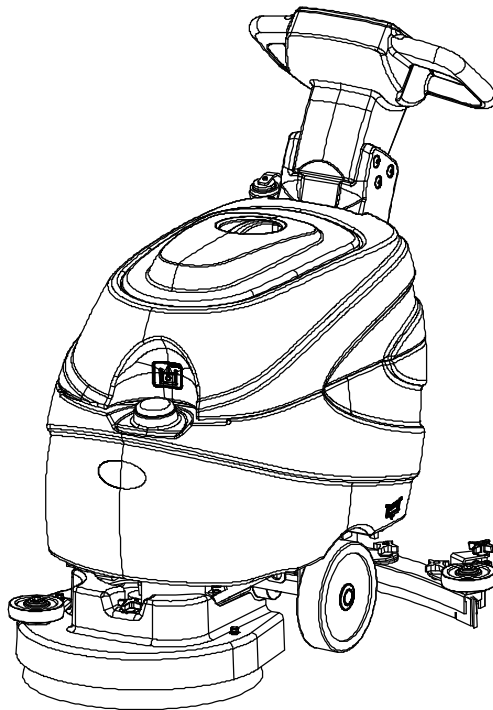


Walk-behind Floor Scrubber

Applicable Models: G20B

User Manual

V1.0



REMINDER

Please check the machine carefully after unboxing.

If you find any abnormalities or missing parts, please contact the after-sales service team immediately.

Please follow the manual strictly and maintain the machine regularly according to the provided maintenance instructions.

APPLICATION SCENARIOS

The machine is suitable for commercial floor cleaning, especially for cleaning schools, hospitals, offices, shopping malls, supermarkets, and hotels.

The machine is recommended for cleaning indoor concrete-based floor, ceramic tiles, various types of stone floors, and other resilient floors, but it is not recommended for outdoor rough floors and large-area scenarios.

Please do not remove solid waste stains such as gravel, dust, paper scraps, and leaves, as well as perform deep cleaning tasks.

SYMBOLS INTRODUCTION IN THIS MANUAL



Attention:

Indicates that improper operation may cause serious injury

Indicates that improper operation may cause injury to minors or property damage.

Indicates that improper operation could lead to personal injury or death.

Indicates that improper operation may lead to property damage.

WARNING



Attention:

Do not operate the machine under the following conditions:

- Persons with physical or mental disabilities (including children) or persons without training and authorization are not allowed to use this product.
- Failure to read, understand and follow the instructions in this operation manual.
- After taking alcohol or drugs.
- This machine must not be used outside the range of usage conditions. The recommendations are as follows: room temperature between 0°C and 40°C, relative humidity between 30% and 95%.
- Located in areas where flammable vapors/liquids or flammable dusts are present.



Attention:

Do not use or pick up flammable materials or reactive metals.

- This machine is not equipped with an explosion-proof motor. The motor generates sparks during start-up and operation, which may cause a flash fire or explosion if the machine is used in areas where flammable vapors/liquids or flammable dusts are present.



Attention:

- Do not use acidic solutions, as this may damage the machine or endanger the operator.
- Do not touch the floor pad/disc brush with your hands when it's rotating for cleaning.
- Improper handling of the battery can lead to explosion or fire. The battery, please open the battery compartment for heat dissipation and keep away from any open flames.
- Before cleaning and maintaining the machine, please disconnect the battery and charger cables.
- Do not charge the battery with a damaged power cord.
- Do not modify the plug.
- If the charger power cord is damaged or broken, it must be replaced by the manufacturer or the technical agent or qualified person, to avoid danger.

SAFETY TIPS

1. Before Transporting and Installing the Machine:

- To ensure safety: Wear protective gloves and professional protective shoes.
- When assembling or not in use, please make sure to turn off the machine switch and disconnect the power supply.
- When assembling or not in use, please ensure that the machine's wheels and body are secured to prevent any unwanted movement.
- Do not park the machine on surfaces with a huge slope.
- Please use an inclined surface to unload the machine and avoid the wheels straight up and down and excessive bumps.

2. Before Operating the Machine:

- Please check if the machine body is complete, whether there is any damage or missing parts.
- Please check if the brush , squeegee, and rubber strips are properly installed.
- Before operating the machine, check for any potential risks of liquid leakage.

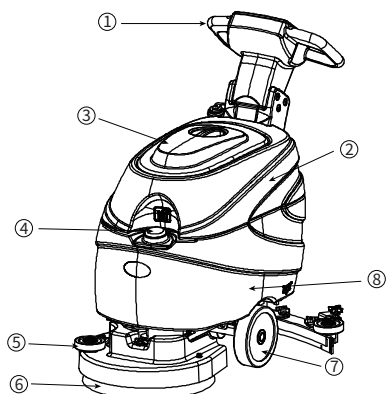
3. During Machine Operation:

- If the machine is damaged or fails to operate, please stop using it and contact the after-sales engineer in a timely manner. Pay attention to personal protective equipment; do not wear shorts, slippery shoes, or flip-flops.
- Avoid using flammable, acidic solutions, or cleaners with excessive foam to prevent defoliating agent foam from entering the vacuum motor inlet.
- Please use neutral cleaning agents; otherwise, it may cause chemical damage to the machine's materials or components.

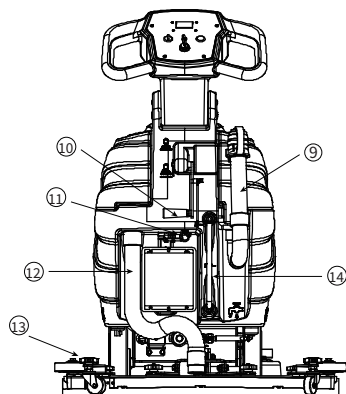
4. Before Leaving or Maintaining the Machine:

- Park the machine on an even floor surface.
- Before maintenance, please turn off the power supply.
- Do not use non-original accessories, as they may cause machine malfunction, personal injury, or property damage.
- No unauthorized disassembly of the machine is allowed, and all repairs must be carried out by authorized personnel.
- No unauthorized modifications to the machine are permitted.
- Please wear personal protective equipment when using/maintaining the machine.

MACHINE PARTS

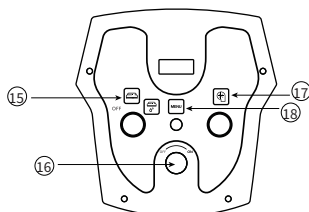


- | | |
|------------------------|------------------------|
| 1. Control Handle | 5. Head Assembly |
| 2. Recovery Tank | 6. Pad Holder or Brush |
| 3. Recovery Tank Cover | 7. Wheel |
| 4. Solution Tank Cover | 8. Solution Tank |



- | | |
|-------------------------|---------------------------|
| 9. Drain Hose | 12. Suction Hose |
| 10. Squeegee Lift Lever | 13. Squeegee Assembly |
| 11. Power Plug | 14. Water Level Indicator |

CONTROL PANEL INTRODUCTION



- | | |
|------------------|-------------------|
| 15. Brush Button | 17. Vacuum Button |
| 16. Key Switch | 18. Menu Button |

BATTERY

Before the first use, the battery must be fully charged.

-  Note: The room where the battery is charged must be well-ventilated, and the battery compartment should be opened to prevent the accumulation of any leaked gases.
-  Note: The following operations must be performed by qualified personnel. If the connectors are not connected correctly, it may cause equipment failure.
-  Note: Using an incompatible battery charger may cause battery damage and fire accidents.

BATTERY USAGE

1. Transport the machine to a well-ventilated area.
2. Park the machine on a dry, flat surface, turn off the machine, open the electrical compartment cover, and remove the key.
3. Connect the charger's DC cord to the machine's battery charging port, and then plug the AC power cord into a properly grounded wall outlet.
4. Once fully charged, the green light will come on, and you can turn it off. Depending on the type of battery, the maximum charging cycle can reach up to 12 hours.
5. After the battery has been charged, be sure to disconnect the AC power cord before removing the charger from the machine.

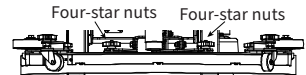
Battery Usage Precautions:

- Strictly prohibit placing the battery in environments that are flammable, explosive, or excessively humid to prevent the risk of explosion.
- Do not install, use, or store batteries in hazardous environments (electrified, damp, overheated, overly cold, strong magnetic fields).
- Do not touch the battery with wet hands to avoid the risk of electric shock.
- Do not use flammable and volatile solvents (such as alcohol) to clean the battery and terminals to prevent fires. If cleaning is necessary, wipe with a dry cloth.
- When the battery exhibits noises, abnormal temperature, leakage, or other unusual conditions, please immediately stop charging or using it.
- Please dispose of used batteries in accordance with local regulations. Before discarding the batteries, fully discharge them and wrap the electrodes with insulating paper to prevent fires or explosions.
- For the charger, regularly inspect the charger cable for any damage. If it is damaged, do not use the machine.
- Before charging, turn off the key switch and do not turn on the machine.
- A set of batteries typically requires a charging time of 10-12 hours. Each time you use the charger, make sure the batteries are fully charged to avoid damaging them.
- If the machine is not going to be used for a long period, ensure that the battery is fully charged and recharge it once a month.
- If the battery has 30% charge remaining, please charge it in a timely manner and do not wait until the battery is completely depleted before recharging.
- If the machine is not going to be used for an extended period, the power should be disconnected to prevent current discharge.
- Charge and store in a clean, ventilated, and dry place with a temperature of 0-35°C.

BRUSH AND SQUEEGEE ASSEMBLY INSTALLATION

▲ Squeegee Assembly Installation:

- Loosen the two four-star nuts on the squeegee assembly, and then connect the suction hose to the suction port on the squeegee assembly for installation.
- Align the four-star nuts with the grooves on the squeegee bracket, and then tighten the nuts.



▲ Installation of the Brush :

-  Note: Wear personal protective equipment when performing operations and maintenance.

1. Disconnect the power supply.
2. Place the brush /pad holder under the machine head assembly.
3. Place the three pins of the brush /pad holder into the corresponding mounting holes on the machine head, and lock them in place by turning clockwise.
4. Press down on the brush button switch to fully secure the brush /pad holder.

▲ **Removing the Brush:**

- 1. Turn on the key switch, ensuring the machine head is lifted.
- 2. Press and hold the menu button for 5 seconds, and the display screen will show the interface.  Press and hold the menu button for another 3 seconds, and the machine will automatically release the brush /pad holder.

MACHINE OPERATION

 **Note:** Do not operate the machine without reading and understanding the operating manual.

- Before cleaning the floor, if you find paper scraps, a large amount of dust, beverage bottles, or other solid waste on the floor, please clean them up in advance to ensure that there are no obstacles or debris on the floor.
- Check to ensure that the battery is properly connected, the battery power is normal, and meets the operational requirements .
- Check if the brush is excessively worn and needs to be replaced.
- Check if the squeegee is excessively worn and needs to be replaced.
- Confirm that the recovery is empty, and the filter mesh and float are installed and cleaned.
- Confirm that the drain is properly connected to the squeegee and check for any damage. If not, connect it correctly or replace it.

Operation Steps:

1. Turn on the Key Switch

- Boot Display Information:
Brand:
Software Version: VER.XX
- Working Display Information:
Battery Level:  (Blinks when low battery)
Total Operating Time: 00000:00 (Hours: Minutes)
- Press the "MENU" button briefly to display the battery voltage.

2. Mode Switching:

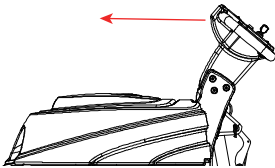
- Holding down the "MENU" button to power on, and releasing the button when the settings parameter page appears, tap the "MENU" button multiple times to switch pages until you reach the 8th parameter "V-HD".
- Currently, there are two modes available to choose from, "0-Yes" indicates the deep mode, and "1-No" indicates the normal mode.
- If you wish to select the normal mode, press and hold the "MENU" button on the "1-No" page. When "Param.UpdateOK" appears on the panel, an asterisk "*" will appear in front of "1-No," indicating that the selection is successful. Restart the device, and it will enter the normal mode.



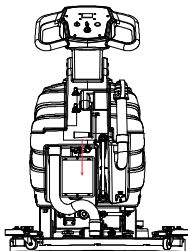
- If you wish to select the deep mode, press and hold the "MENU" button on the "0-Yes" page. When "Param.UpdateOK" appears on the panel, an asterisk "*" will appear in front of "0-Yes," indicating that the selection is successful. Restart the device, and it will enter the deep mode.



- 3. Press down on the control lever to lower the machine head assembly to the ground.



4. Lower the squeegee assembly by adjusting the lift rod.

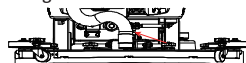


5. The brush button switch has three positions: the left position is OFF, the middle position activates the brush motor without water, and the right position activates both the brush motor and water supply.

6. Press the suction button switch to activate the suction function.

7. The machine is ready for use.

8. Adjust the water flow by turning the water valve knob, as shown in the diagram to the right.



During operation, please follow the instructions below:

1. Each cleaning path should overlap by 5 centimeters.

2. Keep the machine moving to prevent damage to the floor surface.

3. When cleaning along edges, be careful to avoid the machine hitting pillars and walls.

4. If there is too much foam in the sewage tank, please drain the sewage in time or add a defoamer.

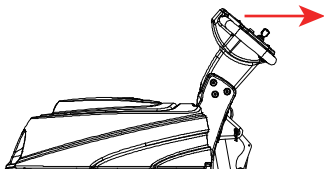
⚠ Note: Excessive foam can cause vacuum motor failure.

ENDING WORK

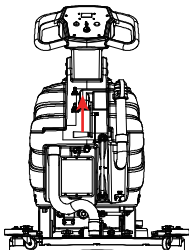
After work is completed, follow these instructions before performing any maintenance:

1. After use, turn off both the scrubbing and suction button switches.

2. Pull back on the control lever to lift the machine head.



3. Lift the suction squeegee assembly by raising the lift rod.



⚠ Note: Wear personal protective gloves to prevent contact with cleaning agents.

⚠ Note: Please move the machine to an area suitable for sewage discharge to prevent pollution.

MACHINE MAINTENANCE

Machine Storage

- Store in an indoor dry environment.
- Ensure that the brush plate and suction squeegee are in the raised position.
- Ensure that all the water in the clean water tank and the sewage tank is completely drained, especially when stored in cold

Daily Maintenance

- Wipe the entire machine with a clean/damp cloth.
- Drain the clean water tank by opening the drain valve at the bottom of the tank.
- Drain and rinse the sewage tank with clean water.
- Remove the brush plate and scraper components, and rinse them with clean water.

Monthly Maintenance

- Rinse the clean water tank with clean water.
- Remove the filter cap and filter mesh, and rinse them with clean water.
- Please check the motor every 250 hours to ensure it is working properly.

Squeegee Rubber Blade Replacement

- Remove the scraper assembly from the machine (refer to the scraper installation instructions).
- Please loosen the stainless steel clasps and remove the rubber strip.
- Replace the rubber strip with a new one and reassemble the scraper assembly.

TECHNICAL SPECIFICATIONS

Parameters	International Units	G20B
Cleaning Width	mm	510
Squeegee Width	mm	780
Work Efficiency	m ² /h	2050
Maximum Driving Speed	km/h	—
Maximum Grade	%	2
Disk Brush (Diameter * Quantity)	mm	490*1
Operating Voltage	V	DC24V
Rated Total Power	W	1000
Brush Motor	W	500
Vacuum Motor	W	500
Clean Water Tank	L	35
Sewage Tank	L	40
Net Weight	kg	66
Machine Dimensions (Excluding Scraper)	L*W*H (mm)	1115*810*1070

COMMON TROUBLESHOOTING

Problem	Situation	Solutions
No power	Not connected to the power source	Connecting to the battery
Machine not dispensing water or dispensing very little water	Water valve is closed Filter is clogged Clean water tank is empty	Open the water valve Clean the filter Add water to the clean water tank
Poor suction effect	• Clogged suction slot • Wear and tear of the rubber strip • Improper installation of the squeegee • Damage or loosening of the suction hose • Suction hose clogged • Loose drain pipe cover • Open dirty water tank lid • Dirty water tank full • Blockage at the outlet of the vacuum motor • Loose vacuum motor	• Cleaning the squeegee • Replacing the new rubber strip • Ensuring the squeegee is correctly installed • Replacing the suction hose or reattaching and securing it properly • Inspecting the hose and removing any blockages • Tightening the drain pipe cover • Ensuring the dirty water tank lid is closed and sealed • Draining the dirty water tank • Inspecting the vacuum motor inlet, removing any blockages, and cleaning the filter cotton • Tightening the motor mounting screws, being careful not to overtighten to avoid damaging the motor
Off-Line	Connection failure between panel and XD240	1. Check the connection between the panel and XD240 2. Controller internal fault
F01	Current sensor failure	1. Check if the motor line is short-circuited 2. Controller internal fault
F02	EEPROM Failure	1. Controller has no parameters
F03	Main relay closure failure	1. Check if the motor line is short-circuited to the negative pole of the battery 2. Check if the solenoid valve is short-circuited to the negative pole of the battery 3. Internal fault of the controller
F04	Parameter modification failure	Restart the controller
F05	DCF file corruption	1. Upgrade the controller program 2. Internal failure of the controller
F06	ST unburned fuse failure	1. Controller internal fault
F07	Precharge failure	1. Check if the motor line is short-circuited to the negative pole of the battery 2. Check if the solenoid valve is short-circuited to the negative pole of the battery 3. Internal fault of the controller
F08	Main relay disconnection fault	1. Controller internal fault
F09	Main relay fault	1. Controller internal fault
F10	Electromagnetic valve opening failure	1. Check if the solenoid valve is properly plugged in or if there is an open circuit in the solenoid valve wire 2. Controller internal fault
F11	Electromagnetic valve disconnection fault	1. Check and resolve the short circuit in the solenoid valve wiring 2. Check and resolve the short circuit inside the solenoid valve 3. Controller internal fault
F12	Battery open circuit fault	1. Check and solve the open circuit problem between the battery and the controller
F13	Overvoltage fault	1. The battery voltage exceeds the maximum voltage set by the controller
F14	Undervoltage fault	1. The battery voltage is lower than the minimum value of the controller voltage parameter setting
F15	Overheating fault	1. Check the controller fan heat
F16	Brush motor overload failure	1. Check whether the brush motor is blocked 2. Check whether the brush motor power matches the controller setting

Problem	Situation	Solutions
F17	Suction motor overload failure	1. Check whether the suction motor is blocked 2. Check whether the suction motor power matches the controller setting
F18	Brush motor open circuit fault	1. Check the wiring of the brush motor
F19	Suction motor open circuit fault	1. Check the wiring of the suction motor
F20	Brush motor short circuit fault	1. Check the brush motor wiring 2. Internal fault of the controller
F21	Suction motor short circuit fault	1. Check the wiring of the suction motor 2. Internal fault of the controller
F22	PDO communication failure	1. Controller communication failure, check the connection between the controller and the LCD
F23	Severe undervoltage fault	1. The battery voltage is lower than the minimum voltage set by the controller
F24	CAN lithium battery disconnection fault	1. Please check whether the lithium battery CAN line is connected
F25	CAN lithium battery stops output	1. Lithium battery internal fault, please check whether the lithium battery is discharged
F26	IOT offline	1. Check whether the IOT module connection is normal
F27	Locking machine	1. Please contact the manufacturer or dealer

