

RÉCOLTEUSE DE JEUNES POUSSES 800MM 800MM BABYLEAF HARVESTER

T000193



⚠ ATTENTION/DANGER

Lisez attentivement ce manuel et appliquez les règles de sécurité et d'utilisation.
Toute négligence à cet égard peut causer des accidents graves.

*Read this manual carefully and follow the rules of safety and use.
Any negligence in this regard can cause serious accidents.*

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INTRODUCTION

Thank you for purchasing the Terrateck RJP 80M harvester. We hope that this machine will bring you complete satisfaction thanks to its user-friendly features and manoeuvrability.

The **Terrateck RJP 80M babyleaf harvester** is designed for occasionally harvesting babyleaf crops, i.e. the various multicut salads (mesclun, purslane, spinach).

Equipped with an 80cm wide cutter bar, this babyleaf harvester cuts the plants cleanly and precisely. The cutter bar and pick-up reel height are adjustable according to the height of the vegetation in order to comply with the different harvesting standards.

Designed and assembled in our workshop, the babyleaf harvester is a lightweight manoeuvrable tool. The Terrateck RJP 80M babyleaf harvester meets the requirements of producers in terms of speed and consistent cutting quality. By mechanising the harvesting process, our RJP 80M babyleaf harvester can cover 30 metres in 120 seconds.

Thanks to its electric motor, the Terrateck RJP 80M babyleaf harvester complies with environmental standards by eliminating the harmful exhaust gases that would be discharged from a combustion engine in a confined environment (production greenhouses).

This user manual provides the information you need to use and maintain your harvester safely and correctly.

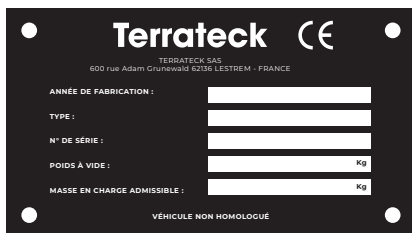
This manual contains the following information:

- **Safety instructions** for using this machine safely,
- **Operating instructions** for ensuring the best possible occupational standards for the best possible yield,
- **Technical information** for prolonging the life and improving the performance of the harvester.

COMMENTS:

- Keep this user manual in a place where it will not get damaged and that is easily accessible for future reference as needed.
- If this manual should become unusable or get lost, please purchase a new one from your Terrateck dealer-repairer.
- When hiring out the machine, please be sure to give this manual to the hirer.
- Should the machine be transferred or sold, be sure to give this manual to the new owner.

IDENTIFICATION OF YOUR MACHINE



To ensure a fast and efficient service, order parts or request a repair from your Terrateck agent, make a note of the information engraved on the identification plate of your machine.

Sprout picker	
Year of manufacture	
Type	
Serial no.	

PRESENTATION



SAFETY INSTRUCTIONS

Before you start using the machine for the first time, carefully read the entire user manual to familiarise yourself with how the machine operates and carry out your work properly and safely.

Keep the manual in a convenient place so that you can consult it when necessary. We recommend that you to read it again from time to time to refresh your memory.

Terrateck has carried out a pre-shipment inspection of your new machine.

When you receive your harvester and before first use, review the safety instructions, operating instructions and technical information contained in this manual.

Do not use the machine for any other purpose not covered in this manual. Furthermore, Terrateck shall not be held liable for any such use.

All the information, illustrations and features contained in this manual are based on the latest information available at the time of publication. We reserve the right to make changes at any time without notice.

The words and symbols below, which you will find in the user manual and on the decals, are given as a reminder to read the instructions because they concern your safety.



The paragraphs of this manual accompanied by this general hazard symbol or the standard pictograms stuck to the machine are to draw your attention to actions that may cause accidents. You must always keep in mind the safety instructions and apply them.

The housing and protective elements have been removed on some of the illustrations in this manual for the purpose of clarity. **Never use the harvester without the protections.** If you need to remove a protection for a repair, you must reassemble it before using the harvester.



IMPORTANT

The word **IMPORTANT** is used to point out special instructions or procedures that must be strictly observed. Failure to do this may result in the damage or destruction of the machine or its environment.



NOTE

The word **NOTE** is used to highlight points of particular interest for making the machine more efficient and easy to use.

Make sure you understand the following precautions and always keep them in mind before, during and after using the machine; never take risks!

WORKING SAFELY



IMPORTANT

The failure to comply with the safety rules in this manual or any negligence on the part of the user can result in serious damage. The user of the harvester is responsible for every manoeuvre they undertake with the machine.

(1) Familiarise yourself with the controls of the machine by reading the user manual before using the machine.

- (2) Do not let the categories of people listed below use the machine:
- Anyone with reduced physical, sensory or mental abilities or people who have never used this machine.
 - People who are unable to use the machine properly due to fatigue or illness, or the influence of medication or drugs.
 - Children or anyone under the age of 18, who are not old enough to use the machine.
 - We consider it hazardous for pregnant women and their baby(ies) to use this machine.

When another person uses your machine, you must ensure that it complies with the safety instructions. You must explain to them how it works and ask them to read this entire manual in order to avoid accidents.

(3) Make sure you are in a good state of health by taking breaks at the appropriate times. Allow sufficient time to complete the task in hand. Working when in a hurry can lead to accidents.

(4) Wear personal protective equipment to operate the machine:



(5) Read the safety instructions in this manual regarding the hazardous points highlighted by the pictograms. Here is the description of these pictograms:



Mandatory protection of the head



Mandatory protection of the body



Mandatory protection of the hearing



Mandatory protection of the hands



Mandatory protection of the feet



WARNING: SENSITIVE TO MOISTURE
Do not wash or splash water.



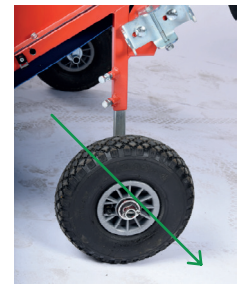
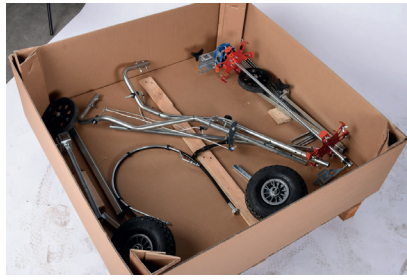
WARNING:
General hazard, Hazardous area
Consult your user manual



WARNING:
CUTTING HAZARDS

(6) In the event of an erased or torn pictogram. See (55) and (56).

ASSEMBLY INSTRUCTIONS



REAR WHEEL

(7) Fit the rear wheel tubes into the tubes at the back of the machine. The wheels must be positioned towards the outside of the machine.

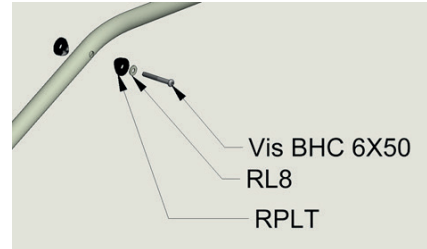
(8) Tighten the two screws and nuts on each side using the **13mm spanner**.

PUSH BAR



(9) Connect the central bar to the left and right arms of the push bar.

(10) Assemble the two pairs of bolts, on the left and right, with a pair of 13mm open-ended spanners.

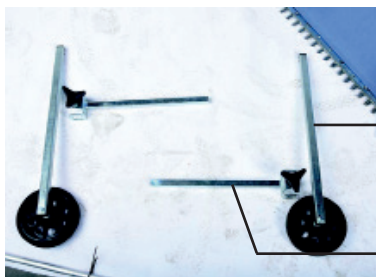


(11) Fasten the harvest bag tubes to the arms of the push bar with a **4mm Allen key**.



(12) Thread the assembly into the holes in the frame and put the bolts through the holes, when they are aligned.

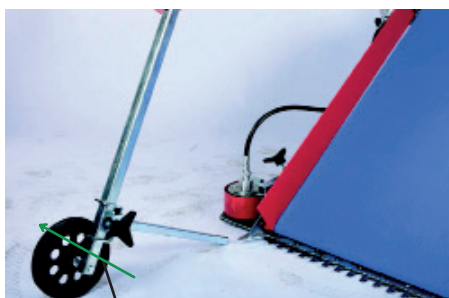
(13) Tighten the bolts using the **13mm open-ended spanner**.



(14) Connect the horizontal tube of the wheel to the vertical tube of the pick-up reel: the star screw must be on the side opposite the wheel.

Vertical tube of the pick-up reel

Horizontal tube of the wheel



Front wheel – right side



Front wheel – left side



(15) Insert the horizontal tube of the wheel in the front tube of the machine: the star screw must face the inside of the machine and the wheel must be on the outside.



REEL

(16) Fit the bars to the pick-up reel: you can adjust the diameter of the pick-up reel by pushing in the bars more or less far.



IMPORTANT

In any case, make sure that the bars are always fastened on each side in both holes.





The bar is assembled in both holes



(17) Tighten all the wing screws **by hand**.

(18) Fit the entire pick-up reel assembly onto the vertical tubes of the front wheels. The pick-up reel is located above the conveyor and the angle transmission is located on the left side of the machine.

FLEXIBLE TRANSMISSION SHAFT

The flexible shaft is pre-assembled at the factory on its guide.



Upper part

Lower part



Lower part



Upper part



(19) Start by fixing the guide using the two pairs of nuts and washers:

(20) Screw the upper nut of the hose onto the shaft of the conveyor.

(21) Then screw the lower nut of the hose onto the angle transmission of the pickup reel.



IMPORTANT

Be careful not to twist the hose: secure the hose in place and turn the nut.

DRILL

To drive the RJP 80M babyleaf harvester, Terrateck recommends using the DeWALT XR 18V combi-drill, but **please note that any other make or model may be suitable**.

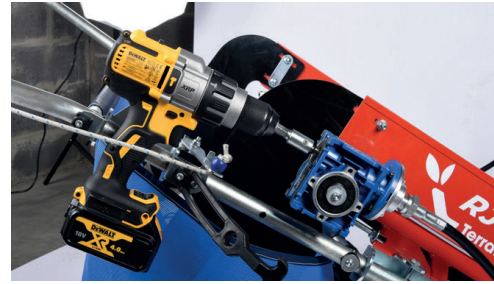
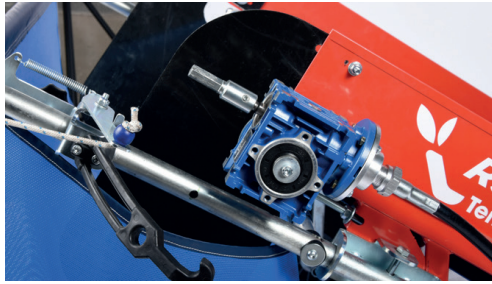


NOTE

In any case, your combi-drill must have the following specifications:

- Voltage: 18V
- Battery Type: 4.0Ah XR Li-Ion
- Chuck size: 1.5-13 mm
- No-load speed: 1300 rpm
- Maximum torque: 60 Nm

(22) Adjust the drill's rotation settings. See **Managing the operating settings**.

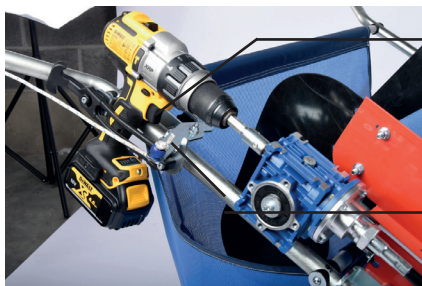


(23) Fit the drill onto the arm of the machine by pushing the chuck onto the hexagonal shaft.

(24) Tighten the chuck of the drill.

(25) Adjust the positioning of the part that controls the trigger of the drill and tighten the drill using the plastic toggle latch.

(26) Check that the control lever is placed in front of the trigger of the drill; if necessary, adjust the height of the control mechanism to fit the drill.



Trigger of the combi-drill

Control lever



(27) Check that the control cord passes under the right half-handle so that it can properly activate the trigger of the combi-drill.

(28) Check that the cord is taut. If necessary, tighten or loosen the side bolts. Cut the protruding end with a saw to avoid any injury when moving around the harvester.



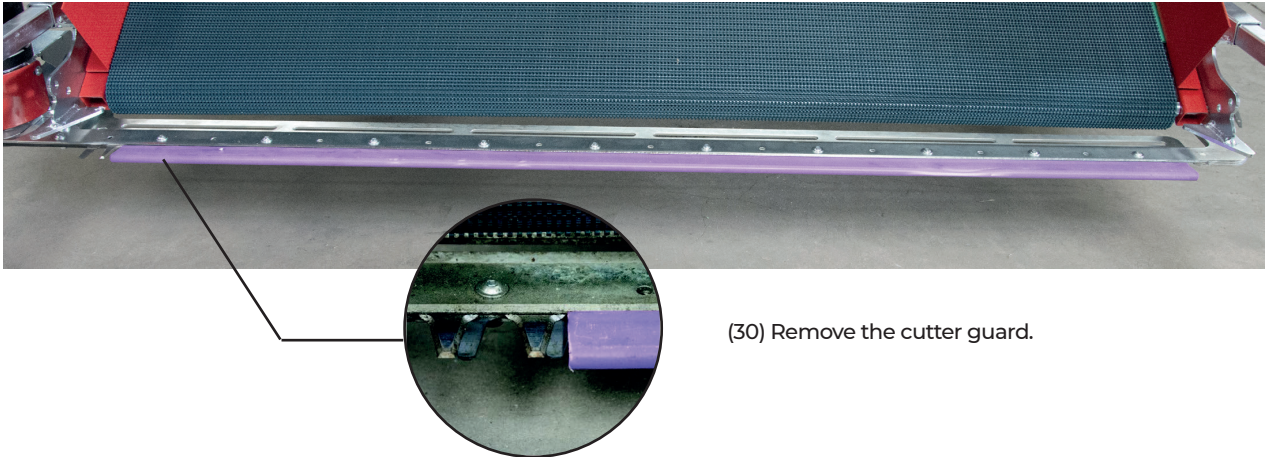
OPERATING INSTRUCTIONS BEFORE YOU START



Before starting up the harvester, you must follow some basic procedures to ensure that the workers are safe and the harvester is being operated properly, as well as guarantee the longevity of the machine.

Walk around the machine to visually check the following:

(29) Check the condition of the tyres. Watch out for any premature wear, blistering or abnormal tears, in which case you will need to change the tyre(s). **See (82) and (83).**



(30) Remove the cutter guard.

(31) Make sure that all of these housing elements are in place and secure. If the safety devices are damaged or do not work, consult your Terrateck agent.

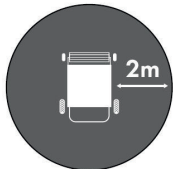
(32) Check the tension of the control cord: tighten/loosen the two side bolts to ensure that there is enough tension and that the pressure on the trigger of the drill is adequate. See (28).

(33) Before using the machine, check that your power tool works properly



IMPORTANT

Do not smoke when working near the screw gun battery. There is a risk of an explosion.



(34) Check the battery level of your drill to ensure that it is operating effectively.

(35) Make sure that everyone in the work area maintains a safe distance of at least 2m from the machine.



IMPORTANT

Always handle the machine without the power tool.

(36) Position the harvester in front of the crop to be harvested by pushing the machine using the main bar.

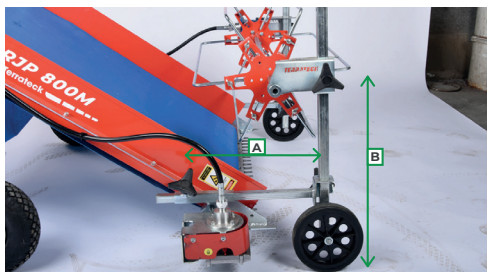
(37) Make sure that the harvest bag at the back of the machine is empty to start harvesting.

(38) You can distribute harvesting crates along your route.



IMPORTANT

Make sure that these additional harvesting crates are located outside the path that the harvester will take.



(39) Adjust the position of the reel:

The horizontal distance (A) of the reel in relation to the conveyor and the vertical distance (B) from the ground are adjustable.

These settings vary according to the type of crop and its density.



NOTE

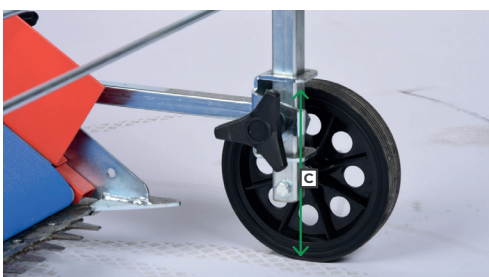
Move both sides at the same time to avoid jamming the sliders due to the buckling forces that act upon the sliding mechanism if the settings are too dissimilar.

Loosen and tighten all the star screws properly to lock the required settings. Check them again after operating the machine for a while d'utilisation.



IMPORTANT

Be sure to check that the pickup reel does not come in contact with the conveyor. Should this happen, the conveyor will probably be badly damaged.



(40) Adjust the cutting height:

The height of the cutter bar from the ground can be adjusted using the two star screws. **A scale graduated in centimetres can be used to view the cutting height in relation to the ground.**



NOTE

The cutting height and the height of the pick-up reel are independent. Adjust the height setting of the pick-up reel when you change the cutting height setting.

(41) Properly tighten all the star screws when reassembling and recheck the tightening after operating the machine for a while.

The distance between cutterbar and the conveyor can also be adjusted. Take a 13mm spanner to make this adjustment.



IMPORTANT

The cutter bar must never come in contact with the ground or the conveyor, as this may damage the cutting sections and the exchangeable gearbox.

NORMAL START



Before starting the machine, make sure that nobody is near the machine (see 35).

(42) Adjust the cutting settings according to the crop that you are planning to harvest with the machine.
See Managing the operating settings.



IMPORTANT

The cutting settings must be set when the machine is shut down.

(43) To start the machine, pull the cord. It is a "dead man" safety control device:

- The machine will operate while the cord is held taut.
- When the cord is released, even accidentally, the machine shuts down completely.



IMPORTANT

Do not bypass this safety mechanism by blocking the cord: both hands of the user must hold the cord taut.

(44) You can spread the produce of the harvest by hand in the harvest bag without letting go of the cord with the other hand.



IMPORTANT

Do not touch the hazardous parts, i.e. moving parts, hot areas (speed reducer, flexible shaft, combi-drill). Failure to do so may result in serious injury.

END OF HARVEST

(45) When the harvest bag is full, let go of the cord: this will stop the machine, so that you can empty the full bag.



IMPORTANT

Empty or full harvesting crates must be laid out beside the path of the harvester.

JAMMING

An incorrect setting of the cutting parameters or harvesting conditions can result in a jam at the cutter bar.

To prevent this problem, the machine has a safety CUT OFF that reduces the torque of the cutter bar, thereby preventing any damage to the mechanical parts in case of a blockage.

To clean out the machine, carefully carry out the following steps:

(46) Stop the machine immediately by letting go of the cord;

(47) Analyse the situation to find out the cause of the jam,

(48) Wear protective equipment such as cut resistant gloves to clear any goods that have become stuck.



IMPORTANT

It is important not to put your fingers in the cutting blades to avoid any risk of getting cut or even severing fingers.

Once the cutter bar of the machine is free of all the jammed material, proceed as follows to restart:

(49) Change the settings to the correct cutting settings: speed of rotation of the drill and/or height of the cutterbar and pick-up reel.

(50) Free the harvester from the crop being harvested in order to test the cutterbar without any load: press the start-up cord to control the operation of the cutterbar.



If you notice any damage or you hear any suspicious noises, contact our agents.

IMPORTANT

If everything seems fine, the work can continue.

MANAGING THE OPERATING SETTINGS

There are many adjustment options on all combi-drill models.

The harvester settings should be fine-tuned by the operator: according to several factors such as

- the type of crop;
- the maturity of the harvest;
- the fragility of the shoots;
- the humidity level;
- etc.

The correct adjustment of each of the settings, i.e.

- the pick-up reel rotation frequency;
- the speed of the conveyor,
- the frequency of the cutterbar

are all dependent on the settings of the combi-drill.



In any case, Terrateck recommends that you adjust your combi-drill as follows:

- maximum speed
- maximum torque

NOTE

CARE AND MAINTENANCE

Do not modify the harvester's structure, install another type of motor or fit tyres of a different size or type from the original tyres. Any failure or malfunction of the machine due to an unauthorised modification is not covered by the warranty. Furthermore, Terrateck shall not be held liable for any consequences.

The machine is designed and manufactured according to our strict quality charter. However, if you should notice any defects, please notify our agents before operation.

Never mount unauthorised equipment to the machine or make unauthorised modifications.



IMPORTANT

During the care or maintenance phases, make sure no one is located near to the machine.

MAINTENANCE



(51) When preparing to maintain the harvester, place the machine on a hard and level surface.

(52) Block the wheels with chocks.

(53) The work area must be adequately lit to prevent accidents.



IMPORTANT

Remove the combi-drill from the harvester.

(54) Before removing a safety device, such as a protective cover, make sure that the combi-drill has been removed from the machine.



IMPORTANT

Do not forget to put the removed safety covers back on because the uncovered hazardous parts can cause serious injuries.

(55) Check the safety pictograms stuck to the machine. These help you to identify hazardous points and point out the risks incurred at each of these points.



IMPORTANT

It is important to make sure that these pictograms stay in place and are legible by the user.

Here are some guidelines for their maintenance:

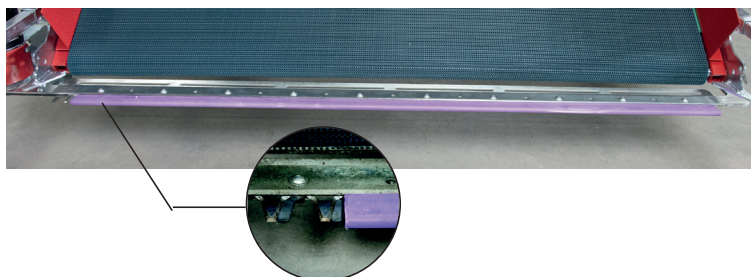
(56) Do not cover the pictograms, so that they remain visible at all times. If they are dirty, clean them with soapy water and dry them with a soft cloth. If they come unstuck or get damaged or torn, order a new safety sticker from your Terrateck agent. Place the new sticker where the old one was located in accordance with the diagram below. When sticking a new sticker, first clean the area with soapy water, rinse thoroughly and dry the surface to be glued. When glueing, eliminate any air bubbles that may affect the glueing process resulting in a poor bond.

The references of the safety pictograms and their location on the machine are provided here.

(57) Each time the machine is used, clean the cutter bar with a high-pressure water jet to remove any sap or other organic matter that can damage the materials and, hence, the effectiveness of the blades.

(58) Immediately after each use, lubricate the cutterbar with a fine oil recommended by Terrateck (T.RJP.H1000)

(59) Replace the cutter guard.

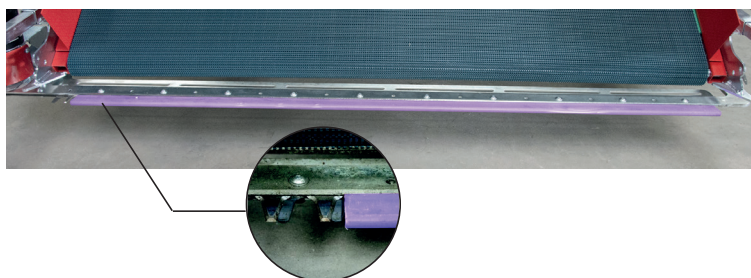


STORING FOR A SHORT PERIOD

(60) After using the machine, clean the cutterbar with a high-pressure water jet to remove any sap or other organic matter that can damage the materials and, hence, the effectiveness of the blades.

(61) Lubricate the cutterbar with a fine oil recommended by Terrateck (T.RJP.H1000).

(62) Fit the cutter guard.



(63) Store the machine in an enclosed space that is sheltered from the weather and away from any flammable products, moisture and dust.

STORING FOR A LONG PERIOD



When you store the harvester for a prolonged period, especially in winter, certain measures must be taken to keep it in good condition. These measures depend on the location and the season.

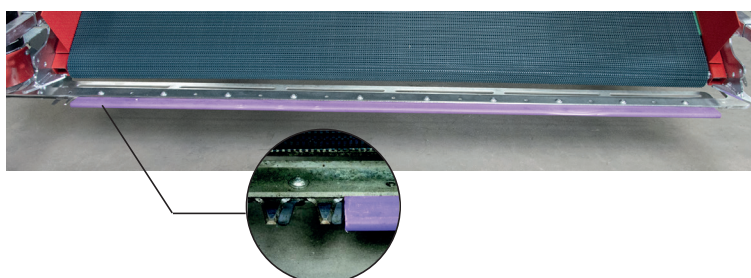
(64) Clean the outside of the machine with a high-pressure water jet.

(65) Lubricate the speed reducers regularly. See (79) and (80).

(66) Lubricate the cutterbar's exchangeable gearbox. See (84) and (85).

(67) Lubricate the cutterbar with a fine oil recommended by Terrateck (T.RJP.H1000).

(68) Fit the cutter guard.



(69) Tighten all the screws, bolts and nuts.

(70) Store the harvester in an enclosed space that is sheltered from the weather and away from any flammable products, moisture and dust.

(71) Carry out a full inspection before starting it up. See "Before you start".

MAINTENANCE OF THE MECHANICAL SYSTEMS



(72) When preparing the harvester for one or more maintenance operations or when fitting or dismantling equipment, place the machine on a hard, level surface.

(73) Block the wheels with chocks.

(74) The work area must be adequately lit to prevent accidents.

(75) Check that the cutter guard is in place.

(76) Use the right tools to carry out the maintenance on the harvester.



IMPORTANT

The use of makeshift tools can lead to injuries, accidents during operation or damage to the working parts of the machine as well as their poor maintenance.

(77) Do not forget to put the removed safety covers back on because the uncovered hazardous parts can cause serious injuries.

(78) If in any doubt, consult your TERRATECK agent regarding mechanical, electrical or electronic problems.

The speed reducers:

The reducers are filled using a pipette.

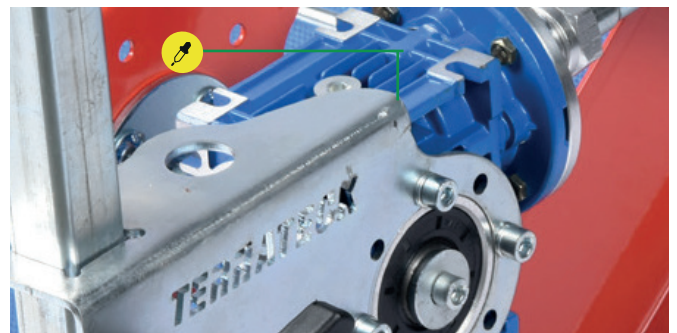
(79) Unscrew the filling nut and fill it right to the top. The filler hole acts as an oil level.

(80) Always use the oil recommended by Terrateck (Mineral gear lubrication oil - T.RJP.HR1000)

Oil for gearboxes:

Pick-up reel and conveyor gearbox capacity	0,04 liter
Self-propulsion gearbox capacity	0,075 liter
Recommended viscosity	EP320 mineral oil
First oil change	50 hours or 1 year*
Subsequent oil changes	500 hours or 4 years*
Protection index	IP54

***whichever comes first**



Wheels and tyres:



IMPORTANT

Do not try to repair a wheel or tyre if you do not have the equipment or experience to do this kind of work.

When maintaining the wheels and tyres, the harvester must be supported by certified jack stands or appropriate equivalent holders.



Do not use a mechanical or hydraulic jack. This kind of system is not safe enough for this type of operation.

(81) To fit the sidewalls of the tyre on the rim, do not exceed the maximum inflation pressure specified on the tyre.

IMPORTANT

Tyre size and pressure:

	Size	Pressure
Front wheel	Ø175mm	0 bars
Rear wheel	4.00-10"	0,75 bars



IMPORTANT



Excessive inflation may cause the tyre to burst or break the rim with a dangerous explosive force.

(82) If a tyre has deep cuts, knocks or is punctured, it must be repaired or replaced by qualified personnel as soon as possible.

(83) If you need to replace a tyre, the dimensions of the new tyre must be the same as the original dimensions.

The cutter bar exchangeable gearbox:

(84) Wipe the filling hole with a cloth.

(85) Each time the machine is used, add some lithium grease (one or two presses of a grease pump) to the exchangeable gearbox of the cutterbar.



Do not add too much grease as this will create excessive pressure in the housing which would damage the seals.

IMPORTANT

The cutter bar:

Sharpening the blades:

The setting of the blade gap is made at the factory. If you notice a drop in cutting performance with plant stalks that are shredded rather than being clean-cut, you can sharpen the blades. Here's how to proceed.

(87) Remove the cutting blade.

(88) Clamp it in a vice.

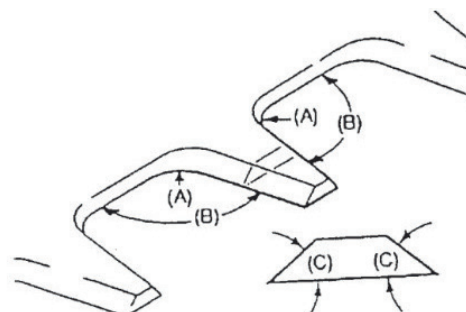
(89) Sharpen and reshape the cutting edges with a thin, flat file, while maintaining the correct cutting edge angle.

(90) Remove any burrs from the knife with a hone.

(91) If the bar is bent or damaged, it must be replaced.

(92) To assemble the cutterbar, reverse the dismantling process and adjust the blade gap.

Radius of curvature (A)	6 mm
Angle of attack (B)	about 100°
Knife angle (C)	from 40° to 43°





If you are experiencing difficulties sharpening the teeth, we recommend that you consult a professional.

Adjusting the blade gap:

The setting of the blade gap is made at the factory.

As a result of wear, there may be some play between the blades of the cutter bar. This is called the "blade gap" and it reduces productivity and cutting quality.

The adjustment can only be done after the blades have been thoroughly cleaned and any debris, which has become embedded between the blades, has been removed.

(93) Clean the cutter bar with a high-pressure water jet to remove any sap or other organic matter that can damage the materials and, hence, the effectiveness of the blades.

The gap must be in the order of 0.20 to 0.40mm. If the gap is greater than this, the blades begin to shred the plants.

(94) Measure the gap using shims. If the gap is too big, call your Terrateck agent. Only the latter is authorised to adjust the blade gap.

The conveyor:

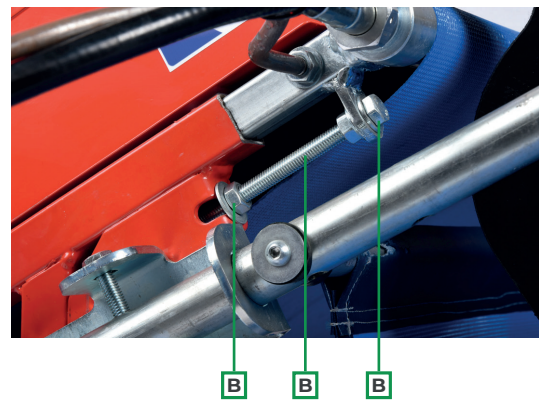
The conveyor tension is preset at the factory. It can nevertheless be adjusted according to atmospheric conditions or wear. Indeed, the belt is made largely of a rubber material which can expand or stretch by several centimetres.

(96) Hold screw C with a 13mm spanner. Loosen nut D slightly to free up the rotation of screw C.

(97) While holding screw C, tighten or loosen nut E with another 13mm spanner, to tighten or loosen the conveyor.

(98) Repeat this operation on both sides of the machine.

(99) Tighten screw C with nut D to lock the assembly in position.



Excessive tension will reduce the speed of the belt, reduce battery life and increase noise levels.

IMPORTANT

MAINTENANCE OF THE ELECTRICAL SYSTEMS



INFORMATION ON SCREW GUN MAINTENANCE:

CONSULT THE INSTRUCTIONS OF THE COMBI-DRILL

MACHINE HANDLING



(100) When loading the harvester onto a lorry or trailer, make sure that the combi-drill has been removed from the machine.

(101) Pay particular attention to the safety of people in the surrounding area.

(102) Get another person to guide you.



IMPORTANT

Make sure no one is near the area in which the harvester is moving.

(103) To load or unload the machine on a lorry, non-slip ramps with the same incline must be fitted and the harvester must be moved manually in a straight line.

(104) Use ramps whose specifications are sufficient to support the weight of the RJP 80M harvester.

(105) Preferably, transport the machine with the original pallet proposed as an accessory by your Terrateck agent.

(106) If the machine is equipped with non-original accessories, consult your Terrateck agent for advice.



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