



Petrol Scarifier

WELS38



Operator's Manual



DO NOT operate this equipment until you have read and understood all the enclosed Operator's Manual.
READ ALL the sections in this manual PRIOR to attempting to service, maintain or operate this equipment. !

Fold along dotted line

Place
Stamp
Here

**WEBB LAWMOWERS
C/O HANDY DISTRIBUTION
MURDOCK ROAD
DORCAN
SWINDON
SN3 5HY**

Fold along dotted line

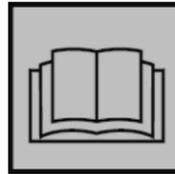
Explanation of symbols on the scarifier



General hazard safety alert.



Beware of thrown or flying objects to bystanders.



Read instruction manual.



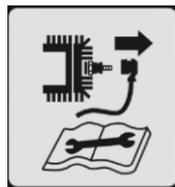
Keep bystanders away from the machine.



Beware of sharp blade(s).
Keep hands and feet out of openings while machine is running.



Wear eye and ear protection.



Remove spark plug before maintenance.



The guaranteed value is : $L_{WA}=98\text{dB(A)}$
WELS38

WEBB Petrol Scarifier Operator's Manual Contents

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READ ALL the sections in this manual PRIOR to attempting to service, maintain or operate this equipment. !

PRE-OPERATION NOTE

Thank you for your purchase of the **WEBB** PETROL SCARIFIER. This scarifier has been designed and manufactured to our highest quality demands for durability and performance.

Webb is committed to offering durable products and quality after-market service. The scarifier is warranted to be free from manufacturer defects in material and workmanship for a period of two (2) years (Domestic use) from the date of purchase. This warranty will be void if the machine has not been operated and maintained in the manner prescribed in this Operator's Manual. Any machine malfunctions, and/or warranty claims that arise from the misinterpretation or the misunderstanding of the instructions and cautions discussed in this booklet will not be eligible for warranty protection.

In order for the scarifier to perform at its optimum capabilities, the operator must read this manual thoroughly before using this unit. This Operator's Manual contains important product operation procedures, safety precautions, maintenance and troubleshooting tips as well as other advisories. Please keep this manual nearby when operating the machine, as a reference should any questions arise.

The **Webb** Scarifier is a self-propelled scarifier designed for dethatching established lawns and large grass covered areas. **DO NOT USE SCARIFIER ON ANY OTHER SURFACE EXCEPT REAL GRASS LAWNS.** The machine should not be used for any other purpose than that stated above. The inappropriate use of any machine can cause serious damage and/or bodily harm to the environment and operator. It is imperative that the operator of this equipment be responsible for the operational environment of the scarifier. Please be prepared and well-informed for all specific requirements precautions and work hazards that may and/or do exist at the jobsite.

Powered by a Briggs & Stratton engine, the SCARIFIER is a powerful unit driving replaceable spring steel flails on a reel for thorough dethatching. For optimum results, ensure that the lawn is mowed to its normal cut height, and allowed to dry before commencing work. Power raking can damage wet grass, particularly young growth. Inspect your jobsite for any debris such as rocks, wiring, string or and other items that can become hazardous during work. Identify and mark all fixed objects to be avoided during work, such as sprinkler heads, water valves, buried cables, or clothes line anchors etc. The jobsite environment, soil conditions, job specifications and operator experience will all be factors that must be considered to select the proper tool for the job. Failure to maintain the scarifier in a proper manner will lead to decreased productivity of the tool and hazards to the operator and bystanders. Do not use the machine if it has been modified or improperly maintained.

All jobsites are different. Please ensure that when using the scarifier, all local bylaws and codes are followed. All operators and mechanics of this machine should be trained in general machine use and safety.

Every care and effort has been made to ascertain the accuracy and completeness of procedures described in this document to ensure your enjoyment and satisfaction. If you have any questions or concerns, please contact your local authorized dealer.

PRODUCT SPECIFICATIONS

Model name	WELS38
Product Number	193810002
Engine model	B&S 1062
Rake width (mm)	380
Rake clearance (mm)	33
Height adjustment (mm)	× 40 ×
Dimensions (mm)	1120 590 1070
Max.blade rotation speed (r/m)	1900
Net Weight (kgs)	46

PRE-OPERATION NOTE CONT'D...



Residual risks
Even when the power tool is used as prescribed it is not possible to eliminate all residual risk factors. The following hazards may arise in connection with the power tool's construction and design:

- Damage to lungs if an effective dust mask is not worn.
- Damage to hearing if sufficient hearing protection is not worn.
- Damages to health resulting from vibration emission, if the power tool is being used over longer periods of time or not adequately managed and properly maintained.

SAFETY PRECAUTIONS



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

Before starting to use this machine, **READ AND UNDERSTAND OPERATOR'S MANUAL PRIOR TO USE OF SCARIFIER.** Be thoroughly familiar with the controls and the proper use of the machine before starting operations.



WARNING: Do not put your hands or feet near or under rotating parts. Keep clear of the discharge opening at all times.

Before operating scarifier, ensure that it is structurally and mechanically safe by checking the following:

- Are all engine controls and the clutch action functioning within acceptable tolerances?
- Is the drive belt in good condition?
- Is the protective rubber skirt in place?



If any of the above checks fail, please take necessary steps to maintain or repair the unit before operating it in any environment.

Before using the scarifier on proposed jobsite, perform the following environmental checks: Inspect the entire work area for unexpected buried hazards, such as boulders, foundations, and fencing. Clean work area of any litter or debris, such as wire, boards, rocks, or any other potential hazards. Know and mark the location of any and all buried utility lines or sprinkler systems. If in doubt, always check with your local utilities provider for survey information and assistance.



Call your local utility company so that they can locate and mark these lines for you. Any cut electrical cable or gas line can result in injury or fatality.

Check for ventilation in area. Do not operate the scarifier or run the engine in unventilated areas.

SAFETY PRECAUTIONS CONT'D...**ALWAYS OPERATE SCARIFIER OUTDOORS!!**

1. When operating the scarifier, follow these guidelines for operator's personal safety:
 - a. Always wear proper safety clothing and equipment for the job. These can and should include eye and ear protection, gloves, dust mask and any other items that are appropriate for the job and jobsite requirements.
 - b. Never wear any jewelry, neck ties, or other loose or hanging items that can be caught on any part of the machine.
 - c. Tie back or remove any loose hair, clothing and any other potential hazards and obstructions.
 - d. Keep all hands, loose clothing, hair, jewelry and all other personal parts and belongings away from moving parts of the machine.
 - e. Avoid coming in contact with the muffler and other engine parts after the engine is started and the time immediately after the machine is turned off. Machine and engine temperatures may exceed 150° or 66°C. Machine must be allowed to cool before touching it or attempting to perform any maintenance!
2. For the safety of others and that of the operator, observe the following precautions:
 - a. Keep observers and bystanders away from the scarifier and its immediate working environment (i.e.: the turf that is being dethatched etc.) while the machine is in use.
 - b. Stop operations or if anyone or anything (i.e.: humans, animals, debris etc.) approaches from the front or the sides while the machine is in operation.
 - c. Stop work and turn off the scarifier if it hits any debris that jams the machine or causes it to labour unnecessarily. Inspect the scarifier and surrounding environment for any possible causes.
 - d. If the machine is jammed, stop the engine and remove the spark plug wire before attempting to clear any jams in the unit.
 - e. Never leave machine unattended
 - f. DO NOT, under any circumstances, operate machine if any of the following conditions are applicable:
 - i. Any impairment (i.e.: medical conditions, medicinal side-effects, alcohol, drugs etc.) Of the operator.
 - ii. The operator has not read or understood the operator's manual for this machine.
 - iii. The operator does not clearly understand the operations of the machine.
 - iv. The machine is in need of repair
 - v. The operator is inappropriately attired to operate the machine.
3. Due to the nature of the machine and the tasks that it is designed to perform, the scarifier may behave in the following manner:
 - a. Always start dethatching a safe distance away from any object such as a fence, foundation or any other structural obstructions. The flails could possibly catch and climb on the object.
 - b. Use extreme caution when operating scarifier on uneven terrain. Do not risk the possibility of tipping over the machine or causing it to rollover.

SAVE THESE INSTRUCTIONS!!!**GENERAL INSTRUCTIONS FOR WORKING WITH YOUR PETROL SCARIFIER****WARNING**

- Petrol is highly flammable. Use extra care in handling gasoline and other fuels. They are flammable and vapors are explosive.

- Store fuel in containers specially designed for this purpose; Use only an approved fuel container.
- Refuel outdoors only and do not smoke while refueling; Never refuel the machine indoors.
- Never store the machine or fuel container near an open flame, such as a water heater
- Add fuel before starting the engine. Never remove the cap of the fuel tank or add petrol while the engine is running or when the engine is hot; Allow the engine to cool before refueling.
- 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;
- Do not smoke in the vicinity of the mower.

SAFETY PRECAUTIONS CONT'D...

- Replace faulty silencers
- Clean up any oil or fuel spills.
- Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times.
- Do not operate the engine in a confined space where dangerous carbon monoxide fumes can collect; Walk and never run.
- Always be sure of your footing on slopes.
- Do not change the engine governor settings or over-speed the engine;
- Never make adjustments or repairs with the engine (motor) running. Disconnect the spark plug wire, and keep the wire away from the plug to prevent accidental starting.
- Check regularly that nuts and bolts, especially blade attachment bolts, are fastened tightly and keep the equipment in a good condition.
- Never tamper with safety devices. Check their proper operation regularly.
- Make sure that grass, leaves or other debris does not collect in the scarifier; check regularly and remove such residues to blocking.
- Stop and inspect your scarifier if you strike any object. Repair, if necessary, before restarting.
- Never attempt to make wheel height adjustments while the engine (motor) is running.
- Grass catcher components (if equipped) are subject to wear, damage and deterioration, which could expose moving parts or allow objects to be ejected. Frequently check these components and, if necessary, replace damaged components with parts recommended by the manufacturer.
- Stop the blade(s) if the scarifier has to be tilted for transportation when crossing surfaces other than grass, and when transporting the scarifier to and from the area to be raked.
- Start the engine or switch on the motor carefully according to instructions and with feet well away from the blades.
- Do not tilt the scarifier when starting the engine or switching on the motor, except if the scarifier has to be tilted for starting. In this case, do not tilt it more than absolutely necessary and lift only the part which is away from the operator.
- Never pick up or carry a scarifier while the engine is running.
- Stop the engine and disconnect the spark plug wire.
 - before clearing blockages or unclogging chute.
 - before checking, cleaning or working on the rake.
 - after striking a foreign object, inspect the scarifier for damage and make repairs before restarting and operating the scarifier;
 - if scarifier starts to vibrate abnormally (check immediately).
- Stop the engine:
 - whenever you leave the scarifier.
 - before refueling.
- Reduce the throttle setting during engine shut down and, if the engine is provided with a shut-off valve, turn the fuel off at the conclusion of raking;
- Allow the engine to cool before storing in any enclosure
- Never store the equipment with petrol in the tank inside a building where fumes can reach an open flame or spark. To reduce the fire hazard, keep the engine, silencer, battery compartment and petrol storage area free of grass, leaves, or excessive grease.
- Check the grass catcher frequently for wear or deterioration
- If the fuel tank has to be drained, this should be done outdoors.

GUIDE TO PARTS BREAKDOWN

Regular maintenance and parts replacement are important steps to extending the life of your equipment and enjoying its optimum performance. When performing or conducting any maintenance or repairs, always check that your working surroundings are safe and well-ventilated and that the technician is familiar and comfortable with all aspects of the machine and required procedures.

This guide aims to serve as a representational guide to the SCARIFIER. Any other uses or application beyond the scope of this document are strictly prohibited. While every attempt has been made to maintain its accuracy, **Webb** reserves the right to update and modify the equipment without prior notification.

Prior to performing any maintenance or repair procedures, acquire the appropriate parts.

To order spare parts, please provide the following information:

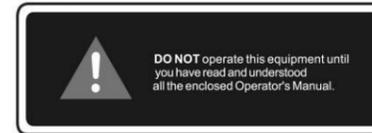
1. Machine Make
2. Model Number
3. Product Number
4. Machine Serial Number
5. Quantity Required of Each Part
6. Part Descriptions.

All **Webb** parts are guaranteed by a ninety (90) day warranty against any manufacturer's defects in workmanship and material. the Operator's Manual for further details on our Warranty Policy.

INFORMATION ON SAFETY DECALS

Below are the decals available for re-ordering to facilitate maintenance. All decals are available for replacement except that with the serial number of the unit for each number serves as a unique identifier for warranty and support purposes.

If you have any questions, please do not hesitate to contact us for further assistance.



Operator: Qty Required=1
PART No. L0106064



Adjustment: Qty Required=1
PART No. 48RLP010



Warning: Qty Required=1
PART No. 48RLP030

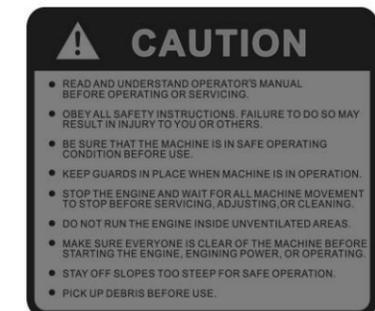
Logo: Qty Required=1
PART No.L0423010



Service: Qty Required=1
PART No. L0106084



PART No. L0203000



Caution: Qty Required=1
PART No. L0106090

CONTENTS LIST



Prior to setting up the Scarifier, check that the following items are enclosed:

Item	Quantity	Check if enclosed
Webb Petrol Scarifier Unit	1	___Yes___No
Webb Petrol Scarifier Unit Handle & Clutch Handle	1	___Yes___No
Webb Petrol Scarifier Operator's Manual	1	___Yes___No
Grass Catcher	1	___Yes___No
Original Engine Manufacturer's Manual	1	___Yes___No

If any of these items are missing, please contact us on 01793 333212 or customerservice@webblawnmowers.co.uk.

DO NOT ATTEMPT ASSEMBLY OR OPERATION WITHOUT ANY OF THESE LISTED PARTS!

SETTING UP THE SCARIFIER

- Cut away and remove box from scarifier.
The Scarifier is a heavy unit. **DO NOT ATTEMPT TO MANUALLY LIFT FROM BOX ALONE!**

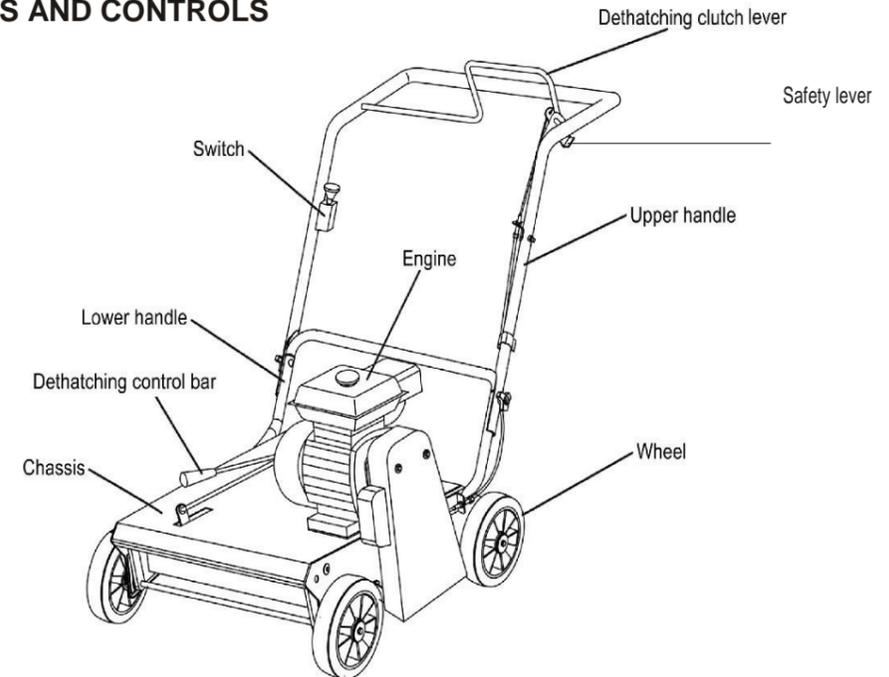


MAKE sure that BOTH people lifting the machine are capable of lifting at least 100 lbs/45.36 kgs individually!! NEVER ATTEMPT TO LIFT THE MACHINE WITH ONLY ONE PERSON!!

- Fold the handle into upright position.
- Verify that all bolts are tightened to secure the handle to the unit.
- Attach the clutch cable to handle.
- Ensure that clutch cable is connected correctly by testing the clutch spring. It should stretch from 3/4"(1.9 cm) to 1"(2.54 cm) maximum and release easily.
- Check the engine to ensure that it is filled with oil.
- Read the Engine Manufacturer's Manual thoroughly for any further procedures to prepare engine for use.

SETTING UP THE SCARIFIER CONT'D...

FEATURES AND CONTROLS



Switch-- Stop a running engine.

Dethatching control bar-- Converts the rake to dethatching state or not.

Dethatching clutch lever-- Engages the rotor with flails.

PRE-OPERATION PROCEDURES

Before using the **Webb PETROL SCARIFIER**, please perform the following procedures for the personal and property safety of the operator, jobsite and for optimal performance.

- Before operating the scarifier ensure that it is structurally and mechanically safe by checking the following:
 - Perform a detailed visual inspection on the machine with particular attention to the following:
 - Are there any loose, worn or damaged parts? If so, **DO NOT ATTEMPT TO OPERATE THE MACHINE**. Make note of required parts, and contact your local authorised dealer for replacement parts and further assistance to service the unit **PRIOR** to any further use.
 - Is the machine, particularly the flails and rotor, clean and free of debris? Small rocks and other foreign objects can jam machines and cause the unit to malfunction, leading to serious injury to the operator and property damage on the jobsite.
 - Are there any cracks or damage on the engine? Consult with the engine manufacturer's manual for guidelines and instructions on service. **DO NOT ATTEMPT TO OPERATE THE MACHINE** until the engine is repaired to engine factory standards.
 - Are the flails engaged in the traveling position (i.e: raised from the working surface)? Ensure that the rotor is securely raised away from the working surface until arrival at jobsite. Moving the scarifier with the flail and rotor in the lowered working position can damage the unit and jobsite.
 - Inspect the handle for the following:
 - Is the handle properly and securely attached to the machine?
 - Is the handle set in the correct operating position?
 - Consult the "Recommended Maintenance Schedule" section of this manual and verify that:
 - The wheels, axle and carriage are lubricated and in good condition.

PRE-OPERATION PROCEDURES CONT'D...

- i The rotor and flails are clean and not in need of replacement. Consult the "Maintenance and Service" section of this manual for guidelines and instructions on when and how to change the flails.
- i The drive belt is in good condition and set to the appropriate tension. Consult the "Maintenance and Service" section of this manual for guidelines and instructions on taking care of the belt.



If any of the above checks fail, please take necessary steps to maintain or repair the unit before operating it in any environment.

2. Before operating the scarifier, perform the following environmental checks:
 - a. Is the ground where the scarifier will be operating level and solid? If it is a slope of more than 35% grade, please refer to "Dethatching on Inclined Surfaces" under the "Operation Procedures" section of this manual.
 - b. Has the lawn been cleared of debris such as string, wire, rocks, metal and other materials? Such items could cause malfunction or damage to the scarifier that could also be potentially hazardous to the machine and operator.
 - c. Are all obstructions such as sprinkler lines, electrical boxes, fences etc. clearly marked?

OPERATION PROCEDURES

A. TRANSPORTING THE SCARIFIER

1. Loosen bolt on handle until handle folds over the engine and rests against the machine.
2. Work with a partner, lift the unit to the transportation vehicle.
 - a. ALWAYS use safe lifting techniques to avoid back or muscle injury! Consult your local health and safety organisation for tips and best practices for moving heavy machinery.
 - b. The SCARIFIER is a HEAVY machine. The net weight is 46kgs.



MAKE sure that BOTH people lifting the machine are capable of lifting at least 100 lbs/45.36 kgs individually!! NEVER ATTEMPT TO LIFT THE MACHINE WITH ONLY ONE PERSON!!

B. PREPARING TO DETHATCH

1. For optimum results, make sure that the ground is dry. Dethatching a wet lawn can damage grass roots, thus adversely affect lawn growth and health
2. Mow the lawn to its normal cut height. Check for depth of thatch by removing several sample plugs from the work area. If thatch is deeper than .3/4"(1.9 cm), two separate rakings are recommended (once in the spring and again in the fall) so as not to traumatize established lawn growth.
3. Check for the slope of any inclined area. This machine is not recommended on use on slopes with more than 35% grade.
4. Before operating the Scarifier, check that the engine is in good order in accordance with the engine manufacturer's handbook.

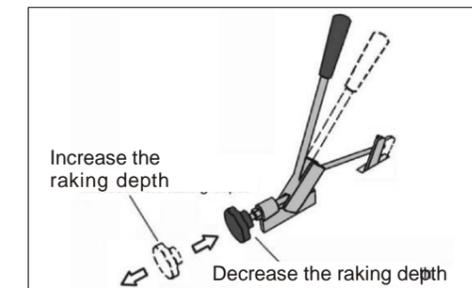


IMPORTANT: ALWAYS KEEP DETHATCHING CONTROL BAR FULLY ENGAGED AGAINST HANDLE WHEN IN USE.

OPERATION PROCEDURES CONT'D...

ADJUSTING THE RAKING DEPTH (See Fig. 8)

- Never adjust the dethatching depth with the motor still running.
- The rake is adjusted to one dethatching depth upon delivery.
- You can set the dethatching height to the desired depth to fit different lawns. Turn the knob to rear position to increase the dethatching depth or to front position to decrease the raking depth.



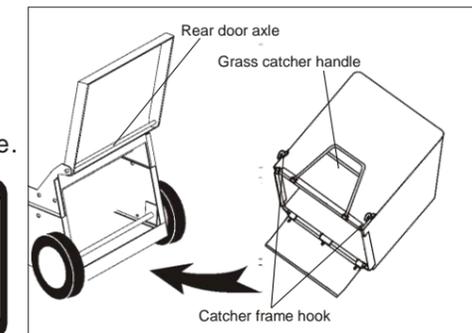
WARNING: The scarifier can only be used on level lawns, if the lowest raking height is being used.



CAUTION: Do not run your scarifier without the approved grass catcher in place. Do not touch rotating tines.

TO ATTACH THE GRASS CATCHER

- Lift the rear door of the scarifier and place the grass catcher frame side hooks onto the axle of the rear door.
- The grass catcher is secured to the scarifier housing when the rear door is lowered onto the grass catcher frame.

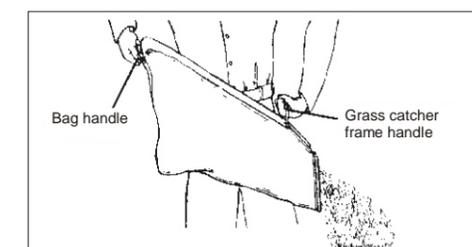


CAUTION: Do not run the scarifier without the approved grass catcher in place. Never attempt to operate the scarifier with the rear door removed or propped open.

TO EMPTY GRASS CATCHER

1. Lift up on grass catcher using the frame handle.
2. Remove grass catcher with clippings from under rake handle.
3. Empty clippings from bag using frame handle and bag handle.

NOTE: Do not drag the bag when emptying; it will cause unnecessary wear.



CAUTION: During operation of emptying clippings from grass catcher, please wear protective gloves to prevent environmental influence on your skin.

BEFORE STARTING ENGINE ADD OIL

Your scarifier is shipped without oil in the engine. The engine holds approximately 0.6L (refer to engine manufacturers specifications in engine hand book). For type and grade of oil to use, see "ENGINE" in Customer Responsibilities section of this manual.

1. Be sure the scarifier is level and area around oil filler is clean.
2. Remove engine oil cap and fill to the full line on the dipstick. Pour oil slowly. Do not over fill.

NOTE: Allow oil to settle down into engine for accurate reading. To read correct level, tighten engine oil cap, then remove it to read the dipstick.

OPERATION PROCEDURES CONT'D...

3. Reinstall engine oil cap and tighten.

- Check oil level before each use. Add oil if needed. Fill to full line on dipstick.
- Change the oil after every 25 hours of operation or each season. You may need to change the oil more often under dusty, dirty conditions.

ADD PETROL

NOTE: Before filling the fuel tank, remove and discard the debris plug that is inside the tank.

Fill fuel tank. Use fresh, clean, regular unleaded gasoline with a minimum of 87 octants. Do not mix oil with petrol. Purchase fuel in quantities that can be used within 30 days to ensure fuel freshness.



WARNING: Experience indicates that alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage. To avoid engine problems, the fuel system should be emptied before storage of 30 days or longer. Drain the fuel tank, start the engine and let it run until the fuel lines and carburetor are empty. Use fresh fuel next season. See storage instructions for additional information. Never use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.



CAUTION: Fill to the bottom of fuel tank filler neck. Do not overfill. Wipe off any spilled oil or fuel. Do not store, spill or use gasoline near an open flame.

TO START ENGINE

NOTE: Due to protective coatings on the engine, a small amount of smoke may be present during the initial use of the product and should be considered normal.

1. To start a cold engine, push in the switch knob, and then push primer (if equipped) three times before trying to start. Use a firm push. This step is not usually necessary when starting an engine, which has already run for a few minutes.
2. Move throttle control lever to fast position.
3. Hold and pull starter handle quickly. Do not allow starter rope to snap back.

NOTE: In cooler weather it may be necessary to repeat priming steps (if primer equipped). In warmer weather over priming may cause flooding and the engine will not start. If you do flood the engine, wait a few minutes before attempting to start and do not repeat priming steps.



CAUTION: If the engine fails to start in 30 seconds, after repeated starting operation by pulling the starter knob, please stop your operation and check the causes. See trouble shooting.

TO STOP ENGINE

To stop engine, release the driving clutch lever, and then push in the Stop Engine switch knob.



C. DETHATCHING ON FLAT SURFACES



DANGER : Do not touch rotating tines
DO NOT SET FLAILS LOWER THAN NECESSARY! Lower flail settings will produce neither better results nor speedup the dethatching process. Inappropriate flail settings will cause premature wear on the unit, such as failed drive belts.

OPERATION PROCEDURES CONT'D...

1. Set the flail depth so that they just touch a flat surface, such as pavement.
2. Start engine and engage clutch to comfortable walking speed for the operator to maintain control of the scarifier at all times.
3. Move the machine to the working area. Test the setting of the flails by dethatching a small area. Raise the depth setting if the following conditions occur:
 - a. Engine RPM suddenly drops to extremely low levels.
 - b. Unit pulls forward, bounces roughly or otherwise becomes difficult to control.
 - c. Grooves are left in the lawn by the scarifier.
4. Thatch should be easily raked and deposited on top of healthy grass. If significant amounts of healthy grass are also removed in the process, adjust flail depth to decrease damage. If the lawn is covered by heavy thatch, lean on handle to raise front wheel slightly, engage the clutch, then SLOWLY lower dethatcher into ground.
5. Once appropriate flail depth is set, push the scarifier in one constant direction and dethatch.
6. Engage clutch control and release to stop scarifier.



ALWAYS keep flails RAISED where there is any possibility of crossing hard objects or surfaces such as rocks, pavement, etc.)

7. To turn the scarifier, push down on the handle to raise rotor and flails from turf and pivot on back wheels.
8. Remove and dispose of thatch after raking prior to any further lawn treatments.

D. DETHATCHING ON INCLINED SURFACES



DANGER: Do not touch rotating tines

1. When operating on inclines, note the following:
 - a. THIS MACHINE IS NOT DESIGNED FOR USE ON INCLINES OF MORE THAN 35% GRADE.

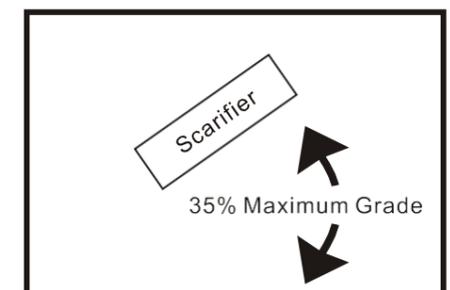


IF MACHINE IS USED ON EXTREME INCLINES, IT MAY BECOME UNBALANCED TO THE POINT OF PRESENTING THE DANGER OF ROLLING OVER.

- b. Dethatching on inclines will cause the centre of gravity of the unit to shift to the downward side of the machine. The following conditions may occur as a result:
 - i. Greater effort and physical exertion may be required to maneuver and control the balance of the machine.
 - ii. Uneven raking results from the shift in gravity leading to downhill flails working at a lower raking depth than the uphill flails which are working at a higher setting.
2. Consider the following tips for dethatching on inclines:
 - a. Move machine across hills rather than up and down on the hill for greater control and even dethatching. (see above for explanation and Diag.1 below for diagram). Raking across hills helps to prevent water runoff, and allows the lawn to hold more seed, fertiliser and water to encourage healthy growth.



Disengage tines from ground only when machine is on a flat surface. NEVER DISENGAGE TINES WHEN TRAVELLING UP OR DOWN INCLINES.



Diag.1: Dethatching on inclined site

STORING THE SCARIFIER

1. Ensure that the area in which the machine will be stored is well-ventilated and free of any potential fire hazards such as open flames, gas appliances, furnaces, water heaters, and other appliances.
2. Clean and lubricate machine prior to storage.
3. Lightly lubricate flails and rotor to inhibit rusting.
4. Touch-up any scratches or damaged area exposing metal to the elements.
5. Order and re-apply any safety labels. Refer to "Information on Safety Decals" in "Parts Breakdown Section" of the manual for placement and parts numbers.
6. Verify with engine manufacturer's handbook for guidance on preparing engine for storage.
7. Store unit in transport position (see "Transporting the SCARIFIER" in "Operation Procedures" section).
8. Store the machine in a covered or indoor storage area for increased protection and longevity.

MAINTENANCE PROCEDURES

This section encompasses two general types of maintenance:

1. Preventative Maintenance and 2. General Service. The first refers to regularly scheduled routine care of the scarifier, such as cleaning and lubrication. The second provides information on common procedures, such as changing flails, and adjusting the drive belt that are to be performed as needed.

By following the Inspection Schedule below BEFORE and AFTER each use of the scarifier, appropriate actions can be taken to extend the service life of the machine and reduce any costly repairs and unnecessary downtime for the unit.



All service should be performed by trained technicians.

A. INSPECTION SCHEDULE

The following list aims to offer some basic guidelines to performing a detailed inspection BEFORE and AFTER each use. Certain checks will require some disassembly, i.e. the removal of the drive guard, to perform. Depending on various environmental conditions and frequency of use, other inspection points may have to be added for each machine.

Item	Yes	No
Is the engine oil filled to recommended levels? Consult Engine Manufacturer's Manual.		
Is the engine air cleaner properly attached and clean? Consult Engine Manufacturer's Manual.		
Is the clutch cable properly attached? Refer to p.10 "Setting up the Scarifier" for details.		
Is the clutch cable worn or visibly damaged? Replace if necessary.		
Is the drive belt tension set properly? Refer to p.16 "Replacing Drive V-Belt and Pulley" for details.		
Does the drive belt show signs of wear and tear? Replace if necessary.		
Are all the flails in good condition? Are any flails worn down to minimum length of 3"/ 7.6 cm? If so, have they been replaced?		
Are the spring clips which secure the flails and rotor shaft in good condition? If so, make sure that the sprockets will be replaced before any further use as worn sprocket can lead to chain slippage and other mechanical issues that may cause serious harm to the jobsite and/or bodily damage to the operator.		
Is the carriage securely fastened and free of all debris? Lingering debris may lead to premature wear on the machine and shorten performance life.		
Are the safety warning labels and other decals clearly identifiable and legible? If not, ensure that fresh decals will be re-applied prior to use for operator safety.		
Is the frame and handle in good condition with no visible damage or rusting? If not, contact your local authorised dealer to replace parts prior to further use.		

MAINTENANCE PROCEDURES CONT'D...

B. PREVENTATIVE MAINTENANCE PROCEDURES

Maintaining a regular cleaning and lubrication schedule as well as taking time to perform preventative maintenance procedures, will prolong the service life of the SCARIFIER. The following are guidelines to setting up a regular maintenance routine for the scarifier.

1. Cleaning the SCARIFIER

- i. After each use, the scarifier, in particular the flails and rotor assembly, should be cleaned and washed of any dirt or debris that may be trapped in the unit.
- ii. When using a power pressure washer to clean the unit, DO NOT USE ANY MACHINE RATED HIGHER THAN 1000 PSI.
- iii. Beware of damaging any warning decals and labels, as well as the drive belt, bearings and engine. Limit direct spray on these objects to help prevent their wear and tear.
- iv. For easier access to cleaning the scarifier, the machine may be tipped on its engine guard for NO MORE THAN 2 MINUTES. Engine damage may result from petrol flowing into the crankshaft due to prolonged tipping.

2. Lubrication Schedule

Regularly scheduled lubrication of the wheels, flails & rotor assembly, and linkage joints in the carriage is essential to smooth performance and extended equipment life. The following schedule is a recommended guide to lubricating your SCARIFIER. The schedule should be adjusted for various environmental conditions and frequency of use.

Item	Suggested Lubricant	Every 20 hours	Every 60 hours	As required	After each pressure wash	Storage
Engine	Refer to Owner's Manual for Engine			✓		
Depth Adjustment Lever	General Purpose Spray Lubricant	✓		✓		
Wheels	Lithium-based Grease		✓	✓	✓	✓
Folding Handle Attachment Kits	General Purpose Spray Lubricant	✓		✓	✓	✓
Flails & Rotor	General Purpose Spray Lubricant			✓	✓	✓
Linkage	General Purpose Spray Lubricant	✓		✓	✓	✓
Grease Nipple	General Purpose Spray Lubricant			✓	✓	✓



Technician should read and thoroughly understand all manuals pertaining to the machine to be serviced. Do NOT proceed with any service and maintenance activity until ALL questions and concerns have been addressed. Please contact your local authorised dealer for technical support and advice.



ALWAYS consult and verify that all local codes and bylaws are followed before performing any service or maintenance procedures.

MAINTENANCE PROCEDURES CONT'D...

C. GENERAL SERVICE PROCEDURES

The following are general guidelines for servicing common wear components on the scarifier. ALL MAINTENANCE AND SERVICE WORK MUST BE PERFORMED BY A TRAINED AND EXPERIENCED TECHNICIAN. Ensure that the work area is clean and free of debris prior to starting any maintenance or service work. Small particles may become trapped in key components, which may lead to serious damage to the machine and cause severe bodily harm to the operator or technician.

Before performing any service and maintenance procedures, consult these general safety actions for a safe working environment.

1. Make sure that both the engine and scarifier are cool, prior to any service or maintenance work.
2. Verify that the work area is clean and free of any debris, tripping or fire hazards, and other potential sources of danger.
3. Always wear correct safety clothing and equipment for the job. These can and should include eye and ear protection, gloves, dust mask and any other items that are appropriate for the job and jobsite requirements.
4. Ensure that the technician has tied back or removed any loose hair, clothing and any other potential hazards and obstructions.
5. Disconnect spark plug.



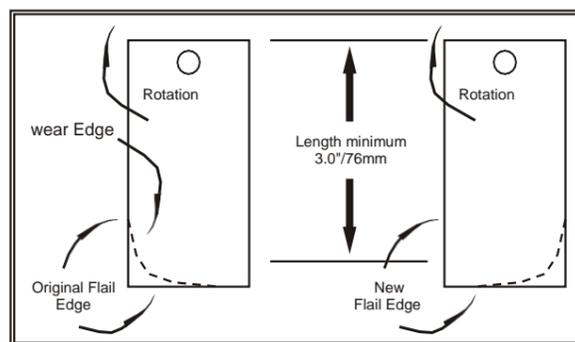
Use Webb brand-name parts for compatibility and optimum performance. Use of any other parts prior to consulting with your local authorised dealer will void all warranties expressed herein.

1. Maintaining Flail Blades

Flails are a normal wear and tear item. There are two procedures that apply to the maintenance of flails:

- a. If the striking edge of the flails are dulled by use (see diagram 2), rotate the rotor end to end for fresh blades.
- b. Replacing the flails when they have reached the wear limits on diagram 2.

Please contact your local dealer for details.



Diag.2:Flail Maintenance Reference

2. Replacing drive V-belt and pulley,

If it is needed to replace drive V-belt and pulley, please contact your local dealer for details.

TROUBLESHOOTING

Often, small problems can occur in daily operation of any machine. The following troubleshooting guide aims to address common issues and offer suggestions, on how to correct such problems.

Please review this guide before requesting service. Small problems can often be fixed simply by following these guidelines. If there are any further questions or concerns, please do not hesitate to contact your local authorised dealer for assistance!

Problem	Possible Causes	Suggested Solutions
Engine stalls or labours when raking	Flails set too low to ground.	Raise flails so that they just skim the ground when level.
Abnormal or excessive vibration	Damaged or missing flails Loose handle bolts Loose engine bolts	STOP WORK IMMEDIATELY Replace any damaged or missing flails and tighten all bolts and nuts.
Engine will not start	Stop switch is off. Throttle in "off" position. Engine not in full choke position. Out of petrol Bad or old petrol. Spark plug wire is disconnected or improperly connected. Engine oil level too low (Oil Alert). Dirty air cleaner	Check that all switches are on. Verify that throttle and choke position are in proper setting. Fill petrol tank up. Empty and dispose of bad/old petrol as per local bylaws. Refill with new petrol. Reconnect spark plug wire. Refill engine oil. Clean or replace air filter.
Engine is locked and will not pull over	Debris locked up against rotor assembly and/or drive pulleys. Engine problem.	Disconnect spark plug wire and remove debris prior to restarting machine. Refer to engine owner's manual for instructions on any engine problems.



ALWAYS MAKE SURE THAT THE MACHINE IS TURNED OFF AND ON STABLE GROUND, PRIOR TO PERFORMING ANY SERVICE OR TROUBLESHOOTING PROCEDURES.

WARRANTY STATEMENT

GJ HANDY & CO LTD USER WARRANTY POLICY

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 and covers faulty parts and the labour involved in replacing and repairing those parts, which are of original manufacture.

Period of Warranty

Webb (excludes Electric Handheld, Dynamic, Heritage, Legacy), Webb Pro, Sanli Engine

- a) 2 years from the original date of sale to the first domestic user.
- b) 90 days from the original date of sale to the professional/commercial user.
- c) 90 days from the original date of sale when used for hire.
- d) A reduced warranty period of 90 days applies to those items which are subject to normal wear and tear (e.g. but not limited to wheels, tyres, cutter bars, cylinders, cutting blades, blade boss, belts, cables, nylon line & spool, collection bags, spark plugs).
- e) Engines are supplied with a separate warranty to the machine. The engine manufacturers warranty statement which will be supplied within the engine instruction manual. All enquiries and warranty repairs should be discussed with the engine manufacturer or approved warranty repair dealer.
- f) 90 days from the original date of purchase for Replacement Spare Parts (unless normal wear & tear component, which are covered for 30 days).
- g) All machines' must be serviced within the first 12 months from the original date of purchase to comply with the warranty, failure to do so will invalidate the 2nd year of the warranty.

Webb Electric Handheld, Webb Dynamic, Heritage & Legacy, Handy, Mowerland, Q-Garden

- a) 1 year from the original date of sale to the first domestic user.
- b) 90 days from the original date of sale to the professional/commercial user.
- c) 90 days from the original date of sale when used for hire.
- d) A reduced warranty period of 90 days applies to those items which are subject to normal wear and tear (e.g. but not limited to wheels, tyres, cutter bars, cylinders, cutting blades, blade boss, belts, cables, nylon line & spool, collection bags, spark plugs).
- e) Engines are supplied with a separate warranty to the machine. The engine manufacturers warranty statement which will be supplied within the engine instruction manual. All enquiries and warranty repairs should be discussed with the engine manufacturer or approved warranty repair dealer.
- f) 90 days from the original date of purchase for Replacement Spare Parts (unless normal wear & tear component, which are covered for 30 days).

All warranty repairs must be undertaken by an authorised service dealer. These dealers have been accredited by GJ Handy & Co Ltd and agree to only use genuine parts and follow our repair procedures.

WARRANTY STATEMENT CONT'D

GJ HANDY & CO LTD USER WARRANTY POLICY

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 operator's manual, or service parts replacement which would include oil, filters, tyres, 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 GJ Handy & Co 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.

Disclaimer

- a) This warranty is only a remedy for defect of products. GJ Handy & Co Ltd 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 GJ Handy & Co Ltd, or to modify the terms conditions or limitation of this warranty policy in any way.
- c) Neither GJ Handy & Co Ltd nor any company affiliated with GJ Handy & Co Ltd 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.

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.

Should you need to contact us for any reason, please do not hesitate to do so

Telephone: **01793 333212**
(Mon to Fri 8.00am to 5.30pm excl. Bank Holidays)

Email: customerservice@webbgardenpower.co.uk

Contact Us at www.webbgardenpower.co.uk

WARRANTY REGISTRATION

Customer keep

Congratulations for choosing a **Webb** product to meet all your tough jobsite needs! Please file your original receipt/invoice of purchase for this unit in a safe place. For warranty repair of your Webb product, you will need to provide a copy of this document to confirm your warranty status.

Product registration is a key step toward enjoying your new **Webb** product! While registration is not necessary to enjoy our manufacturer's warranty, there are many benefits to participating in this program. Registration helps to facilitate warranty service, and notify you of any updates, changes, and service advisories on your product.

Complete this Warranty Registration Card and post it to us or visit www.webbgardenpowers.co.uk and complete the registration online.

Data Protection: your data will be held and used by Webb/Handy Distribution and their authorised dealers for warranty administration and marketing purposes only. Webb will not forward this data to third parties.

If you do not wish to receive marketing information, please tick box.

Warranty Registration Information	
<i>Owners Information</i>	
Owner's Name:	
Owner's Address:	
Post code:	Country:
<i>Machine Information</i>	
Date of purchased:	
Machine Model:	
Product Number: 1938	
Machine Serial No:	
<i>Product Information Update</i>	
Can we contact you with any product-related news?	
Who should we contact?	
Contact Telephone:	
Contact E-Mail:	
What is the preferred contact method?	
<i>Signature</i>	
Dealer name/address	Signature (if applicable)
Customers: My signature hereby confirms that I have received the operating instruction intended for the device, instructions and the device free of obvious defects.	Signature

WARRANTY REGISTRATION

Return to Webb

Congratulations for choosing a **Webb** product to meet all your tough jobsite needs! Please file your original receipt/invoice of purchase for this unit in a safe place. For warranty repair of your Webb product, you will need to provide a copy of this document to confirm your warranty status.

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If you do not wish to receive marketing information, please tick box.

Warranty Registration Information	
<i>Owner Information</i>	
Owner's Name:	
Owner's Address:	
Post code:	Country:
<i>Machine Information</i>	
Date of purchased:	
Machine Model:	
Product Number: 1938	
Machine Serial No:	
<i>Product Information Update</i>	
Can we contact you with any product-related news?	
Who should we contact?	
Contact Telephone:	
Contact E-Mail:	
What is the preferred contact method?	
<i>Signature</i>	
Dealer name/address	Signature (If applicable)
Customers: My signature hereby confirms that I have received the operating instruction intended for the device, instructions and the device free of obvious defects.	Signature