

Hand-pushed Sweeper Instructions



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Introduction

Contents and Purpose of Instructions

The Manual provides necessary information, including the technical characteristics, operation methods, machine storage, maintenance, spare parts and precautions of safety conditions, so the customer can use the sweeper (hereinafter referred to as “the Product”) safely, conveniently and correctly. The user, professional repairing/maintenance technicians should read the Manual carefully prior to use, and operate the Product in strict accordance with the instructions.

The Manual is prepared exclusively prepared for the users, professional repairing/maintenance technicians. The operators must pass professional technical training; otherwise, the manufacturer will not undertake the losses due to misoperation of operators.

※ For any inconsistency between the Manual and the Product, the real product prevails.

Keeping of the Manual

The Manual MUST be kept in a safe and accessible place near the Product and away from liquids, etc. to keep it intact.

Confirmation Information

Refer to the Product’s nameplate for the details of model and date of production.

Model _____

No. _____

Modification and Improvement

Our products are subject to constant improvement and are reserved with space for further expansion, but we are exempted from the liability for improving the sold products. For any change of contents, please kindly contact our After-sales Department.

Safety

Contents and Purpose

The following symbols indicate the potential hazards. Please read the instructions carefully and take necessary prevention & protection measures. The Manual is prepared for the purpose of preventing hazards. The safety prevention against accidents is necessary, for most accident occurred in work due to violation of basic safety rules. Careful and prudent operation is the best way to keep away from an accident and even better than some preventive measures. While using the Product, pay much attention to the surrounding environment and personnel, especially the children.

Symbol Introduction



Danger!

The operator may face danger (or even death).



Warning!

The operator may face potential hazards.



Caution!

Cautions, important remarks or useful functions.

Pay much attention to the contents with these symbols in the paragraph.

General Instructions

The detailed warning and information against damage of personnel and product are displayed as follows:

 **Danger!**

Pull the on/off switch to off position and remove the key from the main power switch prior to repairing or maintenance.

The Product **MUST** be handled by qualified and authorized personnel.

Keep the battery away from sparks, flame and smoke. It will discharge gas during normal operation.

Do **NOT** wear accessories, but wear the working clothes while using the Product.

Do **NOT** work under the lifter, unless it is fixed safely.

Do **NOT** use the Product in places with hazards, inflammable or explosive gas, liquid and steam.

The Product applies to sweeping of general wastes only. It is forbidden to sweep the silk rope, band, high-temperature sundries, water, inflammable or toxic substances, to avoid twining, combustion or failure of main and secondary brush.

 **Warning!**

Please read the instructions of repairing and maintenance carefully prior to repairing and maintenance.

Keep the loose clothes and body parts, such as hair and finer, away from the air ports and moving parts of the Product.

Make sure to turn off the switch when the Product is stopped.

Please read the instructions of repairing and maintenance carefully prior to repairing and maintenance.

Do **NOT** smoke while charging the battery.

Do **NOT** use the Product in a quite dirty place. If the ground waste thickness is over 3mm, please sweep for two or more times.

Please use the Product with caution to avoid personal injury, especially the children.

Do **NOT** put a container that has water onto the Product.

Make sure to keep the Product within the temperature range of -10°C~40°C.

Make sure to use the Product within the temperature range of -10°C~40°C.

The moisture should be within the range of 30% - 95%.

Do **NOT** keep nor use the Product in places with direct sunlight, rainfall or bad weather.

Make sure to put out the fire (if any) with powder fire extinguisher, instead of water.

Avoid collision with a shelf on which an article may fall down.

Do **NOT** alter the Product's safety protection device, but follow the maintenance procedure.

For any fault of the Product, check if such fault is caused by poor maintenance.

Please purchase the parts from the original manufacturer or authorized dealer for replacement.

Make sure the Product has operation and support conditions. The Product should be maintained by professional technicians by referring to the Manual's maintenance chapters.

Make sure to assign a supervision person while dismantling and scrapping the Product. The Product should be sent to the specific center for handling, for it may contain some hazardous

substances (such as battery) which are handled to satisfy the standards.

The Product should not tilt for over 30° on the horizontal ground if it is installed with lead (wet) battery; otherwise, the highly-corrosive liquid in battery may come out. Please remove the battery if the Product has to be tilted prior to maintenance.

Safety Requirements of Battery

1. Charge the battery quickly if it has low level, to avoid low-voltage status of battery;
2. The 12V maintenance-free battery is used in the Product;
3. Please keep the battery dry and clean, remove the foreign matters such as metal and dust, to avoid electric leakage;
4. It is forbidden to put metal parts (such as tools) onto the battery to avoid damage due to short circuit;
5. Please recycle the battery by local laws and regulations;
6. Open flame is prohibited when handling the battery;
7. Make sure to charge the battery in a well-ventilated room;
8. It is forbidden to connect or disconnect the battery when key switch is pulled to (ON) position;
9. Firstly, disconnect the battery line at negative pole (-) and then disconnect the positive pole (+) of battery before dismantling the battery. Pay much attention to the polarity of battery when connecting the wire, for the electrical components can be damaged by wrong wiring;
10. Avoid direct contact between the positive and negative pole; otherwise, high-voltage current, heat and fire hazard may occur!

General Safety Rules

In addition to the Manual's regulations, the user needs to follow all general safety rules and criteria of accident prevention. Please read the Manual carefully, even if you have used a similar sweeper before. You can save a lot of time by reading the Manual prior to use. It is great importance to master all components, control parts and their functions prior to use. You can avoid a muddle situation by reading the Manual prior to use.

Outer Package

Upon receiving the Product, please check if the Product has a damage; if so, keep the outer package and report the damage to the freight forwarder.

Please check if the Product is attached with the following items:

- User's manual of the Product;
- Start key;

Note: The key is placed in the Manual's plastic bag to avoid loss during transport.

Product Description

Technical Parameters

S/N	Item	Unit	
1	Sweeping width	mm	1050
2	Power supply	v	12V 80Ah maintenance-free battery
3	Volume of waste bin	L	35
4	Diameter of side brush	mm	300
5	Length of main brush	mm	500
6	Total power	w	600
7	Filtering area	m ²	2
9	Net weight	Kg	88

Performance

The Product MUST be handled by qualified operators on the flat ground of cement, asphalt or floor tile to clean the dust (floor sweeping and dust collection).

Routine Control

The operator can move the Product to the front/back/left/right.

Description

- Control over front panel of the Product (As shown in Fig. 1)



Fig. 1

Prestart

 Caution!

Make sure the cover is not opened and waste bin is installed correctly prior to normal operation of the Product. Please do all-round check if the Product fails to be started after transport.

Each Startup

Insert the start key into the operation panel; turn the key switch to “ON” position.

After 3s, the power meter will display the power level of battery; it will show 100% if battery has full level; if it has low power, such as 20%, please recharge it; otherwise, the power meter will show the power level that is memorized in the previous shutdown.

Product Startup

1. Rotate the key to Position “ON”.
2. Pull the rod forwards and backwards to move the Product into the working area.
3. Press the function button of main brush and side brush to Position I to start sweeping.

Note: Please press the function button of main brush before pressing the function button of side brush; otherwise, the motor of side brush fails to be started.

Shutdown

1. Press the function button of main brush and side brush to Position 0.
2. Rotate the start key to Position “OFF”.

Operation Notes

 Warning! High-speed running is prohibited!

1. Do NOT stay the Product at one position for long period while the motor is running; otherwise, it will leave unnecessary trace on the ground.
2. Please uplift the front wheel slightly before collecting the large wastes. It is lifted for short period.
3. Make sure to clean the filter in order to better clean the Product. Pull the dust shake rod at lateral side of waste bin for dozens of times, to shake off the dust on the filter.

 Caution!

1. Do NOT use the Product on wet floor to avoid damage of filtering mesh.
2. While the Product is running, decide whether remove the dust on the filter based on the dirt in the sweeping area.
3. Make sure to unload the waste bin after use or it is full.
4. When main and side brush has wear, adjust the tail screw rod to lower the main brush and side brush; please set the brush properly until it can sweep the ground clearly, instead of setting it too low, to avoid burn of fuse. (No adjustment is required during the first sweeping, for it is well adjusted prior to delivery).

Cleaning of Waste Bin

1. Push the Product to the area of garbage can.
2. Loosen the buckle and take out the dust bin.
3. When waste is cleaned, put the front opening of waste bin on the baffle.



Fig. 1

Storage

Please store the Product as follows if it is idled within 30 days:

1. Keep the Product at clean and dry place.
2. Disconnect the battery connector.

First Use

It is required to inspect the following operation after the first use (the first 8 hours):

1. Check if the interface is fastened correctly.
2. Check if the visible parts are intact and complete.

Height Inspection and Setting of main Brush



Fig. 2

(The height of main brush is well set before it leaves the factory!)

1. Please adjust the main brush after using it for a certain period due to the wear of ground main brush: Rotate the right handle at tail of the Product for 2 circles (lower it for about 3mm), until the main brush has contact to the ground to the depth of 3-5mm.
2. If the main brush has severe wear and the right handle fails to be rotated, please open the front cover, and adjust the height of main brush as follows:
 - A. Rotate the right handle to the furthest position of bolt;
 - B. Loosen the nut of steel wire rope and then fasten the steel wire rope;
 - C. Close the front cover;
 - D. Repeat the process in further use of the Product (height inspection and setting of main brush 1)

Notes: Clean sweeping is not good if the contact depth between brush and ground is high! Instead,

the Product will have the best sweeping effects when contact depth between brush and ground is 3-5mm! If the brush is too low, the overcurrent protector will act and press the protector to continue running of the Product.

Replacement of main Brush

⚠ Caution! Make sure to wear gloves while replacing the main brush, to avoid damage due to the brush.

1. Loosen the hexagon bolts at both sides in figure below, loosen the safety lever and open the case.



2. Loosen the left/right rocker arm of main brush.



3. Upward the Product and take out the main brush.



4. Take out the left/right end socket of main brush.
5. Install the left/right end socket of main brush on the main brush; make sure to install them at the same left/right position of original main brush.
6. Install the main brush on the Product and fasten the bolts.
7. Install the safety lever and case.
8. Adjust the main brush screw rod to the position of the first use.

Height Inspection and Setting of Side Brush

(The height of side brush is well set before it leaves the factory!)

1. Adjust the side brush after using it for a certain period when side brush fails to clean the ground.
2. Rotate the left handle at tail of the Product anticlockwise for 1 circle and then start sweeping (as shown in Fig. 3).

Replacement of Side Brush

The side brush is designed for collecting the wastes at both sides into the middle through the rotation of brush, and the waste will be collected by the main brush into the waste bin. Merits of side brush: Clean the wastes at edge and dead corner, to increase the sweeping efficiency.

1. Put the Product on the horizontal ground and rotate the Product's start key to Position "OFF".
2. Upward the Product and loosen the four bolts at bottom of brush disk.
3. Install the new side brush.
4. Set the height of side brush according to the section above.

Dust Vibration

Please use the dust vibration function regularly after the Product is used for a certain period, for the holes of filter can be blocked easily:

Power off the Product;

Pull the dust shake rod at lateral side of waste bin for dozens of times, to shake off the dust on the filter.

Inspection of Filter Cleanness and Integrity

1. Put the Product on the horizontal ground and rotate the Product's start key to Position "OFF".
 2. Remove the waste bin.
 3. Scrap the bottom of filter gently with the burr-free rod.
- Note: Do NOT clean the filter with water or detergent; otherwise, it will be damaged.
4. Check if the filter has a crack; if so, please replace the filter.

Inspection and Setting of Side Skirt Height

1. Put the Product on horizontal ground where the side skirt height can be inspected easily.
2. Rotate the Product's start key to Position "OFF".


Inspect the side skirt

3. Inspect the integrity of side skirt.
4. Check if the distance between side skirt and ground is 0~3mm.
5. Inspect the front/rear side skirt.
6. Upward the front wheel of the Product.
7. Inspect the integrity of front and rear side skirt.
8. Do inspection.

Make the front skirt contact ground slightly to see if it is separated from the ground.

The distance between rear side skirt and ground is 0~3mm.

Battery Charging


 Caution: When warning indicator is on after a certain period of use, charge the battery to prolong its service life.

Caution! Please charge the battery quickly when it has low power. Inspect the power level of battery on a weekly basis. Make sure to charge the battery on a monthly basis if it is idled for long period.

 Warning!

Charge the battery in ventilated place and keep away from open flame. Do NOT smoke while charging the battery.

1. Use the Product on the horizontal ground.
2. Rotate the Product’s start key to Position “OFF”.
3. Connect the recharger to the 220V power supply (the charging port is located at tail of the Product).
4. Once charging is done (green lamp stops flickering), unplug the power line and charging socket directly.

 Attention: The battery recharger must match the battery installed on the Product. The charging period should not be less than 9h.

Maintenance

Maintenance of Complete Machine

The Product MUST be provided with regular maintenance correctly to maximize the Machine’s service life and safety. The general maintenance requirements should be prepared in the sheet. The maintenance interval, which can be changed at proper working conditions, must be decided by the professional maintenance technicians.

 Warning!

Make sure to shut down the Product (unplug the start key) and remove the battery (if necessary) prior to maintenance. Please read the Manual’s safety section carefully.

The easiest and most common maintenance procedures are described in the Manual only.

Maintenance Contents	During handover	Every 10h (1)	Every 50h (1)	Every 100h (1)	Every 200h (1)	Every 400h (1)
Adjust and inspect height of side brush and main brush						
Check if main and side brush is twined with wire and silk						
Do cleaning and integrity inspection of filter						
Inspect height and operation of side skirt						
Do visual inspection to drive belt of main brush						
Fasten and inspect the screws and nuts						
Inspect the wear of main and side brush						

Replace the drive belt of main and side brush						
Inspect and replace carbon brush of motor						

Warranty

No warranty is provided in the following cases:

1. The Product has mechanical damage or fault for it is not maintained according to the maintenance manual;
2. The mechanical appearance or structure has obvious damages due to misoperation;
3. The Product is dismantled or modified without permission of the original manufacturer;
4. The Product is damaged due to the Force Majeure;
5. The parts of water pump are damaged (main brush/side brush/belt/side skirt/filter)
6. The warranty expires or the Product is used for over 1,000h.

Super Sweeper to Remove Dust, Clean up the Entire World