General

Read and understand the operating instructions before using the appliance. Familiarise with the control elements and how to use the appliance properly. Abide by all the safety measures stated in the service manual. Act responsibly toward third parties. The operator is responsible for accidents or risks to third parties. In case of any doubts about connection and operation refer please to our customer center.

Signs and symbols

	Warning / Caution!
	After-running of the appliance!
	Please read the instructions carefully before starting the machine.
	Wear goggles + Wear ear protectors.
	Wear a face mask.
	Do not expose tools to rain. Do not use tools in damp or wet locations.
CE	European Conformity Mark Products marked with this symbol meet all of the community provisions to be applied for the European Economic Area.
	Guaranteed sound power level
	Any damaged or disposed electric or electronic devices must be delivered to appropriate collection centres.
	Keep third persons out of the danger zone

20 V	Battery voltage Direct Current
120 mm	Grass cutting blade width
200 mm	Hedge cutting blade length

Specified Conditions of Use

As required, this device may be converted via simple replacement of the included attachments into grass shears or hedge shears. The hedge shears cuts ornamental shrubs and light undergrowth or bushes. The device is also well-suited for ornamental cuts as, for example, for the care of graves.
They are exclusively designed to trim and cut back ornamental shrubs and brush -wood with a low wood thickness. Any other use is not deemed appropriate and the manufacturer/ supplier is not liable for damages resulting from such use.
The grass shears allow for clean cuts of lawn edges or hardly accessible lawn areas.
Each type of use other than those given in these instructions for use can damage the machine and cause serious risk to the user. Please always observe the safety instructions in order to safeguard your guarantee claim and in the interests of product safety. Due to the machine's design, we are unable to fully exclude all residual risks.
Please note that our devices were not designed for commercial, craft or industrial use.
We do not assume any guarantee if the device is used in commercial, craft or industrial companies as well as for similar activities.

⚠ ATTENTION!
The battery-powered grass and hedge shear can not and should not replace your hedge shears.

Residual dangers

Residual risks always remain even if the grass- and hedge shear is used properly. The grass- and hedge shear`s design can entail the following hazards:

- Contact can be made with the unprotected blade (resulting in cutting injuries)
- Reaching into or grabbing the grass- and hedge shear while it is in operation (resulting in cutting injuries)
- Unanticipated, sudden movement of the plant material being cut (resulting in cutting injuries)
- Ejection or catapulting of damaged cutting teeth
- Ejection or catapulting of the plant material being cut
- Hearing damage if the specified hearing protection is not worn
- Inhalation of cut materials

General safety instructions

⚠ ATTENTION!
Read all instructions contained. Failure to observe the following instructions may result in electric shock, burns and/or severe injury. The term ‘power tool’ used in the following includes both mains-operated tools (with mains supply) and battery operated tools (without mains supply).

KEEP THESE INSTRUCTIONS CAREFULLY!

1) Working area

a) **Keep your working area clean and tidy.** Untidy and poorly lit working areas may lead to accidents.

b) **Do not operate the tool in potentially explosive environments containing combustible fluids, gases or dusts.** Power tools generate sparks that may ignite dusts or fumes.

c) **Keep children and other persons away when you are operating the power tool.** Distractions may result in the operator loosing control over the tool.

2) Electrical safety

a) **The mains plug of the power tool must fit into the mains socket. The plug must not be modified in any way. Do not use adapter plugs/connectors in combination with tools with protective earthing.** Unmodified plugs and fitting sockets reduce the risk of electric shock.

b) **Avoid physical contact with earthed surfaces as pipes, heaters, ovens and refrigerators.** There is an increased risk of electric shock if your body is earthed.

c) **Keep the tool out of the rain.** The penetration of water into a power tool increases the risk of electric shock.

3) Personal safety

a) **Always pay attention to what you do and apply reasonable care when working with a power tool. Do not use the tool when you are tired or under the influence of medication, drugs or alcohol.** When working with power tools even a short moment of inattentiveness may result in severe injury.

b) **Wear personal protection equipment and always wear eye protection (safety goggles).** Wearing personal protection equipment such as a dust mask, nonslip safety shoes, safety helmet or ear protectors (depending on the type and use of the tool) reduces the risk of injury.

c) **Avoid unintentional activation. Ensure that the electrical tool is switched off before you connect it to the power supply and/ or the battery, pick it up, or carry it.** If you have your finger on the switch while carrying the electrical tool or connect the device to the power supply with the switch activated, then this may cause accidents.

d) **Remove adjustment tools or wrenches and the like before you switch the tool on.** A wrench or another tool that is inside or on a turning part of the tool may cause injury.

e) **Avoid abnormal posture. Ensure good posture and keep your balance at all times.** This allows you to better control the power tool in unexpected situations.

f) **Wear suitable clothes. Do not wear loose clothing or jewellery. Keep your hair, clothes and gloves clear of all moving parts.** Loose clothing, jewellery or long hair may get caught in moving parts.

g) **If dust extraction/collection devices are provided make sure that they are connected and used properly.** The use of these devices reduces hazards caused by dust.

4) Use and treatment of the power tool

a) **Do not overtax the power tool. Use the power tool intended for your type of work in each case.** The use of the suitable power tool within the stated range of performance makes working more effective and safer.

b) **Do not use a power tool with a damaged switch.** A power tool that cannot be switched on or off any more is dangerous and must be repaired.

c) **Pull out the plug connector from the socket and/or remove the battery before you change the device settings, change accessories, or put away the device.** These care instructions prevent the device from starting unintentionally.

d) **Store power tools out of the reach of children. Do not allow persons to use the tool if they are not familiar with the tool or these instructions.** Power tools are dangerous if used by inexperienced persons.

e) **Thoroughly maintain your power tool. Check whether moving parts are working properly and are not jamming/ sticking, and whether parts are broken or otherwise damaged in a way that affects the function of the tool.** Have damaged parts repaired before using the tool. Many accidents are the result of poorly maintained power tools.

f) **Keep cutting tools sharp and clean. Well looked after cutting tools with sharp cutting edges, jam les**s often and are easier to guide.

g) **Use power tools, accessories, add-on tools, etc. in accordance with these instructions and in the way prescribed for the respective type of tool. You should also consider the working conditions and the work to be carried out.** The use of power tools for purposes other than those intended for the respective tool may result in dangerous situations.

5) Battery tool use and care

a) **Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.

b) **Use power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.

c) **When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another.** Shorting the battery terminals together may cause burns or a fire.

d) **Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Liquid ejected from the battery may cause irritation or burns.

6) Service

a) **Have your power tool repaired only by qualified specialists and only with original spare parts.** This ensures that the safety of the device is maintained.

Safety instructions for hedge shears:

Keep all parts of your body away from the cutting blades. Do not try to remove cut-off matter with the tool running. Do not try to hold material to be cut off with your hand. Remove cut-off matter that is stuck between the blades only when the tool is switched off! When working with hedge trimmers even a short moment of inattentiveness may result in severe injury.

Carry the hedge shear at the handle with the cutting blades standing still. Always put on the protection cover when transporting or storing the hedge shear. Careful handling reduces the risk of injury through the cutting blades.

Only hold the power tool on the insulated handle surfaces, because the cutting blade can come into contact with concealed

power lines. If the cutting blade comes into contact with an energised line, device parts can become energised and cause an electric shock.

Before starting work, search the hedge for concealed objects, e.g. wire, etc. Pay careful attention to ensure that the cutting tool does not come into contact with wire or other metal objects.

Hold the power tool properly with both hands on the handles when there are two handles. Losing control of the device can result in injury.

The hedge shear is intended for work in which the user is standing on the floor and not on a ladder or other unstable footprint.

It is recommended that before using the hedge shear, the user should ensure that the locking device (s) of any moving parts (e.g. the extended shaft and the swivel element), if present, are in the locked position.

Safety instructions for grass- and hedge shear:

The cutting tool continues to run after the device is switched off.

Turn off power before cleaning.

⚠ ATTENTION
Beware! Keep your fingers away from the cutting area!

Read the instructions carefully. Familiarize yourself with the controls and the correct use of the machine.

Before use, the machine must be visually checked for damaged, missing or incorrectly installed protective devices or covers.

Eye protection, long trousers and sturdy shoes are to be worn for the entire period of use of the machine.

Only switch on the motor when hands and feet are removed from the cutting tools. Beware of injuries from the cutting unit on feet and hands.

Remove all debris from the working area before use and pay attention to such debris while working!

Turn the machine off before transporting and wait until the blade stops moving. Maintenance and cleaning should be performed only when the machine is turned off.

Be aware of third persons in the work area.

Use of the machine must be prevented if people, especially children and house pets are present.

Only use the grass and hedge shear in daylight or sufficiently bright artificial illumination.

After you finish using the clippers and before cleaning them, it is necessary to ensure that the machine cannot be accidentally turned on, such as by unlocking the switch.

Never hold the clippers by the blades, you may run the risk of injury even when the clippers are not moving!

Never touch moving blades in an attempt to remove debris or if the blades are blocked. Always switch off the device.

Switch off the device before performing any work such as maintenance and care.

Keep the machine away from children and store it in a safe place.

When working with the shears, always take a stable standing position, particularly when you are using steps or a ladder.

Always use the protective part designed for the blade when transporting and storing the shears.

Before starting the work, make yourself familiar with the surroundings and possible dangers which you may not hear because of the noise.

Before using the device, clear the work surface of foreign objects and pay attention to foreign objects (e.g. wire fences) while working!

The machine should not be used in case of poor weather

conditions, especially in case of lightning.

Always disconnect the machine from the power supply (i.e. remove the removable battery),
- if the machine is left unattended.
- before removing a blockage
- before checking, cleaning or processing the machine
- after contact with foreign objects
- if the machine begins to vibrate strangely

Always ensure that the ventilation openings are kept free of foreign objects.

Avoid an abnormal posture and always keep your balance in order to have a stable position on slopes at all times. Walk, don‘t run.

⚠ ATTENTION
Do not touch any moving dangerous parts until the machine has been switched off and the moving dangerous parts have come to a complete standstill.

A tingling feeling or numbness in the hands is sign of excessive vibration. Limit the operating time, take sufficiently long work breaks, distribute the work between several people or wear antivibration gloves when using the tool for extended periods.

Additional safety instructions

This device must not be used by children. Children should be supervised so that they do not play with the device. Cleaning and maintenance must not be carried out by children. This product is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge.

Children and teenagers under 16 years of age must never use this device!

Never permit children or persons who are not familiar with the operating instructions to use this device.

Statutory regulations can restrict the age of the operator.

The machine must be checked and serviced regularly. Have the machine repaired only in an authorized workshop.

In the event of an accident or malfunction, switch off the device immediately, remove the battery and make sure that all moving parts are completely stationary. Then check the device.

Only use the spare sparts and accessories recommended by the manufacturer.

Note that the user shall be responsible himself for accidents and hazards that result to other people or their property.

Never use the machine with damaged coverings or protective devices or without the covering or protective devices.

⚠ ATTENTION
The protective equipment on the appliance is strictly prohibited to be disassembled, changed, used in conflict with the designation and it is prohibited to attach any protective equipment of other manufacturers. The ON/OFF switch and safety switch must not be locked.

⚠ WARNING
This power tool generates an electromagnetic field during operation. Under certain circumstances, this field may affect active or passive medical implants. To reduce the risk of serious or fatal injury, we recommend that individuals with medical implants consult your physician and the manufacturer of the medical implant before operating the machine.

Starting up the device

Included in delivery

- Open the packaging and carefully take out the device.
- Remove the packaging, as well as all packaging/and transport safety devices (if present).
- Check that the delivery contents are complete.

- Inspect the device and accessories for transport damage.
- Keep the packaging until the warranty period expires, if possible.

⚠ DANGER

The device and packaging are not toys!

Children may not play with plastic bags, films or small parts! Risk of swallowing and suffocation!

Safety instructions for chargers.

See charger instructions.

Safety instructions for batteries.

See the instructions for the battery.

Inserting/removing the battery

The device can be used with or without a Telescopic push handle (5).

The grass and hedge shear are supplied without batteries or a charger, which must be purchased separately:

The grass and hedge shear can be operated with the Activ Energy 20V or the Activ Energy 20/40V battery pack.

Only use the battery specified in the "Technical data" chapter for the grass and hedge shear, do not operate the grass and hedge shear with batteries from other manufacturers.

1. To insert the battery, push it in the direction of the arrow into the holder and pay attention to an audible click (at the Telescopic push handle (5) or at the grass and hedge shear. Fig. A + G/Pos.10)
2. Remove the battery from the device. In addition the release for battery (Fig. A + G / Pos. 10) press and hold it in position.

Operation

Switching on/off **(on the walking stick (5) or on grass and hedge shear)**

Press down the switch safety lock 3 (Fig. A + B) and press switch 4. After switching on, the safety switch with switch-on lock (3) no longer has to be held.

Release switch (4) to switch off.

⚠ ATTENTION!
The blades will coast for a certain time after switch-off!

Refitting the tool/Changing the shear systems

Put the included blade guard into the blade (11) and use protective gloves to protect yourself from injury (Fig.C).

Push both lateral push buttons concurrently and remove the shearing blades (Fig. D).

Remove any dirt from the gear area.

Lead the cutting blades with the rear holding toe into the housing of the grass shear as shown in Fig. E and lock the click system in place by strongly pushing on the blade base plate.

The position of the eccentric drive does not have to be considered when changing the blades. When the device is switched on, the gear eccentric unit automatically engages into the appropriate relief in the shearing blade.

The device is now ready for operation.

Use and assembly of the push handle

The push handle is used for comfortable working in an upright position.

1. To install the push handle, guide the end piece into the corresponding receptacle behind the handle (Fig. G). Make sure that the push handle engages properly.
2. The push handle may be adjusted in increments of 15° up to an angle of 120° via the swivel joint. Press the locking button (8) and set the desired angle. (Fig. G /Pos. 8). Make sure that the swivel engages again.
3. To change the length of the push handle, undo the quick release(7). Set your desired height and then tighten the lock (7)in a clockwise direction to fasten the handle in place (Fig. G).
4. Slide the wheels onto the axle bracket (Fig.F).

Hints for your work with the tool

- The hedge shear cuts ornamental hedge and light undergrowth or bushes. The device is also well-suited for ornamental cuts as, for example, for the care of graves.
- The grass shear allow for clean cuts of lawn edges or hardly accessible lawn areas.

Spare parts

Please contact our service department if you need accessories or spare parts.

When working with this machine, do not use spare parts other than those recommended by us. Using spare parts not recommend by us can result in serious injuries to persons or damage to the machine.

- Device type
- Item number of the device
- Grass cutting blade Nr. 50807520
- Hedge cutting blade Nr. 50807519

Technical Data

Cordless Grass- and Hedge Shear	**FS-GBS 2**	
Battery voltage	20 V ⎓ (direct current)	
No-load Speed	1100 min-1	
Cutting width *	120 mm	
Cutting thickness **	8 mm	
Cutting length **	200 mm	
Weight without battery	1,8 kg	
Protection	IPX1	
Noise information Measured according to EN 60745-2-15;		
Sound pressure level L_{pA} 1)	79 dB (A) K = 3 dB (A)	
Sound power level L_{WA} 2)	89,5 dB (A) K=2,03dB(A)	
Guaranteed sound power level	92dB(A)	
Vibration information Vibration total values (triaxial vector sum) determined according to EN 60745-2-15, Uncertainty K = 1,5 m/s^2		
Vibration emission value a_h	1,94 m/s^2	
Compatible batteries		
Modell	ACTIV ENERGY 20 V	ACTIV ENERGY 20/40 V
Battery type	Li-Ion	Li-Ion
Max. voltage	20 V ⎓	40 V ⎓
Battery capacity	2000 mAh	2500 mAh
Charging time	ca. 45 min.	ca. 95 min.
Compatible chargers		
Modell	ACTIV ENERGY 4,0 A	
Nominal input power	220-240 V ~ / 50 Hz / 96 W	
Nominal output power	21 V ⎓ / 4,0 A	
Safety class	II (double shielded)	

* Codless Grass Shear ** Cordless Hedge Shear
Subject to technical alterations and amendments.

- The declared vibration emission level represents the main applications of the tool. However if the tool is used for different applications, with different accessories or poorly maintained, the vibration emission may differ. This may significantly increase the exposure level over the total working period.
- The vibration emission level will vary because of the ways in which a power tool can be used and may increase above the level given in this information sheet.
- The vibration emission level may be used to compare one tool with another.
- It may be used for a preliminary assessment of exposure.
- An estimation of the level of exposure to vibration should also take into account the times when the tool is switched off or when it is running but not actually doing the job. This may significantly reduce the exposure level over the total working period.
- Note: You create the privilege against vascular pulsations of the hands in time breaks.
- Try to keep the stress due to vibration as low as possible. For example, measures to reduce vibration stress are wearing gloves when using the tool and limiting the work time. All phase of the operating cycle must be considered in this regard, (for example, times when the power tool is switched off, and times when the power tool is switched
- on but is not running under load).
- Always keep hands and feet away from the cutting tools, particularly when switching on the motor!

⚠ ATTENTION

Without a push handle the device is operated with one hand. Under no circumstances should you bring your free other hand near the running knife.

Maintenance

Clean the blade from any crushed plants and dirt. The blades should be detached at least once a season for the removal of debris. Lubricate the C pinion and the D back of the blade with a light oil. Do not lubricate the motor and other parts. Should the blade become dull after a long period of use, a spare part can be ordered.

Warning! The leading edges of the blades must be oiled to ensure proper lubrication. If the leading edges are not oiled, blade durability may be adversely affected. If the cutting tools have become dull after long use please replace them with original spare parts.

Clean the device using only a brush or cloth. Do not wash down the device with water and do not dip the device into water. Apply protective spray to the blades after each use.

Replace blunt blades. Always put on the blade guard after use. Examine the tool for obvious defects and have it repaired in an authorised service shop if required.

Storage

Always store the tool in a dry, clean place outside the reach of children. Make sure that the place of storage is frost-free

Disposal

If your device should become useless somewhere in the future or you do not need it any longer, do not dispose of the device together with your domestic refuse, but dispose of it in an environmentally friendly manner.

Please dispose of the device itself at an according collecting/recycling point. By doing so, plastic and metal parts can be separated and recycled. Information concerning the disposal of materials and devices are available from your local administration.

Batteries do not belong in household waste. As a consumer, you are legally obliged to return used batteries. Batteries must be removed and disposed of in the proper manner at the end of your device's service life. You can dispose of old batteries at communal collection points or at your dealer/sales outlet.

Electrical devices may not be disposed of in the household waste.

Any damaged or disposed electric or electronic devices must be delivered to appropriate collection centres.

Transport packaging disposal

The packaging protects the machine against damage during transport. Packaging materials are usually chosen based on environment aspects and waste treatment principles and are therefore recyclable. Returning the packaging into material circulation saves raw materials and reduces waste production. Parts of packagings (e.g. foils, styropor®) can be dangerous for children.

Keep parts of the packagings out of reach of children and dispose them as soon as possible.

Batteries and rechargeable batteries must not go in domestic waste!

[As a consumer you are legally obliged to dispose of all batteries, irrespective of whether they contain harmful substances* or not, at a collection point in your community/district or at a retail outlet, so that they can be disposed of in an environmentally friendly manner.

* marked with: Cd = Cadmium, Hg = Mercury, Pb = Lead, Li = Lithium.]

EC Declaration Of Conformity

We, **MOGATEC Moderne Gartentechnik GmbH, Im Grund 14 , 09430 Drebach, GERMANY,** declare under our sole responsibility that the **Cordless Grass- and Hedge Shear FS-GBS 2**, to which this declaration relates correspond to the relevant basic safety and health requirements of Directives
2006/42/EG (EG-Maschinenrichtlinie)
2014/30/EU (EMV-Richtlinie)
2000/14/EG + 2005/88/EG (Geräuschrichtlinie)
2011/65/EU (RoHS-Richtlinie)
For the relevant implementation of the safety and health requirements mentioned in the Directives, the following standards and/or technical specifcation(s) have been respected:
EN 60745-1:2009/A11:2010
EN 60745-2-15:2009/A1:2010
EN 60335-1:2012/A13:2017
EN 50636-2-94:2014
EN 55014-1:2006/A1:2009/A2:2011
EN 55014-1:2017
EN ISO 10517:2019
EN 55014-2: 1997/A1:2001/A2:2008
EN 55014-2:2015
AfPS GS 2019:01 PAK

Conformity assessment procedure according 2000/14/EC amended by 2005/88/EC to Annex V.
Measured sound power level 89,5 dB (A)
Guaranteed sound power level 92 dB (A)

The year of manufacture is printed on the nameplate and can be additionally retrieved via the consecutive serial number.

Drebach, 2021-01-07

Matthias Fiedler
Senior Product Manager
MOGATEC Moderne Gartentechnik GmbH
Maintenance of technical documentation:
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