ELIET®

MANUAL

BL360

In this manual you will find information about the actual use and maintenance of the machine. **Read it carefully and keep it in a safe place.**

Please also keep your **purchasing invoice** or the proof of receipt together with this booklet.

Registrer your product online at **www.eliet.eu**

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1. Introduction

1.1 Read this operation manual carefully

ELIET machines are designed for safe and reliable use if they are operated in accordance with the instructions provided. Carefully read these operating instructions before using the machine. Failure to do so may result in personal injury or damage to the equipment.

1.2 Identification data – ELIET BL360

Copy the identification data of your machine into the text boxes:

Item number:	
Serial number:	
Year of manufacture:	20
Date of purchase:	

2. Warranty

2.1 Warranty card

In order to be able to make a warranty claim, you will need to register your machine online within one month after purchase: **www.elietmachines.com**
Read the warranty conditions in chapture "15. Warranty Conditions" on page 37

3. Welcome

Welcome to the family of ELIET users.

We thank you for the trust that you have placed in ELIET and we are convinced that you have purchased the very best machine. The operating life of your ELIET machine depends on how you care for your machine. Strict adherence to the instructions and suggestions in these manuals will guarantee optimum performance of your ELIET machine for a very long time.

Read this manual carefully before operating the machine. This will prevent you from operating the device incorrectly. For your own safety, please observe the safety instructions specified in the relevant chapter. Even if you are thoroughly familiar with operating such equipment, it is still advisable to read these pages carefully.

All ELIET equipment and machines are continually being updated and improved and therefore the specification of your machine may differ slightly in terms of shape, technology and accessories. The descriptions and technical data in this manual are accurate at the time of printing. Certain illustrations and descriptions may not be applicable to your specific machine, but instead relate to a different version of the machine. We trust therefore that you will understand that the texts and illustrations in this manual cannot give rise to any claims. If you still have questions after reading this manual, please contact your ELIET dealer. Find an official ELIET dealer near you on www.eliet.eu.

ELIET AT YOUR SERVICE

ELIET®

During office hours ELIET's help desk will make every effort to answer all of your questions:

European customers GMT +1: from 08:00 a.m. to 18:00 p.m.
Tel: +32 56 77 70 88
Fax: +32 56 77 52 13
Service@eliet.be

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5. Operator safety symbols

ELIET cannot anticipate every situation in which a risk or danger can occur. The warning symbols in this operating manual and the labels on the machine are therefore not comprehensive. Although minimal, a residual risk will always be present. If while operating the machine you apply a working method, operation or technique that is not explicitly recommended by ELIET, make sure that it does not represent a danger for bystanders.

A number of symbols (''For your information'', ''Caution'', ''Warning'') are used in this operating manual to provide additional information and to highlight dangers.

5.1 For your information

For your information:
This symbol is used to draw your attention to specific information and/or actions, or to indicate where you can find additional information on the subject.

5.2 Caution

Caution:
This symbol suggests safe practices. The purpose is to prevent incorrect operation that could result in personal injury or damage to the machine.

5.3 Warning

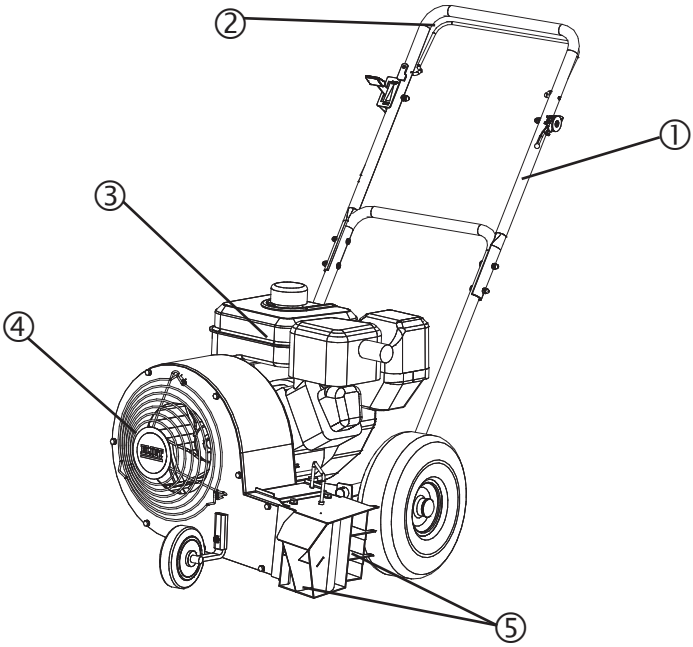
Warning:
This symbol warns you about extreme danger that you must take notice of in those specific circumstances. So for the sake of your own safety, remain alert at all times.

These safety messages can only warn of, but not remove the danger. Both the use of common sense and proper observation of the guidelines in this manual are essential to prevent accidents.

6. Main machine parts

To fully understand the content of this operating manual you need to be fully conversant with the terminology used for the descriptions. This chapter refers to a broad range of machine parts and identifies their names. We recommend that you take the time to study the machine prior to its use for a better understanding of the descriptions provided in this operating manual.

6.1 General overview



1. Handlebar
2. Operating handle
3. Engine
4. Suction opening
5. Discharge openings

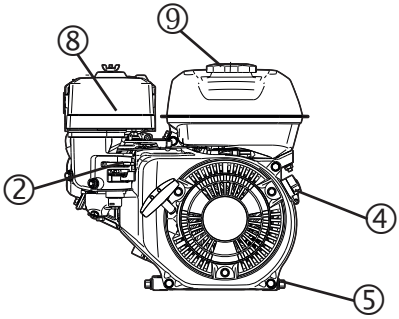
For your information:
All references to front, rear/back, left and right in this manual are from the viewpoint of the operator standing behind the machine and facing the direction the machine is travelling.

For your information:
Your ELIET dealer remains at your service for any maintenance or advice, ensuring your ELIET machine is always in perfect condition. You can contact him for original ELIET parts and lubricants at any time. These service parts are manufactured according to the same strict rules and craftsmanship as the original equipment. (Find a dealer near you on **www.eliet.eu**)

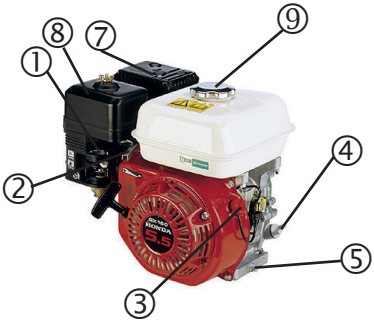
Cuation:
For your own safety, only genuine parts should be mounted on ELIET machines. For a list of original spare parts and their ordering codes please visit **www.eliet.eu.**

6.2 Engines

5,0 PS GP160



5,5 PS GX160



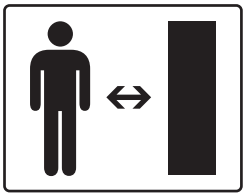
1. Choke
2. Speed control
3. ON/OFF switch
4. Oil filler cap/dipstick
5. Oil drain plug
6. Fuel tap
7. Exhaust
8. Air Filter
9. Fuel filler cap

7. Safety instructions

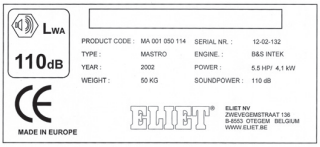
7.1 Safety messages

Safety stickers or relief images have been affixed on to visible areas of the machine. Make a note of the icons and warnings specified on these stickers.

This sticker is affixed near the exhaust and warns the operator of hot surfaces with a high risk of burns.
Item no.: BQ 505 010 060



This sticker reminds the user that bystanders should observe a minimum distance from the machine.
Item no.: BQ 505 010 150



This unique sticker contains all machine identification data.

- Year of manufacture
- Model
- Type number
- Serial number
- Capacity
- Weight
- Guaranteed A-weighted noise level

In addition, the sticker bears the manufacturer's company information. The sticker bears the seal of conformity with European standards in the form of a CE label.

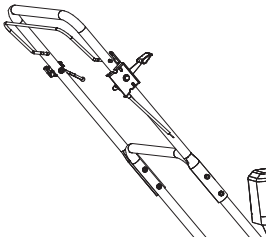
This sticker groups a number of key safety messages and information about the machine and the manufacturer:
Some safety instructions are symbolised by icons:
1. Before operating the machine the manual should be read and understood.
2. Suitable safety clothing (gloves, safety goggles, ear protection) must be worn when operating the machine.
3. There is a real risk of severe injuries including permanent damage to the hands. Never place your hands near the blade while it is still operating.
5. There is a real risk of severe injuries with permanent damage to the eyes or face as a result of flying debris.
Item no.: BQ 505 010 050

This sticker notifies the operator that the engine must be turned off and the spark plug cap removed before starting maintenance on the machine.
Item no.: BQ 505 010 040

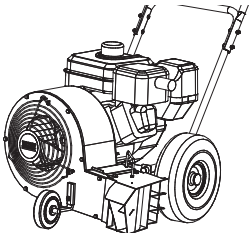
Caution:
Safety stickers or parts that include safety information that are damaged due to use or cleaning, have become illegible or have been removed must be replaced immediately. Stickers and parts can be obtained from any authorised ELIET dealer.

7.2 Safety features

Warning:
Never attempt to circumvent or disengage safety devices.
Safety measures were designed for your safety.
Before using the machine, the operator should check that the safety device works properly. Any defects must be repaired prior to using the machine.



Dead-man's handle: This handle is mounted on the handlebar and must be pressed in order to start the engine. Releasing the handle disengages the engine.



Protective covers: all the outward-rotating parts that could potentially cause accidents are shielded by a protective cover. They include the protective covers on the wheel drive and the covers on the turbine at the suction nozzle.

Sturdy construction: the robust build reflects the durability of these machines and also offers a safety guarantee for the operator in case of unforeseen circumstances.

7.3 Safety instructions

7.3.1 General safety instructions

Warning:
Most accidents are caused by carelessness or reckless behaviour

- The owner of the machine will keep this manual during its complete service life. A reference guide for the user, it also ensures that the machine is used and maintained correctly at all times. Always refer to this instruction manual if you have any doubts about an operation that you are about to perform.
- If the instructions stated in this manual are not clear to you, do not hesitate to contact your Eliet dealer for further explanation. In addition, the ELIET help desk is at your service during office hours to answer any questions you may have (EU +32 56 77 70 88).

For your information:
Please also read the engine manual supplied with your machine. It contains useful tips about proper use and maintenance of the engine.

- Be sure to read the chapter which is intended for the dealer ("8. Dealer's duties" on page 16) and verify whether the machine was delivered in accordance with the instructions.
- After you purchase the machine, allow the dealer or a professional to give you some instructions regarding correct use.
- Carefully observe all safety instructions when using this ELIET machine ! Carefully read all the instructions relating to the operation of the machine. All these instructions are important for your own personal safety.
- Always observe the applicable regulations of the Labour Inspectorate to avoid accidents.
- Read and observe all safety messages indicated on the machine in the form of stickers or icons.
- Under no conditions whatsoever may the original design of the machine be modified without written consent of ELIET EUROPE NV (Belgium).

7.3.2 Careful and cautious use

For your information:
Personal protective equipment helps to reduce the risks the operator is exposed to.

Think about what you are doing at every manoeuvre. Do not be tempted to let routine dull your attention. Never act impulsively or on reflex.

- Although the machine is equipped with extensive safety features, please avoid dangerous situations.
- This machine was designed for blowing away leaves and other light materials that are on the work terrain and must be used for this purpose only.
- Never work when light intensity is below 500 Lux.
- The machine may never be used as a means of transport for people or heavy loads.
- Thoroughly inspect the area where the machine is to be used. Remove any sticks, stones, wire and rubbish; also pay attention to electric cables, water pipes, sprinklers, etc.
- Use the machine in a manner that respects environmental regulations:
  Avoid running the machine when you're not using it.
  Avoid spillage of fuel while refuelling.
  Service the engine regularly to ensure optimum combustion.

7.3.3 Responsibilities of the Operator

- All persons using the machine are assumed to be fully conversant with the safety instructions. **The operator is fully liable for the use of the machine in regard to himself and to third parties.**
- The operator of this machine is assumed mature enough and with enough common sense to make decisions by himself.
- The machine may not be operated by minors. However, this does not apply to youths over the age of 16 who are learning to operate the machine under the supervision of an experienced operator. This manual must be read before use.
- Children and animals should be kept at a safe distance (10 m) from the machine.
- ELIET advises against lending the machine to others, but if this should occur, it should only be lent to persons who are familiar it. **Always make sure that the user is aware of the potential hazards and ensure that he/she reads the manual before using the machine.**
- This machine must only be operated by persons who have a good physical condition. Take a rest if you become tired while operating the machine. Do not operate the machine after alcohol or hallucinogenic drug use.

7.3.4 Personal Protective Equipment (PPE)

- The person operating this machine must wear suitable clothing, i.e. clothing covering the entire body, protective gloves and closed footwear.
- For protection of the most sensitive senses, ELIET recommends hearing protection and safety goggles.

Caution:
Stones loosened by the air blast coming from the outlet nozzle may cause damage to persons or property. Pay particular attention to any potential glass damage. Bear this in mind when operating the machine.

7.3.5 Danger zone

The safe position for the operator is at the handlebar.

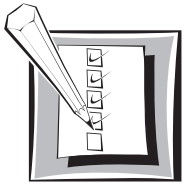
- Never allow bystanders within the danger zone - a circle of 10 m around the machine - during work.
- Do not take any risks! Disengage the machine as soon as someone enters into the danger zone.
- Shut off the engine when leaving the machine unattended.
- Once the motor is running, focus all your attention on operating the machine.

7.3.6 Periodic maintenance

For your information:
For your own safety and in the interest of extending the life of the machine, this machine should undergo regular maintenance.

- Periodic maintenance is essential. You must therefore strictly follow the maintenance schedule in this operating manual. ("11.2 Maintenance schedules" on page 28).
- Always request genuine ELIET replacement parts from your ELIET dealer if parts require replacement due to wear or failure. This is important for guaranteeing your own safety (find an official ELIET dealer near you on **www.eliet.eu**)
- You must pay more attention and be more careful when wearing ear protection because noises that announce a danger (such as shouting, signal sounds) will on ly be heard to a limited degree.
- ELIET does not recommend using a Walkman or a portable MP3 layer whilst working.
- Always make sure the engine is switched off and the spark plug removed before performing repairs or maintenance.

8. Dealer's duties

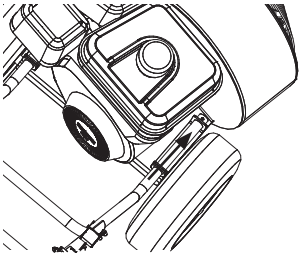


8.1 Unpacking the machine

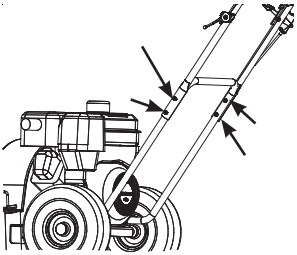
- ELIET machines are packaged in accordance with common rules for proper transportation. Deliveries are always ex factory. Consequently, ELIET cannot be held liable for any damage occurred during transport.
- If the packaging is damaged upon receipt of the goods, check the state of the machine to ensure it is not damaged. Report any irregularities on the delivery order before signing for receipt.
- In case of damage to the machine a complaint to the shipping company must be submitted immediately after delivery.

8.2 Assembly

When first removed from its packaging, the machine is not yet fully assembled. It is the task of the dealer to finish the assembly. Please find a few guidelines below:



- The lower part of the handlebar is the first part to be assembled. For easy mounting, press the ends of handlebar inward somewhat. Slide the lower part into the handlebar holder till the endpoint. Nuts and locking rings are supplied with the machine, in a separate plastic bag.



- The upper half of the handlebar is now placed on the lower half. Both bar halves are fixed to one another using the four bolts (M6x45) and the nuts and locking rings (M6) supplied. Due attention must be paid during the assembly, ensuring that the cable guides for the throttle and wheel drive belt tensioners do not become constricted.

- Using cable bindings (adhesive tape or Ty-rap), affix the cable guides to the handlebar so that they are not in the way when operating the machine.
- The dealer must also affix the safety lever and test it. Mounting instructions and all necessary parts are supplied.
- The dealer will perform a test run of the machine to check whether everything functions properly.

8.3 Other duties

Warning:
As an ELIET dealer you **must** familiarize your customers with the **operation of the machine** and also **point out the possible dangers** while using it. You are expected to carefully go over the maintenance points of the machine together with the new owner. Repeat these instructions until the new owner has fully understood everything.

Warning :
The manufacturer, ELIET wish to re-emphasise that the Dealer must expressly point out to the customers that they must examinethe bolts which retain the chipping blades for security of fixings **within the first 5 operating hours**.

- The fuel tank must be filled with petrol (read "9.2 Refuelling" on page 20)
- Prior to delivery to the customer, the dealer will check the oil level by means of the dipstick. (read "11.4.2 Checking the oil level in the engine" on page 28)
- The rpm will be set at 3,200 rpm.
- The dealer makes a final test drive and checks that all devices are working properly.
- The dealer checks that all safety features are working perfectly.
- Every ELIET dealer warrants a long life span of ELIET machines. He will lubricate the hinges before delivering the machine to the client.
- Important information for the new owner at the time of delivery:
    - The dealer will familiarize the new owner with the machine's operation.
    - He will also inform the new owner of potential dangers.
    - The dealer insists that the machine be returned for first maintenance after 10 hours of service (belt tightening and first oil change are required).

Caution:
Finally the dealer ensures the guarantee card is completed and signed in order to avoid disputes in any warranty cases. Please refer to the guarantee conditions for further information.(“15. Warranty Conditions” op pagina 37)

9. Operating instructions

9.1 Preliminary checks

Caution:
Try making a habit of checking the following points before getting to work with the machine:

Checklist

- Check the machine's hours of operation and compare this figure to the maintenance table. (read "11.2 Maintenance schedules" on page 28).
- Check whether there is sufficient oil in the machine. To this end, remove the dipstick and check the oil level has not dropped below the minimum level. (read "11.4.2 Checking the oil level in the engine" on page 28).
- Check that the fuel tank is full. If it is not, fill it up (read "9.2 Refuelling" on page 20).
- Check the air filter for excessive dirt (read "11.4.3 Cleaning the air filter" on page 29)
- Check that the impeller is in a good condition. If the impeller shows ruptures or fractures, it must be repaired immediately.
- Check whether all guards are in position and whether they have been correctly secured.
- Check whether all safety precautions on the machine are still functioning.
- Check that the tensioning bolts of the impeller are sufficiently tight
- Check that the engine cuts out when releasing the safety handle on the handlebar.

Once these items have been checked and approved, you can prepare the area of operation (see "9.3 Preparing the work site" on page 20) and move the machine to the work site.

9.2 Refuelling

When there is insufficient petrol in the machine it must be filled up. It is advisable to always use fresh petrol. Preferably unleaded petrol with 98 or 99 octane should be used.

Warning:
Under certain conditions, petrol is extremely flammable and explosive. Fire and explosions caused by petrol can result in serious burns or damage to property. The following points should therefore be taken into consideration:

- Topping up with petrol should never take place while the engine is rotating.
- Always allow the engine to cool off for a few minutes before topping up with fuel.
- Only use fresh petrol.
- For environmental reasons, ELIET recommends the use of unleaded petrol. Additives may be added in order to extend the freshness life.
- Store petrol in an approved tank. Keep this tank out of reach of children.
- Never top up with petrol in a place where work will be carried out later. Keep a distance of at least 10 metres away from a chosen working area. This to prevent any fire risk.
- Clean the area around the fuel tank cap and remove it. Do not fill the tank up completely. Fill it up till the fuel is about 10mm away from the top edge. In other words, do not fill the tank right up to the opening.
- Always use a funnel or spout to pour the petrol into the tank. Suitable funnels can be obtained from your ELIET dealer.
- Replace the cap on the tank as soon as possible. If petrol is spilt during filling, the engine must be cleaned immediately.
- Also, ensure clothing does not come into contact with petrol. If this does happen, clothing should be changed immediately.
- It is unsafe and therefore expressly forbidden to fill the tank in the vicinity of smokers or a naked flame.
- A doctor should be consulted immediately if fuel is swallowed or comes into contact with eyes.

9.3 Preparing the work site

- Never work when light intensity is below 500 Lux.
- Besides the machine, the work area must also comply with certain conditions; these must be verified prior to starting the work.
- Examine the work area and remove any movable objects prior to operation.
- Ensure that you are familiar with areas that might cause damage to property and that precautions are made.
- A careful work plan should be part of the operation: determine which route will be followed for efficient removal or heaping up of leaves and dirt.

9.4 Starting the engine

Caution:
Never start the machine if there is dust or dirt on the engine or between the cooling fins of the engine This prevents optimal cooling of the engine and more importantly can cause fire.

For your information:
The procedure to start the engine can vary per brand. Please check your engine manual. read "6. Main machine parts" on page 8 contains the various models.

- If this has not been done when going through the checklist, always check the engine for adequate oil and fuel levels before starting it. Please see "11.4.2 Checking the oil level in the engine" on page 28. for details about how to check and refill the oil.
- For petrol refuelling please refer to "9.2 Refuelling" on page 20.
- If the fuel tank is equipped with a fuel tap, open it.
- Depending on the type of engine, put the handle or turn the switch into the ON position.
- Set the choke handle to "Close".
- Open full throttle, represented by the image of a hare.

Engage the engine by firmly pulling the starter cord.

- The engine running, set the choke handle to "Open". This prevents the motor from getting too much fuel. Should this be forgotten, the engine will slow down and start producing a lot of smoke and eventually, disengage. If this happens, restart the engine without opening the choke.
- If the engine fails to restart, this could be due to a greased spark plug, which consequently must be cleaned or replaced (see "11.5.2 Checking or changing the spark plug" on page 31).

9.5 Working with the machine

Warning:
For optimum protection of your hearing, please put on the supplied hearing protection prior to starting the engine.

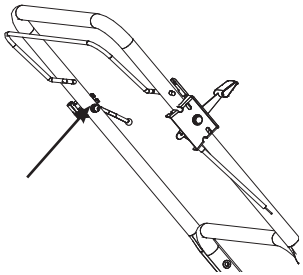
9.5.1 Prior to starting work

Pay attention to the following safety instructions before starting to operate the machine.

- Never run a petrol engine in a closed environment. There is a risk of carbon monoxide poisoning from the exhaust if you do so.
- The operator must wear clothing, protective gloves and other protective attributes as prescribed in this manual (see "7.3 Safety instructions" on page 13).
- The operator must be alert while he's working. As long as he is operating the machine, his full attention must be on the job.
- Never work when light intensity is below 500 Lux.
- The engine will only run with the dead-man's handle on the handlebar in the pressed position. Therefore it must be pressed manually against the steering bar while working. This safety handle may never be fixed into position in any other way (e.g. with a rope, adhesive tape,...).
- Once the engine is running, it is recommended to allow it to warm up in order to achieve the best possible performance.

9.5.2 During the work

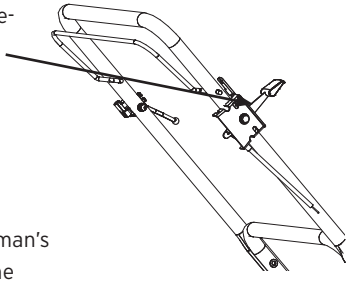
- The work plan must consider the fact that the machine should not be working at an angle of more than 15° for longer stretches of time.
- Once the engine is running, the impeller in the turbine immediately starts rotating and thus instantly creates an air flow.

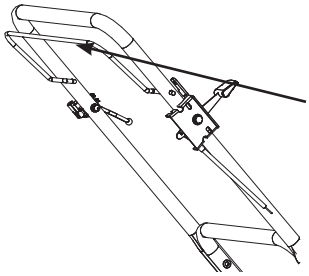


- Before each transport and when the machine is running stationary, the vents on the discharge nozzles must be turned upwards to minimise the risk of stone chippings.

- Having arrived at the work terrain, one should reduce speed: leaves will not be blown away properly at a high speed and this will thus reduce efficiency.

- The air velocity can be controlled by adjusting the engine regime. This is done by decreasing throttle.





- In case of an emergency, simply release the dead-man's handle: this will cut off the engine.

For your information:
If removing leaves, one should obviously not work against the wind, otherwise the leaves that are blown free by the artificial air stream will be placed back onto the previously cleaned work area by the natural wind.

9.6 Stopping the engine

Warning:
Be aware that the impeller will continue to turn for some time once the machine has been turned off.

- In case of an emergency, simply release the dead-man's handle: this will cut off the engine.
- To stop the engine, switch the throttle or turn the knob into the "OFF" position.
- If the machine is equipped with a fuel tap, close it.

9.7 After finishing the work

9.7.1 Cleaning the machine

ELIET recommend cleaning the machine after each use. We recommend using every cleaning event to perform an inspection where you check component and machine integrity. You can, thus, intervene on time to prevent faults and failures. This will ensure that the service life of your machine is improved.

Caution:
Wear suitable clothing for cleaning. Gloves are required.

Not cleaning the machine will lead to :

- Increased wear of the bearings.
- Increased wear of covers.
- Reduced motor cooling.
- Increased risk of fire.
- Inability to notice cracks or tears.
- Damage to the paint.
- Illegibility of safety stickers.

Caution:
You will no longer be entitled to any warranty should you fail to perform proper care and maintenance on a daily basis.

pecial attention must be paid to the following items :

- The motor should be clear of dust and dirt. The cooling fins in particular as well as the area around the exhaust must be clean. The area around the fuel cap must be kept clean to avoid dirt entering the fuel tank.
- The bushings must be cleaned of sand and dirt that has become stuck in the lubricating grease. After cleaning, apply new lubricant (see § 11.3, page 28, for a list of lubricants).
- Using a dry cloth, remove any dirt from the frame. Pay special attention to places where stickers with safety messages are displayed.

Let op:
The machine must not be tilted during maintenance work.

- Use a dry cloth or soft brush for any cleaning. Use penetrating oil with MoS2 to remove grease and lubricants. The latter is a lubricant and rust solvent at the same time..

- A steamer may be used for cleaning, but the water should not be overly pointed at bearings, protection covers and filler caps. Water is the number one cause of rust and this must be avoided at all times. Allow the engine to cool down properly before treating it with water.

Any necessary replacement and/or repair works must be undertaken immediately. Ask your authorised ELIET dealer to carry out repairs (find an authorised ELIET dealer near you on www.eliet.eu).

10. Transporting the machine

- When transporting the machine, always take care to turn off the motor.
- Do only allow responsible adults move or transport the machine.
- During transport, children, unauthorised people or animals must not be allowed within a 3 m radius of the machine.
- It is critical to judiciously select the traffic route in such a way as to release yourself from the worries of tripping up over some obstacles. Preferably, the transportation route is flat and even-surfaced.
- If the machine is tipped over for whatever reason, turn it upright it as soon as possible. This prevents the oil in the crankcase from getting onto the air filter. As these filters are expensive, it is best to prevent this.
- Use anti-slip ramps when loading the machine in a van or on a trailer Ensure that these are well secured to the vehicle or trailer. Under no circumstances should the ramp slope exceed 25°.
- Be careful and composed when loading and unloading the machine so that it does not tip over and give rise to an accident.
- As soon as the engine is running, the impeller will rotate as well and hence consistently develop air. Consequently, if one wants to use traction for transporting the machine between two work zones, one should not forget that air will be emerging from the discharge nozzle at high velocity. To reduce the risk of damage from stone chipping, the air valves must always be turned upwards. Their position is controlled with the operating lever on the handlebar. Throttle must be reduced as well.
- When reversing with the machine, always check that there are no obstacles that could cause an accident.
- During transport the machine will be firmly fastened in the vehicle. Use the fixed chassis parts for attaching ropes to.

11. Maintenance

11.1 General

ELIET recommend that the machine should be brought to an official ELIET dealer for a major overhaul each year. (Find an authorized ELIET dealer near you by visiting www.eliet.eu.) Your ELIET dealer is always at your service for maintenance and advice. Your dealer will stock genuine ELIET service parts and lubricants. Your dealer's staff can always obtain advice and service from ELIET's help desk so that they can provide you with an impeccable after-sales service.

Caution:
Only use genuine ELIET replacement parts. These service parts are manufactured to the same strict quality control requirements and degree of craftsmanship as the original equipment. The list of original replacement parts and their ordering code can be consulted online by visiting **www.eliet.eu**.

Perform maintenance in a room intended for this purpose. This room must be

- Spacious
- Dust-free
- Easy access
- Clean and tidy
- Well lit
- Quiet

These characteristics are important to enable maintenance to be performed in an optimal manner.

Caution:
Maintenance performed in an incorrect manner can subsequently compromise the safety of the operator. Damage or consequential damage that arises from a lack of or from faulty maintenance will mean that the warranty shall no longer apply. Therefore, have maintenance performed by engineers with experience and who know what they are doing.

11.2 Maintenance schedules

A. Routine checks before each job.

- Visual inspection of machine condition
- Checking oil level in engine
- Cleaning the air filter
- Checking and tightening the bolts of the impeller.
- Machine cleaning
- Checking the tyre pressure..

B. Maintenance after every 20 working hours

- Daily maintenance.
- Changing the engine oil
- Checking or changing the spark plug
- Changing the air filter.
- General lubrication

11.3 Lubricants

Engine (1,1 l)	SUNOCO SUPER DENALUBE SAE 20 W 50 API SF / CC
Hinge Points	NOVATIO WHITE SUPREME GREASE
Lubricating points	SUNOCO VET MULTI-PURPOSE LR - EP2
Hydrostatic oil (0,85 l)	HONDA HST OIL (VI 195)

11.4 Routine checks before each job

11.4.1 Visual inspection

Check that no parts are deformed, that welded seams are not cracked and that parts are not excessively loose. Particularly check that the flexible couplings on the in- and outgoing shafts of the blower are in a good shape and not showing any ruptures. If problems are found, carry out the necessary repairs first.

11.4.2 Checking the oil level in the engine

Refer to the 'General description' section in §6. Main parts for possible locations of the oil dip-stick and oil drainage and filler plugs.

- Take a clean cloth.

- Pull the oil level dipstick out of the oil filler opening.
- Usually, the oil level cannot be correctly read immediately. Wipe the dipstick clean, place it back in the oil filler opening, but do not tighten it.
- Pull the dipstick out again, and read the correct oil level.
- If the oil on the dipstick is between the minimum and maximum level, then there this is sufficient oil.

If the oil level is too low it can be filled up via the oil filler plug. Only use the recommended oil. Do not add too much at a time and regularly check the oil level.

11.4.3 Cleaning the air filter

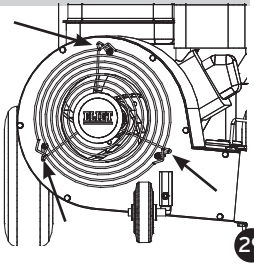
- The type of air filter can vary slightly depending on the make and type of engine.
- Locate the air filter underneath the black protective cap beside the petrol tank on the machine.
- Release the black protective cap.
- There are two types of filter. As well as the common sponge filter, there is a filter which consists of laminated paper like the air filter in a car.
- The sponge filter can be cleaned by rinsing it out with some petrol and blowing compressed air through it.
- The paper filter type can only be cleaned by dusting it off or by blowing compressed air through it.
- Once cleaned, all items should be reassembled in their original position.

Caution:
If the machine accidentally falls over, it should be placed upright again as soon as possible. When the engine ends up in an unusual position it is possible for oil from the crankcase to flow onto the air filter via the carburettor. As oil on the paper of the filter prevents air from passing through, the filter has to be replaced.

11.4.4 Checking and tightening the bolts of the impeller.

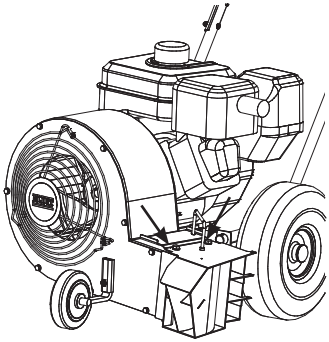
Caution:
Prior to performing any maintenance works on the impeller, make sure to detach the spark plug cable.

- HFor your and other people's safety, it is of key importance to regularly check the impeller for ruptures. For easy examination, the protective plate must be removed from the suction opening. This requires undoing three cap nuts. Use a size 10 spanner for the purpose (in addition, a torch will be required to inspect the dark turbine area).



- If any deformities or ruptures are discovered on the impeller, repairs must be carried out immediately.

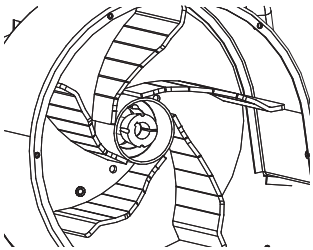
- In order to dismantle the impeller, the front plate of the blower must be detached in full. To do this, the blower nozzle must be detached also. The nozzle is affixed with four M8 bolts that can be unfastened with a size 13 spanner. Subsequently, the 12 bolts securing the front plate must be taken off. This requires a size 10 spanner.



Once the front plate is removed, one has easy access to the impeller, which is mounted directly onto the crankshaft. In order to ensure that the impeller cannot come loose, it is secured to the crankshaft with a special conical bushing.

How to dismantle the impeller ?

Warning:
Make sure to wear gloves while performing this procedure



- To display the conical clamping area, first the 'bowler hat' at the centre of the impeller must be removed. Use a size 13 spanner to unfasten the M8 bolt.
- At the heart of the impeller is a conical drill socket. There are three holes, two of which carry an Allen bolt.
- One of these bolts must be unscrewed completely. The others must be undone only half.
- The fully loosened Allen bolt is then screwed into the hole that was initially empty. After screwing it in, secure it tightly. While securing it, the two parts of the socket head will come apart.
- The entire impeller can now be slid off the crankshaft.
- Make sure not to lose the wedge in the crankshaft while dismantling the socket head .

11.5 Maintenance after 20 operating hours

11.5.1 Changing the engine oil

- nsure the engine is resting on a level surface and is switched OFF.
- Locate the plug screwed into the crankcase at the rear of the engine at the bottom of the engine base. (See the engine manual).
- Keep a 1 litre recepticle nearby before unscrewing the plug.
- Allow all of the oil (approx. 0.75 litres) to drain from the engine.
- Refit and tighten the plug into the drain. Use a clean cloth to wipe away any spilt oil.
- Refill the engine with new four-stroke oil. For this purpose ELIET recommends a top quality oil with a high detergent content : SUNOCO DENALUBE SAE 20W50 API SF / CC.
- Add approx. 1,1 litres of oil via the oil filler opening. Remove any spilt oil once filling has finished. Allow some time for the oil to fill the crankcase before measuring the oil level with the dipstick.
- Place the dipstick in the filler opening without screwing it tight. Remove it and check the oil on the dipstick reaches the upper level mark. If not, add more oil..

Caution:
The action described here may slightly differ from what applies to your model. Read the engine manual to be sure.

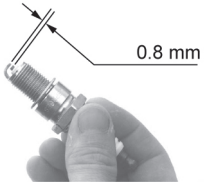
Warning:
Too little oil in the engine leads to irrevocable serious engine damage.

11.5.2 Checking or changing the spark plug

ELIET recommends the following makes of spark plug:

Briggs & Stratton - 9HP	CV8 Champion
Honda GX 270 - 9 HP	BPR 6 ES NGK
Honda GX 390 - 13 HP	BPR 6 ES NGK
Briggs & Stratton - 13 HP	CV8 Champion

- Switch OFF the engine and pull the cable off the spark plug.
- Clean the area around the spark plug and remove it from the cylinder head.
- Using feeler gauges, check whether the distance between the electrodes is 0.8 mm.



- If the spark plug has suffered too much corrosion or contamination, it should be replaced.
- To check the quality of the ignition, proceed as follows:
  1. Refit spark plug cap onto spark plug.
  2. Hold the rubber part of the spark plug cap and press the outer electrode against the frame of the engine.
  3. Pull the starter cord.
  4. Check the sparks between the electrodes.
  5. If the sparks are bright and located exactly between the centres of the electrodes, then the spark plug is still OK.
  6. If the sparks are weak, irregular and not located exactly between the centres of the electrodes, then the spark plug must be renewed.

Caution:
The engine can ignite only with the dead-man's handle pressed down

Caution:
Refitting an old or replacing a new spark plug should be performed with the greatest care in order to avoid damaging the screw thread in the motor.Torque the spark plug to 20 Nm.

11.5.3 Changing the air filter

This action is completely identical to cleaning the air filter (see "11.4.3 Cleaning the air filter" on page 29).

- A new air filter of the correct type is available from your ELIET dealer or from a service centre approved for this type of engine.

11.5.4 General lubrication

ELIET feels it is important to use high-quality materials because these will prolong the life of the machines which are sometimes used in rather extreme working conditions. Special lubricants have therefore already been used in the factory. ELIET also recommends lubrication of the following parts on a regular basis:

- Bearing of the wheels.
- Hinges.

A. Bearing lubrication

- The ball bearings mounted by ELIET are usually equipped with sealing rings to keep dust out. These seals are never perfect. In order to extend the machine's life expectancy, the user must take particular care here.
- Spray a little MoS2 penetrating oil on the bearings and, in particular, on the bearing bush

seams. Leave it to settle.

- Use a dust cloth to remove all the dirt that has accumulated around the bearing seams.
- Spray more penetrating oil into the seams of the bearing seals so that the oil can penetrate the bearings.
- All excess spray should be removed.
- Finally, spray Novatio White Supreme Grease into the seams of the bearing seals.
- The wheel bearings consist of roller bearings. The rollers rotate on the wheel axles. To limit wear of the rollers and to reduce the noise of these bearings, apply some grease to them. Using a brush, apply some Sunoco multipurpose grease to the shaft ends. Now replace the wheels into their original position.

B. Hinge point lubrication

Hinges can be found in these locations:
The pivot point of the swivel caster.

- A grease nipple has been provided for lubricating the hinge of the swivel caster.
- Place a grease pump on the grease nipple and pump the grease into the bearing casing.
- ELIET recommends high quality lubricants from SUNOCO. (Sunoco Multipurpose LR-EP 2)
- All lubricants indicated are available from your ELIET dealer.

12. Storing the machine

Clean the machine. (read "9.7.1 Cleaning the machine" on page 24).

When storing the machine for an extended period, it is recommended to follow the steps below:

- Carry out a major overhaul. (read § 11.5; "11.5 Maintenance after 20 operating hours" on page 31pag. 31).
  Check all nuts and bolts and tighten them where necessary. Most bolts require the use of two spanners, size 10, 13 or 17.
- Empty all fuel from the tank. This can be done simply by letting the motor run until the machine hits empty or by using a siphon to pump the petrol into a jerrycan (read "9.2 Refuelling" on page 20).
- etach the spark plug (read §"11.5.2 Checking or changing the spark plug" on page 31).
  Spray some MoS2 penetrating oil into the cylinder. Pull the starter cord until the piston is in its uppermost position. Replace the spark plug.
- To avoid rust on the machine, touch up all chipped areas or treat them with anti-rust grease. Original paints/enamels in the appropriate colours are available from your ELIET dealer.
- Store the machine in a cool, dry place, away from possible rain. If necessary, cover it with a tarp.
- Always allow the machine to cool down before storage.
- If the machine is stored outdoors, it must be properly covered with canvas. Avoid precipitation coming in direct contact with the machine. ELIET highly recommends a sheltered storage place.

13. Equipment Specifications

Engine	5,0 HP Hondag GP160
	5,5 HP Honda GX160
Chassis	steel 3 mm
Air flow	50 m^3/min
Adjustable wind detector	can be operated from the handlebar (Ventury Jet Effect™)
Adjustable air flow	sideways - frontal
Windspeed	200 km/u
Turbine	Staalplaat 2 mm
	diameter 360 mm
Impeller	Aluminium 5 mm
Suction opening	180 mm
Transmission	Direct
Measurements (LxBxH in mm)	1100x850x950
Noise reduction	Nee
Sound power level	100dB(A)
Weight	38 kg

14. CE declaration of conformity

Machine : **LEAF BLOWER**
Model : **ELIET BL 360**
Type: **MA 012 010 230**
MA 012 010 205

The previously mentioned machine has been designed and manufactured to comply with the following European CE regulations :

EN 15503: "Garden equipment - Garden blowers, vacuums and blower/vacuums - Safety"

ELIET mfg. cy. hereby declares that after performing a hazard analysis, it is fully aware of the potential hazards and risks associated with the machine. In this knowledge, the necessary steps have been taken in line with Machine Directive 2006/42/EC in order to ensure absolute operator safety for the operator, when the machine is used correctly.
The value of the measured sound power level and the guaranteed sound power level were obtained according the procedures set forward in the directive 2000/14/EG annex III/B clause 34 and directive EN 13503.
Measured sound power level LwA : 100 dB(A)
Guaranteed A-weighted sound power level : 101 dB(A)

Date: 01/01/16
Signature:

Frederic LIETAER
Zaakvoerder ELIET EUROPE NV

ELIET EUROPE NV
Diesveldstraat 2
B - 8553 Otegem
Belgium
Ph: +32 56 77 70 88
Fax :+32 56 77 52 13

E-mail : info@eliet.be

15. Warranty Conditions

Dear Customer,

Thank you for placing your confidence in ELIET. We are convinced that the appliance you have chosen will fulfill your needs and expectations over the coming years. ELIET is committed to guaranteeing the good performance of its products.

What is warranty ?

ELIET's product design and manufacture procedures are subject to strict quality guidelines, aimed at **guaranteeing** a long product life and permanent safety. To ensure this, ELIET will repair any **hidden defects or abnormalities** throughout the warranty period, provided you **use your machine as instructed.**

Warranty conditions

ELIET's warranty obligations for new machines is governed by the following conditions.

I. Warranty period

The warranty period starts the day the dealer delivers the machine to the customer (date of invoice) and expires

- after two years of private use.
- after twelve months or 100 running hours* of rental use.
- after twelve months or 100 running hours* in semi-professional or in professional use.

To be eligible to obtain warranty the customer is invited to register the newly purchased machine with ELIET. You should complete the registration online on Eliet's webiste : **www.eliet.eu**

* what is reached first

II. Non-applicability of the warranty

- Wearing parts like knives, bearings, belts, chains, cogwheels, tires, lamps, fuses, etc. are not covered by the warranty.
- When the defect is shown to be caused by improper handling, improper use, negligence or consequential damage that occurs as a result of external influences (fall, broken stones, foreign object, accident).
- When the defect is shown to be caused by a lack of periodic maintenance or cleaning of reinigen van de machine in accordance with the prescribed periodic maintenance.
- If it turns out that the defect was caused by acting against the instructions or advice of the user manual in.
- When the defect occurs after a repair by an unofficial ELIET dealer or a repair using parts that are not original ELIET parts.
- When the defect is shown to be due to the unauthorized modification of the machine's original construction.
- When the defect occurs after use of the machine contravening the instructions for use in the manual.
- When the warranty procedure is not followed or after the end of the warranty term.
- For all problems relating to the motor, please contact an authorized service centre of the engine

manufacturer.

III. Procedure

- **Step 1:** On the date of purchase, the customer should register his/her purchase online by completing the registration card at **www.eliet.eu.**
- **Step 2:** In the event of a defect becoming apparent, the customer shall have this verified by the authorized ELIET dealer. If the dealer feels that there is a factory defect, the dealer may invoke the warranty, under the terms specified.
- **Step 3:** Every warranty application must be accompanied by a fully completed official application form. Copies of this warranty application are available to dealers at ELIET or even at an importer/agent.
- **Step 4:** The dealer then orders the parts needed to perform the repairs. Next, the dealer faxes the order form together with the completed warranty form.
- **Step 5:** The warranty form should be stapled to the purchase invoice and mailed to ELIET or an importer/agent of ELIET.
- **Step 6:** ELIET will send the parts ordered to the dealer under the regular delivery and payment conditions.
- **Step 7:** The defective part will be examined by the technical department first prior to approving or rejecting the warranty. ELIET reserve the right to solely decide whether or not the customer has complied with the conditions for the validity of this warranty, i.e. 1 year or 2 years. Faulty components shall become the property of ELIET.
- **Step 8:** When a warranty claim is found to be valid, ELIET will credit the warranty parts. Customers shall never be entitled to apply for a refund of labour costs.

IV. In case of damage caused by transport

- All goods are supplied ex factory. Transport risks are borne by the customer. It follows, that ELIET highly recommend to check the goods for damage on arrival.
- Any damage found should be stated on the delivery form before signing. Make sure the driver of the haulage company puts his signature next to the damage on your copy.
- In the absence of a written and signed declaration on the delivery form, the insurance of the haulage company will not accept any liability.
- Damages can be claimed from the hauler using a copy of the delivery form and a covering letter stating your complaint.
- The damaged machine should be kept in its original condition until the hauler's insurer has performed any examination.

ELIET®

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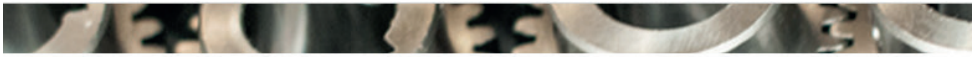

product registration

Contact

Company	
Firstname	
Name	
Address	
Postal code	
City	
Country	Belgium ▼
Phone (insert country code)	
Fax	
E-mail address	
VAT number	

Contact

Machine

Machine	--- choose here --- ▼
Serial number:	
Date of purchase	30/09/2015

Is your machine not mentioned in this list ? Then contact Eliet at +32 56 77 70 88 or info@eliet.eu

General information

This machine will mainly be used for:

- ○ private use
- ○ professional use
- ○ rental

I have a garden measuring:

- ○ < 50 m²
- ○ 50 - 200 m²
- ○ 200 - 1000 m²
- ○ 1000 - 5000 m²
- ○ > 5000m²

Name dealer

Did the dealer give you sufficient information on the operation of the machine?

○ Yes ○ No

Did the dealer go through the maintenance schedule with you?

○ Yes ○ No

Did you receive the manual that is delivered with the machine?

○ Yes ○ No

☑ I give my consent to use my personal data for administrative reasons

SEND