



## **Foreword**

This manual provides the necessary machine operation and maintenance instructions.

Read and understand this manual in detail before operating or using the machine.

When ordering a replacement part, first determine your machine model number and serial number. You can send either by phone or by mail

Way to order parts and accessories from any authorized service center or dealer. This machine can provide an excellent serve. If the following can be achieved, the best results will be achieved at the lowest cost:

Do not operate the machine unless trained and authorized

The regularly maintains the machine in accordance with the maintenance instructions provided in the operation manual.

Do not attempt to fix the machine by yourself . All repairs must be made by an authorized personnel/service centers only .





Protect the environment against pollution

According to the local waste disposal regulations, on the premise of maintaining environmental safety, lose waste packaging materials, batteries and other old machines Components, antifreeze and oil materials have venom body. Please be sure to do the recycling job well.

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Note: the product is being updated all the time. The appearance shall be subject to the physical object, which will not affect the use function of the product.

#### Instructions

#### **Matters need attention**

This machine is suitable for industrial and commercial use and is specialized for cleaning hard indoor floors and not for other purposes. Please use all the recommended cleaning pads and brushes and commercially available floor cleaners for this machine. All operators must read, understand, and follow the safety precautions below.

The following instructions for the safety warning symbols used in this manual and the heading "For safety":

Warning: used to warn about the risk or unsafe operation of serious personal injury or death. For safety: indicating matters to be observed when using the machine to ensure safety. Fail to observe the following warnings may cause personal injury, electric shock, fire or explosion.

## ⚠ Warning: Fire or explosion hazard:

- Do not use flammable liquids; do not operate machines near or located in places with flammable liquids, gases, or combustible dust. This machine is not equipped with an explosion-proof motor. If the machine is used in a place with flammable gas, liquid or combustible ash, the electric motor during startup and operation will produce a spark, which may cause a flash fire or explosion.
- Do not pick up flammable materials or active metals.
- The battery releases the hydrogen gas. Stay away from sparks or open sources. Keep the battery on when charging.

Marning: Risk of electric shock. Disconnect the battery connection before repairing the machine.

⚠ Warning: Rotary brush running. Do not approach your hands. Turn off the power supply before repairing the machine.

# The following information indicates potential hazards to operators or equipment: for safety:

- 1. Do not operate the machine:
- contacts flammable liquid or near flammable gas, otherwise may cause explosion or flash fire condition.
- Unless trained and authorized to operate the machine.
- Unless the operation manual is read and understood.
- If not properly correctly.
- 2. Before starting the machine:
- Make sure that all safety devices are positioned and operating correctly.

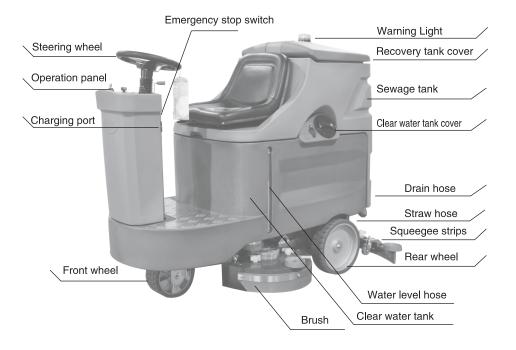
- 3. When using the machine:
- Walk slowly when encountering the slope and sliding surface.
- Wears non-slip shoes.
- —Slow down when steering.
- The machine shall be reported upon damage or operational failure immediately.
- Do not allow children to play on or near the machine.
- Follow the mixing ratio and treatment instructions on the chemical container.
- 4. Before leaving or repairing the machine:
- Park the machine on a smooth ground.
- Power off the machine.
- 5. When repairing the machine:
- Avoid moving the parts.Do not wear a loose top, shirt, or sleeve.
- Disconnect the battery connection before operating the machine.
- Wear protective gloves and protective equipment when handling battery or battery wiring.
- Avoid contact with battery liquid acid, and first do not flush the machine with high-pressure wine spray or water pipe.
- Use replacement parts supplied or approved by the manufacturer.
- All repairs must be carried out by qualified maintenance personnel.
- Do not modify the original design of the machine.
- 6. When handling the machine:
- Please close the machine.
- —Do not carry the machine when the battery is installed.
- Please carry the machine with the assistance of others.
- Use the recommended handling floor when loading or unloading machines from a truck or trailer.
- Use ropes to secure the machine to the truck or trailer.
- Lower the brush head to the lower position.
- 7. When storing the machine:
- Please charge the battery before storing the machine.
- Do not store when out of charge.
- Thoroughly drained and rinse the tank, store the machine in a dry place and keep the head in the raised position.
- Open the lid of the sewage tank for ventilation. (Note: Do not let the machine in the rain and store it indoors.)
- Store the machine in cold and does drain all liquid inside the machine.

## **Machine operation indicates**

#### Operation panel

First put down the plate brush and water squeegee strips, and then open the key switch and plate brush + water absorption switch can operate





#### **Receive machine**

Disintegrate the machine package

- 1. Please check for damage. In case of damage immediately to the freight industry response.
- 2. Check the freight content list. If there are any missing items, please contact the seller.

#### Freight content:

- 6V battery, 4 pieces standard. (if Li-ion battery, 1piece)
- 24V battery charger 1 piece standard
- battery connection 1 set standard
- Water absorption glue strip 1 pair standard
- needle plate 1 piece standard
- Wash brush 1 piece standard
- 3. Before unpacking the machine, please remove the shipping fixed parts and ropes that attach the machine to the stack.

Carefully remove the machine with other assistance.state-owned;

Note: If without the loading pad, do not push the machine directly to avoid damage to the machine. individual

Note: To avoid damage to the machine, remove the machine from the stack before installing the battery.

### Install the battery

Warning: fire or explosion danger. The battery releases the chlorine gas. Please Keep away from sparks or open sources of ignition. Keep the electric bottle lid open when charging. For safety: When repairing machines, wear protective gloves and protective equipment when handling battery and battery wiring. Avoid touch with the battery liquid acid.

- Park the machine on the horizontal ground and take the key.
- Lift the sewage tank to expose the accessible battery.
- Carefully install the battery in the battery compartment and connect the battery cable.

Note: Do not throw the battery into the battery compartment, so as to avoid causing damage to the battery and the machine.

1. Before connecting the battery, please determine whether the electrode and terminals are clean. Use electrode cleaning waves and drift brushes as required.

 $Description: Apply \ a \ thin \ metal-free \ oil \ or \ protective \ agent \ to \ avoid \ battery \ corrosion.$ 

2. After the battery bottle is properly installed, please check the power scale of the battery meter. Battery charging as required.

#### Machine cleaning method:

- 1. Manual control of the water valve to adjust the water tank water and detergent flow to the ground.
- 2. The brush cleans the floor with a solution mixed with detergent and water.
- 3. As the machine is moving forward, suction the sewage from the floor into the tank.

### Brush and cleaning pad information

To ensure optimal performance, clean by using the correct brush type.

The recommended brushes and cleaning pads are as follows:

The Soft Nylon Brush- white

It is recommended to clean the coated floor without damaging the ground. Clean without facial scratches.

Buffing pad-- white

Used to maintain brightness slip or polishing ground.

Squeegees-- red

To scrub minor dirt without damaging the ground.

Gravity folding pad--- black

Used to strongly remove the thick coating or substrate, or to perform a strong scrub,

#### Install the machine

#### Water suction rake assembly

- 1. Park the machine on the level ground and remove the key.
- 2. Lower the suction rake lift lever to the lower position.
- 3. In the figure, install the water suction rake on the mounting bracket of the water suction rake and completely put the fastening knob into the jack before tightening the knob.
- 4. Connect the vacuum suction pipe to the suction rake assembly.
- 5. Check the absorbent target glue strip and make appropriate adjustments.

#### Install brush and cleaning pad

Description: For the recommended brushes and cleaning pads, please refer to the "Brush and cleaning pad information" section in this manual, or consult with your local authorized dealer.

- 1. Park the machine on the level ground and remove the key.
- 2. Step on the brush head lift pedal to lift the brush head off the ground.
- 3. Place the white pad on the needle seat first, and then install the drive plate. Bolt the central lock to secure the clean pad.
- 4. Position the pin holder / brush mounting column bolt at the inserted motor drive disc buckle and press the brush disc motor switch.
- 5. If you want to remove the needle seat and the brush, step on the brush head lift pedal, lift the brush head off the ground, and press the brush plate motor switch.

## **Machine operation**

For safety: Do not operate the machine before reading and understanding the operation manual.

Marning: fire or explosion danger. Do not operate machines near or in places with flammable liquids, gases, or combustible dust.

#### Pre-operation inspection

- \* Dust off the ground.
- \* Check the battery scale of the battery meter. Refer to "Battery Power Meter"
- \* Check the wear of water suction rubber strip, and adjust the Angle appropriately.
- \* Check the grinding of the pad / front.
- \* Confirm that the sewage tank is empty and a clean floating ball cage has been installed.
- \* Check the wear of the brush head skirt.

#### Run a machine

- 1. Turn the main power supply key on to the (1) position.
- 2. Pull the suction lifting lifting lever down to bring the suction lifting assembly down to the ground.
- 3. Press on the brush head lift pedal to bring the brush head down to the ground.
- 4. Open the clear water control knob.
- 5. Press the brush plate motor switch, and then press the water suction motor switch.
- 6. Motor drive model: Adjust the speed control knob to your desired cleaning speed.

Description: A cleaning speed of 45-60m per minute is recommended.

### During machine operation

Warning: fire or explosion danger. Do not pick up flammable materials or active metals.

- 1. Each cleaning path overlaps by 5 cm.
- 2. Keep the machine continuously to avoid damage to the ground.
- 3. If after absorbing water, there are drag marks on the ground, wipe the rubber strip with a rag to remove garbage. Clean up in advance to prevent drag marks.
- 4. Do not operate the machine on a slope above 5% (3  $^{\circ}$  ).
- 5. If the foam is too much, pour the recommended defoamer agents into the sewage tank.

Note: Do not let the foam into the filter net to avoid damage to the suction motor. Foam will fail the filter switch.

- 6. Use double cleaning to remove extremely dirty areas. After washing the water suction steak, leaving the solution impregnated for 3-5 minutes, lower down the water suction and clean again.
- 7. Replace or rotate the cleaning pad as necessary.
- 8. Observe the electricity consumption of the battery power meter (refer to 'battery power meter').
- 9. Check the remaining liquid amount through the clear water tank liquid level gauge. The traditional land washing method is about 10 liters every 10 minutes.
- 10. When the solution in the clean water tank is used up, first empty the sewage tank and then reinject the solution.
- 11. When the staff leaves the machine, please park the machine on the flat ground and remove the key.
- 12. After cleaning, conduct daily maintenance procedures.

#### Instruction

#### **Tank Drain**

Sewage water should be drained and cleaned after each use, and the clean water tank should be cleaned regularly to remove any corrosion.

Move the machine to the drain site, turn off the power key, and drain according to the following drain instructions:

(Note: For safety reasons, before leaving the machine, please park the machine on a level surface and turn off the machine and remove the key.)

- 1. Unscrew the recovery tank drain cover counterclockwise and remove it:
- 2. Open the sewage the tank cover, then flush the tank;
- 3. Remove and flush the floating filter located in the recovery tank.

## **Battery Charging**

Note: In order to prolong the life of the battery and ensure the best performance of the machine, the battery must be charged after the machine has been used for at least 30 minutes. Do not leave the battery uncharged for a long time. The charging instructions below apply to the charger that came with this machine. Be sure to use the following specifications of the charger to avoid battery damage.

Battery Charger Specifications

- Charger type: Charger for a lead-acid battery
- Output voltage -24 volts will
- Automatic power off circuit
- The output current is 25 amps
- suitable for deep rough ring charging

1. Move the machine to a well-ventilated place for charging.

AWARNING: Fire or explosion hazard. The battery releases hydrogen gas. Keep away from sparks or open sources of ignition. Keep the battery compartment open while charging.

2. Park the machine on a level surface and turn the key to the OFF position.

For safety reasons: When servicing the machine, wear protective gloves and eye protection when handling batteries and battery wiring. Avoid contact with battery acid.

- 3. Check the electrolyte level in each battery unit before charging.
- 4. When charging, please open the sewage tank to the side for ventilation.
- 5. Plug the charger's AC (alternating current) power cord into a well-grounded electrical outlet.
- 6. Plug the charger's DC (direct current) cable into the battery charging socket behind the recovery tank.
- 7. The charger will automatically start charging and will automatically turn off when fully charged.

Note: The machine will not operate when it is connected to the charger.

Note: During the charging of the charger, do not unplug the charger's DC cable from the socket on the machine. To avoid arc discharge. If charging must be suspended during charging, please unplug the AC power cord first.

MARNING: FIRE OR EXPLOSION HAZARD. The battery releases hydrogen gas. Keep away from sparks or open sources of ignition.

8. After charging, Check batttery voltage.

#### **Machine maintenance**

As long as the daily, weekly and monthly maintenance procedures are properly followed, the machine can be kept in top working condition.

Marning: Risk of electric shock. Disconnect the battery wiring before servicing the machine.

#### Daily maintenance (after each use)

- 1. Drain and clean the recovery tank.
- 2. Remove and rinse the floating filter located in the recovery tank.
- 3. Drain the fresh water tank and flush the tank with hot water no higher than 60  $^{\circ}$  C as needed.
- 4. Remove the cleaning pad/brush for cleaning. If worn, flip or replace the pad.
- 5. Wipe the squeegee blade. The squeegee assembly is placed in the raised position to prevent damage to the rubber strips.
- 6. Check the wear condition of the squeegee blade edge. If it is worn out, turn the two ends of the adhesive strips over.
- 7. Wipe down the machine with an all-purpose cleaner and a damp cloth.

For safety's sake, when cleaning the machine, do not flush the machine with high pressure spray or water pipe, so as to avoid the failure of electronic parts.

- 8. Check the wear condition of the brush head skirt and replace it if it is worn or damaged.
- 9. Charge the battery, in order to prolong the life of the battery and ensure the best performance of the machine, the machine must be used for more than 30 minutes

#### The above can be used to charge the battery.

Monthly maintenance (every 80 hours of use)

- 1. Remove the solution tank filter from under the machine and clean the screen, making sure to empty the solution tank before removing the filter.
- 2. Clean the top of the battery to prevent electrode corrosion (refer to [Battery Maintenance]).
- $3. \ Check$  whether the battery wiring is loose.
- 4. Check and clean the recovery tank cover seal and replace if damaged.
- 5. Spray all the pivots and rollers with wine sand glue dry lubricant, and then cover with a layer of waterproof lubricant to maintain the smooth operation of the draft.
- 6. Check whether the nuts and bolts on the machine are loose.
- 7. Check the machine for leaks.

## Quarterly maintenance

Check the carbon brush wear of the drive motor (drive model), vacuum motor and brush motor every 250 hours.

When the length of the charcoal play is worn within 10 mm, the carbon brushes need to be replaced. If the machine needs to be sent for repair, please contact an authorized service center.

## **Faultresolution**

Problem	Cause	Solution	
Machine not working	Unit not connected the power	Charge Battery	
	Battery wiring loose	Replace battery	
	Main fuse blown	Tighten the battery wiring	
	The brush head is lifted off	Replace fuse	
The brush motor does not work	the ground	Lower the brush head	
	The battery charge meter is		
	locked and not activated	Battery charging	
	Brush motor circuit breaker tripped		
	* *	Reset brush circuit breaker	
	Brush (up/down) switch	Please contact the service	
	Tarrure	center	
	Motor carbon brush wear	Please contact the service	
	The squeegee is lifted off	center	
	the ground		
	Vacuum motor fuse blown	Lower the squeegee	
	Vacuum motor or wiring fault	Replace the fuse	
Vacuum motor not working	THE STATE OF WILLIAM THEFT	Please contact the service	
	Motor carbon brush wear	center	
		Please contact the service	
	Clogged solution tank filter	center	
	or solution line	Clean the solution tank	
	The flow rate setting of the water	filter	
Little or no water flow out	flow control knob is too low	O Adjust the water flow	
	Loogan the games of the	control knob	
	Loosen the screw of the switch control knob	Tighten the screw after	
	Recovery tank full	lubricating the knob	
	Absorbent strip wear	Drain the recovery tank	
	Suction pipe clogged	Replace the absorbent strip	
Inefficient	Damaged recovery tank seal	Clear clogged debris	
recycling of	Damaged recovery tank sear	D1 (1 1	
sewage	Vacuum motor failure	Replace the seal	
		Please contact the service	
	Defective battery	center	
Operating time	Battery charging failure	Replace the battery	
reduced		Repair or replace the charger	

# **Machine parameters**

Chinese	English	Unit	Model A32
工作宽度	Working width	mm	860
水扒宽度	Squeege width	mm	1100
工作效率	Working capacity	m²/h	6450
刷盘直径	Brush	mm	405*2
刷盘压力	Brush presure	kg/cm <sup>2</sup>	45
刷盘马达	Brush motor	V/W	24/ 400*2
刷盘转速	Brush rpm	RPM	160
驱动马达	Traction motor	V/W	24/650
工作速度	Work speed	km/h	15
吸水马达	Suctionmotor	V/W	24/ 650
吸水力度	Suction vacuum	mbar	165
清水箱	Solution tank	L	125
污水箱	Recovery tank	L	135
机器长度	Machine length	mm	1665
机器高度	Machine height	mm	1295
机器宽度	Machine width	mm	910
电瓶规格	Batteries	V/Ah	6/200*4
机器噪音	Noise level	dB (A)	<6 3
爬坡度	Max gradient	%	16
机器重量	Machine weight	Kg	296/438