



Dellonda 1500W Electric 2-in-1 Scarifier & Rake

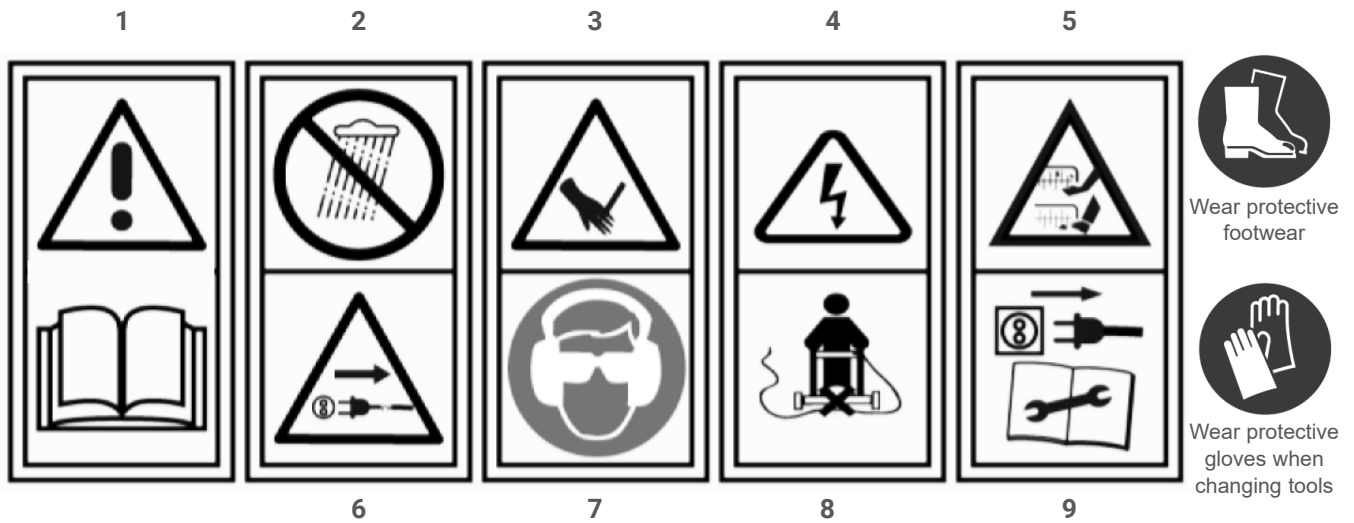


Model No. DG216.V2

Thank you for purchasing a Dellonda product. Manufactured to a high standard, this product will, if used according to these instructions, and properly maintained, give you years of trouble free performance.

Important Information

Please read these instructions carefully. Note the safe operational requirements, warnings & cautions. Use the product correctly and with care for the purpose for which it is intended. Failure to do so may cause damage and/or personal injury and will invalidate the warranty. Keep these instructions safe for future use.



1	CAUTION! Read the instruction manual and follow the warning and safety instructions.
2	DO NOT use the machine in wet weather conditions.
3	Caution! Blades do not stop immediately after switching off.
4	WARNING! Electricity.
5	Danger! Keep hands and feet away from the cutting equipment.

6	Caution! Unplug immediately if the power cord or plug becomes damaged.
7	Wear eye and ear protection.
8	DO NOT cut the power cable.
9	Always switch off the machine, disconnect the power and wait till the machine comes to a standstill prior to maintenance, cleaning or repair work.

Specification

Cable Length:	10m
Nett Weight:	8.9kg
Noise Power/Pressure:	LpA = 82.5dB(A) LWA =97dB(A)
Power:	1500W
Machine Dimensions (W x D x H):	575 x 1000 x 950mm
No Load Speed:	4100rpm
Working Width:	360mm

Working Depths:	Rake: -9, -6, -3, 3mm Scarifier: -3, 0, 3, 9mm
Grass Collector Bag Size:	35L
Supply:	230V ~ 50Hz
Vibration:	Max. measured: 3.783m/s ²
Uncertainty:	K=1.5m/s ²

Safety Instructions

ELECTRICAL SAFETY

- ❑ **WARNING!** It is the user's responsibility to check the following:
 - Check all electrical equipment and s to ensure that they are safe before using. Inspect power supply leads, plugs and all electrical connections for wear and damage. Dellonda recommend that an RCD (Residual Current Device) is used with all electrical machines. You may obtain an RCD by contacting your local domestic stockist. If the machine is used in the course of business duties, it must be maintained in a safe condition and routinely PAT (Portable Test) tested.
 - **Electrical safety information:** It is important that the following information is read and understood.
 - Ensure that the insulation on all cables, and on the machine is safe before connecting it to the power supply.
 - Regularly inspect power supply cables and plugs for wear or damage and check all connections to ensure that they are secure.
 - **Important:** Ensure that the voltage rating on the machine suits the power supply to be used and it is fitted with the correct fuse.
 - **DO NOT** pull or carry the machine by the power cable.
 - **DO NOT** use worn or damaged cables, plugs or connectors.
 - Ensure that any faulty item is repaired or replaced immediately by a qualified electrician.
 - Dellonda recommend that installation and repairs are carried out by a qualified electrician.

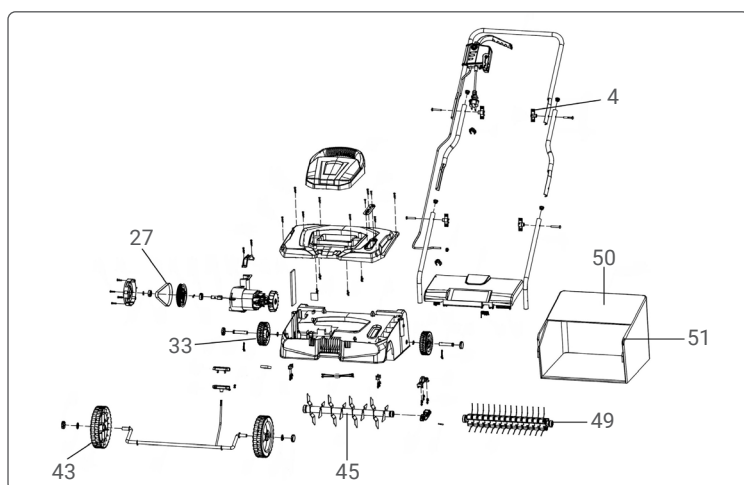
Extension Leads/Power Cords

- ❑ **WARNING!** If you do not check the condition of extension leads, cables and connections or do not use them correctly, you could get an electric shock. To stay safe make sure they are: Rated correctly to suit the equipment you want to connect to them. Uncoiled, to prevent them from overheating.
- Disconnect the lead from the mains if the lead becomes damaged or entangled during use.
- If the supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer or it's service agent.

GENERAL SAFETY

- ✓ Read and fully understand instruction manual before using the machine. Retain manual for future use and future users.
- ✓ Users must be fully trained before using this machine.
- ❑ **WARNING!** Keep hands and feet away from moving blades. Be aware of the danger of being drawn in by moving parts.
- ❑ **WARNING!** Be aware of live electrical parts.
- ❑ **WARNING!** Before carrying out any maintenance or adjustments remove the power source and ensure all moving parts have come to a complete standstill and cannot start again unexpectedly.
- ❑ **WARNING!** Never allow children, persons with reduced physical, sensory, or mental capabilities, those with lack of experience and knowledge or people unfamiliar with these instructions to use the machine, local regulations may restrict the age of the operator.
- ❑ **WARNING!** Never operate the machine with defective guards or shields, or without safety devices.
- ❑ **WARNING!** Never operate the machine while people, especially children, or pets are nearby.
- ❑ **WARNING!** Never operate the machine if the cord is damaged or worn.
- ❑ **WARNING!** Avoid using the machine in bad weather conditions especially when there is a risk of lightning.
- ❑ **WARNING!** Children shall NOT play with the machine.
- ❑ **WARNING!** The machine shall be disconnected from its power source during service and when replacing parts.
- ❑ **WARNING!** The removal of the plug has to be such that an operator can check from any of the points to which he has access that the plug remains removed.
- ❑ **WARNING!** Remove the plug from the mains or remove the disabling device whenever the machine is left by the user, before clearing a blockage, before checking, cleaning or working on the machine, after striking a foreign object to inspect the machine for damage, and if the machine starts to vibrate abnormally, for immediate check.
- ❑ **WARNING!** Cleaning and user maintenance on the machine shall not be made by children without supervision.
- ✓ Suitable/protective clothing (long trousers) and appropriate PPE must be worn: ear protection, safety, slip resistant footwear.
- ✗ **DO NOT** use whilst tired, ill or under the influence of alcohol or other drug.
- ✓ **ALWAYS** inspect and risk assess the area to be worked prior to working. Review for items such as foreign objects (stones, toys, wires sticks, bones), slope, ditches, drop-offs.
- ✗ **DO NOT** use the machine on slopes. Be aware of the risk of overturning or slipping on too steep a slope. Always 'travel' along slope contours not up and down slopes.
- ✓ **ALWAYS** inspect the machine prior to use for loose fittings, fatigue and damage.
- ✓ Only use the machine when there is good visibility (daylight or good artificial light.)
- ✗ **DO NOT** use the machine without either the grass bag or deflector fitted.
- ✗ **DO NOT** connect a damaged cord to the supply or touch a damaged cord before it is disconnected from the supply for the reason that damaged cords can lead to contact with live parts.
- ✗ **DO NOT** use in the rain.
- ✗ **DO NOT** leave the machine running without supervision.
- ✓ Allow the machine to cool down completely before moving or storing.
- ✓ Use genuine replacement parts only.
- ✓ Keep the machine in good operating condition and perform regular maintenance. Keep machine clean.
- ✓ Check for and replace worn or damaged parts.
- ✗ **DO NOT** modify the machine in any way. **DO NOT** tamper with or modify safety features in any way.
- ✗ **DO NOT** overreach.
- ✓ Always keep balance.
- ✓ Walk, never run.

Contents



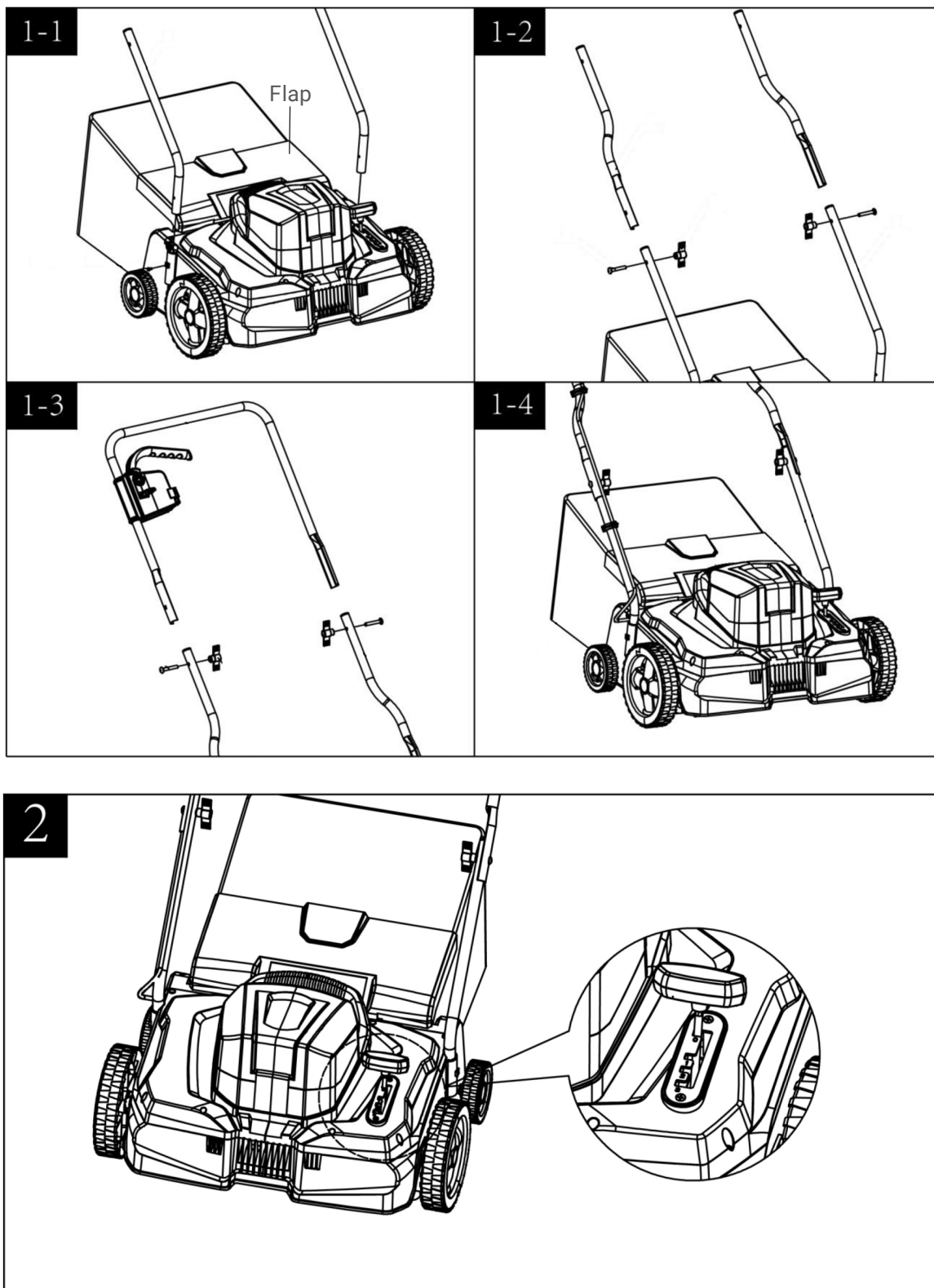
Item	Description
4	Knob
27	Belt
33	Rear Wheel
43	Front Wheel
45	Aerator Assembly
49	Rake Drum
50	Grass Bag
51	Grass Bag Frame

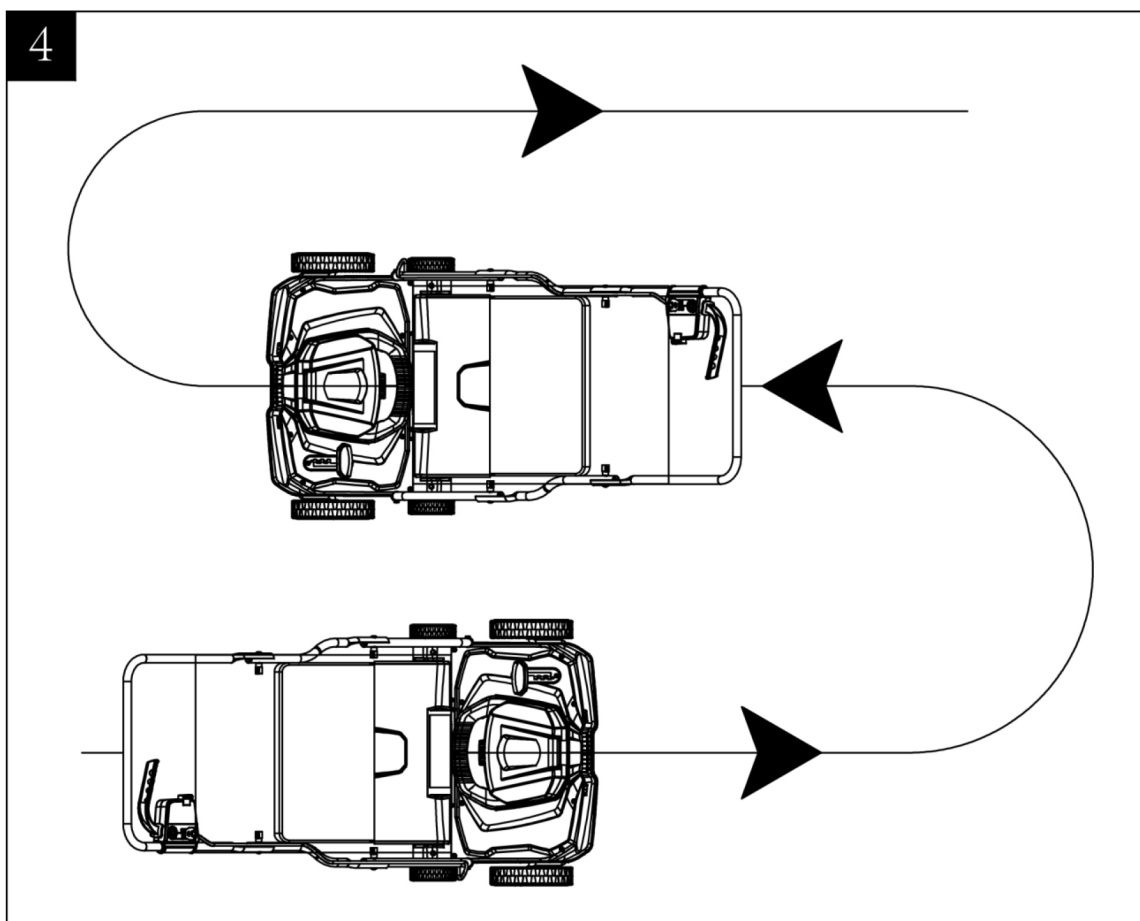
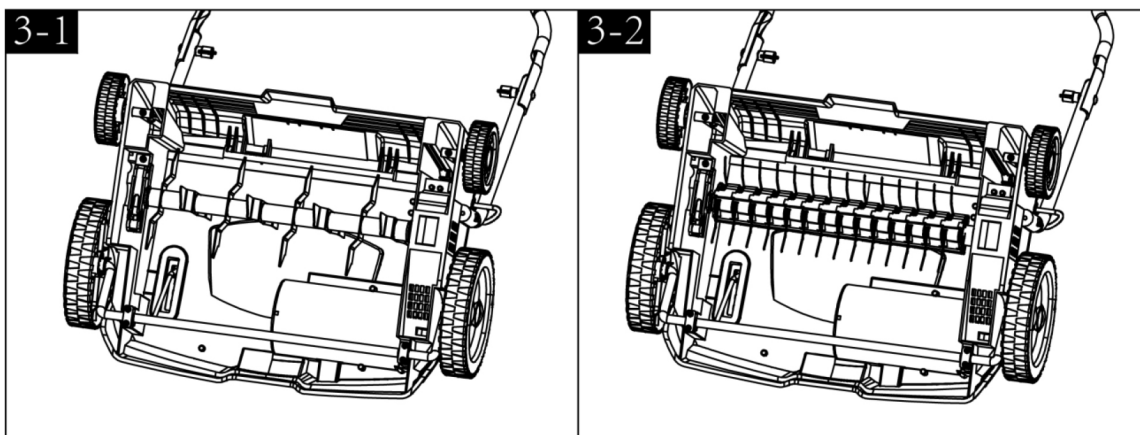
Assembly

- See illustrations for assembly.
- Use supplied hardware fastenings and fixings included.

Fitting the grass box

- Lift flap.
- With the flap lifted, place grass box onto the inner lugs of the machine, lower the flap down.





Before operation

NOTE: This machine is only intended, as an electric lawn scarifier and; as an electric lawn rake, for aerating lawns and grassy areas in private domestic and hobby gardens. It is not designed for use in public areas, parks, sports areas, and in agriculture and forestry.

- The machine must be assembled correctly before use.
- The machine should be checked carefully before use. You should only work with an machine that is in good condition. If you notice any defect on the machine that may cause danger to the operator, do not operate the machine until defects are rectified.
- Replace worn or damaged parts for safety. Use only original spare parts. Parts not produced by the manufacturer may cause poor fit and possible injury.
- Before use, all foreign objects must be removed from the lawn, also pay attention to foreign objects during the operation.
- Only work in daylight or sufficiently good artificial light.
- Wear suitable working clothes and solid shoes.
- Before use, Check power cord and interconnection cord are intact and not damaged. If damaged DO NOT use, contact Dellonda Service Centre.
- Contact Dellonda Service Centre if the machine is in need of repair, or machine is damaged.

Setting the work depth (Operating positions)

CAUTION! Only with the motor switched off and the blade shaft at a standstill.

- Use selector to engage gear. Fig.2. The working depth for the machine with the rake and scarifier can be set at.

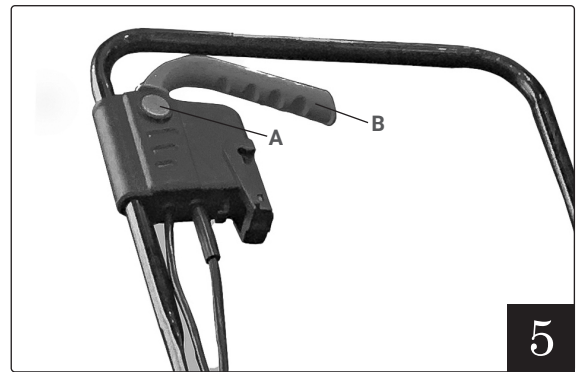
	Raker	Scarifier
Position 0	3mm	9mm
Position 1	-3mm	3mm

Position 2	-6mm	0mm
Position 3	-9mm	-3mm

Starting ON/OFF

CAUTION! DO NOT start the machine if it is standing in long grass or solid ground.

- **DO NOT** attempt to set the depth while the blades are spinning.
- Press the safety lock button A of the switch/plug combination and then pull the switch level B against the bar. Fig.5.
- Keep the switch level hold while release the safety lock button A.
- To stop the machine, release the switch level and it automatically returns to its start position. Wait for blades to stop rotating before attempting any maintenance.



Clearing Blockages/ Overheat Protection

- If the machine is blocked by a foreign object or if the motor is overloaded, the motor will switch off automatically by the protection device. Wait till the motor cools down (approx. 15 minutes) then start machine again.

WARNING! If you do not release the switch lever the machine will start immediately after the motor has cooled down. And causing a **Danger of serious injury!**

Scarification

- With the scarifier cylinder, the machine can be used as a scarifier for removing matting and moss in the lawn as well as for cutting flat-rooting ranks. In order that a healthy lawn can develop in the spring, it is necessary for greater amounts of air to penetrate the area around the roots of the grass. We recommend scarify the lawn twice a year, e.g. in the Spring and in the Autumn. To achieve good result and increase the lifetime of the scarifier cylinder, mow your lawn to a shorter height (less than 4 cm) before starting.

Starting

- Select the working depth depending upon the state of the lawn and the actual height of the grass.
- Tilt the scarifier backwards slightly so that both front wheels are off the ground.
- Switch the scarifier on, the scarifier cylinder starts rotation freely.
- Guide the scarifier at an appropriate speed in strips as straight as possible across your lawn.
- Always guide the scarifier at an even speed depending on the type of ground. Remaining in one place too long, or scarify if the ground is wet or too dry can damage the grass.
- To prevent tripping take particular care when moving backwards and when pulling the scarifier.
- Always let the cutting blade rotate at top speed, do not work in such a way as to overload the machine .
- Never pass the machine over the extension cable while it is running, make sure it is always in a safe position behind your back.
- Place the extension safely on a path or the area already scarified. see Fig.4 on page 5.
- When working on inclines always stand diagonally to the incline in a sturdy, safe stance. Do not work on extremely steep slopes.
- Empty the grass box when it is full in order to prevent the blade becoming clogged and the motor being overload.

Blades

- Worn blade invites poor performance and overload of motor.
- Check before each use the blades situation. Sharpen or replace the blades with new one when necessary. It is recommended to do this by a specialist.

The blades are reversible designed. To change the direction of the blades:

- Remove the screw then rotate the clasp from the device. Fig. 3-1.
- Take the scarifier cylinder out of the housing. Fig. 3-2.
- **CAUTION!** Disconnect the mains and wear protective gloves.

Collection and Aeration (optional)

- With the rake cylinder, the machine can be used as a lawn raker for removing grass and moss in the lawn as well as for cutting flat-rooting ranks.
- In order that a healthy lawn can develop in the spring, it is necessary for greater amounts of air to penetrate the area around the roots of the grass. We recommend aerate the lawn every 4-6 weeks depends on the state of your lawn.
- To achieve good result and increase the lifetime of the rake cylinder, mow your lawn to a shorter height (less than 4 cm) before starting.

Transport

CAUTION! Before transporting the machine, switch off the motor.

- The cylinder and the machine maybe damaged even if you move the machine with the motor switched off, e.g. over solid ground.
- Prevent the cylinder from touching the ground by setting the working depth at the top position.

Storage

- The machine should be stored in a dry and clean room and out of reach of children.
- During extend periods of storage, during the winter for example, ensure that the machine is protected against corrosion and frost.

At the end of the season, or if the machine is not to be used for longer than a month:

- Clean the machine by wiping over all metal surfaces with an oil-soaked cloth to protect them from corrosion (non-resinous oil), or spray a fine coat of oil onto them from a can.
- Fold the guide bar down, and store it in a suitable place.

Maintenance

- ❑ **WARNING! DO NOT** touch moving hazardous parts before the machine is disconnected from the mains and moving hazardous parts have come to a complete stop.

- After each use and before storage, wipe off and dry all outer surfaces. Store dry.
- When removing the blade, wear safety gloves to avoid personal harm.

Prior to each time the machine is used:

- Check the connecting cable for signs of damage or ageing. Replace the cable if it is cracked, split or otherwise damaged.
- Check the condition of the cutting cylinder, and ensure that all threaded connections are securely tightened.
- If the blades are blunt, take it to a specialist workshop for repair if necessary.

Once per season:

- Lubricate the blades, joints between the cylinder and the driving shaft, and the twist spring on the safety flap.
- At the end of the grass-cutting season, have the machine checked and serviced in a specialist workshop.

Adjustments and Maintenance operations to the machine

- When making adjustments and maintenance to the machine always make sure the machine has been disconnected from the mains supply.

Preventative Maintenance measures to be observed

- Always keep the machine clean after each use to prevent unnecessary breakdowns.

Repair of the machine

- In the unlikely event of repair to the machine contact Dellonda Service Centre.

Operating methods in the event of an accident/breakdown

- In the event of an accident or breakdown always unplug machine at the mains before investigating the issue.

Necessary safety checks

- Thoroughly examine the area you will be raking. Remove all stones, sticks, wires, and other objects.
- Check the machines aerator and blade bolts for wear or damage. Worn blades can be replaced. Replace damaged blades or bolts immediately.
- Inspect all guards, shields, and safety devices before raking. **DO NOT** operate with damaged or defective parts.

Frequency of inspections for safety functions

- Always inspect before each use.

Discharge chute

- Always keep the discharge chute clear by keeping the grass box from over filling.

Spare parts

- ✓ Refer to the parts list for spares, or contact Dellonda service centre.

Cleaning

CAUTION! Always clean the machine after use. Failure to carry out proper cleaning can result in damage to the machine or cause it to malfunction.

- ❑ **WARNING!** Injury can occur during work on the cutting blades. Wear protective gloves.
- Remove the collection bag if any. Empty and clean the bag from each use.
- Always stand the machine on a firm surface, and block the wheels to prevent it from rolling away.
- Tilt the machine forward.
- Clean the underside of the housing around the blades and the safety flap with a scrubbing brush, and brush or rag. Never splash with water.
- Stand the machine on its wheels again, clean the ventilator, and any remaining grass or dirt.

Decommissioning/ Life time of the machine/ Disposal

- ✓ Through years of normal wear, the machine will eventually become unserviceable. When this happens ensure that it is disposed of in accordance with local authority regulations.

Troubleshooting

Problem	Possible causes	Remedy
Motor does not start	No electricity. Defective cable. Defective safety switch/plug combination. Overheat protection activated.	Check mains connection. Check cable, plug in, replace if required, or have it repaired by a qualified person. Arrange for repair in a specialist workshop, or contact Dellonda Service Centre. 1. Working depth too large, set to the shorter depth. 2. Cylinder blocked, remove the blockage. 3. Grass too long, mow the lawn before operation. Wait till the motor cools down for around 15 minutes before rework.
Abnormal noises	Cylinder is jammed. Cogged belt slipping. Loose bolts, nuts or other securing Components.	Cylinder is jammed, switch off wait till complete stop. Remove the objects. Arrange for repair in a specialist workshop. Tighten all components, contact specialist workshop if noises Prevail.
Abnormal vibrations	Cutting blades damaged or worn. Working depth too large. Grass too long.	Replace a new cylinder or have it checked by an specialist Workshop. Set to correct working depth. Mow the lawn before aerating.
Poor scarification results	Working depth too small. Worn blades. Ejector channel blocked.	Set to large working depth. Replace a new cylinder or have it checked by an specialist Workshop. Empty collection bag and remove blockage.

Environment Protection and Waste Protection and Electrical Equipment Regulations (WEEE)

Recycle unwanted packaging materials. When this product is no longer required, or has reached the end of its useful life, please dispose of it in an environmentally friendly way. Drain any fluids (if applicable) into approved containers, in accordance with local waste regulations. It is our policy to continually improve products and we reserve the right to alter data, specifications and parts without prior notice. No liability is accepted for incorrect use of this product. Guarantee is 12 months from purchase date, proof of which is required for any claim.

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