# 5. Safety symbols

ELIET cannot foresee every situation which may represent a risk or danger. As such, the warnings in this manual, as well as the stickers placed on the machine, are not exhaustive. Though very minimal, there is some residual risk. If you, as the operator, utilise any procedure or technique, or execute any operation that is not explicitly recommended by ELIET, please ensure that you are not putting anyone else at risk.







The symbols used in this manual ("For your information", "Caution", "Warning") are meant to provide you with further information and to draw your attention to any potential danger.

# 5.1. For your information



**For your information:** This symbol is meant to draw your attention to special information and/or actions, or to inform you that additional information on a particular topic is also available elsewhere in the manual.

# 5.2. Caution



**Caution:** This symbol explains how to proceed in order to avoid incorrect handling. This will allow you to avoid any incorrect actions that could lead to bodily injury or material damage.

# 5.3. Warning



**Warning:** This symbol is meant to draw your attention to very serious risks of which you need to be aware in certain circumstances. In these cases, please remain alert, in order to ensure your own safety.

These security messages are only meant to inform the operator; in no way do they eliminate risk. Common sense and following the instructions in this manual are essential to avoiding accidents.

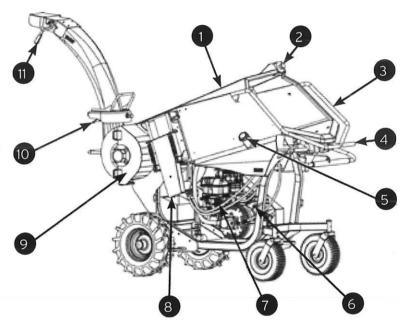
# 6. Main parts



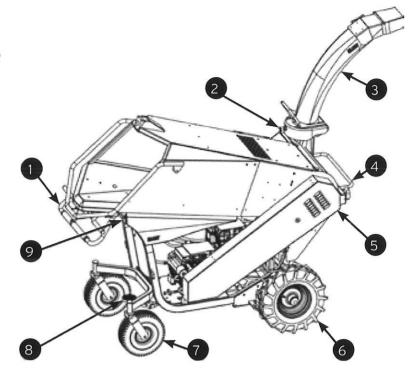
To fully understand the content of this manual, it is important for you to be familiar with the terminology used in the descriptions. This chapter includes a rundown of various parts and identifies them by name. It is strongly recommended that you examine the machine before operation, in order to fully understand the descriptions that are provided in this manual.

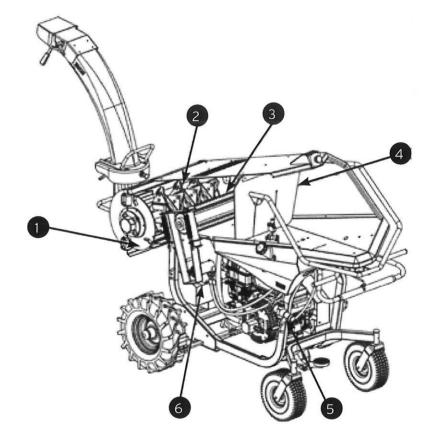
# 6.1. Overview

- 1. Feed hopper
- 2. Safety button
- 3. Safety bar
- 4. Feed roller controls
- Petrol (UK)/ gas (USA) tank filler cap
- 6. Ignition key
- 7. Engine controls
- 8. Feed drive
- 9. Turbine system
  "Turbo Discharge™"
- 10. Locking handle for rotating the blow chute
- 11. Deflector handle

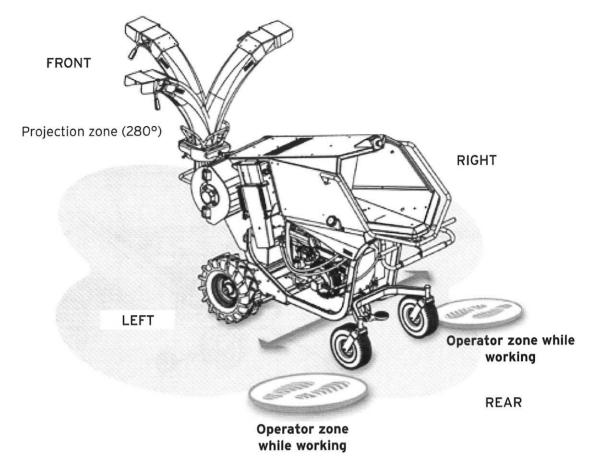


- 1. Handle + control panel
- 2. Locking button for lowering the blow chute
- 3. Blow chute
- 4. Maintenance hatch
- 5. Transmission belt guard
- 6. Traction wheel
- 7. Swivel wheel
- 8. Brake pedal
- 9. Hydraulic oil filler plug





- "Turbo Discharge™" fan
- 2. Blade support/shaft
- 3. Feed roller
- 4. Anti-projectile shield
- Feed roller speed regulator (option)
- 6. Battery





**For your information:** When the instructions in this manual indicate "right, left, front and behind", this is always to be interpreted from the point of view of an operator standing on the feeding side of the machine.



**For your information:** Your ELIET dealer is at your service to provide you with advice and to assist with the maintenance of your machine so that it always remains in optimal condition. You can also contact your dealer with all of your parts and lubricant needs. These service parts are manufactured with the same know-how and precision as the original equipment.



**Caution:** For your own safety, only original equipment parts should be used on ELIET machines.

#### Safety precautions 7.



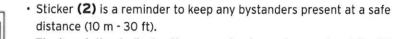


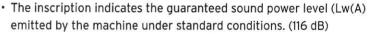
#### 7.1. Safety messages

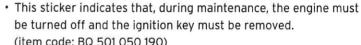
Security messages in the form of stickers or embossed illustrations can be found at easily visible locations on your machine. Please pay special attention to the pictograms and warning messages they contain.



- 1. Stickers (1) and (2) are located on the left side of the Prof 6.
  - Sticker (1) summarises the general safety instructions in the form of icons:
  - You have to read and fully understand the instruction manual before working with the machine. Always wear the appropriate protective gear while operating the machine (gloves, safety goggles, hearing protectors).









(item code: BQ 501 050 190)



2. Likewise, the sticker located on the right side of the hopper highlights the risk of cutting one's hands and being pulled into the hopper. These two risks are inherent to the shredding of wood, but the presence of the anti-projectile shield ensures the maximum reduction of both. Wearing gloves is mandatory, and you must never place your legs into the hopper or climb into it. (item code: BQ 505 010 565)



3. The sticker located on the left side of the hopper is a reminder of the maximum diameter of a branch that can be shredded (<10 cm - 4"). There is a risk of wood chips being ejected from the hopper. Anyone standing within 10 metres - 30 ft of the machine must be wearing safety goggles while the engine is running. (item code: BQ 505 010 570)



4. This sticker located on the belt guard indicates that a belt is found behind the guard. The machine is never to be operated with the safety guard removed, as this could lead to the operator's hands being crushed. Before any interventions on the machine, please carefully read the maintenance manual. You must wait a minimum of 1 minute after shutting off the machine to make sure that all moving parts have completely stopped before undertaking any interventions. For all maintenance operations, the engine must be turned off and the operator must refer to the user manual. Never operate the machine without all the safety guards mounted in place.

(item code: BQ 505 010 600)



5. This sticker is located on the deflector and contains a warning related to the risk of injury that could occur if you are standing within the shredder ejection zone while the engine is running. This apply to anyone standing within 10 metres - 30 ft of the machine.

(item code: BQ 505 014 100)



6. The blow chute can be folded over in order to make the unit smaller for transport. This sticker, located on the blow chute and the shredding chamber, warns the operator of the danger of either catching or cutting their fingers while folding the chute. The sticker also indicates that it is necessary to first turn off the engine before folding the chute. Your hands should never be placed into the blow chute or the shredding chamber for any reason. There is an imminent risk of wood chips being ejected from the blow chute

(item code: BQ 501 050 270 and BQ 505 010 590)



7. This sticker, located on the shredding chamber, warns the operator of the danger of being cut by the blades when opening the maintenance hatch that provides access to the blade system. The engine must be turned off, and the operator must ensure that the blade shaft has come to a complete stop. You must wait a minimum of 1 minute after shutting off the machine to make sure that all moving parts have completely stopped before undertaking any interventions.

(item code: BQ 501 050 250)



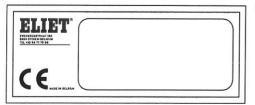
8. This sticker, located on the hopper, is a reminder to the operator to check the bolts that attach the blades to the shaft 5 hours after having terminated an intervention on the machine (either changing or turning the blades). The operator must turn off the engine and remove the ignition key. When performing maintenance on the blades, you must ensure that the blade shaft has come to a complete stop. Due to the heightened risk of cutting your hands, you must wear protective gloves and read the maintenance manual, in order to ensure the use of the proper wrenches. (item code: BQ 505 010 420)



**9.** The sticker located on the belt guard towards the engine exhaust pipe indicates a risk of burning oneself in this area. (item number: BQ 505 010 580)

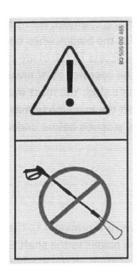


10. The sticker located on the support mechanism guard of the vertically-sliding feeder indicates a risk of catching or crushing your fingers. Maintain a safe distance for all susceptible body parts. This sticker located on the feeding mechanism guard also indicates that a chain is found behind it. Once the guard has been removed, there is a risk of susceptible body injury being dragged into the machine. Never operate the machine without all the safety guards mounted in place. (item code: BQ 501 050 280)



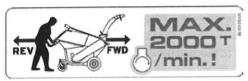
11. This sticker is located on the battery holder. It contains all identification data for your machine: model, model number, serial number, year of manufacture, engine, power rating, weight, guaranteed sound power level (Lw(A).

This sticker also contains all information related to the manufacturer. The CE label also indicates that the machine complies with the current European Machinery Directive.



**12.** The sticker located just above the engine is a reminder that a high-pressure cleaner must never be used on the sensitive areas of the machine: engine, transmission, bearings, electrical junction box, etc.

Do not clean the machine when it is still warm. (item code: BQ 505 010 465)



13. This sticker on the chassis in front of the engine strongly advises you to reduce the engine RPM to maximum 2000 when you will move the unit around.

(item code: BQ 505 010 670)



**Caution:** Safety stickers or any parts that bear such information that have either become damaged, removed or rendered illegible after operation or cleaning must be replaced immediately. These stickers and parts are available at your authorised ELIET dealer.

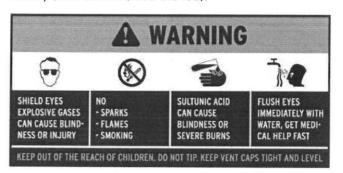
# The following stickers apply exclusively to machines sold on the American market:



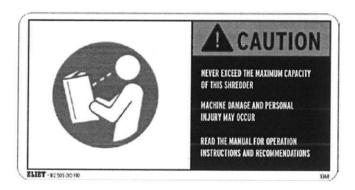
**14.** This sticker summarises a number of important safety messages taken from the instruction manual in 18 points. Caution: This of course does not relieve the operator of the obligation to read the instruction manual.

(item code: BQ 505 010 200)

**15.** This sticker is located on the battery holder. It warns the user of the hazard posed by the sulphuric acid contained within the battery (item code: BQ 505 010 180).



**16.** This sticker is located on the feeding hopper at the infeed opening. It is a standing reminder to the operator to operate the machine within the prescribed capacity and to not overload it (item code: BQ 505 010 190).



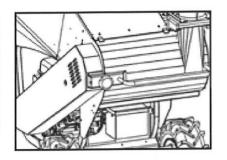
17. This sticker is located near the engine starter mechanism. Each time the operator goes to start the machine, they are reminded to inspect and service the blades regularly before turning on the machine (item code: BQ 505 010 250).



**18.** This sticker is found next to the identification sticker. It contains the phone number that our American customers can call in the event of a problem (item code: BQ 505 010 240).

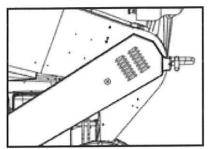


# 7.2. Safety features



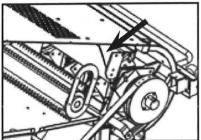
#### Safety switch:

The safety contact installed in the maintenance hatch of the blade shaft and the "Turbo Discharge™" prevents any contact with rotating parts. This maintenance hatch can be opened without the need for tools. When it is opened, the safety switch turns off the motor. The motor can only be restarted once the maintenance hatch has been closed properly.



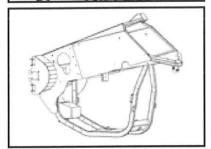
#### Belt guards:

These guards provide protection against the potential hazards created by rotating belts. They can only be removed with the use of tools. If the belt guards have been removed or are not fitted correctly, starting the machine is strictly prohibited given the potential safety hazards.



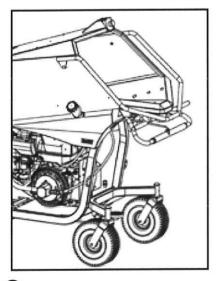
#### Sound absorption:

The soundproof hood around the blade shaft absorbs the noise created by shredding, which reduces the noise pollution to which the operator and their surroundings are exposed.



#### Sturdy construction:

Sturdy construction provides a guarantee of endurance for ELIET machines and is also a guarantee of user safety in the event of unexpected occurrences.



#### Safety bar and button:

If you press the safety bar or button, the feed roller will stop immediately. The feed roller can only be restarted once the safety bar or button has been returned to its original position.

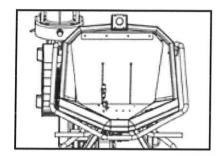
To reset:

Safety button: Turn the button and pull.

**Safety bar:** Pull on the lock below the hopper, and pull the bar towards yourself.

#### Parking brake:

The parking brake ensures that the machine does not move while you are working or transporting it. The brake keeps the machine stationary in one spot, in order to avoid any potential mishaps after it has been moved.

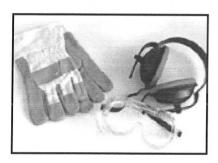


### Anti-projection shield:

The flexible safety screen fitted inside the infeed opening protects the operator against flying wood chips. Under no circumstances should you place your hands beyond this flexible, transparent screen.

The operator must remain aware that lifting this screen means losing the protection it provides and increases risks of injuries. It is to be replaced in the event that it is damaged.

(item code: BR 902 000 010)



#### Safety kit:

Because we here at ELIET are concerned for your safety, we cannot insist enough the importance of using all of the protective gear included in the standard safety kit that we supply. This kit contains your Personal Protective Equipment (PPE): safety glasses, hearing protectors and a pair of multi-purpose gloves.



**Warning:** Never try to deactivate or avoid the safety features. The safety measures are meant for your own personal safety. Before beginning to work, the operator must verify that all protective equipment is functioning properly. In the event that a defect is detected, first complete any repairs that are necessary.

# 7.3. Safety precautions

# 7.3.1. General safety precautions



Warning: Most accidents are the result of reckless and thoughtless behaviour.

- The owner of the machine must keep this manual throughout the complete service life of the machine. It will serve as a reference for the operator for operating and maintaining the machine according to the proper instructions. Always refer to this instruction manual if you have any doubts about how to perform a certain operation.
- If the instructions stated in this manual are not clear, do not hesitate to contact your ELIET dealer for further clarification. ELIET's help desk is also at your disposal during office hours to answer your questions (EU +32 56 77 70 88).

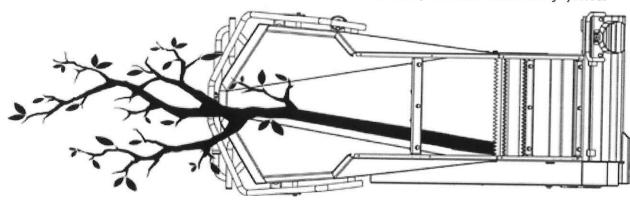


**For your information:** Please also carefully read the engine manual that is provided with the machine. It contains useful information for properly using and maintaining the engine.

- Also read the chapter that is meant for the dealer (see Section 8, page 25) and immediately check if the machine has been delivered to you in accordance with the requirements.
- While using your ELIET machine, please carefully observe all safety instructions. Carefully read all instructions relating to the use of the machine. These instructions are in the interest of your own, personal safety.
- For your safety, ensure that the machine is always operating with properly sharpened cutters/blades.
- Upon purchasing the machine, ask the dealer or a professional to explain how it works.
- Take note of all safety messages located on the machine in the form of text and pictograms. (see Section 7.1, page 13)
- Always apply the specific labor safety requirements in order to avoid any accidents.
- Under no circumstances should the original machine be modified without prior explicit, written permission from ELIET EUROPE S.A. (Belgium).
- Under no circumstances should a safety device be shunted, disassembled or deactivated/neutralised.
- As shredding involves considerable physical effort, take regular breaks and make sure to eat and drink sufficiently.
- It is not recommended that persons with heart problems or balance disturbances operate the machine.
- Avoid inhaling the exhaust fumes from the machine. Exhaust gases contain toxic particles that could result in poisoning and even death. As such, the engine should never be started in an enclosed space.
- Once the engine has been started, there is a risk of wood chips being ejected.

# 7.3.2. Careful and sensible use

- This machine is designed solely for shredding branches, prunings, leaves and all other green garden debris. It should never be used for any other purposes than the ones indicated above.
- Never attempt to shred frozen branches.
- Ensure that you are concentrating on each of your actions as you use the machine. Do not let routine use of the machine dull your attention. Never act impulsively or reflexively.
- Despite the extensive safety features, do not take any reckless risks.
- · Never allow any tools to enter the feeding hopper.
- Avoid allowing any other objects to enter the hopper (cords, stones, metal, plastic, textile, etc.)
- This model can shred branches with a maximum diameter of up to 100 mm. For your own safety, it is imperative that you never attempt to surpass this limit.
- The machine is not designed to be subjected to the stated maximum capacity (the maximum branch diameter) for long periods. As a guideline: no more than 10% of the waste to be shredded should have a branch diameter above 70 mm.
- Never use a step to feed garden waste into the feeding hopper.
- Do not use a garden fork or a shovel to feed green waste into the machine.
- Do not use your foot to push green waste into the infeed opening.
- Ensure that your working space has a minimum light intensity of 500 lux.
- Always remember to lock the wheels while the machine is operating to avoid the machine from moving unintentionally.
- For deontological reasons, ELIET distances itself completely from the shredding of animals and living organisms through the use of its machines.
- When working with the shredder, try to feed as much waste as possible into the right side of the infeed funnel, so that it stays as long as possible in the shredding chamber before being ejected.



# 7.3.3. Responsibilities of the operator

- The person working with the machine should be familiar with all safety instructions. The operator is fully liable when using the machine, in regard to themselves and others.
- Operators are presumed to possess a certain level of maturity that permits them to make decisions based on common sense.
- Underage persons must not operate the machine. However, this does not apply to youths above
  the age of 16 who are learning to operate the machine under the supervision of an adult. This
  manual must be read before using the machine for the first time.
- Children below the age of 16 and animals must be kept away from the machine (10 m 30 ft).

- Disabled persons may only operate the machine when under the supervision of an experienced operator.
- ELIET recommends that the machine should not be lent to others. However, if this is done, only lend it to persons who are familiar with the machine.

# Always inform the other operator of the potential risks and make them read the manual before using the machine.

- Anyone who will work with this machine should be well-rested and in good physical condition.
   As soon as an operator begins to feel tired while working, they have to take a break. The machine is never to be operated after having consumed alcohol.
- Never operate the machine after consuming alcohol.



Warning: JUST ONE moment of inattention or carelessness can destroy a life.

# 7.3.4. Personal Protective Equipment (PPE)



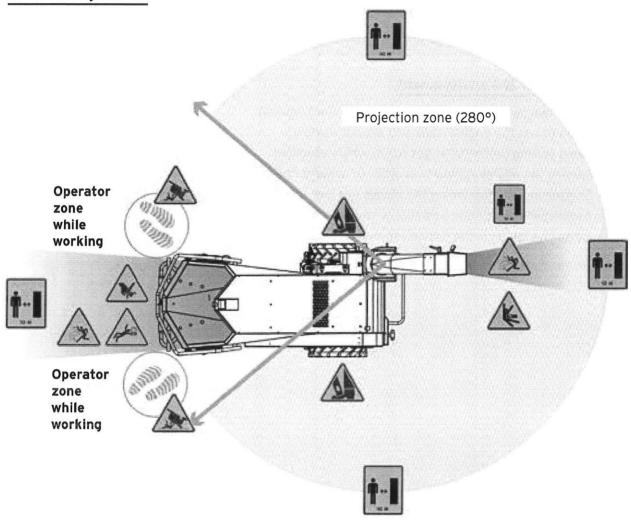
**For your information:** The operator can reduce potential risks by wearing personal protective equipment.

- Working with this machine requires appropriate workwear: clothing that covers the entire body, sturdy work gloves and closed shoes with non-slip soles.
- Do not wear loose-fitting clothing (a scarf, for instance, should never be worn). If you have long hair, pull it back into a ponytail and wear a cap or a headband.
- Never wear a sweatshirt with drawstrings.
- To protect your eyes and ears, you must also wear safety goggles and hearing protectors.
- Shredding may result in dust production. If this dust irritates your lungs, ELIET recommends that you wear a dust mask that conforms to Directive 89/686/EC.



**Caution:** While wearing a hearing protector, more attention and vigilance are required, since any noises that may indicate a danger (such as screams, calls...) will be harder to hear. Eliet recommend not the use of a mobile, smartphone or MP3 player while working.

#### 7.3.5. Danger zone



- While the machine is operating, make sure that nobody comes within 10 m 30 ft of it. Do not take any risks: Turn off the engine immediately as soon as anyone enters the danger zone.
- When you walk away from the machine, the engine must be switched off. Always wait until the blades have come to a complete stop before carrying out any operations on the machine. Once the engine is running, focus all of your attention on operating the machine.

## 7.3.6. Regular maintenance



**For your information**: Regular maintenance is vital to ensuring your own security and a long service live from your machine.

- Periodic maintenance is essential. For this reason, strictly follow the maintenance schedule included in this instruction manual.(see Section 11.2, page 48)
- When certain parts must be replaced due to wear or damage, always consult your ELIET dealer and ask them for original ELIET replacement parts. This is important for your own safety (you will find an authorised ELIET dealer near you at www.eliet.eu).
- Always make sure the engine is switched off and the battery cables disconnected before performing repairs or maintenance.



**For your information:** Please also carefully read the engine manual that is provided with the machine. This contains useful information for the proper use and maintenance of the engine.

# 7.3.7. Respect the environment

Use the machine in a way that respects the environment:

- · Avoid to run the engine while you are not using it.
- Avoid spilling petrol (UK)/ gas (USA) while refuelling.
- Service the engine regularly in order to achieve optimum combustion.
- Sharpening and tightening the blades reduces the consumption of fuel.
- Avoid spilling sulphuric acid that is contained in the battery.
- When changing oil, the dirty oil should be set aside in order to be recycled.

# 9.2. Filling up with fuel



**For your information:** The fuel tank is equipped with a petrol (UK)/ gas (USA) level sensor. If the fuel level is too low, a red LED light will glow on the electrical box below the hopper.



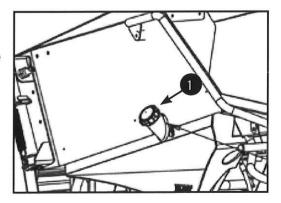
For your information: The fuel tank has a capacity of 11 litres - 2.9 US gallons.

If there is not enough fuel in the machine, proceed with topping up the tank. ELIET recommends that you only use fresh petrol (UK)/ gas (USA) from a pump. (see Section 17.1, page 82)
We recommend using E5 petrol (UK)/ gas (USA) or 95 RON petrol (UK)/ gas (USA).
No other types of fuel are to be used in the machine. (Read the engine manual.)



**Warning:** Under certain conditions, petrol (UK)/ gas (USA) is highly flammable and extremely explosive. Fire and explosions caused by petrol (UK)/ gas (USA) can result in serious burns or damage to property.

- Never add fuel while the engine is running. Always allow a few minutes for the engine to cool off before topping up with fuel.
- Only use fresh petrol (UK)/ gas (USA).
- Never add oil to petrol (UK)/ gas (USA).
- Because of the short shelf life of petrol (UK)/ gas (USA), ELIET recommends that you buy it in small quantities.
- Store fuel in an approved container. Keep this container out of reach of children.
- Store fuel in a well-ventilated area away from open flames, sparks and heat sources.
- Never top up fuel in the location where work is to be performed. Always keep a distance of at least 10 m 30 ft from that location. This will help prevent any risk of fire.
- Clean the area around the fuel tank filler cap (1) before unscrewing it. Never fill the tank to the point of overflowing. Fill the tank to within 50 mm 2" of the top. Do not fill it up all the way to the opening.
- To do so, always use a clean funnel/pouring spout with a filter to prevent the introduction of dirt in the tank. Your ELIET dealer will provide you with an appropriate funnel.



- · Refit the fuel filler cap as quickly as possible.
- Be careful not to spill petrol (UK)/ gas (USA) onto your clothing. If you should do so, change out of these clothes immediately.



Caution: Never top up the fuel tank in the vicinity of smokers or naked flames.

• In the event that fuel is swallowed or gets into your eyes, obtain medical attention immediately.

# 9.3. Preparing the work area

- First clear the area where the machine will be used. In addition, the paths leading to the working area, to prevent the operator from tripping over any obstacles. This is another measure the operator must take for their own safety.
- Position the machine in such a way that the chips ejected from the discharge blow chute do not cause personal injury or material damage.
- Always engage the parking brake once the machine has been placed in the work area. Place something behind the wheels or tracks to prevent any unintended movements by the machine due to gravity and/or vibrations.
- The machine must never be used on sloped surfaces (whether lateral, uphill or downhill).
- Make sure to sort the material to be shredded beforehand. This provides the operator the opportunity to ensure that no foreign objects will enter the machine along with the material.
- Foreign objects are defined as: any non-green object (such as metal, stones, plastic, PVC, cords, etc.) or green material with a diameter in excess of the stated capacity. Not only can these objects cause serious damage to your machine, but they can also be ejected from the machine and cause serious harm.
- Always position the machine in a way so that the wind will blow the dust that is produced away from the engine and from the operator.
- **Option:** For better control over the ejection of wood chips, a reinforced canvas attachment for the blow chute is available, which directs the wood chips below the chute. For example, they can be ejected into a wheelbarrow, trailer, big bag, etc. Order number: MA 032 001 003

# 9.4. Starting and turning off the engine



**Warning:** Never start the machine if the engine cooling fins are not clean or free of debris to protect the engine from overheating.



For your information: Also read the engine manual that has been provided.



**Warning:** Under no circumstances should the engine ever be started in an enclosed space for more than 30 consecutive seconds. Exhaust gases contain toxic substances and may lead to poisoning or suffocation.



**Caution:** Ensure that no unauthorised persons are within a radius of 10 m - 30 ft around the machine before starting the engine.



**Caution:** Ensure that the blow chute has been placed into the working position and that the deflector has been lowered before starting the engine.



**Warning:** The blades begin moving as soon as the engine is started. If there are any wood chips still remaining in the shredder or the turbine, they will be projected from the machine. Ensure that no one is present in the projection zone.

Before starting the engine, check that there is sufficient oil and fuel in the engine. If necessary, read the following sections:

- See "11.4.1. Checking engine oil level + refilling", page 56.
- See "9.2. Filling up with fuel", page 27.

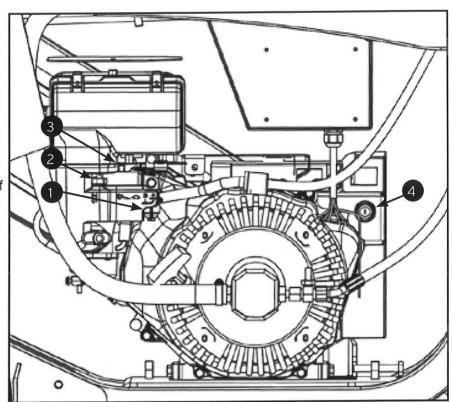


**Warning:** Before starting up the machine, protect your ears with hearing protectors and your eyes with the safety goggles.

- Ensure that the shredding chamber and turbo are empty, in order to avoid overloading the starter mechanism.
- Ensure that the feeding hopper is empty (no green waste, no tools, etc.).
- · Set the deflector to the "working position".

#### Subaru engine:

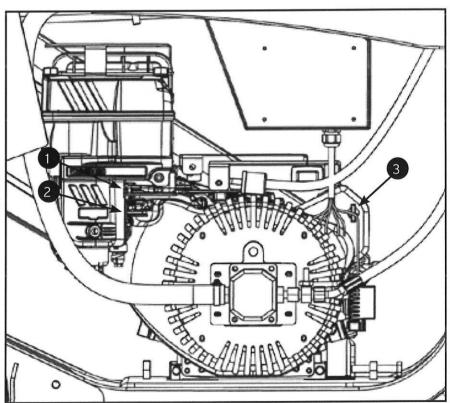
- Open the fuel valve
   on the engine.
- 2. Set the choke (2) to "closed".
- 3. Move the throttle lever (3) up to the maximum position, towards the image of the rabbit.
- Turn the ignition key
   (4) to the right, and release the key as soon as the engine has started.



### Vanguard engine:

For your information: The throttle lever allows the operator to adjust the RPM, open the fuel shut off valve and stop the engine.

- Push the throttle lever (1) to the maximum position (rabbit image).
- 2. Set the choke (2) to "closed".
- 3. Turn the ignition key (3) to the right, and release as soon as the engine has started.



Once the engine has been running for a few seconds (+/- 5 seconds maximum), set the choke directly to the "open" position. This is an important step, since it will avoid overflooding the engine with petrol (UK)/ gas (USA). Otherwise, the engine will slow down, start emitting thick smoke and finally cut out. If this should happen, restart the engine without using the starter.

If you are no longer able to start the engine, this is likely due to a dirty spark plug. In that case, you will either need to clean it or replace it.

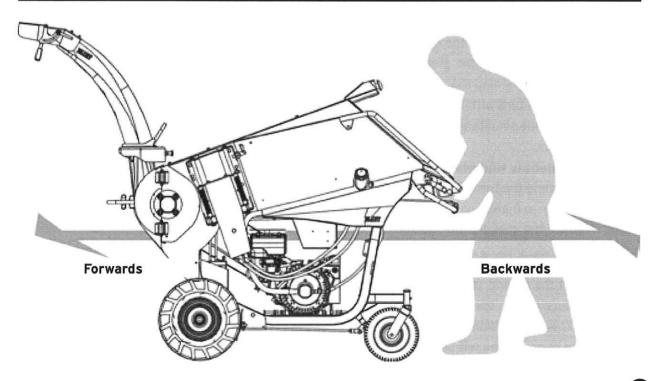
#### Procedure for shutting off the engine:



**Caution:** Only shut off the engine once the shredder, the shredding chamber and the turbine are empty. You will know when this is when no more wood chips are being ejected from the blow chute. The blade shaft will continue to turn due to inertia after the engine has been shut off. Wait a few seconds to ensure that it has come to a complete stop before conducting any interventions on the machine.

- Wait for the feeding hopper to be completely empty, and ensure that no more wood chips are being ejected from the blow chute.
- Turn off the feeding roller to avoid any further material from being fed into the machine.
- · Wait a few moments to ensure that all waste has been shredded.
- Slowly reduce the engine speed, and pull the throttle lever back to the image of the turtle.
- · Afterwards, for the:
  - Subaru engine: Turn the ignition key to the "O" position.
  - Vanguard engine: Set the throttle to the lowest position (O).

# 9.5. Moving the machine





**Caution:** Only move the machine once the deflector has been lowered to the maximum position to avoid the risk of any remaining shredded material being ejected. The machine is equipped with a freewheel that allows it to be pushed by hand when the engine has been shut off.



**Caution:** When moving the machine, ensure that any bystanders are at a minimum distance of 10 m - 30 ft. If anyone begins to move towards you, stop moving immediately.

#### TIP:

You should first try to become familiar with how a self-propelled machine moves by experimenting with it in a quiet, open area without any bystanders and engine speed at idle.

# A. If you have a self-propelled machine (ZR type)

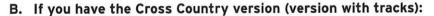
- Start the engine. (see Section 9.4, page 29)
- · Reduce engine speed. (2,000 rpms)



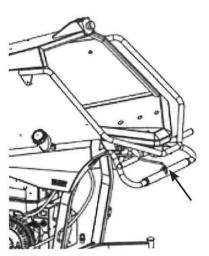
**Caution:** Once the engine has been turned on, there is an imminent risk of ejection. If there are any wood chips remaining inside the machine, they could be blown out. This is why it is important for you to always wear safety goggles.

#### · Moving the machine:

- Turning-twisting the control handle forwards will cause the machine to move forwards. The more you twist the control handle forwards, the faster the machine will move. This also applies to the opposite direction: Turning the control handle in the opposite direction will cause the machine to move backwards. The more you turn-twist the handle the faster the machine will move. Ensure that the area in which the machine will move is free from anything that can be damaged by projectiles.
- To make a turn with the machine push the handle (left or right) while simultaneously twisting the handle to move the machine.
- The intensity with which you push the handle to the side will determine the turning radius.
- In order to manoeuvre between obstacles, you will need to reduce the speed of the machine (decrease RPM) to avoid losing control.



- Start the engine. (see Section 9.4, page 29)
- Reduce engine speed. (2,000 rpms)
- To move the machine, perform the following steps: The control handle consists of two separate handles: The left-side handle controls the left track, and the right-side handle controls the right track.



• To move the machine forwards in a straight line (forwards or backwards): turn-twist both control handles at the same time. Moving both control handles forwards will cause the machine to move forwards; turning-twisting them backwards will cause the machine to move backwards.



**Caution:** If you do not turn-twist both control handles by the same amount, the machine will not move in a straight line.

- To turn to the right: the machine will turn to the right if you twist more the left handle (1). The greater the difference between the control handles, the more the machine will turn.
- To turn to the left: the machine will turn to the left if you twist more the right handle (2). the greater the difference between the controls the more the machine will turn.
- To turn the machine on the spot: bring throttle lever to the minimum (tortoise) and turn-twist each handle in opposite directions. This may cause the machine to change directions very suddenly.



#### MIND YOUR FEET!

The operator must always stay alert and move the control handles carefully. If you feel like you are losing control of the machine, immediately let go of the two handles and move away from the machine.



**Warning:** If you fall, immediately let go of the handles to avoid moving them unintentionally and incurring the risk of the machine falling onto you.



**Warning:** The machine can change direction suddenly. Ensure that you have enough space to manoeuvre before moving into a tight space. You can always pull back on the throttle lever to decrease the engine speed.



**Warning:** The more you twist the handle the faster the machine will move. The more you increase the engine RPM the faster the machine will move.

#### A. Going down a slope:

Always point the hopper of the machine towards the bottom of the slope so that it descends in reverse.



**Warning:** On steeper slopes, the machine may pick up speed on its own due to its own weight. This may result in losing control over the speed of the machine. As soon as you notice this happening, quickly turn the handle in the opposite direction to slow down the machine and regain control over its speed.

Always remain alert and focused on what you are doing! Ensure that there is enough free space at the bottom of the slope (at least 3x the length of the machine).

# B. How to move the machine in the event of engine failure:

The wheels/tracks are driven by the oil pressure created by the hydraulic pump. This pump is powered by the engine. If the engine is not running, the hydraulic power will not function either. External force can be used to push or pull the machine forwards or backwards. However, this requires the circulation of oil in the wheel motors. To make this happen, turn the driving handle in the same direction in which you wish to move the machine.

In the Cross Country version with tracks, you will encounter greater resistance. The pulling or pushing force will need to be significant in order to move the machine. As such: try first to repair the engine on site to move it properly instead of hauling it away.

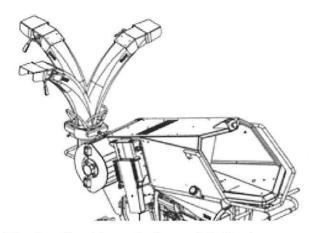
# 9.6. Working with the machine

### 9.6.1. Before you start working

- Wear proper clothing, protective gloves and other accessories as instructed in this manual. See "7.3. Safety precautions", page 20.
- A good gardener should plan out their work and be well-organised. This will enable you to have perfect control over your work and to avoid accidents.
- The waste to be shredded should be systematically sorted before commencing the work: big branches, small branches, leaves and any damp objects. Ensure that the material does not contain any foreign objects.
- Do not use the machine in an enclosed or poorly-ventilated space. Otherwise, there is a serious risk of being poisoned by the toxic exhaust fumes from the engine.
- Always shred at full throttle.
- The parking brake should be set as soon as the machine is in the work area.

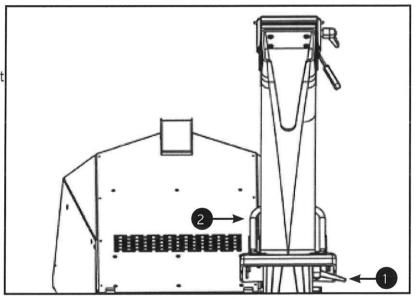


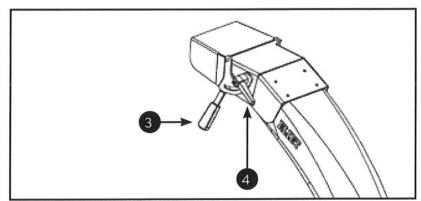
**Warning:** Before you begin shredding, ensure that the blow chute is set to the vertical position. Point the blow chute and the deflectors in the desired direction.



# 9.6.2. Turning and positioning the blow chute and deflector

- To position the blow chute, you will need to release the lever (1), hold the handle on the blow chute (2) and turn it to the desired position. Once the blow chute has been set to the desired position, the lever (1) can be retightened.
- To set the deflector in the desired position, use the handle (3) to position the deflector and then retighten the handle (4) to keep it in that position.





#### 9.6.3. While working



**Caution:** Always wear personal protective equipment. (Safety goggles, gloves, hearing protectors, safety footwear, etc.)

- Be very attentive while working. While operating the machine, you must focus all of your attention on it.
- Start the engine. (see Section 9.4, page 29)
- Allow the machine to run empty for at least 5 minutes so that it heats up.



For your information: When shredding at temperatures around freezing, you will have to ensure that you are shredding branches with a maximum diameter of 50 mm - 2".



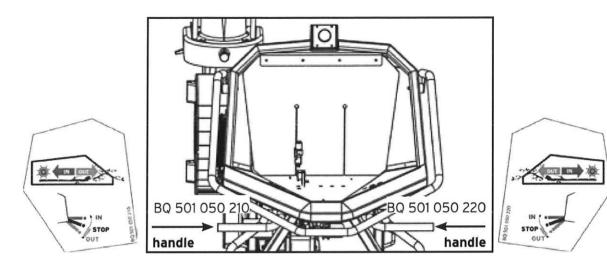
**For your information:** Always shred at full throttle. This will ensure optimal performance.

# 9.6.4. Operating the feed roller

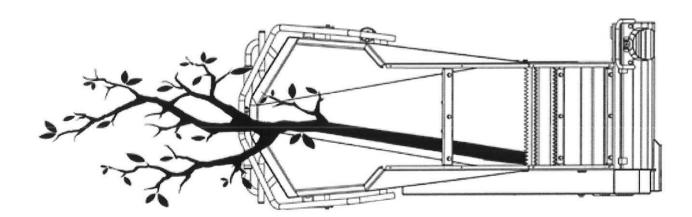
In order to simplify operating the feed roller, we have opted for a clear and comprehensible system that requires you to move the handle, as depicted below.

- Pulling on the handle (see the image below) will cause the feed roller to start moving, drawing the material to be shredded into the feeding hopper at a constant speed. If you push the handle forward once, the feed roller will stop. If you push on the handle a second time, the feed roller will move in the opposite direction and move the material out of the feed hopper.
- The feeding position (IN) is a fixed position.
- The stop position of the feed roller (STOP) is also a fixed position.
- The backflow position (OUT) is a variable position. The handle will automatically return to the stop position. In order to continue the backflow of material, you will need to continuously push on the handle.

• There are two handles. They are both connected, which enables you to work on either side of the shredder and to avoid any risks from projectiles by standing in front of the hopper.



- You should preferably stand to the side of the feeding hopper when putting green waste into it. This will keep you out of the path of any wood chips that might still be ejected past the anti-projectile shield.
- Feed the green waste into the hopper and guide it towards the anti-projectile shield. In the case of loose waste (leaves, etc.), use a branch or the remaining waste to be shredded to push the material towards the shield. (DO NOT USE a shovel or a garden fork).
- In the case of branches, it is recommended to feed in the thickest part of the branch first.
- · Never use a footstep to feed green waste into the hopper.
- In order to ensure more intense shredding and smaller wood chips, it is recommended to feed the waste into the hopper along the right side of the infeed hopper. This will ensure that the chips travel through the entire shredding chamber before they are ejected. The result is a finer cut.



- When feeding green waste into the machine, the operator should never, under any circumstances, place their hands beyond the anti-projection shield.
- Never push jammed waste into the hopper with your foot.
- If the emergency safety bar has been pushed, the feed roller will stop. It cannot be restarted until the bar has first been reset below the hopper.
- This also applies to the emergency stop button: Once it has been pushed, the feed roller can no longer be controlled without first having reset the emergency stop button by turning it and pulling it up at the same time.



**Caution:** Do not lean over the feeding hopper to push material into it, in order to prevent yourself from EVER placing your hands into the machine beyond the anti-projectile shield.

- You will obtain quicker results by reducing the amount of material that you feed into the machine.
- In the case of branches, it is recommended to feed in the thickest part of the branch first.
- If possible, wet, soft and/or leafy pruning waste should be alternated as much as possible with woody material. The idea is to prevent the wet stuff from clogging the shredding chamber. If wood chips are no longer being ejected, this indicates a blockage.
- Immediately push on the feeding handle and hold it in the backflow position (OUT) to force the wood chips in the shredding chamber to be ejected into the feeding hopper.
- Then turn off the machine. Open the shredding chamber and remove the wood chips.

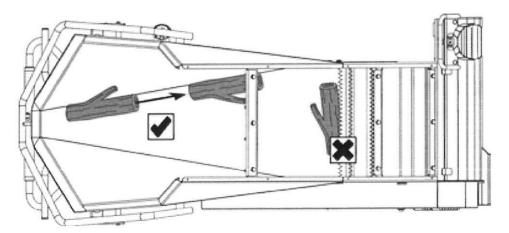


**Caution:** Always wear protective gloves. You risk cutting your hands on the blades.

· Check the blow chute and unclog it completely if necessary.



**Caution:** Thick branches that have been sawn at both ends must be fed in from the left side of the hopper so that they are guided in by the side of the hopper. Make sure that branches do not turn diagonally to the in-feed direction, as this can block the machine.

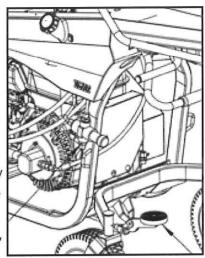


#### To stop the feed roller:

- push on the feeding handle. (see Section 9.6.4, page 36)
- · push on the safety bar.
- push on the safety button.

The rotation direction of the feed roller can be reversed by pushing on the control handle. This is very useful if ever a piece of wood becomes lodged under the roller.

 With speed regulation: If you have selected this option (rotary knob beneath the feeding hopper, to the left), you can regulate the speed of the feed roller according to the material to be shredded. By adjusting the rotary knob (in the range of 1 to 10), you can obtain maximum performance. (Optional equipment)



• ABM system (anti-block motor): To keep the shredder unit from from staling and to ensure that the machine functions autonomously, you have chosen an ABM system (anti-block motor). When the engime RPM drops below 3000 the feeder will automatically stop feeding. Once the RPM is back above 3000 the feeder will start-feed again automatically.

# If any unusual sounds are heard coming from the shredding chamber, immediately turn off the machine to remove the obstruction:

- Stop the feed roller by pushing the safety bar.
- Pull the throttle lever back to the minimum position.
- Stop the engine using the ignition key.



**Caution:** Make sure the blades have come to a complete standstill before carrying out any operation on the machine. As an extra **safety measure, remove the starter key.** 

- Open the maintenance hatch in order to access the blade shaft and the discharge system. (see Section 11.3.4, page 53)
- · Check the Turbo fan for damage.
- · Check the blades and the blade holders for damage.
- In the event of damage, make the necessary repair before working again.

# If you notice a foreign object in the green waste in the feeding hopper, perform the following steps:

- Push on the feed roller handle as far as it will go to push the material out of the machine.
- Stop the engine.
- You may now safely reach into the feeding hopper to remove the foreign object that you found amongst the green waste.
- · Remove any foreign objects.