



# **BTCR36 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. Only with correct operation and regular maintenance can the machine be kept in its best working condition.

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

In this manual we use illustrations to show the components and functions of the machine. It is possible that some of them contain details that are slightly different from those of yours. However, all the instructions presented here still apply to your product and should be followed strictly during the operation.

Some components of the product may be harmful or dangerous and we have tried our best to include them in this manual. **It is the user's obligation to pay special attention to them during the work.** However, since it is impossible for us to point out all potential dangers, we expect you to be extremely cautious during the work so as to protect the machine, yourself and other people in the working area.

Only accessories from the original manufacturer can be used on the machine. Using accessories from other sources may lead to low working efficiency or even accidents in extreme cases.

We usually modify or improve our products to meet the latest market demand. However, this is **NOT** suitable for machines that have been sold. We will **NOT** be responsible for any injury or loss caused due to the user's improper operation either.

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!

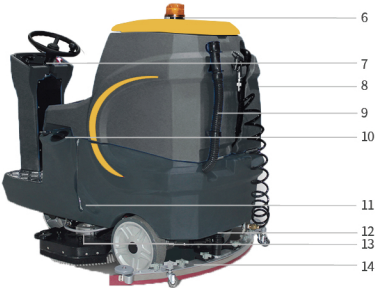
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# Components and technical parameters



- 1.Steering wheel
- 2.Sewage tank
- 3.Clean water tank
- 4.Accelerator pedal
- 5.Brush



- 6.Water gun
- 9.Drainage hose
- 10.Water inlet
- 11.Water-level gauge
- 12.Sewage suction hose
- 13.Water valve
- 14.Squeegee assembly

| Item                            | Parameter     | Item                        | Parameter |
|---------------------------------|---------------|-----------------------------|-----------|
| Cleaning width (in)             | 18*2=36       | Driving motor power (W)     | 600       |
| Squeegee width (in)             | 47            | Suction motor power(W)      | 550       |
| Working efficiency (sq.ft/h)    | 75,000        | Brush plate motor power (W) | 550*2     |
| Clean water tank capacity (gal) | 37            | Package weight (lb)         | 970       |
| Sewage tank capacity (gal)      | 45            | Package size (in)           | 64*36*56  |
| Battery capacity                | 4*6V/ 4*200Ah | Product size (in)           | 63*36*51  |

## Chapter 1 General description

This product is used for industrial and commercial purposes and suitable for cleaning hard indoor floors. Do NOT use the machine for other purposes. Use suggested brush plates and scouring pads, as neutral low foam/no foam solution & defoamer suitable.

Any operator must read, understand and abide by the following safety guidance.

### ALERT!



Do NOT use explosive liquids; do NOT use the machine in places with flammable or explosive liquids, gases or dust.



Do NOT use the machine to clean flammable materials or active metals.



Hydrogen is generated when the battery is being charged. Please keep it away from sparks or open flames. Please charge the machine in a well-ventilated area.

### ALERT!

Disconnect the battery before maintaining the machine, or electric shocks, fire or explosion may be caused.

### ALERT!

Turn off the general switch before maintaining the machine. Keep your hands away from the brush plate when it is operating.

### FOR YOUR OWN SAFETY

#### 1. Do NOT use the machine when



explosive liquids or gases are presented in the working area, or



you are not trained and qualified for the operation, or



you have not read and understood the instruction manual, or



you are not sure how to operate the machine safely

#### 2. Before starting the machine,



make sure that all safety-ensuring devices are installed and adjusted to the correct positions.

#### 3. When using the machine,



slow down on slopes, and



wear anti-slippery shoes, and



report immediately when a fault is produced, and



pay attention to the people in your neighborhood, especially children, and



pay attention to the concentration of chemical materials.

#### 4. Before leaving or maintaining the machine:

⊗ park the machine on a flat ground, and

⊗ turn off the machine.

**5. When maintaining the machine,**

⊗ do NOT move its key components, and

⊗ do NOT wear loose clothes, and

⊗ disconnect the battery, and

⊗ wear protective devices if you need to handle the battery or the battery cables,

and

⊗ do NOT touch the acid liquid of the battery, and

⊗ do NOT use high pressure water guns to wash the machine, and

⊗ use spare parts from the original manufacturer, and

⊗ do NOT change the original design of the machine.

**6. When transferring the machine,**

⊗ turn off the machine, and

⊗ disconnect the battery cables prior to transferring the machine.

⊗ do NOT carry the machine on your own, and

⊗ the machine should be wrapped with cardboard and secured onto the pallet.

⊗ lift up the brush and the squeegee.

### 2.1 List of accessories

When you receive the product, check whether all of the following items are presented. Contact us if there is any part missing.

| 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      |          |        |                    |        |

⚠ Before unpacking the machine, remove the shipping fasteners and ropes securing the machine to the pallet, and then carefully remove the machine from the pallet with the assistance of others.

⚠ Remove the machine from the pallet before installing the batteries to avoid damage to the machine.

### 2.2 Installation of the batteries

#### ALERT!

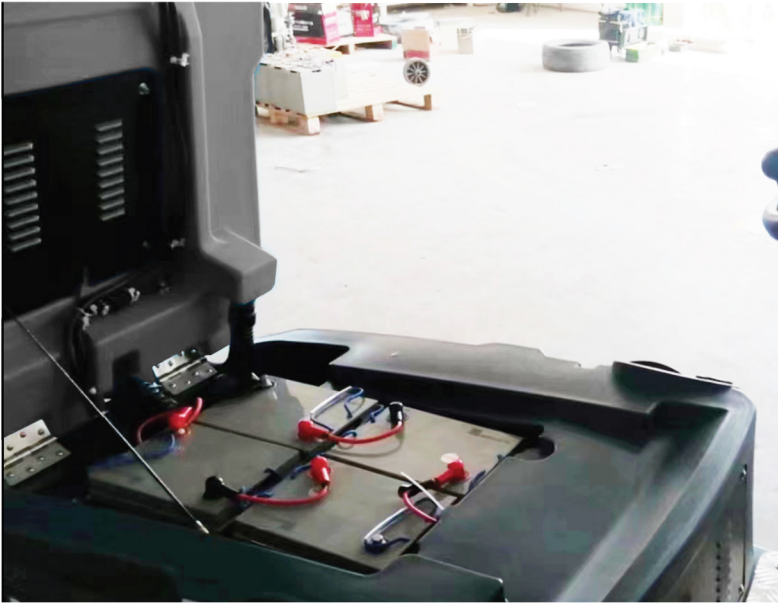
Hydrogen will be generated during the charging process. As a result, the charging room must be well ventilated and away from sparks and open fire, or severe accidents may take place.

#### FOR YOUR OWN SAFETY

Please wear protective devices and avoid direct contact with the acid liquid of the batteries.

Follow the instructions below to install the batteries:

1. Park the machine on a flat surface and remove the key.
2. Empty the sewage tank and flip it open to its side
3. Install the batteries carefully into the battery box and connect the battery cable according to the figure:



### **ATTENTION!**

Do NOT throw the batteries into the battery box.

1. Before connecting the batteries, check whether the ends of the batteries are clean.
2. When the batteries are installed, check the power and charge the batteries when necessary.

### **NOTE**

Apply a coat of metal-free lubricant to the battery cables to prevent corrosion.

## Chapter 3 Operation of the machine

### 3.1 Washing methods

Adjust the flow of the washer fluid (mixture of water and detergent or pure water) through the water valve. The brush plates use the washer fluid to clean the floor. While the machine is moving, the squeegee will suck the dirty water into the sewage tank.

**In order to achieve the best cleaning effects, please use the pad to clean epoxy & softer floors, and brush on harder floors:**

1. Brush plate: used to clean tiles, concrete and harder flat floors.
2. White pad: used for maintaining highly glossy or polished floors.
3. Red pad: used for scrubbing light dirt.
4. Black pad: used for super powerful washing.

### 3.2 Assembling the machine

#### 3.2.1 Installation of the squeegee

- ⊗ Park the machine on a flat ground and remove the key.
- ⊗ Lower the squeegee control handle to put down the squeegee bracket.
- ⊗ Install the squeegee on the squeegee brackets and make sure that the tightening knobs are fully inserted into the socket before tightening the knobs.
- ⊗ Check the rubber of the squeegee and make necessary adjustments.

#### 3.2.2 Installation of the brush plates and the pads

- ⊗ Park the machine on the flat ground and remove the key.
- ⊗ (right) Remove the splash guard/baffle, turn the brush counterclockwise, and the brush will fall down. Then install the new brush by aligning the 3 nuts with the holes under the machine, turn the brush clockwise to lock the brush in. (You can wear gloves, hold on the bristles and gently lift up the brush while turning/removing it.)
- ⊗ (Left) Remove the splash guard/baffle, turn the brush counterclockwise to remove it. Install the new brush in reverse steps.

### 3.3 Preparation before operating the machine

#### FOR YOUR OWN SAFETY

Do NOT operate the machine until you have fully understood the instruction manual.

## ALERT!

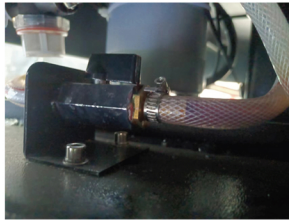
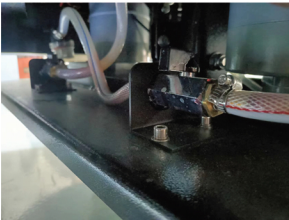
Do NOT operate the machine in places with flammable or explosive gases, liquids or vapor.

### Before operating the machine, check

- ⊗ if there is dust on the ground, and
- ⊗ if the batteries are fully charged, and
- ⊗ if the brush plates and the pads are worn, and
- ⊗ if the rubber of the squeegee is worn, and
- ⊗ if the sewage tank is empty, and
- ⊗ if a floating filter screen is installed in the sewage tank, and
- ⊗ if the boards of the brush head are worn.

### 3.4 Operating the machine

- ⊗ Turn the key to turn on the power.
- ⊗ Pull down the squeegee lifting handle to lower the squeegee.  
Turn on/off the brush function by clicking the button on the control panel.  
Brush will be lifted or lowered automatically.
- ⊗ Turn on the water valve.
- ⊗ When the valve is parallel to the pipeline, the amount of water is the largest; when the valve is at 90° to the pipe, the amount of water is closed.
- ⊗ Adjust the machine moving speed by stepping on the accelerator pedal, just like driving a car.



### During the operation, pay attention:

- ⊗ Do NOT park the machine on the same place for a long time so as to avoid damage to the ground.
- ⊗ Do NOT operate the machine on slopes with an inclination higher than 15°.
- ⊗ 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.
- ⊗ Do NOT let foam get into the filter screen to prevent the vacuum motor from being damaged.

- ⊗ Pay attention to the power of the batteries.
- ⊗ When the clean water tank has run out of water, discharge the sewage tank first and then add water.
- ⊗ Before leaving the machine, park it on a flat ground and remove the key.
- ⊗ Perform suggested maintenance on the machine on a daily, weekly, monthly or bi-monthly basis.

### 3.5 Power meter

The current power of the batteries is displayed in the power meter. Pay attention to the power display during the work and do NOT leave the batteries in a low voltage state, or else the service life of the batteries will be reduced.

### 3.6 Emptying the water tanks

The sewage tank should be cleaned every time you finish the work. The clean water tank should be washed regularly to remove corrosion and small particles. Before draining the water tanks, move the machine to an appropriate place and follow the instructions below.

#### FOR YOUR OWN SAFETY

Before draining the water tanks, turn off the machine and pull out the key.

##### Draining the sewage tank:

- ⊗ Lower the drainage hose, open its cap and the dirty water will flow out.
- ⊗ Wash the sewage tank.
- ⊗ Remove and wash the floating filter screen inside the sewage tank.

##### Draining the clean water tank:

- ⊗ Remove the clean water cap and filter screen when you want to empty the clean water tank.
- ⊗ When the water valve is parallel to the ground, the water way is closed. When the water valve is perpendicular to the ground, the water way is opened and clean water can be drained.



### 3.7 Charging the batteries

#### NOTE

The total voltage of the batteries will gradually decrease during the work. When the voltmeter displays voltage is below 21V, it indicates insufficient power and requires timely charging. Please charge the batteries immediately and do NOT keep the batteries in the low-power state for a long time.

#### Specifications of the charger:

-  Charger type: Lead-acid battery charger
-  Voltage output: 24 V
-  Current output: 49-52 A
-  Automatic circuit breaker
-  Suitable for deep cycle battery charging

#### EXTREMELY IMPORTANT NOTE!

Hydrogen will be released during the charging process. As a result, the charging room must be well ventilated and without any spark or open fire.

#### FOR YOUR SAFETY

Please wear gloves and other protective devices to avoid contact with acid substances.

#### Instructions on charging the batteries:

-  The charging room should be well ventilated.
-  Park the machine on the flat ground and pull out the key.
-  Connect the charger with the charging port under the seat.
-  Then plug in the AC cord of the charger into a well-grounded socket.
-  The charging process will automatically begin and stop.



## NOTE

The machine cannot be operated during the charging process.

### 3.8 Maintenance of the machine

The machine can be kept in its best condition if regular maintenance is performed.

## ALERT!

Before maintaining the machine, disconnect the power or electric shocks may be produced.

### Daily maintenance:

- ③ Drain the sewage tank and rinse it with clean water.
- ③ Remove and clean the floating filter screen inside the sewage tank.
- ③ Drain the clean water tank and wash it with hot water (the temperature of the water should NOT be higher than 140 degree Fahrenheit).
- ③ Remove and clean the brush plate and the scouring pad.
- ③ Clean the rubber strips of the squeegee. Keep the squeegee lifted when not in use to prevent the strips from being damaged.
- ③ Wipe clean the surface of the machine with an all-purpose cleaner and a damp cloth.
- ③ Charge the batteries.

### Monthly maintenance

- ③ Remove the filter of the clean water tank and wash the filter screen. Make sure that the clean water tank is drained before removing the filter.
- ③ Clean the ends of the batteries to prevent corrosion.
- ③ Check whether the battery cables are loosened.
- ③ Check and clean the sealing strip of the sewage tank cover. Change it if it is broken.
- ③ Apply anti-water lubricants on all the pivots and rollers to keep them running smoothly.
- ③ Check whether the nuts on the machine are loose.
- ③ Check whether the machine leaks.

## Chapter 4 Common problems and solutions

|                                      |                                                   |                                                                                     |
|--------------------------------------|---------------------------------------------------|-------------------------------------------------------------------------------------|
| The batteries cannot be charged.     | The charger fails.                                | Replace the charger.                                                                |
|                                      | The charging port is oxidized.                    | Replace the charging port                                                           |
| The suction motor does not work.     | The fuse is blown.                                | Reset the fuse.                                                                     |
| The brush plate motor does not work. | The fuse is blown.                                | Reset 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 water solenoid fails.                         | Check or replace the water solenoid.                                                |
| Loud noise is produced.              | 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 floating ball is stuck.                       | Clean the debris near the floating ball and shake it a little to get the ball down. |
|                                      | The suction hose is blocked.                      | Clean the suction hose.                                                             |
|                                      | The rubber sealant of the sewage tank is cracked. | Replace the rubber sealant.                                                         |
|                                      | The rubber of the squeegee is cracked.            | Replace the rubber.                                                                 |

### 5.1 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 <https://www.crystalfloorscrubber.com/frequently-bought-accessories>.
- ☹ The delivery receipt and purchase invoice are certificates for warranty and must be kept properly.

### 5.2 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.

# Warranty Card

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

