

Environmental tips



Please dispose of the package, used components (battery) and hazardous fluid (antifreeze and machine oil) properly according to local waste disposal regulations to ensure environmental safety.

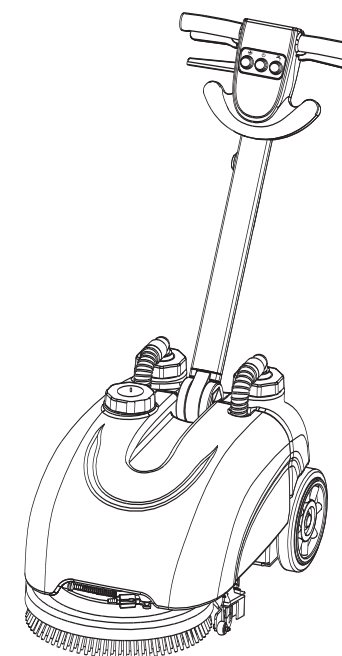


Please remember to recycle them for further use if possible.

PUSH-BEHIND FLOOR SCRUBBER

201 SERIES

Product Manual



Manufacturer: Guangzhou Baiyun Cleaning Tools Co.,Ltd
Address: Shenshan Industry Park, Baiyun District, Guangzhou City, China
Tel: 020-6112688 020-86060888
Fax: 020-86062798 020-86060616
Website: <http://www.byclean.net>

Applicable model:
A201、Q201、K201、Y201、T201.

This manual contains important safety precautions and instructions on the correct operation of product. Please read this carefully before using the product.

Version: A/0-2014

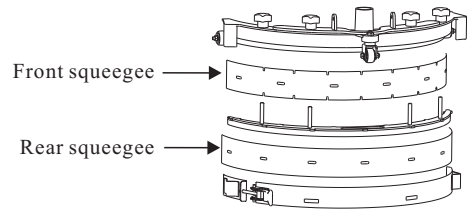
IMPORTANT STATEMENT

The content of this manual is for all users. Manufacturer reserves the right to update and revise the content of this manual as when necessary. If there will be further inquiries, please contact the distributor or manufacturer.

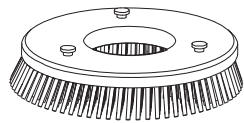
Guangdong Baiyun Cleaning Group Co., Ltd.

201 Series Push-behind Floor Scrubber Optional Spares

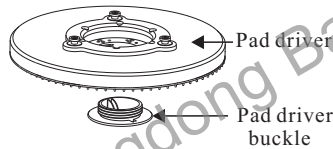
Description: 1. 201 series: A201, Q201, K201, Y201, T201.
2. The following pictures are only for reference, so products are subjects to what you get.



- Front squeegee: standard squeegee with 6 holes
- Front squeegee: oil-resistant squeegee
- Front squeegee: customized hole position
- Rear squeegee: standard squeegee
- Rear squeegee: oil-resistant squeegee



- Brush: 14" brush with 0.7mm bristles



- Pad driver: 14" floor scrubber pad driver

Remark: _____

Thank you for buying this product. Before operating it, please read this manual completely and carefully to make sure that you are familiar with the product and can assemble components correctly. Please save this manual for future reference.

Description:

Function: Floor scrubbing.

For area: Smooth hard ceramic tiles or marble floor in factories, shopping malls, parking places, plazas, hotels, hospitals, schools, waiting rooms in the transportation system, etc.

Description of symbols in this manual



Content starting with this symbol is information closely related to operator's safety. If this symbol appears in a certain chapter, it refers to relevant information starting with the "Warning" sign and it should be read carefully.



Content starting with this symbol indicates possible causes of failure of the product. If this symbol appears in a certain chapter, it means relevant message with an "Attention" symbol should be read carefully.



Content starting with this symbol provides supplementary information.

Description of symbols on the machine



It means important notes to be followed during operation.



Read the product manual.



Stay away from flammable source and corrosive liquids.



Stay away from naked fire.



Please read the operating manual and instructions on use before starting the floor scrubber.



Indicates high power voltage and the area should be kept from water spill.

CONTENTS

Packing list

Standard configuration. 1

Operation instructions

Key components. 2
Description of control components. 3
Control panel. 3
Assembling parts. 3
Preparation before starting the machine. 5
Operation steps. 6

Safety precautions

Don'ts. 7
Notes before using. 7
Safety regulations. 8

Important precautions

Working conditions. 9
Notes on moving. 9

Maintenance guide

Daily maintenance. 10
Periodic maintenance. 13

Technical details

Technical specifications. 14
Wiring diagram. 15

After-sales service

After-sale service. 16
Limited warranty statement. 16
Disclaimer. 17

WARRANTY INFORMATION

Disclaimer

Manufacturer takes no responsibility under the following cases:

1. Any damage due to inadequate use of power supply.
2. Any damage due to alteration by unauthorized agents.
3. Any damage of parts due to improper use, storage or handling of machine.
4. Any damage due to operating machine under adverse conditions.
5. Any damage due to overloading to machine.

Guangdong Baiyun Cleaning Group Co., Ltd.

AFTER-SALES SERVICE

After-sales service

If there are any questions, contact local after-sales service agent or manufacturer at: 020-86060888.

| | |
|---|---|
| Warranty card | Fill out the warranty card after purchasing the product and store the warranty card for future use. |
| Under warranty | Provide the after-sales service agent with the warranty card, the invoice and the part that needs to be repaired. |
| Exceed warranty period | The after-sales service agent repairs the product and charge according to situations. |
| The product must be repaired by manufacture's approved after-sales service agents. The name list of after-sales service agents can be found on our website: http://www.byclean.net . | |

Limited warranty statement

1. Manufacturer's authorized distributors are responsible for the after-sales service of the product.
2. This limited warranty shall last for 12 months from the date of original purchase of the product. Recommended replacement intervals and duration of limited warranty of spares and consumables are as follows:

| Name | Recommended re- placement intervals | Duration of limited warranty |
|-----------------------------|--|------------------------------|
| Squeegee | 200 hours | Not covered |
| Brush | 100 hours | Not covered |
| Side rubber band | 1000 hours | Not covered |
| Water suction motor | 600 hours | 12 months |
| Traction motor | 1200 hours | 12 months |
| Brush motor | 1200 hours | 12 months |
| Water suction hose | 700 hours | Not covered |
| Soiled water discharge hose | 700 hours | Not covered |

* Carbon brush of motor is not under warranty.

PACKING LIST

Standard configuration

| No. | Name | Unit | Quantity |
|-----|------------------------|-------|----------|
| 1 | Main Unit | Piece | 1 |
| 2 | Squeegee assembly | Set | 1 |
| 3 | Power cable | Piece | 1 |
| 4 | Product manual | Copy | 1 |
| 5 | Conformity certificate | Piece | 1 |

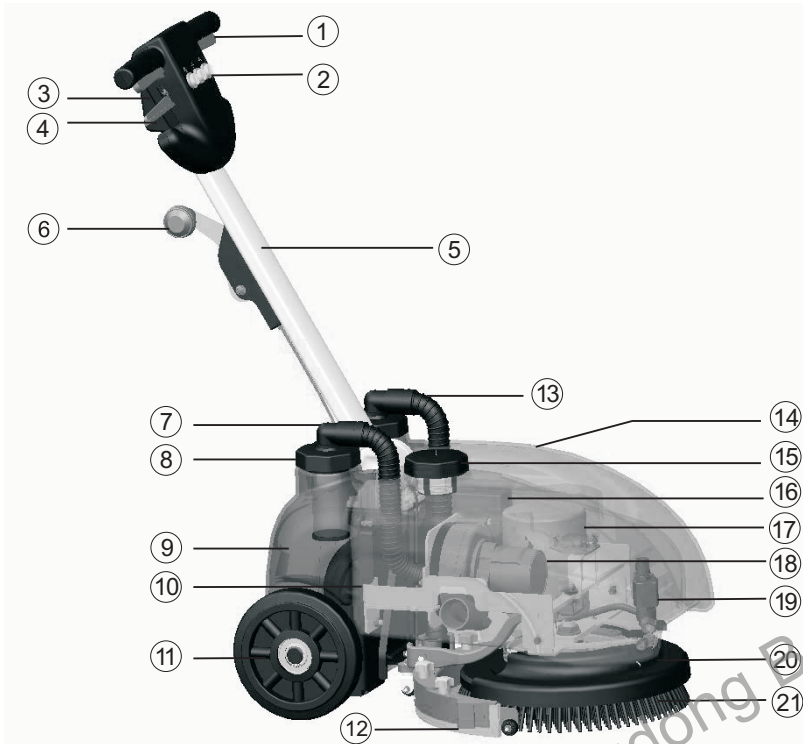


Unpacking check

Check the product on receiving immediately. If there will be obvious damages on the product, please keep the packing materials and contact the local distributor.

OPERATION INSTRUCTIONS

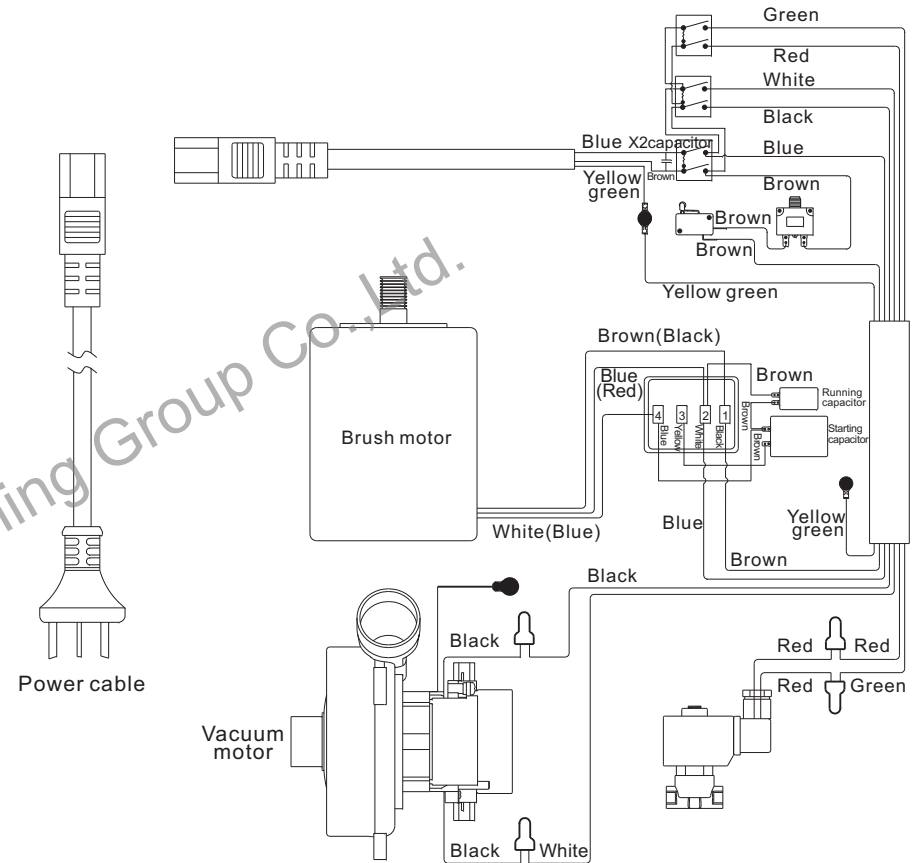
Key components



- | | | |
|-----------------------------|--------------------------|------------------|
| ① Brush motor switch | ⑨ Recovery tank | ⑰ Brush motor |
| ② Control panel | ⑩ Solution tank frame | ⑱ Vacuum motor |
| ③ Serial number | ⑪ Wheel | ⑲ Solenoid valve |
| ④ Handle adjustment switch | ⑫ Squeegee assembly | ⑳ Protect cover |
| ⑤ Handle lever assembly | ⑬ Suction hose | ㉑ Brush assembly |
| ⑥ Squeegee adjustment lever | ⑭ Solution tank | |
| ⑦ Vacuum hose | ⑮ Solution tank lid | |
| ⑧ Recovery tank lid | ⑯ Circuit board assembly | |

TECHNICAL DETAILS

Wiring diagram



TECHNICAL DETAILS

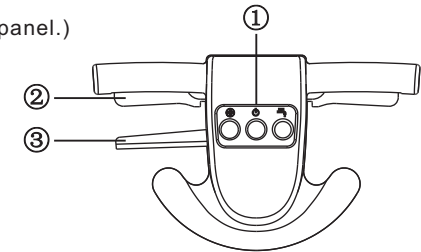
Technical specifications

| Description | Unit | Data |
|--------------------------------------|--------------------|----------|
| Protection level | IPX | 3 |
| Operating tension | V | 12 |
| Vacuum motor | W | 200 |
| Suction vacuum | mmH ₂ O | 1300 |
| Brush motor | W | 300 |
| Brush speed | rpm | 140 |
| Noise level | dB | ≤70 |
| Solution tank capacity | L | 11.8 |
| Recovery tank capacity | L | 13.4 |
| Squeegee width | cm | 43 |
| Theoretical cleaning efficiency | m ² /h | 1500 |
| Brush diameter | inch | 14 |
| Cleaning width | cm | 35 |
| Brush pressure | kg.f | 0-25 |
| Maximum gradient | deg | 12 |
| Minimum turning radius | cm | 60 |
| Power cable length | m | 25 |
| Machine dimensions(Without squeegee) | cm | 42x41x86 |
| Package weight(Without battery) | kg | 34.7 |

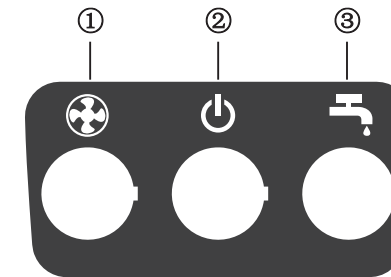
OPERATION INSTRUCTIONS

Description of control components

- ① **Control panel**
(See on the instruction of the control panel.)
- ② **Brush motor switch**
Hold on the switch to make the brush motor work. Release it, the brush stops working.
- ③ **Handle adjustment switch**
Operate the switch to regulate the angle of the handle lever.



Description of control panel



- ① **Vacuum switch**
Press this switch, the vacuum motor begins to work. Press it again to turn off the vacuum motor.
- ② **ON/OFF switch**
Press this switch to turn on or off the power.
- ③ **Sprinkling switch**
Press this switch, the sprinkling motor starts to working. Then, press this again, the sprinkling motor comes to a complete stop.

Assembling parts

1.Squeegee assembling

Put the end hole on the revolving shaft of the squeegee assembly as axle and assemble the revolving shaft assembly, spring, shaft. Then, insert and unfasten the opening bolt with the holes of the revolving shaft. After that, use the locking nut to connect the revolving shaft assembly with the shaft on the solution tank frame. At last, connect the suction hose

OPERATION INSTRUCTIONS

Assembling parts

into the suction mouth on the squeegee frame to complete the assembling of the squeegee assembly.(fig.2)

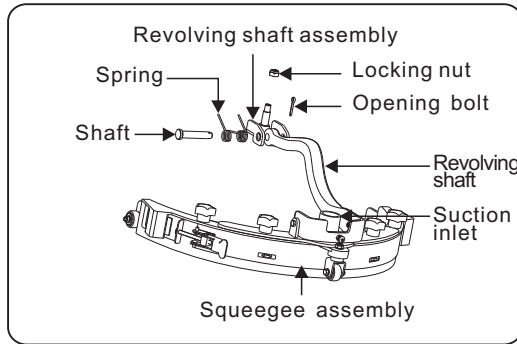


fig.1

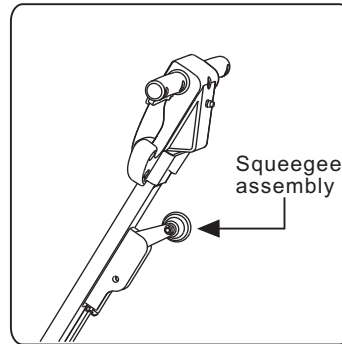


fig.2

● Squeegee ascending and descending

After the cleaning work, lift up the squeegee assembly and remove the brush in case that the squeegee and the brush deform. Pull the squeegee lever upward to ascend the squeegee assembly, and pull it downward to descend the squeegee assembly. The specific steps to remove the brush is seen on the page 6 as the instructions of brush assembling(fig.2)

2. Brush assembling

⚠ Attention

- Do not operate any function button while hands are touching the brush, in case of injuries.
- Make sure the scrub pad is placed with the center of the pad drive and screw the pad driver buckle. Afterwards, you can work as follows.

1. Make the operation handle vertical and put the machine downward on the floor. Then, align the brush with the three-blade plate and rotate the brush 30° to the left. After that, the brush assembling will be finished and place the machine well.(fig.3)
2. If the brush is needed to change, hold on and rotate it 30° to the right to remove the brush.(fig.4)

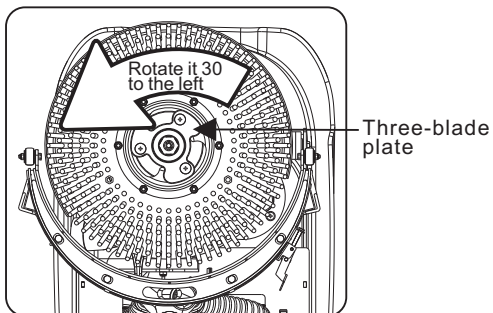


fig.3

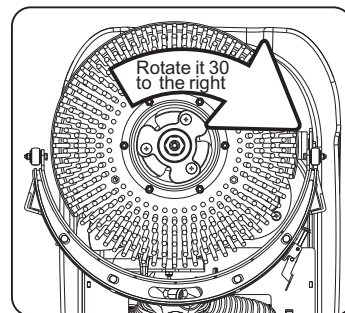


fig.4

MAINTENANCE GUIDE

Trouble shooting

Note: Before contacting the repair agent or our customer service department, please check the followings for possible solutions.

| Problem | Cause | Solution |
|--|---|---|
| The motor does not run | <ol style="list-style-type: none"> 1. The machine socket has not been connected well with the battery socket. 2. The related motor switch has not been switched on. 3. The voltage of the machine is not normal or stable. 4. The related indicated lights blinks abnormal. | <ol style="list-style-type: none"> 1. Connect the machine socket well with the battery socket. 2. Switch on the related switch. 3. Make sure the voltage of the machine be the specified voltage. 4. Turn off the power, and then, turn it on again. |
| No water comes out or the water flow is small. | <ol style="list-style-type: none"> 1. The filter or hose joint is obstructed. 2. The floor being cleaned is too dry. Water supply is normally insufficient when cleaning a new-built building for the first time. 3. The solenoid valve or the sprinkling water motor is obstructed. | <ol style="list-style-type: none"> 1. Remove the filter and the hose joint and clean them. 2. When the ground is too dry, sprinkle some water on it before the cleaning work. 3. Clean the solenoid valve and the sprinkling water motor. |
| Water suction power is weak | <ol style="list-style-type: none"> 1. The seal ring of the soiled water recovery tank lid gets loose. 2. The hose hoop gets loose. 3. The water suction motor gets loose or tilts. 4. The water suction hose is obstructed. 5. The vacuum hose is broken. | <ol style="list-style-type: none"> 1. Attach the seal strip properly without space. 2. Check the hose hoop and install it properly. 3. Open the silencer lid to make sure the motor is installed correctly and properly. 4. Clear out the air inlet and outlet. 5. Repair the vacuum hose. |
| The terminal poles of the batteries become hot or fused. | <ol style="list-style-type: none"> 1. The cable ends are not screwed tight. 2. There are black metal pads between the cable ends and the terminal poles. | <ol style="list-style-type: none"> 1. Tighten the screw. 2. Take the pads out and connect the ends of the cable closely to the poles of the batteries. |
| Water could not be completely sucked. | <ol style="list-style-type: none"> 1. The water suction motor does not work. 2. The water suction hose is obstructed. 3. There are foreign objects in the squeegee. 4. The squeegee is excessively worn out. 5. The height of the squeegee is not suitable. | <ol style="list-style-type: none"> 1. Remove the foreign object. 2. Remove the foreign object.. 3. Put another side of the squeegee forward or replace the squeegee. 4. Adjust the height of the squeegee. 5. Check the motor. |
| The machine could not clean thoroughly | <ol style="list-style-type: none"> 1. The brush motor doesn't run. 2. The dirt is too stubborn. 3. The brush is excessively worn out 4. The brush is obstructed by a foreign object. | <ol style="list-style-type: none"> 1. Check the motor. 2. Use a special effect detergent and sprinkle it on the floor. 3. Replace the brush. 4. Remove the foreign object. |

MAINTENANCE GUIDE

Daily maintenance

4. Maintain the brush

Hold on the brush and rotate it 30° to the right to remove the brush (fig.13&fig.14), and then clean them. If the machine will lay idle for long time, the brush should be removed, cleaned and air-dried, otherwise, the load of the brush motors may be too strong when it is being used again and even worse, can't operate normally. (fig.15)

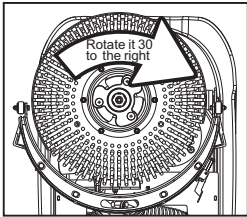


fig.13

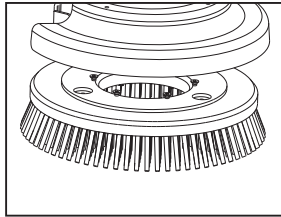


fig.14

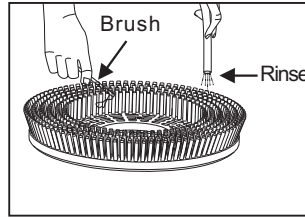
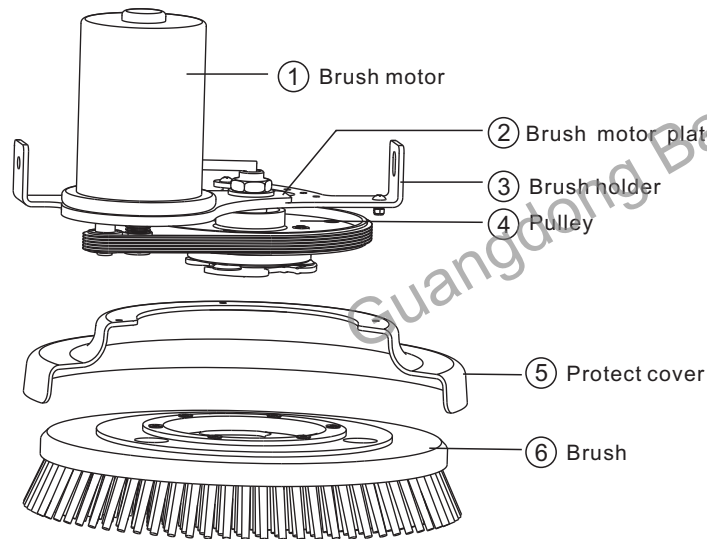


fig.15

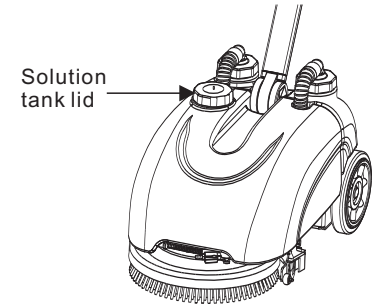
● Brush assembly exploded diagram



OPERATION INSTRUCTIONS

Working before preparation

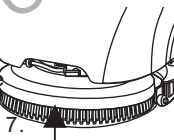
- 1.Fill the solution tank
 - ① Open the solution tank lid, then fill the water or dilute neutral detergent into the solution tank from the inlet mouth.
 - ② The temperature of water or detergent should be lower than 50℃.



! Attention

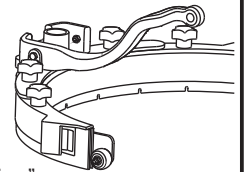
To avoid shortening the service life of the machine, detergents added into the solution tank should be less foamy and less volatile neutral detergents with a PH of 5-9.

2. Check whether the brush is assembled well. If not, assemble them according to the instruction of "Brush assembling" on Page 7.

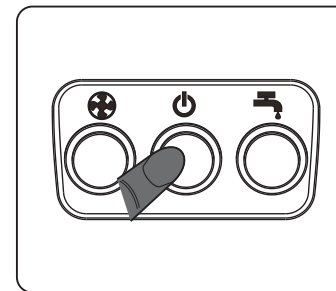


Brush

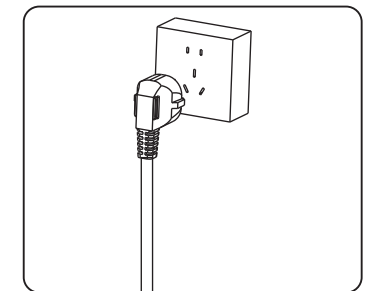
3. Check whether the squeegee assembly is assembled well. If not, assemble the squeegee assembly according to the instruction of "squeegee assembling" on Page 4.



4. Insert the plug into the power socket to connect the power, and then press the function buttons on the control panel to make sure the brushes, the squeegee assembly, the suction pump and the sprinkling pump are ready for work.



Turn off ON/OFF switch



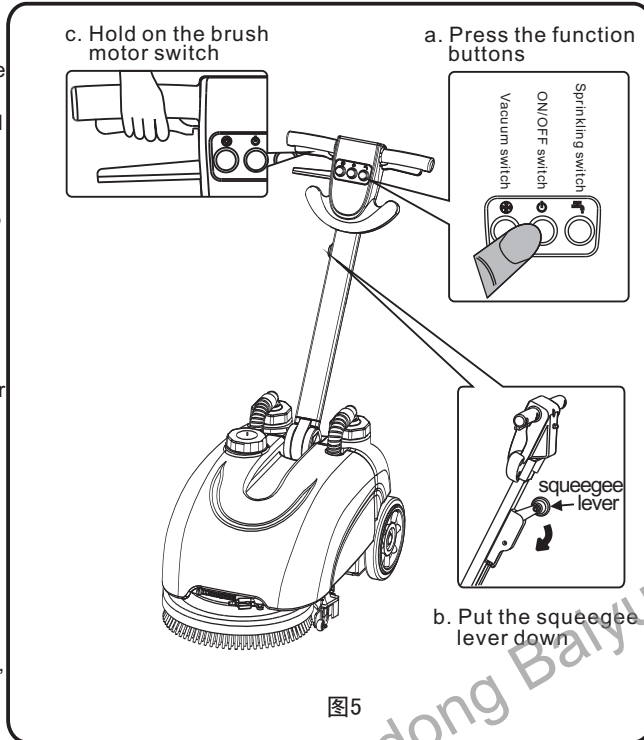
Connect the power

OPERATION INSTRUCTIONS

Operation steps

After the preparation work, operator can use the machine to begin the cleaning work.

1. Check whether the sprinkling button and the vacuum button are turn off. Then switch on the ON/OFF switch on the control panel(fig.5-a), the machine will in manual state.
2. Press the sprinkling button on the control panel(fig.5-a), the solenoid valve begins to work, the machine starts sprinkling water.
3. Put down the squeegee lever to ensure that the squeegee is totally touched with the floor to work.
4. Hold on the brush motor switches on both sides (fig.5-c), the brush can clean the floor.
5. After cleaning the work, lift up the squeegee lever and release the brush motor switches. Then, press the sprinkling button, vacuum button, ON/OFF switch to stop all cleaning work.



Note

During the cleaning work, change the water flow according to the condition of the floor. The ball valve above the brush cover can be used to adjust the water flow. After the cleaning work, pull the water pipe from quick connector can discharge water in the solution tank (fig.6).

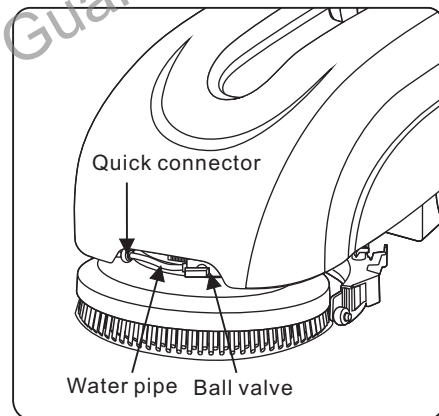


fig.6

MAINTENANCE GUIDE

Daily maintenance

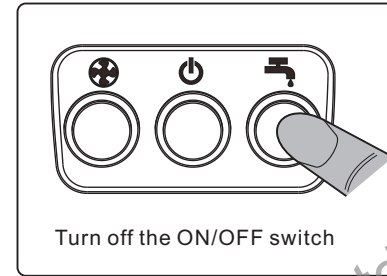


fig.11

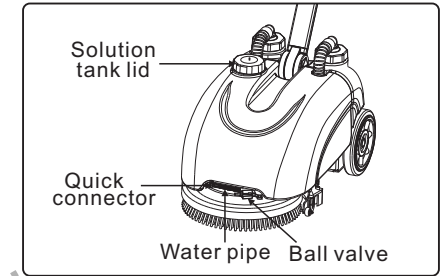


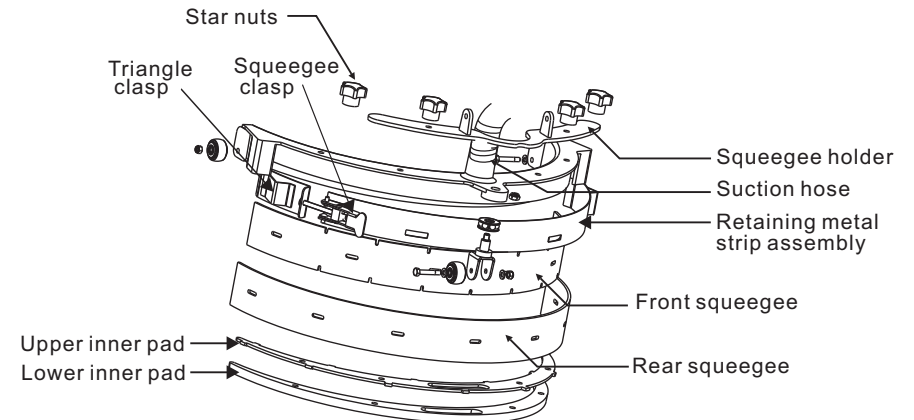
fig.12

3. Maintain the squeegee

Remove, clean and air-dry the squeegee regularly to prolong the service life. The whole squeegee assembly can be removed, to be cleaned and air-dry.

The procedure to remove the squeegee:

- ① Turn the two star nuts anticlockwise to remove the squeegee assembly.
- ② Release the squeegee clasp to loosen the retaining metal strip assembly. Then pull the two triangle clasps downwards to take out the retaining metal strip assembly.
- ③ After taking out the retaining metal strip assembly, the rear squeegee can be removed.
- ④ Loosen the upper and lower inner pads and then the front and rear squeegee can be removed. Check to confirm the wearing condition of the squeegee and turn to an untouched side for use. Each squeegee has 4 sides for switching use.



MAINTENANCE GUIDE

Daily maintenance



Attention

When the cleaning work is over:

1. Disconnect the machine socket from the battery socket.
2. Drain the soiled water from the recovery tank and wash it with clean water.
3. Check to make sure the water suction hose is clear.
4. Wash the brushes and squeegees, and air-dry them.

1. Maintain the recovery tank

- Clean the recovery tank every time the cleaning work is finished.
 - ① Take out the vacuum hose and the drain hose from the recovery tank lid. Then, pull out the whole recover tank to separate it from the machine.
 - ② Loosen the two recovery tank lids and turn over the recovery tank to discharge all the soiled water.
 - ③ Use the clean water to wash the recovery tank and air-dry it. Take care of preventing sludge or foreign objects from blocking the water.
 - ④ After cleaning the recovery tank, fasten the two recovery tank lids. After that, push the recovery tank into the machine. Finally, connect the vacuum hose and the drain hose with the mouth of the recovery tank.
- Clean the strainer periodically. (fig.10)

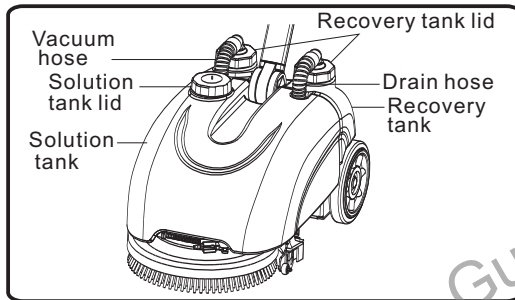


fig.9

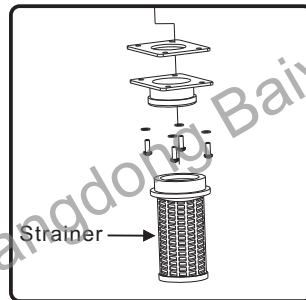


fig.10

2. Maintain the solution tank

- If the machine stays idle for a long time, open the solution tank lid and quick connector to discharge all the solution water in the solution tank in case of solution in the tank deteriorates (fig.12).
- If the machine will be transported or stored when the environment temperature is less than 4°C, discharge all the solution water in the solution tank. After this, twist down the ball valve. Then press the sprinkling button to sprinkle all the water stayed in the sprinkling system (fig.11). Otherwise, water may freeze and damage the sprinkling motor, solenoid valve, and hoses because of lower water temperature.

SAFETY PRECAUTIONS



This chapter contains important information about the safe use of the machine. Please read it carefully.

Don'ts

| | |
|--|---|
| <p>1. Do not put anything on the machine;</p> <p>Forbidden</p> | <p>2. Do not put hands into the spinning parts while the machine is operating;</p> <p>Forbidden</p> |
| <p>3. Do not block the air-discharge hose or the air ventilation area;</p> <p>Forbidden</p> | <p>4. Do not move, change or cover the safety information sign;</p> <p>Forbidden</p> |
| <p>4. To ensure personal safety, the machine must be operated by a trained technician. (New users can be trained the basic operation skills in the field by sales agent or distributor.)</p> | |

Notes before using

1. This machine is designed for small area floor cleaning indoor. Please read this manual thoroughly and carefully before starting the machine.
2. Do not disassemble or refit the machine without permission. There is an engineering design product and is tested in production. Manufacturer takes no responsibility for accidents or damage as a result of unauthorized disassembling or refitting the machine.
3. Contact dealer or manufacturer immediately in case of any breakage or failure in starting the machine upon unpacking the product.
4. Make sure the voltage of power supply accords with the voltage on the nameplate of the machine. Manufacturer takes no responsibility for damage or human injuries caused by using wrong power supply.
5. Do not overload the machine. Manufacturer takes no responsibility for damage to any components as a result of overloading.
6. Do not use the machine under adverse condition, such as acid/alkaline rich area, working temperature lower than 10°C or above 35°C. Manufacturer takes no responsibility for damage, accidents or injuries as a result of operating the machine under adverse conditions.
7. In case of any abnormalities, please contact authorized after-sales service center immediately.

SAFETY PRECAUTIONS

Warning

Safety precautions

1. If problem happens while the machine is operating, cut off the power first. After having inspected and solved the problems, restart the machine.
2. The end of the battery cable should connect to the terminal holders of the battery directly to ensure safety. If there is metal pad between them, the temperature of the battery and the cable may become too high and, even worse, the battery and the cable may fuse or damaged.
3. Put the machine on ventilating places while charging.
4. Water spills should be avoid when cleaning the machine itself. Electronic parts inside the control panel are sensitive to water spills and may cause damage in water ingress.
5. Do not use the machine near flammable liquids, gas or suspended particles.
6. Keep the machine from any heat source and make sure it is ventilated.
7. Disconnect the battery socket from the machine socket and disconnect the battery socket from the charger socket before maintaining the machine.
8. This machine can only be assembled with brushes of the designated size. Being assembled with brushes of other sizes may result in damage to the machine.
9. Be careful and move the machine at the low speed when it is working on slopes or sliding floor, especially when it is moving backward.
10. Do not let the machine keep on scrubbing the same place, otherwise, the area/floor may be damaged.
11. To prevent the machine from unauthorized operating, turn off the power and pull out the key from the ON/OFF switch.
12. Make sure the machine will not move accidentally when it is left unattended.
13. If the user use the non-original batteries or chargers, please contact the manufacturers in advance in order to avoid accidents.



fig.7

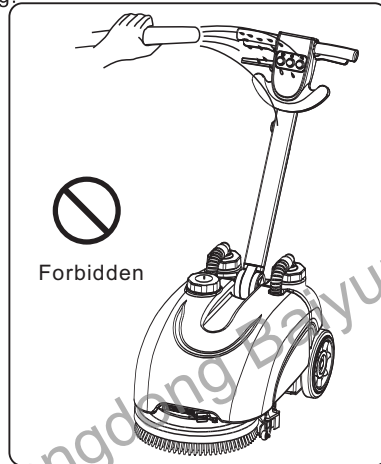


fig.8

IMPORTANT PRECAUTIONS

Working conditions

1. Working environment temperature

- The machine can only work in the 10°C-35°C environment.

2. Sensibility to strong acid and strong alkali

- Do not put strong acid or strong alkali liquids into the water tank to deal with stubborn dirt, in case those liquids damage the components of the water channel. If those liquids are needed, sprinkle them on the floor directly.
- The detergents put into the water tank should be neutral detergents with a PH of 5-9.

3. Cleaning areas

- If there are too much dirt and big rubbish on the floor, such as wastepaper, plastic bags, fruit peel, fruit seeds and so on, it is recommended to sweep the floor first, and then use the machine to clean the floor, in case big objects block the water suction hose.

Notes on moving

1. While driving, keep the machine from colliding with other objects. Before entering a narrow space, check whether the machine can get in.
2. Avoid driving the machine over rough places in case of mechanic damage, which will shorten the servicing life of the machine.
3. The width of the aisle should be at least 47cm for the machine with the squeegee assembly to get through. If the width of the aisle is less than 47cm, remove the squeegee assembly, and then let the machine get through. Do not force the machine to get through, which may result in mechanical problems.

