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Originalfassung

DE BETRIEBSANLEITUNG

HÄCKSLER

Übersetzung / Translation

EN USER MANUAL

SHREDDER

ES MANUAL DE INSTRUCCIONES

BIOTRITURADORA

FR MODE D'EMPLOI

BROYEUR DE VÉGÉTAUX



ZI-HAEK4100 / ZI-HAEK11000

EAN: 9120039232690 / 9120039232683



ACHTUNG: Öl (15W40) kontrollieren!



ATTENTION: Check Oil (15W40)!

ATENCIÓN: Comprobar el aceite (15W40)!

ATTENTION: vérifiez l'huile (15W40)



10 PREFACE (EN)

Dear Customer!

This manual contains important information and advice for the correct and safe use and maintenance of the shredder ZI-HAEK4100 / ZI-HAEK11000.

Following the usual commercial name of the machine (see cover) is substituted in this manual with the name "machine".

The manual is part of the machine and may not be stored separately. Read it profoundly before first use of the machine and keep it for later reference. When the machine is handed to other persons always put the manual to the machine.

Please follow the security instructions!

Please read the entire manual, to prevent misunderstandings, machine damage or even injuries!



Due to continuous development of our products illustrations, pictures might differ slightly.

If you however find errors in this manual, please inform us.

Technical changes excepted!

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11 SAFETY

11.1 Intended Use

The machine must only be used for its intended purpose! Any other use is deemed to be a case of misuse.

To use the machine properly you must also observe and follow all safety regulations, the assembly instructions, operating and maintenance instructions lay down in this manual.

All people who use and service the machine have to be acquainted with this manual and must be informed about the machine's potential hazards.

It is also imperative to observe the accident prevention regulations in force in your area.

The same applies for the general rules of occupational health and safety.

The machine is used for:

Shredding of branches of all kinds (depending on the type of wood and freshness). Wilted, moist, garden waste already stored several days alternating with tree branches.

This machines with drawbar are not approved for public road traffic!

Any manipulation of the machine or its parts is a misuse, in this case **ZIPPER-MASCHINEN and its sales partners cannot be made liable for ANY direct or indirect damage.**



WARNING

- Set during the operation could ensure that no foreign objects (such as stones, glass, metal, earth, and plastic) are filled into the shredder, such as foreign bodies blunt the chopping blade and severely damage the engine.
- Use your shredder solely for the purposes for which it was designed.
- The chopper should be carefully checked before use. Never use a chopper that is not in good condition if you notice a defect on the machine, which could pose a danger to the user, do not use the chopper until the defects have been corrected.
- This machine contains rotating blades.
- This blades does not stop immediately after stopping.
- The in-feed must be completely assembled and fixed prior to use.

Prohibited use:

- The operation of the machine outside the stated technical limits described in this manual is forbidden.
- Operation of the machine function without any protection devices is forbidden
- The use of the machine for any purposes other than described in this user-manual is forbidden.
- Any manipulation of the machine and parts is forbidden.
- The use of the machine not being suitable for the use of the machine and not being certified is forbidden.
- It is not allowed to leave the immediate work area during the work is being performed!



11.2 Security instructions

Missing or non-readable security stickers have to be replaced immediately!

To avoid malfunction, machine defects and injuries, read the following security instructions!

The locally applicable laws and regulations may specify the minimum age of the operator and limit the use of this machine!

- **Use the machine only in good enough light to allow a safe operation can be guaranteed.**
- **In tiredness, decreased concentration or under the influence of alcohol or drugs, the work on the machine is prohibited!**
- **Caution in slippery conditions - slip hazard - risk of injury. When working, robust and non-slip footwear. Slides / stumble / traps are a major cause of serious injury or death.**
- **Unauthorized persons, especially children and not trained personnel must be kept away from the running machine!**
- **The machine must be operated only by trained persons (knowledge and understanding of this manual), which have no limitations of motor skills compared with conventional workers.**
- **No other person and pets shall remain within 12m!**
- **If you pass the machine to third, these instructions must be attached to the machine.**
- **Before each use, the reliability of the machine is to be checked (tightness of the cutting tool, the proper function of the throttle lever, safety switch)**
- **Use personal safety equipment: ear protectors, safety gloves in EN 388, class 3111, safety shoes S1, safety goggles or face protection when working with the machine!**
- **Make sure that the device is completely and correctly assembled.**
- **Never leave the machine running unattended! Before leaving the working area switch the machine off and wait until the machine stops.**
- **Switch off the machine before maintenance or adjustment.**
- **The machine should be only during operation on solid level ground.**
- **Neither put your hands into the in-feed and discharge chute when the machine is running.**
- **Using your shredder only in places where it is protected from water and never use it during rain outdoors.**
- **Danger of burns! During the operation flow of hot exhaust gases and engine parts such as the muffler and engine become hot.**
- **WARNING: Gasoline is highly flammable!**
- **Stop the engine before refuelling**
- **Smoking and open flames are prohibited during refuelling.**
- **Do not refuel when the engine and carburettor are still very hot.**
- **Refuel only outdoors or in a well ventilated area.**
- **Avoid contact with skin and clothes (fire hazard)**
- **Check after refuelling tank cap and check for leaks.**
- **Start the engine at least 3 meters from the tank location.**
- **Spilled fuel is wipe immediately.**
- **Keep the fuel in suitable containers only**
- **Make sure the fuel does not overflow. If the fuel overflows, the engine must not be started. Remove any dirt from the appliance and prevent any attempt at ignition until fuel fumes have evaporated**
- **Damaged fuel tank or other tank cap must be replaced immediately**
- **After the operation the fuel cock must be closed (if available)**
- **Danger of Intoxication! Only use outdoors and far from open windows and vents!**
- **Exhaust contains poisonous carbon monoxide. The exposure can cause unconsciousness and death.**
- **Before the start, after the failure or shock, be sure to check the device and make sure that it is in good condition**

Change damaged parts immediately

TRANSPORT NOTES:

- **Switch off the engine and let cool down**
- **Never lift or carry the machine while the engine is running**
- **Wait till the blade are completely stopped**
- **Secure the machine**
- **Empty tank completely, avoid fuel spillage**
- **To avoid damage to the device never drag but always lift correctly.**

**STORAGE NOTES:**

- Clean and dry the machine
- Empty tank completely, avoid fuel spillage
- Let cool down the engine
- Store in a dry, out of reach of children place, well packaged
- Do not store machines with fuels and fuels close to combustible and highly inflammable materials as well as sparks and open flames.
- Never remove the fuel tank cap when the engine is running or hot

Switch of the engine and remove the ignition key (if is available):

- Before check, clean or work on the machine
- Before eliminating faults
- Before the start, after the failure or shock, be sure to check the device and make sure that it is in good condition
- If the shredder starts to vibrate abnormally, stop the engine immediately and locate the cause. Vibrations generally terminate in malfunction.
- Before refuelling
- Always if you leave the machine

11.3 Remaining risk factors



WARNING

It is important to ensure that each machine has remaining risks. In the execution of all work (even the simplest) greatest attention is required. A safe working depends on you!

Even if the machine is used as required it is still impossible to eliminate certain residual risk factors totally. The following hazards may arise in connection with the machine's construction and design:

- Risk of injury to the hands / fingers by negligent guiding the to be shredded material.
Guide the to be shredded material slowly and carefully into the in-feed. Automatic feeding!
- Risk of injury: hair and loose clothing, etc. can be captured and wound up! Safety regulations must be observed with regard to clothing.
- Risk of injury by tilting the machine
- Risk of injury to the eye by flying debris, even with safety goggles.
- Risk of injury to the hearing by prolonged labor without hearing protection.
- Risk of burns: Touching the mufflers, exhaust and other machine components which can be hot after prolonged continuous operation or when the engine is hot cause severe burns.

These risk factors can be minimized through obeying all security and operation instructions, proper machine maintenance, proficient and appropriate operation by persons with technical knowledge and experience.

In spite of all safety is and remains her healthy common sense and their corresponding technical qualification / training for use of the machines most important safety factor!



12 ASSEMBLY

12.1 Delivery content

Please check the product contents immediately after receipt for any eventual transport damage or missing parts. Claims from transport damage or missing parts must be placed immediately after initial machine receipt and unpacking before putting the machine into operation. Please understand that later claims cannot be accepted anymore.

ZI-HAEK4100:



ZI-HAEK11000:



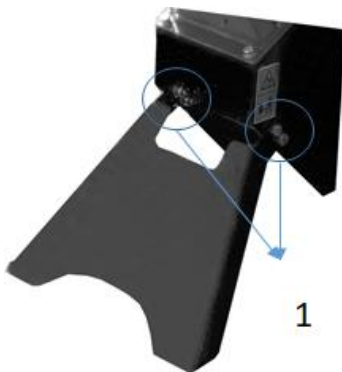
12.2 Assembly



NOTICE

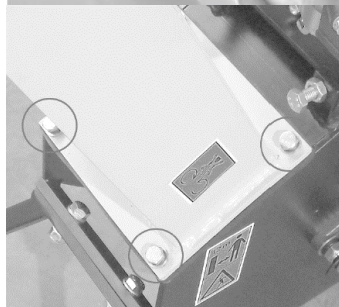
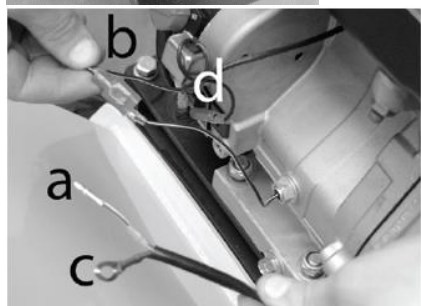
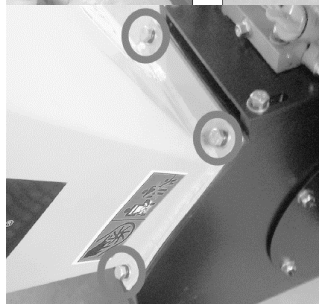
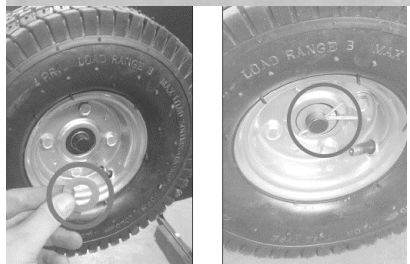
Some machine components are heavier than 20kg. Assembly only from min. 2 persons! Assembly only with engine switched off!

ZI-HAEK4100:



Base foot:

Tilt the blades chassis slightly backwards and fix the base foot with four screws , washers and nuts M10.

**Axis:**

Tilt the blades chassis slightly forwards, push the axis through the bracket and fix with Allen screw, washer and nut.

Wheels:

Place on both ends of the axis a washer. Push a wheel over the axis. Secure with a spacer and splint.

In-feed:

Place the in-feed on the blades chassis so that the mounting holes coincide with the holes on the in-feed. Fix with screws, washers and nuts.

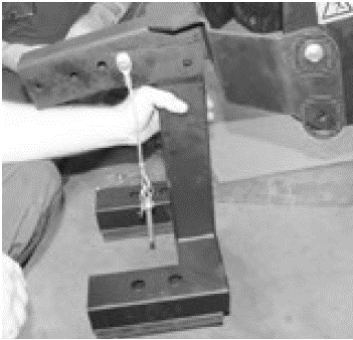
Attention: Risk of cutting!

Safety switch:

Insert the cable (a) into the plug of the cable (b). Then connect the cable (c) to the motor using screw (d).

Discharge chute:

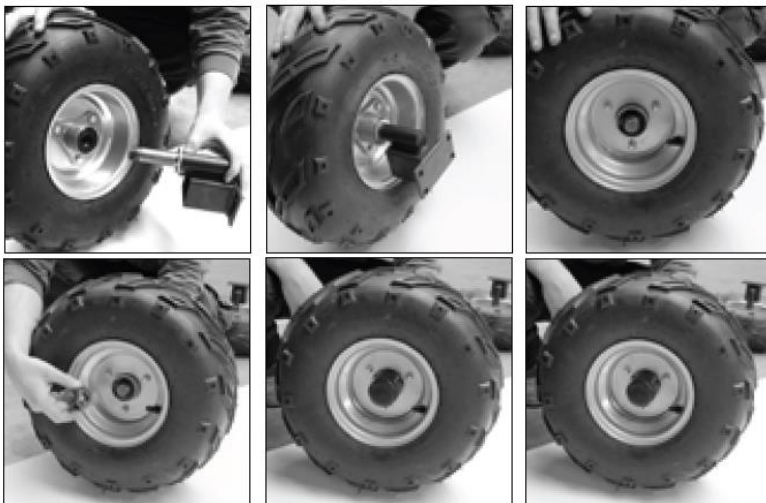
Place the discharge chute on the blades chassis so that the mounting holes coincide with the holes on the discharge chute. Fix with screws, washers and nuts.

**ZI-HAEK11000:****Base foot:**

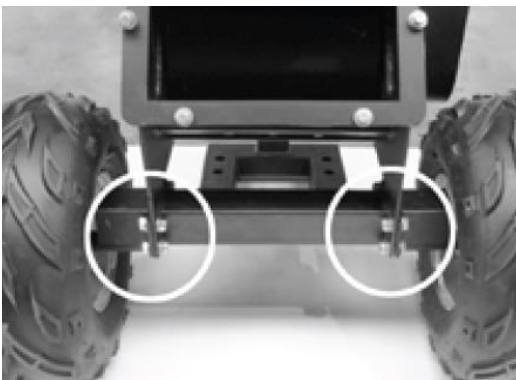
Tilt the blades chassis slightly backwards and fix the base foot with screws, washers and nuts.

Drawbar:

Place the drawbar on the base foot and fix with screws M12x100, washers and nuts M12.

**Wheels:**

Push the axis through the rim, tighten the nut and secure with a splint. Then fit the hubcap.

**Axis:**

Tilt the blades chassis slightly backwards and fix the axis with screws, washers and nuts.


In-feed:

Place the in-feed on the blades chassis so that the mounting holes coincide with the holes on the in-feed.

Fix with washers and nuts.

Attention: Risk of cutting!


Safety switch / battery connection:
Safety switch:

Establish the plug connection of the 2-pin plug (1)

Battery:

Connect the (+) and (-) poles of the starter cable to the one on the battery.


Discharge chute:

Place the discharge chute on the blades chassis so that the mounting holes coincide with the holes on the discharge chute.

Fix with screws, washers and nuts.


WARNING

After finalized assembly check all screw connections and retighten if necessary!

12.3 Checklist before each use
NOTICE


The use of paint thinners, petrol, aggressive chemicals or abrasives leads to material damage to the surfaces! Therefore use only mild detergents for cleaning!

- Clean the machine and remove dirt and dust if necessary.
- If the air filter is dirty, blow the filter cartridge from the inside by moving a jet of dry compressed air up and down. Continue until all dust has been removed. Replace the air filter with a new one if necessary.
- Check the carburettor for external dirt and dust and clean it with dry compressed air if necessary.
- Check the nuts and bolts for tightness. (Screws or bolts loosened by vibrations can lead to accidents!)

12.3.1 Checking the engine oil level

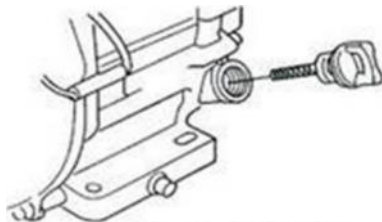
NOTICE



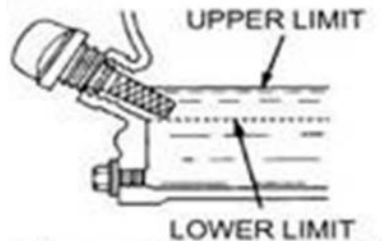
Too low an oil level will damage the engine and shorten the life of the machine. Therefore, check the engine oil level before every start and top up the engine oil if necessary.



1. To check the engine oil level, place the machine on a safe, level surface. Switch off the engine and allow the machine to stand for ten minutes so that the circulating oil can collect in the oil pan.
2. Unscrew the oil dipstick and wipe with a clean, lint-free cloth or a non-fibrous paper towel.



3. Push the dipstick into the opening, but do not screw it in. (Make sure that the dipstick has really been pushed in completely).



4. Pull out the oil dipstick again and read off the oil level. There are two markings for this - see illustration on the left.
5. If the oil level is low, refill the recommended oil up to the upper edge (maximum filling volume: approx. 0.5 litres).
6. Push in the oil dipstick again and tighten.

12.3.2 Checking the fuel tank level

NOTICE



Observe the safety regulations for fuel control. Filter the fuel during refuelling to prevent foreign particles from entering the combustion chamber. Wipe up leaked fuel.

1. Screw on the tank cap (sits on the fuel tank).
2. Level check in the form of a visual inspection. If necessary, top up with fuel with the appropriate octane number (RON 95).
3. Close the fuel filler cap tightly after refuelling.



13 OPERATION

Machine to be operated in a perfect state only. Inspect the device visually every time it is to be used. Check in particular the safety equipment, electrical controls, electric cables and screwed connection for damage and if tightened properly. Replace any damaged parts before operating the device.

13.1 Information on Initial Start-up

NOTICE



Note that the machine is delivered without engine oil and fuel. Make sure that this equipment is filled up before the machine is put into operation for the first time.
ATTENTION: The machine does not start until the engine oil has been refilled to the upper limit.

13.1.1 Test Run Initial Start-up

- Let the machine run idle for about 3 minutes.
- Pay attention to abnormal noises.
- Pay attention to the exhaust fumes (too black, too white)?

13.1.2 Notes on the first 20 operating hours

In order to optimize the life expectancy of your machine, the following points should be observed:

- Do not operate the engine for the first 20 operating hours @ maximum load (this also applies to used engines after extensive maintenance). This means lower speed and lower maximum working load than during normal operation.
- Change the engine oil after the first 20 hours of operation.

13.2 Operation instructions



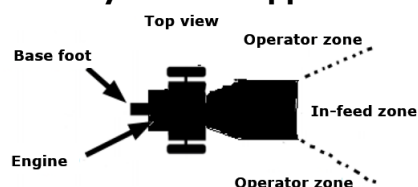
WARNING

Stop the machine before any break, maintenance and cleaning!
The safety switch must be rightly connected! RISK OF INJURY!

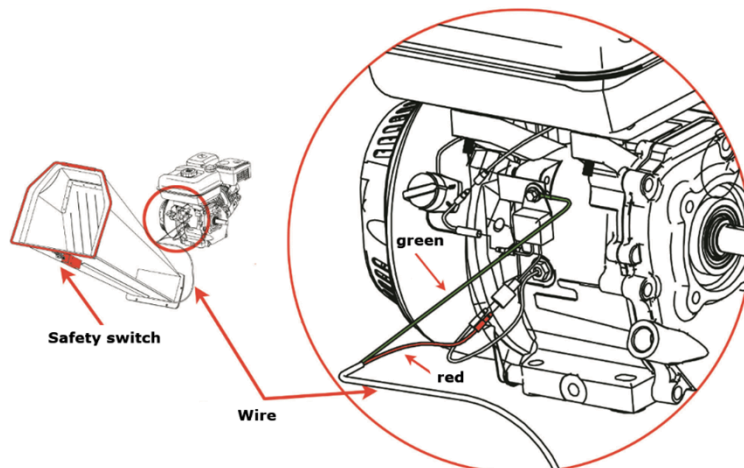


NOTICE

- **Do not stand in the discharge chute area during starting the machine**
- **Before starting check that the in-feed is free from any material**
- **Start shredding after the engine has reached full speed**
- **Operating only with sharp blades**
- **Use only blades allowable for this machine!**
- **Never use damaged blades!**
- **Always operate in the operator zone**
- **Never stay in the in-feed zone**
- **Never use the recoil-starter while the engine is running. This will damage the engine**
- **Do not operate the machine on slopes of more than 20°, as even with an optimum oil level the engine may not be supplied with sufficient lubrication.**



Connection of safety switch:

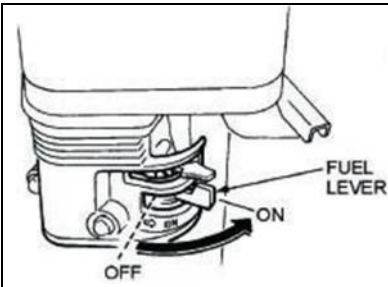
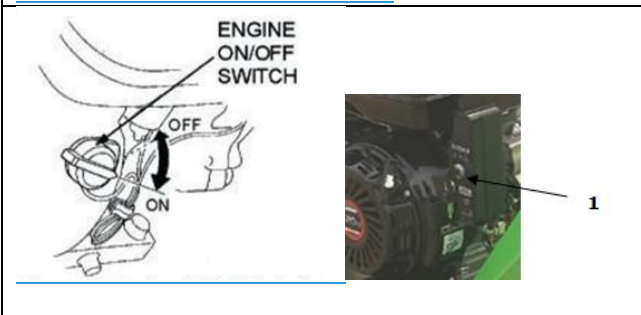
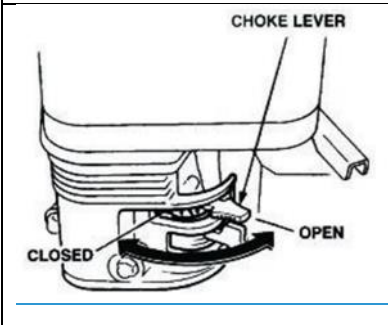


13.3 Operation

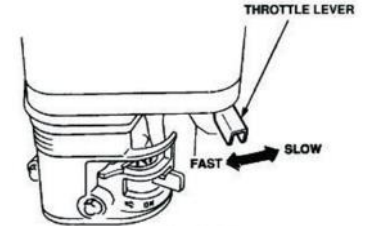
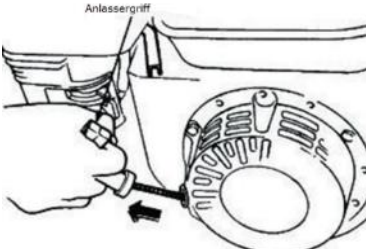
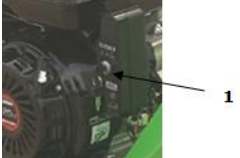
13.3.1 Refuel, start, stop

See also the operation manual of the engine manufacturer

Starting the machine

	<ol style="list-style-type: none"> 1. Turn the fuel valve to the "On" position.
	<ol style="list-style-type: none"> 2. Set the engine ON/OFF switch (ignition switch) also to the "On" position. (only for ZI-HAEK4100) <p>Turn the key (1) to I-Position (only for ZI-HAEK11000)</p>
	<p>Note: The closed position of the choke lever enriches the fuel mixture for starting a cold engine. The open position provides the correct fuel mixture for normal operation after starting and for restarting a warm engine.</p> <ol style="list-style-type: none"> 3. Turn the choke lever to the "Closed" position, only for cold engine.



  	<ol style="list-style-type: none">4. Set the throttle lever to "half throttle" (= middle position between "fast" and "slow"). Note: Do not pull the starter rope through to the end and do not let it rewind after pulling, but only rewind it quickly.5. Grab the starter handle and pull it out slowly. The resistance becomes strongest at a certain point. This point corresponds to the compression point. Let the rope roll back a little from this point and then pull it out powerfully. Only for ZI-HAEK11000 (elektronic START): Turn the Key from Position I to Start.6. Turn the choke lever to "Open when the engine is running." Open throttle further to increase the speed before working with the Machine.
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Stopping the Machine:

Emergency-stop:

In case of danger and/or in an emergency situation, you can quickly stop the machine by pressing the infeed emergency stop.

Normal stop

1. Set the throttle lever to "minimum" and let the engine run idle for approx. 3 minutes at low engine speed.
2. Then set the engine ON/OFF switch (ignition switch) to the OFF position.
Only for ZI-HAEK11000: Turn the key (1) from position I to 0.
3. Close the fuel switch.
4. Wait until the engine has cooled down before storing the machine.



NOTICE

- **To wet material causes clogging**
- **Insert the to be shredded material into the in-feed and when the material is gripped by the machine and automatically feeded, release the material immediately**
- **Always feed in material with the thick end first**
- **Saw off long side branches and insert them separately**
- **Never work with too much pressure**
- **Do not overload the machine**
- **In the event of blockages, switch off the engine immediately and eliminate any malfunctions.**
- **Remove crosswise lying material only when the engine is switched off and the blades are stopped!**
- **Switch off the engine immediately if there are any unusual noise and vibrations. Repair any faults immediately.**



After finishing the shredder work let the machine sufficient time to process the whole shredding material. This avoids start-up difficulties when working next time!

To be shredded:

Hedge and tree cuttings, bushes, perennial herb, dead flowers

To be not shredded:

Glass, metal, plastic, plastic bags, stones, cloth, roots with soil, food left-overs, fish or meat.

14 MAINTENANCE



ATTENTION

No cleaning, upkeep, checks or maintenance when machine is running
Shut off the machine, let it cool down, disconnect spark plug cap from spark plug!

The machine does not require intense maintenance. However, to ensure a long lifespan, we strongly recommend following the upkeep and maintenance plan.

Repairs must be carried out by specialists! Use original ZIPPER parts only!

NOTICE

Only a properly maintained equipment may be a satisfactory tool. Care and maintenance deficiencies can cause unpredictable accidents and injuries.

Repairs should be performed only by authorized service centers.

Improper operation may damage the equipment or endanger your safety.

14.1 Maintenance plan

Controls for the maintenance of the machine	
Loose or lost screws, nuts, bolts	Regularly prior to each operation
Damage of any part of the machine	Regularly prior to each operation
Fuel level	Regularly prior to each operation
Fuel tank of tightness	Regularly prior to each operation
Machine cleaning	Regularly prior to each operation
Oil level	Regularly prior to each operation
Function of safety switch	Every month
Tension of the V-belt	Regularly prior to each operation
Greasing of the blade drum	Every 25 working hours
Cleaning spark plug	Every 25 working hours
Cleaning air filter	Every 20-30 working hours

14.1.1 Cleaning the air filter

A clogged air filter reduces the engines power output drastically and causes engine disfunction. Furthermore it reduces the engines lifespan!

Disassemble the air filter cap. Remove the air filter from the machine. Clean the air filter and drip some drops of oil onto the filter. Mount the filter back.

14.1.2 Cleaning the spark plug

Take off the spark plug cap. Loosen and remove the spark plug. Clean it with a small brush from soot debris. The contact distance shall account approx. 0, 5mm – 0,7mm.



14.1.3 Greasing of the blade drum

Grease the bearings of the blade drum on both sides to the grease nipple. Also after every cleaning!

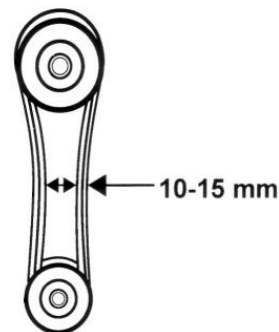
- Remove V-belt cover.
- Clean grease nipple with cloth
- Apply the grease gun and pump the grease
- Reassemble the V-belt cover



14.1.4 Adjusting the V-belt

The V-belt connects the engine and blade drum. Especially with new machines or even after the change of the v-belt this itself is getting wider and loses purchase. If the V-belt yields more than 10-15mm on thumb pressure, it is necessary to adjust the V-belt again.

1. Switch off the machine and take off the cover of the belt.
2. Loose the four nuts at the engine.
3. Move back the engine for straining and forward to solve the V-belt.
4. Put the engine and drive pulley in liner (a ruler can be helpful). Tighten the four nuts at the engine again.
5. Fix the cover of the V-belt again.

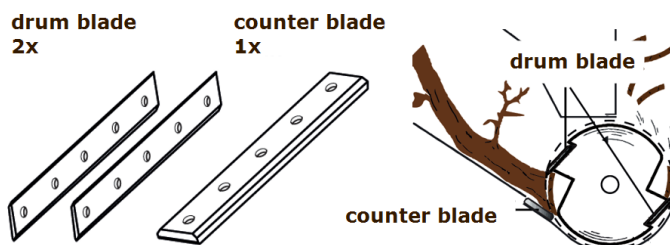


14.1.5 Blades



NOTICE

- **Wear safety gloves.**
- **After approx. 30-50 working hours, the blades are blunt under normal operating conditions.**
- **Blades are blunt if:**
 - abnormal noise
 - decreased speed
 - V-belt (despite correct tension) slips
- **Drum blades and counter blade can be turned 1 time**



- **Replace damaged blades immediately!**

Loosen the screws, turn the blades (grind if necessary) and retighten the blades. Adjust counter blade cutting gap to 0,5 mm.

14.1.6 Carburettor

NOTICE

Carburetor settings must be performed only by trained personnel!

14.1.7 Refuel

Each normal petrol (unleaded petrol) with octane index (ROZ) of 95 can be used. Never use a mix of oil and petrol or dirty petrol. Avoid infiltration of the gasoline tank by water, dust or dirt.

NOTICE

It is not recommended to use alternative for gasoline, because this can cause damage of parts of the gasoline system.



14.1.8 Cleaning

Clean the machine and the working attachment from dirt.

Clean the machine housing with a wet cloth and a mild cleaning solution.

Put on all coatless flats a thin coat of oil.

NOTICE

The usage of solvents, aggressive chemicals or scouring agents damages the machine housing.

14.1.9 Storage

If the machine is stored for longer than 30 days:

- Let the machine cool down
- Clean the machine and dry
- Empty Tank and carburetor completely, avoid fuel spillage
- Store in a dry, out of reach of children place, well packaged.

14.1.10 Disposal

Do not dispose the machine in residual waste. Contact your local authorities for information regarding the available disposal options. Avoid damage caused by leaking operating supplies: drain the operating supplies prior to disposal! When you buy at your local dealer for a replacement unit, the latter is obliged to exchange your old.



15 TROUBLE SHOOTING



ATTENTION

Shut off the machine, let it cool down, disconnect spark plug cap from spark plug

Trouble	Possible cause	Solution
Engine does not start	• Ignition switch defect	• Repair or change
	• No fuel	• Refuel
	• Spark plug dirty or damaged	• Clean or change
	• Fuel line faulty	• Check fuel line for damage and kinks
	• less engine oil (CAUTION: engine protection device)	• Fill up engine oil to maximum
To low power	• Air filter dirty	• Clean or change
	• V-belt	• Tighten or change
	• Overload	• Reduce material feeding
	• Blockage	• Remove shredded material
	• Blades blunt	• Turn/grind blades
No automatically feeding of the shredded material	• Blades blunt	• Turn/grind blades
Extra-ordinary sounds	• Screws, nuts or other parts are slack	• Fix parts



NOTICE

Should you in necessary repairs not able to properly to perform or you have not the prescribed training for it always attract a workshop to fix the problem.