

ELIET
MANUAL

TRUCKLOADER



This booklet provides information about the actual use and maintenance of the machine. **Read it carefully and keep it in a safe place for future reference.**



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



Register your purchase online on **www.eliyet.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 TRUCKLOADER

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

Item number:	<input type="text" value="MA 015 010"/>
Serial number:	<input type="text"/>
Year of manufacture:	<input type="text" value="20"/>

2. Warranty



2.1 Warranty card

To be eligible for warranty you must send the completed warranty card to the address stated below within one month from the date of purchase:

European customers:

ELIET EUROPE NV
Diesveldstraat 2
8553 Otegem
T (+32)(0)56 77 70 88 - **F** (+32)(0)56 77 52 13
email: service@eliet.eu, www.eliet.eu

US customers:

ELIET USA Inc.
3361 Stafford street (office B)
15204 Pittsburgh (PA)
Ph (+001) 412 367 5185 - **Fax** (+001)412 774 1970
email: usinfo@elietusa.com, www.elietusa.com

Read the warranty conditions on the attached warranty card.

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.eliyet.eu.

ELIET AT YOUR SERVICE

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@eliyet.be

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5. Operator safety symbols



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:

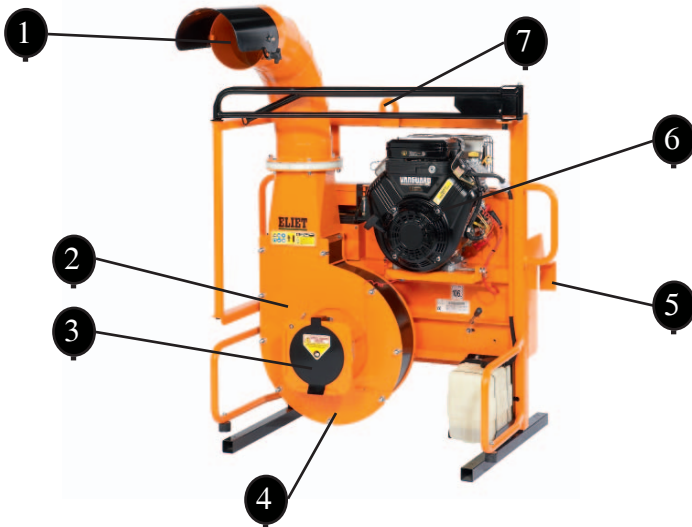
This symbol warns you about extreme danger that you must take notice of in those specific circumstances. So for the sake of your own safety, remain alert at all times.

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 Overall view



1. 360° turnable hose
2. Turbine
3. Protective covering
4. Cleaning valve

5. Support hook
6. Engine
7. Hanger

The truck loader is available with 3 different support systems::



Stationary carrier frame



Carrier frame on wheels



Carrier frame with lift



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



Caution:

For your own safety, only original parts may be mounted on ELIET machines.

6.2 Engines



Honda GX390



B&S Vanguard 13 PK



B&S Vanguard 16 PK

7. Safety instructions

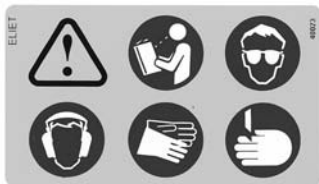


7.1 Safety messages



This sticker is affixed on the belt protection cover and warns about the danger of hand injuries. Never insert hands or feet into the suction pipe. The engine must be turned off in case of faulty operation or before starting maintenance.

Item no. BQ 505 010 070



This sticker groups a number of key safety messages and information about the machine and the manufacturer: Some safety instructions are symbolised by icons:

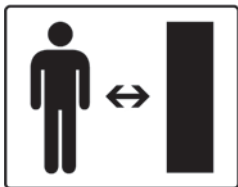
1. Before operating the machine the manual should be read and understood.
2. Suitable safety clothing (gloves, safety goggles, ear protection) must be worn when operating the machine.
3. There is a real risk of severe injuries including permanent damage to the hands. Never place your hands near the blade 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



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



This sticker is affixed on the cover of the driving belt. It indicates the potential danger arising when the cover is removed while the engine is running. The machine may never be operated without the cover. The engine must be switched off before removing the cover at all times.
Item no. BQ 505 010 130



This unique sticker contains all machine identification data.

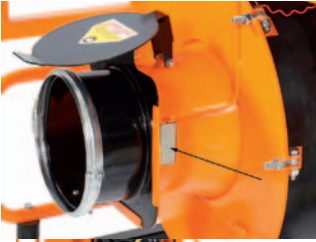
- Year of manufacture
- Model
- Type number
- Serial number
- Capacity
- Weight
- Guaranteed A-weighted noise level

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.

7.2 Safety features



Protective coverings : All outward-rotating parts that could potentially cause accidents are shielded by a protective cover. This involves the protective cover for the belt drive and the protective plate that shuts once the suction hose is moved away from the turbine.



Safety contact : switches the engine off once the suction hose is moved away from the turbine..



Ergonomic handle : allows the suction opening of the hose to be operated with ease. The support wheel means that the suction opening does not need to be held up.



Support arm : ensures that the suction hose is always held up, increasing user comfort.



Adjustable legs : allows the truck loader to be modified according to the wall to which it is to be secured. This allows work to take place under the safest possible conditions.



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.

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).
- Be sure to read the chapter which is intended for the dealer (see chapter 8) and verify whether the machine was delivered in accordance with the instructions.
- 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.
- After you purchase the machine, allow the dealer or a professional to give you some instructions regarding correct use.
- Read and observe all safety messages indicated on the machine in the form of stickers or icons.

7.3.2 Careful and cautious use

- 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 sucks up leaves that are lying on the ground at the work site. This Eliet machine is to be used for this purpose only.
- Sucking up other objects can seriously endanger the user and his property. Furthermore, the machine is not equipped to suck up other objects. This will increase wear and tear and reduce the machine's life expectancy.
- The only safe position for the operator while operating the machine is at the handlebar.
- Never work when light intensity is below 500 Lux.
- Under no conditions whatsoever may the original design of the machine be modified without explicit and written consent of ELIET NV.
- The machine may never be used as a means of transport for people or heavy loads.



Warning:

The suction force at the suction opening will inevitably also suck up small stones. These will be blown out of the blow chute. These projectiles can cause serious damage to property and persons. Be particularly aware of damage that may be caused to glass. Make sure you take this into account when preparing the work.

7.3.3 Operator's responsibilities

- 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 (under 16 years of age) 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.



Warning:

A MOMENT OF INATTENTIVENESS OR CARELESSNESS CAN LEAD TO LIFE LONG REGRET

7.3.4 Personal Protective Equipment (PPE)



For your information:

Personal protective equipment reduces the risk run by the operator.

- The person operating this machine must wear suitable clothing, i.e. clothing covering the entire body, protective gloves and closed footwear.

- Since your feet run a high risk when operating the machine, sturdy, closed non-slip shoes are a must. Shoes with a steel toe are highly recommended.
- For protection of the most sensitive senses, ELIET recommends hearing protection and safety goggles.
- Sucking up leaves can produce a considerable amount of dust. If it irritates your respiratory airways, ELIET recommends you wear a dust mask (in compliance with the 89/686/EEC standard).

7.3.5 Danger zone

The safe position for the operator is at the handlebar of the suction hose.

- 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.
- 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.eliyet.eu)
- Always make sure the engine is switched off and the spark plug removed before performing repairs or maintenance.

8. Dealer's 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. .

- The dealer shall make a final test drive and check that all devices operate properly.
- The rpm will be set at 3,200 rpm
- The dealer checks that all safety features work 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 familiarizes the new owner with the machine's operation.
- The dealer informs the new owner of potential dangers.
- The dealer shall insist that the machine be returned for a first service after 10 hours of operation (belt tightening is required).



Caution:

Finally, the dealer will ensure that the warranty card is completed and signed. The purpose is to avoid warranty disputes. **Please read the warranty conditions for more details.**

9. Operating instructions



9.1 Preliminary checks



Caution:

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

As suggested by the name of the truck loader, the machine sucks up leaves and blows them into an enclosed area such as a trailer or truck.

What are the prerequisites?

- 1. Enclosed area :** It must be possible to close down the space provided by the trailer or truck adequately, in order to allow the leaves to be collected efficiently.
- 2. A sturdy wall :** At least one wall of the trailer or truck must be free so that the suction device can be hitched to it. The wall, its hinges and attachment points must be sturdy enough to support the weight of the truck loader.



Caution:

If there is a window in this wall that connects the passenger area and the enclosed area in the truck, be aware that there is a very real risk of glass breakage if leaves are blown into this closed area. Protect this glass adequately.

- Before hitching the truck loader to the trailer or truck, the support legs must be retracted so that they do not cause problems when hitching.
- The suction device is supplied on a carrier frame. If the truck loader has been in storage, the entire weight will be borne by this carrier frame. There are three options in this instance. There is a stationary frame on fixed legs, there is a frame with swivel wheels or there is a construction on wheels that is equipped with a lifting system.

- If the optional lifting system is not provided and only manual support brackets are present, at least three adults MUST be available to hang the suction device on the wall of the trailer or truck. These three people must be physically fit. The leaf collector weighs 160 kg.
- When manually lifting the blower, ELIET recommends adhering to the following ergonomic guidelines:

- a) Place the machine on its supporting frame as closely as possible to the wall so that it only has to be moved a short distance.
- b) Before anyone takes hold of the machine, the people concerned must make sure they will not have to make a turning movement during lifting.
- c) Try to estimate the weight to be lifted as accurately as possible.
- d) Do not overestimate your own strength; even the tiniest excessive burden on the spinal column can cause long-term damage.
- e) Try to keep the weight as closely as possible to the body.
- f) Try to stand firmly at the point at which the machine is to be lifted.
- g) Take a firm grip on the machine at a point that corresponds to the height to which it must be lifted.
- h) The lift itself should involve the strong leg muscles and not the weaker back muscles (bend your knees and lift with a straight back).

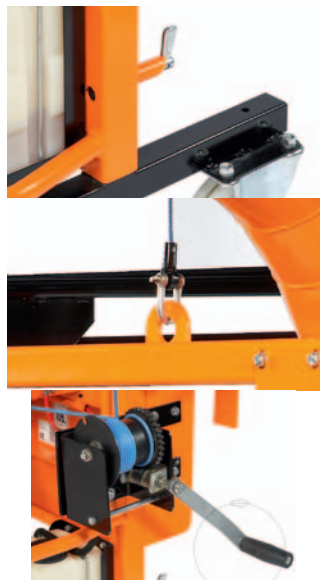


Caution: :

Lifting heavy weights incorrectly can lead to severe damage to the spinal column. Back problems are very painful and may continue for the long-term.

Carrier frame with lifting system

- In the event that the device incorporates a carrier frame with a lifting system, the operator will be able to attach and connect the blower on his own.
- Before lifting the machine, the two pins that are used to secure the truck loader to its carrier frame must be turned around.
- The hook on the lifting belt must be hooked into the eye above the truck loader.
- In order to hoist the truck loader with the winch, the people carrying out the procedure must be situated in the load area of the vehicle as this puts the winch at a practical height.
- Both hands must be placed on the handle if the machine is to be lifted or set down with the winch.
- The truck loader will be raised if the winch is turned to the right. Raise the machine until it reaches the height that allows the attachment hooks to be hitched to the vehicle's side.



- Press the machine against the side of the vehicle and lower the truck loader so that the attachment hooks are properly secured.
- The handle must be turned to the left to lower the machine.
- The swivel wheels are still resting on the ground. These must also be lifted before transportation.
- The carrier frame must be lifted manually. The lifting belt must first be unhitched from the truck loader.
- The carrier frame must then be secured in its raised position with the two pins that were previously turned around. The pins can be inserted into the regularly spaced holes that are provided in the guides.
- Ensure that the area 3 m around the machine is free from people before lifting or lowering the machine.
- Never stand under or position any parts of your body under the truck loader when the handle is being turned.
- If a fork-lift truck, crane or hoisting installation is available, the blower can be attached to the side of the vehicle using this equipment. An eye is provided on the top of the machine for the purpose of attaching to a hoisting device.
- When using the truck loader, it must hang horizontally and the chassis must hang parallel to the vehicle side. This can be adjusted by releasing the support legs. Ensure that the blower is supported by the two legs simultaneously. Secure the locking nut correctly.



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

9.1.1 Checklist

- Check the total number of hours the machine has operated and compare this to the maintenance table.
- Check that the belt tension is adequate. If not, adjust it.
- Check that all protection covers are present and properly in place.
- Check that all safety provisions on the machine are still operating properly.
- If the machine is equipped with a maintenance meter, check that it operates at the indicated speed (3200 RPM). Never attempt to change the default settings of the motor.
- Check the oil level.
- Check that the fuel tank is full. If necessary, fill up the tank with fuel.
- Check the air filter for excessive dirt.
- Check that the propeller is in a good condition. If the propeller shows ruptures or fractures, it must be repaired prior to use.
- Check that the tensioning bolts of the propeller are sufficiently tight.

After verification and approval of all points on the checklist, the work area can be prepared and the machine wheeled to it.

- When petrol in the machine is running low, it must be refuelled. Under certain conditions, petrol is extremely flammable and highly explosive. Fires and petrol explosions can inflict severe burns and cause damage to personal property. Consequently, the following points should be observed:
1. Never refuel with the engine running. Always allow the engine to cool off for several minutes prior to fuelling.
 2. Only use fresh petrol. ELIET is environmentally conscious and, therefore, recommends using unleaded petrol. Additives may be used for extended fuel freshness.
 3. Store the petrol in an approved tank. Keep out of reach of children.
 4. Never refuel at the location where the machine is later to be operated. Make sure this takes place at least 7.5 m from the selected work zone. Doing so will avoid creating a fire hazard.
 5. Clean the area around the fuel cap and remove it. Do not fill the tank completely. Fill up to approximately 6-13 mm from the brim. So never fill it up to the brim.
 6. Always use a funnel or a spout for refuelling.
 7. Put the cap back on the tank. If any petrol is spilled whilst refilling, then the motor should be immediately cleaned.
 8. Make sure that clothing does not come into contact with the fuel. If this does occur, the clothing must be changed immediately.
 9. It is irresponsible and, thus, strictly forbidden to refill the tank in the vicinity of smokers or near an open fire.

9.2 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; they must be verified prior to starting the work.
- Survey the work site and remove all objects that must not be sucked up by the machine (e.g. cans, rope, branches,...)
- Ensure that nobody is located in the enclosed area, near the exhaust mouth when the truck loader is put into operation.
- A standard suction hose measures 3.5 metres in length and thus provides suction over a width of 7 metres. This must be taken into consideration before defining the work route.

9.3 Starting the engine



Caution:

Never start the machine when dust has settled on the engine or between its cooling fins. It reduces proper cooling of the engine and can cause a fire.

- In view of the risk of carbon monoxide poisoning from the exhaust, the machine must never be run in a closed environment.
- The operator must wear the required clothing. (General safety instructions)
- The engine will run only with the suction arm attached to the suction opening of the turbine and if the collector unit is mounted correctly. Disengaging the functionality of the safety switches in any way is strictly prohibited.
- 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.
- Only ever work with the machine if visibility is sufficient. There must be adequate light levels.
- Whilst working, if you notice any strange noises, then cease operation immediately. Disengage the turbine and stop the engine. Examine the defect and perform any necessary repairs before continuing.
- Repairs, maintenance and cleaning must only be performed with the engine turned off and the spark plug cap decoupled.



Warning:

Be aware that the propeller will continue to rotate after being disengaged.

Always check the engine for adequate oil and fuel levels before starting. (See general maintenance)



Caution:

For optimum protection of your hearing you are advised to put on hearing protection prior to starting the engine.

- You must be aware that the engine can only start if the suction hose has been attached to the suction opening.
- To place the suction hose on the suction opening, raise the metal plate on the side of the suction opening so that the hose interrupts the contact from this plate to the suction opening. The tension belt is then slid over the collar of the turbine suction opening and is turned so that the hose is firmly attached.
- Depending on the type of engine, move the lever or turn the switch to 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.
- If the choke is not reopened, the engine will slow down and start to smoke heavily, and eventually come to a stop. Restart the engine without opening the choke if this happens.
- The engine's failure to restart could indicate a soaked spark plug which then needs to be replaced.
- To turn off the machine, the propeller drive must first be switched off. This is done by turning the lever on the right-hand side of the machine.
- To stop the engine, switch the throttle or turn the knob to the "OFF" position.
- If the machine is equipped with a fuel tap, close it.



9.4 Operating the machine

- All preparatory measures should have been taken before arriving at the work site (see point 9.1). When you are sure these have been completed, you can begin the procedure for starting the engine.
- Even though the engine is running, the propeller wheel in the turbine is not yet active. The propeller begins to turn when belt tension is increased. To do so, the black lever under the engine is moved to the left.
- When moving the clutch lever, you are advised to hold the hose's suction opening so that it cannot suck up any undesirable objects when starting up.
- Before engaging the propeller, ensure the engine is running at full capacity.
- Be careful when engaging the transmission. Build up the belt tension very gradually and be aware of the engine activity. The engine must be given sufficient time to overcome inertia on the propeller.
- If you wish to let go of the carrying handle on the suction hose you must reduce belt tension to the propeller by moving the clutch lever.
- In an emergency situation, move the clutch lever and turn off the engine.



Warning :

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

- When sucking up leaves, the suction opening must never be fully pressed onto the ground. There must always be room for sufficient air to be sucked up.
- The leaves that have been sucked up will be blown into the trailer or truck. The expulsion direction can be modified.



Caution :

Only ever change the expulsion direction when the engine is turned off.

- If the leaves to be cleared are wet and are sticking to one another, they must be sucked up gradually. You must avoid clumps of sticky leaves being sucked up in one go. This could lead to the suction hose becoming blocked or increase wear and tear on the drive if this mass of leaves suddenly impacts upon the propeller.
- The suction hose should be kept extended when sucking up leaves. Kinks in the hose will also increase the chance of it becoming blocked.
- Should the hose get blocked nonetheless, one may attempt to loosen the clump of leaves by tapping on the hose or moving it backwards and forwards at the location of the blockage. A transparent hose will allow the blockage to be located more quickly. The above procedure must be carried out along the length of the hose if it is not transparent.

10. Transporting the machine



- Only adults are permitted to move or transport the machine.
- For safe transport it is essential that the truck loader be attached firmly to the trailer or the van. Make sure the machine is firmly lashed up. Use the support brackets as attachment points for ropes. The device must be attached so that movements made by the vehicle as a result of bumps in the road do not lead to the machine coming loose from the wall to which it is attached.
- Even if the machine is secured firmly with ropes for transport over long distances, the speed of the vehicle must not exceed 60 km/h.
- Choose the route that presents the fewest obstacles. The transport route is preferably flat, with an even surface.
- The suction hose must be detached entirely and stored separately if the machine is to be transported over long distances. The support arm for the suction hose must also be detached and stored. The support arm is secured at the base with a quick-release pin.
- The engine does not have to be switched off if the machine is to be transported short distances between work zones. The propeller drive, however, must be disengaged. This is done by moving the clutch lever on the right to the right-hand side.
- The two people who are unhitching the truck loader must endeavour to keep it as upright as possible. The machine's centre of gravity is quite high. This means that if it tilts, the mass of the machine will have a huge impact upon this tilting movement. The weight of the machine (160 kg) may take the persons concerned by surprise.
- When reversing, you must be aware that the truck loader is 65 cm long.

11. Maintenance



11.1 General



For your information:

The dealer and his staff are always ready to help and can also rely on the ELIET help desk for support. This combination guarantees you the best joint effort to find a solution to any problems you may have. For repairs or maintenance you can turn to your authorised ELIET dealer or a service centre authorised by the engine manufacturer. Please always submit the model and serial numbers of the machine and the engine, as well as a complete description of the problem. Only use original ELIET replacement parts. These service parts are manufactured according to the same strict quality requirements and craftsmanship as the original equipment. For your own safety, only original parts should be mounted on ELIET machines.

Maintenance must always be carried out in an area intended for that purpose. The area must meet the following criteria:

- Spacious
- Dust-free
- Easily accessible
- Clean and tidy
- Well lit
- Quiet

These characteristics are important for proper performance of the maintenance works.



Warning:

Maintenance performed in an incorrect manner may compromise the operator's safety. Damage or consequential damage that arises from insufficient or faulty maintenance will void the warranty. Maintenance must therefore be performed by expert and experienced engineers at all times.

- In principle, the maintenance work described may be carried out by any person with technical skills. ELIET recommends, however, that the machine be brought to an official ELIET dealer for

a major overhaul each year.

- Your ELIET dealer is always ready to carry out maintenance and provide advice. He stocks genuine ELIET replacement parts and lubricants. His staff can always obtain advice and service from ELIET's help desk in order to provide you with an impeccable after-sales service.

11.2 Lubricants

Hinges	NOVATIO WHITE SUPREME GREASE
Engine	1,1L SUNOCO SUPER DENALUBE SAE 20 W50 API SF/CC
Bearings	SUNOCO VET MULTI-PURPOSE LR-EP2

11.3 Routine check before each operation

11.3.1 Visual check

Check that no parts have been deformed, that welded seams are not cracked and that parts are not excessively loose. If problems are found, carry out the necessary repairs first.

11.3.2 Engine oil level

- Take a clean cloth.
- Pull the dipstick from the filler opening.
- The oil level will usually be hard to read immediately. Wipe the dipstick with your clean towel and re-insert it without fastening it.
- Pull the dipstick out again; you will now get an accurate reading of the oil level.
- The oil sticking to the dipstick should be between the minimum and maximum mark.

11.3.3 Cleaning the air filter

The type of air filter may differ slightly depending on the engine brand and type.

- The air filter is located under the black protection cover next to the fuel reservoir on the machine.
- Loosen the black protection cover.
- There are two types of filters: the common sponge filter and a paper filter, similar to the air filter of a car.
- Sponge filters can be cleaned by rinsing them with some petrol and blowing them with compressed air.
- Paper filters are cleaned by dusting them down or treating them with compressed air.
- After cleaning, replace all parts in their original positions.
- The machine must not be tilted during maintenance work.

**Caution:**

Should the machine have toppled over for some reason, you must set it upright again as soon as possible. The unusual position of the engine may have caused oil to seep from the crankcase via the carburettor onto the air filter. Oil on the filter paper obstructs the air passage and the filter must therefore be replaced.

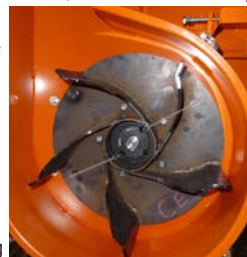
11.3.4 Checking the propeller

- For your and other people's safety it is of key importance to regularly check the propeller for ruptures. In order to investigate this easily, the protective plate must be removed from the suction opening. The locks must be turned in order to do so. (A torch will now be required to inspect the dark turbine area.)
- If any deformities or ruptures are discovered on the propeller, repairs must be carried out immediately. In this event, it is not only a question of welding the rupture, but also of rebalancing the propeller itself.
- In order to dismantle the propeller, the full front plate of the blower must be detached. The blower opening must also be detached in order to remove the front plate. This blower opening is secured with a fixing washer. The 12 bolts that secure the front plate must then be undone.
- Ensure that the wire that runs to the safety contact on the collar of the suction opening does not get jammed or wrenched when removing the front plate.
- Once the front plate has been removed, the propeller can be accessed easily. It is mounted directly onto the crankshaft. The propeller mounting is hidden behind the hood that is secured with one M8 bolt (spanner 13).
- In order to ensure that the propeller cannot come loose, it is secured with a special conical bushing on the crankshaft.



How to dismantle the propeller?

- At the heart of the propeller is a conical drill socket. There are three holes, two of which carry a socket-head screw.
- One of these bolts must be fully unscrewed. The other must be half undone.
- The fully loosened screw 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 propeller can now be slid off the crankshaft.
- Make sure not to lose the wedge in the crankshaft while dismantling the socket head.



11.3.5 Checking belt pulleys

- As is the case with the propeller, both belt pulleys are secured to the respective axles with conical drill sockets.
- The fact that the propeller drive has to deal with a great deal of inertial force means that it is important to regularly check that the belt pulleys are properly secured.
- To do so, the protective plate of the drive belt must be removed. Use a spanner size 10 to undo the 3 bolts.
- The conical drill socket will be visible in the centre of each belt pulley. If you look carefully, bolts are only secured in two of the three holes, i.e. between the drill socket and the belt pulley.
- An Allen key 6 can be used to tighten up the two bolts.
- If the belt pulley mounting is sufficiently tight, the protective cover can be replaced.



11.3.6 Cleaning the machine

- Failure to clean the machine will induce quicker wear. A machine functioning sub-optimally can compromise the operator's safety.

Failure to clean the machine can cause:

1. Increased wear of the bearings
2. Increased wear of covers
3. Reduced cooling
4. Risk of fire
5. Inability to notice cracks or tears
6. Damage to the paint
7. Illegibility of stickers



Caution:

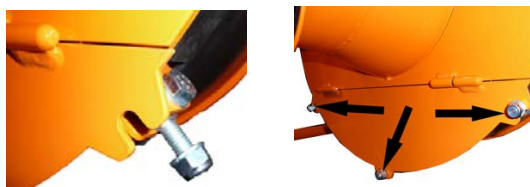
Wear suitable clothing for cleaning activities. Utility gloves are necessary.

- Thus, after each use, it is recommended to clean the machine. Cleaning the machine can also be regarded as a visual check. It offers an opportunity to promptly notice any breakage or need for lubrication.

The following points require special attention:

- The motor should be clear of dust and dirt. The cooling fins and the area around the exhaust, in particular, must be clean. The area around the fuel cap must be kept clean to avoid dirt entering the fuel tank.
- The hinges and bushings must be cleaned of sand and dirt that has become stuck in the lubricating grease. Reapply lubricating grease after wiping the bushings. (Consult the list of lubricants)
- Using a dry cloth, remove any dirt from the frame. Particularly where safety stickers have been placed.
- 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 the machine but the water should not be overly pointed at bearings, protection covers and filler caps. Water is the primary reason for rust and must always be avoided.

ELIET has provided a cleaning valve on the bottom of the machine, which enables you to quickly spray the sludge out of the turbine using a water hose. To do so, simply undo the three bolts under the cleaning valve; you can now turn them back and open the cleaning valve.



11.4 Maintenance after 20 hours of operation

11.4.1 General lubrication treatment

ELIET is committed to using high-quality materials that extend a machine's life cycle despite sometimes dusty work circumstances.

For this reason, special lubrication products have already been applied in the factory. ELIET also recommends lubricating all parts on a regular basis:

- Bearings
- Hinges

A. Lubricating bearings



Caution:

As applies to all maintenance work, the engine must be turned off. Utility gloves are essential.

Bearings are located at two points:

1. The propeller shaft bearing block
2. The bearings for the belt tensioners

- In order to simplify the lubrication process, lubrication points have already been provided in the propeller shaft bearing block.
- The first lubrication point can be accessed between the turbine and the support system. Place a grease pump on the lubrication point and pump the grease into the bearing casing.
- To find the second lubrication point, the protective cover for the belt drive must be removed. Two lubrication points can be located behind the propeller shaft belt pulley. Pump grease into this bearing casing.
- ELIET recommends good quality lubricants from SUNOCO. (Sunoco Multi-purpose LR-EP 2)
- In order to lubricate the belt tension rollers, the protective cover must first be removed.
- The bearings that are located in the tension rollers are usually equipped with sealing rings that 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 penetrating oil on MOS2 basis on the bearings and, in particular, on the bearing bush seams. Leave this to settle.
- Use a duster to remove all dirt that has adhered around the bearing seams.
- Spray the penetrating oil into the seams of the bearing seals again so that the oil can penetrate the bearings.
- All excess spray should be removed.
- Now spray Novatio White Supreme Grease into the seams of the bearing seals.
- Make sure that the penetrating oil or lubricant does not end up on the belt or in its immediate vicinity. This could make the belt slip and will lead to increased wear and tear.

b. Lubricating hinges

Hinges can be found in these locations:

- The pivot point of belt tensioner
- The decoupling lever
- The pivot point of the supporting arm

- Start by spraying some penetrating oil into the hinges. Allow it to sit for a while.
- Then wipe away old lubricant with a cloth or paper tissue.
- Once the hinges have been cleaned, spray them with Novatio White Supreme Grease.
- All lubricants indicated are available from your ELIET dealer.

11.4.2 Changing the oil

- Ensure that the engine is on an even surface and turned off.
- At the side of the engine, below the engine foot, a bolt is affixed to the crankcase.
- Have a 1,5 litre collection reservoir ready before loosening the bolt.
- Empty the full contents (1.1 l) from the engine.
- Replace the bolt on the drain. Wipe away any spilled oil with a clean cloth.
- Refill the engine with fresh 4 stroke oil. ELIET recommends a top quality high-detergent oil: SUNOCO DENALUBE SAE 20W50 API SF / CC.
- Pour 1.1 l of oil into the filler opening.
- Remove any spilled oil after filling. Before checking the oil level with the dipstick, leave the engine untouched until all the oil has found its way into the crankcase.
- Place the dipstick in the filler opening without fastening it. After pulling it out again, the oil attached to the dipstick should reach the maximum mark. If it doesn't, more oil must be added.



Warning:

Oil shortage inevitably causes severe engine damage.

11.4.3 Checking the spark plug

ELIET suggests the following spark plugs:

NGK	BPM 7 A
CHAMPION	BS 19 LM

- Turn off the engine and pull the cable from the spark plug.
- Clean the area around the spark plug and remove the spark plug from the cylinder head.
- The distance between the electrodes is 0.8 mm.
- If the spark plug is heavily contaminated or dirty, it must be replaced.



Complete the following steps to verify ignition quality:

1. Replace the spark plug cap on the plug.
2. Grab the rubber of the spark plug cap and press the outermost electrodes against the mass of the engine.
3. Pull the starter cord.
4. Check for sparks between the electrodes.
5. The spark plug is in good condition if the sparks are clear and neatly centred between the electrodes.
6. Weak, irregular and off-centre sparks indicate that the spark plug must be changed.

Note: engine ignition will only be successful if the safety contact is broken by placing the suction hose on the suction opening and if the switch is set to ON.

- Replace the new or old spark plug with care so as not to damage the screw thread. Secure the spark plug with a torque of 20 Nm.

11.4.4 Changing the air filter

- This procedure is exactly the same as for cleaning the air filter.
- Contact your ELIET dealer or authorised engine service centre to purchase the proper air filter.

11.4.5 Belt drive tension



Caution:

When adjusting the belt tension the engine must be turned off and the spark plug cap removed

- To check the tension of the drive belt, the protective cover behind the leaf sucker must be removed. To do so, the 3 M6 bolts must be undone (spanner 10).
- The decoupling lever is moved so that the belt tensioner presses against the belt. The belt tension can now be checked to ensure it is tight enough. If the belt can be manually pressed

together so that the belt tensioner loses contact with the belt, there is too little tension on the belt.

- Belt tension can be increased by sliding the engine block slightly backwards. Slotted holes are provided for this purpose in the engine support. The bolts that must be undone in order to move the engine are easy to access (spanner 13).
- Before loosening the engine, use a felt pen to mark the front and back of the engine foot on the engine support. This will save a great deal of time and effort when trying to align the belt.
- Slide the engine block backwards. Ensure, when doing so, that the belt does not remain tensioned in a decoupled state. Reference: Sliding the engine 1 mm gives 2 mm tension on the belt.
- The bolts have some 'play' in the slotted holes so it is important that the engine is clamped when the belt pulleys are aligned. The marks we made before loosening the engine can now be used as guides. The engine can now be secured.
- In order to check alignment, place a straight rod against the belt pulleys and then verify that the pulleys touch two belt pulleys at four points. If this is the case, the engine can be secured properly.
- If the check is negative, the engine must be undone slightly. Gently hit the engine block with a rubber mallet at the location where the belt pulley fails to come into contact with the straight rod. This will rectify the deviation. The bolts can then be secured tightly.



Extra function:

When moving the decoupling lever, the propeller will be inhibited by a second v-belt. The tension on this belt can be adjusted by undoing the bolt in the farthest belt pulley.

This v-belt should only be slightly tensioned so that it only works when braking and does not rotate when the machine is in normal use.



The belt guides must be set so that the unused belt does not rotate with the turbine's v-belt pulley when this is driven by another belt.



12. Storing the machine



Clean the machine.

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

- Carry out a major overhaul.
- Check all nuts and bolts and twist them on where necessary. Most bolts require the use of two spanners of 10, 13 or 17 mm.
- 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 storage area, 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.
- Empty all fuel from the tank. This can be done simply by letting the motor run until the machine hits empty. Use a pump siphon to transfer fuel into a jerry can.
- Remove the sparkplug (read the sparkplug maintenance instructions). Spray the sparkplug hole with a little penetrating oil on MoS₂ basis in the cylinder cavity. Pull the starter cord until the piston is in its uppermost position. Replace the spark plug.

13. Equipment specifications



Engine	13hp
Revolutions	3200 rpm
Drive	Belt SPA
Transmission1/1
Propeller	450 mm
.....	Steel
.....	5 Propellor blades
Turbine	Steel
Suction opening :	180 mm
Suction hose :	3.5 m
Support arm	H : 600 mm
.....	L : 1300 mm
Noise reduction:	Rubber
Measurements (L x W x H) :	1080 x 800 x 1290
Width hook :	60 mm
Width between hooks :	785 mm
Distance from hook to support leg:	230 mm
Weight :	160 kg

* Extra height measured from the support hooks.

14. Warranty conditions

Dear Customer,

We thank you for purchasing an ELIET product. Congratulations on your purchase of this machine which is sure to exceed your expectations and needs over the coming years. At ELIET, we do everything to ensure that our products function properly. That is why your product comes with a two-year warranty.

What is warranty?

At ELIET, the design and production of our products are subject to strict quality rules. The purpose of these rules is to guarantee a long service life and permanent safety. That is why ELIET is happy to repair any hidden defects or faults during the whole run-in period (i.e. the warranty period) free of charge, provided the prescribed procedure is followed.

Warranty conditions

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

I. Warranty period

The warranty period starts the day the dealer delivers the machine to the customer (maximum one week after the purchase) and expires:

- for private use: after two years.
- for rental use: after twelve months or 100 hours of operation.
- for semi-professional and/or professional use: after twelve months or 100 hours of operation.

To be eligible to obtain warranty the customer is required to register the newly purchased machine with ELIET. For this purpose you need to complete the registration card on the website: **www.elieta.eu**. If you don't have access to the Internet, please complete the attached registration card and return it to ELIET.

II. The warranty does not apply to the following parts or in the following cases.

- Parts that are subject to wear and tear (e.g. blades, bearings, belts, chains, gearwheels, tyres, bulbs, fuses, etc.).
- Defects caused by improper use, neglect or consequential damage by an external source (fall, chippings, foreign objects, accident).
- Defects caused by improper maintenance of the machine, hence contrary to the prescribed periodic maintenance.
- Defects caused by improper repairs carried out by others than authorised ELIET dealers or after using other than original ELIET replacement parts.
- Defects caused by making improper changes to the original design of the machine.
- Faults occurring as a result of machine use contrary to the instructions contained in this manual.
- Failure to observe the prescribed warranty procedure or expiry of the warranty period.

- For all problems relating to the engine, please contact an authorised service centre of the engine manufacturer.

III. Procedure

- **Step 1:** On the date of purchase, the customer registers his/her purchase online by completing the registration card on **www.elieta.eu**. In addition, the enclosed registration card is completed in its entirety on the day of purchase. The first part of the card has to be returned to ELIET within one month. The customer is required to keep all remaining parts of the card along with the purchase invoice for the duration of the warranty period.
- **Step 2:** In the event of a defect, the customer shall have it verified by the authorised ELIET dealer. If the dealer finds a manufacturing defect, he may invoke the warranty under the terms specified.
- **Step 3:** Every warranty application must be accompanied by a fully completed official application form. Dealers may request application forms from ELIET or from an ELIET importer/agent.
- **Step 4:** The dealer orders the parts necessary to perform the repairs. Next, the dealer faxes the order form together with the completed warranty form and a copy of the registration card to ELIET.
- **Step 5:** The warranty form must be stapled to the purchase invoice and sent to ELIET or an ELIET importer/agent.
- **Step 6:** ELIET sends the parts ordered to the dealer under the regular delivery and payment conditions.
- **Step 7:** The defective part will be examined by ELIET's technical department prior to approving or rejecting the warranty. ELIET reserves the right to unilaterally decide whether or not the customer has complied with all the conditions applicable to the one year or two year warranty. Faulty components automatically become the property of ELIET.
- **Step 8:** If a warranty claim is found to be valid, ELIET will credit the warranted parts. Customers shall never be entitled to a refund of labour costs.

IV. In the event of damage caused by transport

- All goods are supplied ex factory. Transport risks shall be borne by the customer. ELIET therefore recommends checking the goods for damage on arrival.
- Any damage found must be detailed on the delivery form before signing. Make sure the driver of the transport company signs for the damage on your copy of the form.
- In the absence of a written and signed statement on the delivery form, the transport insurance company will not accept any liability.
- Claims for damages must be submitted to the carrier and shall include a copy of the delivery form and a covering letter detailing your complaint.
- The damaged machine should be kept in its original condition until the carrier's insurer has performed an examination.

**REGISTRATIONCARD
ELIET CUSTOMER SERVICE**

To be able to claim the full rights to which you are entitled, it is important to register within a month after the date of purchase. Therefore fill out this registration form and return the first registration card to the ELIET Customer Service. Your purchase should be registered on the ELIET website: www.eliet.be

**REGISTRATIEKAART
ELIET KLANTDIENST**

Om als klant, aanspraak te kunnen maken op waarborg dient men zich binnen de maand na aankoop bij ELIET te registreren. Hiervoor vult u onderstaand document volledig in en stuurt het eerste deel van deze registratiekaart naar de ELIET klantendienst terug. Registreer uw aankoop op de ELIET website: www.eliet.be

**CARTE
SERVIE**

Pour profiter de tous les avantages auxquels vous êtes éligible, il est important de vous inscrire dans le mois suivant l'achat. Complétez ce formulaire de première inscription et renvoyez la première partie au Service Clientèle ELIET. Votre achat doit être enregistré sur le site Internet ELIET: www.eliet.be

ELIET

 Registration card
Registratiekaart
Carte d'enregistrement
Registratiekaartje

 ELIET Customer Service
Zwevepoortstraat 136
B-9003 Ougem
Belgium

 Registratiekaartje naar ELIET Klantendienst terug. Registreer uw aankoop op de ELIET website: www.eliet.be
Customer Identity / Klantgegevens / Données du Client / Kundendaten

Name / Naam / Nom / Name

First Name / Voornamen / Prénoms / Vornamen

Street / Straat / Rue / Strasse

Nr / Nr / N° / Nr

Box / Bus / Boîte / App.

City code / Post / Code Postal / Postleitzahl

City / Plaats / Ville / Stadt

Country / Land / Pays / Land

Telephone / Telefoon / Téléphone / Telefon-Nr.

Fax / Fax / Télécopieur / Fax

E-mail

Machine identity / Machinegegevens / Données de machine / Daten Maschine

Model / Model / Modèle / Modell

Year of manufacture / Bouwjaar / L'année de construction / Baujahr

Article Code / Artikel code / Code d'article / Artikel-Nr.

Serial number / Seriennummer / Numéros de série / Serien-Nr.

Date / Datum / Date / Datum

Signature

Handtekening

Signature

Unterschrift

Stamp of dealer

Stempel van handelaar

Cachet de revendeur

Stempel Fachhändler

I declare that all information that was filled in is correct and truthful. I also declare to have read and understood the operations manual and the warranty conditions.

Ik verklaar dat al deze gegevens waarheidsgetrouw werden ingevuld. Hierdoor geef ik te kennen de gebruiksaanwijzing en de garantievoorwaarden te hebben gelezen en begrepen. Je déclare que toutes les données complétées sont correctes et véridiques. Je déclare également d'avoir lu et appliqué les notices de l'outil. J'emploi et les conditions de garantie. Ich erkläre hiermit, dass alle angegebenen Daten korrekt und wahrheitsgemäß gemacht wurden. Ich erkläre ebenfalls, dass ich die Garantiebedingungen gelesen und verstanden habe.

Put a crossmark to which application this machine was used

Zet een kruis bij de toepassing waarbij deze machine wordt ingezet.

Indiquez avec une croix l'environnement dans lequel la machine a été utilisée.

Kreuzen Sie an, für welche Art von Gebrauch die Maschine bestimmt ist.

- Home use / Particulier gebruik / Usage particulier / Private Nutzung
 Professional Landscaping / Hoveniersbedrijf / Usage Professionnel / Gewerbliche Nutzung
 Forestry / Bosbouw / Forêt / Forstbetrieb
 Public Groundcare/ Openbare groenverzorging / Espaces Verts Public / Öffentliche Grünflächenversorgung
 Rental / Verhuur / Location / Vermietung

Dit document dient binnen de maand na aankoop teruggestuurd te worden naar de ELIET Klantendienst.

This document has to be returned to ELIET Customer Service within a month after purchase.

Remoyez ce document au Service après-vente ELIET dans le mois suivant à la date d'achat.

Dieses Dokument muss innerhalb eines Monats nach Kaufdatum an den ELIET Kundendienst zurückgeschickt werden.

15. EC Declaration of Conformity

Machine: **VACUUM**
Type: **ELIET TRUCKLOADER**
Model number: **MA 015 010 110**
MA 015 010 209
MA 015 010 113

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"

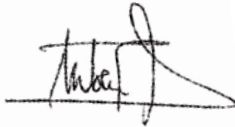
ELIET mfg. cy. hereby declares that after performing a hazard analysis, it is fully aware of the potential hazards and risks associated with the machine. In this knowledge, the necessary steps have been taken in line with Machine Directive 2006/42/EC in order to ensure absolute operator safety for the operator, when the machine is used correctly.

The value of the measured sound power level and the guaranteed sound power level were obtained according to the procedures set forward in the directive 2000/14/EG annex III/B clause 35 and directive EN 13503.

Measured sound power level LwA : 105 dB(A)
Guaranteed A-weighted sound power level : 106 dB(A)

Date: 01/01/2011

Signature:



Frederic LIETAER
Managing Director ELIET EUROPE NV
Date of birth: 02/01/1975

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