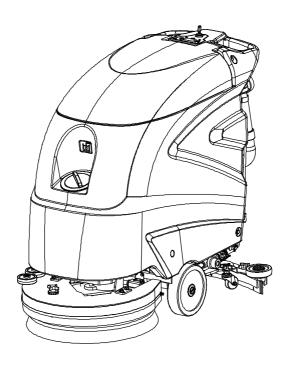
# Walk-behind Floor Scrubber

Applicable Models: G20B+/G20BT/G26BT

# **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 concretefloor, based floor, ceramic tiles, varioustypes 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 proper 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 explo⊠sion-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.

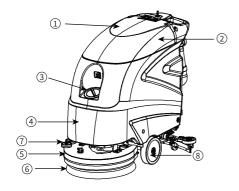
#### 3. During Machine Operation:

- 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 (G20B+)

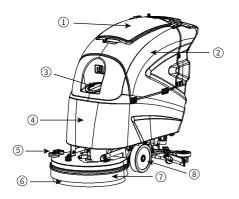


1.Recovery Tank Cover 2.Recovery Tank

3. Solution Tank Cover 4 Solution Tank 5.Rubber Skirt 6.Pad Holder or Brush 7.Machine Head Assembly 8.Wheels 9.Recovery Tank Drain Hose 12.Squeegee Assembly 10.Water Level Indicator 13.Squeegee Assembly Lever

11.Suction Hose

# **MACHINE PARTS (G20BT)**



2.Recovery Tank

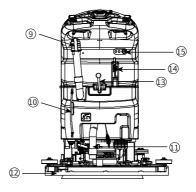
1.Recovery Tank Cover 5.Machine Head Assembly

3. Solution Tank Cover

6.Pad Holder or Brush 7.Rubber Skirt

4. Solution Tank

8.Wheels



9.Recovery Tank Drain Hose 13.Squeegee Assembly Lever 10.Water Level Indicator

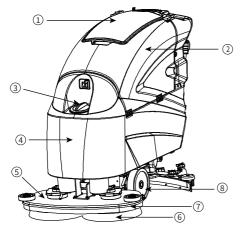
14.Handbrake

11.Suction Hose

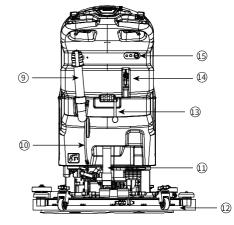
12. Squeegee Assembly

15.Key Switch

# MACHINE PARTS (G26BT)



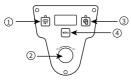
- 1.Recovery Tank Cover
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- 3. Solution Tank Cover
- 4. Solution Tank
- 5.Rubber Skirt
- 6.Pad Holder or Brush
- 7. Machine Head Assembly
- 8.Wheels



- 9. Recovery Tank Drain Hose
- 10.Water Level Indicator
- 11.Suction Hose
- 12. Squeegee Assembly
- 13. Squeegee Assembly Lever
- 14. Hand Brake
- 15.Key Bwitch

### CONTROL PANEL INTRODUCTION

#### ▲ G20B+



1.Brush Button 2.Key Switch 3.Suction Button 4.Menu Button

#### ▲ G20BT/G26BT



1.Menu Button

2.Speed Control Button/Brush Button

### **BATTERY**

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



Before charging the battery for the first time, ensure that the room is well-ventilated and open the battery compartment to prevent the accumulation of any leaked gases.



Attention: The following operations must be performed by qualified personnel. Improper connector connections may cause equipment failure.



Attention: The use of incompatible battery chargers may lead to 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 DC cord of the charger to the machine's battery charging port, and then plug the AC power cord into a properly grounded wall socket.
- 4. Once fully charged, a green light will illuminate, at which point you can turn it off. Depending on the type of battery, the longest charging cycle can reach up to 12 hours.
- 5. After the battery has been charged, make sure to disconnect the AC power cord before removing the charger from the machine.

#### **Battery Usage Precautions:**

- Do not place batteries in environments that are flammable, explosive, or excessively humid to prevent explosions.
- Do not install, use, or store batteries in hazardous environments (with electricity, damp, overheating, freezing, strong magnets).
- Do not touch batteries with wet hands to avoid 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 noise, abnormal temperature, leakage, or other unusual conditions, please immediately stop charging
  or using it.
- Please handle waste batteries in accordance with local regulations. Before discarding the batteries, fully discharge them and
  wrap the terminals with insulating paper to prevent fires or explosions.
- For the charger, regularly check if the charger cable is damaged. If it is damaged, do not use the device.
- When using each time, please pay attention to the battery charge level. If the battery charge is low, charge it in time to avoid over-discharging the battery.
- Before charging, turn off the key switch and do not turn on the device.
- A set of batteries typically requires 10-12 hours to charge fully. Each time you use the charger, make sure the batteries are fully charged to prevent damage to the batteries.
- If the device 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 time and do not wait until the battery is completely drained to recharge.
- If the machine is not going to be used for an extended period, it is advisable to disconnect the power supply to prevent current discharge.
- Charge and store in a clean, ventilated, and dry place with a temperature of 0-35°C.

# **BRUSH AND SQUEEGEE INSTALLATION**

#### ▲ Squeegee Assembly Installation:

1.Loosen the two four-star nuts on the squeegee assembly, and then connect and install the suction hose to the suction port on the squeegee assembly.

2. Align the four-bolt nuts with the slots on the squeegee bracket, and then tighten the nuts.

#### ▲ Install the Brush:

Attention: Wear personal protective equipment when operating and maintaining.

- 1. Disconnect the power supply.
- 2. Place the brush plate under the machine head.

3.Place the three pins on the brush plate into the corresponding mounting holes on the machine head and lock them in place by turning clockwise.

G20BT: Press the brush plate button, the brush plate rotates and locks immediately.

G20BT/G26BT: Turn on the power, ensure that the speed control knob is at the lowest speed setting, pull the direction control lever backward, and the brush plate will rotate and lock immediately.

#### ▲ Remove the Brush:

- Lift the machine head assembly, power on and hold down the "MENU" button for 5 seconds, the machine will automatically unload the brush plate.
- · Alternatively, disconnect the power supply and swing the brush plate clockwise/counterclockwise to loosen it.
- If using a needle brush, first install the appropriate needle brush on the matching needle brush holder.

# **MACHINE OPERATION**

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

#### G20B+:

• Turn on the key switch.

Press the pedal to lower the machine head assembly to the ground.

Turn the control lever downwards to lower the bucket assembly.

Press the suction button, and the vacuum motor will start working.

Press the floor-scrubbing button, and the brush motor will start working.

#### G20BT/G26BT:

- . Turn on the key switch.
- To make the machine move forward, pull the direction control lever towards the back, and adjust the speed control button.

  Turn the speed control button clockwise to accelerate the machine, and turn it counterclockwise to decelerate.
- To make the machine move backward, push the direction control lever forward, and adjust the speed control knob. Turn the
  speed control knob clockwise to increase the machine's speed, and turn it counterclockwise to decrease the machine's
  speed.
- Press the pedal to lower the machine head assembly to the ground, pull back or push forward the direction control lever, and the brush plate motor will operate.
- By pulling down the control lever to lower the bucket assembly, the vacuum motor operates, and at this time, the machine
  can only move forward and not backward.

# **ENDING WORK**

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

- 1. Lift the machine head assembly by stepping on the pedal to stop the brush motor.
- 2. Lift the squeegee head using the lever to delay the shutdown of the vacuum motor.

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

🔨 Attention: Please move the machine to an area suitable for wastewater discharge to prevent pollution.

# MACHINE MAINTENANCE

#### ▲ Machine Storage

- · Store in a dry indoor environment;
- Ensure that the brush disc and squeegee are in the raised position;
- Make sure that all the water in the clean water tank and dirty water tank is completely drained, especially when stored in cold
  places.

### **Daily Maintenance**

- Wipe the entire machine with a clean/damp cloth;
- Empty the clean water tank by opening the drain valve at the bottom of the tank;
- Drain and flush the dirty water tank with clean water;
- Remove the brush disc and squeegee assembly, and rinse 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 inspect the motor every 250 hours to ensure it is working properly.

#### Squeegee Rubber Strip Replacement

- Remove the squeegee assembly from the machine (refer to the squeegee installation instructions);
- Loosen the stainless steel clasps and remove the rubber strip;
- Replace with a new rubber strip and reassemble the squeegee assembly.

# **TECHNICAL SPECIFICATIONS**

Parameters	International Units	G20B+	G20BT	G26BT
Cleaning Width	mm	510	510	690
Squeegee Width	mm	780	780	860
Work Efficiency	m²/h	2050	2250	3100
Maximum Driving Speed	km/h	-	4.5	4.5
Maximum Grade	%	2	2	2
Disk Brush (Diameter * Quantity)	mm	490*1	490*1	330*2
Operating Voltage	V	DC24V	DC24V	DC24V
Rated Total Power	W	890	1010	1310
Motor	W	_	120	120
Brush Motor	W	500	500	400*2
Vacuum Motor	W	390	390	390
Clean Water Tank	L	45	55	70
Sewage Tank	L	55	65	80
Net Weight	kg	82	93	120
Machine Dimensions (Excluding Scraper)	L*W*H (mm)	1166*810*990	1275*810*1025	1327*870*1052

# **COMMON TROUBLESHOOTING**

### G20B+

Problem	Situation	Solutions
No power	Not connected to the ower 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	Check the connection between the panel and XD240     Controller internal fault
F01	Current sensor failure	Check if the motor line is short-circuited     Controller internal fault
F02	EEPROM Failure	1. Controller has no parameters
F03	Main relay closure failure	Check if the motor line is short-circuited to the negative pole of the battery     Check if the solenoid valve is short-circuited to the negative pole of the battery     Internal fault of the controller
F04	Parameter modification failure	Restart the controller
F05	DCF file corruption	Upgrade the controller program     Internal failure of the controller
F06	ST unburned fuse failure	1. Controller internal fault
F07	Precharge failure	Check if the motor line is short-circuited to the negative pole of the battery     Check if the solenoid valve is short-circuited to the negative pole of the battery     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	Check if the solenoid valve is properly plugged in or if there is an open circuit in the solenoid valve wire     Controller internal fault
F11	Electromagnetic valve disconnection fault	Check and resolve the short circuit in the solenoid valve wiring     Check and resolve the short circuit inside the solenoid valve     Controller internal fault
F12	Battery open circuit fault	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	Check whether the brush motor is blocked     Check whether the brush motor power matches the controller setting

Problem	Situation	Solutions
F17	Suction motor overload failure	Check whether the suction motor is blocked     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	Check the brush motor wiring     Internal fault of the controller
F21	Suction motor short circuit fault	Check the wiring of the suction motor     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

# G20BT/G26BT

Problem	English Abbreviation	Solutions	
F1	Ems active	1.Release emergency stop switch	
F2	Brush Error	1.Check the brush motor and its related circuits 2.Replace the controller	
F3	Vacuum Error	1.Check the brush motor and its related circuits     2.Replace the controller	
F4	Brush Open	1.Brush Motor is open or not connected	
F5	Vacuum Open	1. Vacuum Motor is open or not connected	
F6	Dirty Water Full	1.Drain dirty water	
F7	Clean Water Empty	1. Fill clean water	
F8	Battery Low	1.Charging	
F9	Battery Very Low	1.Must charging	
F10	Traction Error	1.Check the traction motor and its related circuits     2.Replace the electronic brake	
F11	Traction SRO	Reboot, do not step on the accelerator     Check the pedal accelerator	
F12	Brake Open	1.E-Brake is disconnected or open	
F13	Brake Error	1.Check the electronic brake     2.Replace the electronic brake	
F14	Valve Error	1.Check the Solenoid valve and pump	
F15	Pump Error	2.Replace the Solenoid valve or pump	
F16	Valve Open	1.Valve or pump is open or not connected	
F17	Pump Open	1.vatve of parity is open of not connected	
F20	Comm. Error	Check the communication line     update the software     replace the controller	
F21	Self-Test NG	Check the circuit- Wiring issue     check the accelerator     update the software     replace the controller	
F22	Over Temp	1.Controller temperature is > 70C 2. Check the load current	

Problem	English Abbreviation	Solutions	
F23	EEPROM Error	Parameter setting issue, Update parameter     Replace the Controller	
F24	Battery High	Battery Voltage is too high     Parameter Setting error, update parameter     Replace the Controller	
F25	Tract Carbon	Traction motor running time is more than set time limit     Not zero the motor time after changing motor carbon	
F26	M-Bru Carbon	Brush motor running time is more than set time limit     Not zero the motor time after changing motor carbon	
F27	Blow. Carbon	Nacuum motor running time is more than set time limit     Not zero the motor time after changing motor carbon	
F28	Sit in Seat	1.Please sit in seat	
F29	Beeper Open	1.Beeper is open or disconnected	
F30	Beeper Error	1. Beeper is short-circuit or overloaded	