# SMB 4200/820T Drive-on type Scrubber Operating Manual



Please read this instruction manual carefully before use

## Foreword

This manual comes with every new model to provide the necessary operating and maintenance instructions.

Read this manual completely and get to know the machine when operating or servicing the machine.

This machine will provide excellent service. However, if you pay attention to the following items in daily operation, you can achieve twice the result with half the effort:

- •Be very careful when operating the machine.
- Regular maintenance of the machine according to the maintenance instructions provided with each machine.
- •Use original parts or similar parts when maintaining the machine.

Protect Environment	Machine Data
Please dispose of assembly materials, old machine components	Please fill it out during
and used batteries in an	installation for future reference.
environmentally friendly manner according to local waste disposal	Model -
regulations.	Serial number -
Always remember to recycle items as much as possible.	Install Date -

#### USE

The SMB 4200/820T is a ride-on industrial/commercial machine that scrubs both rough and smooth hard surfaces such as concrete, tile, stone and synthetics. Typical applications include schools, hospitals/health care facilities, office buildings, and shopping malls. It is forbidden to use this machine on land, grass, artificial turf, or carpeted ground. This machine can only be used indoors. This machine is not intended for use on public roads. Do not perform operations other than those described in this operator's manual

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4200/820T ride-on scrubber warranty main card ;
4200/820T ride-on
scrubber warranty
secondary card ;

Important Safety Notes —— Keep these instructions properly

The following are the symbols and related instructions used in this manual:



Warning: Use to warn of the risk or unsafe operation of serious person injury or

death. For safety: indicate what needs to be observed when using the machine.

The following information may pose a hazard to the operator, know when these conditions may occur, identify all safety hazards on the machine, and immediately report damage or faulty operation of the machine.



Warning: flammable substances may cause explosion or fire, do not use flammable substances in the tank.



Warning: flammable material or active metal may cause explosion or fire, do not pick up.

For safety reasons:

- 1. Do not operate the machine in the following cases:
- —— Untrained and authorized.
- -- Not read and understood the operator manual.
- —— After the ingestion of alcohol or drugs.
- —— When using a mobile phone or any other type of electronic device.
- —— Discontinue the brakes.
- --- Not being in the proper working condition.
- —— Located in areas where flammable vapor / liquid or flammable dust exists.
- —— Area in the dark where the control or operating machine cannot be safely viewed, unless the lights is operating or turned on.
- —— Areas where objects may be dropped, unless covered.
- 2. When operating the machine:
- Check the machine for fluid leakage.
- Keep sparks and open fires from refueling areas.
- Ensure that all safety devices are in place and work properly

Check the brake and steering operation.
3. When using the machine:
—— Can only be used according to the instructions provided in this manual.
—— Stop the machine by using the brakes.
—— Slow down on slopes and smooth surfaces.
—— Slow down when turning.
—— When the machine runs, the operator is in the operating table.
—— The machine should be very careful when reversing.
—— Children are prohibited from playing on or near the machine.
—— Do not carry passengers on the machine.
—— Always observe the safety and traffic rules.
—— Immediately machine damage or faulty operation.
— Follow the mixing, handling, and discarding instructions on the chemical containers.
—— Observe with the safety guidelines for wetland boards.
—— Observe with the site safety guidelines for the wetland board.
4. When leaving or serviceservice:
—— Park on the horizontal surface.
—— Turn off the machine and remove the key.
5. When repairing the machine:
—— All the work must be carried out in an environment with good lighting conditions and high visibility.
—— Avoid moving the parts, do not wear loose clothes or jewelry, and tie up your long hair.
—— Do not stop the brakes when pushing on the slope or tractor.
—— Do not power the spray near the electrical components or flush the machine with water pipe
—— The operating machine needs to disconnect the battery connector.
—— The battery must be installed by the trained personnel.
—— All maintenance work must be performed by well-trained service technicians.
—— Do not make any modifications to the machine different from the original design.
—— Use the replacement parts provided or approved by the original plant.
—— Wear required and personal protective clothing recommended in this manual

For safety reasons: Wear a hearing protection device. For safety reasons: wear protective gloves.

For safety concerns: Wear the eye protection devices. For safety reasons: wear a dust mask.

6. When loading the machine on or from the truck or trailer:

—— Empty the water tank when loading the machine.

—— When turning off the machine, first wash the washing plate and absorb the water.

—— Turn off the machine and remove the key.

—— Use a ramp, truck, or trailer that can support the weight of the machine and the operator.

—— Use the tray, unless the loading height is less than 380 mm from the ground (15 in.), Do not push the machine into the truck or trailer / push the machine from the truck or trailer.

—— Stuck in the machine to the truck or trail

Note: Please read this manual carefully and understand the precautions labels on the machine before operating the SMB 4200/820T Ride-onScrubber



# <u>Machine components</u>













The cleaning parts of the machine are: fresh water tank, dirty water tank, brush plate, needle seat or scouring pad, squeegee assembly, a water suction motor and a driving motor.

Buttons on the control panel control the scrubbing function of the machine. Turn on the brush motor switch and the water suction motor switch, and put down the brush plate and the squeegee. Put the forward and reverse switches in the "forward" position, adjust the speed switch (according to different grounds, adjust to the appropriate speed and water output), and then step on the pedal to start cleaning.

The disc brush of the single brush version has a brush disc width of 560mm and a cleaning width of 560mm.

The disc brush of the double brush version has a brush disc width of 380mm and a cleaning width of 760mm.

Note: The amount and type of soil particles will determine the type of brush head or pad to use. For special advice, please refer to the "Brush Information" section of this manual, or contact the original service provider after sales.

#### Scrubbing method

The water and detergent in the clean water tank flow to the brush plate and the ground through the solenoid valve, and the mixed solution of detergent and water is used to scrub the ground through the rotation of the brush head. While the machine is advancing, the squeegee sucks the sewage on the ground into the sewage tank through the suction motor of the sewage suction pipe.

## Brush information

To ensure optimum performance, use the correct type of brush for the cleaning job. Recommended brushes and scouring pads are as follows:

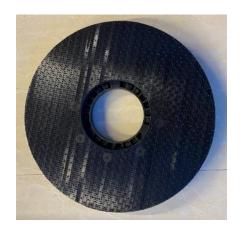
Non-Scratching Synthetic Brush Head - This brush uses a softer general purpose synthetic resin bristle for scrubbing light particles without scratching gloss-coated floors and floors.

Nylon Brush - Recommended for scrubbing coated floors, cleans without leaving scratches.

Needle holders and scouring pads — for floors and painted floors to give them a shiny finish.

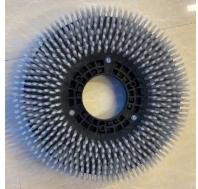
#### Attached:

Needle seat and cleaning pad specifications: single brush version 560mm, double brush version 380\*2.





brush



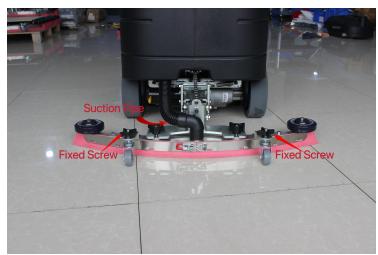
#### Machine setting

Installing the Squeegee Assembly

- 1. Park the machine on a stable ground.
- 2. Please turn off the machine key switch.

FOR SAFETY: When leaving or servicing machine, stop on level surface, turn off machine, and remove key.

- 3. Install the squeegee to the squeegee bracket and tighten the two setscrews.
- 4. Connect the suction hose and the squeegee assembly, as shown in the illustration.



The squeegee is preset at the factory, if you need to adjust the squeegee assembly, please refer to the "Installing the Squeegee Assembly" section of this manual.

Inject clean water into the clean water tank

FOR SAFETY: When leaving or servicing machine, stop on level surface, turn off machine, and remove key.



There is a clean water injection hole in the clean water tank at the rear of the machine For safety concerns: Stop on the horizontal surface, turn it off and remove the key while leaving or repairing the machine.

Clear water box water injection hole behind the machine.

WARNING: Flammable substances may cause explosion or fire. Do not use flammable substances in the tank. Scrubbing method: Open the injection hole of the fresh water tank and inject part of the water (do not exceed 60 degrees Celsius).

According to the mixing ratio instructions on the water tank, pour the required cleaning agent into the clean water tank, and then pour warm water into the clean water tank. At the same time, add defoamer to the sewage tank (please refer to the description on the defoamer for the ratio).

FOR SAFETY: When using machine, follow mixing ratios and handling instructions on chemical containers. NOTE: If using a bucket to fill the solution tank with clean water, make sure the bucket is clean; do not use the same

A bucket is filled with clean water and drained with dirty water.

Note: Please always use the recommended cleaning agents. Remember that the clean water tank cannot use granular cleansers to prevent blocking the clean water filter and clean water pipes, such as washing powder. If the machine is damaged due to improper use of cleansers, the manufacturer will not bear the responsibility of insurance.

# machine operation

Check before operation
□Check the machine for liquid leakage.
□Check whether the sealing ring of the water tank cover is damaged or there are foreign
objects.
□Check whether the sewage filter is blocked.
□Check the condition of the brush and remove any lint, ties, wire, plastic wrap or other
debris around the brush.
$\Box$ Check if the squeegee is worn or dirty, or the angle of the squeegee needs to be adjusted.
□Check whether the sewage suction pipe and the suction port of the squeegee are blocked by
dirt or the sewage pipe is broken.
□ Drain and clean recovery tank.
□Check that the brakes and steering wheel operate normally.
□Check whether the horn and reversing lights are normal.
□Check the maintenance records to decide whether machine maintenance is required.
before operation
Before washing, remove large debris and remove any wires, clumps of thread, string, etc. that
may be wrapped around the brush.
Please plan the cleaning method in advance, and please try to make long-term planning
arrangements to minimize the number of downtime and start-up. Do not clean the entire floor or
area at once.

Wipe down the machine beforehand to prevent streaking.

# Scrubbing

FOR SAFETY: Do not operate machine until operator's manual has been read and understood.

- 1. Please turn on the switch key.
- 2. Press the switch of the brush plate motor and the water suction motor switch, put down the brush plate and the squeegee assembly, and adjust the appropriate speed.
- 3. Turn on the water switch to start working.
- 4. Before turning off the power of the key, please turn off the three switches of water suction, water discharge and brush plate
- 5. Please set the direction switch (forward or backward) according to the direction in which the machine needs to be moved.
- Note 1: The forward and backward switch of the machine is turned in the "forward" direction, which is normal floor scrubbing.
- Note 2: Turn the forward and backward switch of the machine in the "backward" direction, the squeegee assembly will be lifted automatically, the water suction motor will be turned off, and the reversing light will be on as a warning.
- 6. Step on the push pedal to start scrubbing



Warning: Do not pick up flammable substances or reactive metals which may cause an explosion or fire

7. Release the foot switch to stop, turn off the water suction switch to put away the squeegee, and turn off the brush switch to put away the brush tray. Press the automatic brush removal button and the brush plate will fall off automatically, or pull out the key to turn off the power, and then pull the brush plate to the left to manually remove the brush.

8. If you need to stop quickly, please release the pedal immediately and use the emergency stop switch to shut down the machine. When scrubbing, do not operate the machine on slopes steeper than 7% (4°).

FOR SAFETY: When using machine, go slowly on slopes and slippery surfaces.

# During machine operation

Try to keep going in a straight line to avoid hitting the pillars or scraping the sides of the machine. Overlap cleaning routes by a few centimeters (a few inches).

When the machine is moving, please avoid turning the steering wheel sharply. The machine is very sensitive to the turning of the steering wheel. Avoid sharp turns unless in an emergency.

When reaching the bottom of the aisle, wash from the bottom towards the aisle opening. When cleaning, adjust the machine speed and clean water flow as needed, and use the medium speed and the lowest clean water flow as much as possible.

Keep the machine moving to avoid damaging the ground.

If you find that the cleaning effect is not good, please stop cleaning and refer to machine troubleshooting.

#### Scrubbing method

If there is too much foam, it is recommended to use a defoamer to inject into the sewage tank, otherwise the foam will be sucked into the water suction motor and damage the water suction motor.

Replace needle holders or scouring pads for cleaning as needed.

Please pay attention to the battery level indicator to make sure there is enough power for machine operation.

Please pay attention to the clear water tank indicating transparent tube, make sure the clean water tank is not empty, please clean the clean water tank before refilling it.

Please remove the key before leaving the machine.

After cleaning, perform daily maintenance procedures (see Maintenance Form)

Drive the machine slowly on slopes: Use the pedals to control the machine and the governor switch to slow down the machine when going downhill, and scrub the machine uphill instead of downhill.

FOR SAFETY: When using machine, go slowly on slopes and slippery surfaces.

Do not operate the machine in areas where the ambient temperature exceeds 43° C (110° F). Do not activate the scrub function in areas where the ambient temperature is below 0° C (32° F).

The maximum rated incline for machine scrubbing operations is 7%, and the maximum rated incline for transporting machines is 19.25%.

Clean water tank water level transparent tube

The water level tube of the clean water tank can simply and clearly indicate the real-time water level, which is convenient for machine operation and ensures the normal use of the machine (it is recommended that the water level in the clean water tank be displayed at more than half of the transparent tube to maintain the water pressure and ensure the water output).



Clean water tank water level transparent tube

sewage tank sewage sensor

When the sewage tank is full, the sewage tank sewage sensor will cut off the power of the suction motor, but it will not stop other functions. Please drain the sewage tank sewage in time for normal use.



Sewage tank sewage, sensor

Battery consumption indicator

The battery drain indicator will show the battery charge. But when the battery is fully charged, the power indicator shows 100. As the power is consumed, the power value will gradually decrease. When the battery value is too low, the scrub function will be turned



off to remind the operator of the battery charge status. When the power remaining is 20%, it is necessary to charge the battery in time.

Note: Do not charge the battery too frequently; overcharging will shorten the life of the battery. Do not charge the battery when the battery is extremely low; Fully charged once within a month.

Automatic discharge switch

The brush plate will automatically drop after the automatic discharge switch starts



Automatic Discharge

The ECO energy-saving mode

Starting ECO energy saving mode can reduce the power consumption of the device, make the device last longer, and use ECO in places such as hospitals, libraries and so on in a quiet environment.



Energy Saving

#### Drain it out and clean the sewage tank

After cleaning and cleaning the sewage tank or when the sewage sensor cuts off the suction motor, please drain and clean the sewage tank. Then fill the water tank and you can cl

- l. Please push the machine to the clean water drain immediately.
  - 2. Turn the machine key switch off. For safety reasons: leave or repair

During the machine, stop on the horizontal surface, turn off the machine and pull out the key.

- 3. Remove the sewage tank drain pipe. When holding the drain up, open the top cover and then slowly place the drain into the drain or sink.
  - 4. Lift the tank cover and flush the tank with clean water.



Warning: Flammable substances may cause an explosion or a fire. Do not use flammable substances in the tank.

Do not use steam to clean the tank, high heat will damage the tank and components.

 ${\mathfrak l}$ . Rinse the dirt and sludge inside the sewage tank with clean water.



 $\emptyset$ . Cover the lid of the sewage tank to ensure that there is no other foreign body around, as shown in the figure below.



- 7. When removing the drain and holding the drain up, open the drain cover and then slowly place the drain into the sewer or sink.
- & After the sewage tank is drained, clean water can be flushed from the sewage tank, rinse the sewage in the sewage tank, and then cover the drain pipe cover, and hang the drain pipe back to the original position.



9. Check whether the water filter net is clean. If there is a foreign matter, unscrew the outer cover of the water filter net counterclockwise, remove the filter net, clean it and then install it.



10. The water filter should be cleaned at least once a month to ensure the smooth operation of the water.

## Machine troubleshooting

ques tion	cause	resolvent		
	The water suction motor is turned off	Open the water suction motor		
Lack of suction	Absorbent water pick glue strip wear	Turn the direction or replace the water suction and pick the		
	Water absorbance shift	glue strip  Adjust the water  absorbers		
	The suction pipe is blocked	Clear the blockage		
	The sewage filter net becomes dirty	Clean the filter		
	Water with crumbs	Remove garbage		
	The suction pipe connected to the suction pipe is not attached or damaged	Reconnect or replace the suction tube		
	Sewage tank cover or sewage pipe cover is not covered	Check for obstruction and cover		
	The water suction motor switch is turned off	Turn on the water- suction motor switch		
	Sewage tank full	Dry sewage tank		
The water- absorbing motor	The foam filled the	Empty the sewage tank		
is not working	sewage tank	Reduce the use of detergent or add antideffoam in the sewage tank		
	The sewage tank sensor is dirty, damaged or blocked	Clean or replace the sensor		
The level	The clear water box is empty	Fill the clear water box		
The brush plate produces	The water valve was closed	Open the water valve		
little water or	Solenoid valve damage	Replace solenoid valve		
no water	The clean water box filter screen is blocked	Dry the water box, take out the water box filter screen for cleaning and then put it back		
	Use an inappropriate detergent or brush	Contact the after- sales maintenance personnel		
The ground washing effect	Sewage tank full	Empty the sewage tank		
	Clear water box empty	Water box with water		

is not good		With debris on the pin holder or clean pad	Remove garbage
1		norder of cream pad	
		Wash brush wear	Replace the brush
		Low battery power	Charge the battery
١			until the
1			charger is
١			off



#### Maintenance table

The table below indicates the person responsible for each procedure,  $\mathbf{0}$  = operator

T = a person with specialized training

Interval period	person liable	Check the repai r point	explain	order
everyda	0	8	Brush plate / needle base clean cushion	Check the height of the brush plate / needle holder
У	0	3	Sewage tank	Check for damage and wear or for debris
	0	1	Sewage tank cover	cleaning
50 Hours	0	9	Water absorbent rubber strip	Check for damage and wear
100 Hours	Т	1	Sealing ring of sewage tank	Check for damage and wear
200 Hours	Т	4	Maintenance- free battery electrodes and wiring	Check and clean
	Т	2	Water suction motor	Check the motor brush (500 hours after checking each 100 hours)
500 Hours	Т	7	Brush disk motor	Check the motor brush (500 hours after checking each 100 hours)
	Т	6	Drive the motor	Check the motor brush (500 hours after checking each 100 hours)
	T	5	Walk the rear wheel	Check for damage and wear

Note: More frequent maintenance may be required under extreme dusty conditions.

Battery charging

Important: When charging, ensure that the charger is properly set according to the battery type.

- 1. Push the machine to the flat, dry ground. Note: Please confirm that the area is well ventilated.
- 2. Turn the machine key switch off.

For safety concerns: Stop on the horizontal surface, turn it off and remove the key while leaving or repairing the machine.

3. Insert the charger connector into the battery charging connector.



Battery installation, the use of the precautions

- 1. Before use, check whether each battery is damaged, clean, marked clearly, and clean the battery surface with dry cloth; check the battery open circuit voltage, whether the positive and negative electrodes are clearly marked, and whether there is a reverse electrode.
- 2. Install the battery upright and not upside down, and the spacing between adjacent batteries shall be at least greater than 5cm. After the installation, check the requirements of the installation diagram, check whether the positive and negative electrodes of each battery are correct, and then connect each battery with the whole line.
- 3. After all the batteries are installed, check whether the continuous part is loose and tighten the connection. Avoid excessive force and damage to the pole column. Generally, the torque is not greater than 15N M.
- 4. When the vehicle battery is installed, the plug between the battery should be adjusted, so that the battery is in the upright position, and the battery should be tightened to prevent the battery from shaking and collision.
  - 5. Electric door lock, safety seat and other devices easy to produce sparks must be isolated from the battery.
- 6. When the battery state of charge leaves the factory, the user can usually directly load the car for use. If it is shelved for a long time (more than 12 months), it can only supplement the electricity by the charging method before use.
- 7. Battery should not be close to the fire source, heat source, hot summer is strictly prohibited to the sun in the sun, should avoid battery violent vibration, collision and positive and negative short circuit.
- 8. The battery capacity is based on the ambient temperature of  $25^{\circ}$ C. When the temperature drops by  $1^{\circ}$ C, the battery capacity is reduced by about 1%. The influencing factors of temperature should be considered in use, and avoid the use in the environment below- $10^{\circ}$ C as far as possible.
  - 9. The battery shall not be disassembled randomly to avoid danger.
  - 10. Waste batteries must be recycled, and shall not be discarded at will, affecting the environment.
  - 11. When charging, we should pay attention to the battery temperature change to prevent overheating and damage to the battery and the danger.
- 12. The battery is strictly prohibited to use the machine in the case of power loss for a long time. Always charge the battery at once before use. (If you do not follow this operation, the battery will bear the consequences.)

Replace the brush plate, needle holder and cleaning pad

- 1. Park the machine on a flat surface to determine where the brush plate motor is raised.
- 2. Turn the machine key switch off.

For safety concerns: Stop on the horizontal surface, turn it off and remove the key while leaving or repairing the machine.

- 3. Method to replace (install) brush plate and needle holder: the left and right two brush plates, needle holder and hundred cleaning pad of this model, rotate the left brush plate counterclockwise and remove the brush plate; drag the right brush plate clockwise with both hands and remove the brush plate. Similarly, the method of installing the brush plate is the opposite.
  - 4. You can directly use the automatic brush button, one key unloading brush.





#### Brush plate and 100 clean mat

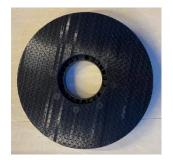
The machine is equipped with brush plate and clean pad, check the brush plate and drive hub daily for thread winding. In addition, the brush plate should also be checked for damage and wear.

For safety concerns: Stop on the horizontal surface, turn it off and remove the key while leaving or repairing the machine.

If many of the bristles on the brush plate are missing or less than 10 mm (0.38 inches) long, replace the brush. Before use, please install the pad on the pad drive plate, and the needle holder is used to fix the pad. After use, you need to clean the cleaning mat with soap and clean water immediately. Do not use high-pressure clean water to clean up

100 Clean mat. Hang the clean pad or lay it flat to dry.

Note: Please replace the whole brush plate and the pad, otherwise the force of the brush plate or the pad will be uneven.





#### Sauce the rubber strip

The suction glue strip is the waste water, let the suction motor into the sewage tank through the sewage suction pipe.

Check the wear and tear of the suction and adhesive strip daily. If the water suction strip wear half, turn the direction or replace the strip.

The water suction suction assembly can be removed from the water suction bracket when transporting the machine to prevent damage.



Unscrew the fixing nut counterclockwise Pull off the suction tube

Replace (turn direction) water suction and glue strip

- 1. Park the machine on the horizontal ground, determine the brush plate motor, water suction pick in the rising position.
  - 2. Turn the machine key switch off.

For safety concerns: Stop on the horizontal surface, turn it off and remove the key while leaving or repairing the machine.



3. Remove the suction steak assembly from the machine.



4. Undo the suction nut clip.

- 5. Remove the suction strip strip from the suction strip assembly.
- 6. Remove the two strips of the suction assembly and remove the rear suction strip.



- 7. Install a new front suction strip or turn the existing suction strip to the other side, and determine that the hole on the front suction strip at the flange of the suction assembly and press the strip and press buckle.
- & Install a new suction strip or turn the existing suction strip to the other side, and point the hole on the strip at the flange of the suction assembly.

- $\ensuremath{\mathfrak{g}}$  . Fix the press on the water suction assembly and card the press clip.
- $\ensuremath{\mathbb{N}}$  . Install the water suction steak back to the suction steak on the suction suction bracket, and install the suction pipe.



ll. Tighten the retaining nut of the suction suction assembly.

Adjust the water absorbers

Adjust the suction steak to determine that the edge can be in contact with the cleaning ground. Please make this adjustment on the flat ground.

For safety concerns: Stop on the horizontal surface, turn it off and remove the key while leaving or repairing the machine.

- 1. To check whether the suction assembly needs to be adjusted properly, the suction assembly can be placed on the horizontal floor. Push the machine forward to see if the Angle of the tape to the ground is too low or too straight. The appropriate Angle should be about  $75^{\circ}$ .
- 2. If the strip is not in contact with the ground, adjust the adjustment nut shown by the arrow, rotate the nut clockwise to make the strip rise; rotate the knob counterclockwise,

Water suction is drops and contact with the ground. the best state should be adjusted according to the actual demand.



- 3. If the middle of the water suction strip has good contact with the ground, but there is a gap on the left, as shown by the arrow, adjust the nut, rotate the nut clockwise, lift the left water suction strip; rotate counterclockwise, the water suction strip drops, and contact with the ground, please adjust the best state according to the actual demand.
- 4. If the middle of the water suction strip has good contact with the ground, but there is a gap on the right, as shown by the arrow, adjust the nut, rotate the nut clockwise, lift the left water suction strip; rotate counterclockwise, the water suction strip drops, and contact with the ground, please adjust the best state according to the actual demand.
- 5. If the sides of the strip have good contact with the ground and the ground, please rotate the adjustment nut shown by the arrow counterclockwise to make the strip contact well with the ground or at 75 degrees; if the sides of the fruit change, please follow the previous steps 2 and 3.

#### Pushing, towing, and transporting machines

Push or drag the machine

If you turn off the machine, you can push it forward or backward, but you cannot drag it from the front side. For safety reasons: Do not operate the machine when the brake is stopped.

Push or drag the machine only on a flat surface. Do not exceed  $3.2~\mathrm{kp}$  / h ( $2m~\mathrm{p}$  h), do not try to push or drag the machine at high speed.

To push or drag the machine, press the brake to remove the switch.

#### Transportation machine

When using a truck or trailer, always follow the following procedures:

1. Raise the suction pick assembly and brush plate motor.

For safety reasons: When loading the machine on a truck on or from a truck or trailer, the water tank must be emptied before loading the machine.

2. Remove the machine with the recommended device.

For safety reasons: When transporting the machine, use the proposed device from the truck or carrier.

- 3. Close the machine in front of the truck or trailer.
- 4. An tions were placed behind each drive wheel to prevent machine sliding.
- 5. Tie the machine's shelf with ropes and tie it to a trailer or truck to prevent the machine from tilting. For safety reasons: When transporting the machine, rope the machine to the car plate.

## Storage machine

When storing the machine for a long time, take the following steps.

- 1. Dry and clean up the clean water boxes and sewage tanks., Open the sewage tank for ventilation.
- 2. Park the machine in a cool and dry area. Do not rain the machine and store it indoors.
- 3. Remove the battery or charge it every 1-2 months (always full).

#### Anti-freezing protection

For safety reasons: Stop and turn off the machine on the horizontal surface while leaving or repairing the machine.

1. After use, empty the water tank and the water in the pipeline to avoid freezing and blockage.

The LED light of the smart charger indicates the working status

LED lamp	Indicate the state	operative mode	
LED1, LED2	Shine, the fan does	Pre-charge state	
	not turn	[Charging time: 3 hours]	
LED1, LED2	The red light turns	Constant flow state	
	on and the fan turns on	[Charging time: 7-8 hours]	
LED1、LED2	The red light turns	Constant pressure	
	on and the fan	state	
	turns on	[Charging time: 4.5 hours]	
LED1、LED2	LED1 red light,	Small constant flow	
	LED2	state	
	The green light	[Charging time: 4.5]	
	shines and the fan does not turn	hours]	
LED1, LED2	LED1 light is off	charge	
	and LED2 is on	complete	
	The green light and		
	the fan do not turn		
	rema rks		
Several cases of	1. Short circuit of load		
LED2 red	2. Wire connection		
light	3, the battery line		
	short circuit		
	4, Over-		
	temperatureLED2		
	bright orange		
	lamp		

# General machine size / capacity

project	Dimensions / capacity
length	1200mm
altitude	1150mm
Width / Frame (drum to drum)	760mm
Width / Rear suction pick (drum to drum)	820mm
Brush diameter	Single brush 560mm / double brush 380mm * 2
Brush the path width	Single brush 560mm / double brush 760mm
Clean water box capacity	70L
Sewage tank capacity	80L
Weight / containing standard battery assembly	240Kg
Sound pressure level type LPA	<68dB

## type

type	quantity	voltage	rated	Weight (per)
			current	
Battery (standard)	2	12V	100Ah 3hr	33.5Kg

type	use	VDC	W
electro- motor	Wash the ground brush	24	Single brush 500W Double brush 300W * 2
	vacuum motor drive	24	500W

type	VDC	ampe	hert	VAC
		re	Z	
Charger (smart type)	24	15	50	220

# Machine size



