ELIET®

USER MANUAL

ECOCURE ZRWS



In this manual you will find information on the proper operation and maintenance of the machine. **Read it carefully and keep it in a safe place.**



Please keep your **purchase invoice** or proof of payment with this manual.



Register your online purchase at **www.eliet.eu**

© ELIET

Copyright 2026 ELIET. All rights reserved. All texts, drawings, illustrations, diagrams, graphs, etc., included in this ELIET manual are protected by copyright but also by other intellectual property rights. None of this information may be copied for commercial or distribution purposes and/or modified or transferred («reposted») for other purposes. Content whose copyrights belong exclusively to their respective owners and have been reproduced in certain places in this ELIET manual.

1. Introduction



1.1 Read this manual

ELIET machines are designed for safe and reliable use, if they are operated in accordance with the instructions provided. Carefully read this manual before using the machine. Neglecting to do so could result in bodily injury or material damage.

1.2 Identification data – ELIET ECOCURE ZR

Write the identification data of your machine in the boxed areas:

Article number:	MA 024 300 209
Serial number:	
Year of Manufacture:	20

2. Warranty



2.1 Warranty Card

The customer wishing to invoke the warranty must register his machine online: www.elietmachines.com - Customer Support - Register.

If you do not have an Internet connection, you can return your handwritten registration card to: ELIET EUROPE NV, Diesveldstraat 2, B – 8553 Otegem (Belgium)
Phone +32 (0)56 77 70 88 - Fax +32 (0)56 77 52 13



For your information: Any technical problems or breakages resulting from improper maintenance of the machine void any warranty claims. Chapter 11 provides a summary of service intervals and indicates for which service an authorized dealer should be consulted.

3. Welcome



Welcome to the ELIET customer community.

We thank you for having shown your trust in us by purchasing an ELIET machine . We are convinced that you have just bought the best machine ever. The lifespan of your ELIET machine depends on how you treat it. By following the instructions and advice in this manual, you can be sure that your ELIET machine will serve you very well for a very long time.

We strongly recommend that you read this instruction manual carefully. This will help you avoid any missteps that could have serious consequences. It is also in your best interest to read the chapter about safety instructions carefully. Even if you are familiar with this type of machine, it is strongly recommended that you read this instruction manual carefully.

As ELIET is constantly improving its machines and equipment, we reserve the right to make some slight changes to the content of the delivery, both in terms of its configuration and equipment as well as in terms of the technology used. The descriptions and technical specifications in this instruction manual are in force at the time of its publication. Some images, or even descriptions, may not be about the type of machine you bought but may relate to another version. Accordingly, we ask you to be understanding that we do not accept any responsibility for the texts and illustrations in this instruction notice. If you still have any questions after reading this manual, please do not hesitate to contact your ELIET dealer.

Find the authorized ELIET distributor in your region on www.eliet.eu.

ELIET AT YOUR SERVICE

During office hours, the ELIET helpdesk is always at your service to answer your questions.

European customers: GMT +1: 8-12h & 13-17h (16h FRI)
T (+32) 56 77 70 88 - F (+32) (+32) 56 77 52 13

Diesveldstraat 2
B-8553 Otegem
Belgique
Service@eliet.eu

CA & USA customers : UTC -6: 9-12h & 13-18h
T (+001) 412 367 5185 - F (+001) 412 774 1970

2850 North Dug Gap Road
Dalton, GA 30720
USA
info@elietusa.com

4. Table of contents

1. Introduction 3

1.1 Read this manual 3
1.2 Identification data - ELIET ECOCURE ZR 3

2. Warranty 3

2.1 Warranty Card 3

3. Welcome 4

4. Table of contents 5

5. Safety symbols 7

5.1 For your information 7
5.2 Caution 7
5.3 Warning 7

6. Main components 8

6.1 Overview 8
6.2 Engine (Honda GX 390) 12

7. Safety instructions 14

7.1 Security Messages 14
7.2 Safety features 16
7.3 Safety instructions 16

8. Dealer Duties 22

9. Instruction manual 24

9.1 Due diligence 24
9.2 Adding petrol 25
9.3 Placing / removing a tool on the Ecocure 25
9.4 Preparing the work area 30
9.5 Starting the engine 31
9.6 Engine shutdown 32
9.7 Working with the machine 32

10. Machine transport 43

11. Maintenance 45

11.1 General 45
11.2 Maintenance Diagram 46
11.3 Clean the machine 48
11.4 Routine check-ups before each work session 50
11.5 Maintenance of the first 20 hours of work 55
11.6 Periodic maintenance every 20 working hours 56
11.7 Maintenance every 100 hours 63
11.8 Maintenance every 500 hours 65

12. Machine Storage 67

13. Technical sheet 68

14. EC Declaration of conformity 69

15. Annexes 70

15.1 List of tightening torques 70
15.2 Risk analysis 71
15.3 Warranty conditions 72

English

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, utilize any procedure or technic, 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 hand- ling. This will allow you to avoid any incorrect actions that could lead to bodily injury or material damage.

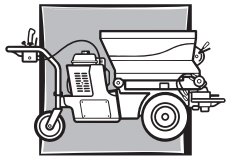
5.3 Warning



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.

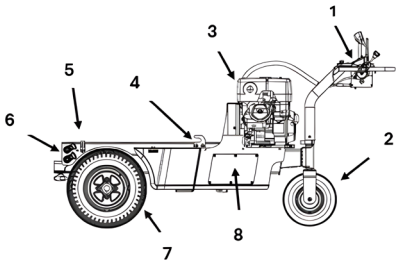
These security messages are only meant to inform the operator; in no way do they eliminate risk. Common sense and following the instructions in this manual are essential to avoiding accidents.

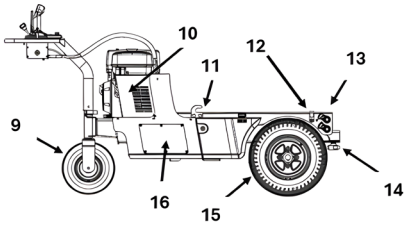
6. Main components

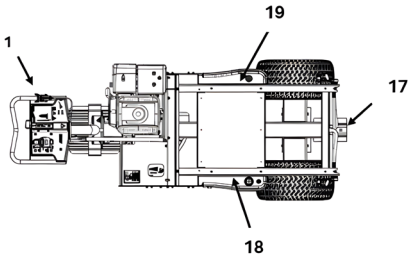


To fully understand the content of this instruction leaflet, it is important to familiarize yourself with the terminology used in the explanations. This chapter reviews different parts by identifying them by name. It is strongly recommended that you study the machine beforehand in order to understand the explanations given in this manual.

6.1 Overview



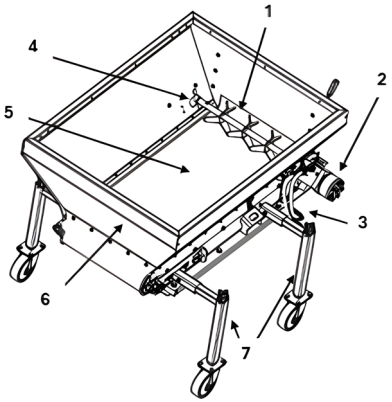




A. BASE MACHINE (MA 024 300 209)

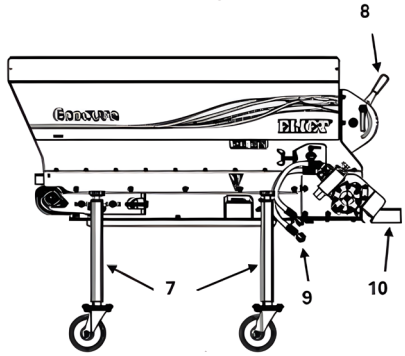
1. HANDLEBAR
2. LEFT STEERING WHEEL
3. ENGINE
4. LEFT ANCHORAGE DEVICE
5. LEFT AUTO LOCK
6. LEFT HYDRAULIC FITTINGS
7. LEFT FRONT WHEEL
8. BATTERY COMPARTMENT ACCES
9. RIGHT REAR WHEEL
10. HYDROSTATIC BOX COMPARTMENT
11. RIGHT ANCHORAGE DEVICE
12. AUTO LOCK RIGHT
13. RIGHT HYDRAULIC FITTINGS
14. TIGHTENING KNOB (WS SPREADER TOOL)
15. RIGHT FRONT WHEEL
16. HYDRAULIC FILTER ACCESS
17. ANCHORAGE FOR OPTION SPREADER WS
18. RIGHT TOOL SUPPORT SLIDE
19. LEFT TOOL SUPPORT SLIDE

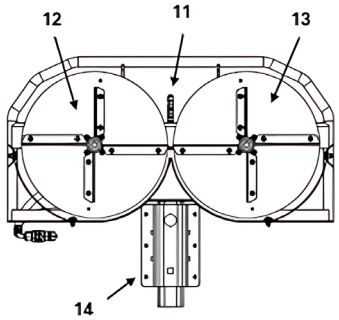
A. WS SPREADER TOOL (MA 024 001 007)

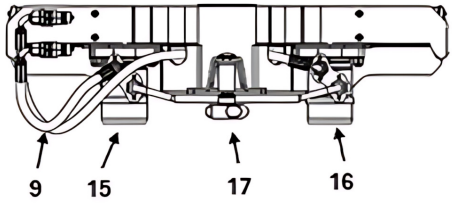


1. HOPPER OPENING SLIDE
2. HYDRAULIC MOTOR CONVEYOR
3. HOSES HYDRAULIC FITTINGS
4. AGITATOR
5. CONVEYOR BELT TRANSPORT
6. HOPPER
7. SUPPORT WHEELS WITH FEET

7. SUPPORT WHEELS WITH FEET
8. HOPPER OPENING LEVER
9. HYDRAULIC COUPLING HOSES
10. SPREADER DISCS TRAY SUPPORT

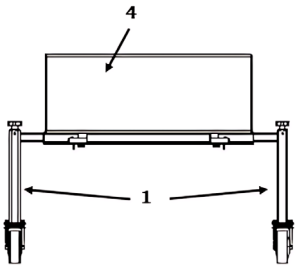


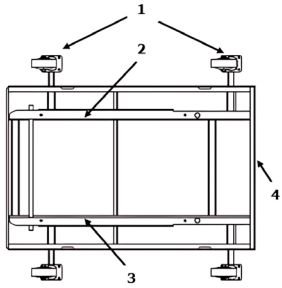


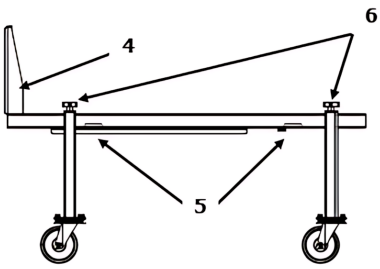


11. SETTING MARK FOR DISTRIBUTION TRAY
12. LEFT DISTRIBUTION TRAY
13. RIGHT DISTRIBUTION TRAY
14. DISTRIBUTION TRAY SLIDE
15. RIGHT HYDRAULIC MOTOR
16. LEFT HYDRAULIC MOTOR
17. CLAMPING KNOB DISTRIBUTOR TRAY

C. TRANSPORT TRAY TOOL (MA 024 001 009)

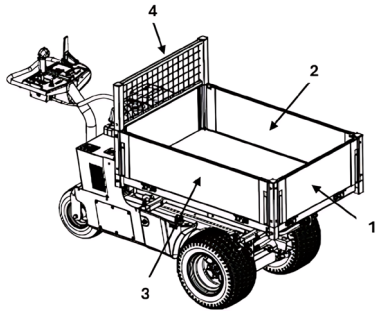




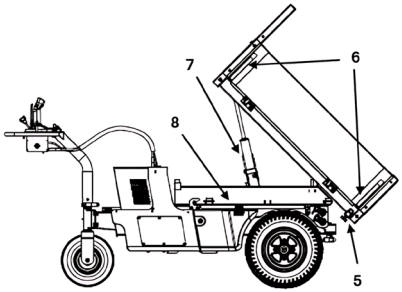


1. SUPPORT WHEELS
2. LEFT ANCHOR SLIDE
3. RIGHT ANCHOR SLIDE
4. PROTECTIVE WALL TABLE TOP
5. ANCHOR POINTS FOR STRAPS
6. HEIGHT ADJUSTMENT WHEEL
7.

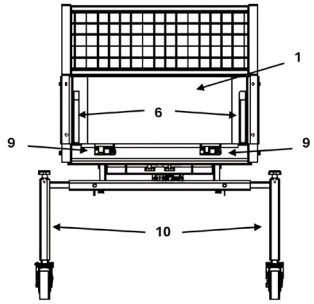
D. DUMPER BUCKET TOOL (MA 024 001 006)



1. REMOVABLE FRONT WALL
2. REMOVABLE LEFT SIDEWALL
3. REMOVABLE RIGHT SIDEWALL
4. FIXED BACK WALL

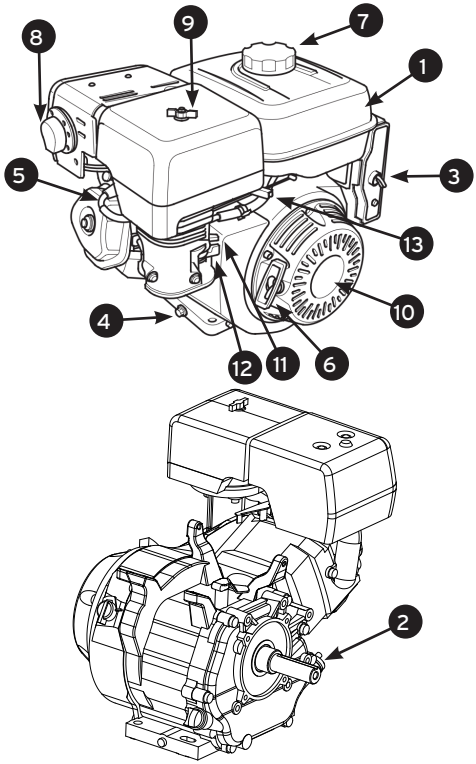


5. CLAMPING WHEEL WITH SUPPORT SLIDING WALL
6. LEVER WALL OPENING
7. ELECTRO-HYDRAULIC CYLINDER
8. CHASSIS SUPPORT DUMPER



1. REMOVABLE FRONT WALL
6. LEVER WALL OPENING
9. FRONT WALL HINGE
10. ADJUSTABLE SUPPORT FEET

6.2 Engine (Honda GX 390)

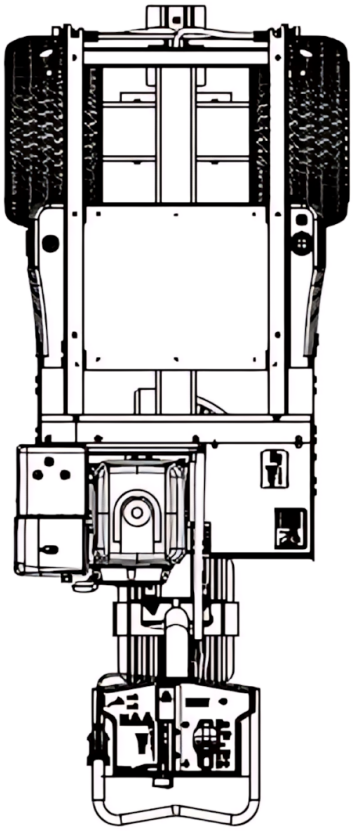


1. FUEL TANK
2. OIL CAP / DIPSTICK
3. KEY CONTACTOR
4. OIL DRAIN PLUG
5. SPARK PLUG CAP
6. RECOIL STARTER
7. FUEL CAP
8. EXHAUST
9. AIR FILTER COVER
10. RECOIL STARTER HANDLE
11. ENRICHMENT LEVER (CHOKE)
12. FUEL INLET VALVE
13. ENGINE SPEED LEVER

For your information: Your ELIET dealer is there to advise you and maintain your machine so that it always offers optimal performance. You can also contact him for your parts and lubricants needed. These parts are designed with the same craftsmanship and precision as the original parts.

Attention: For your own safety, ELIET recommends that you only use original parts.

FRONT



LEFT

RIGHT

BACK

For your information: When the instruction manual speaks of "right, left, forward and backward", it always adopts the point of view of the operator on the handlebar side of the machine.

7. Safety instructions





7.1 Security Messages

Safety messages are affixed in the form of stickers or embossed illustrations in clearly visible places on the machine. Pay attention to the pictograms and warning messages on the Index.



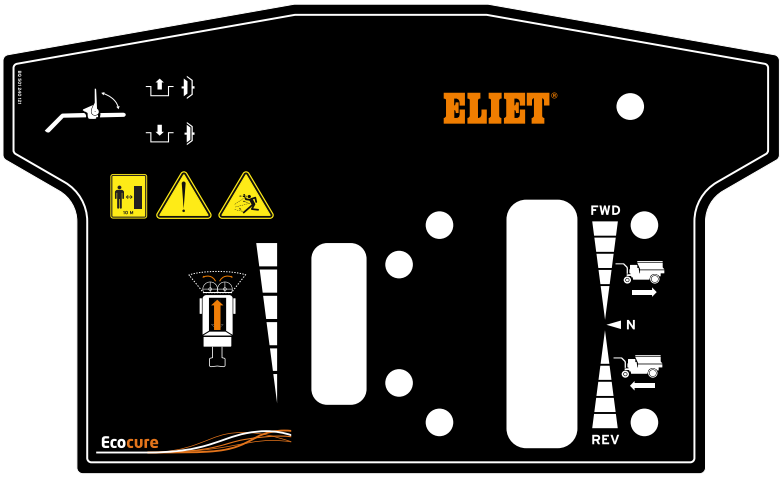
This sticker is affixed to the front of the hopper above the spreader discs of the WS spreader tool and warns of the risk of injury that may occur if you stand in the material discharge area when the machine is running. It contains symbols warning of the dangers associated with throwing equipment, the risk of hand injuries, the risk of trampling and the need to equip oneself with personal protective devices.



The sticker is applied to the left side housing of the WS spreader tool hopper, close to the spreading discs. It warns of the danger of injury to the operator and the presence of rotating parts (conveyor belt and spreading discs). It is also affixed to the top and right inboard side of the chassis hydraulic transmission guard, warning of the danger to the user of hand injuries (belt, conveyor belt and rotating pulleys) if this guard were to be removed.

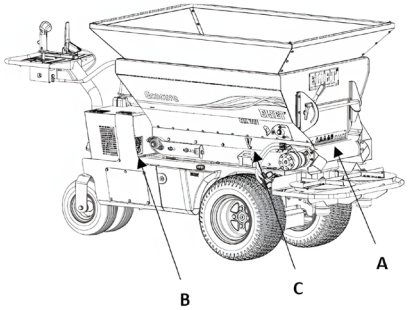


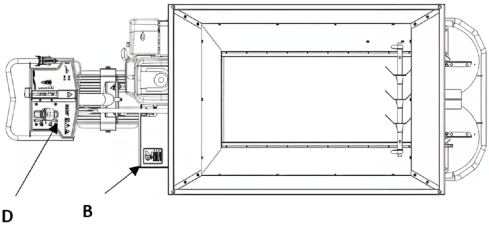
This sticker is affixed to the left and right sides of the machine, it designates the different anchorage points present on the machine to be preferred during transport.

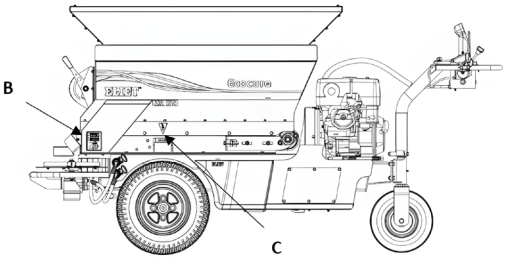


This sticker on the handlebars warns the user of the danger of injury from projections of material and the need to keep third parties at a safe distance (10 m).

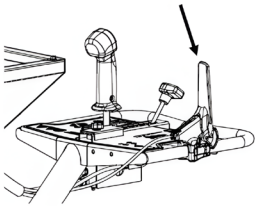
Locations of various stickers with safety messages:







7.2 Safety features



Emergency stop lever:

This lever is on the left side of the handlebars. By releasing this lever, the transmission of the various components will stop working (traction, conveyor belt, agitator & spreading discs).



Safety Kit:

It is for the sake of your safety that ELIET cannot sufficiently emphasize the importance of using all the protections accompanying the delivery of the machine. This includes protective glasses, hearing protection and a pair of multi-purpose gloves.

7.3 Safety instructions

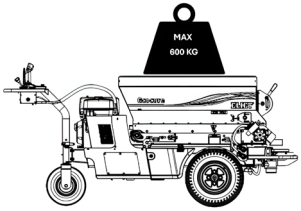
7.3.1 General Safety Instructions

- The owner of the machine must keep this instruction manual for the entire life of the machine. The operator will use it as a reference structure to operate and maintain the machine according to according to the best practices. If you are unsure how to perform an operation, always consult this user manual.
- If the instructions in this manual are not clear, please do not hesitate to ask your ELIET dealer for further explanation. In addition, the ELIET Help Desk is always at your service to answer your questions during office hours on the number (EU +32 56 77 70 88).
- Refer to the dealer chapter (see chapter 8, page 22) and immediately check whether the machine has been delivered to you according to the instructions.
- When purchasing the machine, ask the dealer or a competent third party to explain how it should be used correctly.
- When using the machine, follow all safety instructions. Read all instructions for using the machine carefully. All of these instructions are intended to ensure your personal safety.
- Always follow the current instructions of the labour inspectorate for the prevention of accidents.
- Take note of the safety notes on the machine in the form of stickers and pictograms.
- The original structure of the machine must not be modified under any circumstances without the prior explicit written consent of ELIET EUROPE SA. (Belgium).

7.3.2 Prudent and rational use

- This machine is designed to transport general goods, spread materials such as sand, potting soil, compost, lava, seeds, fertilizers in the form of granules and road salt. It should never be used for any purpose other than those stated here.
- The use of the machine is a heavy physical activity, so you will need to take regular breaks, eat and drink enough.
- It is not recommended for people with heart problems to work with the machine.
- Think about every operation you perform with the machine. Don't let yourself be distracted by habit. Never act impulsively or reflexively.
- Don't take undue risks despite the presence of safety devices.
- Never work with a machine that is not fully assembled. Check the perfect assembly of the machine according to the specifications given in this manual.
- Never operate the machine if the individual housings and enclosures are not properly assembled.
- Never use a step stool to load materials onto the machine.
- Make sure that the place where you work has a minimum light intensity of 500 lux.
- Always work on a stable and flat surface.
- Never work if the machine is in a steeply inclined position; observe the maximum recommended inclination (see § 10, Transporting the machine on page 43 and § 9.4 Preparation of the work area, page 30).
- Never attempt to change any machine parameter or perform maintenance while the engine is running.
- The use of the machine can generate explosions when working in an environment close to flammable products, fuel vapours, gases, etc.
- It is forbidden to throw glowing objects into the machine (e.g. cigarettes, charcoal).
- Never put your hands beyond the handlebars when the machine is in operation.

WS SPREADER TOOL

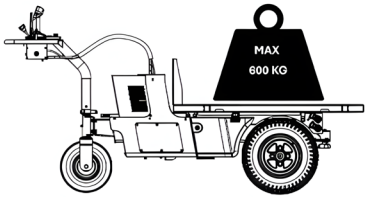


- Do not load the hopper with more than 600 kg of goods.
- Avoid introducing foreign bodies into the machine (ropes, stones, metal, plastic, textiles, etc.) or any other material other than homogeneous spreading materials.
- Never use your feet to push the material to be spread into the loading hopper.
- Never insert any tools into the loading hopper (e.g. fork, shovel, etc.).

- It can spread materials with a diameter of up to 5 mm. For your safety, it is strictly forbidden to exceed this limit.
- Never spread frozen materials. Spreading materials in these freezing conditions could cause accidents or even breakage on the machine, or even cause a risk of injury to the user.

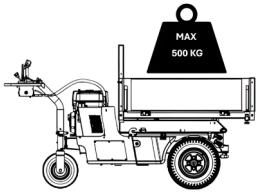
TRANSPORT TRAY TOOL

- Do not load the transport tray with more than 600 kg of goods.
- Make sure that the goods being transported are stable, always use the different anchorage points (4) for straps.

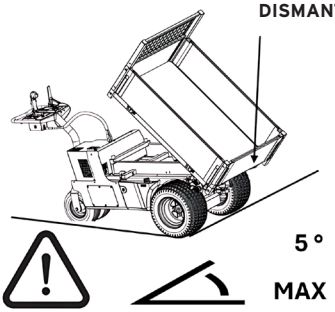


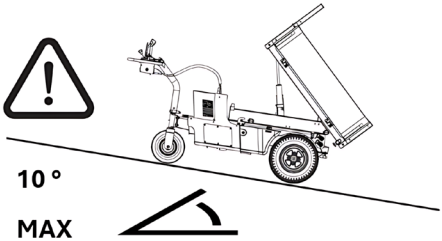
DUMPER BUCKET TOOL

- Do not load the dumper tray with more than 500 kg of goods.



DISMANTLE THE FRONT WALL BEFORE UNLOADING



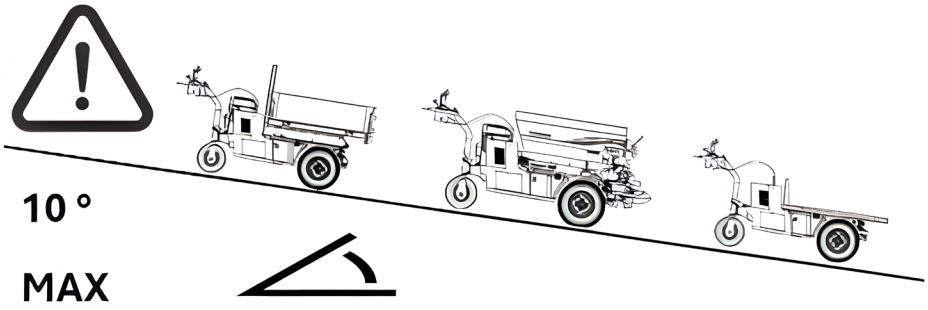


To avoid any possible risk of lifting the rear part of the machine and all the various risks and consequences associated with it, **do not lift the body to empty it without first dismantling the front wall.**

In order to avoid any possible risk of the machine tipping, **do not empty the dumper bucket at lateral inclinations greater than 5°, and downward inclinations of more than 10°.**

Warning: For obvious safety reasons, ELIET is completely discharged from any responsibility in the event of the machine tipping over without respecting the maximum inclination conditions and dismantling of the front wall.

Warning: Ignoring these precautionary instructions when operating the machine exposes the user to an almost certain risk of tipping over and damage to the machine, as well as a risk of serious injury. Observe the maximum tolerated inclinations listed in this user's manual.



7.3.3 User Responsibility

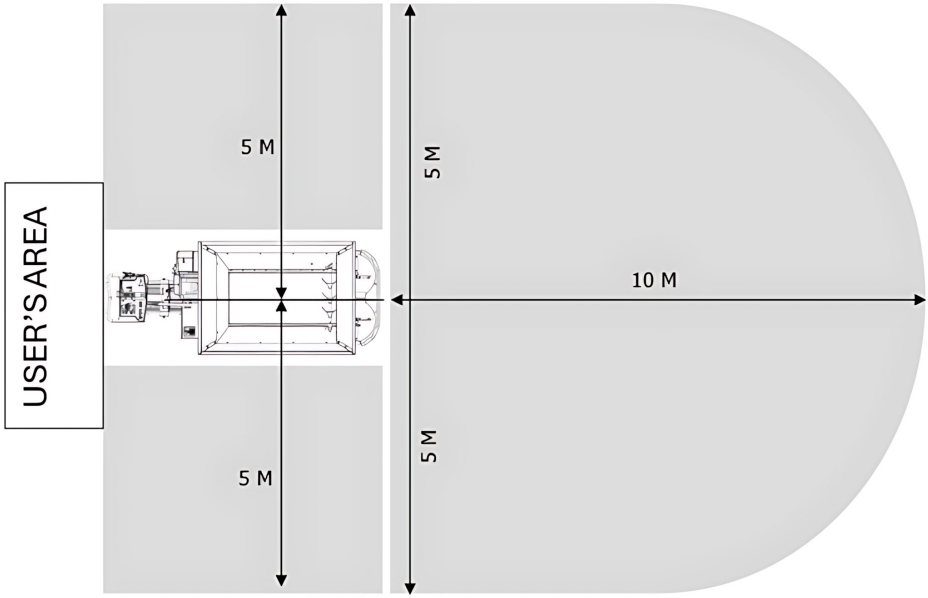
- The person working with the machine is supposed to know the safety instructions. It is fully responsible for the machine towards itself and third parties.
- The machine operator is expected to have a certain maturity that allows him to make decisions based on common sense.
- The machine must not be entrusted to a minor. However, this does not apply to young people over the age of 16 who learn to use it under adult supervision.
- Disabled people can only work with the machine when accompanied.
- Children (< 16 years old) and pets must be kept away from the machine (> 10 m).
- ELIET advises not to lend this machine. If you do, only lend it to people who are familiar with all the controls. Always draw the user's attention to possible hazards and require the user to read the manual before using the machine.
- Anyone who will be working with this machine must be well rested and in good physical condition. As soon as the user starts to feel tired, he should take a break. It is forbidden to work with the machine after consuming alcohol or narcotics.
- The user must write a list of the number of hours of operation. This will allow the regular maintenance schedule of the machine to be properly followed.

7.3.4 Personal protective equipment (PPE)

- Working with this machine requires the right clothing: clothing that covers the entire body, sturdy work gloves and closed-toe shoes with non-slip soles.
- It is forbidden to wear loose clothing (e.g. a scarf). If the operator has long hair, he will tie it in a ponytail and wear a cap or headband.
- In order to best protect the most exposed and delicate organs, ELIET recommends the use of hearing protection, gloves and protective glasses.
- When wearing hearing protection, increased attention and vigilance are necessary since noises that indicate danger (such as screams, signals, unusual mechanical noises,) will be attenuated and therefore only faintly audible.
- ELIET advises against the use of a mobile phone, a portable MP3 player, or any other similar device during work.
- Spreading work can generate dust. If your respiratory tract is irritated by this dust, ELIET recommends wearing a dust mask that complies with 89/686/EC.

7.3.5 Hazardous areas (WS spreader tools, dumper & transport tray)

When the machine is operating, make sure that no one approaches it within a radius of 10 m, especially around the area where the material to be spread is thrown (spreader tool WS).



- To operate the machine, the operator is preferably behind the machine and both hands hold the handlebars.
- Any third party and non-worker may not place themselves in the hazardous areas while the machine is in operation.
- Contact with moving parts may result in injury or damage. So keep your hands , feet, or floating clothing away from moving parts. The machine can only be used in its normal working configuration.
- Don't take any risk when someone enters the danger zone: stop the engine immediately.
- Children and pets should be kept away from the machine.
- As soon as you move away from the machine, the user is required to stop the engine.
- When the motor is running, the user must devote all his attention to the handling and the various control elements of the machine.

7.3.6 Regular maintenance

- Periodic maintenance is essential. Therefore, carefully follow the maintenance schedule provided in this instruction manual.
- Keep a maintenance list of each maintenance operation carried out in detail.
- When certain parts need to be replaced, always contact your ELIET dealer and ask him for original spare parts. This is important for your own safety (find an authorized ELIET dealer in your area via www.eliet.eu).
- Repair and maintenance operations can only be carried out when the engine is stopped.

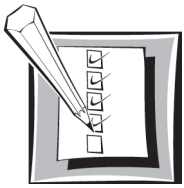
WS SPREADER TOOL:

- Pre-use checks of the visual condition of the conveyor belt, disc blades and tyre pressure are essential to ensure the proper functioning of the machine.
- It is absolutely forbidden to tilt the machine upwards during spreading to remove any residue accumulated in the loading hopper or its optional extension.
- The correct tension of the conveyor belt must be checked within the first 5 hours of use after the machine is put into operation, and checked every 25 hours of work, or even more frequently in the case of intensive use or frequent slippage.
- Always wait for the engine and the various spreading devices (conveyor belt, discs, etc.) to come to a complete stop before carrying out any manipulation.
- Always wear the appropriate clothing to perform this maintenance.

Use the machine with respect for the environment

- Don't leave the engine running unnecessarily without working.
- Avoid wasting gas when filling the tank.
- Maintain the engine regularly to ensure proper operation.

8. Dealer Duties



Warning: As an ELIET dealer, it is your duty to explain to your customers how the machine works and, in addition, to indicate the potential dangers associated with the use of the machine. To this new owner, carefully list the maintenance points of the machine. Repeat these explanations until he has assimilated them perfectly.

Warning (WS Spreader Tool): As a manufacturer, ELIET expressly reminds its dealers that they must inform their customers that the tension of the conveyor belt must be checked during the first 5 hours of use.

Failure to do so can result in serious injury or death. Beyond the damage suffered by his machine, the customer will not be able to benefit from the intervention of the warranty. The list of tightening torques is provided in Appendix 15.1, page 70.

- ELIET machines are packaged in accordance with the usual rules for safe transport. Deliveries are always made ex works. ELIET declines all responsibility in the event of damage incurred during transport.
- •If the packaging is found to be damaged upon receipt of the goods, check the condition of the machine as a precautionary measure. Report each anomaly on the delivery note before signing it for receipt.
- If the machine is damaged, a complaint will be made immediately after delivery to the transport company.

Upon delivery, the machine is fully assembled, and with any optional tool correctly positioned on it (depending on the initial choice of ordering).

- Every ELIET dealer is responsible for the longevity of the ELIET machine.
- Before delivering the machine to the customer, he will carry out an additional lubrication of all the hinge points.
- The dealer will also check the pressure of the various tyres (recommended pressure = 1.2 bar for the front-wheel drive wheels - 1.5 bar for the twin rear-wheel steering).
- A machine is delivered and packed with oil and fuel in the engine. The dealer will ensure that these points comply with the requirements of this manual (or those of the engine). The dealer will ensure that the engine oil levels are checked and refuelled prior to delivery to the customer.
- The maximum speed of the combustion engine should be set to around 3000 rpm and should not generate vibrations. the idle speed should also be checked and adjusted if necessary, in order to avoid any vibrations or resonances.
- Finally, the dealer will carry out an additional lubrication of the various lubrication tips (depending on the optional accompanying tools) and lubrication of the various hinge points.
- The dealer will also plan to assemble and fix any various wiring on the chassis of the Ecocure, such as the electrical connection pin and the 3-position switch of the dumper tool (if used).
- The dealer should test the machine for a certain period of time while checking that all the individual components are fully functional (e.g. engagement controls, "dead man" clutch handle, etc.).

9. Instruction manual



9.1 Due diligence

Attention: Before you get to work, get into the habit of carrying out the following checks :

Checklist

1. Check the engine oil level. To do this, remove the oil dipstick from the engine and make sure that the oil level is not below the minimum mark (see if necessary §11.4.2 Engine Oil Level Check, page 50).
2. Make sure that the fuel tank is sufficiently filled beforehand. Otherwise, you must top up with fuel (see §9.2 Topping up with petrol, page 25).
3. Make sure that the air filter is not too dirty (if applicable, see § 11.4.3. Cleaning or Replacing the Air Filter, page 51).
4. Check whether the belt tension is sufficient (see if necessary § 11.6.1 Checking the Tension of the Transmission Belt, page 56). If not, adjust it (see if necessary §11.6.3 Adjusting the Tension of the Transmission Belt, page 57).
5. Before you get to work, check that all the housings are present and that they are secure.
6. Before handling the machine, make sure that the chosen tool is perfectly anchored to the base machine frame. See also § 9.3 Placing / Removing a Tool on the Ecocure, page 25.

WS SPREADER TOOL

- Before starting the work, check the conveyor belt and the spreading discs for clogged spreading residues. If so, clean up before the start of a new work session.
- Check that all safety devices on the machine are working properly (see § 7.2 Safety Devices, page 16).
- Check for wear and tear and ensure that the conveyor belt is properly tensioned. If you find cracks in the conveyor belt, you should replace it immediately (see §11.4.4. Condition check of the conveyor belt, page 51).

Once these points have been checked and approved, you can prepare the work area (see § 9.4 Preparing the Work Area, page 31) and getting there with the machine.

9.2 Adding petrol

If the amount of petrol in the machine is insufficient, then it is necessary to top up the petrol. It is recommended to always use new petrol. Unleaded petrol should be preferred, preferably 98 octanes (98 E5).



Warning: Under certain circumstances, petrol is extremely flammable and highly explosive. Ignition and explosion of gasoline can cause serious injury or damage. Please note the following tips.

- Topping up the petrol tank never be done while the engine is running. Let it cool for a few minutes first before topping up.
- Use only fresh petrol, ideally less than 30 days old since purchase. In order to prolong its shelf life, additives can be added, or the use of "Alkylate" fuel can also be a good alternative for occasional or widely spaced uses.
- Store petrol in a specially designed tank. Store petrol out of the reach of children.
- Never top up the tank where the machine will be used next. Keep yourself at least 10 m away from this area. This way, you avoid any risk of fire.
- Clean the contour of the petrol cap and remove dirt. Do not fill the tank until overflowing. Fill the tank to about 10 mm from the rim. Do not fill it all the way to the mouth.
- Always make sure to use a funnel or spout to top up the petrol. Your ELIET dealer will provide you with the appropriate funnels.
- Screw the cap back on the tank as quickly as possible. If you spill petrol on the engine while refuelling, clean it immediately.
- Be careful not to spill petrol on your clothes. If so, change them immediately.
- It is dangerous and therefore strictly forbidden to top up near smokers or near a live flame.
- If fuel is ingested or splashed into the eyes, seek medical attention immediately .

9.3 Placing / removing a tool on the Ecocure

The basic frame of the Ecocure has slides on which different tools can be placed, which are anchored in a notch and locked using a rotating metal reinforcement equipped with a spring-loaded locking pin.

At the front of the chassis, there are also 2 hydraulic sockets on each side to hydraulically drive certain implements such as the WS spreader and the DS* precision spreader.

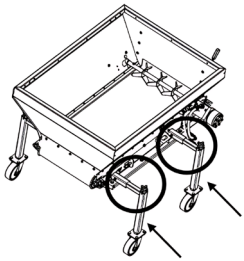
At the time of writing this user manual, the chassis of the Ecocure is designed to be able to be coupled with 3 different tools;

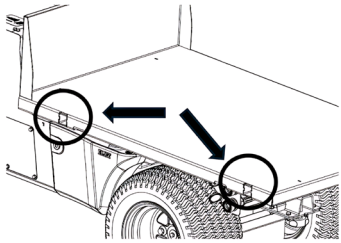
- The transport tray tool (Ref. MA 024 001 009)
- The dumper tool (Ref. MA 024 001 006)
- The WS spreader tool (Ref. MA 024 001 007)

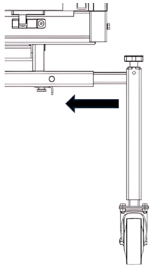
9.3.1 Place a tool on the Ecocure frame:

A. FOR ALL TOOLS:

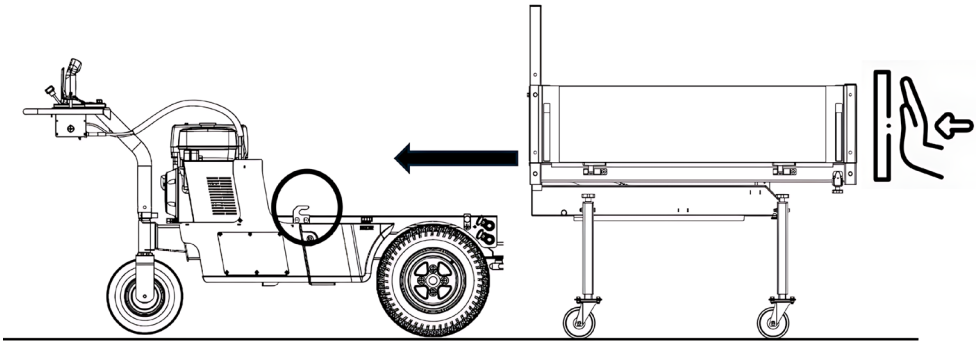
Each tool comes with 4 square-based brackets on movable wheels and adjustable height, which fit into the 4 cavities of each tool.



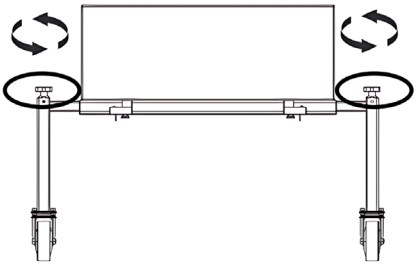




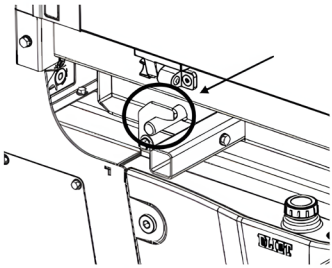
To place a tool on the base frame of the Ecocure, move this tool on its 4 caster wheel supports and present it above the frame at the height of the anchor points.



When the tool is perfectly positioned horizontally above the frame, gradually loosen each wheel mount to lower the tool until it rests on the base frame of the Ecocure. Make sure that the wheels are fully lifted and that the tool rests perfectly in front of the chassis anchors, and that this tool is properly positioned in line with the slides of the Ecocure's base frame. If necessary, adjust its position manually.

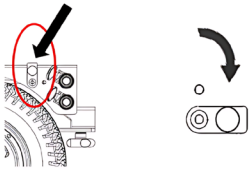


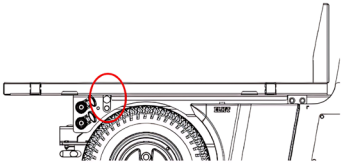
Manually, push the tool towards the inside of the chassis so that it fits perfectly into the 2 side anchors located at the back of the chassis. Make sure that the 2 rotating metal locking braces at the front of the chassis are positioned in a horizontal position beforehand.

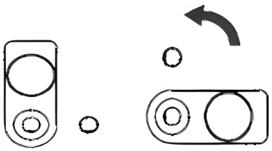


To do this, pull on the spring pin, then turn it to place it in an upright position, then release the spring locking pin so that it fits the footprint in the chassis.

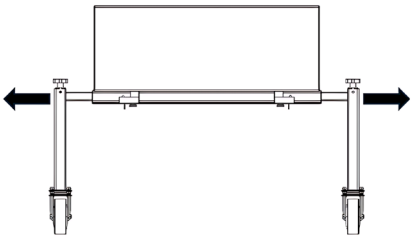
- If this is done correctly and the tool is positioned correctly, straighten the locking braces on each side to the vertical position by pulling on the locking pin, then turning the metal brace to the vertical position, and finally releasing the spring pin so that it fits the footprint in the base frame of the Ecocure. The tool is now coupled to the chassis.







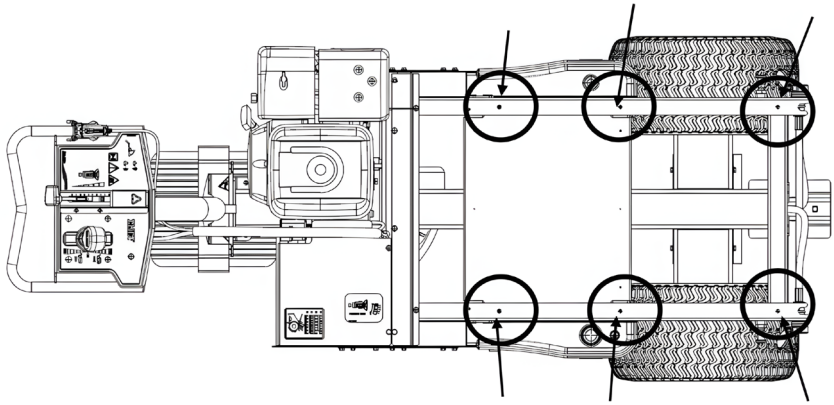
- Then remove the 4 wheel mounts from their indentations on the tool now mated to the Ecocure's base frame.



Important note:

Although the coupling system with its locking system by rotating metal reinforcement with integrated spring pin allows a quick change of application without the need for tools, ELIET recommends - for a permanent and permanent fixing - to fix the chosen tool firmly to the base of the frame using 6 bolts of dimensions M8 x 20 mm.

The chassis and the various tools available are already drilled in order to be able to place these 6 bolts, 3 on each side of the machine.



B. FOR THE WS SPREADER TOOL:

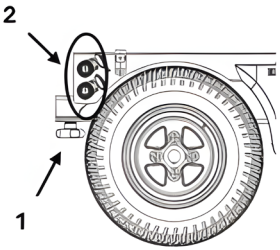
The WS spreader tool stands out from the others because it uses the hydraulics of the base of the Ecocure to feed the rotation of the conveyor belt (connections on the right side) as well as the rotation of the spreading discs (left side).

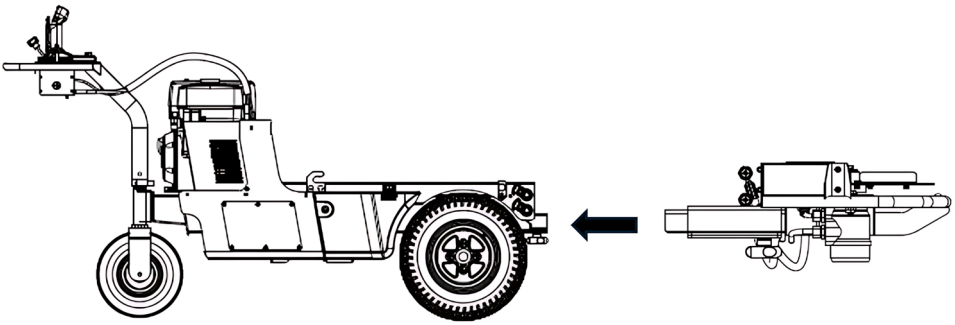
Before mounting the hopper of the WS spreader tool, ELIET recommends that the tray device of the spreading discs be coupled to the front part of the chassis. This is easily inserted into the "V" front part of the Ecocure and then locks with a clamping wheel.

The placement of the spreading disc plate can also be done after the hopper has been placed on the Ecocure frame, but access to place the clamping wheel is less easy.

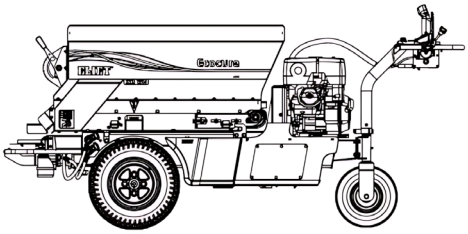
To place the support device with spreading discs, follow these steps:

1. Disassemble the clamping knob from the "V" bracket» (1).
2. Place the support device with spreading discs on the "V" support of the Ecocure frame.
3. Replace the clamping knob (1) from underneath and tighten it firmly.
4. Insert the hydraulic fittings of the holder with spreading discs from the left side of the Ecocure frame (2).

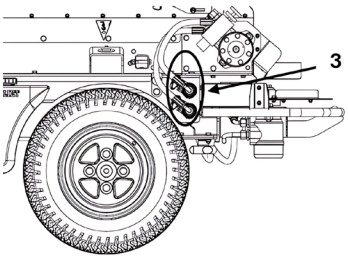




5. Then place the hopper on the base frame of the Ecocure as explained in & 9.3.1, page 26, please follow this coupling procedure for a secure attachment.

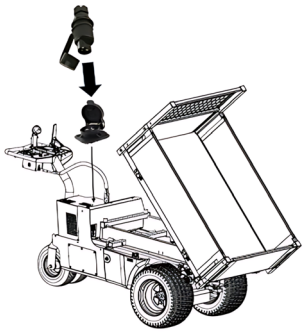


6. Insert the hydraulic conveyor belt drive connections through the right side of the Ecocure frame (3).



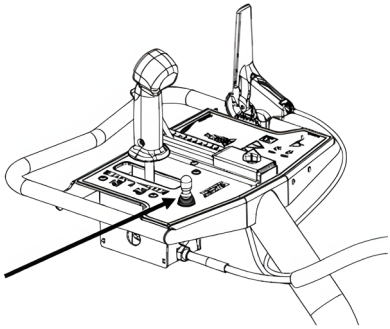
C. FOR THE DUMPER TOOL:

After removing the dumper bucket tool as described in § 9.3.1, page 26, the electro-hydraulic dumper cylinder must be electrically connected.



An electrical braid with a male insulated contact pin is connected to the electrohydraulic cylinder and fits into the female contact pin located on the housing of the transmission box.

This same braid extends to the dashboard, where a 3-position switch is positioned to activate the dumper bucket emptying.



D. FOR THE TRANSPORT TRAY TOOL

After placing the transport plate tool on the base frame of the Ecocure as described in § 9.3.1, page 26, there is no further assembly to be provided.

9.3.2 Removing a tool from the Ecocure

The procedure for removing a tool from the base of the Ecocure chassis is simply to be carried out, unlike the assembly procedure given in & 9.3.1, page 26.

9.4 Preparing the work area

- The work area must first be clear.
- In addition, the access roads and spreading spaces must be duly cleared, to prevent the operator from tripping over any obstacle. Once again, the user must ensure his safety.
- It is forbidden to work with the machine on steep slopes (inclines tolerated = 10° uphill and downhill, lateral inclination tolerated = 5°).

WS SPREADER TOOL:

- The materials to be spread must be sorted beforehand. This will ensure that these materials do not contain any foreign objects that could enter the machine.

Foreign objects are defined as anything that is not organic or mineral (e.g., metal, stones, plastic, rope, textiles, etc.), as well as materials larger than recommended or agglomerated (e.g., lime or hardened or block lava). These objects can not only seriously damage the machine and their distribution components such as the conveyor belt and spreading discs, but also be thrown and seriously injure the operator.

9.5 Starting the engine

Attention: Before starting the machine, remove any dust or dirt from the engine as much as possible, especially between the engine cooling fins. Fouling reduces engine cooling and can lead to a fire.

WS SPREADER TOOL:

- Remove any residue from previous use before starting the machine, if necessary.
- Make sure the inlet hopper is empty (no green waste, no tools, etc.).
- The machine is therefore dangerous as soon as the engine is running. The drive mechanism can eject unwanted leftover spreads at any time. It is therefore necessary to ensure that the "dead man" clutch lever works properly, that it returns to the vertical position when it is not used.

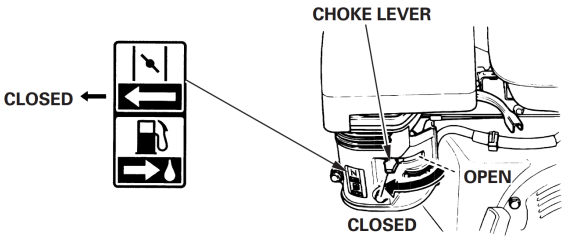
Warning: Before starting the machine, please wear adequate protective equipment (gloves, safety glasses, hearing protection).

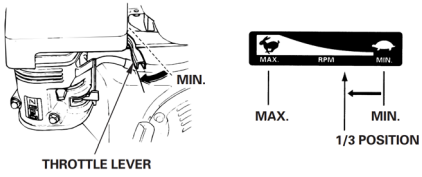
Before starting the engine, check whether it contains enough oil or fuel if this has not been checked beforehand.

For the check and possible top-up of the oil level, refer to § 11.4.2 Engine Oil Level Check, page 50. For the refuelling, see § 9.2 Petrol top-up, page 25.

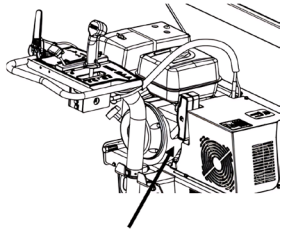
Open the gas tank valve. It is a black lever, located under the white lever (Choke).

Set the choke to "Close". To do this, orient the lever in the direction of the arrow.

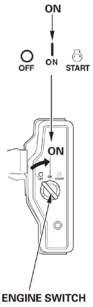




THROTTLE LEVER



ELECTRIC STARTER TYPES



ENGINE SWITCH

Position the trottle lever in the maximum position, following the illustration of the hare.

Starting with the electric starter: Turn the ignition key to "ON", then turn the key to "2" (START), the starter starts the engine, and as soon as the engine has started, the choke flap must be opened to "OPEN".

Starting with the recoil starter: Pull the cord of the launcher gently until resistance is felt and then pull it quickly and firmly. Allow the starter cord to wrap freely.

As soon as the engine is running, quickly position the choke lever to the "Open" position. This is to prevent the engine from consuming an excessive amount of petrol. Otherwise, the engine will slow down and start to give off a lot of smoke, and it will eventually shut down. Then restart the engine without putting the choke on.

If the engine cannot be started, it may mean that the spark plug is flooded or dirty. It should then be cleaned or replaced (see Chapter 11.6.5 Checking or Replacing the Spark Plug, page 60).

9.6 Engine shutdown

- Place the engine speed lever at idle before stopping the engine.
- Turn the ignition key to 0" (OFF).
- Before possible transport or prior to storage, it is recommended to turn off the fuel inlet valve.

9.7 Working with the machine



Warning: The housings protect rotating parts. So don't place your hands or other limbs behind these crankcases when the engine is running. It is strictly forbidden to work with the machine without these housings.

9.7.1 Before you start work

- Pay attention to the following safety precautions before starting work:
- The operator should wear the protective clothing, gloves and other safety accessories as recommended in this instruction manual (see § 7.3 Safety Instructions, page 16).
- Before handling the machine, it should be ensured that any tool positioned on it is perfectly anchored (see § 9.3 Placing / removing a tool on the Ecocure, page 25).
- As a good gardener, make a schedule and work in an orderly manner. This approach allows you to have a good overview of your work and to avoid accidents or wrong maneuvers.
- Do not start a machine with a petrol engine in a confined space. The release of toxic gases generated by the engine could lead to a serious risk of poisoning.

WS SPREADER TOOL:

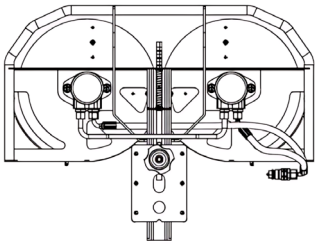
- Before spreading, the materials to be applied should be systematically checked. Also, make sure they don't contain any foreign bodies or lumps.
- Position the support tray of the spreading discs before working with the machine according to the type of material to be spread and the desired flow rate (more information on this in § 9.7.2, adjust the position of the holder of the spreading discs, page 32).

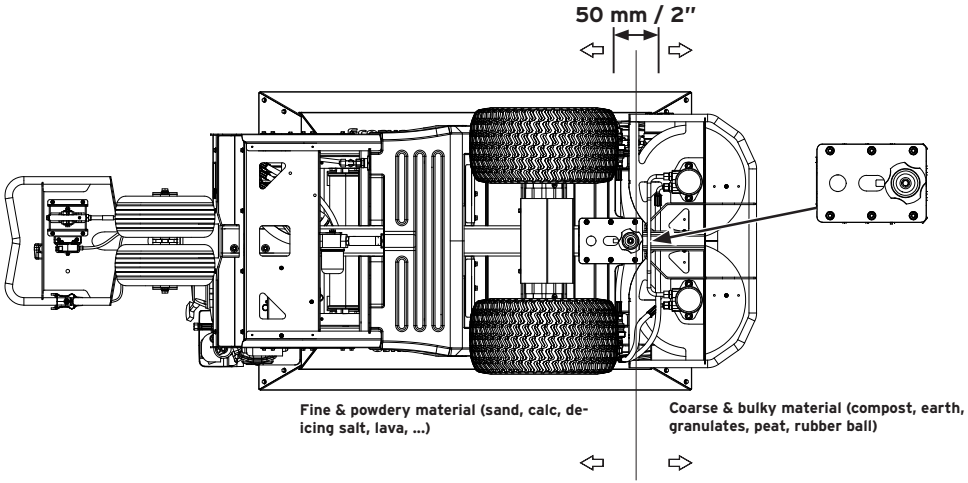
9.7.2 Adjust the position of the disc support tray (WS spreader tool)

Depending on the thickness and density of the material to be distributed, the position of the support tray of the spreading discs should be adjusted to obtain a more homogeneous distribution of the material.

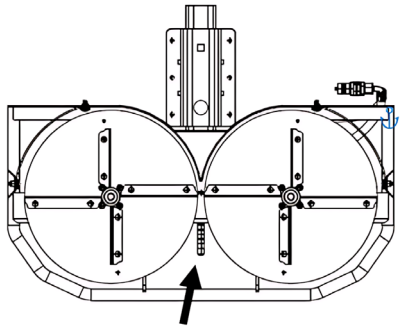
Finer or even powdery material (sand, road salt, powdered lime, lava, etc.), more the disc support will have to be pulled inside the machine.

Conversely, the heavier and coarser material (peat, compost, rubber ball, fertilizer in the form of granules, etc.), more the support tray will have to be deployed towards the front of the machine.





The support tray of the spreading discs is adjustable on a slide with a reach of 50 mm. To adjust the position of the tray, the clamping knob must be loosened beforehand, then the tray should be pushed or pulled into the desired position corresponding to the type of material to be spread, and then tighten the clamping knob firmly. An external mark with 5 thicknesses allows you to see which setting is chosen; 1 thickness on the mark corresponds to 10 mm deep.

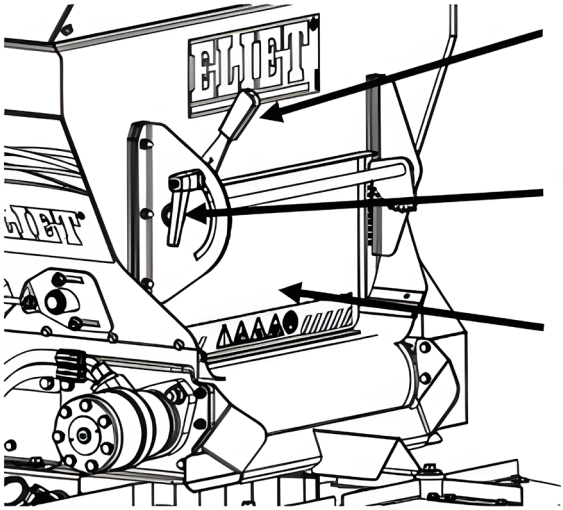


9.7.3 Adjust the spreading rate and hopper opening (Spreader tool WS)

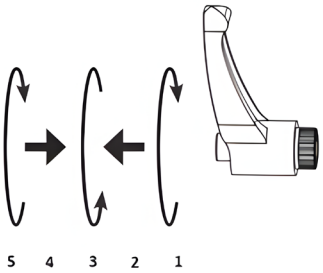
The flow rate of the material to be spread will depend on its nature and weight, the speed of traction forward, the speed of rotation of the conveyor belt – spreading discs assembly, but above all the degree of opening of the hopper flap towards the discs. In order to obtain a flow rate that is as close as possible to the desired yield, it is necessary to carry out tests on a cubed surface (e.g. on the floor in a shed) in order to observe/harvest and weigh the applied material and adjust these different points as you go along until a satisfactory flow rate is obtained.

The opening adjustment of the hopper flap is made by loosening the locking "back and forth" lever by about one turn, so that the hopper opening lever is released and it can move up and down and move the flap on its two guide rails.

Each notch on the support of the opening lever corresponds to 1 cm of opening of the shutter.



Operation of the "back and forth" locking lever



1. RELEASE (COUNTER-HORLOGICAL)
2. PULL OUTWARDS
3. TIGHTEEN (CLOCKWISE)
4. PUSH TO INWARDS
5. RELEASE (COUNTER-HORLOGICAL)

9.7.4 During work (Spreader tool WS)

The Ecocure ZR base equipped with the WS spreader tool is designed to spread different organic or inorganic materials. Its main applications will be the distribution of materials of similar nature and cross-section, and finally of homogeneous appearance.

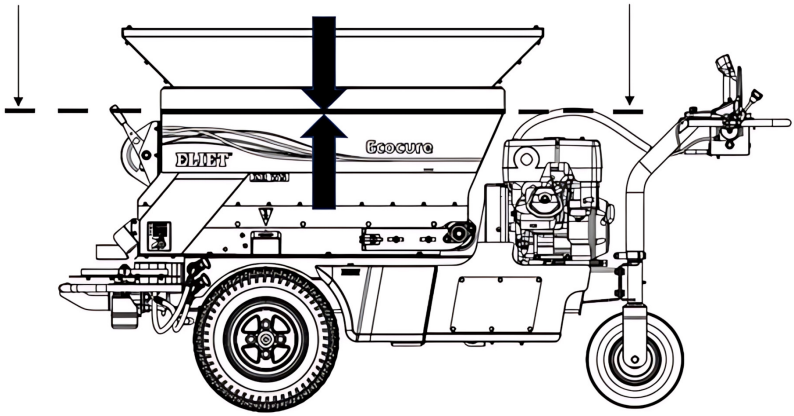
Among the various materials intended to be spread by the machine, we can consider as usual:

- Sand, compost, lava, lime, potting soil, peat, granular fertilizers for the improvement of fields such as lawns or sports fields.
- Rubber and cork balls for the maintenance of synthetic sports fields.
- De-icing salt for clearing roads and properties in winter.

Attention: During the spreading work, the operator will grasp and keep both hands on the handlebars of the machine. It is strictly forbidden to drive the machine with one hand and to stand outside the user's area.

- When filling the loading hopper, make sure that the material is spread evenly. Avoid overloading the hopper to avoid instability when driving the pull, make sure the load is balanced; do not overload the sides of the hopper or the front of the hopper.

MAXIMAL LOAD WITH WET SAND



- The volume of the "well-filled" hopper (excluding the optional extension) is 400 litres, and the maximum load capacity of the machine is 600 kg. For your information, 1 m^2 of wet sand represents an average weight of 1800 to 2000 Kg, 1 m^2 of de-icing salt weighs 1000 – 1200 Kg. It is the responsibility of the user not to overfill the hopper with heavy materials such as wet sand; In this case of use with wet sand, limit the loading of the hopper to the level of the horizontal fold of the hopper wall.
- It is up to the user to adapt the traction speed, the opening of the flow flap to the discs, the speed of rotation of the conveyor belt - and thus of the spreading discs.
- This spreading rate will therefore vary according to the desired dosage and the permitted spreading width.

- When working with the machine at maximum speed, at maximum traction speed & conveyor belt speed & discs, listen to the engine's noise.
- If you notice that it is struggling (or slowing down noticeably), immediately remove the material from the loading hopper in the event of a blockage, and reduce the working speed. This attention is especially for greasy, sticky, heavy, and wet materials.
- Feeding the machine excessively at once makes no sense: you risk losing goods and putting unnecessary strain on the mechanics; The lifespan of the machine and its various transmission and distribution components depends on it.
- As soon as you hear an abnormal noise, stop work immediately. Immediately shut down the engine and investigate the cause of the malfunction. Before proceeding, make the necessary repairs.
- If you notice that despite the prior sorting of the materials to be spread, a foreign object has entered the machine, stop the engine immediately. Remove the foreign object and make sure it has not damaged the machine. In the event of damage, make the necessary repairs first.



Attention: The user is responsible for its loading. Avoid overloading the hopper to avoid the risk of the machine turning over when used on uneven flooring.

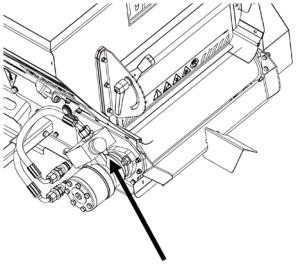
- If there is an obstruction in the hopper opening flap, turn off the machine immediately to clear the obstruction. Caution: wait for the engine to come to stop and the machine to a complete standstill before doing any manipulation.

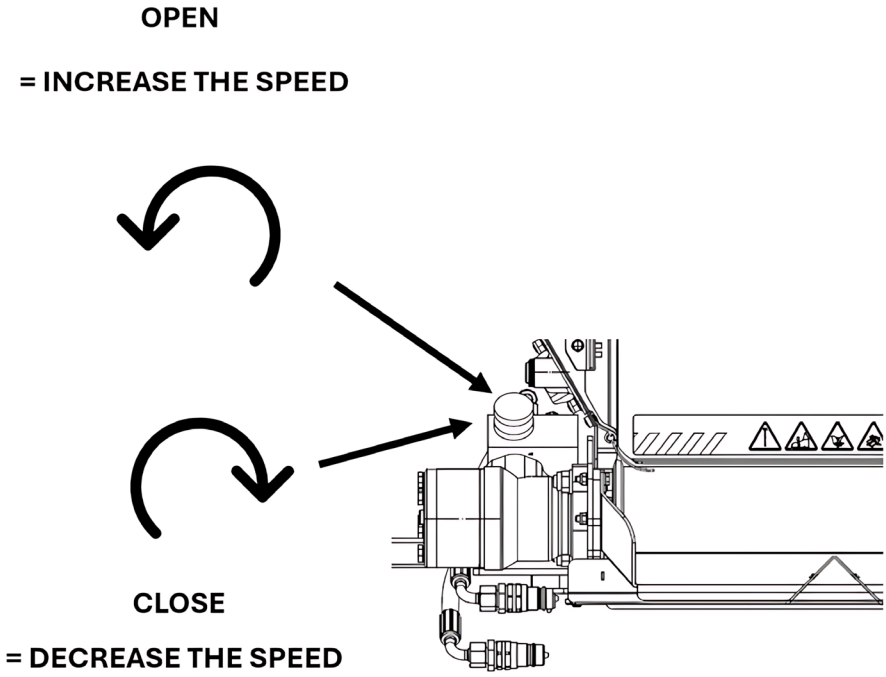
9.7.5 Adjust the speed of the conveyor belt (WS spreader tool)

The adjustment of the flow of goods to the opening slide, i.e. to the spreading discs, can also be set using an adjustment wheel.

This adjustment wheel is positioned on the right side of the machine, in the immediate vicinity of the hydraulic motor driving the conveyor belt.

In this way, the user will be able to fine-tune the throughput precisely, and avoid overloading unnecessary on the agitator when dispensing coarse and heavy materials.



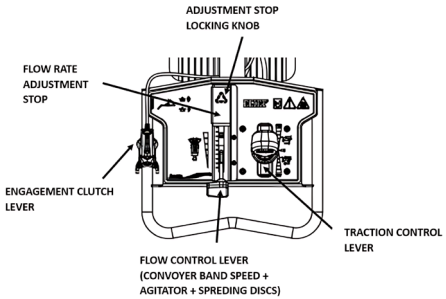


9.7.6 Driving the machine during work

In order to work safely and not to put unnecessary strain on the various transmission components, ELIET recommends that you:

- To work at all times with a maximum engine speed (about 3000 rpm).
- Ensure that the tractive speed adjustment lever is in the "NEUTRAL" (N) position before operating the clutch control lever. This is to avoid unnecessary overloading on the drive belt, but above all to avoid unintentional movement of the machine forward or backward. The safety of the operator is at stake.
- Make sure that the material flow adjustment lever used with the WS spreader tool (conveyor belt drive, agitator & rotation of the two spreading discs) is in the "OFF" position (0) before operating the clutch control lever. This is to avoid spilling goods unintentionally if the WS spreader tool is coupled to the base of the Ecocure, or to maintain unnecessary hydraulic pressure on the entire hydraulic circuit if it is not in use (use of the machine without the WS spreader tool).

Steps to move the machine and start a job:



1. Press and hold the clutch control lever: the engine will drive the hydraulic pump.
2. Gradually push the traction speed adjustment lever either forward or backward, depending on the direction chosen by the operator.

Return to the "NEUTRAL" (N) position if you stop before pressing the clutch control lever again.

WS SPREADER TOOL:

1. As soon as the machine is in its working area, gradually push the material flow adjustment lever forward until the desired flow rate and working width are achieved. To increase the flow rate and working width, push this lever further forward, and to reduce this flow rate, move this control lever back.

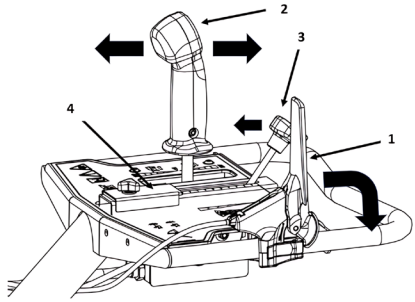
Attention : In the event of imminent danger during work, the operator's first reflex will be to immediately let go of the clutch control lever in order to stop the rotation of all the components and allow the machine to stop.

2. As soon as the flow rate and working width is determined for this job, the operator can adjust the position of the limiter of this flow control by moving the limiter against the lever and tightening its locking knob, in order to block and limit the displacement of this lever and maintain a stable flow rate throughout the job.

Return to the "STOP" position (O) if you stop before pressing the clutch control lever again.

Note:

There is no need to stop to change the traction speed/change the direction of travel or to increase/decrease the throughput: both levers can be controlled when the machine is in motion, both the forward speed/direction of forward and the change in the flow rate can be adjusted without stopping the machine.

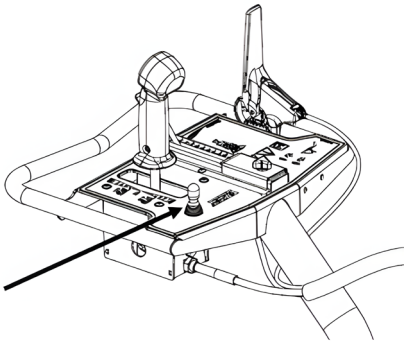


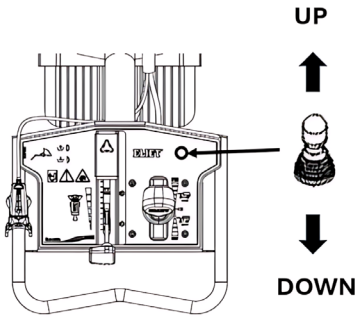
Tip:

The operator can keep his left hand pressing the clutch control lever during the entire work and adapt his speed and flow rate in full movement. By working in this way, the transmission will be less tested and it will be a guarantee of longevity for the various components that make it up.

9.7.7 Emptying the dumper

To operate the tilt of the dumper tool's body, the user will simply need to press and hold the 3-position electric control lever positioned on the dashboard forward to operate the body lift, and backwards to operate the body's return horizontally on the Ecocure's chassis.





- When the user presses the control lever forward and holds it, the dumper bucket will lift to a maximum tilt of 45°. As soon as the user releases the control lever, the control lever will be in the "neutral" position and the body will stop tilting, and it will remain in the selected degree of inclination.
- To lower the dumper bucket horizontally, the user presses the control lever backwards and holds it until the dumper bucket is correctly placed flat on the Ecocure frame.

IMPORTANT NOTES:

The user's attention is drawn to the dangers of using the dumper tipper's emptying function.

For obvious safety reasons, it is therefore **forbidden to operate the lifting or returning of the dumper bucket when the machine is in motion.**

The emptying of the dumper bucket must be carried out without the machine being in motion.

Warning: For obvious safety reasons, ELIET is completely discharged from any liability in the event of the machine tipping over without respecting the shutdown conditions when tilting the dumper bucket.

9.7.8 In the event of an engine shutdown

The engine may stop in the event of overloading, lack of fuel, closing of the fuel valve, low engine oil level, excessive tilting.

In these cases, the engine can easily be restarted. Follow these steps :

1. Check the fuel level in the tank (see §9.2 Topping up the fuel, page 25).
2. Pull the starter handle or turn the starter ignition key to "2" (START), to ensure that the engine is not blocked for any other reason. In the event of an obvious blockage, do not insist and call your ELIET dealer.

WS SPREADER TOOL:

3. Remove the material from the loading hopper and check the agitator for obstruction.
4. If the conveyor belt or agitator were to jam, empty the hopper completely.27
5. If a residue of material is blocking the agitator, remove the contents of the hopper using a tool or by carefully rotating the agitator.
6. When the hopper opening flap is blocked, open it completely to clear any clutter. Once any clutter has been cleared, reposition the flap in its original flow adjustment position.
7. When you start the machine again, go more moderately to prevent the machine from crashing again.



Attention: You should always wear gloves for any handling. When you empty the loading hopper, you may come into contact with the agitator or the edges of the conveyor belt.

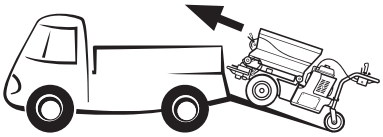
Do not introduce materials with a particle size larger than recommended (max. 5 mm), or a quantity of material containing components of irregular shape and nature (e.g. pieces of branches in compost).

Also monitor the spreading flow of the material projected by the spreading discs: a flow that is too low can indicate the beginning of a jam, or a rotation speed of the motor that is too low, or a rotation speed of the conveyor belt and spreading discs assembly.

10. Machine transport



- This machine can only be moved and transported by adult people.
- To transport the machine, the hopper (spreader tool WS) / dumper bucket / transport tray must be emptied of their contents. It is essential that all material is also removed from the spreading discs (WS-spreader tool).
- During loading of the machine, children, animals and unauthorised persons must not enter within a radius of 3 m.
- Before transporting the machine in a vehicle or on a trailer, the engine must be stopped.
- If the machine were to overturn, straighten it out as quickly as possible. This will reduce the risk of engine oil spreading to the air filter and petrol leaking out of the machine. It is imperative to check the entire machine if this event occurs.
- To load the machine into a van or trailer, use non-slip loading ramps of sufficient width. Make sure they are securely attached to the vehicle or trailer. Also provide one or two extra ramps for the rear wheels (they are off-axis from the front wheels).
- During loading/unloading, the upward and downward slope may not exceed 25° under any circumstances.
- Never move or place the machine on a floor that cannot support the weight of the machine and the person (for information: for this machine, take into account a net weight of about 450 kg).

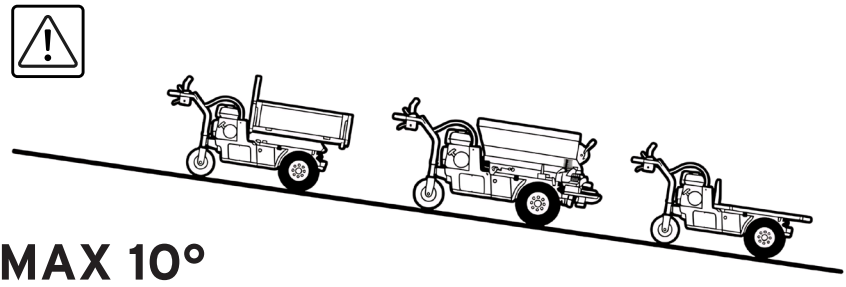


- If you are climbing a slope, the front wheels should be placed first in the slope. For obvious safety reasons, the machine should be mounted in the vehicle/trailer using the grip of the front wheels.
- If you are going down a slope, the steering rear



  wheels should be placed first .
- Never use the machine to transport people.
- Choose your transport route wisely so that you encounter a minimum of obstacles.
- Opt for a flat and uneven route.
- Make sure to leave a sufficient clearance area behind the ramps (5 m).
- Make sure the vehicle's parking brake is fully engaged.

- When loading the machine, act with caution to prevent the machine from tipping over and causing an accident.
- During the journey, the machine must be securely and firmly secured to the vehicle.
- **The maximum degree of lateral slope tolerated by the machine is 5°.**
- When moving downhill, **never tilt the machine more than 10° to the front**, as this may cause it **to tip forward.**



- Be careful not to overload the transport vehicle or trailer, take into account the weight of the machine as well as any coupled implement.
- Use the existing anchor points and secure the machine firmly with sturdy straps.
- ELIET also recommends placing chocks on the wheels, in order to limit any movement of the machine during transport or in the event of sudden braking. Position the rear-wheel steering in the axis of the front wheels to avoid lateral movement when cornering.

Attention: The user is responsible of the machine during transport or during the use with interchangeable tools. Do not neglect the anchoring of the machine to the vehicle, even for short distances.

Attention: The user is responsible for its loading. Avoid overloading the hopper / transport tray / dumper bucket in order to avoid any risk of the machine turning over when used on uneven flooring.

11. Maintenance



11.1 General

ELIET recommends that you present your machine annually to an authorized ELIET dealer for full maintenance and inspection (to find the nearest authorized ELIET dealer, go to www.eliet.eu). Your ELIET dealer is always at your disposal for information and advice. It has a supply of genuine ELIET parts and lubricants. Its staff can call on the advice and service of the ELIET helpdesk at any time and thus offer you an impeccable after-sales service.



Attention: For repairs, use only original spare parts with the ELIET label. These parts have been manufactured according to the same quality criteria as the original parts.

All maintenance must take place in a room specially provided for this purpose. This room must be:

- Spacious
- Dust-free
- Easily accessible
- Tidy
- Well lit
- Calm

Compliance with these criteria must allow maintenance to be carried out in optimal conditions.



Caution: Negligence during maintenance may jeopardize the operator's safety later on. Damage resulting from a lack of maintenance or improper maintenance is not covered by the warranty. Give the maintenance to experienced technicians who are familiar with the machine and are recognised by ELIET .



Attention: All maintenance work involves shutting down the engine.



Attention: Any maintenance operation involves wearing protective gloves or even protective glasses . This set is supplied in a safety kit that accompanies the delivery of the machine.

11.2 Maintenance Diagram

11.2.1 Recommended lubricants

ENGINE OIL (1,1 L):	SUNOCO SUPER DENALUBE SAE 20W50 API SJ / CC
HYDRAULIC OIL (15 L):	MOBIL UNIVIS N32 - ISO VG 32
CHAIN:	CASTROL CHAIN SPRAY O-R
POINTS OF ARTICULATION:	NOVATIO WHITE SUPREME GREASE
GREASE FITTINGS:	SUNOCO VET MULTI-PURPOSE LR - EP2

11.2.2 Daily & periodic maintenance

A. Daily maintenance, routine checks before each work session

- Carry out a visual check of the condition of the machine (see § 11.4.1 Visual inspection, page 50).
- Check the engine oil level. (See § 11.4.2 Checking the engine oil level, page 50).
- Check, clean or replace the air filter. (See § 11.4.3 Cleaning the air filter, page 51).
- Make sure that the machine does not show any signs of abnormal wear or cracks (see § 11.4.1 Visual inspection, page 50).
- Check the hydraulic oil level. (See § 11.4.6 Checking the Hydraulic Oil Level, page 54).

WS SPREADER TOOL:

- Visual inspection of the condition of the conveyor belt (see § 11.4.4 Condition check of the conveyor belt, page 51).
- Visual inspection of the condition of the spreading discs (see § 11.4.1 Visual inspection, page 50).

B. Maintenance after each work session

- Cleaning the machine. (See § 11.3 Cleaning the Machine, page 48).

C. Maintenance after the first 20 hours (or 1 month) *

- Perform the first oil change of the engine (See § 11.6.4 Replacing Engine Oil, page 60 and 11.5.1 First Engine Oil Change, page 55).* = THE FIRST TERM REACHED

D. Periodic maintenance every 20 hours

- Daily maintenance (see § 11.2.2 Daily and periodic maintenance, page 46).
- Checking or replacing the spark plug (See § 11.6.5 Checking or replacing the spark plug, page 60).
- General lubrication (See § 11.6.6 General lubrication, page 61).
- Tension control and adjustment of the tension of the transmission belt (see § 11.6.2 Checking the tension of the transmission belt, page 57).

WS SPREADER TOOL:

- Tension control and adjustment of the agitator chain (See § 11.6.7 Agitator chain tension control, page 62).

E. Periodic maintenance every 100 hours (or 6 months) *

- Changing the engine oil (See § 11.6.4 Replacing the engine oil, page 60).
- Checks the status and recharge of the battery (see § 11.7.2 Checking and recharging the battery, page 63). * = THE FIRST TERM REACHED

F. Periodic maintenance every 500 hours

- Hydraulic oil change and hydraulic oil filter replacement (See § 11.8.1 Hydraulic Oil Change, page 65 & § 11.8.2 Hydraulic Filter Replacement, page 66).

Maintenance table	
After each work / Entretien quotidien	Visual inspection of the machine Engine oil level control Check / clean / replace the air filter Conveyor belt inspection (WS spreader tool)Hydraulic oil level inspection
After each work	Cleaning the machine
20 first hours working*	Engine oil replacement *Or 1 month (first term reached)
Every 20 hours working	Daily maintenance Spark plug inspection or replacement General lubrication Agitator chain tightening check / adjustment (WS spreader tool) Transmission belt tension check
Every 100 hours working*	Engine oil replacement Battery check & recharge *Or 6 months (first term reached)
Every 500 hours working	Hydraulic oil replacement Hydraulic oil filter replacement

11.3 Clean the machine

11.3.1 The importance of cleaning

ELIET recommends cleaning the machine after each use. It is recommended to take advantage of each cleaning to carry out an inspection of the machine, which allows you to check the good condition of the parts and the machine. This will allow you to intervene in time and prevent breakdowns. You will also extend the life of your machine.

Failure to clean the machine leads to:

- Premature wear.
- Increased risk of fire.
- Reduced engine cooling.
- An increased risk of short circuit.
- A decrease in performance.
- Wear and tear of the safety stickers.
- Late detection of wear or the appearance of possible cracks.



Warning: A machine that is no longer functioning optimally can jeopardize the safety of the user.



Warning: Spreading residues, chips and dust can accumulate under the fairings and ignite due to overheating. Remove these build-ups near electrical components or the engine. Clean the machine thoroughly after each use.



Attention: Wear proper clothing for cleaning. Gloves must be worn systematically.

11.3.2 What does cleaning involve?

When cleaning, you should go through the entire machine and inspect all its components. Make sure that the parts are not deformed, that the welds do not have any cracks and that the various components do not have excessive play.

The important points are:

WS SPREADER TOOL

- The welds of the loading hopper.
- The fixing bolts of the spreading disc blades.
- The fixings of the loading hopper opening.
- The conveyor belt, its possible wear and tear and the condition of its seam.
- The support tray of the spreading discs.

The main points should be taken into account :

- Dirt build-up (spreading residues, dust, sand, granules, etc.) inside the machine must be removed. Use a soft brush or vacuum cleaner to remove this dirt.
- Fibrous waste that accumulates around the agitator and spreading discs must be removed so that it does not damage the bearings and bearing protection seals.
- Remove any build-up of dirt that sticks to the inside of the loading hopper.
- Remove all accumulated dirt that adheres to the conveyor belt, spreader discs, loading hopper opening and opening flap slides, levers and joints of this opening flap.

GENERAL GUIDELINES (FOR ALL TOOLS):

- The motor must remain free of dust and dirt. The cooling fins should be clean and the exhaust pipe area should also be clear. To avoid clogging the fuel tank, the filler cap area should always be clean.
- The bearings must be cleaned and free of dirt clogged on lubricant residues. Spray NOVATIO WHITE SUPREME GREASE (or any other equivalent with the same penetrating & lubricating properties) after cleaning, and apply SUNOCO VET MULTI-PURPOSE LR - EP2 grease (or any equivalent product with the same lubricating properties) to the various bearings and joints with lubrication tips.
- Attention must also be paid to the tool fixing devices on the basic frame of the Ecocure, such as the hinges and articulation of the dumper tool, the automatic locks for lashing and locking the various tools; Make sure that they are functional and not blocked/seized by the action of fouling or corrosion.

If you notice any problems, do the necessary repair or replacement work first . To do this, please contact your authorized ELIET dealer (to find the nearest authorized ELIET dealer, go to www.eliet.eu).

Cleaning the machine goes further than simply cleaning its outer shell. You need to open all fairings to clean the less accessible areas as well.



Warning: If you need to remove a protective guard before maintenance work, you should always reinstall it properly after maintenance. The various fairings and protective housings are designed to guarantee your safety.

- Clean the chassis with a dry cloth, especially where there are stickers with safety messages (do not use cleaning products that may damage the paint or stickers).
- If the safety messages on a sticker are no longer legible, replace it. Original stickers are available from your ELIET dealer.
- The use of compressed air is a great help to clean a number of elements very easily.
- Steam or high-pressure cleaning of the machine is permitted. General lubrication is recommended after the machine has dried completely. However, avoid splashing water on bearings, protective housings and various filler caps. Since water is the main cause of oxidation formation, its excessive use should be avoided as much as possible.
- Give the engine time to cool down before directing a high-pressure stream of cold water into it.
- The use of a vacuum cleaner is recommended to remove dirt from areas that are not easily accessible.

11.4 Routine check-ups before each work session

11.4.1 Visual inspection

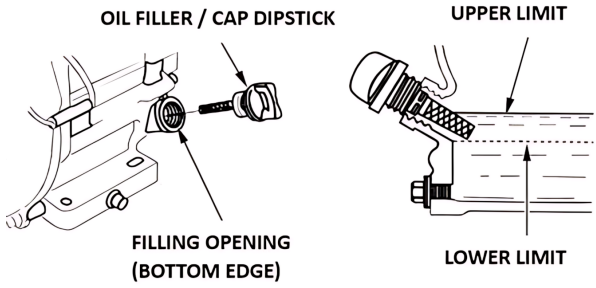
Make sure that parts are not deformed, that welds do not have any cracks and that the individual parts do not have excessive play. If you notice any problems, carry out the necessary repair work first. **Check that the machine motor is running at the prescribed maximum speed (approx. 3000 rpm) and that there are no excessive vibrations or resonance** (rev counter available from your ELIET dealer). Never change the standard engine settings.

11.4.2 Engine Oil Level Check

Refer to the "Engine" sub-chapter in § 6 Main Components, page 12 to check the level using the oil dipstick and the various drain and plugs. Also consult the engine manufacturer's manual for more information on this.

- Place the machine on a flat surface and take a clean cloth, then unscrew the dipstick.
- Generally, the oil level cannot immediately be read correctly. Wipe the dipstick, put it back on its neck without screwing it back on.
- The oil level can be correctly observed when you dip the dipstick for the second time.
- The oil on the dipstick should be between the minimum and maximum level.

If the oil level is too low, add more through the booster cap. Use only the recommended oil (see § 11.2.1 Recommended lubricants, page 46 or the engine manufacturer's instructions). Don't add too much oil at once and check the level regularly.



11.4.3 Checking – cleaning or replacing the air filter

The air filter sits under its protective cap, next to the exhaust and close to the engine's fuel tank.

- Remove the protective cover.
- Extract the air filter, which is made up of a foam pre-filter element and a honeycomb paper filter element.
- Simply clean the pre-filter element (if present) by rinsing it with a little petrol and blowing it with compressed air. After it has dried completely, spray a thin veil of lubricating oil with NOVATIO WHITE SUPREME GREASE spray (or any other lubricant with equivalent properties).
- Clean the paper filter element by blowing it with compressed air. Never wet the filter element with paper.
- Replace these filter elements in their original position after cleaning them, and replace the clamping valves and the outer protective cap.
- If you replace it with a new air filter, a suitable air filter is available from your ELIET distributor or from a distributor approved by the engine manufacturer.

11.4.4 Conveyor belt status check (spreader tool WS)

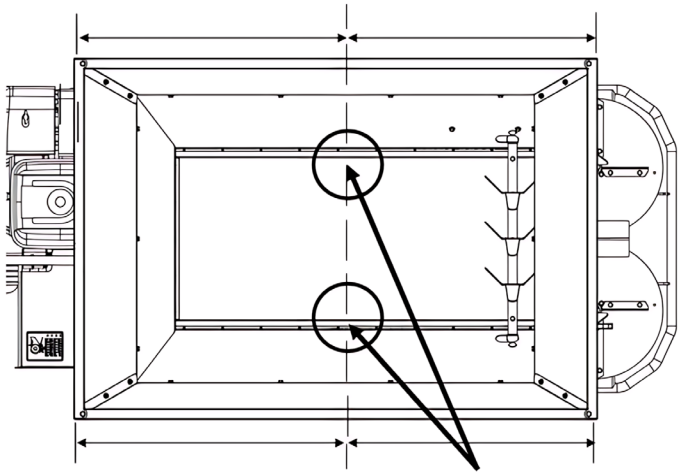


Warning: This maintenance requires the wearing of protective gloves. The edges of the conveyor belt can be sharp and cause finger injuries.

Before the start of each work session, the operator should make sure to observe the general state of wear of the conveyor belt. This is primarily a visual inspection, and the following points should be inspected more specifically:

The condition of the welding (sewing) of the conveyor belt; observe that it does not show any signs of particular wear or the beginning of tearing. - The outer lateral edges; When lifting the flexible protective edges of the hopper (1), also check the outer edges of the conveyor belt, if it does not show signs of significant tears or scratches.- The tension of the conveyor belt; By sliding your fingers to the outside of the conveyor belt at the middle of the hopper – i.e. halfway – lift the belt (2) from underneath and assess whether it is too relaxed.

Adequate tension should be a bending of about 10 mm. If this conveyor belt tension is insufficient, there is a risk of slippage when using the machine with a large load.



1. LIFT THE FLEXIBLE OUTER EDGE

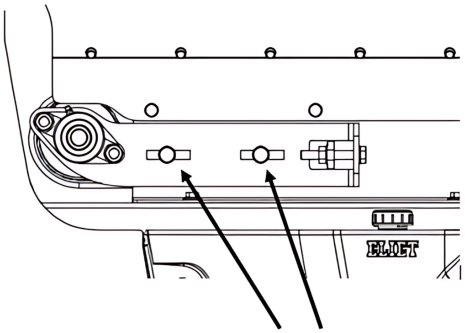
2. LIFT THE CONVOYER BELT FROM UNDERNEATH AND MEASURE THE DEFLECTION

The outer side ledges;

When lifting the flexible protective edges of the hopper (1), also check the outer edges of the conveyor belt, if it does not show signs of tears or significant scratches.- The tension of the conveyor belt; By sliding your fingers to the outside of the conveyor belt at the middle of the hopper – i.e. halfway – lift the belt (2) from underneath and assess whether it is too relaxed.

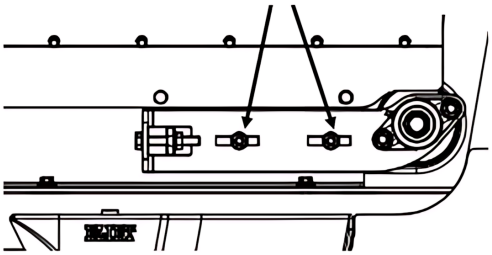
11.4.5 Conveyor belt tension adjustment (WS spreader tool)

The tension of the conveyor belt is carried out as follows:



RIGHT SIDE

A) UNLOCK THE TWO SCREWS OF THE TENSION SLIDE ABOUT ONE TURN ON EACH SIDE

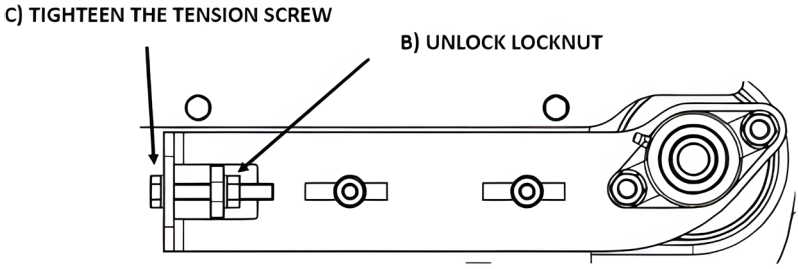


LEFT SIDE

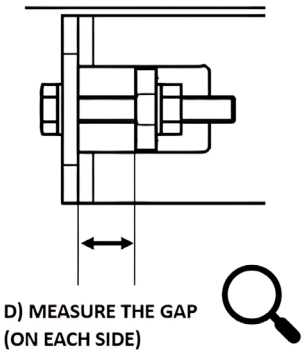
A. Using a 17 mm wrench, loosen the two M10 clamping screws of the conveyor belt tension slides (left and right side) by the equivalent of 1 turn, so that these slides are "free".

B. Loosen the locking lock nut of the tensioning device to release the tension screw (17 mm wrench).

C. To tension the conveyor belt, tighten the tension screw clockwise (17 mm wrench) starting with a full turn. Repeat this identically on each side, so that the same tension force is applied to both sides.



D. Using a ruler, measure the distance between the 2 plates of the tensioning device. This measure must be identical on each side.



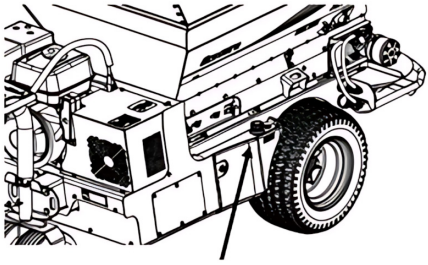
E. Measure the tension of the conveyor belt, as explained in § 11.4.4 Checking the condition of the conveyor belt, page 41.

F. If this tension is not sufficient, make another complete turn of tightening the tension screw on each side.

G. As soon as a suitable tension is obtained (bending-lifting of about 10 mm), tighten the locking nut of the tensioning device (C) on each side. Also tighten the two tensioning slide fastening screws (B) on each side, in order to lock them properly.

11.4.6 Hydraulic oil level control

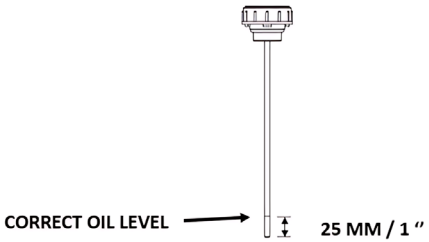
Hydraulic oil level control is measured using the measuring gauge integrated into the filler cap, which is located on the right side of the machine. This level measurement is taken cold, before starting a job or before moving the machine, and on a perfectly flat surface.



HYDRAULIC OIL
DIPSTICK LOCATION

Procedure to follow for the control of the hydraulic oil level measurement:

- Unscrew the filler cap/oil dipstick.
- Wipe the metal gauge part with a clean cloth.
- Screw the oil cap/dipstick completely onto the hydraulic oil tank.
- Unscrew the filler cap/oil dipstick again.
- Observe the measurement on the gauge, which should be at the marking.
- If the level is slightly higher (up to 1 cm above the marking), there is nothing special to do and this level is acceptable. Beyond 1cm above the mark on the gauge, the excess should be extracted by sucking it through the filling port or partially emptying the tank.

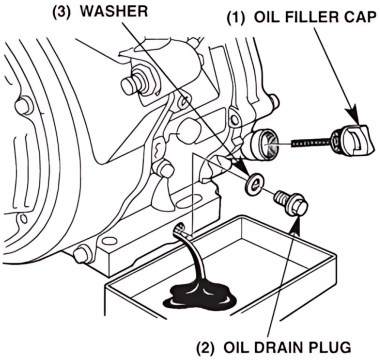


- If the level is slightly lower (up to 0.5 cm below the marking), there is nothing special to do and this minimum level is acceptable. Below this measurement, the level should be topped up with the recommended hydraulic oil (Mobil Univis N32 or equivalent with the same lubricating properties) until a perfect oil level is obtained.
- The correct hydraulic oil level is 25 mm from the end of the metal dipstick.
- If in doubt about this level measurement, do not hesitate to repeat this operation.

11.5 Maintenance of the first 20 hours of work

11.5.1 First engine oil change

According to the engine manufacturer's specific maintenance plan (Honda GX 390), a first engine oil change should be carried out at 20 hours of work OR after 1 month (whichever comes first).



Before changing the engine oil, position the machine on a flat - or slightly inclined surface on the left side (seen from the handlebars, at the back of the machine).

To do this, take two 19 mm wrenches and loosen the drain plug at the end of the drain hose, let the used oil flow into a container with a capacity of more than 2 litres.

After the used engine oil has completely drained, reattach the drain plug to the hose and tighten it with two 19 mm wrenches.

- Place the machine on a flat surface before filling the engine with new oil.
- Loosen the cap/dipstick and fill the engine through this hole with a new oil that meets the engine manufacturer's specifications, both in terms of oil grade and type and detergent level. For more information on the type of oil recommended, please refer to the table of recommended lubricants in § 11.2.1, page 46 or the engine manufacturer's operating instructions.
- Fill the engine with new oil (approx. 1.1 Liter), and measure the level as explained in § 11.4.2 Checking the Engine Oil Level, page 50.



Warning: A lack of engine oil will cause irreparable damage to the engine.

11.6 Periodic maintenance every 20 working hours

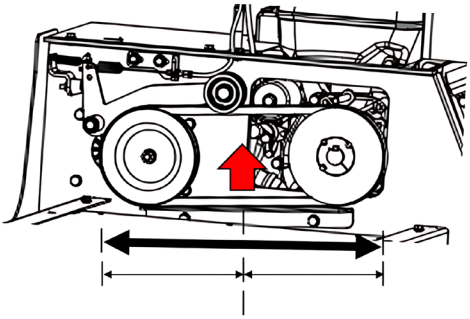
11.6.1 Belt tension control



Warning: Check the belt tension only if the motor is off. The spark plug cap should be removed.

- Adjust the belt tension if you find that it is too low or too high (see § 11.6.1, Adjusting the Belt Tension, page 56).
- An insufficiently tensioned belt can cause it to slip on the transmission pulleys, so its lifespan will be hanging at an adequate tension.
- A new belt will naturally relax during the first few hours of operation but also throughout its life. It is therefore advisable to check and re-tighten the belt before each working session (see § 11.6.2 Adjustment of the tension of the transmission belt, page 57).

To check the tension of the drive belt, follow these steps:



- Remove the protective housing from the transmission belt (6x M6 screws – 10 mm wrench).
- Press the clutch lever on the left side of the handlebars (“dead man” handle). The belt is tensioned by the pressure of a tensioning pulley.
- Using your two fingers, pinch the belt laterally and lift it vertically without exaggeration, and halfway between the 2 pulleys (motor pulley and transmission pulley).
- Observe and measure the bending, which should not be more than 5 mm.
- If this belt tension is adequate, reattach the transmission guard with the 6 M6 screws (10 mm wrench).



Warning: For this maintenance to measure the tension of the transmission belt, the wearing of protective gloves is mandatory.

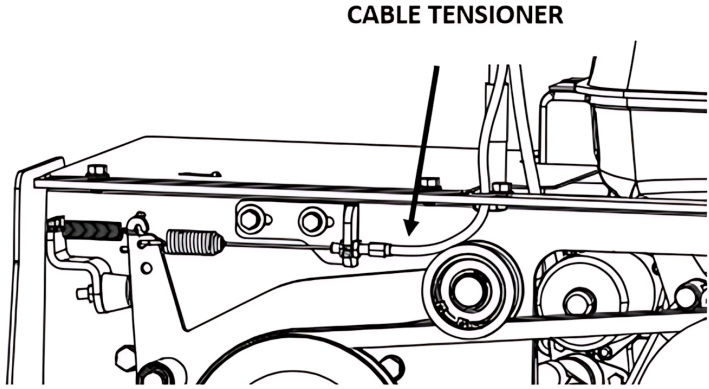
11.6.2 Adjusting the Transmission Belt Tension

The tension adjustment of the transmission belt is done as follows:

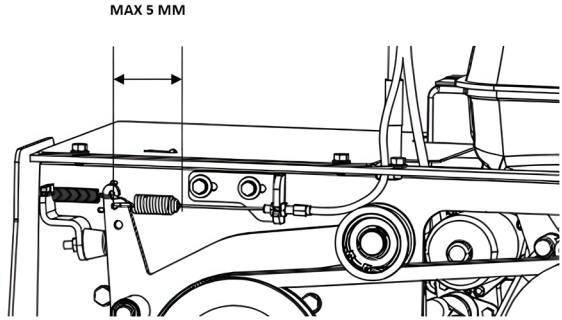
Belt tensioning is achieved by pushing the cable tensioner of the tensioning pulley outwards.

- Remove the transmission guard (6 M8 screws, 13 mm wrench).
- Loosen the 2 M6 lock nuts (10 mm wrench) by about one turn to release the tensioning device from its support.

To tighten the belt, loosen the lock nut to the right of the cable tensioner by an additional full turn to gain more tension space.



- Push the tensioning device to the right, then tighten the M10 lock nut and lock it.
- Using an 8mm wrench and a 10mm wrench, tighten the lock nut firmly.
- Measure the belt tension again, and repeat until the recommended tension is reached (5 mm bending).

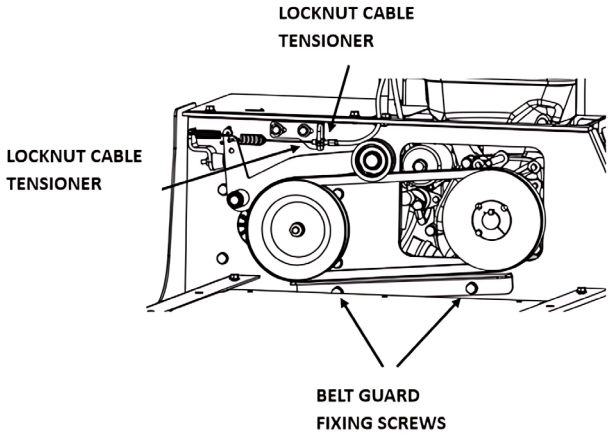


NOTE : Make sure the spring at the end of the cable is not stretched more than 5mm.

- Replace the transmission guard and secure it with the 6 M6 screws (10 mm wrench).

11.6.3 Transmission belt replacement

- To replace the drive belt, the cable tensioner must first be released from its housing, in order to gain enough space to release the belt.
- Using an 8mm wrench and a 10mm wrench, loosen the lock nut that secures the cable tensioner to its support with a complete turn.
- Then loosen the left lock nut (cable end side) completely so that the cable tensioner can be pulled out of its support housing.
- Remove the belt cover from its attachment points (2 M8 screws, 13 mm wrench).
- Remove the strap from its two pulleys.



Replace a new belt on the 2 pulleys.

- Reattach the belt guard using its 2 M8 fixing screws, 13 mm wrench.
- Replace the belt tensioner in its support housing and move the M6 lock nut, 10 mm wrench, closer.
- Adjust the belt tension, as explained in § 11.6.2 Adjusting the Transmission Belt Tension, page 57.

11.6.4 Engine Oil Replacement

Refer to § 11.5.1 First Engine Oil Change, page 55.

Warning: A lack of engine oil will cause irreparable damage to the engine.

11.6.5 Checking or replacing the spark plug

ELIET offers the following spark plugs:

13 HP Honda GX 390 NGK BPR 6 ES – DENSO W20 EPR-U



- Turn off the engine and remove the spark plug cap.
- Clean the engine area around the spark plug and remove it from the engine.
- Use a thickness gauge to check that the distance between the electrodes is 0.8 mm.
- The spark plug should be replaced when it is heavily dirty.

To check the quality of the ignition, follow these steps:

1. Replace the spark plug on its cap.
2. Place the ignition key in the "1" (ON) position.
3. Place the cap with the spark plug so that the electrodes or the spark plug thread are in contact with the motor ground.
4. Pull the starter handle, or activate the rotation of the electric starter by turning the ignition key to the "START" position.
5. Observe if there are sparks between the electrodes of the spark plug.
6. If this is indeed the case, and these sparks are clear and well centered between the electrodes, the spark plug is still functional.
7. If the sparks are weak, irregular, and only shoot intermittently between the electrodes, the spark plug is likely deteriorated and needs to be replaced.



Attention : The replacement of the spark plug or its replacement with a new one must be carried out with the utmost care, so that the thread in the engine is not damaged. Tighten the spark plug to a torque of 20 Nm.

11.6.6 General lubrication

ELIET believes that it is important to use high-quality products, as they extend the life of machines that are sometimes called upon to work in extreme conditions. For example, special lubricants have already been used in the manufacture of the machine. ELIET recommends regular lubrication of bearings and various hinge points.



Caution: As with all maintenance tasks, the engine must be stopped, and the spark plug cap disconnected. Gloves must be worn.

A. Lubrication of components with lubrication tips

Ecocure base frame; There are 2 grease tips.

- 1 grease tip on the steering column.
- 1 grease tip under the forward speed variation control.

WS spreader tool; There are 4 grease tips.

- At each bearing of the conveyor belt (2 by each side).

B. Lubrication of the points of articulation

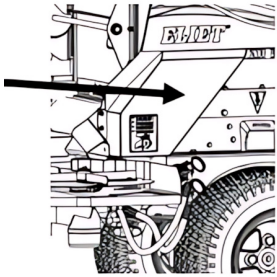
- Hinge points are all moving and hinged parts on the machine.
- The following list includes the main lubrication points, and this list is not exhaustive;
- The different controls and cables on the handlebars (variable speed lever, conveyor belt & disc variable lever of speed, clutch control & cable).
- The axle of the rear steering wheels, the bearings of the wheels.
- The clutch lever bearing of the transmission belt, the bearing of the tensioner pulley.
- Automatic slides & locks for attaching the various interchangeable tools on the base of the Ecocure.
- Hinges and opening levers of the different walls (dumper tool)
- The conveyor belt tension adjustment slides (WS spreader tool).
- The bearings for supporting the agitator in the hopper (spreader tool WS).
- The agitator transmission chain (WS spreader tool).

- The adjustment slide for the spreading disc support (WS spreader tool).
- The hopper opening lever, its hinged nozzles, the sliding parts of the hopper opening, the opening lever locking knob (WS spreader tool).

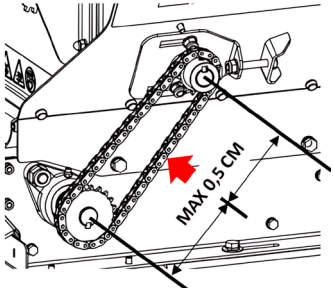
11.6.7 Control and tension of the agitator chain (WS spreader tool)

Attention: The motor must always be stopped while adjusting the tension of the agitator chain.

- To check the tension of the agitator chain, the external protective housing on the front left of the machine must first be disassembled. To do this, unscrew the four M6 screws (10 mm wrench).



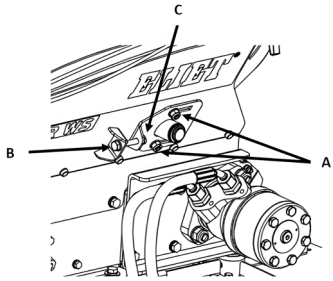
- To measure the chain tension, press the chain halfway between the two drive sprockets.
- A suitable tension will correspond to a bending of about 0.5 cm



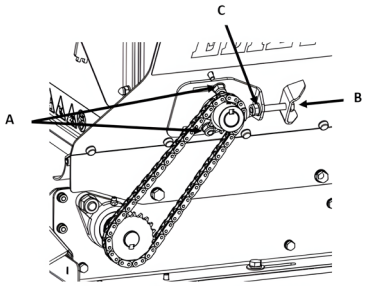
11.6.8 Adjusting the Agitator Chain Tension

If this tension is exaggerated or insufficient, it will have to be adjusted by proceeding as follows:

- Loosen the M8 clamping screws of the two stirrer bearings on the left and right side (A) by about one full turn using a 13 mm wrench. By loosening these two screws, the agitator bearings will be free on their adjustment slide.
- Adjust the chain tension by either tightening or loosening the M8 tension screw (B) with a 13 mm wrench, after releasing the locking M8 lock nut (C). Repeat this operation on each side until a suitable chain tension is obtained.



- Check that the agitator is perfectly horizontal, so that it does not unnecessarily force the support nozzles. Make sure that the tension on the two screws (B) is the same on each side of the machine, measuring and reporting the same distance on each side.
- Once this check has been made and the chain tension has been perfectly achieved, tighten and firmly lock the screws and nuts A, B & C.



11.7 Maintenance every 100 hours

11.7.1 Changing the engine oil

To do this, refer to § 11.5.1 First Engine Oil Change, page 55. This operation is identical to the maintenance of the first 20 hours (or 1 month), and is to be carried out after 100 hours of work (or after 6 months).

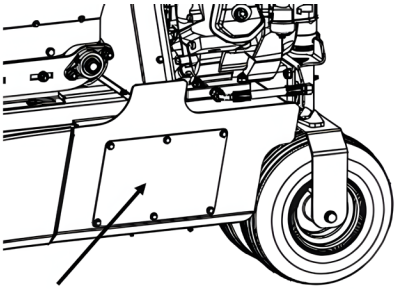
The recommended engine oil is also specified in § 11.2.1 Recommended lubricants, page 46 and in the engine manufacturer's operating instructions.

11.7.2 Battery control and charging

The battery is housed in a dedicated compartment at the left rear of the machine (under the engine), and its access is protected by a removable cover secured by six M6 screws.

To access the battery, remove the six M6 screws (10 mm wrench).

As long as the engine starter seems voluntary and as long as the machine is used frequently, charging the battery is not essential.



The Honda GX 390 engine is equipped with an alternator that recharges this battery when it is running.

However, during and after a long period of inactivity, the battery may discharge and deteriorate. The battery check will focus first and foremost on a visual check; observe that the battery does not show signs of oxidation on the contact terminals, does not show signs of liquid leakage, and does not have a "swollen" appearance.

In case of oxidation on the battery terminals:

- Clean the contact terminals, lugs and mounting bolts with a wire brush or medium sandpaper.
- After thorough cleaning of this assembly, reassemble the terminals on the contact terminals and spray a veil of lubricating oil (or lightly grease the terminals).

If there is any sign of liquid leakage or a "swollen" appearance:

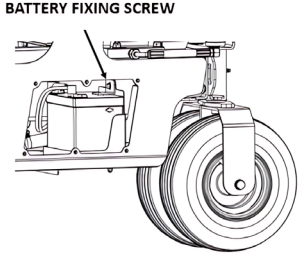
- Replace the battery immediately and thoroughly clean its immediate surroundings.

Note: A "swollen" appearance of a battery can be caused by prolonged storage at sub-zero temperatures.

11.7.3 Disassembling the battery

1. To remove the battery from its housing, it is first necessary to disassemble its mounting bracket (M6 screw, 10 mm wrench), which is in the shape of a square.

2. First **remove the M6 mounting bolt from the negative (-) lug** using two 10 mm wrenches and pull the cable away from its battery connection terminal (black cable).



Note: When disassembling the negative lug attachment bolt, **be careful not to come into contact with the metal tools, the machine frame and the positive battery terminal.** This is to avoid possible short circuits as much as possible.

3. Finally, remove the M6 fixing bolt from the positive (+) lug using two 10 mm wrenches and pull the cable away from its battery connection terminal (red cable).

To replace the battery in its slot, proceed with the reverse disassembly:

1. Connect **the positive (+) battery lug** first (red cable).
2. Second connect **the negative (-) battery lug** (black cable).
3. Reattach the battery mounting bracket.
4. Replace the battery protection cover with its six M6 fixing screws.

Tip: To prevent premature deterioration of the battery during a long period of non-use, it is advisable to disassemble and store it free from frost, and to charge it once a month using a suitable battery charger.

Opting for the connection of the battery to a holding battery charger may prove to be an adequate solution to avoid this disassembly/reassembly of the battery.



Warning: Please follow the procedures for disassembling and reassembling the battery as explained above. A short circuit can lead to serious consequences, or even a fire in the machine.

11.8 Maintenance every 500 hours

11.8.1 Hydraulic Oil Change

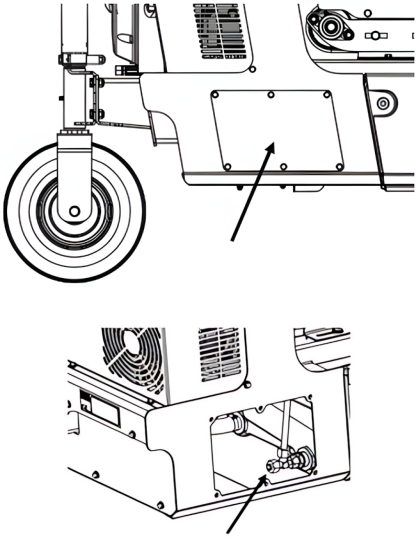
To access the hydraulic tank drain plug which is located under the engine on the right rear side of the machine, its protective cover must be removed. Unscrew and remove the six M6 fixing screws from the cover (10 mm wrench) and remove the protective cover.

Take a container with an ideal capacity equivalent to 20 liters in order to comfortably collect the volume of hydraulic oil, and place it under the drain plug of the hydraulic oil tank.

1. Unscrew and remove the oil dipstick, in order to create a draw of air useful for emptying the tank with as little swirl as possible.

2. Using a 22 mm wrench, unscrew and remove the drain plug from the hydraulic oil tank, collect the used oil in the container prepared for this purpose.

Let all the oil drain out.



HYDRAULIC OIL DRAIN PLUG

3. Wipe the drain plug, remove any residue from its end (the hydraulic oil drain plug is magnetized to capture any metal particles as much as possible).

4. After the used hydraulic oil has completely drained, replace the drain plug and tighten it firmly.

11.8.2 Replacing the hydraulic oil filter

The oil filter is a cylindrical cartridge that is screwed onto a bracket near the battery. To replace this hydraulic oil filter, the hydraulic oil tank should first be drained as described in § 11.8.1, page 65, and the battery protection cover should be removed as detailed in § 11.7.3, page 64 (the hydraulic oil filter is accessible from the left side of the machine).

1. To extract the hydraulic oil filter, grasp it with a suitable disassembly wrench or pliers and unscrew it completely from its bracket. Using a clean cloth, clean the direct surroundings of the hydraulic oil filter holder and make sure there are no impurities.
   Note: A slight drip of residual oil from the pipes and filter holder is possible, so it is recommended to place a collection container under the filter when disassembling it.

2. Get a new oil filter, lightly oil the seals of this filter, for example by spreading a drop of oil on each seal with your finger.

3. Place the new filter on its holder and screw it in completely, tighten it firmly with both hands (do not tighten the filter with a wrench or pliers).

4. Top up hydraulic oil through the filler cap/oil dipstick (required amount approx. 15 litres) and check the level as explained in § 11.4.6, page 54. See the table of recommended lubricants in § 11.2.1, page 46 to ensure that proper hydraulic oil is used.

5. In order to purge the air in the lines and prime the hydraulic pump, start the engine and engage the traction control lever, operate the traction advance lever to forward until the traction drives the machine completely and without hesitation.

6. Let the machine sit for about an hour and check the hydraulic oil level again.

7. Observe if there is no oil loss in the vicinity of the oil filter and its holder, and replace the battery protection cover last.

12. Machine Storage



Preparing for storage

- Clean the machine (see § 11.3 Cleaning the Machine, page 48).
- Perform extensive maintenance (see § 11.5 Maintenance of 20 Operating Hours, page 55).
- Check that all bolts and nuts on the machine are properly tightened and tighten them if necessary. To check most bolts, always take two 8, 10, 13, and 17 wrenches as well as 4, 5, and 6 Allen wrenches.
- Empty the petrol tank. If necessary, use a siphon pump to put the petrol back into a jerry can (see the safety instructions in § 9.2 Fuel Top-Up, page 25). In order to avoid emptying the fuel tank or restarting problems after long inactivity (+ 30 days), also opt for the use of Alkylate-based petrol or the addition of stabilizer-preservative in the petrol present in the tank.
- Disconnect the spark plug cap (see § 11.6.5 Checking or Replacing the Spark Plug, page 60). Spray MoS2-based graphite oil through the spark plug hole into the combustion chamber. Pull the handle of the recoil starter until the piston is in the up position. Then replace the spark plug.
- Touch up or grease the areas where the paint has popped, to prevent rusting. You can obtain the original paint in the same shade from your ELIET distributor.
- Always give the motor time to cool down before storing the machine.
- If the machine is stored outside, it must be well protected by a tarpaulin. Avoid exposing the machine directly to the elements. In any case, ELIET strongly recommends a protected storage location.
- Disconnect the battery (see § 11.7.2 Checking and Recharging the Battery, page 63) and store it in a temperate, frost-free room. Charge the battery once a month during the inactive period. In order to avoid its disassembly, also opt for the use of a holding battery charger.
- Place the machine out of the reach of children.
- Never place the machine in the direct vicinity of a heat source or a live flame (at least 2 m away).

13. Technical sheet



Ecocure Base	**MA 024 300 209**
Engine	13 HP Honda GX 390
Engine start	Electric + recoil starter
Speed	Forward : 0 - 4,5 km/h - Reverse : 0 - 4,5 km/h
Transmission type	Hydraulic - belt drive - infinitely adjustable
Wheel drives	2x hydraulic motor
Chassis	Steel (2 -> 5 mm)
Curb weight	266 kg
Wheels	Front : 18 x 8,50 / 10 NHS - Rear: 13 x 500 / 6 NHS
Dimension in mm (L x W x H)	2100 mm x 850 mm x 1200 mm
Noise level	104 dB (measured)
WS Spreader Tool	**MA 024 001 007**
Load capacity max	600 kg
Load volume	330 liters
Spreading radius	1 --> 8 metres
Conveyor belt transmission	Hydraulic - proportional - 1 hydraulic motor
Transmission discs spreading	Hydraulic - proportional - 2 hydraulic motors
Agitator transmission	Proportional - chain
Option	Hopper extension MA 024 001 004 - (+ 230 liters)
Dimensions	1520 mm x 850 mm x 600 mm
Dimensions & hopper extension	1670 mm x 990 mm x 190 mm (+ 230 litres)
Dumper Bucket Tool	**MA 024 001 006**
Max lifting capacity	500 kg
Load volume	300 liters
Lifting system	1 electrohydraulic cylinder
Dimensions	1275 mm x 875 mm x 600 mm
Transport Tray Tool	**MA 024 001 009**
Max load capacity	600 kg
Dimensions	1200 mm x 810 mm x 300 mm

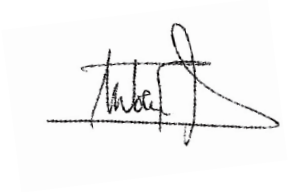
14. EC Declaration of conformity

MACHINE:	TOOL HOLDER	TOOL (OPTION)	TOOL (OPTION)	TOOL (OPTION)
MODELE:	ECOCURE ZR	WS SPREADER	DUMPER BUCKET	TRANSPORT TRAY
TYPE:	MA 024 300 209	MA 024 001 007	MA 024 001 006	MA 024 001 009

The machine manufacturer ELIET states that it has carried out a risk analysis, attesting to knowledge of the risks and dangers of the machine. In this knowledge, the necessary measures have been taken in accordance with Directive 2006/42/EC in order to ensure – in the context of proper use – the safety of the user.

The value of the measured and guaranteed sound level was obtained by applying the procedures of the European Directive 2000/14/EC.

Measured sound level: 103 dB(A) Guaranteed sound level: 104 dB(A)



Date: 02/03/2026
Signature:

Frederic LIETAER
CEO of ELIET EUROPE SA
Born 02/01/1975

ELIET EUROPE SA
Diesveldstraat 2 B - 8553 Otegem BELGIUM
Tél : +32 56 77 70 88
Mail : info@eliet.be

15. Annexes

15.1 List of tightening torques

Power	Threading	8.8	10.9
Normal thread	M4	3,0	4,4
	M5	5,9	8,7
	M6	10	15
	M8	25	36
	M10	49	72
	M12	85	125
	M14	135	200
	M16	210	310
	M18	300	430
	M20	425	610
	M22	580	820
	M24	730	1050
	M27	1100	1550
	M30	1450	2100
Fine thread	M8 x 1	27	39
	M10 x 1,25	52	76
	M12 x 1,5	89	130
	M14 x 1,5	145	215
	M16 x 1,5	225	330
	M18 x 1,5	340	485
	M20 x 1,5	475	680
	M22 x 1,5	630	900
	M24 x 2	800	1150
	M27 x 2	1150	1650
	M30 x 2	1650	2350

(With friction factor μ = 0,14)

15.2 Risk analysis

Below is a list of hazards and risks associated with storing, transporting or operating the ECOCURE ZR. Take note of these dangers and avoid these hazards by following the instructions in this manual. Be aware that not only the user is at risk, but that third parties may also be at risk. Be sure to keep third parties at bay.

- Injury to hands by passing them through the opening of the loading hopper and going beyond the safety devices against the risk of being crushed by the agitator.
- Injury due to the projection of materials via the spreading discs by going beyond the safety devices or splash shields.
- Risk of serious injury or death due to the detachment of a machine part (disc, bolts, etc.) due to a lack of inspection and maintenance, or after incorrect intervention.
- Risk of injury following projection through the discharge opening of the hopper after the introduction of a foreign object (stone, metal, textile, plastic, etc.).
- Injury by splashing material at the level of the spreading discs during the use of a machine in operation.
- Injury or cut to the hands as a result of handling the agitator that is not yet immobilized.
- Injury or cut to the hands as a result of the disassembly of the conveyor belt.
- •Injury or cut to the hands as a result of handling the support device of the spreading discs.
- Strangulation due to the catching of a scarf, or loose garment in the machine.
- Injury due to the machine tipping over while moving or careless transport.
- Fire hazard due to material residue clogging the engine's cooling air channels.
- Irritation of the respiratory tract or lung problems due to inhalation of the dust released.
- Hearing impairment caused by insufficient ear protection during work.
- Nervous system disorders or rheumatic diseases following a long spraying session without taking breaks .
- Injury due to contact with the spreading discs or agitator during unclogging, unblocking, maintenance or cleaning.
- Injury due to a fall while transporting on a floor that cannot support the weight of the person and the machine.
- Injury due to thoughtless behaviour when lowering the dumper tipper.
- Any injury resulting from the neutralization of a safety device.

This list is not exhaustive and is provided for information purposes only, for the benefit of user safety.

15.3 Warranty conditions

Dear Customer,

Thank you for purchasing an ELIET product. We congratulate you on your choice of machine and have no doubt that it will far exceed your expectations in the years to come. At ELIET, we are committed to ensuring that our products work properly. That's why you benefit from the ELIET warranty of 2 years after purchase.

What is the warranty?

The design and manufacturing procedures of ELIET products are subject to strict quality guidelines. The purpose of these is to guarantee the longevity and permanent safety of the product. To this end, ELIET will repair all defects or anomalies free of charge during the entire running-in period (warranty period) as long as the prescribed procedure is followed.

Warranty conditions

ELIET's warranty obligation on new machines is governed by the following terms and conditions.

A. Warranty Period

The warranty period begins on the date the dealer delivers the machine to the customer and ends :

- After two years of private use.
- After twelve months or 100 hours of rental use.
- After twelve months or 100 hours of semi-professional or professional use.

B. What are the cases excluded from the warranty?

- Wear parts are not covered by the warranty conditions (e.g. spreading discs, bearings, belts, chains, sprockets, tyres, agitator, conveyor belt, etc.).
- Failures that turn out to have been caused by incorrect use, negligence or an external factor (fall, spread materials, foreign objects, accident).
- Failure that is the result of a lack of maintenance of the machine in accordance with the recommended periodic maintenance schedule.
- A breakdown occurring after maintenance and/or after the use of non-ELIET spare parts.
- A failure resulting from the unauthorized modification of the original design of the machine.
- A failure resulting from operation of the machine not in accordance with the instructions specified in this manual.
- When the prescribed warranty procedure has not been followed or when the warranty period has expired.
- For any engine-related problems, contact a service centre of the engine brand approved by the machine manufacturer.

C. Procedure

- Step 1: After the purchase, the customer will proceed to the online registration of his purchase by completing the registration form on www.eliet.eu or by returning the handwritten registration card to ELIET. The customer will keep the purchase invoice until the warranty expires.
- Step 2: When a breakdown occurs, the customer must have his machine checked by his authorized ELIET distributor. If the latter considers that it is a manufacturing defect, he can claim the warranty under the specified conditions.
- Step 3: Any warranty claim will be accompanied by a duly completed official claim form. Distributors can obtain these forms from ELIET or an ELIET importer/agent, or complete a warranty claim online via their dealer area.
- Step 4: The distributor orders the spare parts necessary to carry out the repair. The distributor then forwards the purchase order along with the completed warranty form and a copy/proof of registration.
- Step 5: The warranty form must be attached to the purchase invoice and sent to ELIET or the ELIET importer/agent.
- Step 6: ELIET will ship the ordered parts to the distributor under normal delivery and payment conditions .
- Step 7: ELIET's after-sales service will examine the defective components before accepting or rejecting any warranty service request. ELIET reserves the right to decide whether the customer has complied with the conditions governing the validity of this one- or two-year warranty period. Defective components will be returned to ELIET and will become its property.
- Step 8: If the warranty intervention request is deemed to be justified, ELIET will credit the parts delivered under warranty. The cost of labour is not covered by ELIET.

D. In case of damage during transport

- All goods are deemed to be sold ex works. The risks associated with transport are entirely borne by the reseller customer. ELIET therefore strongly advises the reseller customer to examine the goods at the time of receipt.
- Damage must be reported on the delivery note before signing. Make sure that the carrier signs this mention of the damage on your copy of the delivery note.
- The insurance company will not be liable without such written statement signed on the delivery note.
- Damages may be sought from the carrier based on a copy of the delivery note and a cover letter detailing your claim.
- The machine must be kept in its original condition until it is examined by the carrier's insurer.

BZ 201 450 003