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# **Petrol Lawn Scarifier**

## **Operating instructions**

### **PREFACE**

This user manual contains the most important information about the device, its structure, functions and use. Before starting work, read the operating instructions carefully. Safe and correct use will allow you to achieve the best results.

All information contained in the manual is based on the latest data about the product as of the date of printing the document. Due to continuous improvement of devices and changes to them, the user manual may differ from the actual condition of the device.


The manufacturer reserves the right to make changes to the product at any time. Product specifications may change without notice. It is prohibited to copy or reproduce the manual and its elements without the manufacturer's consent.

This user manual should be treated as an integral part of the device and in case of transfer of the device to third parties or resale, it should be provided with the device.

Operating the device in accordance with the operating instructions and the messages contained therein is crucial for maintaining long-term and safe operation of the device and for meeting users' expectations. Failure to read, understand or follow the operating instructions may result in serious injury and damage to the device.

CEDRUS is not responsible for any errors arising in the printing of this manual, which do not directly affect the use of the device and only concern detailed technical or descriptive data. The devices are modernized during production, so some data contained in this manual may differ from the actual data, which also does not affect the way the device is used.

The photos and illustrations contained in this manual are for illustrative purposes only, and the physical condition of the device may differ from the actual condition.

 Information marked in this way indicates actions that the user should take to prevent situations that may lead to damage to the device, damage to property, serious injury to the user and other people, and in extreme cases even death.

Please keep these instructions for future reference.

# Petrol Lawn Scarifier Cedrus

## INTENDED USE

The basic version of the equipment is a scarifier intended for private use, i.e. for use in home and gardening environments. The scarifier roller is designed for ripping moss and weeds out of the soil and for loosening the soil. As a result your lawn can absorb nutrients better and is cleaned. We recommend you to scarify your lawn in the spring and autumn.

Scarifiers for private use machines whose annual operating time generally does not exceed 10 hours, during which the machine is primarily used to maintain small-scale, residential lawns and home/hobby gardens.

Public facilities, sporting halls, and agricultural / forestry applications are excluded.

The operating instructions as supplied by the manufacturer must be kept and referred to in order to ensure that the equipment is properly used and maintained. The instructions contain valuable information on operating, maintenance and servicing conditions.



**Warning!** : Due to the high risk of bodily injury to the user, the equipment may not be used to grind up branch or hedge clippings. Moreover, the equipment may not be used as a cultivator to level out high areas such as mole hills.

For safety reasons, the scarifier may not be used as a drive unit for other equipment or toolkits of any kind, unless specifically advised to do so by the manufacturer.

The equipment is to be used only for its prescribed purpose. Any other use is deemed to be a case of misuse. The user/operator and not the manufacturer will be liable for any damage or injuries of any kind caused as a result of this.

Please note that our equipment has not been designed for use in commercial, trade or industrial applications. Our warranty will be voided if the machine is used in commercial, trade or industrial businesses or for equivalent purposes.

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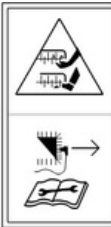
## 1. SYMBOLS MARKED ON THE PRODUCT



Read this instruction book carefully before using the product and keep it in a safe place for future reference.



Keep bystanders away.



Beware of cutting fingers or toes.

Remove spark plug lead before performing any service on the machine



Attention toxic fumes!

Warning! Do not use the appliance in closed or poorly ventilated environment.

Risk of breathing in toxic gases!



Do not expose to rain or damp conditions.



Use eyes and ears protection.



CE Marking

The product meets demands and regulations set by the European Community.



Noise level marking

Your tool noise is not more than 105dB.



**SAFETY ALERT SYMBOL:** Indicates caution or warning may be used in conjunction with other symbols or pictures.

## 2. GENERAL SAFETY RULES



**Before you put this machine into operation you have to read instructions in this manual.**



**When using this machine, observe the following safety instructions to exclude the risk of personal injury or material damage. Please also observe the special safety instructions in the respective chapters. Where applicable, follow the legal directives or regulations for the prevention of accidents pertaining to the use of machine.**



**WARNING! When using petrol tools, basic safety precautions, including the following, should always be followed to reduce the risk of serious personal injury and/or damage to the unit.**



**WARNING: this machine produces an electromagnetic field during operation. This field may under some circumstances interfere with active or passive medical implants. To reduce the risk of serious or fatal injury, we recommend persons with medical implants to consult their physician and the medical implant manufacturer before operating this machine.**

### **TRAINING**



**The operators must receive proper training in the use, adjustment and operation of the machine, including prohibited operations.**

1. Read the instructions carefully. Be familiar with the controls and proper use of the equipment. Spend a few moments to familiarize yourself with your machine before each use.
2. Never allow children or people unfamiliar with these instructions to use the machine. Local regulations can restrict the age of the operator.
3. This machine 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 machine by a person responsible for their safety.
4. Never work while people, especially children, or pets are nearby.
5. Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people or their property.

### **SAFETY INSTRUCTIONS FOR WORKING WITH SCARIFIER**

1. Do not leave engines running in closed rooms where dangerous carbon monoxide could cumulate.
2. Do the tilling at daylight or at good artificial lighting. If possible, do not use the tiller on wet grass.
3. Mind the good stability on slopes.
4. Conduct the unit walking.
5. With machines on wheels, it is necessary that you till across the slope, never up and down.
6. Be particularly careful if changing direction of travel on the slope.
7. Do not do tilling on steep slope.
8. Be particularly careful when you turn the tiller or when you pull towards you.
9. Stop the tiller blade if it is to be tilted for it to be carried out to travel across other areas and must be transferred to/from tilled areas.
10. Never use the tiller with a damaged protection facility or protection grids without any protection facility mounted on such as buffers and/or moss/grass collection basket.
11. Do not change the engine regulation set up and do not turn it over.
12. Carefully start the engine. Keep the sufficient distance of the feet from the tiller blade.

13. Start the engine, the tiller shall not be tilted, a not even when it is to be lifted in the process. Tilt in only as necessary, lift it on the user's reverse side only.
14. Never reach behind or under the rotating parts with hands or feet. Always keep a distance from the ejector.
15. Never lift the tiller up and do not carry it while the engine is on.
16. Switch the engine off and pull the spark plug connector out before blocking or removal of clogs in the ejector:
  - Before releasing the blocks or removal of blocked placed in the ejector.
  - Before removing collection bag or before check, cleaning or working on the tiller.
  - After bumping into an obstruction. Before restarting and work search for damage of the tiller and make the repairs as necessary. If the tiller starts vibrating unusually, it should be inspected immediately.
17. Switch the engine off:
  - If you remove from the tiller.
  - Before refueling.
18. When switching off the engine, ignition switch needs to be in position OFF (position OFF or O). Close the gasoline cock position OFF or O.

## **WORK AREA**

1. Keep work area clean and well lit. Cluttered and dark areas invite accidents.
2. Check the landscape where the machine will be used and remove all objects such as stones, toys, sticks and wires, which could be caught and thrown away. Damage of the machine or operator's injury could be caused.
3. Do not operate this machine in explosive atmospheres, such as on the presence of flammable liquids, gases, or dust. Machine creates sparks which may ignite the dust or fumes.
4. Keep children and bystanders away while operating the machine. Distractions can cause you to lose control.

## **PERSONAL SAFETY**

1. This machine 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 machine by a person responsible for their safety.
2. Children should be supervised to ensure that they do not play with the machine.
3. Stay alert, watch what you are doing and use common sense when operating this machine.
4. Do not use this machine while you are tired, ill or under the influence of drugs, alcohol, or medication. A moment of inattention while operating this machine can cause you to lose control and may result in series personal injury.
5. Do not overreach. Keep proper footing and balance at all times. This enables better control of the tool in unexpected situations.
6. Remove any adjusting key or wrench before turning the machine on. A wrench or a key that is left attached to a rotating part of the machine may result in personal injury.
7. Use safety equipment. Always wear eye protection. Safety equipment such as a dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate condition will reduce personal injuries.
8. Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
9. Prolonged use of the machine may lead to disorders of blood circulation in hands caused by vibration. These effects can be worsened by low ambient temperatures and/or by gripping the handgrips excessively tightly. Period of use you can extend with appropriate gloves or regular breaks. Take frequent work breaks. Limit the amount of exposure per day.

## PETROL TOOL USE AND CARE



**WARNING! Gasoline is highly flammable and explosive.**

1. Store fuel in containers specifically designed for this purpose.
2. Refuel outdoors only and do not smoke while refueling.
3. Add fuel before starting the engine. Never remove the cap of the tank or add petrol while the engine is running or when the engine is hot.
4. If petrol is spilled, do not attempt to start the engine but move the machine away from the area of spillage and avoid creating any source of ignition until petrol vapors have dissipated.
5. Replace all fuel tank and container caps securely.
6. Do not operate the engine in a confined space where dangerous carbon monoxide can collect.
7. Do not force the petrol tool. Use the correct petrol tool for your application. The correct petrol tool will do the job better and safer at the rate for which it was designed.
8. Do not use the petrol tool if the main switch does not work. Any petrol tool that cannot be controlled with switch is dangerous and must be repaired.
9. Turn tool off completely before making any adjustments, changing accessories, or storing petrol tools. Such preventive safety measures reduce the risks of starting the petrol tool accidentally.
10. Store idle petrol tools out of the reach of children and do not allow persons unfamiliar with the petrol tool or these instructions to operate the petrol tool. Petrol tools are dangerous in the hands of untrained users.
11. Maintain petrol tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the petrol tool's operation. If damaged, have the petrol tool repaired before use. Many accidents are caused by poorly maintained petrol tools.
12. Use the petrol tool, accessories and tool bits etc., in accordance with these instructions and in the manner intended for the particular type of petrol tool, taking into account the working conditions and the work to be performed. Use of the petrol tool for operations different from intended could result in a hazardous situation.

## PERSON PROTECTION



**Be prepared! Have about one following things at least:**

- suitable fire extinguisher (Dry Powder)
- Fully equipped first-aid kit, available easily for machine operator and accompanying person. It should contain enough pieces of bandage for lacerated/cutting wounds.
- Mobile phone or another device for quick calling of rescue service.



**Don't work alone. There must be around another person who knows principles of the first aid.**



**The accompanying person must keep safe separation distance from your workplace, but he/she must be able to see you the whole time! Work only on such places where you are able to call the rescue service quickly!**

1. In case of any injury always proceed in accordance with the principles of the first aid.
2. If someone is cut, cover the wound with a clean cloth and press hard to stop the flow of blood.
3. Do not let petrol or oil come in contact with your skin. Keep petrol and oil away from the eyes. If petrol or oil comes in contact with the eyes, wash them immediately with clean water. If irritation is still present, see a doctor immediately.
4. Individuals with poor circulation who are exposed to excessive vibration may experience injury to blood vessels or the nervous system. Vibration may cause the following symptoms to occur in the fingers, hands or wrists: "falling asleep" (numbness), tingling, pain, stabbing sensation, alteration of skin colour or of the

skin. If any of these symptoms occur, see a physician.

**Put safety first in the case of fire:**

5. If fire comes from the engine or smoke appears from any other than the exhaust vent, first distance yourself from the product to ensure your physical safety.
6. Use dry powder fire extinguisher on the fire to prevent it from spreading.
7. A panicked reaction could result in the fire and other damage becoming more extensive.

**MAINTENANCE AND STORAGE**

1. Make sure that all nuts, bolts and screws are tightened securely and that the equipment is in a safe working condition.
2. Routinely check the catch basket for signs of wear and impaired functionality.
3. Remember that on equipments with teeth units, the movement of one teeth unit may result in the other teeth units starting to rotate.
4. While you are adjusting the equipment, take care not to jam your fingers between moving teeth and stationary parts of the equipment.
5. While you are carrying out maintenance work on the teeth, it is important to remember that the teeth can still be moved even if the drive has been switched off.
6. For your own safety, replace worn or damaged parts without delay. Use only original spare parts and original accessories.
7. Keep the equipment where it is out of children's reach.
8. Never store the machine with petrol in the tank inside a building where fumes can reach an open flame or spark
9. Allow the engine to cool before storing in any enclosure;
10. To reduce the fire hazard, keep the engine, silencer, battery compartment and petrol storage area free of grass, thatch, moss, leaves or excessive grease;
11. If the fuel tank has to be drained, this should be done outdoors. The drained fuel should be stored in a container specifically designed for fuel storage or it should be disposed of carefully.



### 3. GENERAL IDENTIFICATION



Fig.1

- |                               |                         |                           |
|-------------------------------|-------------------------|---------------------------|
| 1. Upper handle               | 2. Transport lever      | 3. Starter handle         |
| 4. Grass catcher Locking knob | 5. Wheel                | 6. Height adjustment Knob |
| 7. locking knob               | 8. Brake control handle |                           |

### 4. TECHNICAL DATA

Model	CEDWR01	CEDWR01-B	CEDWR01-H
Engine Type	Horizontal	Horizontal	Horizontal
Engine Displacement	212cm <sup>3</sup>	208cm <sup>3</sup>	196 cm <sup>3</sup>
Nominal Power	4.0kW	4.2kW	4.3kW
Rated Speed	3400rpm/min	3400rpm/min	3400rpm/min
Grass catcher capacity	45L	45L	45L
Working Width	400mm	400mm	400mm
Height Adjustment	-5 +15mm	-5 +15mm	-5 +15mm
Measured sound power level	101.2 dB(A)	101.2 dB(A)	101.2 dB(A)
Guaranteed sound power level	105dB(A)	103dB(A)	99dB(A)
Vibration level (handle)	7.03 m/s <sup>2</sup>	9.98 m/s <sup>2</sup>	7.46 m/s <sup>2</sup>

## 5. ASSEMBLY

### 5.1 FOLDING HANDLE

1. Fix the lower handlebar into the unit body with bolts, washers and locking knobs. (Fig. 2A/ Fig.2B/ Fig.2C)
2. Connect the lower handlebar and upper handlebar with bolts, washers and locking knobs. (Fig.2D/ Fig.2E/ Fig.2F)
3. Attach the cable-clamps to the position shown and then attach the cable. (Fig.2G)



Fig.2A



Fig.2B

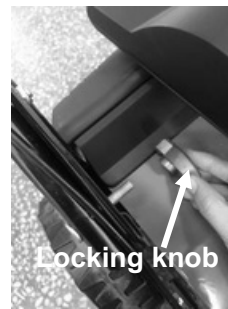


Fig.2C

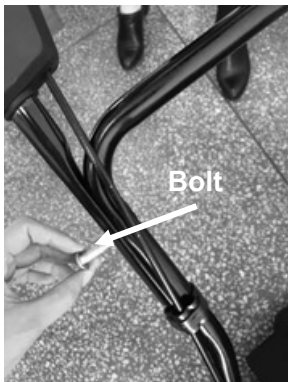


Fig.2D



Fig.2E

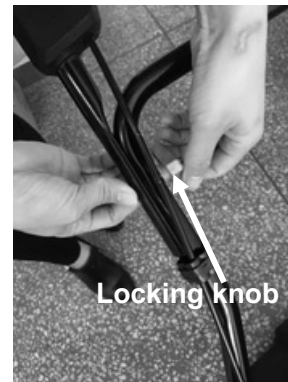


Fig.2F



Fig.2G

### 5.2 ADJUSTMENT FOR AN APPROPRIATE ANGLE

1. Screw out the locking knobs which fixed the lower handle. (Fig.3A)
2. Move the lower handle up or down, adjust it to the proper height. There are 2 adjusting height to be choose on this type lawn mower; at 2 height, lower handle to the ground is highest, 1 height is the lowest.
3. Adjusting to the proper height, then fix the lower handle by the locking knobs.

**! WARNING:** The left side and right side of lower handle must adjust to the same height.

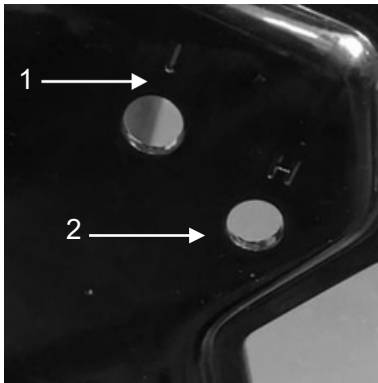


Fig. 3A

### 5.3 MOUNTING AND DISMOUNTING THE GRASS CATCHER

To fit: Raise the rear cover and hitch the grass catcher on rear of mower. (Fig. 4A/Fig. 4B/Fig. 4C).

To remove: Grasp and lift the rear cover, remove grass catcher.

**! WARNING:** Before you ever hook the grass catcher to the scarifier, you must ensure that the engine is stopped and the cutting unit is not rotating.



Fig. 4A



Fig. 4B



Fig. 4C

### 5.4 STARTER HANDLE

Move the starter handle from the engine to the rope guide. (Fig. 5)



Fig. 5

### 5.5 DEPTH OF CUT

Apply outward pressure to disengage lever from rack. Move lever forward or back to adjust height. (Fig. 6 and see clause 6.4).



Fig. 6

## 6. OPERATING INSTRUCTIONS

Service the engine with gasoline and oil as instructed in the separate engine manual packed in your scarifier. Read instructions carefully.

**⚠ WARNING!** Petrol is highly flammable.

Store fuel in containers specifically designed for this purpose.

Refuel outdoors only, before starting the engine and do not smoke while refueling or handling fuel.

Never remove the cap of the fuel tank or add petrol while the engine is running or when the engine is hot.

If petrol is spilled, do not attempt to start the engine but move the machine away from the area of spillage and avoid creating any source of ignition until petrol vapors have dissipated.

Replace all fuel tanks and container caps securely.

Before tipping the scarifier to maintain the blade or drain oil, remove fuel from tank.

**⚠ WARNING:** Never fill fuel tank indoors, with engine running or until the engine has been allowed to cool for at least 15 minutes after running.

### 6.1 TO START ENGINE

1. Before starting engine, please turn the engine switch to the "ON" position. (Fig.7A)
3. To start a cold engine, move the Carburetor lever to the "on" position (Fig. 7B). keep the choke lever stay To the "off" position (Fig. 7B).
4. Standing behind the unit, grasp the brake control handle and hold it against the Lower handle. (Fig. 7C)
5. Keep hold the brake lever as shown Fig.7C and Grasp the starter handle as shown Fig 7D pull up rapidly.  
Return it slowly to the rope guide bolt after engine starts.
6. Move the choke lever to the "on" position. (Fig.7F)

**⚠ Note!** When the cutter deck is in contact with the ground, the unit can move.



Fig. 7A



Fig. 7B

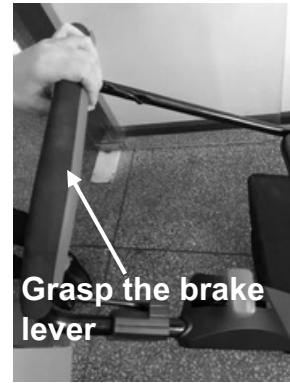


Fig. 7C



Fig. 7D



Fig. 7E

## 6.2 TO STOP ENGINE

**⚠ CAUTION:** The blade continues to rotate for a few seconds after the engine is shut off.

1. Release the brake control handle to stop the engine and blade. (Fig. 8A)
2. Move the engine switch to "OFF" position. (Fig. 8B)



Fig. 8A

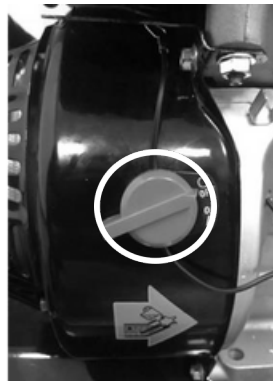


Fig. 8B

## 6.3 GRASS CATCHER

### 6.3.1 Work without the grass catcher (optional)

For scarifier, you can work with grass catcher or without grass catcher. Whenever you detach the grass catcher, the deflector flap dropped down. When scarifier without the grass catcher attached, the cuttings are ejected straight onto the ground. (Fig. 9A)

### 6.3.2 Work with the grass catcher

When work with grass catcher, the cuttings are ejected to the grass catcher. If the grass catcher is full of

cuttings, you will need to empty and clean the grass catcher.

- 1.Stop the engine and wait until it comes to a stop.
- 2.Lift the deflector flap and unhook the grass catcher. (Fig.9B)
- 3.Empty out the contents.

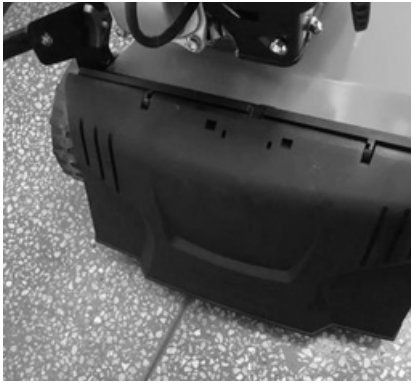


Fig.9A



Fig.9B

## 6.4 HEIGHT ADJUSTMENT INSTRUCTIONS

**CAUTION:** Do not at any time make any adjustment to scarifier without first stopping the engine .

Your scarifier is equipped with a depth adjustment lever offering a Unlimited working positions.The working positions are -3mm, -6mm, -9mm, -12mm, -15mm height.

- 1.Stop mower and disconnect spark plug cable before changing mower cutting height.
- 2.To change the height of cut by turn the front knob clockwise rotation or negative rotation to selected height.
- 3.Move transport lever to transport position to prevent cutter deck from touching the ground after finish work.



Fig.10A



Fig.10B

## 7.REPLACEMENT OF THE ROLLER



**WARNING:** Be sure to wear work gloves.



**Caution:** use only original scarifier/aerator shafts approved by the manufacturer.

The equipment can be assembled with the scarifying roller or the aerator roller.

Only replace the roller with an original **Trex** roller, as this will ensure top performance and safety under all conditions.



To change the scarifying roller or the aerator roller, which is available as an option, proceed as follows.

1. Switch off the engine and leave to cool down.
2. Remove spark-plug terminal.
3. Remove the grass catcher.
4. Raise the unit slightly at the front.



**Note:** Do not raise too high, fuel may run out of the tank, if required, drain fuel before changing the roller.

#### Remove the roller

1. Remove the four screws. (Fig.11B)
2. Lift the roller and pull out in the direction of the arrow. (Fig.11C)



Fig.11A

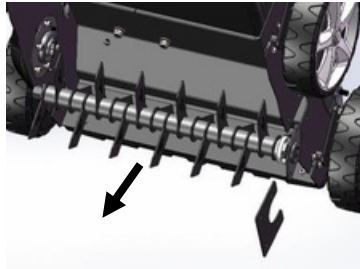


Fig.11B

#### Assemble the roller

1. Slide the new roller in the direction of the arrow, insert the shaft into the hexagonal socket and press the other side into the holder (Fig.11C/ Fig.11D/ Fig.11E).
2. Refasten the roller with the two screws.
3. Check that the roller is seated correctly.
4. Assemble aerator shaft the same as scarifier shaft. (Fig.11F/ Fig.11G/ Fig.11H).

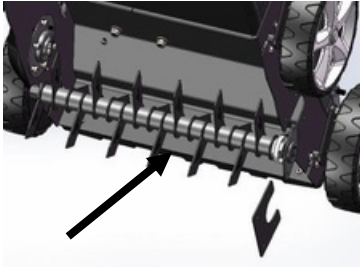


Fig.11C

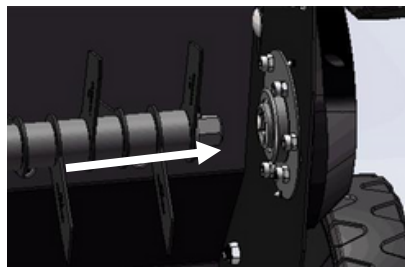


Fig.11D

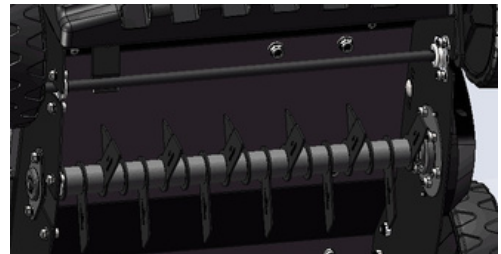


Fig.11E

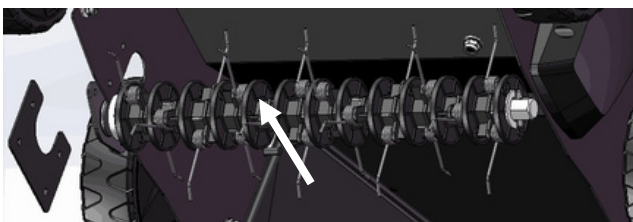


Fig.11F

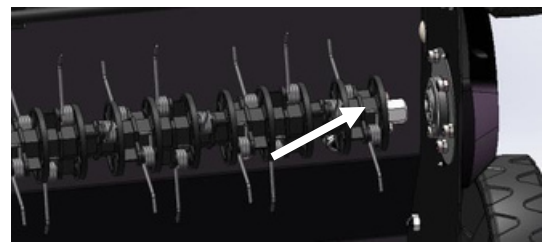


Fig.11G



Fig.11H

## 8.FUNCTIONAL DESCRIPTION

The lawn scarifier is pushed by hand over the area of grass to be cut. The cutters are driven by a petrol engine. The depth of cut is set by varying the central height-adjustment mechanism individually. **Scarification:** The cutter deck rotates and removes the felt layer formed by moss, lichen and weeds and conveys the scarified material to the outside or into the grass catcher. During cutting the cutters penetrate the ground and therefore ensure that the lawn is loosened and absorbs nutrients better. We recommend scarifying the lawn in spring (April/May) and autumn (October). **Aerating:** The cutter deck (aerator shaft) rotates and combs the lawn or aerates the slightly mossy areas. The removed moss is conveyed outwards or into the grass catcher. During aeration the surface of the ground is scratched; this improves water drainage and facilitates the absorption of oxygen. We recommend aerating the lawn during the entire growing period as when required.

## 9.MAINTENANCE INSTRUCTIONS

### SPARK PLUG

Use only original replacement spark plug. For best results, replace the spark plug every 100 hours of use.

### BRAKE PADS

Check and/or replace the engine brake pads in service agent regularly, only original parts can be used as replacement.

## 10.LUBRICATION INSTRUCTIONS



**CAUTION:** DISCONNECT SPARK PLUG BEFORE SERVICING.

- 1.WHEELS-Lubricate the ball bearings in each wheel at least once a season with a light oil.
- 2.ENGINE-Follow engine manual for lubrication instructions.

## 11.CLEANING



**CAUTION:** Do not hose engine. Water can damage engine or contaminate the fuel system.

- 1.Wipe deck with dry cloth.
- 2.Hose under deck by tilting the mower so that the spark plug is up.

### 11.1 ENGINE AIR CLEANER



**CAUTION:** Do not allow dirt or dust to clog the air filter foam element.

The engine air cleaner element must be serviced (cleaned) after 25 hours normal mowing. The foam element must be serviced regularly if the mower is used in dry dusty conditions.

#### To CLEAN AIR FILTER

- 1.Remove cover. (Fig.12A)
- 2.blow the the Filter element dust off . (Fig.12B).
- 3.Place a few drops of SAE30 oil on the foam filter and squeeze tightly to remove any excess oil.



- 4.Reinstall filter.
- 5.Close the filter cover.

**⚠ NOTE:** Replace filter if frayed, torn, damaged or unable to be cleaned.

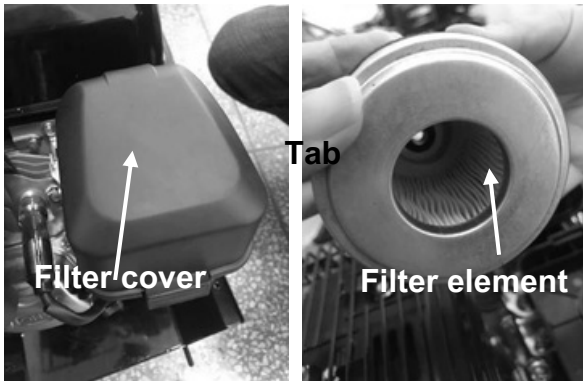


Fig.12A

Fig.12B

## 11.2 ENGINE

Refer to the separate engine manual for engine maintenance instructions.

Maintain engine oil as instructed in the separate engine manual packed with your unit.

Read and follow instructions carefully.

Service air cleaner as per separate engine manual under normal conditions. Clean every few hours under extremely dusty conditions. Poor engine performance and flooding usually indicates that the air cleaner should be serviced.

To service the air cleaner, refer to the separate engine manual packed with your unit.

The spark plug should be cleaned and the gap reset once a season. Spark plug replacement is recommended at the start of each mowing season; check engine manual for correct plug type and gap specifications.

Clean the engine regularly with a cloth or brush. Keep the cooling system (blower housing area) clean to permit proper air circulation which is essential to engine performance and life. Be certain to remove all grass, dirt and combustible debris from muffler area.

## 12.STORAGE AND TRANSPORT

### Storage

The following steps should be taken to prepare lawn scarifier for storage.

1.Empty the tank.

a) Empty the petrol tank with a suction pump.

**⚠ CAUTION!** Do not drain the petrol in closed rooms, in close proximity of open fire, etc. Do not smoke!

Petrol fumes can cause explosion or fire.

b) Start the engine and let it run until it has used up all remaining petrol and stalls.

c) Remove the spark plug. Use an oilcan to fill approx. 20 ml oil into the combustion chamber. Operate the starter to evenly distribute the oil in the combustion chamber. Replace the spark plug.

2.Clean and grease the lawnmower carefully as described above under “Lubrication instructions”.

3.Slightly grease the cutter to avoid corrosion.

4.Store the lawn scarifier in a dry, clean and frost-protected place, out of reach of unauthorized persons.

**⚠ CAUTION!** The engine must have completely cooled down before storing the lawnmower.



**NOTE:** - When storing any type of power equipment in an unventilated or material storage shed,

-Care should be taken to rust-proof the equipment. Using a light oil or silicone, coat the equipment, especially cables and all moving parts.

- Be careful not to bend or kink cables.

- If the starter rope becomes disconnected from rope guide on handle, disconnect and ground the spark plug wire, Depress the blade control handle and pull the starter rope out from engine slowly. Slip the starter rope into the rope guide bolt on handle.

## Transport

1. Move transport lever to transport position.

2. Stopping the engine



## Danger!

Before transportation, always stop the engine and leave to cool down. Remove spark-plug terminal. The appliance must not be tilted when it is transported. When transporting the scarifier in or on a vehicle, ensure that it does not move around unintentionally.

Empty the fuel tank before transporting the unit. Filler cap must be closed tightly.

## 13. TROUBLESHOOTING

Problem	Possible causes	Remedial action
Engine does not start	Throttle choke is not in the correct position	Move throttle choke to correct position.
	Fuel tank is empty.	Fill tank with fuel: refer to ENGINE OWNERS MANUAL.
	Air cleaner element is dirty.	Clean air cleaner element: refer to ENGINE OWNERS MANUAL.
	Spark plug loose.	Tighten spark plug.
	Spark plug wire loose or disconnected from plug.	Install spark plug wire on spark plug.
	Spark plug gap is incorrect.	Set correct gap between electrodes.
	Spark plug is defective.	Install new, correctly gapped plug: refer to ENGINE OWNERS MANUAL.
	Carburetor is flooded with fuel.	Remove air cleaner element and pull starter rope continuously until carburetor clears itself and install air cleaner element.
Motor speed drops off	Faulty ignition module.	Contact the service agent.
	Depth of cut too great	Set to smaller depth of cut
	Grass too high	Mow the lawn before scarifying
	Ejector channel blocked	Pull out spark plug connector,

		remove blockage.
	Air filter clogged	Clean air filter: refer to ENGINE OWNERS MANUAL.
Poor scarification results.	Depth of cut too small	Set to great depth of cut.
	Worn cutting blades	Having cutting blades replaced in a specialist work ship
Grass catcher never fills	Grass catcher is full/clogged	Stop scarifier. Unload grass catcher or clean it
	Ejector channel blocked	Pull out spark plug connector, clean ejection channel
Unusual noises	Bolts, nuts or other mounting Tighten parts. parts slack.	
Vibration	Cutting assembly is loose.	Tighten blade.
	Cutting assembly is unbalanced.	Balance blade.

## 14. ENVIRONMENT



This marking indicates that this product should not be disposed of with other municipal waste. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle to reuse material resources. To return your used device, please use the return and collection systems or contact your local authority or local shops for advice on environmentally safe recycling.

## 15. RESIDUAL RISK

Even though the manufacturer is responsible for the design of the scarifier, certain risks are unavoidable during operation:

- item rejection,
- hearing damage in case of long-term work without hearing protectors,
- damage to eyes and face from splintering elements,
- clothing caught and entangled in moving parts.

Residual risk assessment

If the instructions in this manual are followed, the residual risk when using the scarifier is limited. Failure to follow the rules described here increases the residual risk.

# Maintenance schedule

<div> <div>FREQUENCY</div> <div>ACTION</div> </div>		Before each use	After each use	Every 10h	Every 25h of once a season	Before storage	Information
MACHINE	Check elements	•				•	
	Clean grass collector	•	•			•	
	Clean machine		•			•	
	Check / change belt				• Check		Change if needed
	Clean ventilation outlets	•	•			•	
	Check/replace guide wheels				• Check		Change if needed
	Check/clean/lubricate drive system	• Clean	• Clean		• Lubricate	• Clean and lubricate	Clean shaft
ENGINE	Check oil	•				•	
	Check fuel					•	
	Replace oil				•		More often in difficult conditions
	Clean air filter			•			More often in difficult conditions
	Check / replace spark plug				•		
	Change air filter				•		More often if it is dirty
	Check muffler				•		More often in difficult conditions