



# YZ-S3 Floor Sweeper

instruction manual

安徽扬子工业科技有限  
ANHUI YANGZI INDUSTRIAL TECHNOLOGY



## **Content and purpose of the manual**

The manual will provide customers with necessary information for safe, convenient and correct use of the machine, including technical characteristics, operation methods, machine storage, maintenance, spare parts and safety conditions. Before using the machine, users and professional repair / maintenance technicians must read this manual carefully and use the machine in strict accordance with the instructions in the manual. If you have any questions or get more details, please consult the seller. The manual is specially provided for users and professional repair / maintenance technicians. The operator must have professional technical training, otherwise the manufacturer will not be responsible for the loss caused.

## **Preservation of the manual**

The manual must be placed in a safe and readily accessible area near the machine, away from liquids and other easily damaged places

## **Confirmation information**

The type and year of manufacture of the machine are shown on the back of the body

## **Other reference manuals**

### **Spare parts and maintenance**

All necessary operation, maintenance and repair procedures must be completed by trained operators or after-sales service center. When you purchase accessories or need maintenance from the seller, please tell us the machine model and body number in detail.

### **Modification and improvement**

Our company often improves our products and reserves room for expansion, but we have no obligation to make new improvements to the products that have been sold. If there is any change in the content, please contact our after-sales service department.

## security

### Content and purpose

The following symbols indicate potential hazardous situations. Read these instructions carefully and take necessary precautions. The essence of the machine operation manual is to prevent injury. Safety prevention without accidents is necessary. Most accidents occur in the work, and do not pay attention to the basic safety rules. A careful and careful user is the best guarantee against accidents, even better than some other precautions. When using the machine, be sure to pay attention to the people around you, especially children

### Symbol description



DANGER!

This sign refers to a situation that is dangerous to the operator (even the risk of death).



Warning!

This sign refers to potential injury to personnel



look out!

This sign refers to caution or important related remarks or useful functions.

Note: please pay special attention to the above marks in the paragraph!

### **Detailed warnings and messages on the prevention of danger of injury to personnel and machinery are shown below:**

- Before any maintenance and repair, please turn the start switch to the off position and remove the key from the main power switch.
- The machine must be used by qualified and authorized personnel. Children and disabled persons are not allowed to use the machine.
- Keep the battery away from sparks, flames and smoke, which will exhaust gas during normal operation. (refer to battery manual)

- When using the machine, do not wear accessories, try to wear overalls.
- Do not work under the elevator if it is not secured.
- Do not use in dangerous, flammable or explosive gas, liquid or water vapor.
- This machine can clean general garbage. It is strictly forbidden to clean wire rope, belt, high temperature sundries, ponding, inflammable or toxic and harmful substances, so as to avoid winding, burning the main brush and side brush, so that they can not work normally.
- Please keep loose clothes, hair, fingers and other parts of the body away from the air vent and any moving parts of the machine.
- Remember to turn off the power when the machine stops.
- Do not use the machine where the slope exceeds the machine rating.
- Read the maintenance and repair instructions carefully before performing any maintenance and repair operations
- Don't smoke while the battery is charging.
- Don't use the machine in very dirty areas. If the road garbage is thick, please repeat sweeping twice or more.
- When using the machine, be careful not to cause injury to people, especially children.
- Do not place containers containing liquids on the machine.
- The machine should be stored between - 10 °C and 40 °C .
- When using the machine, the temperature should be between - 10 °C and 40 °C .
- humidity should be between 30% and 95%.
- Do not use the machine as a means of transport.
- When the machine does not move forward, do not allow the brush to continue to rotate to avoid damage to the ground.
- In case of fire, please remember to use powder fire extinguisher instead of water.
- Don't bump into the shelf where there is a risk of falling objects.
- Adjust the driving speed of the machine according to the adhesion of the ground.
- Do not change the safety guards of the machine; follow the maintenance instructions.
- Do not move or change the Yangzi name plate on the machine.
- When the machine operation fails, make sure that the failure is not caused by the lack of regular maintenance. Otherwise, ask Yangzi maintenance service center for help.
- If some parts need to be replaced, you can purchase spare parts from the original manufacturer or authorized dealer.
- Ensure the proper operation and safety conditions of the machine. Professionals or service centers must follow the maintenance section of this manual.
- Even if the machine is to be dismantled and scrapped, someone should pay attention to it. Because some harmful substances (such as batteries, waste oil, etc.) have met the

standards, they should be sent to a specific Center for treatment.

- The machine installed with lead (wet) battery should not be tilted more than 30 ° above the horizontal ground, so that the high concentration of corrosive acid in the battery will leak. The machine must be tilted during maintenance. Please remove the battery.

## **Safety requirements for batteries**

- The battery must be kept away from low voltage state and should be charged as soon as possible;
- The battery is lead-acid maintenance free battery or lithium battery pack (optional);
- To avoid electric leakage, please keep the battery dry and clean, especially to remove pollutants such as metal dust;
- It is forbidden to place metal parts (such as tools) on the battery to prevent the battery from short circuit burning out;
- Please comply with local regulations when recycling batteries;
- It is forbidden to use open fire when handling and handling batteries;
- The charging room should be well ventilated;
- When the key switch is in the on position, it is forbidden to connect or remove the battery;
- Before disassembling the battery, disconnect the negative (-) battery wire and then the positive (+) battery wire. When rewiring, pay attention to the polarity of the battery. · Wrong connection will damage the electrical components;
- Avoid direct contact between positive and negative electrodes, as it may cause short circuit of high current, high heat and even fire.
- When the battery is charged, it will produce explosive hydrogen, charge the battery in a ventilated place, and keep the cover open and away from open fire.

## **General safety regulations**

In addition to the provisions made in this manual, the general safety regulations and accident prevention rules required must be observed. Even if you have used a similar sweeper before, please read the manual carefully. Reading the instructions in advance will save you a lot of time in the future. It is important for you to be familiar with all the accessories and controls and their functions before you start to use them. Read this manual thoroughly, so as not to be in a hurry when you turn it on.

## **The outer packing of the machine**

When the machine arrives, please carefully check whether the machine itself is damaged. If the damage is obvious, please keep the outer packing box, so as to make a damage declaration to the shipping company immediately.

**Please check whether the machine contains the following items:**

- sweeper manual
- Spare parts list of sweeper
- Parts of sweeper
- Starting key
- Certificate of conformity
- warranty

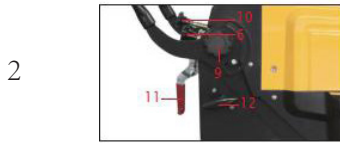
in order to avoid losing the key during transportation, we store the key in the plastic bag in the instruction manual.

**Sweeper performance**

The sweeper must be operated by qualified operators on flat cement, asphalt, etc. to clean (sweep and dust) the dirt or light garbage.

The positive position control of the machine (as shown in Fig. 1 and Fig. 2)

1. Key switch
  2. Main brush button
  3. Side brush button Figure 1
  4. Power and voltage display
  5. Charging port
  6. Main brush height regulator
  7. Main brush protection
  8. Side brush protection Figure 2
  9. Armrest adjuster
  10. Side brush height adjuster
  11. Dustbin handle
  12. Dust shaking handle
- Optional function (Figure 3)
13. Water inlet
  14. Nozzle



## **Start the machine**

- Turn the start key to the "on" position.
- Move the machine to the working area by pushing the push rod forward, backward and turning.
- Press the main brush function button and side brush function button to position I to start sweeping.
- If the working environment is poor, stop sweeping after a certain time interval (pull the vibration handle).
- Check the amount of garbage in the dustbin and empty it in time.
- Please check the water quantity and add water in time.

### The machine stops

Press the main brush and side brush function buttons to o position.  
Turn the start key to the "off" position.

## **use**

### Every start

Insert the start key in the operation panel; turn the key switch to the "on" position. Three seconds later, the meter will display the battery power value. If it is fully charged, it will be displayed as 100%; if it is under charged, it will be displayed as 20%, please charge it; otherwise, it will display the power grid memorized in the last shutdown.

## **Start the machine**

Turn the start key to the "on" position.  
Move the machine to the working area by pushing the push rod forward, backward and turning.  
Press the main brush function button and side brush function button to position I to start sweeping.  
If the working environment is poor, stop sweeping after a certain time interval (pull the vibration handle).  
Check the amount of garbage in the dustbin and empty it in time.  
Please check the water quantity and add water in time.



## The machine stops

Press the main brush and side brush function buttons to 0 position.  
Turn the start key to the "off" position.

## Precautions for machine operation

**Note:** in the process of work, determine whether to start the vibration device temporarily according to the amount of garbage on the ground to be cleaned. When the filter is clogged or the dustbin is full, the machine cannot collect garbage. The dustbin must be emptied after each operation. (if the dustbin is full at work, please empty it immediately)

If the temperature is lower than 0 °C , please pay attention to drain the water in the box to prevent freezing damage.

**DANGER!** Avoid stopping the machine and letting the brush roll for a long time in the same place; this will leave unnecessary marks on the ground.

When collecting large garbage, please remember to lift the front wheel slightly before moving forward. Pay attention to lifting it only for a short time.

In order to clean the machine well, the filter must be cleaned. Pull the dust vibrating rod on the side of the dustbin for more than ten times to shake off the dust on the filter.

**look out!**When working, it is decided to clean the dust on the filter according to the dirt in the cleaned area.

The dustbin must be emptied after each work and after it has been filled.

When the main brush and side brush are worn, the screw at the tail of the machine can be adjusted to lower the main brush and side brush. It is not allowed to adjust it too low. Clean it to avoid burning out the fuse.

(there is no need to adjust when cleaning for the first time. The staff of our company have adjusted it)

### empty trash

Push the sweeper to the bin dump.

Release the buckle and take out the dustbin (Fig. 5).

After cleaning the garbage, put the front of the dustbin on the rear baffle, and then lock the buckle.



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## Preservation and maintenance of the machine

If the machine will not be used within 30 days, follow the procedure below:  
Keep the machine in a clean and dry place.  
Disconnect the battery connector.

### First use

After the first use (the first 8 hours), it is necessary to check the following operations:  
Check whether the connection and fastening parts are loose.  
Check whether the visible parts are intact.  
Check the main brush for excessive wear.

**Warning!** To carry out maintenance operations, the machine must be stopped (remove the start switch key) and the battery must be removed if necessary. Therefore, please read the safety section of the manual carefully.

## Installation and maintenance of side brush and main brush

### Inspection and adjustment of main brush height

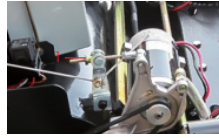
When the sweeper leaves the factory, the height of the main brush has been adjusted to be qualified. When it is used for a period of time, the main brush bristles on the ground are worn. It is necessary to adjust the main brush. Rotate the right rotating handle of the sweeper tail anticlockwise for about 2 mm, so that the main brush hair contacts the ground by 3-5 mm. (Figure 6)

**Note:** please do not think that the longer the bristles contact the ground, the cleaner the cleaning is! In fact, when the bristles contact the ground 3-5mm, the cleaning is the most clean!

When the main brush is seriously worn and the rotary handle has been turned to the last step, please open the front cover and adjust as follows:  
Adjust the right rotary handle to the initial position; (Fig. 6)  
Turn the nut 1 clockwise (Fig. 7) so that the main brush bristles contact the ground for 3-5mm;  
Cover the front cover;  
repeat the process for later use (main brush height check and adjustment 1).



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## Main brush replacement

1. Remove the housing screws; (Fig. 8)
2. Loosen the left and right rocker arms of the main brush; (Fig. 9)
3. Remove the rocker arm;
4. Tilt up the machine and take out the main brush; (FIG. 10)
5. Take out the left and right heads of the main brush;
5. Install the left and right heads of the main brush onto the main brush, paying attention to the same installation position as the left and right of the original main brush;
6. Install the main brush on the sweeper and tighten the bolts; (FIG. 11)
7. Adjust the adjusting screw of the main brush to the position of the first use, so that the bristles of the main brush contact the ground for 3-5mm;
8. Install the bumper and housing.



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## **Be careful! Be careful!**

The hard brush or soft brush can be selected according to the ground conditions; when replacing the main brush, it is better to wear gloves because it may be cut by the brush; the running direction of the main brush is shown in Fig. 6, and the main brush should be installed correctly as shown in the figure, and the pressure between the main brush and the ground should be checked according to the description in relevant chapters.

## **Side brush replacement**

The main function of the side brush is to use its own rotation to collect the garbage from both sides to the middle, which is collected by the main brush into the dustbin. The advantage of the edge brush is that it can sweep out the garbage at the edges and dead corners and increase the cleaning area.

Use the machine on level ground and turn the machine start key to "off" position; Lift up the machine and loosen the four bolts at the bottom of the brush plate (FIG. 13);

Replace with a new side brush;  
Adjust the height of the side brush according to the above section.



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## **Vibrating dust**

After the sweeper works continuously for a period of time, the capillary hole of the filter is easy to be blocked. Please use the dust vibrating function regularly

Pull the dust vibrating rod on the side of the dustbin about ten times to shake off the dust on the filter. Figure 14



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## **Filter cleaning and integrity inspection (FIG. 15)**

Use the machine on level ground, turn the machine start key to the "off" position and remove the dustbin.

- scrape the bottom of the filter with a burr free bar.

Please pay attention to the following: do not use water or detergent to clean it, the filter will be damaged.

Check the filter for cracks. If so, replace it.



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## Maintenance free battery charging (Figure 16)

After each use, when the warning light is on, charge the battery to extend its life.

If you want to stop charging, you should first disconnect the AC socket switch before disconnecting the DC socket.

After the charger is disconnected from the power supply, the DC plug can be pulled out. Figure 16



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**DANGER!** Do not touch the battery terminals and the pins of the DC plug.

## Optional water adding function

When the water inlet with water is on the right side of the control panel (FIG. 17), it is in reverse time

The needle rotates to open the water cap to add water. Figure 17

**Special attention: when the temperature is lower than 0 °C , the water in the water tank should be drained after use.**



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## Skirt height inspection and operation

1. Place the machine on a level ground suitable for checking the skirt height.
2. Turn the start key of the machine door to "off" position. Check the side skirt
3. Check the integrity of the side skirt.
4. Check whether the height between the side skirt and the ground is 0 ~ 3mm.

### Check front / rear skirt

The front wheel of the sweeper is cocked up.

Check the front and back hems.

### inspection

the front skirt gently touches the ground, but is not detached from the ground.

the height between the back skirt and the ground is 0-3mm.

## Maintain

Machine life and operation safety must be ensured by proper routine maintenance of the machine. The following is a list of routine maintenance requirements. Under suitable working conditions, the maintenance interval can be changed, which must be decided by the professional responsible for maintenance.

**Warning! To carry out maintenance operations, the machine must be stopped (remove the start switch key) and the battery must be removed if necessary. Therefore, please read the safety section of the manual carefully.**

Service conditions:

Environmental temperature: - 10 °C - 40 °C ;

Relative humidity of air: 5% - 70%;

The environment without conductive dust and explosion hazard;  
environment without corrosive metal gases or vapors;

Indoor use, ventilation, no vibration environment, front and back space at least 300 mm.

**Note: other maintenance procedures are included in the maintenance schedule. China Yangzi service center also has a detailed service manual.**

## Maintenance scope

Under the following conditions of use, no maintenance is required

Mechanical damage or failure caused by failure to carry out maintenance according to the maintenance manual

The appearance or structure of the machine is obviously damaged due to improper operation

Disassembly or modification without the approval of the original manufacturer

Damage due to weather or force majeure

Consumable parts (main brush / side brush / belt / pulley / filter screen, etc.)

The warranty period is over 1 year or the service life is more than 1500 hours

Maintenance operation	Delivery time	Every 10 hours	Every 50 hours	Every 100 hours	Every 200 hours	Every 500 hours
Height adjustment inspection of side brush and main brush						
Whether the main brush and side brush are wired and filament wound						
Cleaning and integrity inspection of garbage filter screen						
Fill in the oil hole						
Main brush drive belt visual inspection						
Tightening inspection of screws and nuts						
Check the wear of main brush and side brush						
Main brush drive belt replacement						
Skirt height and operation inspection						

## Common problems and Solutions

Problem	reason	Treatment
Large leaves or large garbage particles are leaked during sweeping	Working too fast	Reduce the working speed
	Brush height	Adjust brush height
	The bristles are deformed or entangled with filaments	Remove the entanglement
The sweeper leaves dust on the floor or dust from the side shields	Filter clogged	Clean the filter
	Skin damage	Check the baffle and replace it if damaged
Cleaning is not thorough, leaving paper scraps, leaves or other garbage	The lifting height of front bumper is not correct	Adjust the skin guard link
The brush wears too fast	The brush is pressed too low	Adjust brush height
Too much noise at work	The bristles are entangled with filaments	Remove the entanglement
	The bearing is broken	Replace the bearing
	Brush overpressure	Reduce brush pressure
The brush does not rotate when it works	The drive belt is damaged	Replace the belt
Brush and fan motor do not work	Motor damage	Replace the motor
The electric dust shaker does not work	Excessive motor load	Check and reduce the load
	The switch is broken	Replace the fuse
	The fuse is burnt out	Check and reduce the load
	Motor damage	Replace the motor
	Bearing wear	Replace the bearing
The brush can work normally and cannot run normally	Problems of controller, fuse, drive motor, governor and brake switch	Check the input and output voltage, alarm signal, indicator light, fuse, drive motor and connecting circuit.



The car can't move forward or backward	Pedal governor damaged	Replace the governor
	Brake pedal position fault	Reset the brake pedal and check if it is in good condition
	Brake switch failure	Replace the brake switch
	Controller damage	Replace the controller
The battery doesn't charge	Charger does not work	Check the charger input power
	The battery is burnt out	Replace the battery
	Charger	Check whether there is output of charger
	Loose battery terminals	Check and tighten the battery terminals
Battery discharging too fast	Insufficient charging time	Increase charging time
	The battery is burnt out	Replace the battery
	Charger damaged	Replace charger



# Inspection Certificate

Number: \_\_\_\_\_

Model		Motor		Accessories	
Power cable		Switch		Shell	
Suction		Control		Fuselage	
Function		Manual		Package	



# Warranty Card

Number: \_\_\_\_\_

Name		Tell	
Mailing address			
Purchase time		Bill number	
Product number		Fuselage number	
Replacement parts		Date	
Fault description:			

## Warranty conditions:

1. Within the date of purchase, the motor is guaranteed for one year (if it is more than 7 days from the date of purchase, no replacement, only warranty).
2. Before using the equipment, you must understand the instructions and safety instructions.
3. During the warranty period, the artificial damage of warranty accessories will not be guaranteed.
4. During the warranty period, users who do not follow the operation instructions or dismantle and repair by themselves will not be guaranteed. (if repair is needed, the cost of production will be charged)
5. The buyer shall take the invoice to the place designated by the seller for repair, or send the machine back to our company for repair. (return freight, insurance paid by yourself)