



YZ-S5

Floor Sweeper

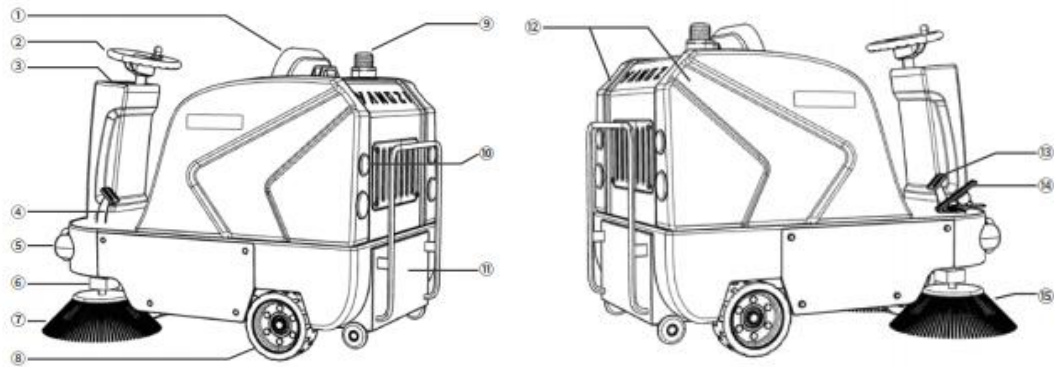
operation instructions

Yangzi.Make cleaning easier

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Parts



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|------------------------|---------------------------|---------------------|
| ① Seat | ⑥ Dust suppression nozzle | ⑪ Dust box |
| ② Steering wheel | ⑦ Left brush | ⑫ Water tank |
| ③ Center control panel | ⑧ Tire | ⑬ Brake pedal |
| ④ Leather lift pedal | ⑨ Warning light | ⑭ Accelerator pedal |
| ⑤ Headlights | ⑩ Tail light | ⑮ Right brush |

Performance parameters

Category	Parameters	Category	Parameters
Cleaning width	1350mm	Side brush motor	90w*2
Roller brush width	590mm	Fan motor power	145w
Side brush width	260mm*2	Drive motor power	800w
Dust box capacity	120L	Vibrating motor power	60w
Charging time	8-10h	Maximum gradeability	15%
Working time	2-3h	Working speed	0-10km/h
Battery type	Lead-acid/lithium battery	Machine weight	363kg
Battery capacity	48V/67Ah	Product size	1600*1350*1260mm
Roller brush motor	700w	/	/

Chapter 1 Description

1.1 Content and Purpose

The following content points out potentially hazardous situations, please read these instructions carefully and take necessary precautions. The essence of this machine operator's manual is to prevent injuries, and most accidents are caused at work by not heeding basic safety rules. A careful and careful user is the best guarantee against accidents, even stronger than some other precautions. When using the machine, be sure to pay attention to your surroundings and people nearby, especially children.

1.2 General Instructions

- Before any maintenance and repair, please turn the start switch to the off position, and please 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.
- Do not use it in a place where dangerous, flammable or explosive gas, liquid or water vapor is present.
- This machine can clean general garbage. It is strictly forbidden to clean silk ropes, belts, high-temperature sundries, accumulated water, flammable or toxic and harmful substances, so as to avoid entanglement, burning the main brush and side brush, and making them unable to work normally.
- Please keep loose clothing, hair, fingers, etc. any part of the body away from the air outlet of the machine and any moving parts.
- When the machine stops, remember to turn off the power.
- Do not use the machine where the inclination exceeds the rated value of the machine.
- Please do not smoke while charging the battery.
- Do not use the machine in a very dirty area. If the road garbage is thick, please repeat the sweeping work twice or more.
- The machine should be in temperature between -10°C to 40°C .
- When using the machine, the temperature should be between -10°C and 40°C , and the humidity should be between 30% and 95%.
- Do not use the machine as a means of transportation.
- When the machine is not moving forward, do not let the brush continue to rotate to avoid damage to the ground.
- In case of fire, please remember to use powder fire extinguisher instead of water.
- When the machine operation fails, make sure that the failure is not caused by lack of regular maintenance.
- If some parts need to be replaced, you can buy spare parts from the original manufacturer or authorized dealer.
- Confirming that the machine is in proper operation and safe condition, professionals or service center must work in accordance with the maintenance section of this manual.

●Even if the machine is to be dismantled and scrapped, someone should be there to pay attention. Because some harmful substances (such as batteries, waste oil, etc.) have met the standards, they should be sent to a specific center for processing.

1.3 Safety requirements for batteries

- The battery must be kept in a low voltage state, and it should be charged as soon as possible.
- To avoid leakage of electricity, please keep the battery dry and clean, especially to remove contaminants such as metal dust.
- It is forbidden to place metal parts (such as tools) on the battery to prevent the battery from being short-circuited and burnt out.
- The charging room should be well ventilated.
- Do not connect or remove the battery when the key switch is in the ON position.
- Before removing or installing batteries, disconnect the negative (-) battery wire first and then the positive (+) battery wire. When rewiring, be sure to pay attention to the polarity of the battery, as wrong connection will damage electrical components.
- Avoid direct contact between the positive electrode and the negative electrode, because it will cause a large current short circuit, high heat and even fire.

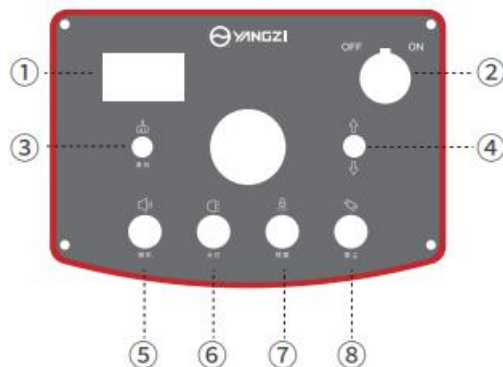
1.4 General safety regulations

In addition to the provisions made in this manual, the required general safety regulations and accident prevention guidelines must also be observed. Even if you have used a similar sweeper before, please read the instructions carefully. Reading the instructions beforehand will save you a lot of time in the future. It is vital that you become familiar with all accessories and controls and their functions before you start using them. Read through this manual so you don't get scrambled when you turn it on.

Chapter 2 Use of the Machine

2.1 Buttons/pedals of the machine

2.1.1 The core control keys of the machine



●①Power/Volmeter (the display device can display the current power, battery voltage, please charge when the voltage is lower than 42V).

●②Key switch

●③Sweep button

●④Forward and backward buttons

●⑤Speaker button

●⑥Headlight button

●⑦Sprinkler button

●⑧ Dust vibration button

pay attention:

(1) The sweeping button is divided into three gears:

The main brush, side brush and fan in the front block can be started with one key, and the main brush and the side brush are automatically lowered, and the cleaning operation can be performed;

Intermediate gear (debugging gear) The main brush, side brush and fan stop rotating, the main brush side brush does not rise, the height of the main brush side brush can be adjusted; in the reset gear, the main brush side brush is raised.

(2) Dust vibrating button, the dust vibrating function can be used only after the main brush side brush is raised after the sweeping button is turned off

●Sprinkler mechanical valve (be sure to open the sprinkler mechanical valve after the sprinkler button is turned on; after the sprinkler function is turned off, close the mechanical valve to prevent the sprinkler from dripping).



- ①Accelerator pedal, to control the running speed of the machine, the greater the pressure, the faster the running speed.
- ②Brake pedal, control the function of machine parking and emergency stop.
- ③Front fender lift bracket pedal [If you need to clean large garbage (such as cans, cigarette boxes, etc.), step on the front fender lift bracket pedal, and the main brush can sweep the large garbage into the trash can]

2.1.2 Charging the battery

●The cable of the charging socket needs a power cable with a diameter of at least 6mm. If you need to stop charging during the charging process, directly power off.

2.1.3 Adding water to the water tank



- Unscrew the cover of the water tank before using the machine, and pour clean water into the water tank. Water, pay attention to the water quality to be clean to prevent clogging of the waterway.

2.2 The operation process of the machine

before start

- Under normal operating conditions of the machine, make sure that the door or lid is not opened, and that the hopper is properly closed. If the machine cannot be used after shipping, check each part first.

Power display

- Insert the start key in the steering wheel console, and turn the start switch clockwise to the "ON" position. After three seconds, the display shows the battery voltage value. If the voltage is lower than 42V, please charge it before use.



start the machine

- Sit in the driver's seat;
- Gently step on the brake pedal and turn the start key to the "ON" position;
- Move the machine to the work area with the steering wheel and the forward/reverse buttons (forward for forward, backward for backward). The driving speed is adjusted from 0 to the maximum value by the pressure of the accelerator pedal;
- Press the sweeping function button to start sweeping, and use the steering wheel, accelerator pedal and forward/backward buttons to move the machine.
- The dustbin must be closed when sweeping.

- The sweeper implements automatic and one-button operation. When the sweeping function button is pressed, all sweeping motors (including the main brush motor, side brush motor, and fan motor) will automatically work, and the main brush and side brush will automatically descend.

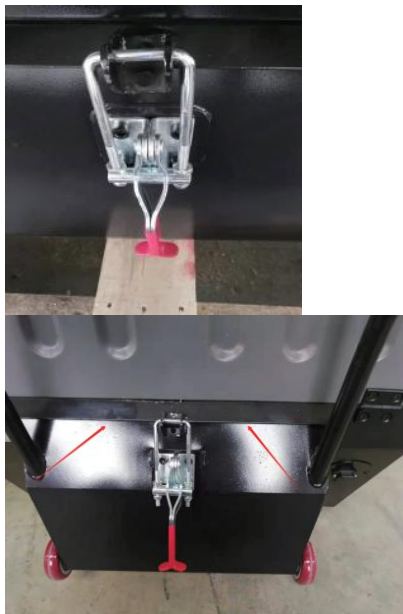
stop of the machine

- Release the accelerator pedal to stop the machine.
- Press the sweeping stop button. All sweeping functions are stopped, and the main brush and side brush are raised.
- Turn the start switch to the "OFF" position.

3.3 Precautions for machine operation

- Avoid stopping the machine and rolling the brush in the same place for a long time; this will leave unnecessary marks on the ground.
- If you need to collect large light garbage, you can lift the front cover by stepping on the pedal to allow the large light garbage to pass through the machine. Please remember that when the front cover is raised, the amount of dust in the machine will be reduced

- In order to clean the machine well, be sure to clean the filter screen, stop the machine, press the dust vibration switch, and start the dust vibration motor to vibrate the filter within 1 minute. After cleaning the filter, restart the sweeping operation.
- When working, the filter needs to be vibrated every 30 minutes on average. (depending on the garbage in the area to be cleaned)
- When the filter screen is blocked or the garbage bin is full, the machine cannot collect garbage and should not work on wet ground to avoid damage to the filter screen.
- The rubbish bin must be emptied every time the work is completed or the rubbish bin is full.



Empty the trash

- Release the pedal to stop the machine.
- The trash can hasp is opened.
- Pull the trash can down and then pull it out to dump the trash.
- Put the trash can back into the machine and fasten the hasp of the trash can. **Note: The sealing strip of the dustbin is tightly fitted with the box body.**
- The machine is ready to work again.

Push/drag of the machine

- Push/drag the machine when the machine is off, or when there is a malfunction

Drive the machine to ensure that the speed is not more than 5km/h. Press the button to forward gear when going forward position, press the button to reverse when reversing.

After using the machine

- Press the reset button to raise the main and side brushes.

- Press the dust vibrating button to vibrate the filter.
- Empty the trash
- Remove the key from the power switch.
- When the machine stops working, the brush must be lifted to prevent the brush from being deformed.

Machine storage and maintenance

- If the machine will not be used within 30 days, store the machine in a clean and dry place and disconnect the battery connector.

Chapter 3 Routine Maintenance and Replacement of Wearing Parts

3.1 Periodic Inspection

Regular maintenance and inspection		Intervals (h)				
		4	50	100	200	500
1	Battery level detection	■				
2	Motor carbon brush inspection					■
3	Whether the main brush is wired, the silk is entangled					
4	Check for debris in the tank					
5	Check the buttons and electronics on the control panel		■		■	
6	Check the brush for wear					
7	Check the filter for impurities					
8	Check the sprinkler joint for leaks					

3.2 Replacement and installation of main brush

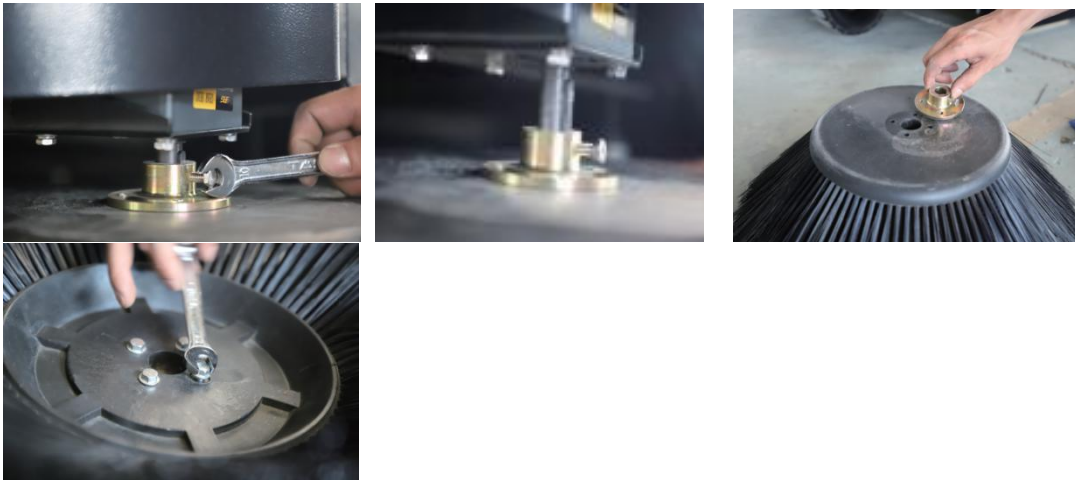
- Ensure that the machine is in a stationary state;

- Open the right side panel of the machine, use an open-end wrench to remove the rocker arm of the main brush, the cover plate and the fixing nut of the fender bracket;



- Pull out the worn main brush, replace the new main brush, install the sealing plate nut first, then install the fender support nut, and finally install the rocker arm nut;
- Turn to the top of the sweeping button switch, the main brush motor, the side brush motor, the suction motor, The push rod motor starts working at the same time; observe whether the rotation of the main brush is abnormal, if the vibration is abnormal, It can be adjusted through the bolt on the rocker arm until it does not vibrate. If it is normal, close the right side panel and carry out cleaning work.

3.3 Side brush replacement and installation



3.4 Removal and installation of garbage can

- Ensure that the machine is in a stationary state;
- Loosen the rubbish bin lock, pull out the rubbish bin, and dump the rubbish in the rubbish bin;
- After the garbage is dumped, align the opening of the garbage can with the correct position of the sweeper, and slowly push it forward.
- Push it all the way and then press the buckle down firmly to put the trash can back in place. **Note: The sealing strip of the dustbin is tightly fitted with the box body.**



!! Hint

The waste bin is inserted into the slot, and the sealing strip on the waste bin should be tightly fitted with the machine. If it doesn't fit, loosen the lock and reinsert it.

3.5 Battery Maintenance

The power system of this sweeper is powered by four 12V maintenance-free lead-acid batteries in series, and the system voltage is 48V.

- When the machine works for a period of time, the battery power drops, and when the last bar of the power display meter is flashing, it indicates that the power is insufficient and needs to be charged in time;
- When maintaining the battery, please wear protective gloves to avoid contact with the acid substance of the battery;
- Check whether the battery connecting wire is worn and the contact parts are loose, and replace it if necessary;
- The terminal of the battery should be kept clean and dry, and there should be no sundries and dust covering it, which is extremely unfavorable to the battery, and will burn the battery in severe cases.

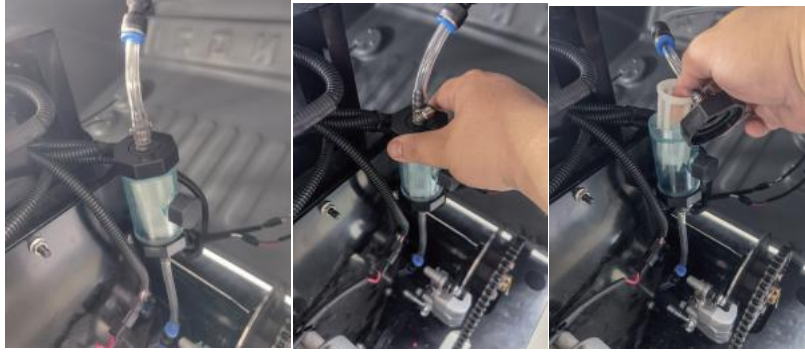
!! Hint

- ◆In order to make the battery have a long service life, it should be charged in time after the machine operation is completed, and deep discharge is strictly prohibited.
- ◆The correct charging method of lead-acid battery: first insert the battery, then plug in the mains; when fully charged, first cut off the mains, and then pull out the battery plug.
- ◆If the machine is not used for a long time, please fully charge the battery, disconnect the positive pole of the battery, and store it.

!! Warn

- ◆During the use of the battery, the capacity of the deeply discharged battery will decrease and the life span will be shortened.

3.6 Cleaning of the water valve filter element



Unscrew the upper screw cap of the filter, take out the filter screen inside, and clean it with clean water.

3.7 Replacing the dust filter



Open the machine case as shown on the right, unscrew the mounting screws of the dust vibrating baffle, and pull out the dust vibrating filter element

Chapter 4 Sweeper Troubleshooting

Problem	Reason	Approach
Main brush not working	Main brush fuse blown	Replace the main brush fuse
	Main brush motor burned out	Replace the main brush motor
	Motor thermal overload start	Wait 5-10 minutes, after the motor cools down, you can reset the start
	DC contactor burned out	Replacing the DC Contactor
Side brush not working	Side brush fuse blown	Replace the side brush fuse
	Side brush motor burned out	Replace the side brush motor
	Motor thermal overload start	Wait 5-10 minutes, after the motor cools down, you can reset the start
	DC contactor burned out	Replacing the DC Contactor
Fan not working	blower fuse blown	Replace fan fuse

	Fan motor burned out	Replace the fan motor
	DC contactor burned out	Replacing the DC Contactor
	Motor thermal overload start	Wait 5-10 minutes, after the motor cools down, you can reset the start
Main brush, side brush, fan not working at the same time	DC contactor burned out	Replacing the DC Contactor
	Motor thermal overload start	Wait 5-10 minutes, after the motor cools down, you can reset the start
Spray not working	Water pump fuse blown	Replace the water pump fuse
	Water pump motor burned out	Replace the water pump motor
The pump works, the spray effect is not obvious	Nozzle is clogged	Remove the nozzle and rinse the nozzle with clean water
	Filter clogged	Remove the filter and rinse the filter with clean water
Pump works, no spray	Electric water valve burnt	Replace Electric Water Valve
	DC48V/DC24V converter burned out	Replace the converter

Problem	Reason	Approach
Alarm light does not show	The key switch is not turned on	Turn the key switch from "OFF" to "ON"
	Fuse key switch burnt	Replacing the key switch fuse
	The battery is depleted	Use a multimeter to measure whether the total battery voltage is 48V (42-52.8V)
	Damaged key switch	Replace the key switch
walking not working	Controller is damaged	Replace the controller (announce controller failure)
	Damaged accelerator pedal	Replace the accelerator pedal (announces a handlebar error)
	Damaged travel motor	Replace travel motor (announces hall error)
The whole machine does not work, the key switch, the switch has a sound	The battery is depleted	Use a multimeter to measure whether the total battery voltage is 48V (42-52.8V)
	Main DC contactor burned out	Replace the main DC contactor
The whole machine does not work	Damaged key switch	Replace the key switch
	The battery is depleted	Use a multimeter to measure whether the total battery voltage is 48V (42-52.8V)
	Main DC contactor burned out	Replace the main DC contactor

Chapter 5 Maintenance

Machine life and operational safety must be ensured by proper and routine maintenance of the machine. The routine maintenance requirements are tabulated below. Under suitable operating conditions, the maintenance interval can be changed and must be determined by the professional responsible for the maintenance.

To perform maintenance operations, the machine must be stopped (remove the start switch key), so please read the safety section of the manual carefully.

Conditions of Use

- Ambient temperature °C: -10°C ~ 40°C;
- The relative humidity of air °C: 5% ~ 70%;
- No conductive dust, no explosion hazard environment;
- An environment that does not contain gases or vapors that corrode metals;
- Indoor use, ventilated, non-vibration environment, front and rear space at least 300mm;

Maintenance schedule

maintenance operation	On handover	Every 10h	Every 50h	Every 100h	Every 200h	Every 500h
Side brush and main brush high °C adjustment check						
Whether the main and side brushes are wired or entangled						
Complete inspection of garbage filter cleaning						
High °C of stopper and operation inspection						
refueling hole						
Vibration filter inspection						
Main brush drive belt visual inspection						
Screw and nut tightening inspection						
Follow-up stop brake pedal check adjustment						
Check the main and side brushes for wear						
Main brush drive belt replacement						
Main brush and drive system motor carbon brush inspection and replacement						

Warranty

Warranty is not covered under the following conditions of use:

- **Failure to perform maintenance in accordance with the maintenance manual may result in mechanical damage or failure.**
- **The mechanical appearance or structure is obviously damaged due to improper operation.**
- **Disassembly or modification not approved by the original factory.**
- **Damage due to weather or force majeure.**
- **More than 1 year of warranty or more than 1500 hours of use.**

Chapter 6 Battery Maintenance Guide

This product uses a lead-acid maintenance-free battery, which has the functions of maintenance-free, maintenance-free, and automatic pressure relief. If it will not be used for a long time, please disconnect the positive pole of the battery and store it.

1) Why lead-acid battery life is short?

The battery is undercharged for a long time, and it is not charged for a long time after discharge. During the use process, there is often an overdischarge phenomenon. The standard charger is not selected during charging, resulting in overcharge phenomenon. The voltage is different, and a low-voltage working state is formed for a long time.

2) After the battery is used up, how should it be stored?

The battery is a sensitive product. If it is not used for a long time, it is best to take the battery out of the machine and put it in a dry place at room temperature; because the battery is placed inside the machine and is not disconnected from electrical appliances and circuit boards, it will form a battery Continuous maintenance discharge.

3) What is overdischarge and how does it affect the performance of the battery?

It refers to the phenomenon that the electricity stored in the battery continues to discharge after reaching the minimum working voltage. After the battery is over-discharged, the voltage drops sharply in a very short period of time, and the entire internal reaction system of the battery is disordered. Reduces battery usage time and extends battery charging time.

!! Deep discharge is strictly prohibited

- ◆ **When the battery is used up every day, please make up the power in time. No matter how much the remaining power is, the battery needs to be fully charged and stored.**



Warranty card

Name		Tell	
Postal address		Bill No	
Purchase time		Number	
Product model		Date	
Replace			
Fault description			

Warranty Conditions

1. Within the day when the user purchases this product, the motor is guaranteed for one year (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. Man-made damage to the warranty parts will not be guaranteed within the warranty;
4. During the warranty period, users who do not follow the operating instructions or those who dismantle and repair by themselves will not be covered by the warranty (if repair is required, a cost will be charged);
5. The buyer can go to the designated point of the seller for maintenance with the invoice, or send the machine back to our company for repair (return freight and insurance premiums are paid by themselves).



