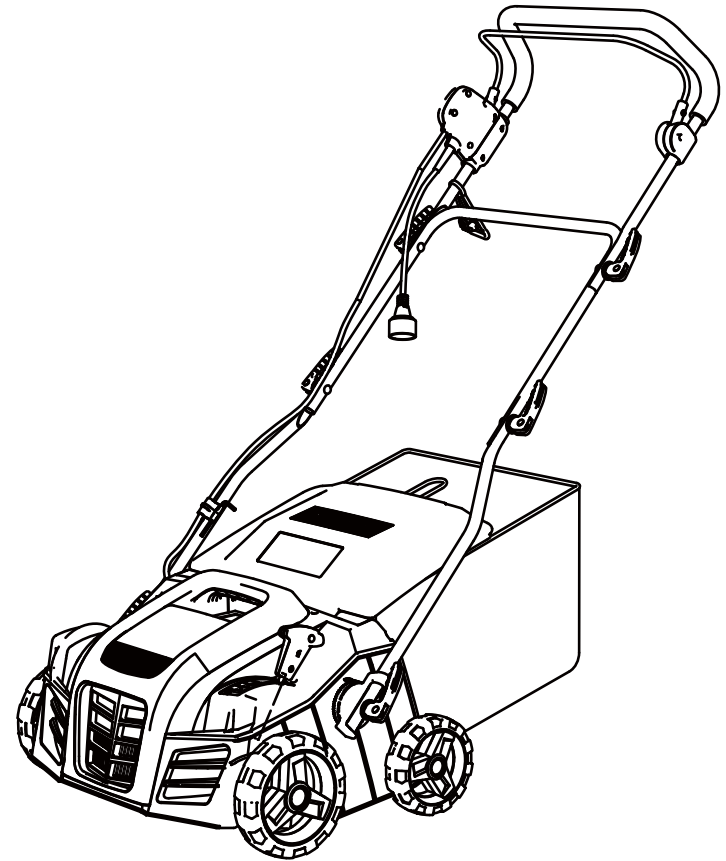
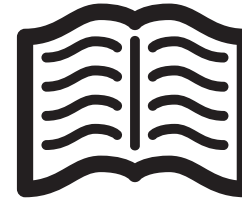


# User Manual

## Electric Dethatcher and Scarifier





## Before You Start

- ⚠ Please read all instructions carefully.
- ⚠ Retain instructions for future reference.
- ⚠ Separate and count all parts and hardware.
- ⚠ Read through each step carefully and follow the proper order.
- ⚠ We recommend that, where possible, all items are assembled near to the area in which they will be placed in use, to avoid moving the product unnecessarily once assembled.
- ⚠ Always place the product on a flat, steady and stable surface.
- ⚠ Keep all small parts and packaging materials for this product away from babies and children as they potentially pose a serious choking hazard.

## SAFETY INSTRUCTIONS

### WARNING

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

Read and understand the operating instructions before using the appliance. Familiarise with the control elements and how to use the appliance properly.

Do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Local regulations may stipulate the minimum age of the user.

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.

### WARNING

The device must never be operated when persons, especially children, or pets are nearby.

### DANGER!

**Warning:** This power tool generates an electro-magnetic 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.

#### **Wear personal protective equipment.**

- Always wear goggles when using the machine.
- Wear ear protectors!
- Wear solid shoes and long trousers.
- Do not wear loose clothing or jewels. Hair, clothing and gloves must be out of reach of moving parts as they could get caught by the rotating parts. Do not use the appliance when barefooted or in open sandals.
- Use protective gloves when handling the blades.

### WARNING

#### **Risk of injury**

**Rotating blades may lead to serious injuries by cutting or amputating parts of the body.**

- Be careful to avoid injury by the cutting tools. Careful appliance handling reduces the risk of injury by knife.
- Do not touch any dangerous moving parts before the machine has been disconnected from the power supply and the moving parts have come to a complete standstill. Stop the device and disconnect it from the power supply

### CAUTION

**Damage to health arising from vibrations to hand and arms if the device is used for a long time or if the device is not guided and evaluated properly.**

Vibration damping systems are no guaranteed protection against white finger disease or carpal tunnel syndrome. Therefore, it is necessary to carefully check the state of your fingers and wrist if you have regularly used the appliance for a long time. If any symptom of the diseases above appears, seek medical advice immediately. To reduce the white finger disease risk, keep your hands warm and take regular breaks during your work.

### CAUTION

#### **Hearing damage**

**A longer stay in the immediate vicinity of the running unit may cause hearing damage. Wear ear protectors!**

When working with the device, a certain level of noise cannot be avoided. Noisy work should be scheduled for hours, during which it is allowed by statute or other local regulations. Adhere to any applicable rest times and limit your working time to the necessary minimum time. For your personal protection and the protection of people nearby, suitable hearing protection must be worn.

Despite the observance of the operating instructions there still may be some hidden residual risks. Carefully check the terrain where the appliance is going to be used and remove all objects that could get caught or thrown off by the appliance such as stones, branches, wires, animals, etc.

Check all screw and plug-in connections and protective equipment if firm and tightened properly and whether all moving parts are running smooth whenever the appliance is to be put into operation.

Replace worn or damaged blades and bolts in sets to preserve balance;

Damaged or illegible security stickers must be replaced.

Do not use the appliance in bad weather, especially when there is a risk of storm.

Do not use the appliance if you are tired, ill, under influence of drugs, alcohol drinks or medicaments.

Provide adequate lightning or good lighting conditions when working with the machine. Poor lighting/light conditions represent a high safety risk.

Avoid operating the equipment in wet grass, where feasible;

Do not overreach. Keep proper footing and balance at all times. Provide a safe posture, especially on slopes.

Walk! Never run!

Always operate rotary machines with wheels at a right angle to the slope and not up and down.

Do not work on too steep slopes. Be particularly careful when changing travelling direction on slopes.



## WARRANTY NOTICE

The following conditions are not covered by the warranty.

1. Damage and defects caused by failure to follow the instructions.
2. Faults caused by repairs and modifications other than our company.
3. Not purchased from our company.
4. Natural disasters such as fires, earthquakes, and floods, abnormal voltages, malfunctions and damage caused by non-designated power supplies.

Check the collection bag at regular intervals for any wear and aging.

After every work stint, clean the machine thoroughly to remove all dust and debris, and repair or replace any faulty parts.

Keep the device, in particular the air vents, clean at all times. Never spray water on the device body!

Never clean the machine and its components with solvents, flammable or toxic liquids. Use only a damp cloth making.

Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition;

Only a regularly maintained and treated appliance can serve as a satisfactory aid. Insufficient maintenance and care can lead to unforeseen accidents and injuries.

Repairs and works specified in these instructions may only be performed by qualified authorised staff.

Use only original accessories and original spare parts. Using other spare parts can result in accidents/injuries of the user. The manufacturer will not be liable for any such damage.

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

## STORAGE

The appliance must be stored in a dry place and protected from frost.

Lock the device in a proper place to protect it from unauthorised use.

Store idle power tools out of the reach of children.

Let the engine cool down, before you store the device in a closed room.

## 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.

## FAILURE REMOVAL

Failures	Causes	Removal
Engine does not start	No power supply.	Check the socket outlet, cable, line and plug, and carry out repairs by a qualified electrician if necessary
	Roller blocked	Check roller
Roller does not rotate	Toothed belt defective	Visit a specialist workshop
Engine output drops	Working depth too large	Adjust to a smaller working depth
	Lawn too high for scarifying	Mow the lawn
Work result unsatisfactory	Working depth too large	Adjust to a smaller working depth
	blades are worn out	Visit a specialist workshop
unbalanced run, device vibrates	Blade is damaged	Visit a specialist workshop

Pay maximum attention when turning around and pulling the appliance to you.

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.

Start the engine carefully according to the operating instructions. Ensure sufficient distance between the feet and the tines.

Keep connection and extension cables away from the tines.

When starting the engine, do not tilt the device unless it needs to be lifted for the operation. In this case, tilt the device only as far as absolutely necessary and lift only the side facing away from the operator. Always make sure that both hands are in operating position before the machine is returned to the ground.

Never put your hands or feet on or under rotating parts. Keep a distance from the ejection opening at all times.

The appliance must not be used if damaged or safety equipment is defective. Replace any worn-out and damaged parts.

Never remove the collection bag when the machine is being operated.

Never touch under the housing body when the engine is running.

Keep the power source free of debris and other build-ups to prevent damaging it or a possible fire.

Stop the device and disconnect it from the power supply. Wait until all rotating parts have stopped and the appliance has cooled down.

- whenever you leave the lawnmower
- before removing blockages
- before checking, cleaning or working on the device
- after contact with a foreign object, to check the device for damage
- before freeing the device from accumulated material
- before tilting or transporting the device

Disconnect the machine from the power source and take the following steps before restarting and operating the machine:

- check for damage
- replace or repair damaged parts
- check for loose parts and tighten them

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

## MAINS CONNECTION

### ⚠ DANGER!

**Operation is only allowed with a safety switch against stray current (RCD max. stray current of 30mA).**

Before use check machine, cable, and plug for any damages or material fatigue. Repairs should only be carried out by authorised Service Agents.

Insert the plug of the electrical cable in a socket of suitable shape, voltage and frequency complying with current regulations.

Keep the connection and extension cables away from dangerous moving parts to avoid damaging them.

Only use splash proof extension cables approved for outdoor purposes. The stranded wire cross-sectional area of the extension cable must be at least 1.5 mm<sup>2</sup> for cables up to 25 m and 2.5 mm<sup>2</sup> for cables above 25 m.

Only plug-in when machine is switched off.

The device is only intended for use on premises that have a continuous current carrying capacity of  $\geq 100$  A per

phase and are supplied from a electrical grid with a rated voltage of 400/230V.

If necessary, please consult your electricity company to ensure that the continuous current carrying capacity of the mains at the connection point is sufficient for connecting the device.

### ⚠ WARNING

**WARNING! Electric shock! There is a risk of an injury caused by electric shock!**

Do not use the device if the cable or plug is damaged or worn.

If the cable is damaged during use, it must be disconnected from the mains supply immediately. Do not touch the cable until it has been disconnected from the mains. Do not connect a damaged cable to the power supply and do not touch a damaged cable before disconnecting it from the power supply, as damaged cables can lead to contact with active parts.



## SPECIFIED CONDITIONS OF USE

The scarifier & raker may only be used for scarifying and removing moss or for raking leaves, moss or weeds from lawns in residential and hobby gardens – depending on the attached roller.

The device may not be used in commercial applications.

### ⚠ WARNING

#### Risk of injury

**Rotating blades may lead to serious injuries by cutting or amputating parts of the body.**

- Be careful to avoid injury by the cutting tools. Careful appliance handling reduces the risk of injury by knife.
- Do not touch any dangerous moving parts before the machine has been disconnected from the power supply and the moving parts have come to a complete standstill.
- All protection covers and safety devices must be correctly attached to operate the device.
- Never use the machine with a damaged cover or protective device or without cover or protective devices.

Do not use this product in any other way as stated for normal use. Not observing general regulations in force and instructions from this manual does not make the manufacturer liable for damages.

Please note that permissible uses for the tool could be limited by national regulations. It is necessary to comply with the regulations applicable in the country where the device is used.

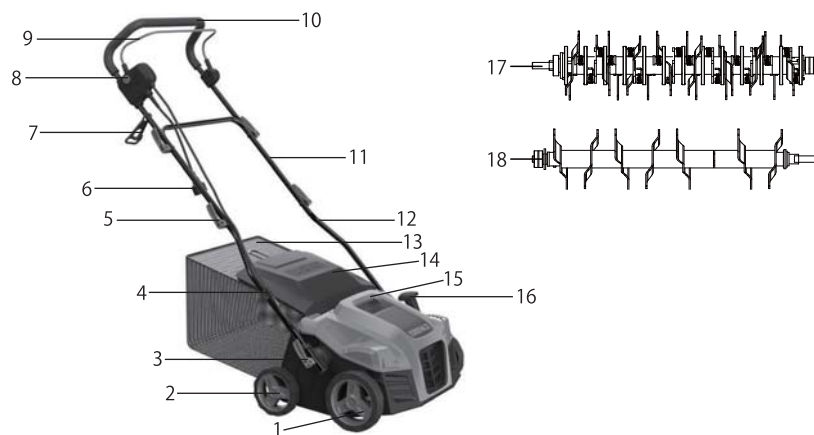
Do not use the device near flammable liquids or gases. Risk of fire and explosion in case of short circuit.

## Know Your Electric Dethatcher and Scarifier

Read the owner's manual and safety instructions carefully before operating the scarifier + dethatcher.

Compare the illustration below to the scarifier + dethatcher in order to familiarize yourself with the location of the various controls and adjustments.

Save this manual for future reference and reread it prior to each dethatching session.



- |                     |                          |                            |
|---------------------|--------------------------|----------------------------|
| 1. Front Wheels 7"  | 7. Extension cord holder | 13. Thatch Bag             |
| 2. Rear Wheels 6"   | 8. Safe Button           | 14. Thatch Cover           |
| 3. Angel&Fixed Knob | 9. Switch Lever          | 15. Body Handle            |
| 4. Cable Clip       | 10. No.3 Handle          | 16. Depth adjustment lever |
| 5. Quick Knob       | 11. No.2 Handle          | 17. Grass blade            |
| 6. Plug             | 12. No.1 Handle          | 18. Ripper Blade           |

## SYMBOLS



Warning/caution!



Wear eye protective goggles!



Wear ear protectors!



Before any adjustment, cleaning and maintenance work, switch off the device and disconnect it from the power supply.



Read the Operating Instructions!  
Save all warnings and instructions for future reference.



Warning against thrown-off items  
Do not let other persons get near due to foreign objects being thrown off.



Caution - Sharp tines  
Keep fingers and feet away.  
Switch off the device and disconnect the mains plug before carrying out any maintenance, adjustment or cleaning work or if the cable is tangled or damaged.  
The tines continue to run after the engine has been switched off.



Keep connection and extension cables away from the tines.



TUV Marking



Warning against sharp knives. Knives keep running for a short time after the appliance is switched off.

Do not touch any dangerous moving parts before the machine has been disconnected from the power supply and the moving parts have come to a complete standstill.



Caution - Sharp tines The tines continue to run after the engine has been switched off.



Keep dry at all times.  
Never expose tool to rain.



Rated voltage / Frequency



Rated input



Idling speed  $n_0$



Working width



Class II tool.



Sound power level



CE marking



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

## MAINTENANCE

### ⚠ DANGER!



Before any adjustment, cleaning and maintenance work, switch off the device and disconnect it from the power supply.

### ⚠ WARNING

#### Risk of injury

Caution - Sharp tines  
Keep fingers and feet away.

For machines with several tine attachments, ensure that the movement of one tine attachment can lead to rotation of the other tine attachments.

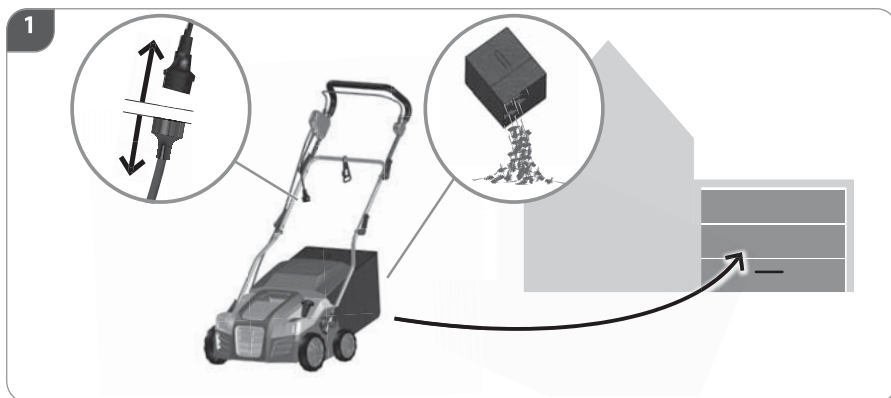
When adjusting the machine, be careful that no fingers are trapped between moving tine attachments and stationary parts of the machine.

When maintaining the tine bodies, be aware that the tine bodies can be moved even when the drive is switched off.

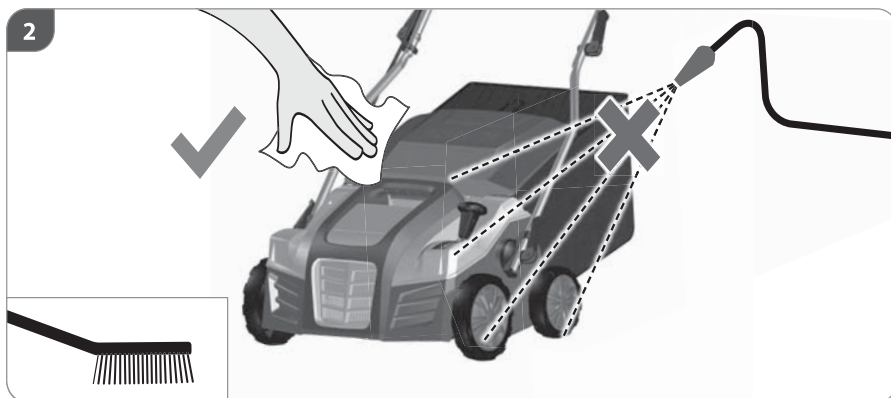
## VI Storage



Unplug and clean the grass bag before store the lawn scarifier + dethatcher



Warning! Do not spray water to clean the lawn scarifier + dethatcher.



## TECHNICAL DATA

Rated voltage / Frequency	120V 60Hz
Rated input	120V 60Hz
Working width	16inch
Protection class	II
Type of protection	IP X4
Weight (with scarifying roller / with raking roller)	13.4Kg
<b>Noise details</b>	
Measured according to <sup>1)</sup> EN 50636-2-92; <sup>2)</sup> 2000/14/ EG	
Sound pressure level $L_{pA}$ <sup>1)</sup> Uncertainty K = 3 dB (A)	85,56 dB (A)
Measured sound power level $L_{WA}$ <sup>1)</sup> Uncertainty K = 3,27dB (A)	100,55 dB (A)
Guaranteed sound power level $L_{WA}$ <sup>2)</sup>	108 dB (A)
<b>Vibration details</b>	
Total vibration values (triaxial vector sum) Determined properly EN 50636-2-92, Uncertainty K = 1,5 m/s <sup>2</sup>	
Vibration emission value $a_h$	5,508 m/s <sup>2</sup>

Technical changes reserved.

**WARNING:** 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 accurate estimate of the vibratory load should also take into account the times when the tool is shut down or when it is running but not actually in use. This may significantly reduce the vibratory load over the total working period.

Identify additional safety measures to protect the operator from the effects of vibration such as: maintain the tool and the accessories, keep the hands warm, organisation of work patterns.

## Assembly and Use Instructions

**WARNING!** Do not connect the scarifier+ dethatcher to the power supply until assembly is complete. Failure to comply could result in accidental starting and severe personal injury. Always wear gloves during assembly.



### Get the Parts of the Scarifie+ Dethatcher

1



2



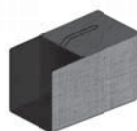
3



4



5



6



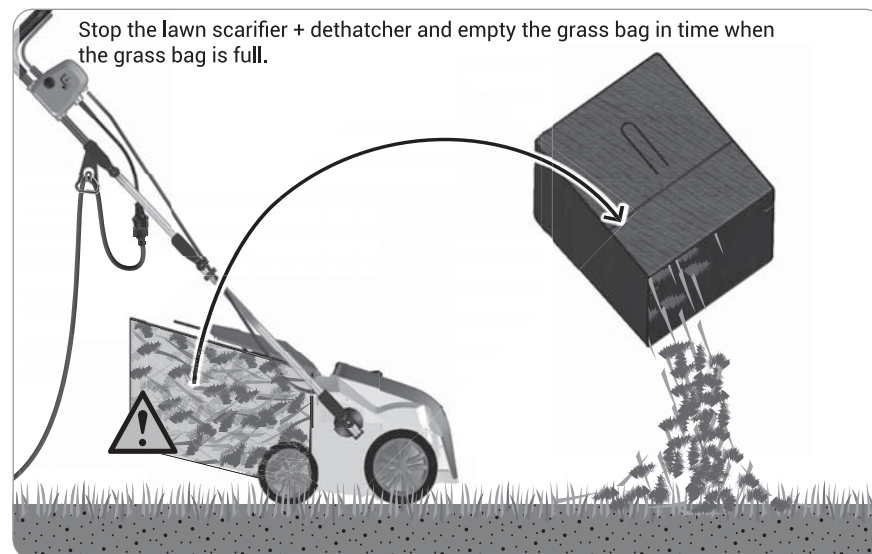
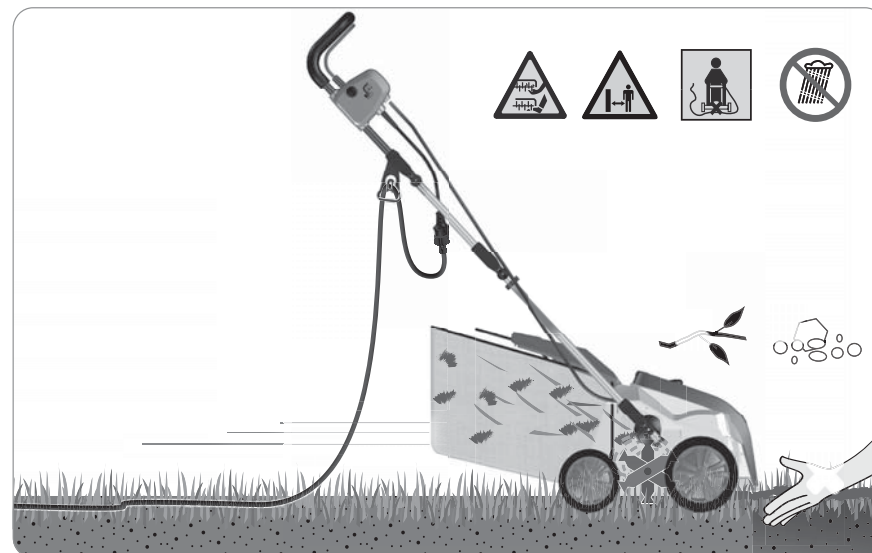
7



## Warning



**ATTENTION:** Do not put your hand or foot into underside of lawn scarifier + dethatcher When it is working or connected the power.

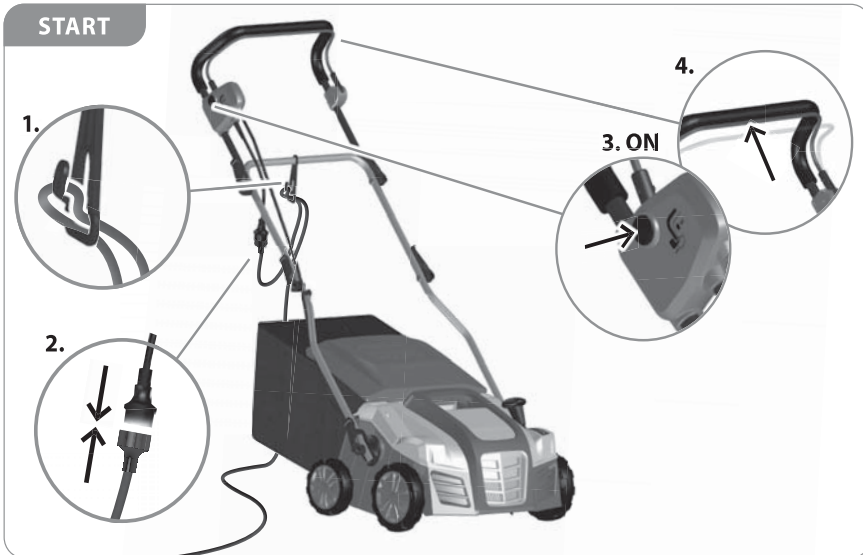


## V Start and stop



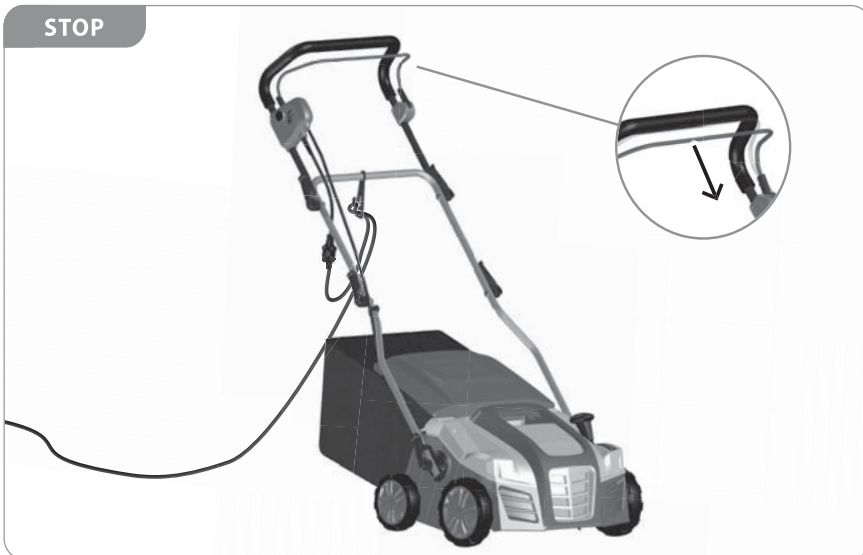
1. Hand the extension cord up on holder.
2. Connect Plug with extension cord.
3. Keeping pressing hold the safe button.
4. Pulling the switch lever back and hold with handle.

### START



Release the switch lever and stop.

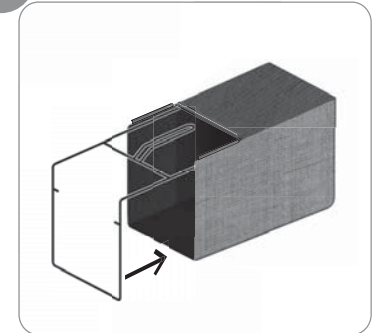
### STOP



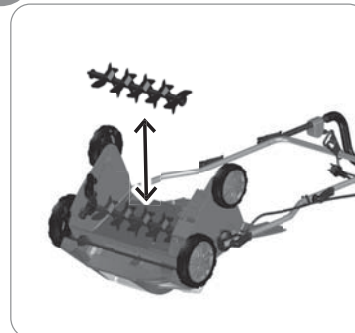
## I Handles assembling



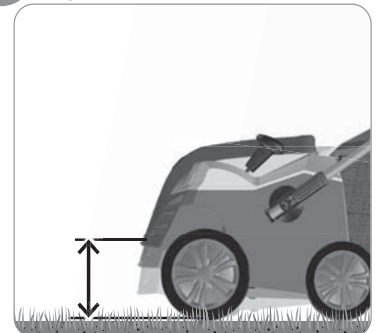
## II Thatch bag assembling



## III Blade assembly and replacement



## IV Depth and handle height adjustment



## V Start and stop



## VI Storage

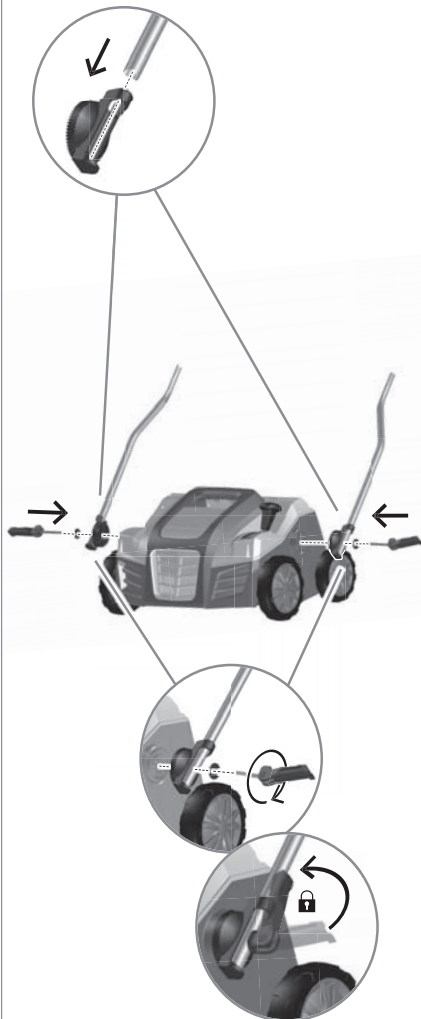


# I

## Handles assembling



### 1 No.1 Handle assembling.



### 2 No.2 Handle assembling, Advance: Install the extension cord holder before handle assembly

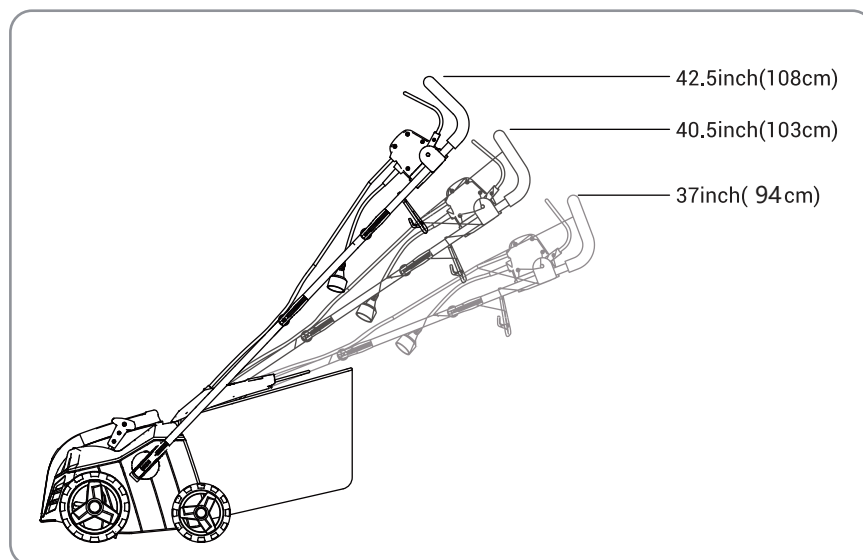
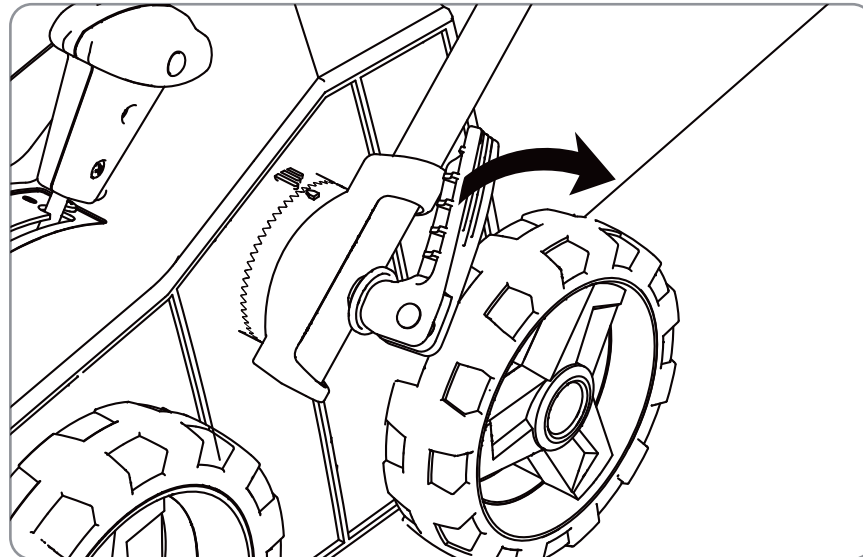


# IV

## Handle height adjustment



Adjust the according handle's height of your need with three height positions . The most comfortable height of handle to push the equipment . Note: follow the picture, adjust the handle's height.

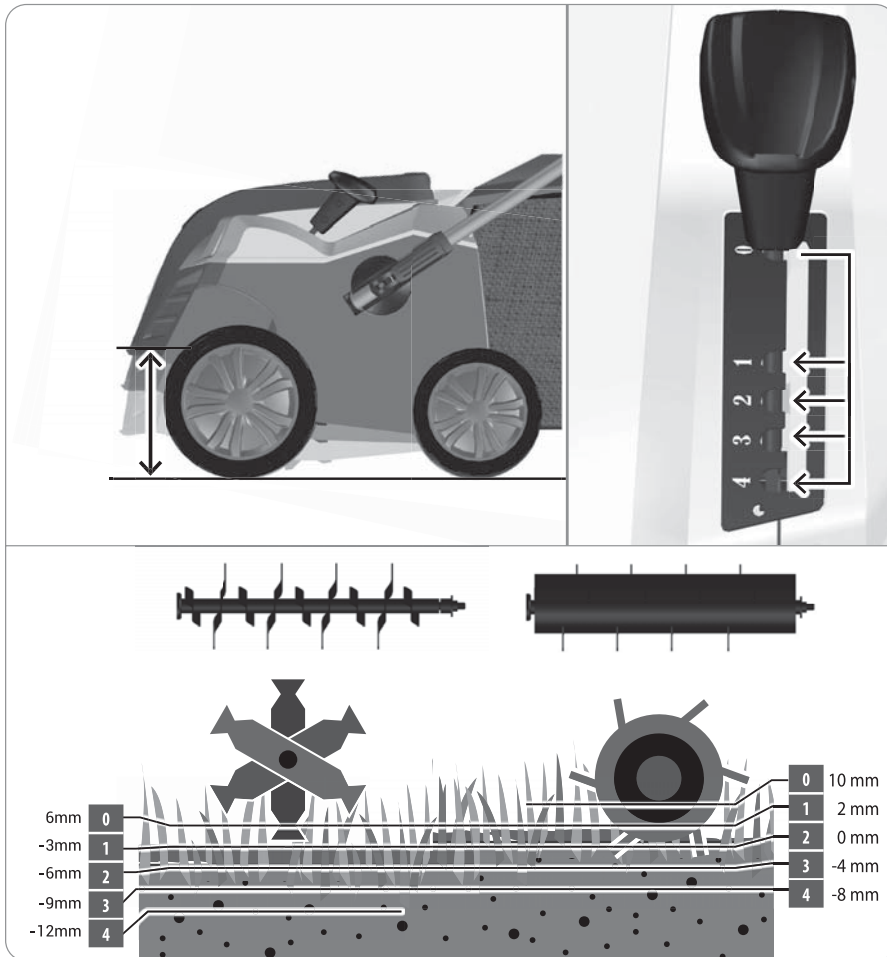




## IV Depth adjustment



Adjust the depth according to the need of your lawn. The most suitable depth depends on the kind of lawn and the actual height of the grass. **ATTENTION:** Follow the picture, Depth adjustment of both blades with different heights.



## I Handles assembling



### 3 No.3 Handles assembling.



### 4 Cable clip installation.

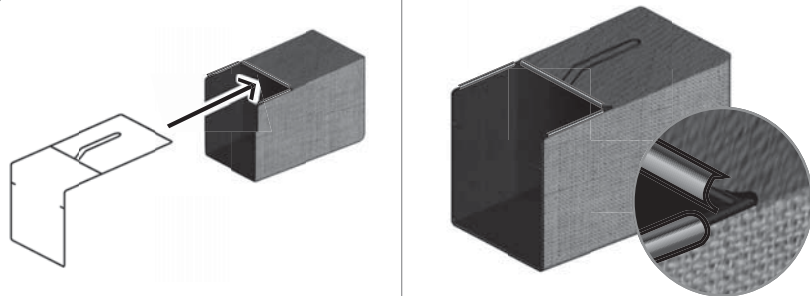




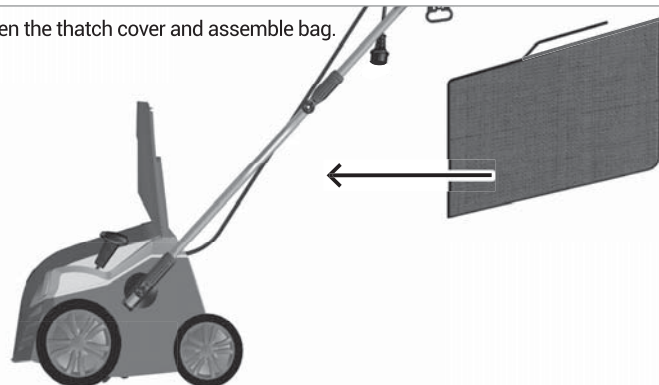
## Thatch Bag Assembling



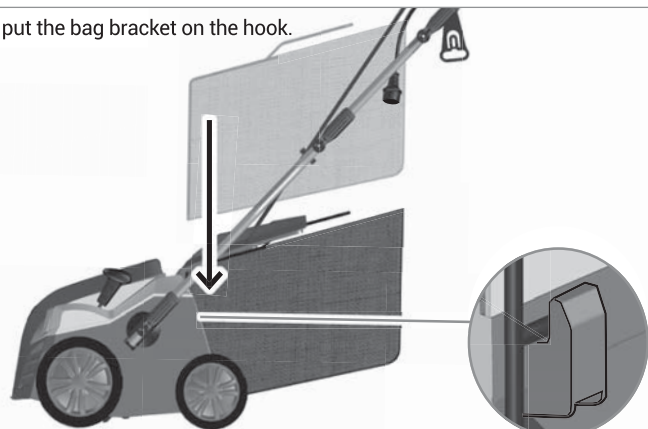
- 1 Put steel bracket into the bag.



- 2 Open the thatch cover and assemble bag.



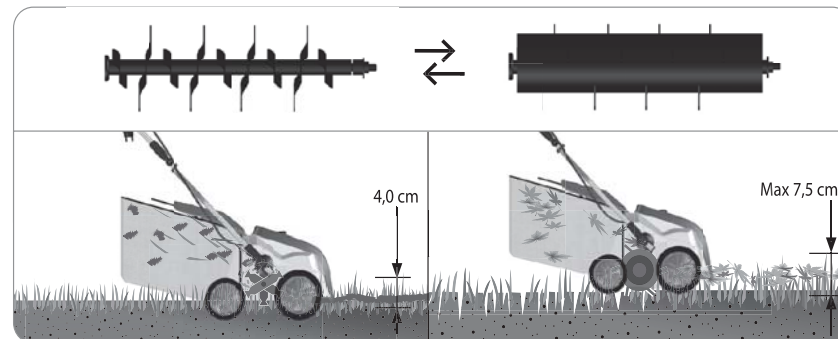
- 3 Sure put the bag bracket on the hook.



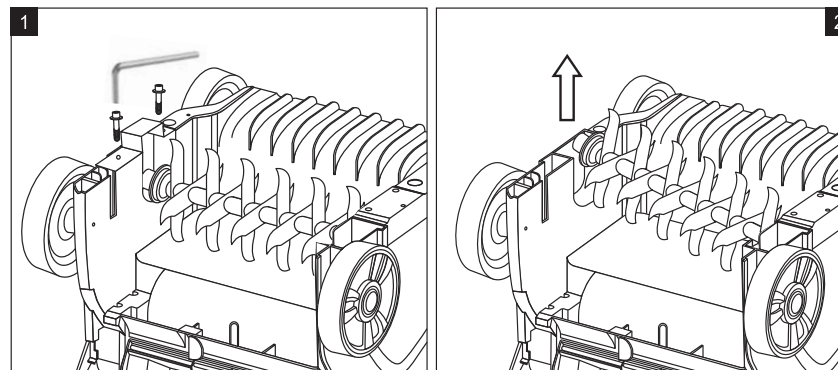
## Blade assembly and replacement



Both of replaceable blades,ripper blade and grass blade. Themax height of grass for ripper blade'sheightis 4cm. The max height of grass for grass blade's is 7.5cm.



Blade replacement: Remove the screws with hex wrench,and take off blade support and blades.



ATTENTION: The hexagons of bothparts should be aligned.

