

## **OWNER'S MANUAL**

### **PETROL LAWN SCARIFIER**

#### **MODEL: STS40-S**



**CE** 2018

#### **CAUTION:**

Read and follow all Safety Rules and Instructions before operating this equipment.



## INTENDED USE

This machine is a scarifier/aerator 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. This allows your grass to absorb nutrients better and gives you a healthier, more vibrant looking lawn as a result. We recommend you to scarify you lawn in the spring and autumn.

Domestic use for this scarifier is classed as a general annual operating time of around 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. These 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. In addition, 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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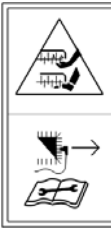
## 1. SYMBOLS FOUND ON THE MACHINE



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



Keep bystanders at a safe distance.



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 no 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. Always use the machine in daylight, or in good lighting conditions. If possible, do not use the scarifier on wet grass.
3. When working on a slope, ensure you have good footing at all times.
4. Use this machine at a steady walking pace.
5. With machines on wheels, it is necessary that you till across the slope, never up and down.
6. If working on a slope, be take extra care when turning the machine.
7. Do not scarify or aerate on a steep slope.
8. Be particularly careful when you turn the scarifier or when pull the scarifier towards you.
9. Stop the scarifier blades if the machine is to be tilted for transportation across other areas or must be transferred to/from scarified areas.
10. Never use the scarifier with a damaged rear deflector and do not operate the machine without its moss/grass collection basket.
11. Do not make any unauthorized alterations to the engine and do not turn it over.

12. Carefully start the engine. Keep your feet a safe distance from the blades.
13. Start the engine, the scarifier should not be tilted, not even if the machine has to be lifted. If tilting of the scarifier is absolutely necessary, lift it on its back wheels towards the user only.
14. Never reach behind or under the rotating parts with hands or feet. Always keep a safe distance from the ejector.
15. Never lift the scarifier up or carry it while the engine is on.
16. Switch the engine off and pull the spark plug connector out before removing any clogs in the ejector we would also recommend disconnecting the spark plug connector if you need to remove the wheels or the tines. You should also disconnect the spark plug connector if you collide with an object and need to inspect the scarifier for damage and making any repairs as necessary. If the scarifier starts vibrating unusually, it should be inspected immediately.
17. Switch the engine off before refueling and before removing the collection basket or tine assembly.
18. When switching off the engine, ignition switch needs to be in position OFF (position OFF or O). In addition, close the petrol cock position to 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 by the machine. Damage to the machine or injury to the operator could be caused.
3. Do not operate this machine in explosive atmospheres, such as in 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 serious 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 in the appropriate conditions will reduce the possibility of personal injuries.
8. Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry 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 exacerbated by low ambient temperatures and/or by gripping the handgrips too tightly. By wearing appropriate gloves or taking regular breaks you can extend the period in which this machine is comfortable to use. Take frequent work breaks. Limit the amount of exposure per day.

## PETROL TOOL USE AND CARE



**WARNING! Petrol 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 fuel cap 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 - 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 use the scarifier for any other application than its intended purpose. Using the right machine for the right job will result in better results and safer operation.
8. Do not use the scarifier if the main switch does not work. Any petrol machine that cannot be controlled with a switch is dangerous and must be repaired.
9. Turn the machine off completely before making any adjustments, changing accessories, or storing petrol machinery. Such preventative safety measures reduce the risks of accidental starting.
10. Store idle machinery out of the reach of children and do not allow persons unfamiliar with the machine or these instructions to operate it. Petrol machinery is dangerous in the hands of untrained users.
11. Maintain your machine. Check for misalignment or seizing of moving parts, breakage of parts and any other condition that may affect the petrol tool's operation. If damaged, have your machine 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 dangerous circumstance or personal injury.

## PERSON PROTECTION



**Be prepared! Have at least one of the following to hand:**

- A suitable fire extinguisher (Dry Powder)
- A fully-stocked first-aid kit, available easily for machine operator and accompanying person. It should contain enough bandages to treat lacerations/cutting wounds.
- A mobile phone or another device capable of quickly calling the emergency services.



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



**The accompanying person must keep a safe distance from the working area, while being able to see you the whole time. Work only in areas where you are able to contact the emergency services 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 case of fire:**

5. If fire comes from the engine or smoke rises for any point on the machine 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. Stay calm – panicking could result in the fire spreading and causing further damage.

**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. While you are adjusting the equipment, take care not to jam your fingers between moving teeth and stationary parts of the equipment.
4. 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.
5. For your own safety, replace worn or damaged parts without delay. Use only original spare parts and original accessories.
6. Keep the equipment where it is out of reach of children.
7. Never store the machine with petrol in the tank inside a building where fumes can reach an open flame or spark
8. Allow the engine to cool before storage.
9. To reduce the fire hazard, keep the engine, silencer, battery compartment and petrol storage area free of grass, thatch, moss, leaves or excessive grease;
10. 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. Engagement Lever     | 3. Starter Handle    |
| 4. Grass Collector     | 5. Wheel                | 6. Height Adjustment |
| 7. Folding Handle Knob | 8. Brake Control Handle |                      |

### 4. TECHNICAL DATA

Model	TS40-S
Engine Type	Horizontal
Engine Displacement	212cm <sup>3</sup>
Nominal Power	4.0kW
Rated Speed	3400rpm/min
Fuel Tank Capacity	3.6L
Oil Tank Capacity	0.6L
Grass catcher capacity	45L
Working Width	400mm
Net Weight	38.4kg
Height Adjustment	-5 +15mm
Measured sound power level	101.2(A) K=3.43dB(A)
Guaranteed sound power level	105dB(A)
Vibration	7.03

## 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

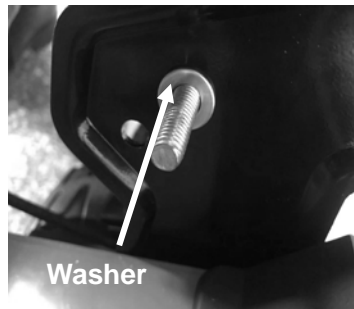


Fig.2B

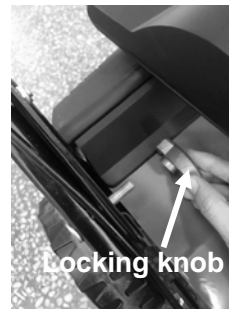


Fig.2C

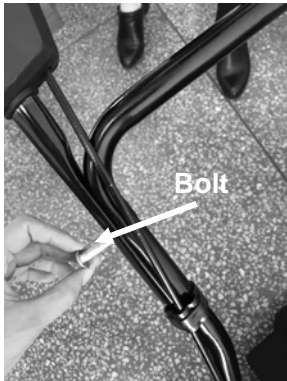


Fig.2D



Fig.2E

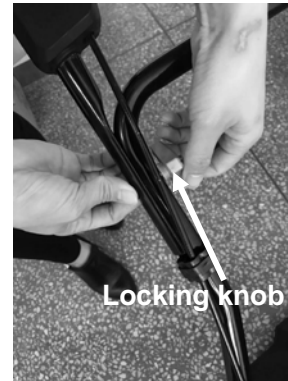


Fig.2F



Fig.2G

### 5.2 ADJUSTMENT FOR AN APPROPRIATE ANGLE

1. Loosen the locking knobs which fix the lower handle in place. (Fig.3A)
2. Move the lower handle up or down, adjust it to the proper height – There are 2 options for handle height.
3. Once adjusted to the desire height, fix the lower handle into place using the locking knobs.

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

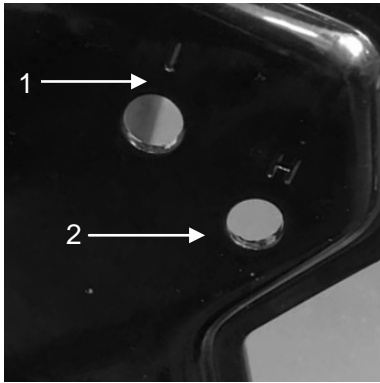


Fig.3A

### 5.3 FITTING AND REMOVING 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

From the operating position, pull the engagement lever back towards you. Then adjust to the desired depth using the adjustment knob. Move lever forward to change the scarifier to the adjusted height. (Fig. 6 and see clause 6.4).



Fig. 6

## 6. OPERATING INSTRUCTIONS

Service the engine with petrol 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 for 15 minutes after the engine has stopped running – the engine must be cool before any fuel is added.

### 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 fuel tap to the “on” position (Fig. 7B). Move the choke lever to the “on” 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 “off” position. (Fig.7E)

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

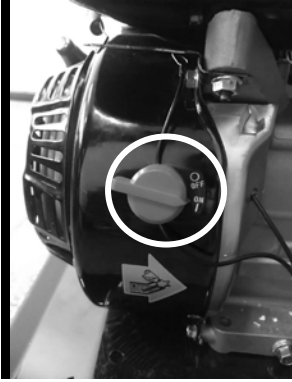


Fig.7A

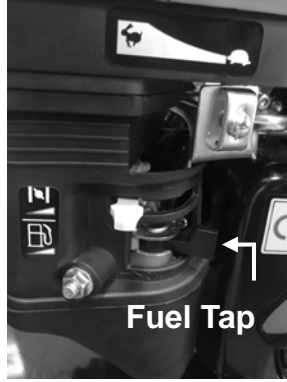


Fig.7B

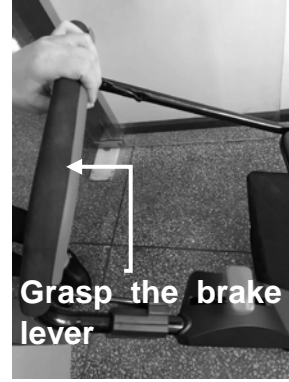


Fig.7C



Fig.7D

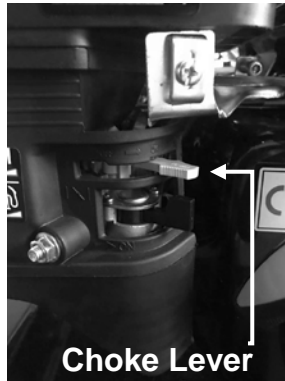


Fig.7E

## 6.2 TO STOP ENGINE



**CAUTION:** The blade will continue 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

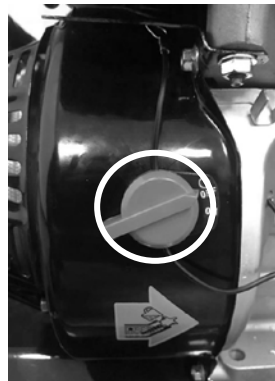


Fig. 8B

## 6.3 GRASS CATCHER

Your grass 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 as described below:

1. Stop the engine and wait until it comes to a complete 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 5 working heights. They are: -3mm, -6mm, -9mm, -12mm and -15mm.

Stop the engine before changing scarifier cutting height.

1. Make sure the engagement lever is pulled back.
2. To change the height of cut by turn the front knob clockwise rotation (higher) (Fig.10A) or anticlockwise rotation (lower) to selected height (Fig.10B).
3. Move engagement lever into its forward position to set your working height.

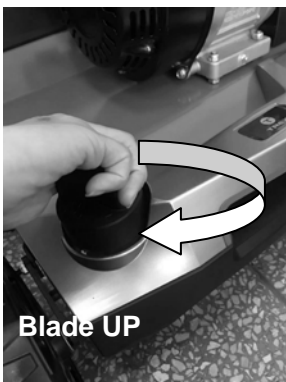


Fig.10A



Fig.10B



Fig. 10C

## 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 **Sherpa** roller, as this will ensure top performance and safety under all conditions.



To change the scarifying roller or the aerator roller:

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 the scarifier too high, as this may cause fuel to run out of the tank, if required, drain the 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)

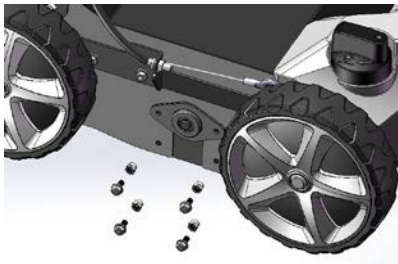


Fig.11A

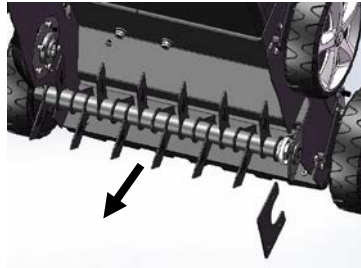


Fig.11B

**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).

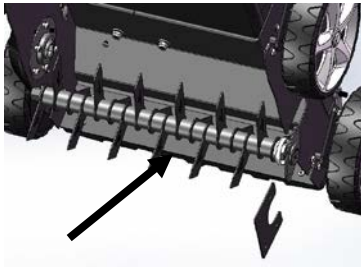


Fig.11C

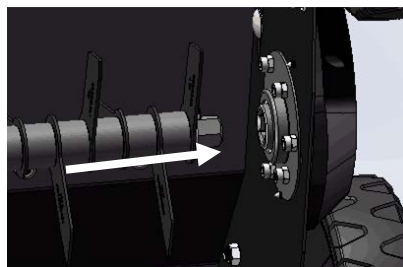


Fig.11D

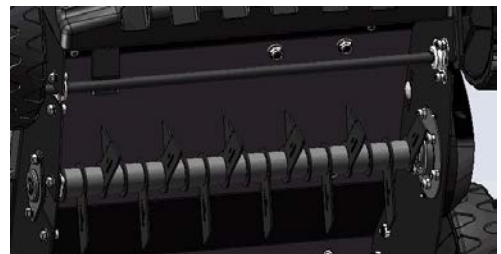


Fig.11E

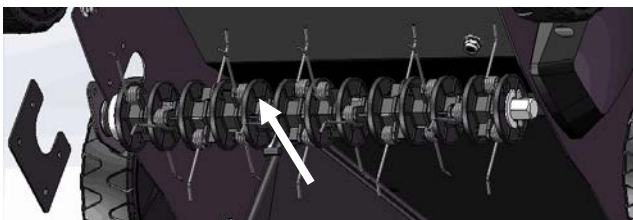


Fig.11F

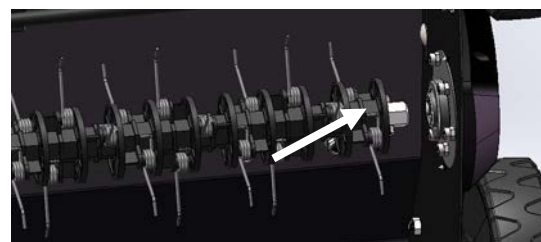


Fig.11G



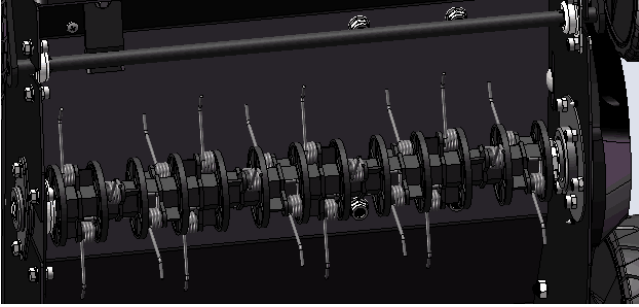


Fig.11H

## 8. FUNCTIONAL DESCRIPTION

The lawn scarifier is pushed by hand over the area of grass to be scarified. 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 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. Dust off the filter element. (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.

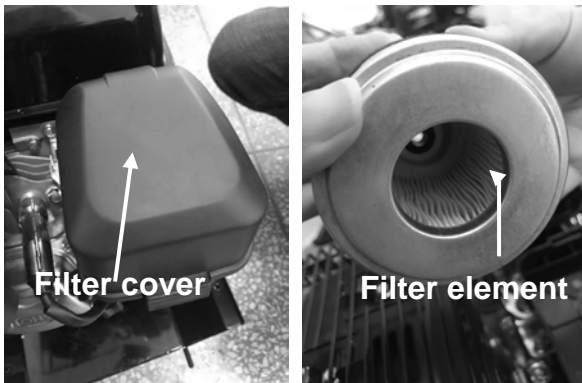


Fig.12A

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 the 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 scarifier 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 unauthorised persons.

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

 **NOTE:** - When storing any type of power equipment in an unventilated storage area:

- 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. Make sure the engine has completely stopped and cooled.



### 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. The fuel tank 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.
	Faulty ignition module.	Contact the service agent.
Motor speed drops off	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 a greater depth of cut.
	Worn cutting blades	Having cutting blades replaced in a specialist workshop
Grass catcher never fills	Grass catcher is full/clogged	Stop the scarifier. Empty the grass catcher or clean it
	Ejector channel blocked	Pull out spark plug connector, clean ejection channel
Unusual noises	Bolts, nuts or other mounting parts slack.	Tighten parts as necessary.
Vibration	Cutting assembly is loose.	Tighten blade assembly as necessary.
	Cutting assembly is unbalanced.	Balance blade as necessary – possibly contact a specialist workshop.

## 14. ENVIRONMENT

Should your machine need replacement after extended use, it should not be put in domestic waste but instead disposed of in an environmentally safe way.

# 15. CE CERTIFICATION

TÜV SÜD  
ZERTIFIKAT ◆ CERTIFICATE ◆ 認證證書 ◆ CERTIFICADO ◆ CERTIFICAT



Product Service

## Attestation of Conformity

No. M8A 101431 0007 Rev. 00

**Holder of Certificate:** NINGBO TREX MACHINERY CO.,LTD.

No.9, Xinhengsi Road,Cicheng Town  
315031 Ningbo  
PEOPLE'S REPUBLIC OF CHINA

**Product:** Aerator  
Lawn aerator and scarifier

**Model(s):** TS40-S, TS40E-SD, TS40-W

**Parameters:** Displacement:  
163cm<sup>3</sup>(TS40-W)  
212cm<sup>3</sup>(TS40-S,TS40E-SD)  
Rated speed: 3400/min

**Tested according to:** EN 13684:2018

This Attestation of Conformity is issued on a voluntary basis according to Council Directive 2006/42/EC relating to machinery. It confirms that the listed equipment (not Annex IV equipment) complies with the principal protection requirements of the directive. It refers only to the sample submitted to TÜV SÜD Product Service GmbH for testing and certification. See also notes overleaf.

**Test report no.:** 7040318100207-00

**Date,** 2019-01-21

(Wanli Tang)

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After preparation of the necessary technical documentation as well as the EC declaration of conformity the required CE marking can be affixed on the product. Other relevant directives have to be observed.

TÜV SÜD Product Service GmbH • Certification Body • Ridlerstraße 65 • 80339 Munich • Germany



## 16. WARRANTY

1. Users Statement of Warranty. Each new machine is warranted against defective material or assembly of material under normal usage. The warranty applies to the original purchaser, is not transferable and covers faulty parts and the labour involved in replacing and repairing those parts, which are of original manufacture.

2. Period of Warranty 2 year conditional warranty from the original date of sale to the first domestic user. 90 days from the original date of sale to the professional/commercial or for hire user. 90 days from the original date of sale for Replacement Spare Parts All machines' must be serviced within the first 14 months from the original date of purchase, to qualify for a second year parts & labour warranty. Evidence may be required for warranty claims after this period. A reduced warranty period of 90 days applies to those items which are subject to normal wear and tear and in normal use, will need replacement or adjustment. These items are chargeable after 90 days of ownership; filters, wheels, belts, brake & clutch friction components, control cable & starter cords, fluids & lubricants, spark plugs, blades, drive & clutch cable surfaces, carburettor cleaning, bearings& grass collectors.

3. Not covered by this warranty (a) The warranty policy does not cover any depreciation or damages caused by ordinary wear, rusting or corrosion, lack of correct maintenance or operation, misuse, abuse, lack of transportation or accident. (b) The warranty policy does not cover any costs necessary for the standard periodic maintenance services instructed by the operators manual, or service parts replacement which would include oil, filters, wheels, belts, brake linings, fuses, blades, seals and other service parts unless it can be proven that the item has evidence of faulty manufacture. (c) The warranty policy will not cover failure or damage caused as a result of parts or accessories being modified without the written approval of Sherpa Tools Ltd. (d) The warranty policy will not cover the unit if non-genuine parts have been fitted and as a result damage has occurred to the unit. (e) The warranty policy is non-transferable and is only applicable to the original purchaser.

4. Disclaimer (a) This warranty is only a remedy for defect of products. Sherpa Tools will never warranty in terms of the merchantability or the fitness for a particular purpose. (b) No person is authorised to make any warranties, representations or promises, expressed or implied, on behalf of Sherpa Tools, or to modify the terms conditions or limitation of this warranty policy in any way. (c) Neither Sherpa Tools nor any company affiliated with Sherpa Tools shall be liable in any event or manner whatsoever for incidental or consequential damages or injuries, including, but not limited to, loss of crops, loss of profit, out of pocket expenses or profits, rental of substitute equipment or other commercial losses.

5. General (a) Most warrantable failures show up within the first few weeks of use. These failures are usually straightforward and warranty assessment is relatively easy. (b) Failures relating to cutter decks and belts need careful investigation, as the cause may not always be straightforward. Look for damage to blades and pulleys especially when the cutter belt or blade boss have snapped or cracked as this could be due to impact damage. (c) Customers should always refer to the operator/instruction manual when any disputed problem arises, you will find most areas covered within the manual.



Sherpa Tools Ltd.  
STS40-S PETROL LAWN SCARIFIER

If you experience any problems with this product,  
please do not return to the store. Contact Sherpa  
Tools direct on our UK helpline.

UK Helpline: 01522 283 020  
[www.sherpatools.co.uk](http://www.sherpatools.co.uk)

2019