

# OPERATION MANUAL

# ORBOT™



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# SAFETY INSTRUCTIONS

## Work Area

- Do not operate the ORBOT in explosive areas, such as in the presence of flammable liquids, gasses or dust.
- Keep children and bystanders away while operating the machine.

## Electrical Safety

- Power tool plugs must match the outlet.
- Do not expose power tools to rain or wet conditions.
- Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- When operating the machine outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
- Guard against electrical shock.

## Personal Safety

- Stay alert, watch what you are doing and use common sense when operating the machine. Do not use the machine while you are tired or under the influence of drugs, alcohol or medication.
- Use safety equipment. Always wear eye protection.
- Avoid accidental starting. Ensure the switch is in the off-position before plugging in.
- Remove any adjusting key or wrench before turning the machine on. A wrench or key left attached to a rotating part of the machine may result in personal injury.
- Dress properly. Do not wear loose clothing. Keep your hair, clothing and gloves away from moving parts.
- If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of these devices can reduce dust-related hazards.

## Further Important Instructions

- Inspect the power cord periodically for damage such as cracking and aging. Replace the cable if damaged, before you take the machine back into operation.
- If the cord is damaged, it must be replaced by a special cable. You can get this cable at your HOS manufacturer or a qualified distributor.
- Always remove the power cord from the outlet before cleaning or repairing the machine or replacing parts.
- Before using the machine, make sure that the driver plate is attached properly.
- Position the cord clear of any moving machine parts.



## TECHNICAL DETAILS ORBOT SPRAYBORG

Motor: 1HP, 100-240V/50-60Hz, 6 amps (50Hz)/11amp (60Hz)  
RPM: 1725 (60Hz)/1400 (50Hz)  
Base diameter: 17"/43 cm  
Orbital diameter: 3/8" (9.5 mm)  
Weight: 82 Lbs./37 kg (Orbot)/102 Lbs./46 kg (Orbot SprayBorg)  
Height: 48" (122 cm)  
Compact size for transport and storage: 30" (76 cm)  
Wheels: 10"/25 cm Diameter, resistant to chemicals

## USAGE

**NOTE: The Orbot SprayBorg is not suitable for use or storage in wet conditions.**

### General Advices

- Everyone who uses the machine should have read these instructions carefully. All persons who operate the machine or stay close should take appropriate safety precautions.
- Use the ORBOT SprayBorg only for intended application.
- Do not use accessories which are not designed and recommended by the manufacturer.
- Do not use the machine if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired
- Disconnect the plug from the power source before making any adjustments, changing accessories, or storing. Such preventive safety measures reduce the risk of starting the machine accidentally.
- Do not use a damaged accessory. Before each use inspect the accessory such as the pad driver for cracks, tears or excess wear. If the machine or accessory is dropped, inspect for damage to install an undamaged accessory.
- Repair the damaged machine before the next application.

### Unpacking and Initial Operation

- Open the shipping box on both sides, remove the packaging material and roll the machine out of the box.
- Put the handle in an upright position (Fig. 1, 2).



Fig. 1



Fig. 2



- Lift the star-shaped screw knobs up and over the top latch bracket and turn clockwise to lock properly (Fig. 3, 4)



Fig. 3



Fig. 4

- Fill the water bottle with water. You can add a cleaning solution of your choice in the prescribed mixing ratio.
- Place the filled water bottle close to the machine on the floor. Insert the filter into the water tank (Fig. 5). Make sure that the filter reaches the bottom of the bottle.



Fig. 5

- Turn the **water bottle** counter-clockwise while you fix the container cap with your other hand. Seal properly (Fig. 6).



Fig. 6

**NOTE: Never seal the container by turning the cap itself! This can lead to distortion and damage of the hoses.**

- To insert and remove the water bottle in and out of the cage holder, insert or remove at an angle on the top hoop of the cage holder. When inserting the bottle, push the container down until it rests firmly (Fig. 7, 8, 9).





Fig. 7



Fig. 8



Fig. 9

- Choose a pad for the appropriate application. Place the pad in front of the machine on the floor and center the driver plate on the pad.  
 → For more information about our pads see page 13.  
 → For the attachment of the HOS brush see page 9.
- To place the driver plate on the pad, position the handle in a lower position (Fig. 10). Lift the machine until the wheels slightly come off the ground and push slowly forward until the machine base tilts towards the ground. (Figure 11).



Fig. 10



Fig. 11



Fig. 12

***WARNING: Make sure you put the wheels back on the ground in time, to avoid the base from falling on the ground. This might cause damage!***

Now you are able to control the base and place it carefully on the pad (Fig. 12).

NOTE: It's not necessary to center the pad exactly. Visual judgment is enough.

- Take the power cable that comes with the machine; connect it to its counterpart which is located on the upper handle. USA version power cables simply push and twist lock together, clockwise. European power cables connect by holding back the lid of the coupler with your thumb and pressing the plug and female coupler together until they are firmly linked. Firmly insert so that the black rubber ring disappears into the female coupler. You can now plug the power cord plug into the outlet.
- ***IMPORTANT SAFETY ADVICE: Never plug the power cord into the outlet before you plug the power cable to the Orbot!***
- For priming the pump system for the first time, put the yellow lever, which is located on the left side of the machine in a vertical position (see Figure 14, p.5). Hold down the black spray button on the right end of the handle (Fig. 13) for about 30 seconds until the pump is working at its full capacity.





Fig. 13

This priming procedure should be repeated after every change of the water tank. For standard priming 10 seconds is usually sufficient.

- By adjusting the yellow lever you can vary the spray pressure. The further you move the lever counter-clockwise upwards, the higher the water pressure. A horizontal position means maximum water output at maximum pressure (Fig. 16)



Fig. 14



Fig. 15



Fig. 16

- Adjust the spray jets on the machine base to the desired position. For most floor cleaning applications adjust the spray jets so that they spray about 6 inches (15 cm) in front of the base.



Fig. 17

- Set the handle position to the desired height by pulling and releasing the black knob (Fig. 18) with the left hand. While holding the black knob out, raise or lower the handle frame with your right hand. To fix the handle frame into place, release the black knob so that it locks firmly into one of the holes provided.



Fig. 18

- NOTE: A detailed description of the ORBOT Weight Kit for maintaining hard floors can be found on page 9.
- To turn the machine on, press the red power button (power button may also be black in color) on the left end of the handle. Position "0" is off and position "I" is on (Fig. 19).







Fig. 19

**WARNING: Make sure a suitable pad or brush is mounted before starting the machine. The immediate contact of the floor and driver plate without a pad can lead to serious damage of the floor and/or the machine.**

### Power Supply

- USA/Canada - Plug the power cord into a 110 volt outlet with a supply of at least 11 amps.
- Europe - Plug the power cord into a 230 volt outlet with a supply of at least 6 amps.
- Australia - Plug the power cord into a 240 volt outlet with a supply of at least 5 amps.
- **If you are in need of a longer power cord, make sure it is a minimum of 12/3 gauge for 100-110 Volt circuits or 6 mm<sup>2</sup> extension cord for 230-240 Volt circuits.**

### Process of Cleaning

- For effective floor cleaning with the ORBOT SprayBorg, move the machine forward and backwards. We recommend you to wet the floor as you move the machine forward, releasing the spray button when you move the machine backwards.
- To increase the pressure and cleaning effect on certain floors like tile and grout, you can lift the machine frame up, raising the wheels off the ground. When lifting the wheels off the ground the full weight of the machine lies on the machine base.
- **WARNING: Make sure the surface to be cleaned is not damaged by the increase in pressure. Omit this measure on very sensitive floors.**

### End of the Application

- Turn off the machine by putting the red on / off switch to "0".
- If you used a cleaning solution, rinse the pump system with clear water. Install a bottle filled with clear water in the cage holder (to exchange the water bottle, see pg. 9). If you do not have an open area to spray and rinse the pump, we recommend placing a SuperZorb pad on the floor in front of the spray jets and directly spray onto it. Press and hold down the spray button until the water is totally clear.  
**WARNING: Omitting this rinsing process can lead to internal hose, filter, and/or pump damage.**
- To store the base in the upright position, press down the handle frame with the right hand and lift up the base with the left hand by grabbing the base handle (Fig. 20, 21).





Fig. 20



Fig. 21

- NOTE: The machine base should now rest on the black bumper foot, located at the back of the bumper. To avoid damage to the handle frame, DO NOT lay the machine frame on the floor as done with other traditional cleaning equipment.
- Remove the pad from the driver plate by pulling it down firmly. To remove the HOS brush, see p.9.
- Put the machine frame in an upright position by pulling the black knob with the left hand and move the handle frame upwards with the right hand. The black knob should lock firmly in the top hole.
- **IMPORTANT SAFETY ADVICE: Always remove the power cord from the electrical outlet before disconnecting it from the machine!**
- To allow an easy transportation of the machine, remove the water bottle and the weight kit if used.
- To easily roll the machine, create a leverage effect by pushing your foot on the back wheel axle and pull the handle towards your body. The ORBOT can be moved similar to a dolly now.

### Storage

- Always store the Orbot with the base in the upright position.
- For storing the Orbot in tight spaces, we recommend that you fold down the handle frame. Open the star-shaped screw knobs on the upper latch brackets by turning them counterclockwise. Fold down the loosened screw caps. The handle can now be folded down (Fig.22).



Fig. 22

- **IMPORTANT: The Orbot should only be stored in dry conditions!**



## Lifting and Carrying

- If you do not have a ramp, we recommend that you lift the machine at all times with two people in and out of a vehicle. Put the firmly locked handle into a lowered position. Make sure that the machine base rests on a pad, so that the Velcro surface of the driver plate does not get damaged or hooked onto a carpeted surface. Grip the machine from each side as it is shown in figure 23. When lifting the machine in or out of the vehicle, set the wheels down first and then the machine base.



Fig. 23

### **IMPORTANT SAFETY INSTRUCTION:**

***Make sure not to grip too close to the machine base – if the base should flip upwards it can cause serious hand injuries.***



Fig. 24



Fig. 25

### ***Make sure you lift the machine with a back-friendly posture.***

- To save space, remove the star-shaped screw caps and fold down the handle and place the frame in an upright position.
- To eliminate the ORBOT from rolling or sliding during transport, lower the frame as far down as possible until it touches the wheels (Fig. 26). The frame acts as a brake, preventing uncontrolled movements. This form of transportation requires sufficient space in a vehicle.



Fig. 26



## ADDITIONAL INSTRUCTIONS

### Weight Kit Installation

- The total weight of the weight kit is 40 lbs.
- Put the weights on top of the white mounting plates located on the sides of the machine base.

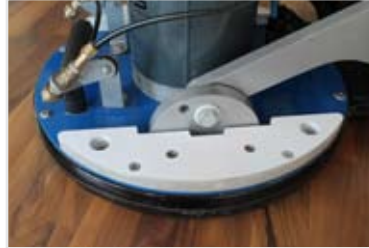


Fig. 27



Fig. 28

- Put the four screws into the holes provided on the weight plates and fasten by turning clockwise. Once the screws have threaded at least 5 full turns, tighten the wing nuts by turning them clockwise, until the weights fit securely to the base.
- **WARNING: Make sure that the weights are securely attached to the base. Loose weights can cause serious damage.**
- For storage and transport we recommend removing the weight kit. The machine can be transported more easily without the weights.

### HOS Brush Installation

- Put the machine base in an upright position, sitting on the foot of the bumper.
- Remove the driver plate by removing the four countersink screws in the center of the plate using an electric screwdriver.
- **WARNING: It is important to only use a PH3 screwdriver bit. Smaller bit sizes can damage the screw heads and leave sharp edges, which can tear or snag the SuperZorb Pads.**
- Mount the HOS brush with the same countersink screws used for mounting the driver plates.
- **IMPORTANT SAFETY INSTRUCTION:** Tighten the screws sufficiently to avoid disengagement of the brush from the machine during operation.  
To avoid stripping the screws do not over tighten. An electric screwdriver with a clutch will ensure that stripping will not occur.
- For further instructions for the storage of the HOS brush see page 15.

### Changing the Water Bottle

- To put the water bottle in the cage holder, place the bottle at an angle over the cage hoop. Push the bottle into the cage hoop so that you can push it without much effort into the cage hoop holder. Push the bottle down until it rests firmly (see figure 7-9, page 5)
- To remove the water bottle from the cage holder, proceed in reverse order: Pull the water bottle out of the holder, as soon as the bottom of the bottle hits the cage hoop, tilt the bottle and pull it up and out at an angle. Remove the bottle from the cage holder and place it next to the machine on the floor (figure 29-31).





Fig. 29



Fig. 30



Fig. 31

- To remove the cap and spray hose from the water bottle, turn the bottle clockwise and secure the cap with the other hand until the cap comes off the bottle (fig. 32). Remove the hose and the filter from the water bottle. Seal the water bottle with a separate cap provided if need for storage.



Fig. 32

- To connect the cap and spray hose to the water bottle, proceed in reverse order. Place the filled water bottle close to the machine on the floor. Insert the filter into the bottom of the water bottle. Turn the bottle counter-clockwise and secure the cap with the other hand until the cap and the bottle are firmly sealed.



Fig. 33

- **WARNING: When connecting or removing the water bottle, never turn the cap, as this might twist and damage the hoses and rubber sealing grommets.**

### Opening and Closing the Spray System, Pump Priming

- Water quantity and pressure of the spray system can be adjusted with the yellow lever which is located on the left side of the machine. Its vertical position indicates zero or minimal water pressure and is used to prime the pump system. Its horizontal position indicates maximal water pressure.
- ALWAYS PRIME THE PUMP SYSTEM AFTER CHANGING THE WATER BOTTLE!
- To prime the pump system, put the yellow lever on the left side of the machine in a vertical position (fig.14, page 5). Hold down the black spray button on the right end of the handle (fig.13, page 5) for about 10 seconds, until the pump reaches its full capacity.



## Changing the Pads

- Place a pad of your choice in front of the machine on the floor.
- Center the machine base in front of the pad with the base in the vertical position (base sitting on the foot of the bumper). Lift the machine slightly until the wheels come off the ground and the machine base can be tilted forward and over onto the pad.  
**WARNING: Make sure you put the wheels back on the ground in time to avoid an impact of the base on the floor that might lead to damages.**  
Now you can control the base and carefully center it on the pad (fig.10-12, page 4).
- To put the machine base up, press the handle down with your right hand and simultaneously lift the base by grabbing the base handle or the motor with your left hand (fig.20&21, page7)
- Remove the pad from the driver plate by pulling it down with a firm tug.

## Opening and Folding the Machine Frame

- To open the machine frame, put the frame in an upright position (fig. 1&2, page 2). Fold the star-shaped screw knobs on the upper latches to the top and turn them clockwise to lock properly (fig.3&4, page 3).
- To fold the machine frame down, loosen the star-shaped screw knobs on the upper latches by turning them counterclockwise. Fold the loosened screw knobs down. Now the machine frame can be folded down. (fig.22, page 7).
- We recommend folding down the machine frame for storage and carriage in compact areas.

## Height Adjustment

- Set the handle position to the desired height by pulling and releasing the black knob (Fig. 18, page 5) with the left hand. While holding the black knob out, raise or lower the handle frame with your right hand. To fix the handle frame into place, release the black knob so that it locks firmly into one of the holes provided.

## Attaching and Removing the Driver Plates

- Put the machine base in an upright position, sitting on the foot of the bumper.
- Remove the driver plate by removing the four countersink screws in the center of the plate using an electric screwdriver.
- **WARNING: It is important to only use a PH3 screwdriver bit as smaller bit sizes can damage the screw heads. Damaged screws can cause further damage.**
- Attach a HOS driver plate to the machine base by lining up the holes of the driver plate with the appropriate threads of the bearing retainer ring. It is recommended to align the threads of the bearing horizontally to the ground (fig.33, page 12).
- Put the four countersink screws through the holes of the driver plate and first screw them into the bearing retainer ring threads manually (fig.34&35, page 12). Then, tighten the screws with an electric screwdriver.







Fig. 34



Fig. 35



Fig. 36

**IMPORTANT SAFETY INSTRUCTION:** Tighten the screws sufficiently to avoid disengagement of the driver plate from the machine base during operation.

To avoid stripping the screws do not over tighten. An electric screwdriver with a clutch will ensure that stripping will not occur.

## ACCESSORIES AND APPLICATIONS

**WARNING:** Never store the HOS accessories in wet conditions! Keep the HOS accessories away from extreme heat and from chemicals!

### HOS Driver Plates

**WARNING:** Exclusively use *ORBOT SprayBorg* designed driver plates only. The use of other non HOS driver plates will damage the machine and its mechanical action.

The driver plates are fastened on the machine base with four countersink screws. For more information on how to change the driver plate see page 11.

### HOS Standard Driver Plate

- The HOS standard driver plate (15" in diameter/38 cm) is supplied as a standard with the ORBOT SprayBorg. It is suitable for the use with all HOS pads for textile and hard floor applications.
- The HOS pads can be easily attached and removed from the Velcro driver disc. More information on how the exchange the pads can be found on page 11.
- After frequent use, lint will stick to the Velcro surface of the driver plate, which hinders a secure attachment of the cleaning pads and will increase wear and tear to the pads.
- Change the HOS Velcro driver disc often as needed to avoid problems as described on page 16.

### HOS StoneFlash Driver Plate

- The HOS StoneFlash driver plate is particularly well suited for the use with the HOS StoneFlash pads due to its catchy Velcro hook surface. The texture of the surface improves the adhesion and thus promotes the longevity of the pads.

### HOS Lippage Driver Plate

- Eight interchangeable diamond discs are mounted to the HOS lippage driver plate. These discs stick to a Velcro surface and can be changed by levering them out of their indentation with a suitable tool.
- Depending on the floor type and the desired results, diamond discs of various grit levels can be chosen.
- Lippage driver is suited for the leveling of uneven stone floors. Lippage, deep scratches and impurities can be removed.
- The lippage driver plate should be rinsed after each application.



## HOS Pads

### HOS SuperZorb Pads

- The HOS SuperZorb pads are made of a cotton-polyester microfiber fabric. Because of their high percentage and quality of cotton, they are highly absorbent and are ideal for cleaning carpets as well as cleaning and drying wet or damp hard floors.
- Wash the HOS SuperZorb pads before their first usage with regular laundry detergent and bleach in a washing machine. **WARNING: Never dry the pads in a dryer.**
- To clean the floor, center the driver plate on the SuperZorb pad. Eye judgment is sufficient.
- With a diameter of 21", the SuperZorb pads are much larger than the driver base. This is intended and allows the cleaning of furniture legs, edges, and baseboards.
- Wash the pads after each use in a washing machine. After the wash cycle, stack the pads in the moist condition. They are now ready for use. Don't dry the pads, as this might trap the dirt.
- A SuperZorb pad, used on both sides, cleans 100-1000 sq. ft (10-100 m<sup>2</sup>), depending on the level of soil.
- The SuperZorb pads can be washed and reused, if cared for appropriately, up to 100 times.

### HOS Glider

- The HOS Gliders reduce the friction on textile surfaces. They are used to clean sensitive and long-fiber carpets gently or to facilitate the handling of the machine on very rough carpets.
- There are two types of gliders in different widths. The thin black glider is used on short-pile carpet, while the slightly thicker white glider is used for cleaning medium-length to long-fiber carpets.
- The gliders are suitable for use with the SuperZorb pads. Due to the Velcro surface, the gliders stick to the pads.
- Attach the glider on the pad so that it is located between the floor and the pad. Place the glider on the floor, with the Velcro side facing up. Center the pad on top of the glider and place the driver plate on the pad.
- **WARNING: Make sure to always have the flat surface of the glider facing the floor. Never put the Velcro side on the carpet, as this might cause serious damage to the floor.**

### HOS AgiClean Pads

- The beige AgiClean pads are made of a special blend of fibers and latex that allows the gentle cleaning of heavily soiled short-pile carpets as well as the scrubbing of hard floors.
- Attach the AgiClean pads by centering them onto the driver plate.
- An AgiClean pad, used on both sides, cleans an approximate area of 1000 -2000 sq. ft (100 to 200 m<sup>2</sup>), depending on the floor type and the level of soil.
- Rinse the AgiClean pads after each use with clean water.

### HOS AkwaStrip Pads

- AkwaStrip pads are made of a unique material impregnated with diamonds. They can be used for deep cleaning and to remove wax off of vinyl, VCT, linoleum, wood, safety tiles and more.
- An AkwaStrip pad, used on both sides, cleans an approximate area of 1000-2000 sq. ft (100 to 200 m<sup>2</sup>), depending on the floor type and the level of wax and soil.
- Make sure to thoroughly rinse the AkwaStrip pads with clean water after each use.





## HOS StoneFlash Pad Restoration Set

- The complete HOS StoneFlash restoration set comes with six diamond pads of different grit sizes and a foam driver to stabilize the StoneFlash pad no.1.
- With the StoneFlash pads, you can grind, hone and polish any type of natural stone such as marble, limestone and terrazzo.
- To deep grind, hone and high-gloss polish the stone, use the pads No.1 through 6 as described on page 15. This method produces a very detailed and natural high-gloss polish without the use of chemicals or crystalizing powders.
- To use the StoneFlash Pad No.1, you need the foam driver. The hook material of the pad and the foam driver stick together.
- For quick grinding, honing and polishing of the stone, use the Pad No.1 to grind the floor and then work up to Pad No.6 with water only. This way you can save money and time to achieve a brilliant shine, naturally.
- Use the Pad No.5 for regular maintenance.
- **OUR TIP FOR YOU:** You can stick the StoneFlash pads directly onto the standard driver plate, which makes it easier to change between floor cleaning and maintenance applications.

## Overview HOS StoneFlash Pads

<b>HOS StoneFlash Foam Driver</b>	For use with our rubber discs (Pad No.1), provides both stability and flexibility during the grinding process
<b>HOS StoneFlash Pad No.1</b>	Removes heavy surface damage
<b>HOS StoneFlash Pad No.2</b>	Removes medium scratches
<b>HOS StoneFlash Pad No.3</b>	Removes light scratches
<b>HOS StoneFlash Pad No.4</b>	Prepares for polish
<b>HOS StoneFlash Pad No.5</b>	For polishing and daily maintenance
<b>HOS StoneFlash Pad No.6</b>	For high-gloss finish – produces an extra high gloss

## HOS Multi-Purpose Brush

- The bristles of the HOS brush are made of high quality nylon. This unique brush design works exclusively for the ORBOT and is ideal for cleaning tile and grout, concrete, rubber flooring and micro-porous surfaces such as porcelain and safety tiles, but can also be used for any other hard surfaces.
- **CAUTION:** *The use of the HOS multi-purpose brush may splash in certain applications! Take appropriate measures or use a HOS splash guard if necessary to prevent the wetting of walls and other obstacles.*
- Rinse the brush as needed with clean water after each use.
- Depending on usage and care, you can use the multi-purpose brush for many years.
- **NOTE ON STORAGE:** *Never store the multi-purpose brush with the bristles down. This can deform the bristles, damage the brush and reduce the cleaning performance.*  
You can bring deformed bristles back into their original form by heating them with a heat gun.



## HOS Environ HP Encapsulation Cleaning Solution

- The formula of the environmentally friendly Environ HP Encapsulation Cleaning Solution is water based and contains a liquid polymer. It captures dirt particles which then can be easily removed.
- The solution is particularly suitable for carpet cleaning.
- The mixing ratio of Environ HP is 1-4 oz/gal. (10-40 ml a liter), depending on the level of soil.
- Enter the appropriate solution quantity in a HOS water bottle and store it in the provided holder as described on page 9.
- Spray the desired amount of solution on the surface by using the momentary operated spray button located on the right handle of the machine.
- Rinse the spray system after each use of the cleaning solution with clean water (see page 16).  
**WARNING: Omitting the rinsing process can lead to damage of the hoses, filters, and pump system.**
- **WARNING: As recommended with all chemicals, keep the Environ HP Encapsulation cleaning solution away from children!**

## Application on different Floor Types

### Carpet Cleaning

- Vacuum the carpet thoroughly before applying the ORBOT. This way, large dirt particles are removed, allowing the ORBOT application to be more effective.
- Depending on the level of soil and the nature of the carpet, select a suitable textile cleaning pad. SuperZorb pads are suitable for all types of carpets, while AgiClean pads are suitable in particular for the cleaning of heavily soiled commercial carpets.
- Attach a SuperZorb pad on the driver plate by laying the pad on the floor and centering the machine base over the pad.
- For gentle cleaning on sensitive long-fiber carpets and for easy handling on rough carpets, use the HOS Gliders.
- Each section of the carpet should be moistened first by using the spray button when you move forward. The carpet should be cleaned by going forward and backwards two to three times, while only spraying on the first pass in order to keep the drying time low. Depending on the level of soil and the nature of the carpet, this process can be shortened or extended.
- As required, carpets can be vacuumed again after the use of the ORBOT.

### Cleaning Hard Floors

- We recommend you to remove dust and coarse dirt from the surface before applying the ORBOT.
- Choose a suitable pad according to the application (see page 13-14).
- Place the driver plate on the pad by putting the pad on the floor and centering the machine base over it.
- Each section of the surface should be cleaned by moving the ORBOT two to three times forward and backwards and adding water and cleaning solution as needed. Depending on the soil contamination and the floor type this process can be shortened or extended.

### Grinding and Polishing Stone Floors

- To remove any dirt that might leave scratches, we recommend you to clean the surface with a squeegee wand or wet-dry vacuum before applying the ORBOT. This cleaning process should be repeated after each step with the HOS StoneFlash pads.
- One StoneFlash pad step cycle consists of five passes moving forward and backwards. Depending on the nature of the floor, this process can be shortened or extended.



## MAINTENANCE

### Cleaning the ORBOT machine:

- Clean the machine with a soft cloth and a neutral pH cleaner.

### Cleaning the spray system:

- Rinse the ORBOT spray system after each application to prevent clogging of the hoses, filters and the pump system.
- To rinse the spray system, install a bottle filled with clear water and place a SuperZorb pad in front of the spray jets. Rinse the system by holding down the black spray button on the machine's handle for at least 30 seconds.
- If the spray nozzles get clogged, remove the caps and soak the brass parts of the spray nozzles and filters in a degreasing solution (like acetone) for about 15 minutes.
- If the spray nozzles are leaking, replace the filters (see page 16).
- When assembling the nozzles, make sure that the nozzle holes are aligned horizontally to achieve a uniform spray pattern.

### Changing the HOS ORBOT SprayBorg Velcro driver discs

- Remove the eight outer screws that fasten the Velcro disc on the driver plate. To save time, use an electric screwdriver with a PH3 bit.
- **WARNING:** The PH3 bit is slightly larger than standard size. It is important that you are using a PH3 bit, as smaller bits can damage the screw heads and produce sharp edges which can damage the cleaning pads.
- Attach a new Velcro disc to the driver plate using the eight screws.  
**WARNING:** Make sure that the screws are very tight, not loose. If the screws are the slightest loose it can cause damage to the Velcro disc.
- Ensure that the four holes in the middle of the Velcro disc are aligned with the screws located on the driver plate. An exact alignment allows an easy removal and installation of the driver plate.

### Changing the filters

- If the spray jets become clogged or should leak, this is a sign that the filters must be changed.
- To change the filters, open the spray jet caps by turning the caps with a suitable wrench counterclockwise. Fix the spray jet body with a wrench using the other hand for stabilization.
- Remove the spray jet caps. The spray tip and the check ball valve filter can now be removed easily from the spray jet body.
- Insert the new filter in the spray jet body housing, place the spray tip inside the cap, put the cap on the thread and turn clockwise to seal.
- Seal the cap firmly by using the appropriate wrenches. The spray jets can now be operated as usual.
- **WARNING: Make sure to align the slits of the spray jet tips in a horizontal plane to the floor to allow for an even spray pattern.**



A: cap, B: spray tip, C: check ball valve filter



### **IMPORTANT NOTE:**

Use all HOS accessories and recommended parts for the operation of the ORBOT.  
The use of inappropriate driver plates, pads, brushes or weights can damage the machine and the floor.  
If you decide to use other than what HOS recommends for use with the ORBOT, the warranty will be voided.

If you have further questions about the ORBOT and all other HOS products, please contact the manufacturer or the appropriate distributor from whom you purchased your products.

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