

Operating Instructions





HIXIN SERIE

HKM 801



Imprint

Product identification

Manual Sweeper

HKM 801

7304009

Item number

Manufacturer

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Information about the operating instructions

Genuine operating instructions according to DIN EN ISO 20607:2019

Published: 23.05.2022 Version: 1.06 Language: English Author: FL/ES

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1 Introduction

You have made a good choice by purchasing the CLEANCRAFT manual sweeper

Read the operating manual thoroughly before commissioning the machine.

It gives you information about the proper commissioning, intended use and safe and efficient operation and maintenance of your manual sweeper.

The operating manual is part of the manual sweeper package. Always keep this operating manual in the location where your manual sweeper is being operated. All local accident prevention regulations and general safety instructions for the operating range of your manual sweeper must also be complied with.

1.1 Copyright

The contents of these instructions are copyright. They may be used in conjunction with the operation of the manual sweeper. Any application beyond those described is not permitted without the written approval of Stürmer GmbH. For the protection of our products, we shall register trademark, patent and design rights, as this is possible in individual cases. We strongly oppose any infringement of our intellectual property.

1.2 Customer service

Please contact your dealer if you have questions concerning your manual sweeper or if you need technical advice. They will help you with specialist information and expert advice.

Germany:

Stürmer Maschinen GmbH Dr.-Robert-Pfleger-Str. 26 D-96103 Hallstadt

Repair service:

Fax:	0049 (0) 951 96555-111
Email:	service@stuermer-maschinen.de

Spare part orders:

Fax:	0049 (0) 951 96555-119
Email:	ersatzteile@stuermer-maschinen.de

We are always interested in valuable experience and knowledge gained from using the application-which then could be shared and be valuable to develop our products even further.

1.3 Limitation of liability

All information and notes in these operating instructions were summarised while taking applicable standards and rules, the state-of-the-art technology and our long-term knowledge and experiences into consideration.

In the following cases the manufacturer is not liable for damages:

- Non-observance of the operating instructions,
- Inappropriate use
- Use of untrained staff,
- Unauthorised modifications
- Technical changes,
- Use of not allowed spare parts.

The actual scope of delivery may deviate from the explanations and presentations described here in case of special models, when using additional ordering options or due to latest technical modifications.

The obligations agreed in the delivery contract, the general terms and conditions as well as the delivery conditions of the manufacturer and the legal regulations at the time of the conclusion of the contract are applicable.

2 Safety

his section provides an overview of all important safety packages for the protection of operating personnel as well as for safe and fault-free operation. Other taskbased safety notes are included in the paragraphs of the individual phases of life.

2.1 Symbol explanation

Safety instructions

The safety notes in these operating instructions are highlighted by symbols. The safety notes are introduced by signal words which express the concern of the risk.





DANGER!

This combination of symbol and signal words indicates an imminently dangerous situation which may lead to death or severe injury if not avoided.

WARNING!

This combination of symbol and signal words indicates a potentially dangerous situation which may lead to death or severe injury if not avoided.

CAUTION!

This combination of symbol and signal words indicates a potentially dangerous situation which may lead to slight or minor injury if not avoided.

ATTENTION!

This combination of symbol and signal words indicates a possibly dangerous situation which may lead to property and environmental damages if they are not avoided.



1

NOTE!

This combination of symbol and signal words indicates a potentially dangerous situation which may lead to material or environmental damage if not avoided.

Tips and recommendations

Tips and recommendations

This symbol highlights useful tips and recommendations as well as information for an efficient and trouble-free operation.

It is necessary to observe the safety notes written in these operating instructions in order to reduce the risk of personal injuries and damages to property.

2.2 Obligations of the operating company

of the operator

The operating company is the person who operates the manual sweeper for business or commercial reasons by herself, or leaves it to a third party for use or application, and who bears the legal product responsibility for the protection of the user, the staff or for third parties.

Obligations of the operating company

If the manual sweeper is used for commercial purposes, the operating company of the manual sweeper must comply with the legal working safety regulations. Therefore, the safety notes in this operating manual, as well as the safety, accident prevention and environment protection regulations applying for the area of application of the manual sweeper must be met. The following applies in particular:

- The operating company must be informed about the applying industrial safety regulations and further analyse hazards resulting from the special working conditions at the place of use of the manual sweeper. She must implement these in form of operating manuals for the operation of the manual sweeper.
- During the entire lifetime of the manual sweeper, the operating company must verify whether the operating manuals prepared by her correspond to the current status of the regulations, and must adapt these if necessary.
- The operating company must unambiguously regulate and determine the responsibilities for installation, operation, troubleshooting, maintenance and cleaning.
- The operating company must ensure that all persons who work with the manual sweeper, have read and understood this manual. Furthermore she must instruct the staff in regular intervals and inform them about the hazards.
- The operator must provide the necessary protective equipment to the staff and order the use of the necessary protective equipment in a binding way.

Furthermore the operating company is responsible to keep the manual sweeper always in a technically flaw-less state. Thus, the following applies:

- The operator must ensure that the maintenance intervals described in this manual are kept.
- The operator must have all safety devices checked regularly for their good working order and their integrity.

2.3 Requirements to staff

Qualifications

The different tasks described in this manual represent different requirements to the qualification of the persons entrusted with these tasks.



WARNING!

Danger in case of insufficient qualification of the staff!

Insufficiently qualified persons cannot estimate the risks while using the manual sweeper and expose themselves and others to the danger of severe or lethal injuries.

- Have all works only performed by qualified persons.
- Keep insufficiently qualified persons out of the working area.



Only persons reliable working procedures can be expected from, are allowed to perform all works. Persons the responsiveness of which is affected by e. g. drugs, alcohol or medication, are not allowed to work with the machine.

The qualifications of the personnel for the different tasks are mentioned below:

Operator

The operator is instructed by the operating company about the assigned tasks and possible risks in case of improper behaviour. Any tasks which need to be performed beyond the operation in the standard mode must only be performed by the operator if it is indicated in these instructions and if the operating company expressively commissioned the operator.

Electrically qualified person

Electrically qualified person is due to their professional training, knowledge and experience as well as knowledge of the relevant standards and regulations, in a position to carry out work on the electrical systems and to independently recognize and avoid possible dangers.

Qualified personnel

Due to their professional training, knowledge and experience as well as their knowledge of relevant regulations the specialist staff is able to perform the assigned tasks and to recognise and avoid any possible dangers themselves.

Manufacturer

Certain works may only be performed by specialist personnel of the manufacturer. Other personnel is not authorized to perform these works. Please contact our customer service for the execution of all arising work.

2.4 Personal protective equipment

The personal protective equipment serves to protect persons against impairments of safety and health while working.

The staff member has to wear personal protective equipment while performing different tasks on and with the machine which are indicated in the individual paragraphs of these instructions.

The personal protective equipment is explained in the following paragraph:



Protective clothes

Protective clothes are made of a tightly fitted fabric without the protruding parts of low tear strength.



Protective gloves

The protective gloves serve to protect the hands against sharp components as well as against friction, abrasions or deep injuries.



Safety boots

Safety boots protect the feet from being crushed, falling parts and slipping over on slippery ground.

2.5 General safety regulations

Please note the following:

- Use the guards and secure them securely. Never work without guards and keep them functional.
- Always keep the sweeper and its working environment clean. Provide adequate lighting.
- The sweeper must not be modified in its design and must not be used for purposes other than those foreseen by the manufacturer.
- Never work under the influence of illnesses affecting concentration, fatigue, drugs, alcohol or medication.
- Keep children and persons not familiar with the sweeper away from their working environment.
- Persons with limited physical, sensory or mental abilities must not use the machine unless they are supervised and instructed by a caregiver.
- Only use the sweeper in accordance with these instructions. The machine is not intended for commercial use.
- Do not sweep in any gelatinous, liquid, flammable, explosive, glowing or harmful substances with the sweeper.
- Do not sweep up liquids.
- The appliance is intended exclusively for sweeping on solid surfaces. The area to be swept should not be wet.
- Never put your hands or feet on or under rotating parts.
- Before each use, make sure that no parts are damaged on the sweeper.
- Damaged parts must be replaced immediately to avoid sources of danger.
- Hold the machine firmly during operation.
- Do not use the machine in the rain or snow.
- Pay attention to all power lines, electric circuits, water lines and other mechanical hazards in your work area, especially those hazards below the work surface that are hidden from the operator's view and can come into unintentional contact.
- Do not use your sweeper in places where there is a risk of fire or explosion, e.g. in the presence of flammable liquids, gases or dust.



- Please take care that the brushes do not jam during operation. A long-term jam can damage the machine.
- Immediately replace defective parts. Use only original replacement parts.
- Do not make any changes, modifications or additions to the machine without the approval of the manufacturer.
- If damage occurs to the sweeper, do not use it any more and have it repaired or contact our customer service.
- If you sweep in glass or broken glass, wear protective glasses and gloves.
- Use robust gloves to remove glass and other sharp objects from the dirt container.
- Do not disassemble the unit or attempt to repair it yourself.



ATTENTION!

Do not sweep with the machine hot objects such as ashes or cigarettes. There is a risk of fire!



ATTENTION!

Do not use the manual sweeper when it is wet!



ATTENTION!

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products,
- arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

2.6 Safety labels on the manual sweeper

On the manual sweeper the safety labels are attached (Fig.1), which must be observed and followed.



Fig. 1: Safety labels

Safety identifications attached to the machine must not be removed. Damaged or missing safety identifications may cause errors, personal injury and material damage. They must be replaced immediately.

If the safety identifications are not visible and comprehensible at first glance, the machine must be stopped until new safety identifications have been attached.



3 Intended use

The hand sweeper is intended exclusively for sweeping

sweeping on level and dry surfaces such as driveways, terraces, sidewalks, courtyards, halls, etc. The device may only be used in accordance with its intended purpose.

Intended use also includes compliance with all information in these instructions.

3.1 Reasonably foreseeable misapplication

Any use beyond or different from the intended use is considered misuse.

Possible misuses can be:

- Sweeping up incandescent, flammable, explosive or toxic substances .
- Sweeping up wet leaves or the like.
- Installation of spare parts and use of accessories and equipment not approved by the manufacturer.
- Bypassing or modifying the safety devices.
- Non-compliance with the maintenance instructions.
- Non-observance of signs of wear and damage.
- Service work performed by untrained or unauthorized personnel.

3.2 Residual risks

Even if all safety regulations are observed and the machine is used in accordance with the regulations, there are still residual risks, which are listed below.

- There is a risk of injury to the upper limbs (e.g. hands, fingers).

4 Technical Data

4.1 Table

	HKM 801
Length	860 mm
Width / Depth	680 mm
Height	320 mm
Height max. with handle	1060 mm
Weight	12,3 kg
Cleaning area	500-1000 m ²
Max. cleaning performance	3200 m²/h
Working width with side brushes	800 mm
Number of side brushes	2
Tank volume	30 Liter

4.2 Accessories

- 2 side brushes -> Item number 7311415
- 2 sweeping rollers -> Item number 7311416

4.3 Type plate

Handkehrmaschine Manual sweeper		Serien-Nr. Serial no.	
Тур Туре	HKM 801	Baujahr Year of manufacture	
Artikel-Nr. Item no.	7304009	Max. Arbeitsbreite Max. working width	800 mm
Gewicht Weight	12,3 kg	Behältervolumen Container volume	30 l
	ancraft.de		

Fig. 2: Type plate HKM 801



5 Transport, packaging, storage

5.1 Transport

Check the manual sweeper on delivery for any visible transportation damage. If you notice any damage to the device please report this immediately to the carrier or dealer.

5.2 Packaging

All used packaging materials and packaging aids are recyclable and should be taken to a materials recycling depot to be disposed of.

The delivery packaging is made of cardboard, so please dispose carefully by having it chopped up and given to the recycling collection.

The film is made of polyethylene (PE) and the cushioned parts of polystyrene (PS). Deliver these substances to a collection point for recyclable materials or to the waste disposal company which looks after your region.



WARNING! Danger to life!

The packaging elements may pose potential hazards (e.g., plastic bags):

 Packaging material for children and persons who are unaware of their actions or keep animals inaccessible.

5.3 Storage

Fold in the push bar after releasing the star grip and store the manual sweeper in a dry, clean and frost-free environment.

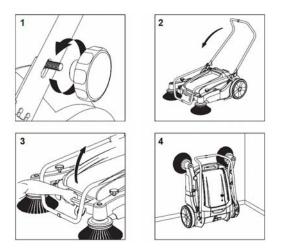


Fig. 3: Storage of the manual sweeper

6 Description of device



Fig. 4: Description of device HKM 801

- 1 Push bar
- 2 Adjustment nut for push bar
- 3 Dirt container
- 4 Sweeping brush
- 5 Turn handle for height adjustment
- 6 Star handle for attaching the push bar

7 Assembly

Assembly of the manual sweeper HKM 801

To put into operation the manual sweeper please proceed as follows:

- Step 1: Remove the packaging from the manual sweeper and check that it is not damaged.
- Step 2: Verify that the shipment is complete.
- Step 3: Fasten the feed brushes with the screws (Pos. 12, Fig. 5) to the pick-up plates at the bottom of the unit.

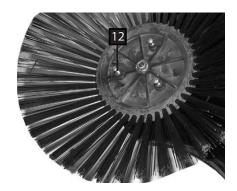


Fig. 5: Assembly of the feed brusheas

Step 4: Fold the push bar into its open position. Attach the handle to the plates on the back of the machine with 2 screws.





8 Operation



ATTENTION!

Empty the dirt collector regularly to ensure safe operation



CAUTION!

Do not use the device when it is wet!

By pushing the sweeper, the feed brushes and the sweeping brushes (Pos. B, Fig. 6) are set in rotation by belt drives (Pos. A, Fig. 6). The rotating feed brushes turn the dirt to the centre. This dirt is collected by the two counter-rotating sweeping brushes (Pos. B, Fig. 6) and conveyed into the dirt collection container.

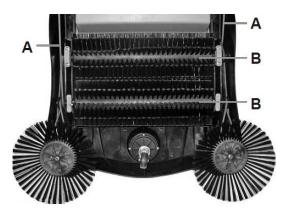


Fig. 6: Functional principle HKM 801

8.1 Setting the feed brushes

Depending on the application and wear, the feed brushes can be infinitely adjusted via the adjusting screw (Pos. 5, Fig.7). Turn the adjustment screw clockwise to increase the distance to the ground. Turn the adjustment screw counterclockwise to decrease the distance. It is possible to drive the sweeper uphill or downhill. However, do not work on an incline greater than 20°.

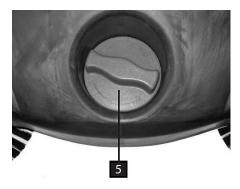


Fig. 7: Setting the feed brushes

8.2 Folding down the push bar

Slightly untighten both fastening nuts (Fig. 8) by approx. one turn and pull up the push bar in order to fold it. This way the appliance can be transported or stored spacesavingly.



Fig. 8: Folding of the push bar

9 Care, maintenance and repair9.1 Care by cleaning

The manual sweeper must always be kept in a clean condition.



Protective gloves

For cleaning, suitable protective gloves must be worn to protect against injury.

- Clean the sweeper only with a dry or damp cloth. Do not use aggressive chemicals or abrasive cleaners.
- Remove foreign objects such as leaves, twigs, etc. from the brushes.
- Do not wash the brushes with hot water.
- Check the drive belts regularly for correct fit and tension.
- Store the sweeper inside in a dry place protected from dust, dirt and extreme temperatures.
- Keep metal parts dry to prevent or minimize corrosion.
- Avoid sweeping long threads or ropes, as the brushes can get tangled and become damaged. If a rope or thread is tangled, remove the reversing roller.

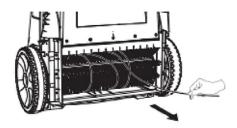


Fig. 9: Tangling of a rope



Emptying the dirt container



ATTENTION!

Clean all parts of the manual sweeper after use. Empty the containers and wipe with a cloth.

Lift the full dirt collection container (Fig. 10) upwards from the unit and dispose of the collected dirt properly. Wear sturdy working gloves to empty the container. Do not hit the container to empty it.

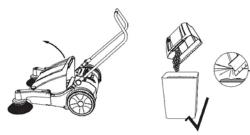


Fig. 10: Emptying the dirt container



ATTENTION!

Use the manual sweeper never without a dirt container!

Clean the main brush at regular intervals to ensure optimum cleaning results and to prevent wear of the sweeping brush

9.2 Maintenance and repair



ATTENTION!

Maintenance and repairs must always be carried out by qualified personnel; any damaged parts must only be replaced with original spare parts.

General maintenance instructions

- Check the belt regularly for a good fit. If worn, replace the belt.
- Check the brushes regularly for wear and replace if necessary.

If the manual sweeper is not functioning properly, contact a specialised dealer or our customer service. Please find the contact data on chapter 1.2 Customer.

Installing of round belt

When installing the drive belt pay attention to the rotational direction of the side brush. When moving forward the side brush must rotate towards the inside.

10 Malfunctions and measures

If you can not eliminate the problems with your manual sweeper yourself, then please contact your CLEANCRAFT dealer. Please mark down the following information from the manual sweeper or instruction manual, this will help you best with your problem.

- designation of the device
- serial number
- year of manufacture
- detailed fault description

Error	Solution
Unsatisfactory sweeping result	 Empty the waste container Adjust the height of the main
	brush
	3. Clean or replace the main brush
	4. Replace drive belt
	5. Adjust / replace / clean side brush
	Adjust the height of the side brush

11 Disposal, recycling of used devices

Please take care in your own interest and in the interest of the environment that all component parts of the machine are only disposed of in the intended and permitted way.

11.1 Decommissioning

Immediately decommission disused machines in order to avoid later misuse and endangering of the environment or personal safety.

- Step 1: Eliminate all environmentally hazardous operating materials from the used device.
- Step 2: If required, disassemble the machine into easyto-handle and usable components and parts.
- Step 3: Dispose of machine components and operating materials by the disposal channels provided.

11.2 Disposal of lubricants

Remove any leaking, used or excessive grease at the lubricating points.

Disposal notes for used lubricants are available from the manufacturer of the lubricants. If necessary, request the product-specific data sheets.



12 Spare parts



DANGER!

Danger of injury by the use of wrong spare parts!

Dangers may result for the user and damages as well as malfunctions may be caused by using wrong or damaged spare parts.

- Only use original spare parts of the manufacturer or spare parts admitted by the manufacturer.
- Always contact the manufacturer in case of uncertainties.



Tips and recommendations

The manufacturer's warranty will become null and void if non-permissible spare parts are used

12.10rdering spare parts

The spare parts may be purchased with the authorised dealer or directly with the manufacturer. Please find the corresponding contact data in Chapter 1.2 Customer service.

Indicate the following basic information for requests or orders of spare parts:

- Type of device
- Item No.
- Position No.
- Year of construction:
- Quantity
- Required mode of dispatch (mail, freight, sea, air, express)
- Address of dispatch

Spare part orders which do not include the above indications may not be taken into consideration. If the indications regarding the mode of dispatch are missing, the product is dispatched at the discretion of the supplier.

You will find information regarding the device type, item No. and year of manufacture on the type plate fixed to the manual sweeper.

Example

The wheel for the manual sweeper HKM 801 must be ordered. The wheel has the number 39 in the spare parts drawing 1.

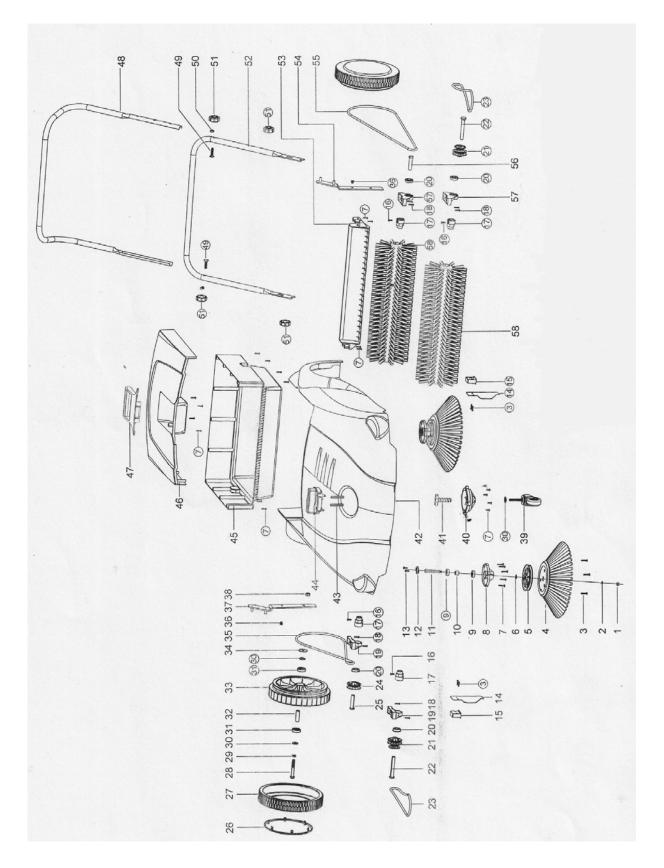
When ordering spare parts, send a copy of the spare parts drawing with the marked component (wheel) and marked position number (39) to the authorized dealer or to the spare parts department and provide the following information:

- Type of device: Manual Sweeper HKM 801
- Item number: 7304009
- Position number: 27



12.2 Spare parts drawing HKM 801

In case of service, the following drawings shall help to identify the necessary spare parts. To order, send a copy of the parts drawing with the marked components to the authorized dealer.





13 Notes



