

**DAILIS**

# Walk-behind Floor Scrubber Instruction Manual

**DLS-XS60**



05/2024

Please read this manual carefully before operation/please properly keep it.

## Preface

All models are enclosed with this manual. This manual provides necessary instructions for machine operation and maintenance.

Please read and understand this manual carefully before operating or using this machine.

Each new model is also enclosed with a complete parts manual, which shall be used when replacing the parts. In order to ensure timely delivery, please follow the instructions of "Parts Ordering Method" in the parts manual.

This machine can provide efficient service. Following these instructions, the machine can achieve the best results at the lowest cost:

- Operate the machine carefully.
- Maintain the machine regularly according to the maintenance instructions provided in the operation manual.
- Use parts manufactured by the original factory or of the same grade for maintenance.

Parts and supplies can be ordered online, by telephone, fax or e-mail.

Environmental protection

Please discard the packaging materials, old machine components such as batteries, antifreeze, oil and other toxic liquids under the premise of maintaining environmental safety according to your local waste disposal regulations.

Please do a good job in recycling.

### Machine data

Please complete for future reference.

Model number- \_\_\_\_\_

Machine serial number- \_\_\_\_\_

Machine option- \_\_\_\_\_

Sales representative- \_\_\_\_\_

Sales representative's Tel- \_\_\_\_\_

Customer number- \_\_\_\_\_

Installation date- \_\_\_\_\_

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# 1. Safety precautions

This machine is a commercial product. It is specially used for cleaning indoor hard floor and must not be used for other purposes. Please be sure to use the recommended scouring pad, brush and neutral detergent suitable for this machine.

The following safety warnings and the heading "For Safety Consideration" are used throughout this manual and, according to their descriptions, their functions are:

**Warning: warn of serious personal injury or death risks or unsafe operations.**

**For Safety Consideration: matters that must be observed when using the machine safely.**

The following safety precautions indicate situations that may cause potential hazards to the operators or equipment. All operators must read, understand and follow the following safety precautions.

**Warning: fire or explosion hazard.**

- Do not use flammable liquids; Do not operate the machine near or in places with flammable liquids, gases or flammable dust.

This machine is not equipped with an explosion-proof motor. During start-up and operation, the electric motor of this machine will generate sparks. If this machine is used in places with flammable gases, liquids or flammable dust, it may cause flash fire or explosion.

- Do not pick up flammable materials or reactive metals.

**Warning: danger of electric shock.**

- Disconnect the battery wiring and charger plug before repairing the machine.

- Do not use a damaged power cord to charge the battery. Do not modify the plug.

- If the charger's power cord is damaged or broken, it must be replaced by the manufacturer or its maintenance agent or similar qualified personnel with qualification so as to avoid dangers.

**Warning: The rotating brush is running. Keep your hands away. Please turn off the power before repairing the machine.**

**For Safety Consideration:**

1. Do not operate the machine in the following cases:

- Contact with flammable liquids or close to flammable gases, otherwise it may cause explosion or flash fire.

- Unless trained and authorized.

- Unless the operation manual is read and understood.

- Do not have normal operating conditions.

2. Before starting the machine:

- Ensure all safety devices are in place and operating normally.

3. When using the machine:

- Please walk slowly in case of slopes or slippery surfaces.
- Wear non-slip shoes.
- Please slow down when turning.
- Report immediately when the machine is damaged or the operation fails.
- Do not allow children to play on or near the machine.
- Observe the mixing ratios and handling instructions on the chemical containers.
- Do not operate on slopes with a gradient exceeding 5% (3°).

4. Before leaving or repairing the machine:

- Park the machine on a smooth floor.
- Turn off the machine.
- Take out the key.

5. When repairing the machine:

- Do not move parts. Do not wear loose tops, shirts or sleeves.
- Disconnect the battery wiring before operating the machine.
- Wear protective gloves and eye protection equipment when handling the battery or battery wiring.
- Do not flush the machine with high pressure spray or water pipes. That may lead to electrical system failure.
- Use replacing parts provided or approved by the manufacturer.
- All maintenance operations must be done by qualified maintenance personnel.
- Do not modify the original design of the machine.

6. When using trucks or trailers for carrying machines:

- Drain the water tank before shipment.
- Use the recommended loading/unloading dock ground when loading and unloading machines from trucks or trailers.
- Remove the battery before handling the machine.
- Please carry the machine with the assistance of others.
- Turn off the machine.
- Lower the brush disc motor to the lowered position.
- Secure the machine with ropes.

## 2.Security labels

The safety labels will be marked on the machine according to the indicated positions. If a label is missing, damaged or difficult to identify, please replace that label.



The rotating brush label is on the brush head.

**Warning: The rotating brush is running.**

**Keep your hands away. Please turn off the power before repairing the machine.**

**Warning:**

The label is in the Recovery tank

	NO.	Name
①	①	Charging port
②	②	Water level transparent pipe
③	③	Suction rake handle
④	④	Blow-off pipe
⑤	⑤	Outlet
⑥	⑥	Clear water filter
⑦	⑦	Brush disc lifting pedal
⑧	⑧	Suction rake assembly

	NO.	Name
①	①	Recovery tank cover
②	②	Clean water inlet
③	③	Chassis main handle
④	④	Brush disc guard
⑤	⑤	Brush disc
⑥	⑥	Guide wheel
⑦	⑦	Brush disc stop ring
⑧	⑧	Drive wheel



NO.	Name
①	Battery meter
②	Brush disc motor switch
③	Main power switch
④	Suction rake motor switch



NO.	Name
①	Clear water tank
②	Electronic control board
③	Recovery tanks
④	Power negative wire (black)
⑤	Power positive wire (red)
⑥	Suction motor
⑦	Battery

## 3 Machine Description

### 3.1 Unpack the machine

- (1) Carefully check whether there is any damage on the packing box of the machine. Please report any damage to the carrier immediately.
- (2) Check the list of freight contents. If there are any missing items, please contact the distributors.

#### Freight contents:

- 2-12V Battery-Optional
  - 220V, 15A Intelligent charger
  - $\phi$ 10 wires, 30cm long battery connection
  - 4 plastic sleeves for battery connection
  - One Suction rake assembly
  - One brush disc and one needle holder
  - Scouring pad must be purchased separately.
- (3) Before unpacking the machine, please remove the iron sheet fixing parts on the big casters. Carefully remove the machine from the shelf with the help of others.

**Note: If no loading/unloading ground is not used, do not directly push the machine so as to avoid damage to the machine.**

### 3.2 Installation the battery

**For Safety Consideration: when repairing the machine, please wear protective gloves and eye protection equipment when handling the battery and battery wiring.**

Recommended battery specifications:

Two 12V, 100Ah maintenance-free batteries

Two 12V, 110Ah maintenance-free batteries

Maximum volume of battery: 330 mm x 171 mm x 216 mm

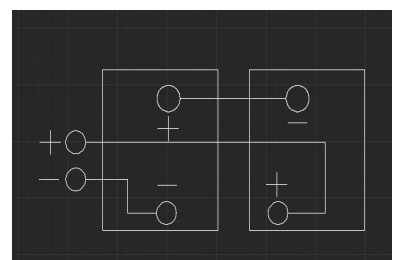
Step.1: Park the machine on the horizontal ground, turn off all power switches, and take out the key.

Step.2: Lift the Recovery tank so that you can reach the battery compartment. (Figure 1)

Step.3: Carefully install the battery in the battery compartment and arrange the battery terminals as shown in the following figure (Figure 2)

Step.4: Connect the battery wires to the battery terminals as shown in the figure (Figure 2)

Red is connected to the positive (+) and black to the negative (-).





## 4 Working mode of machine

### 4.1 Cleaning method:

Water and detergent flow to the brush disc and the ground through water valves and solenoid valves. Clean the floor with detergent and water by rotating the brush disc. For the sewage produced, when the machine goes forward, the sewage on the floor will be sucked into the Recovery tank through the suction rake assembly and the suction motor.

## 5 Brush and scouring pad information

In order to ensure the best efficiency, please use a brush of the appropriate type when cleaning.

The recommended brushes and scouring pads are as follows:

**Needle holder: 530mm 19" needle holder**

**Brush disc: 530mm 19" floor brush**

**Polishing pad (white)** - used for maintaining a highly slippery or polished floor; water the floor first, then clean, so as to prevent the floor from being scratched.

**Cushion pad (red)** - used for cleaning off slight dirt without damaging the floor.

**Scrubbing pad (blue)** - used for scrubbing off moderate to severe dirt. Wipe off dirt, stains and grinding marks to clean the floor surface for recoating.

**Folding pad (brown)** - used for removing the coating from the ground surface for recoating.

**Gravity folding pad (black)** - used for removing heavy coating or substrate or scrubbing with strong force.

## 6 Machine installation

### 6.1 Connect the suction rake assembly

Step.1: Park the machine on the horizontal ground, turn off all power switches and take out the key.

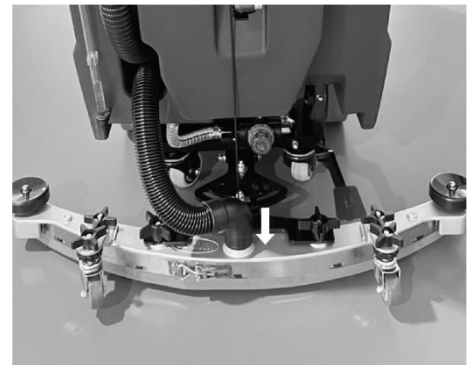
Step.2: Pull up the lifting rod of the suction rake to the upper position



Step.3: Mount the suction rake onto the suction rake mounting bracket, as shown in the figure . Be sure to fully place the fastening knob in the slot and then tighten the knob.



Step.4: Connect the suction pipe to the suction rake assembly, as shown in the figure.



Step.5: Check the suction rake strip and make appropriate adjustment (see "Suction Rake Strip Adjustment")

### 6.2 Brush disc installation

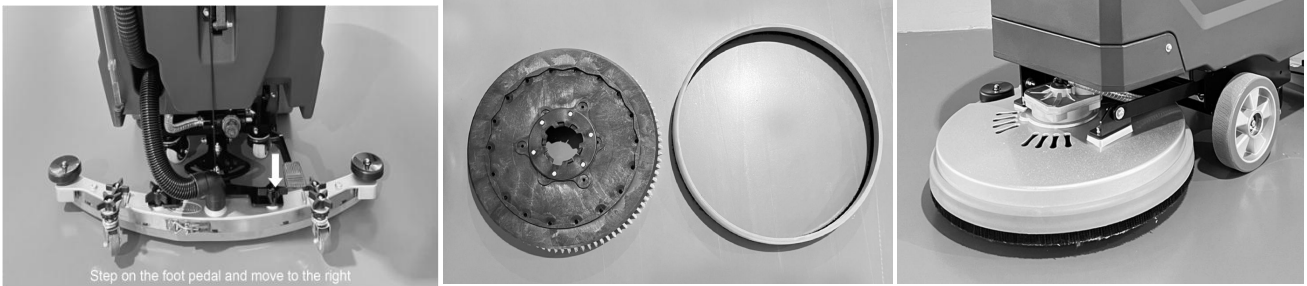
**For Safety Consideration:** before installing the brush disc or needle holder, please place the machine on the horizontal floor and turn off

**all power switches and take out the key.**

Step.1: Park the machine on the horizontal ground, turn off all power, and take out the key.

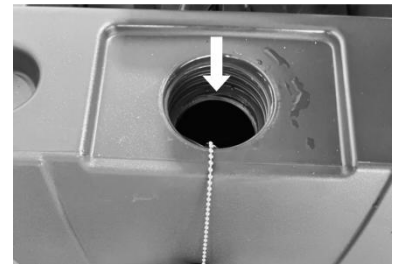
Step.2: Press down the brush disc lifting pedal and move it to the right (as shown by the arrow) so as to raise the brush disc motor.

Step.3: Place the needle holder/brush disc in the middle of the brush disc cover.



### 6.3 Injection of solution into the clean water tank

The front of the machine is provided with a bucket water feed hole to allow injection of solution into the clean water tank.



For the floor washing: use hot water (up to 60°C). According to the mixing ratio instructions on the container, pour the recommended detergent into the clean water tank for mixing.

**Note: If use a bucket to feed the solution into the clean water tank, make sure the bucket is clean. Do not use the same bucket to feed solution and discharge sewage.**

**Note: For cleaning method, please always use the recommended commercial detergent. If the machine is damaged due to improper use of detergent (remember not to use granular detergent, such as washing powder), the manufacturer will not be responsible for warranty.**

**Warning: Pay attention to the danger of fire or explosion hazard. Do not use flammable liquids.**

**For Safety Consideration: please observe the mixing ratio and handling instructions on the chemical container when using the machine.**

## 7 Machine operation

**For Safety Consideration: Do not operate the machine until you have read and understood the operation manual.**

**Warning: fire or explosion hazard. Never operate the machine near or in a location with flammable liquids, gases, or flammable dust.**

### 7.1 Pre-operation check

- Clean up the dust on the floor.
- Check the scale of the battery meter (refer to "Battery Meter").
- Check the wear of the scouring pad/brush.
- Check the wear of the suction rake strip and adjust the angle appropriately.
- Ensure that the Recovery tank is empty and the sewage filter screen is installed and clean.

### 7.2 Turn on the machine

Step.1: Turn on the power supply

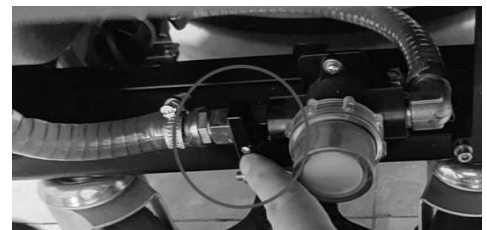
turn on the main power switch and press the brush disc motor button and the suction rake motor button .



Step.2: Press the pedal of the brush disc motor and move it to the left (as shown by arrow) so as to land the brush disc. Lower down the lifting handle of the suction rake to lower the suction rake assembly to the floor , The suction motor works.



Step.3: For different floor cleaning requirements, the water output can be controlled by adjusting the water valve switch up and down .



Step.4: To stop cleaning, please turn off the brush disc, the suction rake motor switch and the main power supply so as to raise the brush disc and suction rake.

### 7.3 During operation of the machine

**Warning: Do not pick up flammable materials or reactive metals so as to avoid fire or explosion.**

For Safety Consideration: please walk slowly and wear non-slip shoes in case of slopes and sliding surfaces.

- 1.the cleaning paths shall overlap each other by 5cm.
- 2.Keep the machine moving so as not to damage the floor.
- 3.Clean the cleaning area in advance to avoid dragging marks. If there is a scratch on the floor following the moving suction rake, please wipe the strip with a cloth and remove the garbage.
- 4.Do not operate the machine on slopes with a gradient of more than 5% (3°).
- 5.If there is too much foam, please pour the recommended commercial defoamer into the Recovery tank.
- 6.Note: Do not allow foam to enter the sewage filter screen in the Recovery tank so as to avoid damaging the suction motor.
- 7.For extremely dirty areas, double cleaning is recommended. First raise the suction rake for cleaning; after

soaking in the solution for 3-5 minutes, lower the suction rake and clean it again.

8. When staff leaves the machine, please raise the suction rake and the brush disc, turn off all power switches and remove the key.

## 7.4 Battery meter

The battery meter shows the level of electricity in the battery. When the battery is fully charged, all indicator lights are on. As the power is consumed, the indicator lights will turn off from right to left.

**Note: In order to prolong the service life of the battery, please charge the battery in time after use of the machine.**

When the power level reaches the last 4 scales, please stop cleaning. This can prevent the battery from completely running out. Please immediately push the machine to the charging area for battery charging.



## 7.5 Overload reset switch

The operation panel of this machine is equipped with a resettable overload reset switch to prevent damage to the electric door lock. Overload reset switch (see Fig. 14).

The control panel of this machine is equipped with two reset switches. The upper is for the suction motor and the lower for the brush disc motor.

When the overload reset switch triggers, please judge the cause of the trigger and let the motor cool down, then press the overload reset switch button manually.

If a machine needs repair, please contact the authorized service center.

## 7.6 Water tank drainage

The Recovery tank shall be drained and cleaned after use each time.

For Safety Consideration: Please park the machine on a level ground before leaving or repairing it, then turn off the machine and take out the key.

## 7.7 Drain the Recovery tank

Step.1: Move the machine to the drainage location and turn off the power key.

Step.2: Hold the drain pipe with its mouth up, remove the pipe cover and then lower the pipe for drainage.

**Note: Do not use the same bucket to feed solution into the clean water tank when that bucket is used for receiving the sewage discharged from the Recovery tank.**



## 7.8 Drain the clean water tank

To drain the remaining water from the clean water tank, open the drain pipe cover of the clean water tank (Fig. 16).



\* If you would like to view more information, please contact us to obtain a full product brochure.

## Contact Information:

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