

SEA 20.0

STIHL



2 - 17 Instruction Manual



Contents

1	Introduction.....	2
2	Guide to Using this Manual.....	2
3	Overview.....	2
4	Safety Precautions.....	4
5	Preparing the hand vacuum for Operation	10
6	Charging the Battery, LEDs.....	10
7	Assembling the Hand Vacuum.....	11
8	Removing and Fitting the Battery.....	11
9	Switching the hand vacuum on and off.....	12
10	Checking the Hand Vacuum and the Battery.....	12
11	Working with the Hand Vacuum.....	12
12	After Finishing Work.....	13
13	Transporting.....	13
14	Storing.....	13
15	Cleaning.....	14
16	Repairing.....	14
17	Troubleshooting.....	15
18	Specifications.....	16
19	Spare Parts and Accessories.....	17
20	Disposal.....	17
21	Product information.....	17

1 Introduction

Dear Customer,

Thank you for choosing STIHL. We develop and manufacture our quality products to meet our customers' requirements. The products are designed for reliability even under extreme conditions.

STIHL also stands for premium service quality. Our dealers guarantee competent advice and instruction as well as comprehensive service support.

STIHL expressly commit themselves to a sustainable and responsible handling of natural resources. This user manual is intended to help you use your STIHL product safely and in an environmentally friendly manner over a long service life.

We thank you for your confidence in us and hope you will enjoy working with your STIHL product.

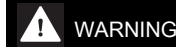


Dr. Nikolas Stihl

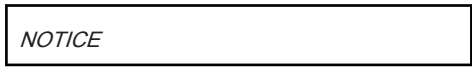
IMPORTANT! READ BEFORE USING AND KEEP IN A SAFE PLACE FOR REFERENCE.

2 Guide to Using this Manual

2.1 Symbols used with warnings in the text



- This symbol indicates dangers that can cause serious injuries or death.
 - ▶ The measures indicated can avoid serious injuries or death.



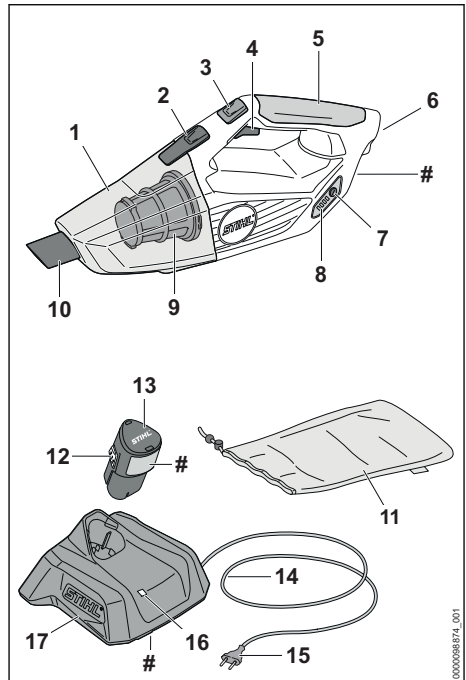
- This symbol indicates dangers that can cause damage to property.
 - ▶ The measures indicated can avoid damage to property.

2.2 Symbols in Text

-  This symbol refers to a chapter in this instruction manual.

3 Overview

3.1 Hand vacuum, battery and charger



1 Container

The container collects vacuumed dust and dirt.

2 Locking lever

The locking lever holds the container on the hand vacuum.

3 Power Lock Button

The locking gas button locks the suction force.

4 Trigger

Switches the hand vacuum on and off.

5 Control handle

For operating, holding and controlling the hand vacuum.

6 Battery compartment

The battery compartment holds the battery.

7 Pushbutton

The button activates the LEDs on the hand vacuum.

8 LEDs

The LEDs indicate the state of charge of the battery and any faults.

9 Filters

The filter filters out dust and dirt from the air drawn in.

10 Nozzle

The nozzle guides vacuumed dust and dirt into the container.

11 Bag

The bag is used to transport and store the hand vacuum, battery, charger and accessories.

12 Locking hook

Holds the battery in the battery compartment.

13 Battery

Supplies power to the hand vacuum.

14 Connecting cable

The connecting cable connects the charger to the mains plug.

15 Mains plug

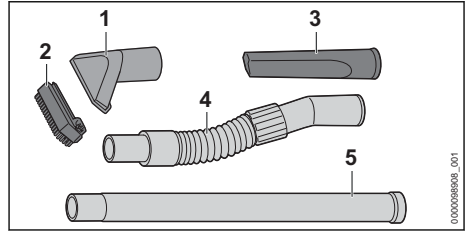
The mains plug connects the connecting cable with a socket

16 LED

The LED indicates the status of the charger.

17 Charger

The charger charges the battery.

Rating plate with machine number**3.2 Accessories****1 Pickup tool**

The pickup tool is used for vacuuming coarse dirt.

2 Brush attachment

The brush attachment is used for vacuuming delicate surfaces.

3 Crevice nozzle

The crevice nozzle is used for picking up in hard-to-reach places.

4 Suction hose, fuel line, intake hose

The suction hose is used to extend the attached nozzle.

5 Extension tube

The extension tube is used to extend the attached nozzles.

3.3 Icons

The symbols can be on the hand vacuum, the battery and the charger and mean the following:



Activate power lock button.



The LED glows or flashes green. The battery is charging.



The LED flashes red. There is no electrical contact between the battery and the charger or there is a fault in the battery or in the charger.



The information next to the symbol indicates the energy content of the battery according to the cell manufacturer's specification. The energy content available in operation is lower.



Operate the electric product in a dry place, indoors only.



Do not dispose of the product with your household waste.



Read, understand and keep the User Manual.

4 Safety Precautions

4.1 Warning Symbols

Meanings of warning signs and labels on the hand vacuum, battery or charger:



Observe safety notices and take the necessary precautions.



Read, understand and keep the User Manual.



Remove the battery during work stoppages, transport, storage, maintenance or repair.



Protect the hand vacuum from rain and dampness.



Protect battery from heat and fire.



Protect the battery from rain and moisture and do not immerse it in liquids.

4.2 Intended Use

The STIHL SEA 20.0 hand vacuum is used for vacuuming dry dust and dirt in the area close to the house.

The hand vacuum must not be used in the rain.

The STIHL AS battery supplies power to the hand vacuum.

The STIHL AL 1 charger recharges the STIHL AS battery.

▲ WARNING

- Batteries and chargers not explicitly approved by STIHL for the hand vacuum may cause a fire or explosion. Persons may be seriously or fatally injured and property may be damaged.
 - ▶ Use the hand vacuum with a STIHL AS battery.
 - ▶ Recharge the STIHL AS battery with a STIHL AL 1 charger.
- Using the hand vacuum, battery or the charger for purposes for which they were not designed may result in serious or fatal injuries, and damage to property may occur.

- ▶ Use hand vacuum, charger and battery as specified in this user manual.

4.3 Requirements concerning the user

▲ WARNING

- Users without adequate training or instruction cannot recognize or assess the risks involved in using the hand vacuum. The user or other persons may sustain serious or fatal injuries.
 - ▶ Read, understand and keep the User Manual.
- ▶ If the hand vacuum is passed on to another person: Always give them the instruction manual.
- ▶ Make sure that the user meets the following conditions:
 - The user is rested.
 - The user must be in good physical condition and mental health to operate and work with the hand vacuum.
 - The user is able to recognize and assess the risks involved in using the hand vacuum.
 - The user is an adult, or is being trained in an occupation under supervision according to national regulations.
 - The user has received instruction from a STIHL servicing dealer or other experienced user before using the hand vacuum for the first time.
 - The user is not under the influence of alcohol, medicines or drugs.
- ▶ If you have any doubts, be sure to consult a STIHL dealer.

4.4 Clothing and equipment

▲ WARNING

- Long hair can be pulled into the hand vacuum during operation. This may result in serious injury to the user.
 - ▶ Tie up and confine long hair above your shoulders.
- Dust can be whipped up during operation. Whipped up dust can damage the respiratory passages and cause allergic reactions.
 - ▶ If dust is generated: Wear a dust respirator mask.
- Inappropriate clothing can snag on the hand vacuum. Users not wearing suitable clothing are at risk of serious injury.
 - ▶ Wear close-fitting clothing.
 - ▶ Remove scarves and jewelry.
- Wearing unsuitable footwear may cause the user to slip. This may result in injury to the user.
 - ▶ Wear sturdy, closed-toed footwear with high-grip soles.

4.5 Work Area and Surroundings

4.5.1 Working Area and Surroundings

▲ WARNING

- Bystanders, children and animals cannot recognize or assess the dangers of the hand vacuum. Bystanders, children and animals may be seriously injured.
 - ▶ Keep bystanders, children and animals away from the working area.
 - ▶ Do not leave the hand vacuum unattended.
 - ▶ Make sure that children cannot play with the hand vacuum.
- The hand vacuum is not waterproof. If you work in the rain or in a damp environment, an electric shock may occur. This can result in injuries to the user and may damage the hand vacuum.
 - ▶ Do not work in the rain or in a damp environment.
- Electrical components of the hand vacuum can produce sparks. Sparks may cause fires




and explosions in highly flammable or explosive environments. Persons may be seriously or fatally injured and property may be damaged.

- ▶ Do not work in a highly flammable or explosive environment.
- Inhaling discharged air can be harmful to health and trigger allergic reactions.
 - ▶ Provide adequate ventilation.
 - ▶ Observe the regulations applicable in the country concerning the ventilation of rooms and the air exchange rate.

4.5.2 Battery

▲ WARNING

- Bystanders, children and animals cannot recognize or assess the dangers of the battery. Bystanders, children and animals may be seriously injured.
 - ▶ Keep bystanders, children and animals away from the work area.
 - ▶ Do not leave the battery unattended.
 - ▶ Make sure that children cannot play with the battery.
- The battery is not protected against all ambient conditions. If the battery is exposed to certain ambient conditions, the battery may catch fire, explode or be irreparably damaged. This may result in serious injury to people and damage to property.
 - ▶ Protect battery from heat and fire.
 - ▶ Do not throw the battery into a fire.
 - ▶ Do not charge, use and store the battery outside of the specified temperature limits,  18.5.
 - ▶ Protect the battery from rain and moisture and do not immerse it in liquids.
 - ▶ Keep battery away from small metal parts.
 - ▶ Do not expose the battery to high pressure.
 - ▶ Do not expose the battery to microwaves.
 - ▶ Protect the battery from chemicals and salts.



4.5.3 Charger

▲ WARNING


- Bystanders and children are not aware of and cannot assess the dangers of a charger or electric current. Bystanders, children and animals may be seriously or fatally injured.
 - ▶ Keep bystanders, children and animals away from the work area.

▶ Make sure that children cannot play with the charger.

- The charger is not waterproof. If you work in the rain or in a damp environment, an electric shock may occur. The user may be injured and the charger may be damaged.



- ▶ Do not operate it in the rain or in a damp environment.

- The charger is not protected against all ambient conditions. If the charger is exposed to certain ambient conditions, it may catch fire or explode. This may result in serious injury to people and damage to property.
 - ▶ Operate the charger in an enclosed, dry room.
 - ▶ Do not operate the charger in a flammable environment or in an explosive environment.
 - ▶ Do not operate the charger on a readily combustible surface.
 - ▶ Do not use and store the charger outside of the specified temperature limits,  18.5.
- The connecting cable is a trip hazard. People may be injured and the charger may be damaged.
 - ▶ Lay the connecting cable flat on the floor.

4.6 Safe Condition

4.6.1 Safe condition

The hand vacuum is in a safe condition if the following points are observed:

- The hand vacuum is undamaged.
- The hand vacuum is clean and dry.
- The controls function properly and have not been modified.
- Original STIHL accessories designed for this hand vacuum are fitted.
- The accessories are correctly attached.

▲ WARNING

- If not in safe condition, components may no longer operate correctly and safety devices may be disabled. This may result in serious or fatal injury to people.
 - ▶ Work only with an undamaged hand vacuum.
 - ▶ If the hand vacuum is dirty or wet: Clean the hand vacuum and allow it to dry.
 - ▶ Never attempt to modify the hand vacuum.
 - ▶ If the controls do not function properly: Do not work with the hand vacuum.


- ▶ Always ensure the filter is in place and undamaged.
- ▶ Fit original STIHL accessories designed for this hand vacuum.
- ▶ Attach accessories as described in this User Manual or in the User Manual for the accessories.
- ▶ Replace worn or damaged labels.
- ▶ Never insert objects in the hand vacuum's openings.

4.6.2 Battery

The battery is in a safe condition if the following points are observed:

- Battery is undamaged.
- The battery is clean and dry.
- Battery functions properly and has not been modified.

▲ WARNING

- A battery that is not in a safe condition cannot operate safely. Persons may be seriously injured.
 - ▶ Never work with a damaged battery.
 - ▶ Never attempt to charge a damaged or defective battery.
 - ▶ If the battery is dirty: Clean the battery.
 - ▶ If the battery is wet or damp: Allow the battery to dry,  18.6.
 - ▶ Never attempt to modify the battery.
 - ▶ Never insert objects in the battery's openings.
 - ▶ Never bridge the battery's contacts with metallic objects (short circuit).
 - ▶ Do not open the battery.
 - ▶ Replace worn or damaged labels.
- Fluid may leak from a damaged battery. If that liquid comes into contact with the skin or eyes, the skin or eyes may be irritated.
 - ▶ Avoid contact with the liquid.
 - ▶ If skin contact occurs: Wash affected areas of skin with plenty of water and soap.
 - ▶ In the event of contact with eyes: Rinse eyes with plenty of water for at least 15 minutes and consult a doctor.
- A damaged or defective battery may smell unusual, emit smoke or burn. Persons may be seriously or fatally injured, and property may be damaged.
 - ▶ If the battery smells unusual or emits smoke: do not use the battery and keep it away from combustible substances.
 - ▶ If the battery catches fire: Attempt to extinguish the battery with a fire extinguisher or water.

4.6.3 Charger

The charger is in a safe condition if the following points are observed:

- Charger is undamaged.
- Charger is clean and dry.

▲ WARNING

- If components do not comply with safety requirements, they will no longer function properly and safety devices may be rendered inoperative. This can result in serious or fatal injuries.
 - ▶ Do not use a damaged charger.
 - ▶ If the charger is dirty or wet: Clean the charger and allow it to dry.
 - ▶ Never attempt to modify the charger.
 - ▶ Never insert objects in the charger's openings.
 - ▶ Never bridge the charger's contacts with metallic objects (short circuit).
 - ▶ Do not open the charger.

4.7 Working

▲ WARNING

- In certain situations, the user may no longer be able to concentrate on their work. This may result in the user stumbling, falling and suffering serious injury.
 - ▶ Keep calm and plan your work.
 - ▶ If light and visibility are poor: Do not work with the hand vacuum.
 - ▶ Use the hand vacuum on your own.
 - ▶ Watch out for obstacles.
 - ▶ Work standing on the ground and keep your balance.
 - ▶ If you start feeling fatigue: Take a break. If you start feeling fatigue: Take a break.
- If the behavior of the hand vacuum changes during operation or feels unusual, it may no longer be in a safe condition. This may result in serious injury to people and damage to property.
 - ▶ Stop working, remove the battery and consult a STIHL dealer.
 - ▶ The hand vacuum must always be operated in an upright position.
 - ▶ To ensure an adequate exchange of cooling air, do not cover the hand vacuum.

4.8 Charging

▲ WARNING

- A damaged or defective charger may produce an unusual smell or emit smoke during the

charging process. This may result in personal injuries and damage to property.

- ▶ Disconnect the plug from the wall outlet.
- The charger can overheat and cause a fire if heat dissipation is inadequate. This can result in serious or fatal injuries and damage to property.
 - ▶ Do not cover the charger.

4.9 Connecting to the power supply

Contact with live components may occur for the following reasons:


- The connecting cable or the extension cord is damaged.
- The mains plug of the connecting cable or extension cord is damaged.
- The socket is not properly installed.

▲ DANGER

- Contact with live parts may result in electric shock. This may result in serious or fatal injury to the user.
 - ▶ Make sure that the connecting cable, extension cord and their mains plugs are undamaged.



If the connecting cable or the extension cord is damaged:

- ▶ Do not touch the damaged area.
- ▶ Disconnect the mains plug from the power supply.
- ▶ Make sure your hands are dry before touching the connecting cable, extension cord or mains plugs.
- ▶ Plug the mains plug of the connecting cable or extension cord into a properly installed, shockproof socket with the correct fuse rating.
- ▶ Install the charger with a ground fault circuit interrupter (30 mA, 30 ms).
- A damaged or unsuitable extension cable can result in electric shock. There is a risk of serious or fatal injury.
 - ▶ Use an extension cable with the correct cable cross-section,  18.4.

▲ WARNING

- Overvoltage can occur in the charger if the line voltage or frequency are incorrect during charging. The charger may be damaged.
 - ▶ Make sure that the mains voltage and the mains frequency of the power supply match the data on the rating plate of the charger.
- If the charger is connected to a power strip, electrical components may be overloaded during the charging process. The components may overheat and cause a fire. Persons may

be seriously or fatally injured, and property may be damaged.

- ▶ Ensure that the technical specifications for the power strip are not exceeded by the information on the rating plate of the charger and of all electrical devices connected to the power strip.
- An incorrectly routed connecting cable or extension cord may be damaged, and people may trip over it. People may be injured, and the connecting cable or extension cord may be damaged.
 - ▶ Route and mark the connecting cable and extension cord so that people will not trip over them.
 - ▶ Route the connecting cable and extension cord so that they are not under tension or tangled.
 - ▶ Route the connecting cable and extension cord so that they will not be damaged, kinked or crushed and will not be chafed.
 - ▶ Protect the connecting cable and extension cord from heat, oil and chemicals.
 - ▶ Lay the connecting cable and extension cord on a dry surface.
- The extension cable warms up in operation. If that heat cannot escape, it may cause a fire.
 - ▶ If using a cable reel: completely unroll the cable reel.
- If wiring and pipes are laid in the wall, they may be damaged if the charger is mounted on the wall. Contact with wiring can result in electric shock. This may result in serious injury to people and damage to property.
 - ▶ Make sure there is no wiring or pipes in the wall at the proposed mounting site.
- If the charger is not mounted on the wall as described in this User Manual, the charger or the battery may fall or the charger may overheat. This may result in injury to people and damage to property.
 - ▶ Mount the charger on a wall as described in this User Manual.
- If the charger is mounted on a wall with the battery inserted, the battery may fall out of the charger. This may result in injury to people and damage to property.
 - ▶ Mount the charger on the wall first before inserting the battery.

4.10 Transporting

4.10.1 Hand vacuum

⚠ WARNING

- The hand vacuum may turn over or shift during transport. Persons may be injured or property damaged.



- ▶ Remove the battery.
- ▶ Transport the hand vacuum in the bag supplied.
- ▶ If no bag is supplied with the hand vacuum: Secure the hand vacuum with lashing straps or a net to prevent it turning over and moving.

4.10.2 Battery

⚠ WARNING

- The battery is not protected against all ambient conditions. The battery may be damaged if it is exposed to certain ambient conditions, and damage to property may occur.
 - ▶ Never transport a damaged battery.
 - ▶ If a bag is supplied: Transport the battery in the bag supplied.
- The battery may turn over or shift during transport. This may result in injury to people and damage to property.
 - ▶ Pack the battery in packaging in such a way that it cannot move.
 - ▶ Secure the packaging so that it cannot move.

4.10.3 Charger

⚠ WARNING

- The charger can turn over or move while being transported. This may result in personal injuries and damage to property.
 - ▶ Disconnect the plug from the wall outlet.
 - ▶ Remove the battery.
 - ▶ Transport the charger in the bag supplied.
 - ▶ If no bag is supplied with the charger: Secure the charger with lashing straps, belts or a net to prevent it turning over and moving.
- The connecting cable must not be used for carrying the charger. The connecting cable and the charger may be damaged.
 - ▶ Wind up the connecting cable and attach it to the charger.

4.11 Storing

4.11.1 Hand vacuum

⚠ WARNING

- Children are not aware of and cannot assess the dangers of the hand vacuum. Children may be seriously injured.



- ▶ Remove the battery.

- ▶ Store the hand vacuum out of the reach of children.

- Moisture may cause the electrical contacts on the hand vacuum and metal components to corrode. The hand vacuum may be damaged.



- ▶ Remove the battery.

- ▶ Store the hand vacuum in a clean and dry condition.

4.11.2 Battery

⚠ WARNING

- Children are not aware of and cannot assess the dangers of the battery. Children may be seriously injured.
 - ▶ Store the battery out of the reach of children.
- The battery is not protected against all ambient conditions. If the battery is exposed to certain ambient conditions, the battery may be irreparably damaged.
 - ▶ Store the battery in a clean and dry condition.
 - ▶ Store the battery in an enclosed space.
 - ▶ Store the battery separately from the hand vacuum.
 - ▶ If the battery is stored in the charger, disconnect the mains plug and store the battery at a battery charge status between 40% and 60% (2 lit green LEDs).
 - ▶ Do not store the battery outside of the specified temperature limits, 18.5.

4.11.3 Charger

⚠ WARNING

- Children are not aware of and cannot assess the dangers of a charger. Children can be seriously injured or killed.
 - ▶ Disconnect the plug from the wall outlet.
 - ▶ Store the charger out of reach of children.

- The charger is not protected against all ambient conditions. If the charger is exposed to certain ambient conditions, the charger may be damaged.
 - ▶ Disconnect the plug from the wall outlet.
 - ▶ If the charger is hot: Allow the charger to cool down.
 - ▶ Store the charger in a clean, dry place.
 - ▶ Store the charger in an enclosed room.
 - ▶ Do not store the charger outside of the specified temperature limits, 18.5.
- The connecting cable should not be used for carrying the charger or hanging up the charger. The connecting cable and the charger may be damaged.
 - ▶ Hold the charger by the housing in a secure grip. The charger is provided with a handle recess to make it easy to pick up the charger.
 - ▶ Hang the charger on the wall mounting.

4.12 Cleaning, Maintenance and Repair

⚠ WARNING

- The hand vacuum may start up unintentionally if the battery is left in place during cleaning, maintenance or repair operations. This may result in serious injury to people and damage to property.



- ▶ Remove the battery.








- Sharp cleaning agents, cleaning with a water jet or pointed objects can damage the hand vacuum, the battery and the charger. If the hand vacuum, the battery or the charger is not cleaned correctly, components may no longer function properly or safety devices may be rendered inoperative. They may cause serious injury to persons.
 - ▶ Clean the hand vacuum, battery and charger as described in this instruction manual.
- If the hand vacuum, the battery or the charger are not serviced or repaired correctly, components may no longer function properly or safety devices may be rendered inoperative. This may result in serious or fatal injury to people.
 - ▶ Do not attempt to service or repair the hand vacuum, battery or charger.
 - ▶ If the hand vacuum, the battery or the charger require servicing or repairs: Con-

tact a STIHL servicing dealer for assistance.

5 Preparing the hand vacuum for Operation

5.1 Preparing the hand vacuum for Operation

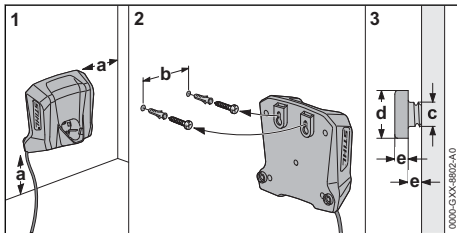
The following steps must be performed before commencing work:

- ▶ Ensure that the following components are in safe condition:
 - Hand vacuum,  4.6.1.
 - Battery,  4.6.2.
 - Charger,  4.6.3.
- ▶ Check the battery,  10.2.
- ▶ Fully charge the battery,  6.2.
- ▶ Cleaning the hand vacuum,  15.1.
- ▶ Check the controls,  10.1.
- ▶ If you cannot carry out these steps: Do not use the hand vacuum and contact your STIHL dealer for assistance.

6 Charging the Battery, LEDs

6.1 Mounting the Charger on a Wall

The charger can be mounted on a wall.



- ▶ Check the following points when mounting the charger on a wall:


- Suitable fixing materials.
- The charger is level.

The following dimensions are observed:

- a = at least 100 mm
- b = 54 mm
- c = 4.5 mm
- d = 9 mm
- e = 2.5 mm

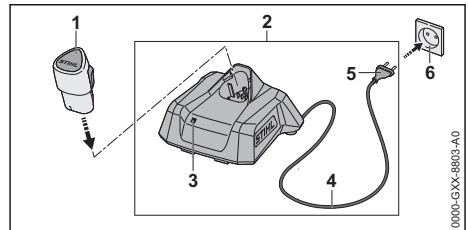
6.2 Charging the battery

The charging time depends on various factors, e.g. the battery temperature or the ambient tem-

perature. For optimum performance, observe the recommended temperature ranges,  18.6. The actual charging time may vary from the charging time indicated. The charging time is indicated at www.stihl.com/charging-times.

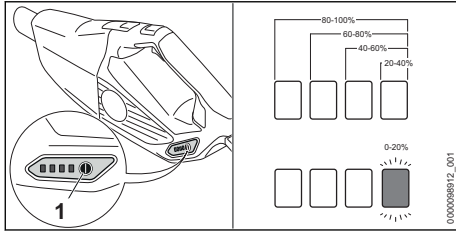
The charging process starts automatically when the mains plug is plugged into a socket and the battery is inserted into the charger. The charger switches off automatically when the battery is fully charged.

The battery and the charger warm up during charging.



- ▶ Insert the mains plug (5) in a convenient wall outlet (6).
The charger (2) runs a self test. The LED (3) glows green for about 1 second and then red for about 1 second.
- ▶ Fit the connecting cable (4).
- ▶ Insert the battery (1) in the guides in the charger (2) and press it home as far as stop. The LED (3) glows or flashes green. The battery (2) is being charged.
- ▶ When the LED (3) stops glowing: The battery (1) is fully charged and can be taken out of the charger (2).
- ▶ If the charger (2) is no longer required. Disconnect the mains plug (5) from the wall outlet (6).

6.3 Displaying State of Charge




- ▶ Insert battery.
- ▶ Press the button (1).
The LEDs emit green light for about 5 seconds and indicate the state of charge.
- ▶ If the LED on the right flashes green: Charge the battery.

6.4 LEDs on the hand vacuum

The LEDs can indicate the state of charge of the battery or any faults. The LEDs can be steady green, steady red or flashing.


If the LEDs are steady or flashing green, this indicates the state of charge of the battery.

- ▶ If the LEDs glow or flash red: Troubleshooting,  17.1.
Malfunction in hand vacuum or battery.

6.5 LED on Charger

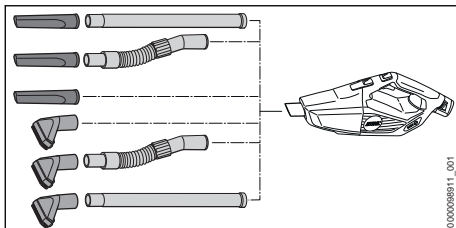
The LED indicates the operating status of the charger or faults. The LED can glow or flash green or red.

If the LED glows or flashes green, the battery is being charged.

- ▶ If the LED glows or flashes red: Troubleshooting,  17.
There is a malfunction in charger or battery.

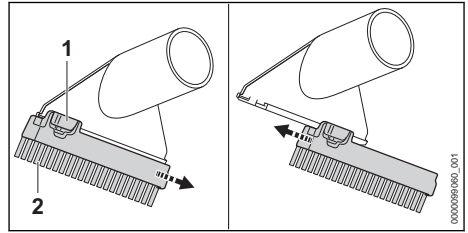
7 Assembling the Hand Vacuum

7.1 Attaching accessories



- ▶ Assemble the accessories and attach them to the nozzle.

Attaching and Removing the Brush Attachment



Removing the brush attachment:

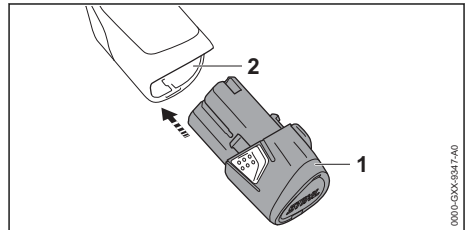
- ▶ Depress the retaining latch (1) and hold it depressed.
- ▶ Remove the brush attachment (2).

Attaching the brush attachment:

- ▶ Push the brush attachment (1) into the guides at the suction nozzle as far as it will go.
The brush attachment engages in position with an audible click.

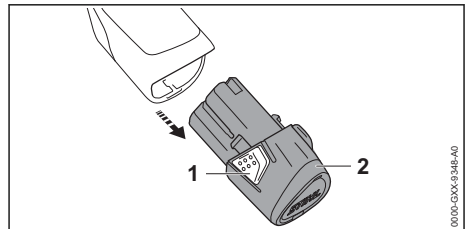
8 Removing and Fitting the Battery

8.1 Fitting the Battery



- ▶ Push the battery (1) into the battery compartment (2) as far as stop.
The battery (1) engages in position with a click.

8.2 Removing the Battery

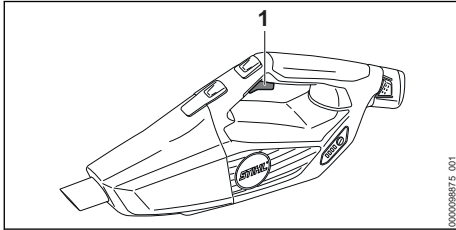


- ▶ Depress both locking hooks (1).
The battery (2) is unlocked and can be removed.

9 Switching the hand vacuum on and off

9.1 Switching on the hand vacuum

- ▶ Hold the hand vacuum firmly with one hand on the control handle – wrap your thumb around the control handle.



- ▶ Press the trigger (1) with your index finger and keep depressed. The hand vacuum accelerates, and the sweepings are sucked in.

9.2 Switching off the hand vacuum

- ▶ Release the trigger. The vacuum shredder stops sucking in the sweepings.
- ▶ If the vacuum shredder continues to suck in sweepings: Remove the battery and consult a STIHL specialist dealer. The hand vacuum is defective.

10 Checking the Hand Vacuum and the Battery

10.1 Checking the controls

Trigger

- ▶ Remove the battery.
- ▶ Press the trigger.
- ▶ If the trigger is stiff or does not spring back to its idle position: Do not use your hand vacuum and contact your STIHL servicing dealer for assistance. The trigger is defective.

Switching on the hand vacuum

- ▶ Insert battery.
- ▶ Press and hold the trigger. The sweepings are sucked in.
- ▶ If 3 LEDs flash red: Remove the battery and consult a STIHL dealer. There is a fault in the hand vacuum.
- ▶ Release the trigger. The vacuum shredder stops sucking in the sweepings.

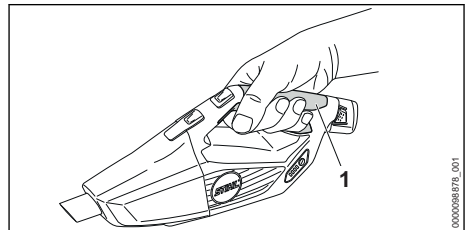
- ▶ If the vacuum shredder continues to suck in sweepings: Remove the battery and consult a STIHL specialist dealer. The hand vacuum is defective.

10.2 Testing the Battery

- ▶ Insert battery.
- ▶ Press button on hand vacuum. The LEDs glow or flash.
- ▶ If the LEDs do not glow or flash: Do not use the hand vacuum and the battery and contact your STIHL servicing dealer. Malfunction in hand vacuum or battery.

11 Working with the Hand Vacuum


11.1 Holding and guiding the hand vacuum



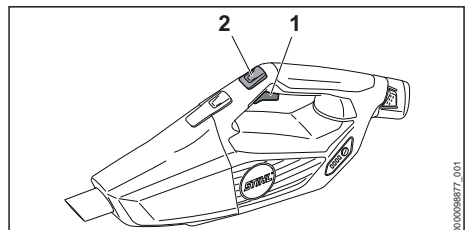
- ▶ Hold and guide the hand vacuum with one hand on the control handle (1) and wrap your thumb around the control handle.

11.2 Picking up Dust and Dirt

- ▶ Switch on the hand vacuum.
- ▶ Hold the hand vacuum with one hand on the control handle and pick the material up either directly or via an attached accessory.

For optimum performance, observe the recommended temperature ranges,  18.6.

11.3 Activating and Deactivating the Power Lock




- ▶ Switch on the hand vacuum.

- ▶ Depress the power lock button (2). This locks the suction force. You can let go of the trigger.

To deactivate the power lock, depress the trigger (1).

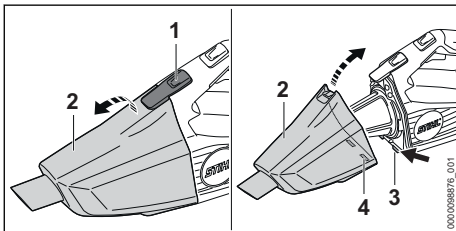
12 After Finishing Work

12.1 After Finishing Work

- ▶ Switch off the hand vacuum and remove the battery.
- ▶ If the hand vacuum is wet: Allow the hand vacuum to dry.
- ▶ If the battery is wet or damp: Allow the battery to dry,  18.6.
- ▶ Clean the hand vacuum.
- ▶ Clean the battery.

12.2 Emptying the Container

- ▶ Switch off the hand vacuum and remove the battery.



- ▶ Press the locking lever (1) and remove the container (2).
- ▶ Empty the container and dispose of its contents in accordance with the applicable regulations.
- ▶ Fit the container (2) so that the tabs (3) engage the recesses (4).
- ▶ Close the container (2).

The container (2) engages with an audible click.

13 Transporting

13.1 Transport of the hand vacuum

- ▶ Switch off the hand vacuum and remove the battery.

Carrying the hand vacuum

- ▶ Carry the hand vacuum by the control handle in one hand.

Transporting the hand vacuum in a vehicle

- ▶ Transport the hand vacuum in the bag supplied.
- ▶ Secure the bag to prevent it from tipping and moving.

13.2 Transporting the Battery

- ▶ Switch off the hand vacuum and remove the battery.
- ▶ Check that the battery is in a safe condition.
- ▶ Pack the battery in the bag supplied.
- ▶ If no bag is supplied with the battery: Pack the battery in packaging in such a way that it cannot move.
- ▶ Secure the packaging so that it cannot move.

The battery is subject to the Carriage of Dangerous Goods regulations. The battery is classified as UN 3480 (lithium ion batteries) and has been tested pursuant to UN Manual Tests and Criteria Part III, Subsection 38.3.

The transport regulations can be found at www.stihl.com/safety-data-sheets.

13.3 Transporting the Charger

- ▶ Disconnect the plug from the wall outlet.
- ▶ Remove the battery.
- ▶ Wind up the connecting cable and attach it to the charger.
- ▶ Transporting the charger in a vehicle:
 - ▶ Transport the charger in the bag supplied.
 - ▶ Secure the bag to prevent turnover and movement.
 - ▶ If no bag is supplied with the charger: Secure the charger to prevent turnover and movement.


14 Storing

14.1 Storage of the hand vacuum

- ▶ Switch off the hand vacuum and remove the battery.
- ▶ The hand vacuum should be stored in such a way that the following conditions are fulfilled:
 - The hand vacuum is out of the reach of children.
 - The hand vacuum is clean and dry.

14.2 Storing the Battery

STIHL recommends keeping the battery in a charging state between 40% and 60 % (2 green LEDs lit).

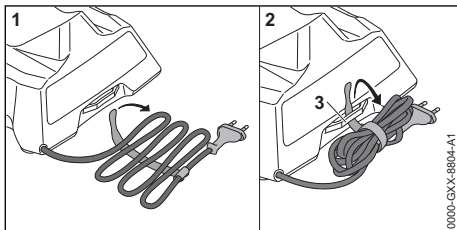
- ▶ The battery should be stored in such a way that the following conditions are fulfilled:
 - The battery is out of the reach of children.
 - The battery is clean and dry.
 - The battery is in an enclosed space.
 - The battery is separated from the hand vacuum.
 - If the battery is stored in the charger, disconnect the mains plug and store the battery at a battery charge status between 40% and 60% (2 lit green LEDs).
 - Do not store the battery outside of the specified temperature limits,  18.5.


NOTICE

- If the battery is not stored as described in this user manual, the battery may become deeply discharged and irreparably damaged.
 - ▶ Charge a discharged battery before storing it. STIHL recommends keeping the battery in a charging state between 40% and 60% (2 lit green LEDs).
 - ▶ Store the battery separately from the hand vacuum.

14.3 Storing the Charger

- ▶ Disconnect the mains plug from the power supply.



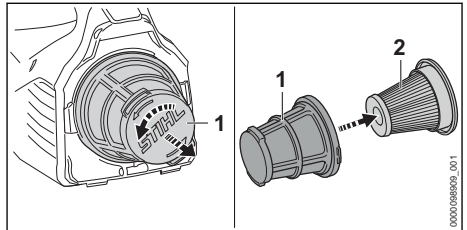
- ▶ Wind up the connecting cable and attach it to the charger.
- ▶ Observe the following points when storing the charger:
 - Charger is out of the reach of children.
 - The charger is clean and dry.
 - Charger is in an enclosed space.
 - The charger is not suspended from the connecting cable or the holder (3) for the connecting cable.
 - Do not store the charger outside of the specified temperature limits,  18.5.

15 Cleaning**15.1 Cleaning the hand vacuum and the accessory**

- ▶ Switch off the hand vacuum and remove the battery.
- ▶ Clean the hand vacuum and accessories with a damp cloth.
- ▶ Clean vents with a paintbrush.

15.2 Cleaning the Filter

- ▶ Switch off the hand vacuum and remove the battery.
- ▶ Remove container.



- ▶ Turn filter basket (1) counterclockwise and remove it.
- ▶ Remove paper filter (2).
- ▶ Remove coarse dirt on the outside of the paper filter. (2).
- ▶ Knock off the paper filter (2).
- ▶ Knock off the filter basket (1).
- ▶ Rinse the filter basket (1) under running water and allow to air dry.
- ▶ Install the paper filter (2) in the filter basket (1).
- ▶ Attach the filter basket (1) and turn it clockwise until it engages.

15.3 Cleaning the Battery

- ▶ Clean the battery with a damp cloth.

15.4 Cleaning the Charger

- ▶ Disconnect the mains plug from the power supply.
- ▶ Clean the charger with a damp cloth.
- ▶ Clean the charger's electrical contacts with a paintbrush or a soft brush.

16 Repairing**16.1 Repairing Hand Vacuum, Battery and Charger**


The hand vacuum, the battery and the charger cannot be repaired by the user.

- ▶ If the hand vacuum is damaged: Do not use the hand vacuum and contact your STIHL dealer for assistance.

- ▶ If the battery has a malfunction or is damaged: Replace the battery.
- ▶ If the charger has a malfunction or is damaged: Replace the charger.
- ▶ If the connecting cable has a malfunction or is damaged: Do not use the charger and have the connecting cable replaced by a STIHL dealer.

17 Troubleshooting

17.1 Troubleshooting the Hand Vacuum or Battery

Fault	LEDs on the hand vacuum	Cause	Remedy
Hand vacuum does not start when switched on.	1 LED flashing green.	State of charge of the battery is too low.	▶ Charge the battery.
	1 LED emits red light.	The battery is too warm or too cold.	▶ Remove the battery. ▶ Allow the battery to cool down or warm up.
	3 LEDs flash red.	There is a fault in the hand vacuum.	▶ Remove the battery and reinsert it. ▶ Switch on the hand vacuum. ▶ If 3 LEDs continue to flash red: Do not use the hand vacuum and contact your STIHL dealer for assistance.
	3 LEDs light up red.	The hand vacuum is too warm.	▶ Remove the battery. ▶ Wait for the hand vacuum to cool down.
	4 LEDs flash red.	There is a fault in the battery.	▶ Remove the battery. ▶ Clean electrical contacts in the battery compartment. ▶ Insert battery. ▶ Switch on the hand vacuum. ▶ If 4 LEDs continue to flash red: Do not use the battery; contact a STIHL authorized dealer.
		No electrical contact between hand vacuum and battery.	▶ Remove the battery. ▶ Clean electrical contacts in the battery compartment. ▶ Insert battery.
		The hand vacuum or battery is damp.	▶ Allow the hand vacuum or battery to dry,  18.6.
The hand vacuum cuts out during operation.	3 LEDs light up red.	The hand vacuum is too warm.	▶ Remove the battery. ▶ Wait for the hand vacuum to cool down.
		There is an electrical fault.	▶ Remove battery and reinsert it. ▶ Switch on the hand vacuum.
The suction power of the hand vacuum decreases.	1 LED flashing green.	State of charge of the battery is too low.	▶ Charge the battery.
		The container is full.	▶ Remove the battery. ▶ Empty the container. ▶ Clean the hand vacuum.
Hand vacuum runtime is too short.		The battery is not fully charged.	▶ Fully charge the battery.
		The battery service life has been exceeded.	▶ Replace the battery.

17.2 Troubleshooting the Charger

Fault	LED on Charger	Cause	Remedy
Battery not being charged.	One LED glows red.	The battery is too warm or too cold.	▶ Leave battery inserted in charger. Charging starts automatically as soon as the permitted temperature range is reached.
	The LED flashes red.	No electrical contact between charger and battery.	▶ Remove the battery. ▶ Clean contacts on charger. ▶ Insert battery.
		There is a malfunction in the charger.	▶ Do not use the charger and contact your STIHL dealer for assistance.
		There is a fault in the battery.	▶ Do not use the battery. Consult a STIHL dealer.
The charger does not run a self test.	The LED glows green for about 1 second and then red for about 1 second.	Electrical contact to charger was briefly interrupted.	▶ Disconnect the mains plug from the power supply. ▶ Wait for 1 minute. ▶ Insert the mains plug in a wall outlet.

18 Specifications

18.1 STIHL hand vacuum SEA 20.0

- Approved battery: STIHL AS
- Weight without battery: 1.1 kg
- Maximum air throughput: 1026 l/min
- Maximum vacuum: 80 mbar
- sample inspection
 - Length: 465 mm
 - Width: 113 mm
 - Height: 187 mm
- Inside diameter suction hose: 29 mm
- Maximum container capacity: 0.75 l

Consult www.stihl.com/battery-life for the respective running time.

18.2 STIHL AS Battery

- Battery Technology: Lithium-ion
- Voltage: 10.8 V
- Capacity in Ah: see rating label
- Energy content in Wh: see rating label
- Weight in kg: see rating label

18.3 STIHL AL 1 Charger

- Rated voltage: see rating plate
- Frequency: see rating plate
- Rated power: see rating plate
- Charging current: see rating plate
- Maximum energy content of approved STIHL AS battery: 12.5 Ah

For charging times see www.stihl.com/charging-times.

18.4 Extension Cords

If an extension cord is used, the cross sectional area of its conductors must meet the following minimum requirements – depending on the line voltage and length of the extension cord:

If rated voltage on the rating label is 220V to 240V:

- Cord length up to 20 m: AWG 15 / 1.5 mm²
- Cord length 20 m up to 50 m: AWG 13 / 2.5 mm²

If rated voltage on the rating label is 100V to 127V:

- Cord length up to 10 m: AWG 14 / 2.0 mm²
- Cord length 10 m up to 30 m: AWG 12 / 3.5 mm²

18.5 Temperature limits



WARNING

- The battery is not protected against all ambient conditions. If the battery is exposed to certain ambient conditions, it may catch fire or explode. This may result in serious injury to people and damage to property.
 - ▶ Do not charge the battery below - 20 °C or above + 50 °C.
 - ▶ Do not use the hand vacuum, battery or charger below - 20 °C or above + 50 °C.
 - ▶ Do not store the hand vacuum, battery or charger below - 20 °C or above + 70 °C.

18.6 Recommended temperature ranges

For optimum performance of the handheld vacuum, batteries and charger, observe the following temperature ranges:

- Charging: 5°C to 40°C
- Use: - 10 °C to + 40 °C
- Storage: - 20 °C to + 50 °C

If the battery is charged, used or stored outside of the recommended temperature ranges, performance may be reduced.

If the battery is wet or moist, allow the battery to dry for at least 48 h between 15°C and 50°C and at less than 70% humidity. Higher humidity may extend the drying time.


18.7 REACH

REACH is an EC regulation and stands for the Registration, Evaluation, Authorisation and Restriction of Chemical substances.

For information on compliance with the REACH regulation see www.stihl.com/reach.

19 Spare Parts and Accessories

19.1 Spare parts and accessories

STIHL  These symbols indicate original STIHL spare parts and original STIHL accessories.

STIHL recommends the use of original STIHL spare parts and accessories.

Despite ongoing market observation, STIHL is unable to judge the reliability, safety and suitability of other manufacturers' spare parts and accessories; accordingly, STIHL cannot warrant for the use of those parts.

Original STIHL spare parts and original STIHL accessories are available from STIHL dealers.

20 Disposal

20.1 Disposal of Hand Vacuum, Battery and Charger

Contact the local authorities or your STIHL dealer for information on disposal.

Improper disposal can be harmful to health and pollute the environment.

- ▶ Take STIHL products including packaging to a suitable collection point for recycling in accordance with local regulations.

- ▶ Do not dispose with domestic waste.

21 Product information

21.1 Hand vacuum STIHL SEA 20.0

ANDREAS STIHL AG & Co. KG
Badstraße 115
D-71336 Waiblingen

Germany

- Category: Hand vacuum
- Manufacturer's brand: STIHL
- Type: SEA 20.0
- serial number: SA03

The technical documents are stored at ANDREAS STIHL AG & Co. KG Produktzulasung.

The year of construction, the country of manufacture and the machine number are shown on the hand vacuum.

www.stihl.com



0458-006-8321-B



0458-006-8321-B