



Model Number: YZ-X7



# YZ-X7 Floor Scrubber

Operating Manual

ANHUI YANGZI INDUSTRIAL TECHNOLOGY CO., LTD.



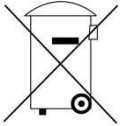
This manual provides the necessary machine operation and maintenance instructions.

Please read and understand this manual carefully before operating or using the machine.

When ordering replacement parts, refer to the parts manual included with the machine. Determine your machine model or serial number before selecting parts or accessories. You can order parts and accessories from any authorized service center or dealer by phone or by mail. This machine can provide excellent service. The following will be the best at the minimum cost:

- Operates the machine carefully.
- Maintain the machine regularly following the maintenance instructions provided in the operating manual.
- makes repairs using original factory manufactured or parts of the same grade.

#### Environmental protection



Please discard packaging materials, batteries, antifreeze and oil on the premise of maintaining environmental safety.



Be sure to do recycling.

# Contents

Notes.....	01
Machine operation display.....	02
Receiving machine.....	03
Open Package	
install the battery	
Machine cleaning mode.....	04
Brush and clean pad.....	05
Machine Installation.....	06
Mount suction	
stripping assembly	
Install brush /	
cleaning pad	
Machine Operation.....	07
Check before use	
Operation	
Battery Information	
Water tank drainage.....	08
Discharge sewage tank	
Discharge clean tank	
Battery charging.....	09
Machine maintenance.....	10
Daily maintenance	
Monthly maintenance	
Handling machine.....	11
Storage machine.....	12
Troublting.....	13
CM117 fault description.....	14
Machine parameters.....	15

## Notes

This machine is for industrial and commercial purposes, specifically for cleaning indoor hard floors and not for other purposes. Please use the recommended cleaning pads and brushes and available floor cleaners for this machine. All operators must read, understand, and observe the following safety precautions.

The following describes the safety warning symbol used in this manual and the title, for Safety:

**Warning:** used to warn of the risk or unsafe operations that can cause serious personal injury or death.

**For safety:** indicate what must be observed when using the machine to ensure safety.

Failure to observe the following warnings may cause personal injury, electric shock, fire, or explosion.

**Warning:** Fire or explosion hazard:

No flammable liquid; do not operate the machine near or in flammable liquid, gas or combustible dust. The machine is not equipped with explosion-proof motors. When in places with flammable gas, liquid or combustible ash, the electric motor during startup and operation generates sparks that may cause flash fire or explosion.

Do not pick up flammable materials or active metal.

One battery releases the hydrogen gas. Stay away from sparks or open fire sources. Keep the battery compartment open when charging.

**Warning:** Risk of electric shock. Disconnect the battery wiring before repairing the machine.

**Warning:** Rotate the brush is 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:

A contact with flammable liquid or near flammable gas, otherwise may cause explosion or flash fire.

— Unless trained and authorized to operate the machine.

— Unless the operating manual is read and understood. If not in the correct operation.

### 2. before starting the machine:

Ensure that all safety devices are positioned and operated correctly.

### 3. When using the machine:

Please slow down when encountering the slope and slippery surface. Wear anti-slip shoes.

Slow down when you turn.

-Report immediately for machine damage or operation failure. Do not let the children play on or near the machine.

Observe the mixing ratio and treatment instructions on the chemical container.

### Before the 4. leaves or repairs the machine:

-Park the machine on a smooth ground. Turn off the machine.

### 5. When repairing the machine:

Avoid moving the parts. Do not wear loose tops, shirts, or sleeves. Disconnect the battery wiring before operating the machine.

-Wear protective gloves and protective equipment when handling battery or battery wiring. -Avoid contact with battery liquid acid. Do not flush the machine with high pressure spraying or water pipe.

-Use replacement parts supplied or approved by the manufacturer. 1. All repairs must be carried out by qualified maintenance personnel. One do not modify the original design of the machine.

### 6. When handling the machine:

One, please turn off the machine.

-Do not carry the machine with the battery. One, please carry the machine with other assistance.

Use the recommended handling level when loading the machine from a truck or trailer. One holds the machine to the truck or trailer.

-Lower the brush head to the lower position.

# Receiving machine

## Remove the machine packing

1. Carefully check the machine box for damage. Immediately to the freight industry.
2. Check the shipping contents. If there are any missing items, please contact the seller.

Freight content:

- 6v Battery 4 Standard
- 24v Battery Charger 1 Standard
- battery connector 1 set \_ Standard standard
- water suction rubber strip 1 pay a standard
- wash wash 1 standard
- Needlet 1 Standard standard
- Other Parts ories separately

3. Before unpacking the machine, remove the shipping fixings and ropes that hold the machine to the stack. Carefully remove the machine from the top with the help of others?

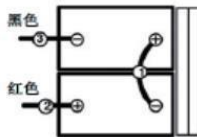
NOTE: If not using the loading pad, do not directly push the machine to avoid damage to the machine. NOTE: To avoid damage to the machine, remove the machine off the stack before installing the battery.

## Install the battery

Warning: Fire or explosion hazard. The battery releases the hydrogen gas. Please far high spark or open source. Keep the electric bottle cap open when charging.

For safety: when repairing the machine, wear protective gloves and protective equipment when handling the battery and battery wiring. Avoid contact with the battery liquid acid.

1. Park the machine on the horizontal level, and take the key.
2. Lift the sewage tank to make the battery exposed
3. Carefully install the battery in the battery compartment and connect the battery cable as



shown below 2.red 3.black

Note: Do not throw the battery into the battery compartment to avoid damage to the battery and machine.

4. Before connecting the battery, determine whether the electrodes and terminals are clean. Use the electrode cleaning fluid and a wire brush as required.



Note: Apply a thin layer of metal-free lubricating oil or protective spray to avoid battery corruption.

5. After the bottle is complete, check the power scale of the battery power meter. Charge the battery as required.

## Machine cleaning mode

### Cleaning method:

Manually control the water valve to adjust the water flow of the water tank and scavenger to the floor. The brush washed the floor with a mixed solution of detergent and water. As the machine advances, use suction water to suck the floor sewage into the sewage tank.

## Brush and clean mat information

For optimal performance, clean up with the correct brush type. The recommended brushes and cleaning pads are as follows:

Soft nylon brush    White:

It is recommended to clean the coated floor without damaging the ground. Clean without a scratch.

Grinding pad White:

For maintaining high smooth or polished ground.

Buffer cushion            Red color

To scrub a slight dirt without damaging the ground.

Gravity folding cushion Black:

Use to strongly remove heavy coating or substrate or super scrub

## Machine Installation

### Install the water suction rake assembly

- 1 Park the machine on the level ground and remove the key.
2. lowers the suction pick lift bar to the lower position.
- 3 Install the water suction tap on the water suction tap mounting bracket and put the fastening knob completely into the jack, and then tighten it around

### Knob

4. Connect the vacuum suction pipe to the suction pickup assembly.
5. Check and adjust properly

## Install brush and cleaning pad

Description: For the recommended brush and cleaning mat, refer to this manual or consult with your local authorized dealer.

1. Park the machine on the level ground and remove the key.
2. Press on the brush lift pedal to lift off the ground
3. Place the pad on the pin seat before installing the drive disc. Hold the central lock and secure the clean pad.
4. Align the pin seat / brush mounting column bolt at the insert motor drive disc buckle and press the brush disc motor switch.
5. To remove the pin seat and the brush, step on the brush head lift pedal to lift the brush head from the ground, and press the brush plate motor switch.

## Machine Operation

For safety: Do not operate the machine until you have read and understood the operating manual. Warning: Fire or explosion hazard. Do not operate the machine near or in flammable liquid, gas or combustible dust.

### Check before operation

Clean the dust from the ground.

Check the power scale of the battery power meter. (refer to the battery power meter) Check the wear of the cleaning pad / brush.

Check the wear of water stripping strip and adjust the angle appropriately.

The port determines that the sewage tank is empty, and a clean floating filter screen is installed. Check the wear of the brush skirt.

### Operating the machine

1. Turn the main power key on to the (I) position.
2. Pull the suction lift down to lower the suction assembly to the ground.
3. Press on the brush head lift pedal to lower the brush head 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 the desired cleaning speed

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

## During the machine operation

Warning: Fire or explosion hazard. Do not pick up flammable materials or active metals.

1. Each cleaning path overlaps by 5 cm.
- 2 Continue the machine to damage the ground.

If water suction water, the ground has drag marks, wipe with a rag tape to remove La ban. Clean up in advance to prevent drag marks. Do not operate the machine with slopes of more than 5% (3 °).

For safety: When using the machine, move slowly on the slope and slippery ground.

5. If excessive foam, pour the recommended deflazer solution into the sewage tank.

NOTE: Do not let the foam into the filter to avoid damage to the vacuum motor. The foam fails the filter screen switch.

6. Clean the extremely dirty area with double cleaning. Remove the water pick up and wash again after dipping the solution for 3-5 minutes.
7. More or rotate the cleaning mat as necessary.
8. Observe the power consumption of battery meter (refer to Battery meter).
9. Check the remaining liquid amount through the clear water tank level gauge. Traditional ground washing method is about 10 liters per 10 minutes;
10. When the solution in the water tank is exhausted, empty the sewage tank and reinject into the solution.
11. Leave the machine, park the machine on the level ground and remove the key. After the cleaning, conduct daily maintenance procedures.

## Battery power meter

The battery power meter displays the battery power. When the battery is full, all the indicators are on. Out from right to left. To extend the battery life, do not allow the indicator lights to extinguish until below the following power consumption.

Description: To extend the battery life, always charge the battery after the total machine service time exceeds 30 minutes.

## Water tank drainage

The sewage tank shall be drained and cleaned after each use. Clear water tank shall be cleaned regularly to remove any corrosion parts. Move the machine to the drain site, turn off the power key and drain the following discharge instructions for safety: park the machine on the horizontal level and close the machine and remove the key before turning high or repairing the machine.

## Sewage discharge tank

1. Unscrew the sewage tank drain cover in the counter-clock direction and remove it
2. Open the sewage tank lid and flush the water tank
3. Remove and flush the floating filter level in the sewage tank.

## Battery charging

NOTE: In order to extend the battery life and ensure the best performance of the machine, the battery must be charged for less least 30 minutes. Do not leave the battery unused for a long time. The following charging instructions apply to the charger attached with this machine. Be sure to use the following specification charger to avoid damage to the battery.

### Battery charger specification:

- Charger Type: Charger for one lead-acid battery
- output voltage of 1 24 volts
- output current: 115 amp
- automatic power-off circuit
- for deep cycle battery charging

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

Warning: Fire or explosion hazard. The battery releases the hydrogen gas. Please far high spark or open source. Keep the battery compartment open when charging.

2. Park the machine on the level ground and turn the key to the closed position.
3. Check the electrolyte level in each battery unit before charging.

For safety: when repairing the machine, wear protective gloves and protective equipment when handling the battery and battery wiring. Avoid contact with the battery liquid acid.

4. When charging, please open the sewage tank side for good ventilation
5. Insert the charger's AC (AC) power cord into a well-grounded power outlet.
6. Insert the DC (DC) cable of the charger into the battery charging outlet at the rear of the sewage tank.
7. The charger will automatically start charging and will automatically turn off when full.

Note: The machine will not operate with the charger. NOTE: During the charger charging, do not unplug the charger Dc cable from the outlet on the machine to avoid arc discharge. If charging must be suspended while charging, unplug the AC power cable first.

Warning: Fire or explosion hazard. The battery releases the hydrogen gas. Stay away from sparks or open fire sources. Keep the battery compartment open when charging.

8. After charging, check the electrolyte level height again.

## Machine maintenance

The machine works best as long as daily, weekly and monthly maintenance procedures are indeed observed.

Warning: Risk of electric shock. Disconnect the battery wiring before maintaining the machine.

### Daily maintenance      After each use of the

1. Drain out and clean the sewage tank
2. Remove and flush the floating filter screen located in the sewage tank
3. Drain water tank and flush hot water tank not above 60 ° C as required
4. Remove the cleaning mat / brush for cleaning. If worn, flip or replace the cleaning mat
5. Wipe the water suction strip strip. The suction pickup assembly is placed in the raised position to prevent damage to the rubber strip.
6. Check the wear condition of the suction water strip strip blade edge. If there is any damage, adjust the tape at both ends.
7. Wipe the machine with a multi-purpose cleaner and a wet cloth. For safety, do not flush the machine with high pressure spraying or water pipe when cleaning it to prevent electronic parts failure.
8. Check the wear of the skirt and replace if damage or damage.
9. Charge the battery, in order to extend the battery life and ensure the best efficiency of the machine, it must be more than 30 minutes for the machine.

### Monthly maintenance      Every 80 hours of use

1. Remove the water box filter from under the machine and clean the screen to ensure that the tank is emptied before removing the filter.
2. Clean the top of the battery against electrode corrosion (refer to Battery Maintenance").
3. Check whether the battery wiring is loose.
4. Check and clean the sewage tank cover strip. More if damaged.
5. Spray silicone dry lubricant on all pivot and rollers and cover with a layer of waterproof oil to keep the wheels running.
- 6 Check for loose nuts and bolts on the machine.
7. Check the machine for leakage.

### Maintenance maintenance

Check the carbon brush wear of the drive motor (drive model), vacuum motor and brush motor every 250 hours. When the carbon brush is worn within 10 mm, the carbon brush is required. Contact the authorized service center for repair.

Warning: Risk of electric shock. Disconnect the battery wiring before repairing the machine.

## Handling machine

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

1. Raise the brush head to the handling position.
2. Mount the machine using the recommended loading pad.
3. Close the front of the machine in front of the truck or trailer. After the machine is released, drop the brush head and turn the key to the closed position.
4. Place obstacles at the rear of each drive wheel to prevent the machine from sliding.
5. Attach the top of the machine to prevent tilt. You must install a carrier on the board of the truck or trailer. For safety: When handling the machine: 1 Flat load the machine from the truck or trailer and secure the machine to the board with ropes.

## Storage machine

1. Charge the battery before storage.
2. Do not store with out of power.
3. Dry the tank tank in the tank thoroughly and rinse. Store the machine in a dry place and keep the brush head in the raised position.
4. Open the sewage tank cover for good ventilation. NOTE: Do not let the machine in rain and store it indoors.5. s like
5. Store the machine in cold conditions, please do drain all the fluid inside the machine.

## Troubleshooting

Stopic	Reason	Solutions
Machine Not Working	Battery dead battery	Battery charging
	Battery fault	Replacement of the battery
	Battery wiring is loose	Tighten the battery wiring
	Main fuse burning off	Replace the fuse
Brush plate motor not working	Brush head goes up from the ground	Lower the brush head
	Battery battery meter locked not started	Battery charging
	Brush disc motor circuit breaker triggers power jump	Reset the brush circuit circuit breaker button
	Brush (top / down) switch fault	Please Contact the Service Center
	Motor carbon brush wear	Please Contact the Service Center
Vacuum motor not operative	Water absorption off the ground	Lower water absorption
	Vacuum motor fuse burning off	Replace the fuse
	Vacuum motor or wiring failure	Please Contact the Service Center
	Motor carbon brush wear	Please Contact the Service Center
Small or watery outflow	Block of clear water box filter or solution pipe	Clean the clear water tank filter
	Flow control knob flow speed setting is too low	0 Adjust the water flow control knob
	Unscrew of the control-making knob	Lubricate knob rear lock screw

Low efficiency of recycling sewage	Sewage tank is full	Drainage and drainage sewage tank
	Wear of suction strip	Replace water suction strip
	Water suction blockage	Remove blocked debris
	Damage seal seal sewage damaged	Replace seal strip
	Vacuum motor failure	Please Contact the Service Center
Less operating time	Battery is defective	Replacement of the battery
	Battery charging fault	Repair or replace the charger

## Technical parameters

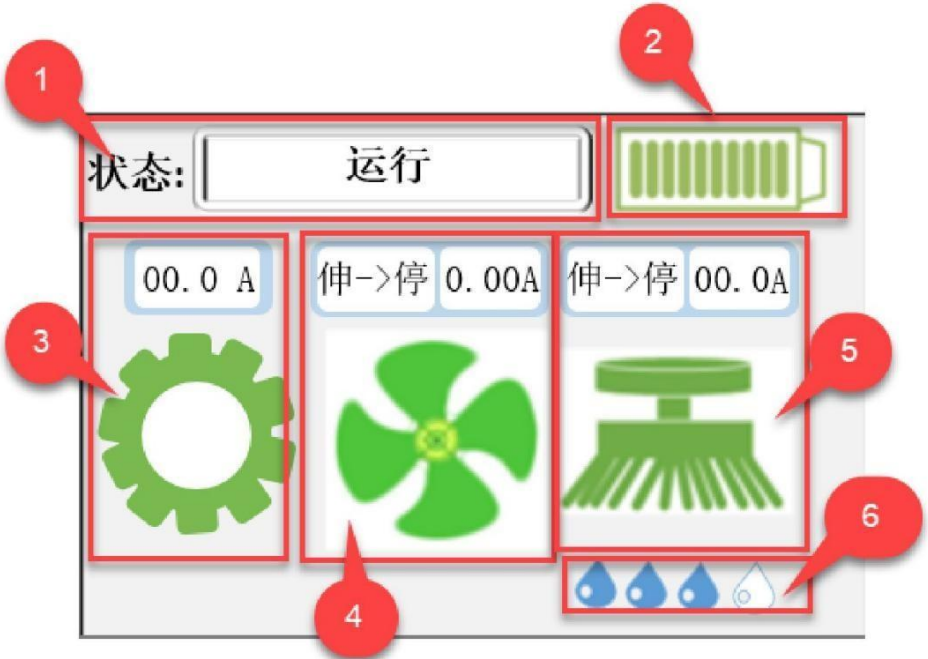
Cleaning efficiency	m <sup>2</sup> /h	6500
Brush plate width	mm	500*2
Width of suction stripping	mm	1180
Cleaning width	mm	1000
Brush disc rotation speed	rpm	230
Brush-plate motor power	w	600
Water suction motor power	w	600
Clear water / sewage tank capacity	L	138/140
Battery capacity	V/Ah	24/220



Working time	h	3-4h
Machine Weight	kg	380kg
Machine Size	mm	1650*1200*1420

## CM1172 fault description

### I. LCD interface interface



- (1) Status display
- (2) Power display
- (3) Walking motor status, Walking motor current display
- (4) water suction motor status, water suction motor current display, water suction push rod status display
- (5) Brush plate motor status, brush plate motor current display, brush plate push rod status display
- (6) Water level gear display

## II. Failure description

Status Display	Other Display	Causes	Solutions
The CM6012 serial port is not connected	None	Open circuit on the serial port line for the CM6012 controller	Check CM6012 controller serial line
The CM6020 serial port is not connected	None	Open circuit on the serial port line for the CM6020 controller	Check CM6020 controller serial line
Low battery voltage	Power display: 1 G	Low battery voltage	Battery charging
High / Low temperature	None	Long-time overload operation	Turn off the machine and take a break
Water suction motor current fault	1. water suction and corresponding putter delay stop working 2. water absorption icon display Red	1. suction motor overload operation 2. short circuit for water suction motor 3. Workenvironment Mismatch	1. Check load condition of suction motor 2. Connecting inspection of suction motor 3. replacement for working environment
Open circuit for the water suction motor	Absorbent icon displays Red	Open circuit of water suction motor	Check the suction motor connection
Water suction push rod current fault	None	Water suction motor pushrod motor overload	Check for excessive suction pusher motor connection or load
Brush plate motor current fault	1. brush tray and along with the corresponding putter delay stop working 2. brush tray icon display red	1. brush plate motor overload operation 2. brush disc motor short circuit 3. Workenvironment Mismatch	1. Check brush plate motor load 2. Check brush plate motor connection 3. replacement for working environment
Brush disc motor, open circuit	Brush tray icon disappears red	Brush plate motor connection is open	Check the brush plate motor connection
Brush plate push plate current fault	None	Brush plate push tter motor overload	Check brush plate push tter motor connection or load

Precharging fault	None	<ol style="list-style-type: none"><li>1. charging suppression</li><li>2. controller fault</li><li>3. battery Low</li></ol>	<ol style="list-style-type: none"><li>The 1. is in a charged state</li><li>2. controller internal fault</li><li>3. Battery Charging</li></ol>
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High battery voltage	None	High battery voltage	Battery voltage mismatch
Sewage tank is full	Water suction and brush plate and corresponding push tter delay stop working	1. sewage tank is full 2. sewage switch short circuit	1. emptying the water from the sewage tank 2. to check the sewage switch
Open circuit for the walking motor	Walking icon displays red	Open circuit for walking motor connection	Check the walking motor wiring
Walking motor current	Suction Off icon displays Red	1. walking motor overload operation 2. walking motor short-circuit	1. Check the walking motor load situation 2. Walking motor wiring inspection
High pedal error	None	Accelerator High End / Low End Out of Range	Before 1. key, check accelerator for operating state 2. change controller parameters
Electromagnetic brake failure	None	Open circuit of the 1. electromagnetic brake line The 2. connection is disconnected	1. Check the electromagnetic brake connection