



BTCR28 Floor Scrubber Instruction Manual

We aim to provide safer, higher-end and more user-friendly cleaning equipment with the help of the newest technology and innovative ideas.

Preface

This instruction manual contains all the information that you need to use and maintain the machine. Please read it carefully before getting started.

This instruction manual is an important part of the product and should be kept together with the machine.

In order to ensure your safety, the following instructions must be followed when operating the machine and performing maintenance:

-  Do NOT use the machine after drinking or taking medicine.
-  Turn off the machine before any maintenance or repair.
-  The machine can only be used by trained and competent personnel; children and disabled people are forbidden to use it.
-  Keep the batteries away from sparks, flame and smoke.
-  Do NOT use the machine in places with flammable or explosive liquids, gases and vapor.
-  When operating the machine, do NOT wear loose clothing, and keep your body away from the moving parts of the machine.
-  Do NOT smoke when charging the batteries.
-  In the event of a fire, use a powder extinguisher instead of water.
-  It is crucial to give due consideration to the machine's disposal process. If any hazardous substances fail to meet the required standards, they must be transported to a designated service center for appropriate treatment.

If you have any question, complaint or suggestion, please feel free to contact us and we will be at your service with all our knowledge and enthusiasm.

We wish you a pleasant experience with our product!

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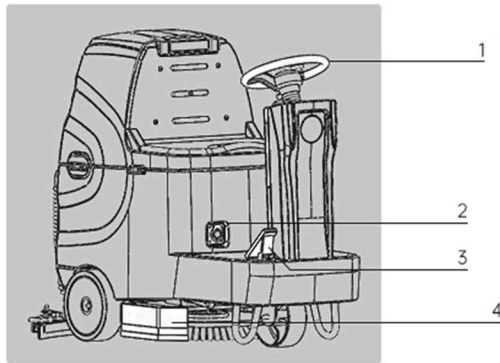
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Chapter 1 General description

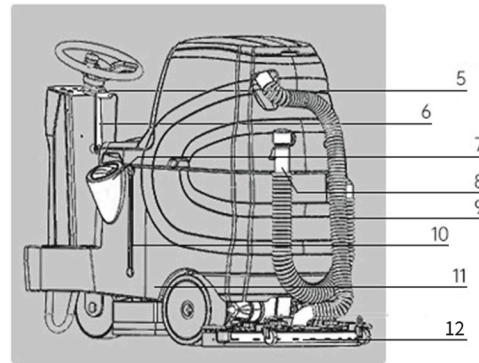
1.1 Suitable scenes

This product can be used in various locations, such as restaurants, schools, hospitals, factories, supermarkets, warehouses & office buildings, etc. It can clean various hard floors effectively, such as mirror tile floor, marble floor, epoxy floor, PVC floor, emery floor, terrazzo floor, concrete floor, ceramic tile, etc.

1.2 Overview of the product



- 1. Steering wheel
- 2. Charging socket
- 3. Accelerator pedal
- 4. Brush plate



- 5. Control panel
- 6. Brush tray lifting handle
- 7. Water inlet
- 8. Suction hose
- 9. Water level gauge
- 10. Water valve switch
- 11. Squeegee assembly
- 12. Squeegee assembly

1.3 List of accessories

Upon receiving the product, please verify the presence of the following items. If any items are missing, contact the seller immediately.

Item	Number	Item	Number	Item	Number
Brush	2	Squeegee	1	Instruction manual	1
External Charger	1	Red pad	2	Battery set	1
Needle Holder	2				

1.4 Consumables and optional items

- ⌚ Consumables/Wearables refer to accessories that will wear out gradually and need to be replaced when they cannot perform.
- ⌚ You can purchase these wearable parts on our website:<https://www.crystalfloorscrubber.com/frequently-bought-accessories>.

Consumables and optional items	
Brush	White Pad (soft)
Rubber for Squeegee Assembly	Red Pad (medium softness)
Needle Holder	Black Pad (hard)

Chapter 2 Unloading and assembling the machine

2.1 Unloading the machine

- ⊗ Remove the packaging carefully and avoid damaging the machine.
- ⊗ We recommend that you keep the packaging of the product since it can be used to transport the machine.
- ⊗ Do NOT unload or unpack the machine violently.

2.2 Assembling the machine

2.2.1 Installing the squeegee

- ⊗ Pass the squeegee fixing screws through the holes of the squeegee holder, and tighten them with plastic knobs.
- ⊗ Turn on the suction motor to see if the squeegee is touching the floor properly & create an airtight situation. Turn the two outermost plastic knobs to adjust the height of the squeegee if needed.



2.2.2 Connecting the battery cords

- ⊗ Drain the sewage tank if needed. Carefully flip open the sewage tank and check whether all the cables on the batteries are connected and tightened.
- ⊗ Connect the battery poles. Pay attention to the positive and negative terminals.
- ⊗ Flip the sewage tank back to its original position.

Chapter 3 Checks and adjustments before using the machine

3.1 Check items

3.1.1 Checking the water volume in the clean water tank

☹ Make sure that there is sufficient water in the clean water tank before work. Do NOT start the cleaning without enough water, or dust may be sucked into the suction motor leading to loud noise and low working efficiency.

3.1.2 Checking the water level in the sewage tank

☹ Pay special attention to the water level in the sewage tank. When the floating balls are in the highest position, discharge the sewage tank immediately or the suction motor will be burned.



3.1.3 Checking the voltage of the batteries

☹ When the general switch is turned on, the current voltage of the batteries will be displayed on the voltmeter. If the last bar of the voltmeter is flashing, the power is insufficient and please charge the batteries immediately.

☹ Note that deep discharging (e.g. frequently using the machine when the voltage is lower than 22 V) will reduce the service life of the batteries.

3.1.4 Checking the status of the brush plate

- ⌚ Check whether the brush plate is worn. If so, please replace it.

3.1.5 Checking the status of rubber

- ⌚ The rubber needs to be replaced if it's worn out or cut
- ⌚ If the rubber cannot create an airtight situation when it's touching the floor, the suction effect will not be satisfactory.

3.2 Adjustment items

3.2.1 Adjustment of the squeegee holder

- ⌚ Turn the plastic knob on the universal wheels to adjust the height of the squeegee.

It is ideal to have the rubber bent at a 45 degree angle while touching the floor to create an airtight situation for better suction effect.



Chapter 4 Instructions on operating the machine

4.1 Moving the machine

☹️ Turn on the power of the machine. Before moving the machine to another location, make sure the brush & the suction functions are turned off so that the brush and the squeegee are both lifted. Then hold on to the steering wheel and step on the accelerator pedal to move the scrubber forward or backward. Do NOT let the brush/pad & rubber touch the floor unless you are cleaning your facility to avoid unnecessary wearing.



Note: when the machine is moving backward or needs to be transported, make sure that the brush plate and the squeegee are lifted, or the brush plate will be worn and the squeegee will be deformed.

4.2 Scrubbing the floor

- ☹️ Turn on the general switch.
- ☹️ Pull down the brush plate lifting handle to lower the brush .
- ☹️ Turn on the suction button, and the squeegee will be put down automatically.
- ☹️ Hold the steering wheel, step on the accelerating pedal and keep the machine running smoothly.

Note:

1. If you need to drive the machine forward, please turn the forward/backward button to the forward gear.
2. If you need to drive the machine backward, please turn the forward/backward button to the backward gear. (In this case, make sure that the brush plate and the squeegee are lifted.)
3. When adding clean water, pay attention to the water quality to avoid blockage.
4. For emergency stop or when operating the machine on a slope, you can release the accelerating pedal.

5. When washing the epoxy floor, replace the brush with a pad on a needle holder.
6. You can clean the floor with clean water. If the floor is greasy or sticky, you can add a small cup of neutral low foam/no foam solution to the solution tank (lower tank) with a full tank of water while adding a small cup of defoamer/anti-foam in the recovery tank (upper tank) or the vacuum motor might be damaged by the bubbles created.
7. When the brush plate motor is turned on, do NOT leave the machine in the same place for a long time.
8. In winter or during very cold weather, please drain the clean water tank once the work is finished.



4.3 Discharging sewage

- ⌚ Before draining the sewage tank, stop the machine and turn off the general switch.
- ⌚ Put down the sewage discharging hose, open the cap and discharge the sewage.
- ⌚ Rinse the sewage tank with clean water.

4.4 Stopping the machine

- ⌚ Drain the sewage tank.
- ⌚ Move the machine to the storage place.
- ⌚ Turn off all the buttons on the control panel.

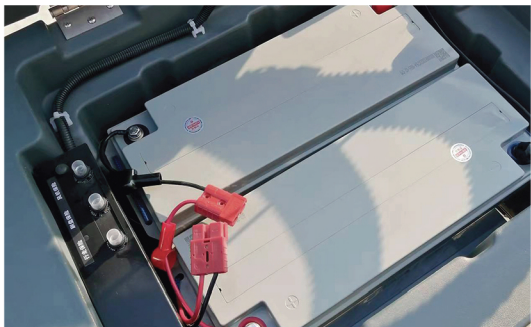


4.5 Charging the batteries

Note: the machine is powered by two 12 V maintenance-free lead-acid batteries and the total system voltage is 24 V.

- ⌚ Empty the sewage tank, and flip it to the side. To charge the batteries, connect the charger to the port under the driver's seat first, then connect the other end of the charger to the wall outlet.
- ⌚ The total voltage of the batteries will gradually decrease during the work. When the last bar of the voltmeter is flashing, the machine is running out of power. Please charge the batteries immediately.
- ⌚ When dealing with the batteries, please wear gloves to avoid direct contact with acid substances.
- ⌚ Check whether the battery cords are worn and the connecting parts are loose, and replace them when necessary.
- ⌚ Keep the batteries dry and clean and make sure that there are no dust on them, since it is extremely harmful to the batteries and may even cause them to burn in severe cases. Do NOT put any object (especially metallic object) on the batteries either.

Note: if the machine will not be used for a long period of time, please fully charge the batteries, & disconnect the battery cords/lines to avoid power loss. Batteries should be charged semi-monthly to avoid deep discharging which would result in battery failure.



Chapter 5 Cleaning and maintenance of the machine

Regular maintenance can extend the service life of your machine.

5.1 Cleaning of the machine

- ⌚ Check the wheels regularly and remove entanglements.
- ⌚ Clean the sewage tank and the sewage drain hose with clean water regularly.
- ⌚ Clean the filter of the water valve. If you notice any dirt or particles on the transparent cover, you can unscrew the filter and wash the cover and the filter screen repeatedly.

Alert: do NOT wash the machine body with water directly, since it is NOT really water-proof and may be short-circuited or burned in this case.

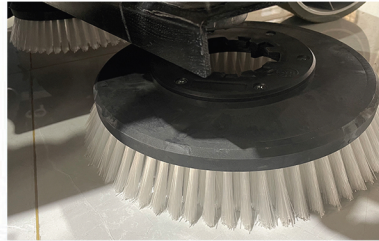
5.2 Maintenance of the machine

5.2.1 Replacement of the brush plate

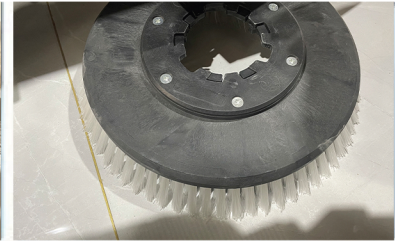
- ⌚ Park the machine on the flat ground and put down the brush plate.
- ⌚ Rotate the brush plate counterclockwise quickly to remove the brush.
- ⌚ If it's stuck, grab the bristles to lift the brush plate slightly and shake it from side to side, and then the brush plate will be detached.
- ⌚ When installing the new brush plate, make sure that the flange plate is aligned with the holes on the brush plate, and rotate it in clockwise to finish the installation.
- ⌚ Installation of the needle plate: add a scouring pad on the bottom of the needle plate, and install it following the instructions above. You can purchase needle plates and scouring pads from our website.



Step 1



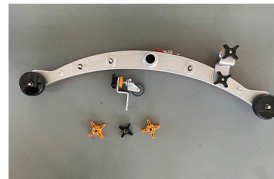
Step 2



Step 3

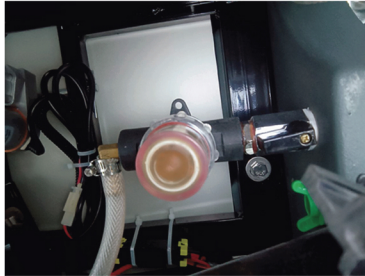
5.2.2 Replacement of the strip of the squeegee

- ⌚ Lower the squeegee and rotate the two innermost plastic knobs to detach the squeegee assembly from the machine.
- ⌚ Remove the wheels of the squeegee, use a wrench to remove the fixing knobs/nuts on the squeegee, and then take out the front & the rear strips from the squeegee.
- ⌚ Install the new squeegee rubber and tighten the rear wheels and the fixing knobs.



5.2.3 Removal and installation of the filter

⌚ The clean water filter is underneath the driver' s seat, between the brush tray and the rear wheel. Unscrew the transparent cover and clean the filter periodically so that the clean water can flow smoothly.



⌚ When the water valve is parallel to the pipe, the water is totally turned on. When the water valve is perpendicular to the pipe, the water is totally turned off. You can turn the water on proportionally with this valve/switch.

Chapter 6 Storage and transportation of the machine

6.1 Storage of the machine

- ⚠ If you are not going to use the machine for a long time, please remove and wash the squeegee and the brush plate, and store them in a dry clean place. We recommend that you store them in an airtight plastic container.
- ⚠ Make sure that the water tanks are drained and cleaned.
- ⚠ Fully charge the battery before storing the machine. If you do not use the machine for a long time, charge the battery regularly (twice a month) to avoid deep discharging which would result in battery failure.

6.2 Transportation of the machine

- ⚠ When lifting or lowering the machine, make sure that it is in a upright position to prevent it from tipping over or falling.
- ⚠ When the machine leaves the factory, it is fixed on a wooden pallet and carried on a transport vehicle with appropriate equipment; upon arrival at the destination, a similar setting needs to be arranged to load or unload the machine safely.
- ⚠ When using a forklift to move the machine, the forklift should move the entire box with the machine well-affixed inside it. Do NOT use a forklift to pick up the machine directly or it might damage the machine. Machine could also tip over or fall easily from the forklift and cause property damage or human injury.

Chapter 7 Common problems and solutions

The batteries cannot be charged	The charger fails.	Replace the charger.
	The charging port is oxidized.	
The suction motor does not work	The fuse is blown.	Replace the fuse.
The brush plate motor does not work	The fuse is blown.	Replace the fuse.
No water comes out	The clean water hose is blocked.	Clean the water hose.
	There are impurities in the filter cover.	Clean the filter cover.
	The electromagnetic valve fails.	Check or replace the electromagnetic valve.
Loud noise is produced while sucking up the water	The squeegee is in the wrong position.	Adjust the height of the universal wheels of the squeegee.
	The suction motor is broken.	Replace the suction motor.
The brush plate	The brush plate drops often.	Re-install the brush properly.
	The brush plate buckle is worn.	Replace the buckle.
The water suction efficiency is low	The white floating balls are stuck.	Clean the debris near the floating balls and gently tap the net around the balls to get them down.
	The suction hose is blocked.	Clean the suction hose.
	The rubber sealant of the sewage tank is cracked.	Replace the rubber sealant.
	The strip of the squeegee is cracked.	Replace the rubber strip.

Chapter 8 After-sale services

8.1 General description

 One-year warranty will be honored on the non-wearable parts. Users can easily purchase the wearable parts (brush, pad, needle plate/holder, squeegee rubber, etc.) on our website.

 The delivery receipt and purchase invoice are certificates for warranty and must be kept properly.

8.2 Cases not covered in the warranty

 The operator fails to perform maintenance listed in this instruction manual.

 The surface and/or the structure of the machine are obviously damaged due to improper operation.

 Disassembly or modification not approved by the original manufacturer.

 Damage due to weather or force majeure.

 The warranty is expired or the machine has been used for more than 1,500 hours.

Technical parameters

Category	Twin-brush
Battery capacity (V/Ah)	2*12v/ 2*150 Ah
Suction motor (W)	550
Brush plate motor (W)	380*2
Traction Motor (W)	500
Squeegee width (In)	39
Brush/pad diameter (In)	2*14
Theoretical working efficiency (ft ² /h)	45,000
Package weight (lb.)	675
Product weight (lb.)	541
Sewage tank capacity (Gal)	22
Clean water tank capacity (Gal)	21
Package size (In)	56*31*50
Product size (In)	54*30*45

Warranty Card

Property of:		Tel:	
Address:			
Date of purchase:			
Model:		Delivery Date:	
Accessories to be replaced:			
Notes:			

