

haaga 677/697



- Operating instructions



Contents

1 About these instructions.....	30
2 Safety instructions.....	31
3 Design and function	40
4 Putting into operation	41
5 Using the sweeper.....	42
6 Transport.....	46
7 Putting out of operation and storage.....	47
8 Maintenance and care	48
9 REACH.....	51
10 EC Declaration of Conformity.....	51
11 Technical data	52
12 Troubleshooting.....	53

Publisher's notice

Dear customer, thank you for purchasing a quality product from Haaga. This product has been manufactured using modern production processes with comprehensive quality assurance measures.

These instructions will allow you to use the sweeper safely and efficiently. Before using the sweeper for the first time, please carefully read the "Safety instructions" chapter.

These instructions form part of the sweeper and must be kept in the vicinity of the sweeper at all times for reference by the user.

These instructions must remain with the sweeper if the machine is lent out or sold.

Illustrations in these instructions are provided for the purpose of general understanding and may differ from the actual sweeper version.

Model designation:

haaga 677/iSweep

haaga 697/iSweep

haaga 697 plus/iSweep

Revision history

Version 1.0:

February 2015, Creation

Copyright

© 2015 Haaga Kehrsysteme GmbH

All rights reserved

1 About these instructions

1.1 Symbols used



Warning!

A warning informs you about possible health risks or risks of fatal injury to yourself and other persons that may occur when handling or using the sweeper.

!CAUTION!

Indicates a possibly dangerous situation. This can lead to damage to property or the environment if not prevented.

NOTE

Highlights useful tips and recommendations as well as information for efficient and trouble-free operation.

1.2 Technical further development

We are continuously working on further development of all our products. We therefore reserve the right to make changes in the scope of delivery with respect to form, technology and equipment.

No claims can therefore be derived from information and illustrations contained in these instructions.

1.3 Warranty

- The relevant national regulations apply in each country. Excepted from this are wearing parts such as sweeping lip, angled wheels and running wheels.

- Please enclose a copy of the invoice in the event of a warranty claim.
- Only genuine Haaga spare parts must be used.
- No technical modifications must be carried out on the sweeper.
- All claims under guarantee and warranty will be rendered void if the machine is not operated properly.

1.4 Target group

These instructions are intended for the person using this sweeper.

Prerequisites

- Persons who operate the sweeper must be informed about the dangers related to use of the machine.
- Persons who operate the sweeper must be rested, healthy and in good physical condition.
- Only pass on or loan the sweeper to persons who are familiar with this model and its handling – always provide the instructions with the machine.
- Persons who are using the sweeper for the first time must have safe operation of the machine explained to them by the salesperson or another qualified person before they operate the sweeper.
- Children should be supervised to ensure that they do not play with the sweeper.

- Minors must not operate the sweeper – except for juveniles over the age of 16 who are trained under supervision.
- This sweeper is not intended for use by persons (including children) with restricted physical, sensor or mental capacity or persons who lack experience and/or knowledge, unless they are supervised by a person responsible for their safety or received instructions from this person on how to use the machine.
- Persons who are prohibited from strenuous physical activity for health reasons should ask a doctor for advice on whether working with the sweeper is possible.
- The sweeper must not be operated after consumption of alcohol, medicines that impair reaction times or drugs.

2 Safety instructions

Safety instructions prevent danger to life and limb and also avoid damage to property or the environment due to improper use of the sweeper.

For this reason, you must read these instructions carefully and follow the safety instructions contained in them before using and working on the sweeper.

The user of the sweeper is responsible for injuries and damage that are caused due to non-compliance with these instructions.

2.1 Intended use

This sweeper is designed in accordance with the state of the art and recognised safety regulations.

Nevertheless, use of the sweeper can lead to dangers for the user or third parties or damage to the sweeper and other material assets.

The sweeper is intended for commercial use, e.g. in hotels, schools, hospitals, factories, shops, offices and the equipment hire trade.

The sweeper is intended exclusively for removal of road dirt, leaves, grass, paper and similar debris.

Sweeping snow with the sweeper is not permitted.

Any other use will be deemed as improper use. The manufacturer will not be liable for damage caused as a result of this. The user is solely liable for the associated risks.

Claims of any kind due to damage caused by improper use are excluded.

The following information must also be observed when operating the sweeper:

- the safety instructions in these operating instructions.

- the chapter "Technical data" in these instructions.
- compliance with the operating, maintenance and storage conditions prescribed by the manufacturer.
- compliance with accident prevention regulations as well as country-specific safety regulations, e.g. as issued by employers' professional liability associations, social security authorities, occupational health and safety bodies and others.
- national and local regulations on time restrictions for operation of noise-emitting equipment.

The sweeper must not be used, for example, for sweeping substances that are hazardous to health, flammable or glowing (e.g. cigarettes, matches), liquids, explosive or hazardous dusts (Ex), acids or solvents. The sweeper must not be used in explosion-hazard areas or as a means of transport.

2.2 Safety instructions for operation/Maintaining operating safety

The user must not wear open long hair, tie, loose clothing or jewellery, including rings.

There is a risk of injury, e.g. getting caught up or pulled into the machine. Use personal protective equipment if necessary or required by regulations!

- Wear sturdy shoes with a high-grip, anti-slip sole.

- Always wear a dust protection mask in dusty conditions.
- Wear sturdy gloves.

Use the machine only in technically perfect condition for its intended purpose and paying attention to safety and the environment.

Have any faults that affect safety rectified immediately by a specialist dealer.

Observe all safety and danger instructions on the sweeper.

The user must ensure the presence and legibility of all warning and information notices throughout the entire service life of the sweeper.

Use only genuine spare parts and accessories that have been approved by the manufacturer. These guarantee that the machine can be operated safely and without faults.

Do not carry out any modifications, attachments or conversions on the sweeper that could impair safety without the approval of the manufacturer! The manufacturer excludes all liability for injuries or material damage caused by use of attachments that have not been approved.

The maintenance work described in these instructions must be carried out completely and at the specified intervals either by the user or at a specialist dealer.

2.3 Information on battery and charging socket

Warning

- Protect the battery against direct sunlight, heat, naked flame and electric sparks.

Warning

- Do not smoke in the immediate vicinity of the battery.
- Do not eat or drink in the area of the charger.
- Avoid spark formation when handling cables and electric devices.
- Do not expose the battery to microwave radiation or high pressure.
- Do not throw into a fire.

Risk of accident!

- Never charge or use faulty, damaged or deformed batteries.
- Do not open, damage or drop the battery.
- Store the battery out of the reach of children.

Health risk!

- Fluid can escape from the battery if it is damaged or used incorrectly – avoid skin contact!
- Leaking battery fluid can cause skin irritation, burns and corrosive injuries. In case of accidental contact, wash the affected skin areas with plenty of soap and water.

- If the fluid comes into contact with the eyes, do not rub and rinse out the eyes with plenty of water for at least 15 minutes. Also consult a doctor.

CAUTION!

Damage to the machine due to improper battery handling.

- Use only the genuine battery from the manufacturer.
- Use the battery only with the sweeper and charger from the battery.
- Do not short-circuit the battery terminals.
- Do not cause a short circuit in the charging socket.
- Do not connect (short-circuit) the battery contacts with metal objects. The battery may be damaged by a short circuit.
- When not in use, keep the battery away from metal objects (e.g. nails, coins, jewellery).
- Do not use metal transport containers.
- Protect the battery against rain – do not immerse in fluids.
- Maximum temperatures:
 - Operation: -10 °C to +50 °C
 - Charging: 0 °C to +40 °C
 - Storage: -10 °C to +40 °C

NOTE

- Fully charge a discharged battery.
- In order to achieve the optimum service life, charge the battery for approx. 10 hours at least every 2 months.

- Always keep the battery clean and dry.
- Observe the technical data.
- Fully charge the battery before use.
- Batteries are subject to a natural ageing process. The service life is around 3 to 5 years under ideal conditions.
- The sweeper is supplied with disconnected battery cable in order to avoid self-discharge of the battery. The sweeper cannot be operated without this electrical connection. The battery cannot be charged.
- Connect the battery cable before putting the sweeper into operation for the first time (see Connecting battery cable).

2.4 Information about the charger



Danger of fatal injury due to electric shock!

- Do not use a faulty or damaged charger.
- Do not open the charger.
- Regularly check the charger connecting cable for damage. Disconnect the mains plug immediately if the connecting cable is damaged.
- Do not insert objects into the ventilation openings of the charger. Danger of electric shock or short circuit.
- Ensure that the insulation of the connecting cable and plug is in perfect condition.

- Electrical connection is permitted only to a properly installed socket.
- After use of the charger, disconnect the mains plug from the socket.



Danger of explosion!

Chargers can produce sparks that are capable of igniting dust or vapours.

- Do not operate in an explosion-hazard area, i.e. in an environment where there are combustible fluids (vapours), gases or dust (Ex).



Danger of fire!

- Do not operate on an easily combustible surface (e.g. paper, fabrics) or in an easily combustible environment.
- Never operate in an easily combustible environment.
- Disconnect the mains plug immediately if there is smoke or fire in the charger.
- Avoid spark formation when handling the cable and electric devices.
- Do not cover the charger so that it can cool down unobstructed.



Risk of accident!

- Never charge the battery if it is faulty, damaged or deformed.
- Never use a faulty or damaged charger.
- Connect the charger only to an easily accessible socket.
- Store the charger out of the reach of children.

- Never eat or drink in the area of the charger – gases may be produced when charging the battery.
- Never use connecting cables which do not comply with the applicable regulations.
- Route and mark connecting cables so that they cannot be damaged and do not pose a risk to anyone – avoid creating a trip hazard!

! CAUTION!

Damage to the machine due to improper handling of the charger.

- Use only the genuine charger from the manufacturer.
- Use only for charging geometrically matching batteries in accordance with the values specified in the Technical data.
- Connect the charger only to the mains voltage and mains frequency specified on the rating plate – connect the charger only to an easily accessible socket.
- Do not pull the mains plug out of the socket by pulling the connecting cable, but always grasp the mains plug. Have a damaged connecting cable repaired by an electrician.
- Use and store the charger only in closed and dry rooms.
- Protect the charger against rain and moisture.
- Operate the charger at ambient temperatures between +5 °C and +40 °C.
- Never connect (short-circuit) the contacts of the charger with metal objects (e.g. nails, coins, jewellery). The charger may be damaged by a short circuit.
- Never use the connecting cable for any other purpose, e.g. to carry or hang up the charger.

NOTE

- Use only the supplied charger.

2.5 Instructions for transport

NOTE

- Do not carry the sweeper by the handle of the waste bin.
- In vehicles: Secure the sweeper to prevent it from tipping, slipping or being damaged.

2.6 Instructions for putting into operation for the first time

NOTE

- The sweeper is supplied with disconnected battery cable in order to avoid self-discharge of the battery.
- Connect the battery cable before putting the sweeper into operation for the first time since the sweeper will not function electrically and the battery cannot be charged without this electrical connection.
- Fully charge the battery using the original charger before putting into operation for the first time.

2.7 Instructions for work preparation



Danger of injury

- The sweeper must be operated only in operationally safe condition.
- Put the sweeper into operation only if all the components are undamaged.
- Check the sweeper to ensure that it is in operationally safe condition – observe the corresponding chapters in the instructions.

2.8 Instructions for operation



Danger of fire!

- Do not sweep up any burning or glowing items, e.g. cigarettes, ash or matches.



Risk of accident!

- Use the sweeper only for its intended purpose.
- Do not climb on the sweeper or use it as a means of transport.
- Do not operate the sweeper without fitted waste bin.
- Never reach into the rotating brushes.
- Never reach into the running sweeper.
- When operating the sweeper, take into account the local conditions and pay attention to other persons, particularly children, when working with the machine.

- Take care in slippery, wet or snowy conditions. There is a risk of slipping on slopes or uneven ground.

- Make sure that the sweeper does not collide with objects, e.g. shelves, scaffolding during operation – danger due to objects tipping over or falling down.

- Take breaks in good time in order to avoid fatigue and exhaustion.

- In the event of a blocked disc brush or blocked fine dirt sweeping roller, interrupt work and clear the blockage. Wear sturdy gloves in order to avoid cut injuries due to sharp objects.

- If the sweeper has been subject to loads other than those that occur during normal use (e.g. forces caused by impacts or falling), always check to ensure that it is still in operationally safe condition before continuing work – also see "Instructions for work preparation". Pay attention in particular to correct functioning of the safety devices.

- Do not continue to use machines that are no longer operationally safe. Consult a specialist dealer in case of doubt.



Danger of explosion!

Sparks can ignite dust or vapours in explosion-hazard areas and cause explosions.

- Never operate the sweeper in areas where there is an explosion hazard.
- Never operate the sweeper in the vicinity of combustible fluids (vapours), gases or dust.

Danger of injury!

- The sweeper is designed for operation by one person only – do not allow any other persons into the working area.
- Keep children, animals and spectators away from the sweeper.
- The user is responsible for accidents or risks that occur with respect to other persons or their property.

CAUTION!

Damage to the sweeper due to improper use.

- In the case of noticeable changes in running behaviour (e.g. higher vibrations, sluggish movement), interrupt work and rectify the causes of the changed behaviour.
- Do not leave the sweeper in the rain.

NOTE

- If the brushes start to rotate more slowly or the charge indicator lights up red, switch off the sweeper and charge the battery. The warranty will be rendered void in the event of deep discharge!
- If the sweeper should already be switched off by the electronics after a short time, this is due to an excessively high motor load. The fine dirt sweeping roller and the disc brushes must then be checked for free movement and any blockages such as trapped stones, wound up threads and similar must be removed.

- When sweeping up leaves, improve the capacity of the waste bin by briefly placing the sweeper on the rear side of the waste bin.
- Guide the push handle with both hands.
- Push the sweeper forwards and adapt the speed to the conditions.
- The sweeper can be pushed over small bumps with a height of 2-3 cm by pushing down slightly on the push handle.
- Pushing against or over obstacles, e.g. kerbs, can lead to damage to the sweeper.
- If the cleaning performance deteriorates, check whether the waste bin is full or if the disc brushes or fine dirt sweeping roller are blocked or worn.

2.8 Information on fill level in waste bin

NOTE

- The waste bin is full if dirt is pushed in front of the machine and no dirt is swept up.
- In order to continue working for a short time, lift the sweeper at the front to move the dirt to the rear of the waste bin. This makes it possible to make better use of the waste bin capacity.

2.9 Instructions for cleaning

NOTE

- Cleaning ensures proper functioning and a long service life for your sweeper.



- Accumulated dirt deposits and wound-up threads etc. behind the roller mounting can lead to sluggish operation of the sweeper and impair functioning.



Danger of injury!

- Wear sturdy gloves in order to avoid cut injuries, e.g. due to glass shards, metal or other sharp-edged materials.



CAUTION!

Damage to the sweeper due to improper cleaning.

- Do not use grease removers for cleaning.
- Do not use aggressive detergents.
- Do not clean with compressed air.
- Do not spray-clean with water or immerse in water. Moisture will damage the electrical components and can lead to short circuits.
- Clean plastic parts with a damp cloth.

2.10 Instructions at the end of work

NOTE

- Empty the waste bin each time after use.



Health risk!

- Empty the waste bin outdoors if possible in order to avoid production of dust.

2.11 Instructions for storage



Risk of accident!

- Do not reach into the swivel area of the push handle – parts of the body may be trapped between the push handle and housing if the push handle falls over unintentionally.
- When storing the sweeper, position it so that no persons are endangered.
- Secure the sweeper to prevent unauthorised access.
- Secure the sweeper to prevent it from falling over and so that the push handle cannot fold down in an uncontrolled manner.



CAUTION!

- Damage to the sweeper due to improper storage.
- The battery cable must be disconnected from the battery if the sweeper is stored for longer than 2 months without recharging the battery, otherwise self-discharge due to the installed components can lead to deep discharge and can therefore damage the battery.

NOTE

- Store the sweeper securely in a dry room.

2.12 Instructions for maintenance and repair

NOTE

- Carry out maintenance of the sweeper regularly. Perform only the maintenance work described in the instructions.
- Have repairs carried out only by the manufacturer's authorised dealers.



Danger of fatal injury!

- Maintenance work must be performed only with disconnected power supply. Disconnect the cable from the battery before starting maintenance work.

! CAUTION!

Damage to the sweeper due to improper maintenance.

- Repairs must be performed only by authorised service centres or by specialists in this field who are familiar with all relevant safety regulations.

2.13 Instructions for disposal

! CAUTION!

- Incorrect handling of environmentally hazardous materials, particularly incorrect disposal of replacement parts and batteries, can cause considerable damage to the environment.

3 Design and function

3.1 Important components

1. Push handle
2. Waste bin
3. Waste bin handle
4. Disc brush height adjustment
5. Carrying handle
6. Disc brush
7. Side guide roller
8. Running wheel
9. Fine dirt sweeping roller
10. Holding-down device
11. Dust filter
12. Machine number
13. On/Off switch
14. LED indicators
15. Battery
16. Angled wheel
17. Sweeping lip
18. Sweeping plate
19. Clutch
20. Toothed sleeve
21. Gear protection



3.2 LED indicators

The LEDs next to the ON/OFF switch on the sweeper show the state of charge of the battery during battery operation.

- Red and green LEDs flash:
The sweeper was automatically switched off by the built-in electronics since the battery charge was too low.
1. Switch off sweeper
(see Switching off the sweeper).
 2. Charge battery
(see Charging the battery).

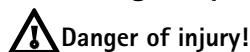
3.3 Overload protection

The motors are equipped with overload protection in order to prevent damage. The sweeper switches off automatically in the event of overloading (e.g. due to blocked brushes).



4 Putting into operation

4.1 Fitting the push handle



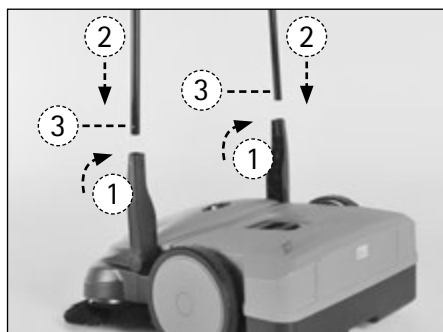
Danger of injury!

- Avoid injury due to push handle accidentally falling over.

NOTE

The push handle can be fitted in two different positions depending on the body height of the user.

1. Turn handle fittings (1) so that they are positioned vertically upwards.
2. Press locking springs (3) on push handle (2).
3. Push the push handle (2) simultaneously into the two handle fittings (1).
4. Press the push handle into the handle fittings until the locking springs engage.



4.2 Connecting battery cable

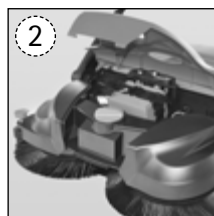


CAUTION!

Damage to the sweeper due to improper connection.

- The sweeper may be damaged and the warranty rendered void if the cables are mixed up on the battery.

1. Pull cover forwards at the front bottom edge (1).
2. Swivel cover up (2).
3. Plug battery cable onto contact tab on the battery (3).
red = positive terminal (+)
blue = negative terminal (-)
4. Close cover (4).



4.3 Charge battery

NOTE

The charger has a fully electronic voltage and current limitation function. This ensures that a connected battery is always kept at the optimum state of charge. This prevents overcharging of the battery.

NOTE

- The battery is not fully charged on delivery.
- Do not switch on the sweeper during charging.
- It is recommended to fully charge the battery before putting the sweeper into operation for the first time.

1. Plug the charger plug into the charging socket on the sweeper.
 2. Plug the charger into a 230 V power outlet.
- The LED indicator on the charger lights up red during charging.
 - The complete charging operation takes approx. 7 hours (LED indicator on the charger lights up green).



5 Using the sweeper

5.1 Battery operation

NOTE

- If the disc brushes start to rotate more slowly or the charge indicator lights up red, switch off the machine and charge the battery. The warranty will be rendered void in the event of deep discharge!
1. Check the sweeper (see Maintenance and care).
 2. Adjust the sweeper (see Adjusting the sweeper).
 3. Switch on the sweeper (see Switching on the sweeper).

4. Guide the push handle with both hands.
5. Push the sweeper forward at normal walking pace.
6. Empty the waste bin as required (see Emptying the waste bin).
7. Switch off sweeper (see Switching off the sweeper).

5.2 Manual operation

NOTE

The sweeper can also be operated temporarily without motor assistance.

1. Check the sweeper (see Maintenance and care).

2. Adjust the sweeper (see Adjusting the sweeper).
3. Guide the push handle with both hands.
4. Push the sweeper forward at normal walking pace.
5. Empty the waste bin as required (see Emptying the waste bin).

5.3 Switch on the sweeper



Risk of accident!

- Do not operate the ON/OFF switch with your foot.
1. Check the sweeper (see Maintenance and care).
 2. Switch the ON/OFF switch (1) to "I" position.



The disc brushes and fine dirt sweeping roller start to rotate.

5.4 Adjusting the sweeper

Height adjustment

NOTE

- Do not press the disc brushes onto the ground too firmly.
- An excessive contact pressure will not achieve a better cleaning result but will increase the wear.

- An excessive contact pressure will increase the pushing resistance.

NOTE

The knob for height adjustment of the disc brushes is located in the middle of the front section. The height adjustment knob allows the height of the disc brushes to be adjusted to the ground to be swept.

1. Adjust to the required level (1):

- Level 1-2: for all flat, hard surfaces (e.g. asphalt, concrete, slabs...)
- Level 3-4: for damp leaves, sand, uneven surfaces (e.g. washed concrete slabs)
- Level 5-8: for heavy soiling and very uneven surfaces

2. To do this, turn the knob (2) anti-clockwise or clockwise to the desired position.



Adjusting the brush holding-down device

NOTE

The brush holding-down device adjusts the right disc brush to the edge areas to be swept, e.g. walls or kerbs. Excessive wear can occur in the event of unsuitable adjustment at lower edges. The holding-down device must not scrape on the ground.

- Sweeping edges and corners:
Press the handle of the brush holding-down device down.
- Operation on surfaces: Pull the handle of the brush holding-down device up.



5.5 Switching off the sweeper



Risk of accident!

- Do not operate the ON/OFF switch with your foot.
1. Switch the ON/OFF switch (1) to "0" position.
 2. Check the sweeper (see Maintenance and care).
 3. Charge battery (see Charging the battery).

5.6 Emptying the waste bin



Danger of injury!

- Wear sturdy gloves in order to avoid cut injuries, e.g. due to glass shards, metal or other sharp-edged materials.



Health risk!

- Empty the waste bin outdoors if possible in order to avoid production of dust.

- Wear a dust protection mask in dusty conditions.

NOTE

Empty the waste bin each time after use.

Empty the waste bin at regular intervals in order to achieve optimum sweeping performance.

1. Fold the push handle forwards so that it is in flat position.
2. Pull the handle of the waste bin upwards.
3. Remove the waste bin and empty.
4. Fit the empty waste bin on the sweeper, making sure that the housing edges are free of dirt.
5. Lock the waste bin handle.



5.7 Cleaning the sweeper



Risk of accident!

Risk of injury due to accidental starting of the sweeper!

- The sweeper must be switched off and disconnected from the power supply when performing all work.
- Do not carry out any work with running motor.
- Disconnect the sweeper from the power source while cleaning. Disconnect the cable from the battery.



Danger of injury!

- Wear sturdy gloves in order to avoid cut injuries, e.g. due to glass shards, metal or other sharp-edged materials.

! CAUTION!

Damage to the sweeper due to improper cleaning.

- Clean the sweeper to remove dust and dirt.
- Do not use grease removers for cleaning.
- Do not use aggressive detergents.
- Do not clean with a high-pressure cleaner.
- Protect bearings against moisture.
- Do not clean the disc brushes and fine dirt sweeping roller with compressed air. The hard air jet could damage the bristles.
- Clean plastic parts with a damp cloth.

- Do not spray-clean with water or immerse in water. Moisture will damage the electrical components and can lead to short circuits.

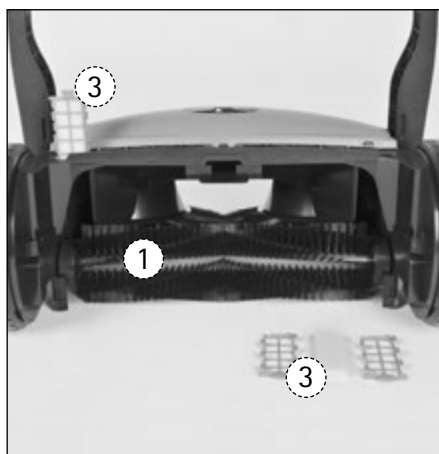
- Cleaning interval after 8 hours of operation.

1. Clean the disc brushes, fine dirt sweeping roller (1) and drives with a wet cloth.

2. Clean plastic parts with a damp cloth.

3. Clean the dust filter (3).

Recommendation: apply a thin coating of Haaga genuine lubricant spray to the brush drives.



6 Transport

6.1 Carrying the sweeper



Danger of injury!

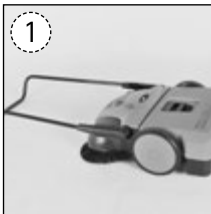
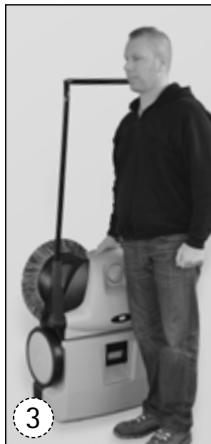
- Hold the sweeper so that falling over or tipping down of the push handle cannot cause injuries to the user or other persons.
- Do not carry the sweeper by the handle of the waste bin.

NOTE

Carry the sweeper by means of the carrying handle at the front.

Do not drop the sweeper.

1. Fold the push handle (1) forwards so that it is in flat position.
2. Grasp the sweeper at the carrying handle (2).
3. Carry the sweeper so that the disc brushes are facing away from the body (3).



6.2 Transporting the sweeper in a vehicle



CAUTION!

Damage to the sweeper due to improper transport.

- Position the sweeper so that the bristles of the disc brushes are not kinked or bent.
- Secure the sweeper to prevent it from tipping, slipping or being damaged.
- Secure the sweeper with a suitable lashing strap to prevent it from slipping.

1. Remove the push handle (see Removing the push handle).
2. Position the sweeper in the vehicle.
3. Secure the sweeper by means of a lashing strap.



7 Putting out of operation and storage

7.1 Removing the push handle



Danger of injury!

- Avoid injury due to push handle accidentally falling over.

NOTE

The push handle can be removed from the sweeper to permit space-saving transport in vehicles.

1. Adjust so that the arrows (1) on the housing are flush with the lugs on the handle fittings.
2. Position yourself in front of the sweeper inside the push handle.
3. Grasp both handle fittings with your hands.
4. Carefully press both handle fittings outwards.
5. Simultaneously pull the handle fittings out of the two mounts on the sweeper.



7.2 Disconnecting battery cable

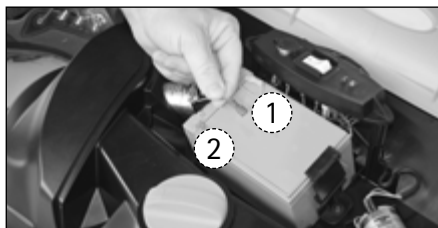


CAUTION!

Damage to the sweeper due to improper disconnection.

- For storage periods of longer than 2 months: disconnect battery cable to protect the battery against deep discharge.
- The sweeper may be damaged and the warranty rendered void if the cables are mixed up on the battery.

1. Pull cover forwards at the front bottom edge.
2. Swivel cover up.
3. Pull battery cable (blue) (1) off contact tab (2).



7.3 Storing the sweeper



CAUTION!

Damage to the sweeper due to improper storage.

- Position the sweeper so that the bristles are not kinked or bent.
- Secure the sweeper to prevent it from tipping, slipping or being damaged.
- Switch the ON/OFF switch to "0" position.
- Do not store the sweeper outside or in a damp place.

NOTE

- Empty the waste bin.
(see Emptying the waste bin).
- When storing, ensure that the push handle and sweeper are secured to prevent them from falling over.
- The battery cable must always be disconnected for longer storage periods as from approx. 2 months (e.g. winter break) without battery recharging. Risk of deep discharge.
- Disconnect battery cable
(see Disconnecting battery cable).



8 Maintenance and care



Risk of accident

Risk of injury due to accidental starting of the sweeper.

- The sweeper must be switched off and disconnected from the power supply when performing all work.
- Disconnect the cable from the battery.
- Do not carry out any work with running motor.



CAUTION!

Damage to the sweeper due to improper maintenance.

- Carry out maintenance of the sweeper regularly.

- Perform only the maintenance work and repairs described in the instructions.
- Have all other work performed by a qualified specialist dealer.
- Use only genuine Haaga spare parts. Otherwise there is a risk of accidents or damage to the sweeper.
- In the event of queries related to this, please consult a specialist dealer.

8.1 Regular maintenance

8.1.1 Before the start of work

Check the condition of the sweeper.

Check to ensure that the push handle is securely attached to the sweeper.

Check condition of waste bin and ensure that it is securely attached.

Check the disc brushes and fine dirt sweeping roller for stuck parts and embedded dirt – bristles must move freely.

Check the disc brushes and fine dirt sweeping roller for wound-up threads and string – remove if necessary.

Check height adjustment of the disc brushes and adjust to the ground to be swept.

Check sweeping pressure adjustment – adjust to the ground to be swept.

Clean handles – they must be clean and dry and free of oil and dirt.

Check the sweeper for damage, and contact Service if necessary.

Check the height adjustment (see Height adjustment).

It must be possible to easily move the sweeper switch to "0" position.

Check charger connecting socket for foreign matter.

! CAUTION!

- No not insert any electrically conductive objects in the charging socket and the sweeper may be damaged by a short circuit in the charging socket.
- Disconnect the cable at the battery before carrying out maintenance and cleaning work.

⚠ Danger of fire!

A short circuit in the charging socket can lead to a cable fire in the sweeper.

- Do not use any flammable fluids to clean the charging sockets.

8.1.2 After the end of work

Clean the dust filter
(see Cleaning the dust filter).

Clean the sweeper
(see Cleaning the sweeper).

Charge battery (see Charging the battery).

8.1.3 Every 8 hours of operation:

Clean the brush drives
(see Cleaning the sweeper).

Recommendation: Apply a thin coating of Haaga genuine lubricant spray to the brush drives (see Spraying the brush drives with lubricant).

8.1.4 Every 2 months:

Charge battery (see Charging the battery).

8.2 Cleaning the dust filter

⚠ Danger of injury!

- Do not clean with compressed air.
1. Remove the waste bin.
 2. Pull both filter elements out of the guides.
 3. Remove the foam insert from the filter element.

4. Knock out the foam insert.
5. Clean the foam insert with water and allow to dry.
6. Insert the cleaned foam insert in the filter element.
7. Insert both filter elements in the guides.
8. Fit the waste bin.



8.3 Eliminating blockages



Danger of injury!

- Wear sturdy gloves in order to avoid cut injuries, e.g. due to glass shards, metal or other sharp-edged materials.
1. Remove wound-up material (e.g. threads, string...) from brushes and axles.
 2. Remove any jammed material (e.g. stones, branches, ...).

8.4 Spraying the brush drives with lubricant



CAUTION!

- Damage to the sweeper due to improper lubrication.

- Use only Haaga genuine lubricant spray. Use of other oils or greases can impair functioning of the brush drives.
1. Position the sweeper so that it is vertical.
 2. Recommendation: spray a sparing amount of Haaga lubricant spray onto the brush drives through the opening in the housing.
 3. Remove excess lubricant.
- Recommendation: Every 8 hours or operation or as required.
 - Haaga genuine lubricant spray is available as an accessory (article no. 923000).



8.4 Straightening bristles



Danger of fire!

- Do not use naked flames or burners to heat the bristles!
- Do not use a heat gun. The brushes may melt due to the excessively hot air.

NOTE

Bent bristles can be straightened again by heating with a hot-air blower.

Heat the bristles using a hot-air blower (e.g. hair dryer). The bristles will straighten themselves.



9 REACH

REACH is the European chemicals regulation for registration, evaluation, authorisation and restriction of chemicals.

Information on compliance with the REACH regulation (EU) No. 1907/2006 can be found at www.haaga-gmbh.de

10 EC Declaration of Conformity

haaga 677/ haaga 697

Haaga Kehrsysteme GmbH, Wielandstr.
24, 73230 Kirchheim / Germany hereby
confirms that the sweeper haaga
677/697 incl. charger conforms with
the Directives 2006/42/EC, 2006/95/EC,
2011/65/EU and has been developed and
manufactured in accordance with the ap-
plicable standards.

Stefan Sander
Managing Director

11 Technical data

Technical data	haaga 677	haaga 697	haaga 697 plus
Sweeping width approx. cm	77	97	97
Sweeping performance approx. m ² /hour	3,600	4,100	4,100
Waste bin capacity (litres)	50	50	50
Weight in kg	21	22	22
Operating time with full battery power*, min. approx.	90	90	120

Noise and vibration information (measured in accordance with EN 60335-2-72):	measured in accordance with EN 60745-2-6		
Sound pressure level L _p (EN 60335-2-72)*	64 dB(A)	64 dB(A)	64 dB(A)
Sound power level L _w (EN 60335-2-72)*	80 dB(A)	80 dB(A)	80 dB(A)
Uncertainty for specified sound levels (2006/42/EC)	2.5 dB(A)	2.5 dB(A)	2.5 dB(A)

Vibration information	measured in accordance with EN 60335-2-72		
Left handle, a _h	< 2.5 m/s ²	< 2.5 m/s ²	< 2.5 m/s ²
Right handle, a _h	< 2.5 m/s ²	< 2.5 m/s ²	< 2.5 m/s ²
Uncertainty (K) (Directive 2006/42/EC)	2.0 m/s ²	2.0 m/s ²	2.0 m/s ² 131

Battery	677	697	697 plus
Voltage	12V	12V	12V
Power	12 Ah	12 Ah	15 Ah
Weight in kg	3.8	3.8	3.8
Temperature range			
- Operation:	from -10 °C to 50 °C	from -10 °C to 50 °C	from -10 °C to 50 °C
- Charging:	from 0 °C to 40 °C	from 0 °C to 40 °C	from 1 °C to 40 °C
- Storage:	from -10 °C to 40 °C	from -10 °C to 40 °C	from -10 °C to 40 °C

Charger	677	697	697 plus
Input voltage	230VAC / 50 Hz	230VAC / 50 Hz	230VAC / 50 Hz
Output voltage	12V	12V	12V
End-of-charge voltage	13.8V	13.8V	13.8V
Charging current	2,500 mA	2,500 mA	2,500 mA
Temperature range			
- Operation:	from 0 °C to 25 °C	from 0 °C to 25 °C	from 0 °C to 25 °C
- Storage:	from -25 °C to 70 °C	from -25 °C to 70 °C	from -25 °C to 70 °C
Weight	540 g	540 g	540 g

*Determined in operating state with nominal maximum speed / dependent on surface type

12 Troubleshooting

Problem	Cause	Remedy
Sweeper moves sluggishly or does not run smoothly	Sweeper dirty	Clean the sweeper (see Cleaning the sweeper)
	Brushes blocked	Eliminate blockage (see Eliminating blockages)
	Brush drives dirty	Clean the brush drives (see Cleaning the sweeper)
		Lubricate brush drives with lubricant spray
	<ul style="list-style-type: none"> • Height adjustment is set too low • Contact pressure of disc brushes is too high 	Adjust height (see Height adjustment)
	Disc brushes do not rotate	Contact Service
Sweeper switches off	<ul style="list-style-type: none"> • Height adjustment is set too low • Contact pressure of disc brushes is too high 	Adjust height (see Height adjustment)
	• Brushes blocked	Clean the sweeper (see Cleaning the sweeper)
	• Overload protection active	Eliminate blockage (see Eliminating blockages)
	• The LED indicator on the sweeper lights up red	<ul style="list-style-type: none"> • Check the state of charge of the battery • Charge battery
Brushes are bent	Improper storage	Straighten brushes
Inadequate sweeping performance	Sweeping lip is missing, loose or heavily worn	Replace sweeping lip