EWORK®

2-IN-1 ELECTRIC DETHATCHER AND SCARIFIER

USER MANUAL



EK-ALS33A-R

Please read before use. Keep for backup.

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1. INTRODUCTION

Thank you for choosing a EWORK machine. We are sure that you will appreciate the quality and functions of this machine that will facilitate your daily work for a long time. Remember that this machine has a wide of network of after sales services to which you can take your machine for any maintenance necessary on your machine, in case of any troubleshooting and for purchasing spare parts and accessories.



Attention! Read all the warning signs and all the instructions. The non observance of the warning and instructions detailed from here on can result in a fire being caused and/ or a serious injury. Before using the nachine, read carefully the information in this manual on a secure and correct start up.

⚠ **Only scarify areas with grass. Do not use this machine for other uses.** For example: do not use the machine to weed, sweep or to sand any type of surface. The use of this machine for other uses for which it has not been designed could cause dangerous situations.

⚠ **Keep all the warning signs and the manual in a safe place for future reference.** If you sell or otherwise dispose of the machine, please pass on the instruction manual as it forms part of the machine.

The expression ¨machine¨ on the warning signs makes reference to this electric machine connected. The expression ¨switch in the open position¨ means that the switch is disconnected and ¨switch in the closed position¨ means that the switch is connected.

Remember that the end user is responsible for accidents and damages caused to himself, to third parties and to things.

The manufacturer will not be in any case held responsible for damages caused through an inadequate or incorrect usage of this machine.

2. NORMATIVE AND SECURITY MEASURES

⚠ To avoid an incorrect manipulation of the machine, read all the instructions included in this manual before using it for the first time. All information included in this manual is relevant for your personal security as well as for other people, animals and things found in your surroundings. If you have any doubts about the information included in this manual, please ask a professional or go back to where you bought the machine to solve your doubts.

The following list of dangers and precautions include the most probable causes whilst using the machine. If you find yourself in a situation not explained in this manual, use your common sense and use the machine in the most secure way and if you see any danger, do not use the machine.

2.1. USERS

This machine has been designed to be operated by people over 18 and whom have read and understood the instruction manual.

⚠ Attention! Do not allow underage people to use the machine.

⚠ Attention! Do not allow people who do not understand the instruction manual to use the machine.

Before using the machine familiarize yourself with the machine making sure you know perfectly well where all the controls can be found as well as all security devices and how all these should be used. If you are not an expert user we recommend you start with some simple jobs and if possible, under the supervision of an expert user.

⚠ Attention! Only lend this machine to people who are familiarized with this type of machine and know how to use it. Always lend the instruction manual with the machine so that the new user reads it and understand it prior to carrying out any work.

This machine is dangerous in untrained hands.

2.2. PERSONAL SECURITY

Be alert and vigilant and use common sense when using the machine.

Do not use the machine when you are tired or under the influence of drugs, alcohol or medicines. One moments distraction can cause serious personal injury.

Never use the machine without the safety features.

Avoid the accidental start up of the machine. Verify that the switch is in the ¨open¨ position before connecting to the mains. Never transport the machine with your finger on the switch or with the switch in the ¨closed¨ position as it can be dangerous to your security and can cause accidents.



Remove all tools from the working area before starting the machine. Any tools left in the working area can be touched by any moving part of the machine and be hurled causing personal damages.

Do not overreach. Maintain both feet firmly on the ground at all times. Do not use this machine on slopes surpassing 15o. Cutting on small hillocks

can be dangerous. Be vigilant when walking on steep inclines and with wet grass. Be particularly careful when changing working direction on an incline.

Be careful when walking on slopes or wet grass. Take special caution when changing direction on slopes.

Do not scarify backwards or pulling the machine. Be alert when pulling the machine backwards.

Dress adequately. Do not use the machine barefoot or wearing sandals. Always use resistant shoes and long trousers.

Do not place your hands or feet under the lawnmower. Maintain all parts of the body well away from the blade when the machine is running. Before starting the lawnmower, ensure that the blade has not come into contact with any object.

Hold the scarifier with both hands from the handle and place your body behind the scarifier.

Maintain all body parts well clear of any moving parts when the machine is in use. Before starting the machine, check that the cutting element is not in contact with any object. One moment of carelessness and your clothing or any body part could get caught up in the cutting parts.

If the machine vibrates abnormally, stop the engine and inspect the machine looking for the possible cause and repaiir it. If you do not find the motive, take the machine to your nearest after sales dealer.

Make sure the machine has stopped completely before carrying out any maintenance or cleaning work on the machine and the working area.

Store all electric machines well away from children.

2.2.1. VIBRATIONS

⚠ The prolonged use of the machine, exposes the client to vibrations that in extreme cases and through many hours of use of the machine could cause the ¨white finger syndrome¨ also known as Raynaud phenomenon. This causes a reduction in the tact of the fingers and their capacity to regulate temperature generating a lack of sensibility. This sickness could in extreme cases cause problems with the nerve endings.

The exposure to the vibrations is the cause of the white finger syndrome. To minimise this effect as much as possible, follow the following recommendations:

- Always use gloves.
- Always have your hands warm.
- Take frequent breaks.
- Always hold the machine tightly by the handles.

If you detect any of the symptoms of the white finger syndrome, consult immediately with your doctor.

2.3. WORKING AREA SECURITY

Maintain the workng area clean and work with good light. Untidy working areas and dark conditions can cause accidents.

Inspect the working area and remove all stones, wood, cables and strange objects that could be touched and propelled by the moving parts of the machine.

Do not use the machine in explosive atmospheres or in the presence of inflammable liquids, gases and powders. Electric machines can release sparks that could ignite the inflammable liquids, gases and powders.

Maintain children, other people and animals well clear of the machine whilst working. Distractions can cause the loss of control. Be vigilant and stop any children, other people and animals coming into the working area.

Do not use this machine at night, with fog or with reduced visibility that does not allow you to see the working area.

2.4. ELECTRICAL SECURITY

The electrical switch of this machine must coincide with the mains switch. Do not modify the switch in any way. If no parts have been modified and they fit perfectly, there will be no electric shock accidents.

Avoid body contact with earthed surfaces such as tubes, radiators, electric kitchens and refrigerators. There is a higher electric shock possibility if your body is earthed.



Don't expose this machine to rain, wet or humid conditions. If water enters the machine there will be a higher risk of electrc shock.

Do not overstretch the cable. Do not use the cable to transport the machine, lift the machine and to unplug the machine. Maintain the cable far away from heat sources, oil, sharp edges or other moving parts. Damaged or tangled cables increase the risk of electric shock.

Never use this machine if the cable or the plug are damaged. Before connecting the machine check that the cable and the plug are not damaged. If you discover that either of these elements are damaged, take your machine to your nearest after sales dealer. Should the cable be damaged, unplug the machine inmediately. Damaged or tangled cables increase the risk of electric shock.

The substitution of the plug or cable should be done by an approved and homologated after sales service. We recommend that this machine should be connected to residual differential whose current is lower or equal to 30mA.

Never use a connecting base that is damaged or that does not comply with current normatives or with the requisites established for this machine in this manual.

When using a cable extension, make sure that its minimum section is 1.5mm2 and no longer than 25 metres, always unrolled and adequate for outdoor use. The use of the cable extension adequate for outdoor use, reduces the risk of electric shock.

Place the cable extension in such a way that it will not get caught in branches or other obstacles and in such a way that it is not in the working area. The cable and any extensions must always be behind the machine and the end user.

Always hold the cable extension in the hook provided on the machine.

Connect this machine to alternate current 120v/50Hz.



Do not touch this machine with wet hands. Risk of electrc shock.



Maintain the cable well clear of the cutting element at all times.

Do not use this machine if the "open" and "closed" switch does not work. Any electric machine that cannot be controlled by the electric switch is dangerous and must be repaired.

Always disconnect the machine before carrying out any work on the machine. Only manipulate the machine when disconnected.

2.5. USAGE AND CARE OF THIS MACHINE

⚠ Only scarify areas with grass. Do not use this machine for other uses. For example: do not use the machine to weed, sweep or to sand any type of surface. The use of this machine for other uses for which it has not been designed could cause dangerous situations.

Use this machine, accessories and all its parts according to the instruction manual and taking into account working conditions and working area. The use of this machine for jobs different to those specified in the instruction manual can cause dangerous situations.

The manufacturer will not be in any case held responsible for damages caused through an inadequate or incorrect usage of this machine.

Do not overload the machine. Use the machine for the work it has been designed for. The correct machine usage will allow you to work better and in a more secure way.

Do not run with the scarifier. Walk at the correct speed that will allow the machine to do its job.

Do not use this machine if the ¨open¨ and ¨closed¨ switch does not work. Any electric machine that cannot be controlled by the electric switch is dangerous and must be repaired.

Look after the machine. Check that all moving parts are well aligned and that they are not blocked, that there are no broken pieces or other conditions that could affect the proper functioning of the machine. If this machine is damaged, always repair it before using it again. Most accidents occur because of poor maintenance.

Maintain the cutting elements sharp and clean. The cutting elements if sharp and clean will cut better, do a better job, have less chance of getting tangled and easier to control.

Turn off and disconnect the machine from the mains before carrying out any maintenance work such as adjustments, cleaning, transportation (even if you are just moving the machine from one working area to another however close by this might be), elevating the machine, maintenance or storage of the machine. These simple security measures reduce the risk of accidental start up.

Do not incline the machine with the engine running.

2.6. MAINTENANCE

Take your machine for periodic revision to a qualified after sales dealer and only use original spare parts and accessories. This will guarantee that the security measures of this electris machine can always be complied with.

3. WARNING ICONS

The warning icons on the labels that are attached to this machine and/or in the manual give necessary information which is necessary for a correct usage of this machine.



Attention, danger!.



Read carefully this manual before start up.



Attention! Danger of material ejection. Be careful with materials that could be ejected.



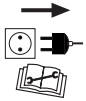
People who are not adequately protected should stay well clear and beyond the security distance.



Always use eye goggles or protecting mask and ear protectors.



Do not use this machine in humid conditions or if it is raining.



Attention! Before carrying out any maintenance work or repair, unplug the machine from the mains.



Danger of electric shock.



Caution! Unplug the machine immediately if the cable or the switch are damaged.



Maintain the cable well clear of the cutting blades.



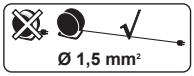
Danger! Risk of finger amputation. Maintain hands and feet well clear of the cutting elements.



Danger! The blades need a few moments to stop completely after stopping the engine.



Risk of injuries! Remove all tooling from the working area prior to its use.



Use cable elongators with a minimum section of 1.5mm^2, and no longer than 25 metres and always ensure all the cable is unwound.



Protection Class II.

IPX4 Degree of protección.

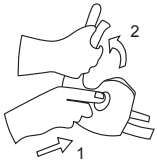
CE Complies with EC Directives.



Guaranteed level of sound power Lwa, Db(A).

4. MACHINE SYMBOLS

To guarantee a correct use and maintenance of this machine, you will find the following symbols on the machine.



Press the security button and without letting go of it, pull the switch bar.

5. MACHINE DESCRIPTION

5.1. USAGE CONDITIONS

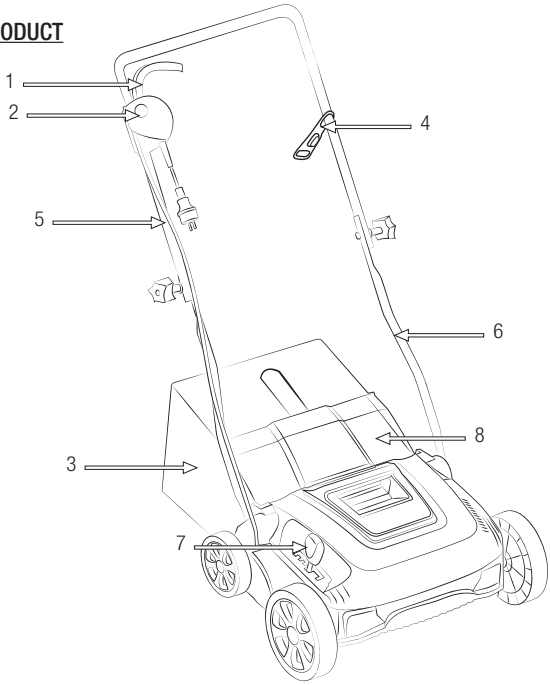
⚠ **Only scarify areas with grass. Do not use this machine for other uses.** For example: do not use the machine to weed, sweep or to sand any type of surface. The use of this machine for other uses for which it has not been designed could cause dangerous situations.

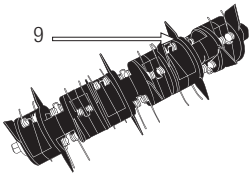
Use this machine outdoors, in dry conditions and in temperatures between 5ºC and 45ºC.

Remember that the end user is responsible for the dangers and accidents caused to other people and objects. The manufacturer will not be in any case held responsible for damages caused through an inadequate or incorrect usage of this machine.

5.2. DETAILED DESCRIPTION OF THE PRODUCT

1. ON/OFF switch handle
2. Security switch
3. Catcher
4. Cable hook
5. Upper handlebar
6. Lower Handlebar
7. Height adjustment lever
8. Catcher cover
9. Scarifying/ Aerator cylinder





The diagrams and pictograms herewith enclosed in this manual are a guide but not necessarily an exact copy of the actual machine.

5.3. TECHNICAL CHARACTERISTICS

Description	Scarifier
Brand	EWORK
Model	EK-ALS33A-R
Voltage (V)	120
Frequency (Hz)	50
Power (W)	1.500
Protection class ⧈	II
Degree of protection	IPX4
Cutting width (mm)	320
Working heights (mm)	-11,-7,-3,+3,+10
Number of heights	5
Bag capacity (l)	40
Measured sound pressure level LpA dB(A)	87.3
Guaranteed sound power level LwA dB(A)	105
Left/right vibration level (m/s^2) (K=1.5)	0.923/1.009
Weight (kg)	10.9

6. START UP INSTRUCTIONS

6.1. LIST OF MATERIALS

This machine includes the following elements that you will find inside the box:

- Scarifier.
- Catcher.
- Top handle.
- Lower handle.
- Lower handle screws.
- Handle screw and knob.
- Hook for cable.
- Scarifying cylinder (mounted on the machine).
- Aerator cylinder.
- Instruction manual.

Remove carefully all the elements from the box and make sure that all listed parts are included.

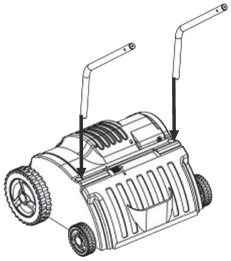
Due to the quality controls done at the factory it is highly improbable that your machine has any faulty part or that any elements are missing. If you find any damaged part or there are any elements missing, do not use the machine until the problem has been solved or you have been given the missing parts. Usage of the machine with defective or missing parts is dangerous and could result in personal injuries.

6.2. MOUNTING THE HANDLE

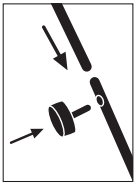
The handle comes unmounted from the manufacturing plant. To mount the handle:

1. Place the scarifier on a flat surface.

2. Insert the lower handlebars into the scarifier as shown in the figure.

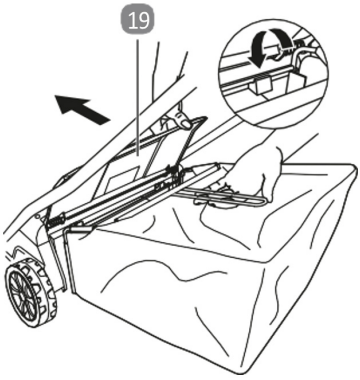


3. Place the upper handlebar on the lower handlebar and secure with the screws (3), washers (4) and knobs (5). Screw them in and close the knob against the washer.



6.3. INSTALL THE COLLECTION BAG

Place the collection bag on the scarifier by hooking the bag to the hooks on the back. To do this, hold the bag by the handle with your right hand, raise the safety flap (19) with your left hand as much as possible and hook the bag.



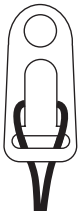
6.4. INSTALLATION OF THE WORK CYLINDER

This machines has two working cylinders, one for scarifying and one for aeration. The scarifying cylinder comes mounted on the machine.

Always carry out maintenance work or servicing with the machine unplugged from the mains. Unplug the machine before carrying out any work on the machine. Read the instruction manual before carrying out any maintenance work.

The working cylinders are sharp and heat up during use. Always use gloves when handling the cylinders to avoid damages to your hands.

6.5. HOLDING THE CABLE EXTENSION



Only use cable extensions that are certified for outdoor use. The cable section must be at least 1.5mm, the cable will have a maximum length of 25m and it must be fully unrolled before starting to work.

Fix the cable extension to the fixing hook provided as seen in the figure.

6.6. CONNECTING TO THE MAINS

It is mandatory that this machine is connected to a switch protected by a differential whose current is 30mA maximum. The tension must be 120V, the frequency 50Hz and it must have a circuit breaker of 10A-16A.

Never use a damaged cable or a damaged electric mains, or that does not comply with current normative or those required for this machine. When using a electric extension for the cable, make sure that it has a minimum section of 1.5 mm2 and it should not be longer than 25metres in length and homologated for outdoor use. Both the plug and the base of the electric extension must be waterproof and should never be submerged in water. The use of an adequate electric extension will reduce the risk of electric shock.

6.7. CHECKING POINTS PRIOR TO USING THE MACHINE

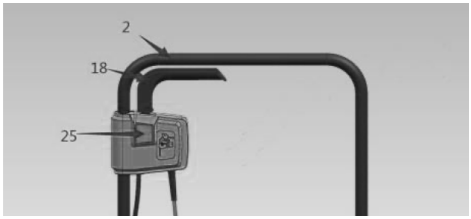
Check all the machine and make sure that there are no loose parts (screws, nuts, knobs etc) and any damages to the machine.

Tighten, repair or replace all necessary equipment prior to using the machine.
Check the state of the catcher and that it is properly in place. Do not use the machine if it is damaged or not properly regulated.

6.8. START UP AND STOPPAGE

Do not place hands or feet under the scarifier. Maintain all body parts well clear from all cutting elements when the machine is in use. Before starting the scarifier, check that the cutting blades are not in contact with any object.

Turning on the machine:
Press the safety button (25) and, without releasing it, raise the On/Off switch bar (18) to the upper bar (2). Once the engine is running, stop pressing the safety button (25).



Disconnection of the machine:
Release the On/Off switch bar (25).

After stopping the machine, the blade will not stop inmediately. Wait until it has stopped before carrying out any maintenance work on the machine or before transporting the machine.

7. MACHINE USAGE

⚠ Use this machine only for jobs for which it has been designed. The use of this machine for any other jobs is dangerous and can cause dangers to the users and/or to the machine.

Do not place hands or feet under the scarifier. Maintain all body parts well clear from all cutting elements when the machine is in use.

Before starting the scarifier, check that the cutting blades are not in contact with any object.

Should you slip or fall, let go of the handle immediately.

Do not rely solely on the security elements of the machine, use your common sense.

Do not use this machine if fatigued, sick, if you have had medicines, drugs or alcohol.

Do not use this machine at night, with fog or with reduced visibility. You must be able to see and control the working area.

Lack of sleep or fatigue can cause accidents and damages.

Never leave the machine unattended.

Do not allow anybody to enter the working area. The perimeter is no less than 15 metres and nobody should enter this working area as it is a danger zone.

Clean the working area and remove any obstacles that could cause accidents.

Always regulate the machine on a flat and stable surface.
Do not use accessories on the machine except those recommended by our company. Use of non recommended accessories could cause severe damages to the user, to the people close by and to the machine.

Avoid using the machine when the ground is humid. Be particularly careful if using the machine after it has rained as you might slip more easily.

It is mandatory to switch off the engine when transporting the machine between working areas.

7.1. FIXING THE MACHINE AND GUIDANCE

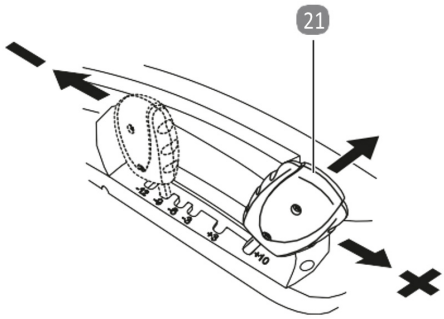
Whilst working, always hold the scarifier with both hands. Always be behind the scarifier and push the machine forward. Do not run with the scarifier, walk at a constant speed that allows the machine to scarify the lawn.

7.2. ADJUSTING THE CUTTING HEIGHT

⚠ Attention! Stop the machine and wait for the blade to stop before adjusting the height adjustment. The blades need a few moments to stop completely after stopping the engine.

To adjust the height of the machine, move the adjustment lever (21) to the desired height.

Position 1	-11 mm
Position 2	-7 mm
Position 3	-3 mm
Position 4	3 mm
Position 5	10 mm



7.3. CUTTING WITH THE SCARIFIER

Place the scarifier in one corner of the working area and adjust the cutting height adjustment to the desired place.

Check that the catcher is correctly placed, check that the blade is not in contact with any object and start the scarifier.

Walk at a pace that allows the scarifier to work correctly.

Empty the catcher when full. When emptying the catcher, always turn the machine off and ensure that the blade has stopped before removing the catcher. If you have to transport the machine between two working areas, always switch off the machine before transporting.

Note: You will obtain better results and the machine will suffer less, if before scarifying, you cut the grass and you leave it as short as possible.

8. MAINTENANCE AND SERVICE

The removal of the security measures, an inappropriate maintenance, the substitution of parts by non original spare parts and accessories could result in severe body harm.



Always carry out maintenance work or servicing with the machine unplugged from the mains. Unplug the machine before carrying out any maintenance work. Read the instruction manual before carrying out any work.

⚠ Carry out periodic checks on the machine to ensure its correct functioning. For a complete check up, we recommend you take the machine to your after sales dealer.

Keep the machine clean, specially the engine air vents.

8.1. CLEANING

Clean the scarifier with a damp cloth. Never use water, petrol or other liquids when cleaning the machine.

Use a nylon brush to clean the grass that accumulates underneath the scarifier and the blade. Never use a metallic brush that could damage your scarifier.

You can use water on the catcher as long as you separate the catcher from the machine at a distance from the machine. Dry the catcher completely before placing again on the machine.

8.2. CONTROL OF THE ELECTRIC CABLE

Inspect the cable for possible damages. If the cable is not in a good condition, take the machine to your nearest service agent.

Do not use the machine if the cable is damaged.

9. TROUBLESHOOTING

Depending on the symptons of the machine, we can detect the probable cause of the problem and solve the problem:

PROBLEM	CAUSE	ACTION
The engine does not work	The machine is not switched to the mains	Switch the machine to the mains
	Damaged cable	Take your machine to the after sales dealer Never repair the cable with tape
	Switch in a bad state	Take your machine to the after sales dealer
	Worn out brushes	Take your machine to the after sales dealer
	Overload protection activated	allow to cool for 15 minutes
Abnormal noises	Strange object ob the blades	This machine has a system for current overload that will activate itself in the following situations: a) Excess material on the working cylinder. b) The grass being scarified is too tall. c) Excess resistance when scarifying.
Abnormal vibrations	Internal problem of the engine or transmission	Take your machine to the after sales dealer

10. TRANSPORT

Before transporting the machine, disconnect the machine.

Never transport the machine whilst the machine is running. Unplug the mains when transporting the machine from one working area to another.

You can transport the machine by pushing it whilst working. Be careful not to cross areas with stones, sticks or other objects that could be hit by the cutting elements and/or the bottom part of the machine.

Take into account the weight of the machine should you need to elevate it. Check the weight under the technical characteristics of the machine. To raise use the handles.

If you are going to transport the machine in a vehicle, fasten it securely to avoid the machine slipping and turning over.

11. STORAGE

Disconnect the machine before storing.

Store this machine in a place not accessible to children and secure.

It should also be dry, clean and within the temperature range 0ºC and 45ºC.

Before storing the machine follow the points of the maintenance chapter.

12. RECYCLING AND MACHINE DISPOSAL

Get rid of your machine in an ecological way. We should not get rid of the machine with the domestic rubbish. Its plastic and metallic parts can be clasified and can be recycled.

All materials used to box this machine are recycable. Please, do not dispose of the box with your domestic rubbish. Throw these parts in an official ecologial residual pick up point.






EWORK®