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## Hahn & Sohn GmbH

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# **User manual**



# **Cordless Grass Shear**

MODEL NUMBER: SERIAL NUMBER:

☐ CEDGS100Li

Model number and serial number should be on nameplate. You should write them down and store in a safe place.



# **NDENTIFICATION** 1. Shear blades 2. Lock-off button 3. Soft handle (Main handle) 4. Switch trigger **5.** Button of battery cartridge 6. Battery Cartridge 7. Shear blades for hedge trimmer 8. Rake blade for loosening soil 9. Shear blades for grass shear 10. Blade cover for grass shear blade 11. Blade cover for hedge trimmer blade

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## **SPECIFICATIONS**

	CEDGS100Li	
Grass shear	100 mm	
Hedge trimmer	70 mm	
rake	75 mm	
	1,000 min-1	
	Ø 8mm	
· ·	200 mm	
e tool)	265 mm x 75 mm x 125 mm	
	D.C. 20V	
accessories)	1.05 kg	
	Hedge trimmer	

- Due to our continuing program of research and development, the specifications herein are subject to change without notice.
- Specifications and battery cartridge may differ from country to country.
- The weight may differ depending on the attachment(s), including the battery cartridge. The lightest and heaviest combinations, according to EPTA-Procedure 01/2014, are shown in the table.

## Applicable battery cartridge and charger

battery cartridge	CEDLi-Ion 2Ah, CEDLi-Ion 4Ah, CEDLi-Ion 6Ah
battery charger	CEDFCH2.4, CEDDCH3.0, CEDFCH3.5

 Some of the battery cartridges and chargers listed above may not be available depending on your region of residence.

WARNING: Only use the battery cartridges and chargers listed above. Use of any other battery cartridges and chargers may cause injury and/or fire.

## **Symbols**

The followings show the symbols which may be used for the equipment. Be sure that you understand their meaning before use.

$\triangle$	Take particular care and attention.		
	Read instruction manual.		
<u>A</u>	Danger; be aware of thrown objects.		
<b>I</b> ∕∱	Keep by standers away.		
* <u>/10001</u> *	Cutting means continues to run after the motor is switched off.		
<b>S</b>	Do not expose to moisture.		
	Wear safety glasses.		
$\triangle$	DANGER - Keep hands away from blade.		



Only for EU countries

Do not dispose of electric equipment or battery pack together with household waste material!

In observance of the European Directives, on Waste Electric and Electronic Equipment and Batteries and Accumulators and Waste Batteries and Accumulators and their implementation in accordance with national laws, electric equipment and batteries and battery pack(s) that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

### Intended use

The tool is intended for cutting lawn edges or sprouts.

### Noise

The typical A-weighted noise level determined according to EN50636-2-94 and EN62841-4-2

Sound pressure level (LpA) : 70 dB(A)

Uncertainty (K): 1.5 dB(A)

The noise level under working may exceed 80 dB (A).

**NOTE:** The declared noise emission value(s) has been measured in accordance with a standard test method and may be used for comparing one tool with another.

**NOTE:** The declared noise emission value(s) may also be used in a preliminary assessment of exposure.

A WARNING: Wear ear protection.

**MARNING:** The noise emission during actual use of the power tool can differ from the declared value(s) depending on the ways in which the tool is used especially what kind of workpiece is processed.

ARNING: Be sure to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

### **Vibration**

The vibration total value (tri-axial vector sum) determined according to EN50636-2-94 and EN62841-4-2 Vibration emission (a): 2 .5 m/sor less

Uncertainty (K): 1.5 m/s2

**NOTE:** The declared vibration total value(s) has been measured in accordance with a standard test method and may be used for comparing one tool with another.

**NOTE:** The declared vibration total value(s) may also be used in a preliminary assessment of exposure.

**MARNING:** The vibration emission during actual use of the power tool can differ from the declared value(s) depending on the ways in which the tool is used especially what kind of workpiece is processed.

**EXARNING:** Be sure to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

## **SAFETY WARNINGS**

## General power tool safety warnings

**MARNING:** Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

# Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

### Work area safety

 Keep work area clean and well lit. Cluttered or dark areas invite accidents.

- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- Keep children and bystanders away while operating a

Electrical safety. Distractions can cause you to lose

- Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
  - Do not expose power tools to rain or wet conditions. The risk of electric shock.
- 4. Do not abuse the cord. Never use the cord for Water entering a power tool will increase carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges
  - or moving parts. Damaged or entangled cords increase the risk of electric shock.
- 5. When operating a power tool outdoors, use an
  - extension cord suitable for outdoor use.

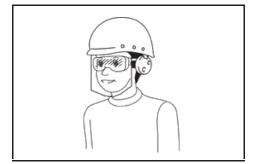
    a so of suitable for outdoor use reduces the risk of electric shock.
- If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.
- Power tools can produce electromagnetic fields (EMF) that are not harmful to the user. However, users of pacemakers and other similar medical devices should contact the maker of their device and/or doctor for advice before operating this power tool.

### Personal safety

3.

- Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- Use personal protective equipment Always wear eye protection. Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.
- 3. Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- Dress properly. Do not wear loose clothing or jewellery. Keep your hair and clothing away trong hair partellery or long hair can be caught in moving parts.

- If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.
- Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles. A careless action can cause severe injury within a fraction of a second.
- 9. Always wear protective goggles to protect your eyes from injury when using power tools. The goggles must comply with ANSI Z87.1 in the USA, EN 166 in Europe, or AS/NZS 1336 in Australia/New Zealand. In Australia/New Zealand, it is legally required to wear a face shield to protect your face, too.



It is an employer's responsibility to enforce the use of appropriate safety protective equipments by the tool operators and by other persons in the immediate working area.

### Power tool use and care

- Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- 4. Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- Maintain power tools and accessories. Check for misalignment or binding of moving parts, break- age of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before
  - **use.** Many accidents are caused by poorly maintained power tools.
- Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

- 7. Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.
- Keep handles and grasping surfaces dry, clean and free from oil and grease. Slippery handles and grasping surfaces do not allow for safe handling
- 9. and control of the tool in unexpected situations. When using the tool, do not wear cloth work gloves which may be entangled. The entanglement of cloth work gloves in the moving Batterarks ខាងខេត្តខាង ខែត្រខាន់ ខាង li
- 1. Recharge only with the charger specified by the manufacturer.

  one type of battery pack hards a risk of hier when used with another battery pack.
- Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
- 3. 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.
- Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact acci- dentally occurs, flush with water. If liquid con- tacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.
- 5. **Denotified an action and the distribution and t**
- 6. Do not expose a battery pack or tool to fire or excessive temperature.
  perature above 130 °C may Exages (കുട്ടിൽ വ
- 7. Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions. Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.

### Service

- Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.
  - Never service damaged battery packs.

    Service
    of battery packs should only be performed by the
- 3. Follows the rectant horized nearing and delianging accessories.

## Cordless Grass Shear and scarifier Safety Warnings

General instructions

- To ensure correct operation, user has to read this instruction manual to make himself familiar with the handling of the equipment. Users insufficiently informed will risk danger to themselves as well as others due to improper handling.
- Never allow children, persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge or people unfamiliar with these instructions to use the machine, local regulations may restrict the age of the operator.
- 3. Use the equipment with the utmost care and attention.
- Operate the equipment only if you are in good physical condition. Perform all work calmly and carefully. Use common sense and keep in mind that the operator or user is responsible for accidents or hazards occurring to other people or their property.
- Never operate the machine while people, espe-5. cially children, or pets are nearby.
- 6. The motor is to be switched off immediately in case that the equipment shows any problem or abnormal sign.
- Switch off and remove the battery cartridge
   when resting and when leaving the equipment unattended, and place it in a safe location to prevent danger to others or damage to the equipment.
- Avoid using the machine in bad weather conditions especially when there is a risk of lightning.

### Personal protective equipment

 Wear eye protection and stout shoes at all times while operating the machine.
 Always wear substantial footwear and long trousers while operating the machine.

### Starting up the equipment

- Make sure that there are no children or other people nearby, also pay attention to any animals in the working vicinity. Otherwise stop using the equipment.
- Before use always check that the equipment is safe for operation. Check the security of the cutting tool and the guard and the switch trigger/lever for easy and proper action. Check for clean and dry handles and test the function of the start/stop.
- 3. Check damaged parts before further use of the equipment. A guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other condition that may affect its operation. A guard or other part that is damaged should be prop- erly repaired or replaced by our authorized service center unless indicated elsewhere in this manual.
- Switch on the motor only when the hands and 4. feet are away from the cutting tool.
- 5. Before starting make sure that the cutting tool has no contact with any objects.

### Method of operation

- Only use the equipment in good light and visibility. During the winter season beware of slippery or wet areas, ice and snow (risk of slipping). Always ensure a safe footing on slopes and be sure to walk and never run.
- 2. Take care against injury to feet and hands from the cutting tool.
- 3. Never stand on a ladder and run the equipment.
- Never climb up into trees to perform cutting operation with the equipment.
- Never work on unstable surfaces.
- Remove sand, stones, nails etc. found within the working range. Foreign particles may damage the cutting tool and can cause dangerous kick-backs.
- Should the cutting tool hit stones or other hard objects, immediately switch off the motor and inspect the cutting tool.

  Inspect the cutting tool at short regular inter-
- vals for damage (detection of hairline cracks by means of tapping-noise test).
- Before commencing cutting, the cutting tool g. must have reached full working speed.
- The cutting tool has to be equipped with the appropriate guard. Never run the equipment with damaged guards or without guards in place!

  All protective installations and guards supplied with the equipment must be used during
- Operation. Always remove the battery cartridge from the equipment:
  - whenever leaving the equipment
  - unattended;

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- before clearing a blockage;
- before checking, cleaning or working on the equipment;
- after striking a foreign object;
- whenever the equipment starts vibrating abnormally.
- Always ensure that the ventilation openings are kept clear of debris.
- Cutting means continues to run after the motor is switched off.
- 15. If the blades stop moving due to the stuck of foreign objects between the blades during operation, switch off the tool and remove the battery cartridge, and then remove the foreign objects using tools such as pliers. Removing the foreign objects by hand may cause an injury for the reason that the blades may move in reaction to removing the foreign objects.

### **Cutting Tools**

Employ only the correct cutting tool for the job in hand.

#### Maintenance instructions

- The condition of the equipment, in particular of the cutting tool of the protective devices must be checked before commencing work. Turn off
- the motor and remove the battery cartridge before carrying out maintenance, replacing cutting tools or cleaning the equipment or cutting tool.
- When not in use, store the equipment indoors in dry and high or locked-up place - out of the reach of children. Clean and maintain before storage.

### SAVE THESE INSTRUCTIONS.

with product (gained from repeated use) replace strict adherence to safety rules for the subject product. MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

# **Cordless Hedge Trimmer Safety Warnings**

- Keep all parts of the body away from the blade. Do not remove cut material or hold material to be cut when blades are moving. Blades continue to move after the switch is turned off. A moment of inattention while operating the hedge trimmer may result in serious personal injury.
- Carry the hedge trimmer by the handle with the blade stopped and taking care not to operate any power switch. Proper carrying of the hedge trimmer will decrease the risk of inadvertent starting and resultant personal injury from the blades.
- When transporting or storing the hedge trimmer, always fit the blade cover. Proper handling of the hedge trimmer will decrease the risk of personal injury from the blades.
- 4. When clearing jammed material or servicing the unit, make sure all power switches are off and the battery pack is removed or disconnected. யாலாவில் கேர்வில் மாலாவில் மாலா
- 5. surfaces only, because the blade may contact

hidden wiring. Blades contacting a "live" wire may make exposed metal parts of the hedge trimmer "live" and could give the operator an electric shock

- Keep all power cords and cables away from cutting area. Power cords or cables may be hidden in hedges or bushes and can be accidentally cut by the blade.
- Do not use the hedge trimmer in bad weather conditions, especially when there is a risk of lightning. This decreases the risk of being struck by lightning.

## **Additional Safety Instructions**

### Preparation

- Check the hedges and bushes for foreign objects, such as wire fences or hidden wiring before operating the tool.
- The tool must not be used by children or young persons under 18 years of age. Young persons over 16 years of age may be exempted from this restriction if they are undergoing training under the supervision of an expert.
- First-time users should have an experienced user show them how to use the tool.
- 4. Use the tool only if you are in good physical ˈˈdowdit/emtired, your attention will be reduced. Be especially careful at the end of a working day. Perform all work calmly and carefully. The user is responsible for all damages to third parties.

- Never use the tool when under the influence of alcohol, drugs or medication.
- Work gloves of stout leather are part of the basic equipment of the tool and must always be worn when working with it. Also wear sturdy shoes with anti-skid soles.
- Before starting work check to make sure that the tool is in good and safe working order. Ensure guards are fitted properly. The tool must not be used unless fully assembled.

### Operation

- 1. Hold the tool firmly when using the tool.
- The tool is intended to be used by the operator at ground level. Do not use the tool on ladders or any other unstable support.
- Do not simultaneously wear multiple belt harnesses and/or shoulder harnesses when operating the tool.
- DANGER Keep hands away from blade.
   Contact with blade will result in serious personal injury. Do not use the tool in the rain or in wet or very
  - damp conditions. The electric motor is not waterproof.
- Make sure you have a secure footing before starting operation.
- 7. Do not operate the tool at no-load unnecessarily.
- Immediately switch off the tool and remove the battery cartridge if the shear blades should come into contact with a fence or other hard object. Check the blades for damage, and if damaged, replace the blades immediately.
- Before checking the shear blades, taking care of faults, or removing material caught in the shear blades, always switch off the tool and remove the battery cartridge.
- Never point the shear blades to yourself or 10. others.
- If the blades stop moving due to the stuck of 11. foreign objects between the blades during operation, switch off the tool and remove the battery cartridge, and then remove the foreign

**objects using tools such as pliers.** Removing the foreign objects by hand may cause an injury for the reason that the blades may move in reaction to removing the foreign objects.

 Avoid dangerous environment. Don't use the tool in damp or wet locations or expose it to rain. Water entering the tool will increase the risk of electric shock.

### Maintenance and storage

- Switch off the tool and remove the battery cartridge before doing any maintenance work.
- When moving the tool to another location, including during work, always remove the battery cartridge and put the blade cover on the shear blades. Never carry or transport the tool with the blades running. Never grasp the blades with your hands.
- Clean the tool and especially the shear blades after use, and before putting the tool into storage for extended periods. Lightly oil the blades and put on the blade cover.
- 4. Store the tool with the blade cover on, in a dry room. Keep it out of reach of children. Never store the tool outdoors.

- 5. Do not dispose of the battery(ies) in a fire. The cell may explode. Check with local codes for possible special disposal instructions.
- Do not open or mutilate the battery(ies). Released electrolyte is corrosive and may cause damage to the eyes or skin. It may be toxic if swallowed.
- Do not charge battery in rain, or in wet locations.

### SAVE THESE INSTRUCTIONS.

MARNING: DO NOT let comfort or familiarity with product (gained from repeated use) replace strict adherence to safety rules for the subject product. MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

## Important safety instructions for battery cartridge

- 1. Before using battery cartridge, read all instructions and cautionary markings on (1) battery charger, (2) battery, and (3) product using battery.
- Do not disassemble or tamper with the battery cartridge. It may result in a fire, excessive heat, or explosion.
- If operating time has become excessively 3. shorter, stop operating immediately. It may result in a risk of overheating, possible burns and even an explosion.
- If electrolyte gets into your eyes, rinse them out with clear water and seek medical attention right away. It may result in loss of your eyesight. Do not short the battery cartridge:
  - Do not touch the terminals with any con
    - ductive material. Avoid storing battery cartridge in a container with other metal objects such as nails, coins, etc.
    - (3) Do not expose battery cartridge to water or rain.

A battery short can cause a large current flow, overheating, possible burns and even a breakdown. Do not store and use the tool and

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- tridge in locations where the temperature may reach or exceed 50 °C (122 °F). Do not incinerate
- the battery cartridge even if it 7. is severely damaged or is completely worn out. The battery cartridge can explode in a fire.
- 8. Do not nail, cut, crush, throw, drop the battery cartridge, or hit against a hard object to the battery cartridge. Such conduct may result in a fire, excessive heat, or explosion.
- Do not use a damaged battery. 9
- The contained lithium-ion batteries are subject to 10. the Dangerous Goods Legislation requirements.

For commercial transports e.g. by third parties, forwarding agents, special requirement on packaging and labeling must be observed. For preparation of the item being shipped, consulting abbefore adjusting or checking function on the tool. expert for hazardous material is required. Please also observe possibly more detailed national regulations. Tape or mask off open contacts and pack up the battery in such a manner that it cannot move around in the packaging.

- When disposing the battery cartridge, remove it from the tool and dispose of it in a safe place. Follow your local regulations relating to disposal of battery.
- Use the batteries only with the products specified by Cedrus. Installing the batteries to non-compliant products may result in a fire, excessive heat, explosion, or leak of electrolyte.
- If the tool is not used for a long period of time, the battery must be removed from the tool.
- During and after use, the battery cartridge may take on heat which can cause burns or low temperature burns. Pay attention to the handling of hot battery cartridges.
- Do not touch the terminal of the tool immediately after use as it may get hot enough to cause hurns
- Do not allow chips, dust, or soil stuck into the 16. terminals, holes, and grooves of the battery cartridge. It may result in poor performance or breakdown of the tool or battery cartridge.
- Unless the tool supports the use near high-voltage electrical power lines, do not use the battery cartridge near high-voltage electrical power lines. It may result in a malfunction or breakdown of the tool or battery cartridge.
- Keep the battery away from children. 18.

### SAVE THESE INSTRUCTIONS.

A CAUTION: Only use genuine Cedrus batteries. Use of non-genuine Cedrus batteries, or batteries that have been altered, may result in the battery bursting causing fires, personal injury and damage. It will also void the Cedrus warranty for the Cedrus tool and charger.

## Tips for maintaining maximum battery life

- Charge the battery cartridge before completely dis- charged. Always stop tool operation and charge the battery cartridge when you notice less tool power.
- Never recharge a fully charged battery cartridge. Overcharging shortens the battery
- Charge the battery cartridge with room 3. tempera- ture at 5 °C - 45 °C . Let a hot battery cartridge cool down before charging it. When not using the battery cartridge, remove
- it from the tool or the charger.
- Charge the battery cartridge if you do not use it for a long period (more than six months).

## **FUNCTIONAL DESCRIPTION**

A CAUTION: Always be sure that the tool is switched off and the battery cartridge is removed

trimmer

This tool can be used as a cordless hedge trimmer by installing the shear blades for hedge trimmer.

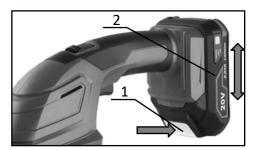
## scarifier

This tool can also be used as a cordless scarifier by installing the rake blade for loosening soil.

## mstaning or removing battery cartridge

A CAUTION: Always switch off the tool before installing or removing of the battery cartridge.

A CAUTION: Hold the tool and the battery cartridge firmly when installing or removing battery cartridge. Failure to hold the tool and the battery cartridge firmly may cause them to slip off your hands and result in damage to the tool and battery cartridge and a personal injury.



### ▶ 1. Button 2. Battery cartridge

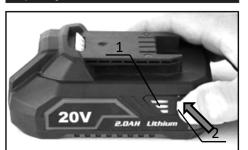
To remove the battery cartridge, slide it from the tool while sliding the button on the front of the cartridge.

To install the battery cartridge, align the tongue on the battery cartridge with the groove in the housing and slip it into place. Insert it all the way until it locks in place with a little click.

ACAUTION: Always install the battery cartridge fully. If not, it may accidentally fall out of the tool, causing injury to you or someone around you.

A CAUTION: Do not install the battery cartridge forcibly. If the cartridge does not slide in easily, it is not being inserted correctly.

# Indicating the remaining battery capacity



### ▶ 1. Indicator lamps 2. Check button

Press the check button on the battery cartridge to indicate the remaining battery capacity. The indicator lamps light off immediately when release the check button. Below for detail remaining capacity information.

Indicator lamps		Remaining
Lighted	Off	capacity
GREEN ORANGE RED		75% to 100%
ORANGE RED		25% to 50%
RED		10% to 25%

**NOTE:** Depending on the conditions of use and the ambient temperature, the indication may differ slightly from the actual capacity.

## Tool / battery protection system

The tool is equipped with a tool/battery protection system. This system automatically cuts off power to the motor to extend tool and battery life. The tool will automatically stop during operation if the tool or battery is placed under one of the following conditions:

### Overload protection

When the battery is operated in a manner that causes it to draw an abnormally high current, the tool automati- cally stops. In this situation, turn the tool off and stop the application that caused the tool to become overloaded. Then turn the tool on to restart.

## Overheat protection

When the battery is overheated, the tool stops automatically. In this case, let the tool and battery cool before turning the tool on again.

## Overdischarge protection

When the battery capacity is not enough, the tool stops automatically. In this case, remove the battery from the tool and charge the battery.

### Switch action

WARNING: Before installing the battery

artridge into the tool, always check to see that the switch trigger actuates properly and returns to the "OFF" position when released.

WARNING: For your safety, this tool is equipped with the lock-off button which prevents the tool from unintended starting. Never use the tool if it starts when you pull the switch trigger without pressing the lock-off button. Ask your local Cedrus Service Center for repairs.

MARNING: Never disable the lock function or tape down the lock-off button.

NOTICE: Do not pull the switch trigger forcibly without pressing the lock-off button. The switch may break.



▶ 1. Switch trigger 2. Lock-off button

To prevent the switch trigger from being accidentally pulled, a lock-off button is provided.

To start the tool, pull the lock-off button forward and depress the switch trigger.

Release the switch trigger to stop and the lock-off button will come back to the original position by itself.

## **ASSEMBLY**

ACAUTION: Always be sure that the tool is switched off and the battery cartridge is removed before carrying out any work on the tool.

ACAUTION: When replacing the shear blades, always wear gloves and attach the blade cover so that your hands and face do not directly contact the blades.

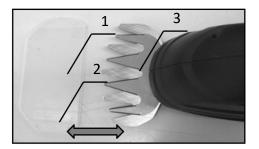
NOTICE: When replacing the shear blades, do not wipe off grease from the gear and crank.

### cover for grass shear

ACAUTION: Be careful not to touch the blades when installing or removing the blade cover.

To remove the blade cover, pull it slightly, and then slide it sideways.

To install the blade cover, perform the steps in reverse. When installing make sure that the side having a convex head of the blade cover upward.



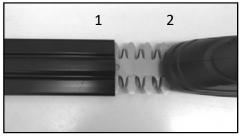
- ▶ 1. Blade cover for grass shear
  - 2. convex head of the blade cover
  - 3. Shear blade for grass shear

# Installing or removing the blade cover for hedge trimmer

A CAUTION: Be careful not to touch the blades when installing or removing the blade cover.

To remove the blade cover, pull it slightly, and then slide it sideways.

To install the blade cover, perform the steps in reverse. When installing make sure that the side having a convex head of the blade cover upward.



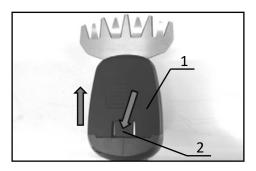
- ▶ 1. Blade cover for hedge trimmer
  - 2. Shear blade for hedge trimmer

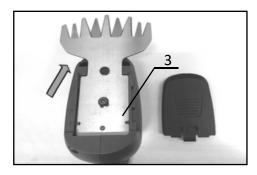
# Installing or removing the shear blades for grass shear

NOTICE: If the parts other than the shear blades such as the crank are worn out, ask Cedrus Authorized Service Centers for parts replacement or repairs.

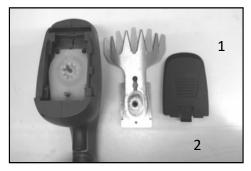
## Removing the shear blades

1. Depress down the button of the undercover and push it forward a bit hard to open and remove the undercover.





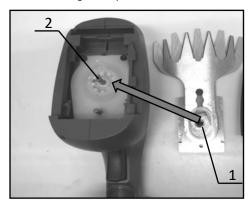
- ▶ 1. Undercover 2. Button of the Undercover 3. Shear blades
- 2. Pull the shear blades upward to remove it .



▶ 1. Undercover 2. Shear blades

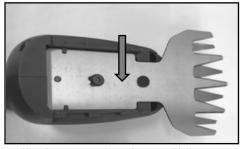
## Installing the shear blades

1. Attach the Shear blades so that hole of the shear blades align to the pin

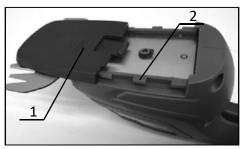


▶ 1. Hole of the shear blades 2. Pin

2. Depress down the shear blades a little bit hard as far as it can go. Make sure that it is firmly fixed in place.



3. Align the tongue on the undercover with the groove in the housing and slip it into place. Insert it a little bit hard until it locks in place with a little click.



- ▶ 1. Undercover 2. Groove in the housing
- **4.** Remove the blade cover, and then turn on the tool to check that it works properly.

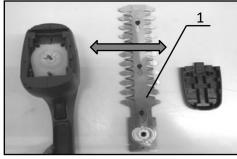
A CAUTION: Never use the tool without installing the undercover.

### NOTICE: If the shear blades do not operate prop-

erly, the blades are not engaging the crank properly. Remove the blades and install them again.

# blades for hedge trimmer

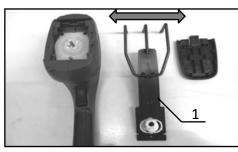
To Install or the shear blades for hedge trimmer. follow the Installing /removing procedure of shear blades for grass shear.



1. Shear blade for hedge trimmer

Installing or removing the rake blade for loosening soil

To Install or remove the rake blade for loosening soil, follow the Installing /removing procedure of shear blades for grass shear or shear blade for hedge trimmer.



▶ 1. Rake blade for loosening soil

## **OPERATION**

MARNING: Before shearing, clear away sticks and stones from the shearing area. Furthermore, clear away any weeds from the shearing area in advance.

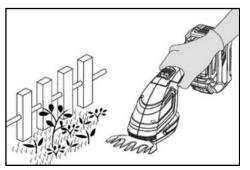


## **AWARNING:** Keep hands away from blades.

A CAUTION: Avoid operating the tool in very hot weather as much as practicable. When operating the tool, be careful of your physical condition.

### Snearing (for grass snear)

1.Hold the tool firmly with one hand on the grip so that the bottom of the tool rests on the ground. Gently move the tool forward.



2.When trimming around curbs, fences or trees, move the tool along them. Be careful that the blades do not come into contact with them

**3.**When trimming sprouts or foliage of a small tree, trim little by little.

**4.**Trim large branches to the desired height using branch cutters before using this tool.

**NOTICE:** Do not use the tool in a way that causes the motor to stop or to rotate extremely slowly.

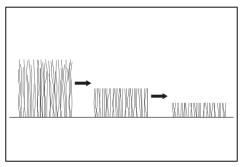
NOTICE: Do not attempt to cut thick branches.

**NOTICE:** Do not allow the shear blades to contact the ground during operation. The blades will be dulled, causing poor performance.

NOTICE: Do not trim the wet grass or foliage of small trees.

## **Cutting long lawn**

Do not try to cut long grass all at once. Instead, cut the lawn in steps. Leave a day or two between cuts until the lawn becomes evenly short.



**NOTE:** Cutting long grass to a short length all at once may cause the grass to die.

## **Trimming (for hedge trimmer)**

ACAUTION: Be careful not to accidentally contact a metal fence or other hard objects while trimming. The blades may break and cause an injury.

MUTION: Be careful not to allow the shear blades to contact the ground. The tool may recoil and cause an injury.

ACAUTION: Overreaching with a hedge trimmer, particularly from a ladder, is extremely dangerous. Do not work while standing on anything wobbly or infirm.

▲ CAUTION: Wear safety glasses when performing operation to keep dust out of your eyes.

to 8 cm lower than the cutting height using branch

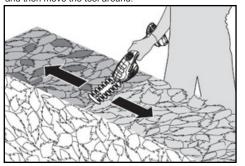
cutters before using the tool.

NOTICE: Do not attempt to cut branches thicker than 8 mm in diameter with the tool. Cut branches

NOTICE: Do not cut down dead trees or similar hard objects. Doing so may damage the tool.

NOTICE: Do not trim the grass or weeds while using the shear blades. The blades may become tangled in the grass or weeds.

 Hold the tool firmly with one hand on the grip, pull the switch trigger while push forward the lock-off button, and then move the tool around.



- **2.**For basic operation, tilt the blades toward the trimming direction and move it calmly and slowly at the speed rate of 3 to 4 seconds per meter.
- **3.**To tie a string at the desired height and to trim along it help you to cut a hedge top evenly.
- **4.**When trimming to make a round shape (trimming box- wood or rhododendron, etc.), trim from the root to the top for a beautiful finish.

## Loosening soil (for scarifier)

Hold the tool firmly with one hand on the grip so that the bottom of the tool rests on the ground. Gently move the tool forward and downward to loosen the soil.

▲ CAUTION: Wear safety glasses when performing operation to keep sand out of your eyes.

NOTICE: Do not use the tool in a way that causes the motor to stop or to rotate extremely slowly.

WAUNTENANCE

ACAUTION: Always be sure that the tool is switched off and the battery cartridge is removed before attempting to perform inspection or maintenance.

To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by Cedrus Authorized or Factory Service Centers, always using Cedrus replacement parts.

## Cleaning the tool

Clean the tool by wiping off dust with a dry cloth or one dipped in soapy water and wrung out.

NOTICE: Never use gasoline, benzine, thinner, alcohol or the like. Discoloration, deformation or cracks may result.

### Blade maintenance

Before the operation or once per hour during operation, apply low viscosity oil (machine oil, or spray-type lubricating oil) to the blades.

After operation, remove dust from both sides of the blades with a wired brush, wipe it off with a cloth and then apply low-viscos- ity oil (machine oil, or spraytype lubricating oil) to the blades.

**NOTICE:** Do not wash the blades in waterg so may cause rust or damage to the tool.

**NOTICE:** Dirt and corrosion cause excessive blade friction and shorten the operating time per battery charge.

## OPTIONAL ACCESSORIES

A CAUTION: These accessories or attachments are recommended for use with your Cedrus tool specified in this manual. The use of any other accessories or attachments might present a risk of injury to persons. Only use accessory or attachment for its stated purpose.

If you need any assistance for more details regarding these accessories, ask your local Cedrus Service Center.

- Shear blade assembly (for grass shear use)
- Shear blade cover (for grass shear use)
- Shear blade assembly (for hedge trimmer use)
- Shear blade cover (for hedge trimmer use)
- Shear blade assembly (for loosen soil use)