

ENG

Translation of the original operating instructions manual



SOIL CULTIVATOR CULTIVION ALPHA

Operating instructions

58_163161-A
02/2022

READ THE USER GUIDE CAREFULLY BEFORE USE

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1. INTRODUCTION

Dear Customer,

Thank you for purchasing your Soil Cultivator Cultivion Alpha. Properly used and maintained, this equipment will give you years of satisfaction.



Warning

Your machine contains numerous recoverable or recyclable materials. Return it to your dealer or, failing this, to an approved servicing centre to be treated.



Comply with the regulations in force in your country as concerns environmental protection associated with your activity.



Warning

It is imperative that you read through the ENTIRE user's manual guide before using or servicing the tool. Always comply with the instructions and illustrations provided in the user's manual.


Throughout the user's manual guide you will find advisory notes and information entitled: NOTE, IMPORTANT, ATTENTION and WARNING.

Points marked "NOTE" indicate additional information.

Points marked "IMPORTANT" warn the user of a potential risk for the equipment.

Points marked "ATTENTION" warn the user of a potentially hazardous situations which if not avoided may result in minor injuries.

Points marked "WARNING" warn the user of a potentially hazardous situation which if not avoided may result in serious injury or death.

The warning  indicates that damage resulting from failure to comply with the procedures and instructions is not covered by the warranty and the owner will be liable for any repair costs.

Safety indications are also given on the tool; they remind you of the safety precautions to be taken. Identify and read these indications before using the tool. Immediately replace any indications that may become partially illegible or deteriorated.

Refer to Section 2.5, "Safety signage" for the location diagram of the safety stickers affixed to the tool.

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2. SAFETY

2.1. INTENDED USAGE

- The Cultivion Alpha is a tool for working in soil only. It is used for weeding, aerating, cultivating and mixing fertiliser with the soil.
- The Cultivion Alpha can also be used to dig furrows using the appropriate work tool attachment (ref. 83849).
- In addition the Cultivion Alpha can be used to clean walkways thanks to the sharp side faces of its blade.
- The PELENC company accepts no responsibility for any damage caused by improper or unspecified use different from its original intention.
- The company PELENC is also not responsible for any damage caused by the use of parts or accessories not listed in this guide.

2.2. GENERAL POWER TOOL SAFETY WARNINGS



Warning

Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

Note

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

2.2.1. WORK AREA SAFETY

1. **Keep the work area clean and well lit.** Cluttered or dark areas invite accidents.
2. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks, which may ignite the dust or fumes.
3. **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control of the tool.

2.2.2. ELECTRICAL SAFETY

1. **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
2. **Avoid body contact with earthed surfaces or grounded surfaces such as pipes, radiators, ranges, and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
3. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
4. **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
5. **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
6. **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.** Use of an RCD reduces the risk of electric shock.

2.2.3. PERSONAL SAFETY

1. **Stay alert, watch what you are doing, and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
2. **Use personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
3. **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or plugging in power tools with the switch in the on position can cause accidents.
4. **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
5. **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
6. **Dress properly. Do not wear loose clothing or jewelry. Keep your hair and clothing away from moving parts.** Loose clothes, jewelry or long hair can be caught in moving parts.
7. **If devices are provided for connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.
8. **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** A careless action can cause severe injury within a fraction of a second.

2.2.4. POWER TOOL USE AND CARE

1. **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
2. **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
3. **Disconnect the plug from the power source and/or remove the battery pack, if detachable, if from the power tool before making any adjustment, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
4. **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
5. **Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
6. **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
7. **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.
8. **Keep handles and grasping surfaces dry, clean and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

2.2.5. BATTERY TOOL USE AND CARE

1. **Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
2. **Use power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.
3. **When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another.** Shorting the battery terminals together may cause burns or a fire.
4. **Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Liquid ejected from the battery may cause irritation or burns.

5. **Do not use a battery pack or tool that is damaged or modified.** Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion or risk of injury.
6. **Do not expose a battery pack or tool to fire or excessive temperature.** Exposure to fire or temperature above 130 °C (or 265°F) may cause explosion.
7. **Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions.** Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.

2.2.6. SERVICING

1. **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.
2. **Never service damaged battery packs.** Service of battery packs should only be performed by the manufacturer or authorized service providers.

2.2.7. MANAGEMENT OF THE RECYCLING AND RECOVERY OF WASTE FROM YOUR TOOL

1. **When the tool reaches the end of its life, PELLENC keeps the end of life sheet of the equipment at disposal.** The end of life sheet provides instructions for safely removing components.

2.3. SAFETY INSTRUCTIONS FOR THE SOIL CULTIVATOR CULTIVION ALPHA

1. Clear your work area before starting work.
2. Make sure that the Cultivion Alpha does not come into contact with anything other than soil and plants.
3. Do not use the Cultivion Alpha to dig very hard, stony soil or near thick roots.
4. Position yourself correctly to prevent accidents.
5. Keep people away from the machine when starting and operating the machine.
6. Never modify the connector in any way whatsoever.
7. The aluminium of the pole conducts electricity. Always keep the tool away from electrical lines, telephone lines, and other sources of electricity. Manipulate the tool by holding the safety handles.
8. **THIS TOOL MAY CAUSE SEVERE INJURIES.** Read the operating instructions manual carefully to learn about the proper handling, operation, maintenance, start-up and stopping of the tool. Familiarize yourself with all its controls and the proper use of the tool.
9. Use personal safety equipment. Always wear safety footwear.
10. Make sure the tool head attachment is not in contact with any object before starting the motor.
11. When in use, the electric motor of the tool may heat up (risk of burns). Avoid contact with skin, clothing or any flammable products (risk of explosion) during and after use.
12. No one other than the operator is authorized within a 3 metre radius.

2.4. SAFETY MEASURES ASSOCIATED WITH PELLENC CHARGER AND BATTERY USE

Please refer to the PELLENC Alpha tool battery manual.

2.5. SAFETY SIGNAGE

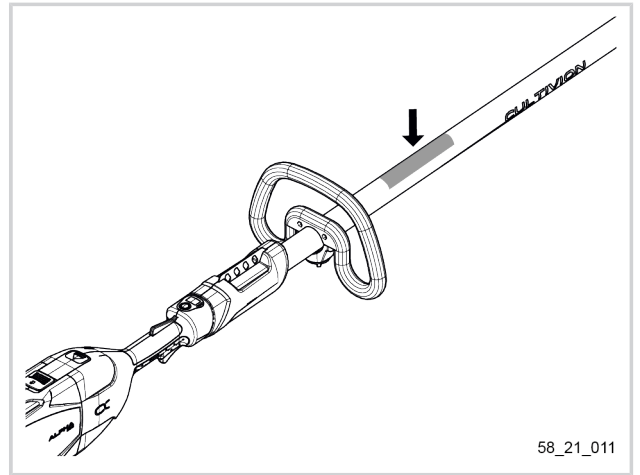
California State Proposition 65:



Caution

This product contains or emits a chemical recognized by the State of California to cause cancer, birth defects or other reproductive harm.

The sticker is located on the pole below the front handle.



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LwA sound power level guaranteed.



Risk of burns



Read the user guide.



Do not expose to any source of water (rain, flooded fields, water jet, etc.)

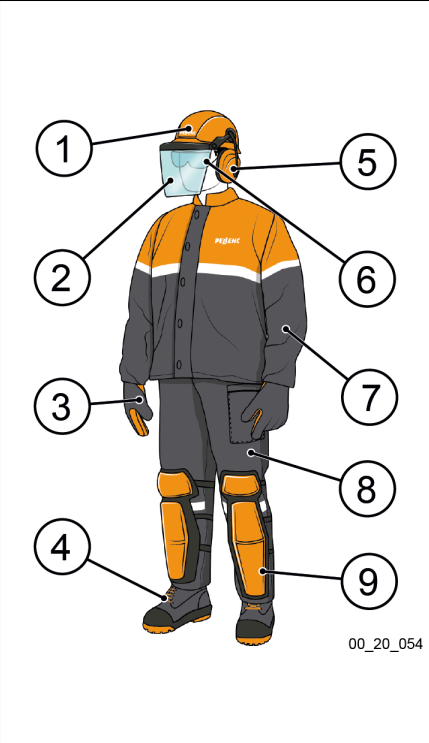


Wearing of safety pants and safety shoes is mandatory



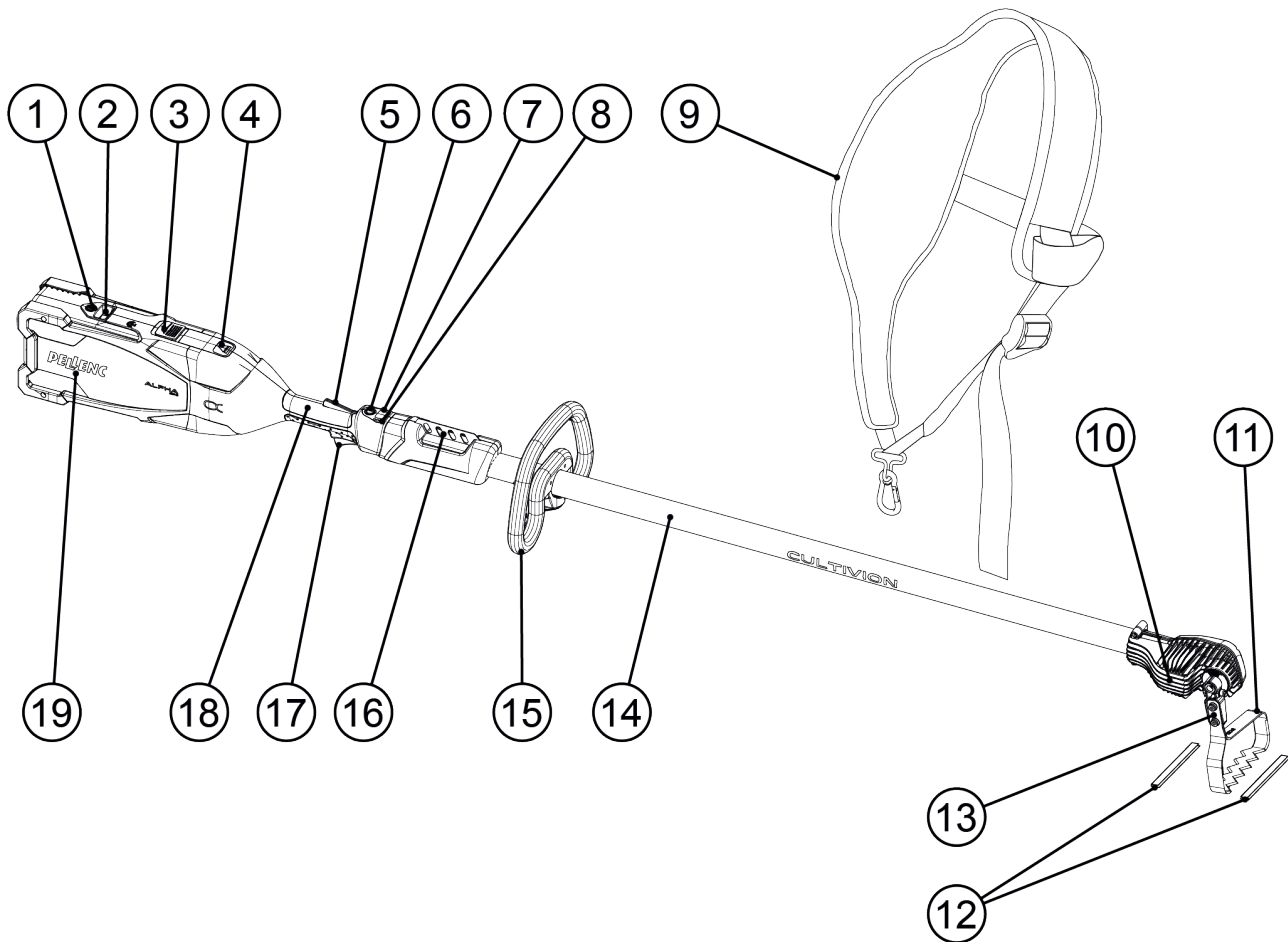
Sharp cutting tool: Keep your hands away from the hedge-trimmer blade.

2.6. PERSONAL PROTECTION EQUIPMENT

	Equipment	Wearing of	Description
	1 Safety helmet	/	/
	2 Protective visor	/	/
	3 Protective gloves	Recommended	Wear hand protection especially when working on the cutting tool.
	4 Robust, non-slip safety shoes	Mandatory	When operating the machine, always wear non-slip safety shoes. Do not operate the machine in bare feet or with sandals.
	5 Ear protection	Recommended	Wear approved ear protectors with sufficient noise attenuating effect.
	6 Safety goggles	Recommended	Wear approved eye protection.
	7 Safety jacket or over-sleeves	/	/
	8 Work trousers	Mandatory	Always wear clothing that covers the operator's legs when the machine is in operation.
	9 Shin pads	/	/

3. DESCRIPTION AND TECHNICAL FEATURES

3.1. DESCRIPTION OF THE CULTIVION ALPHA



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- | | |
|---|---|
| <ol style="list-style-type: none"> 1. Battery on/off button: turns the battery and the tool on or off. 2. Digital battery display: displays information related to the battery. 3. Battery safety lock. 4. Battery locking clip. 5. Safety throttle: prevents inadvertent actuation of the control trigger. 6. Tool handle on/off button: turns the tool on or off and selects the speed. 7. Tool handle digital display: displays battery and tool information (charge rate, errors, etc.). 8. LEDs: display the selected speed. | <ol style="list-style-type: none"> 9. Ergonomic carrying strap. 10. Head 11. Soil working blade. 12. Clip joint 13. Blade mounting part. 14. Pole 15. Front handle 16. Carrying eyelet: allows the ergonomic carrying strap to be attached. 17. Trigger control: Allows you to gradually increase the speed of the blade. 18. Rear handle 19. Battery alpha 260 / alpha 520 (supplied separately). |
|---|---|

3.2. CULTIVION ALPHA BOX CONTENTS

Check that the box contains the following items:

Name	reference
The Cultivion Alpha soil cultivator	163148
An ergonomic carrying strap	162970
A 16cm blade + clip-on seals	81251
A front handle assembly	163159
A blade mounting part	113568
A bag of screws and bolts	116693
An operating instructions manual	163161
A marketing flyer	117927
Warranty card	48642

3.3. TECHNICAL FEATURES

3.3.1. GENERAL CHARACTERISTICS OF THE TOOL

Model	CULTIVION ALPHA
Power	380 W
Tool voltage	43.2V
Weight with blade (without battery)	4.1 kg
Dimensions (l x w x h)	1900 x 400 x 300 mm
Width of work tool	depending on the model
Oscillation speed of the work tool	8 to 15 Hz

Recommendation for the use of tool speeds

Speed 1 (500 strokes/min)	Speed 2 (765 strokes/min)	Speed 3 (887 strokes/min)
Precision work Example: Vegetable growing	Standard work Example: Vineyards and green spaces	Intensive work Example: Vineyards, green spaces and difficult soils

3.3.2. BATTERY COMPATIBILITY AND BATTERY LIFE

Battery	Alpha 260	Alpha 520
Rated battery voltage	43.2 V ⁻⁻⁻	
Type of battery	12 times 2 elements included in 1 pack	12 times 4 elements included in 1 pack
Battery capacity	6 Ah	12 Ah
Battery power	259 Wh	518 Wh
Battery life***	2 hrs.	4 hrs.
Battery weight	2.5 kg	3.6 kg
Operating frequency band	13.56 Mhz , Receiver	

* Non-contractual values (estimate made with a 16cm blade for soil aeration work). The battery life may vary depending on the blades used and the type of work.

3.3.3. VIBRATION EMISSION VALUES AND SOUND PRESSURE LEVELS

The determination of noise levels and vibration rates is based on operating conditions at maximum rated speed. Values defined according to acoustic measurement standards NF EN ISO 11201 and NF EN ISO 3744.

	Maximum speed
Maximum A-weighted sound pressure level at the user's position (uncertainty of K=2.5 dB(A))	L _{pa} = 76.5 dB (A)

Symbol	Value	Unit	Reference	Remark
L _{wam}	91	dB(A)	1 pW	Measured sound power level
L _{wag}	92	dB(A)	1 pW	Guaranteed sound power level

The measurement of the measured sound power level and the guaranteed sound power level were carried out in accordance with the procedure laid down in Directive 2000/14/EC Annex V*.

CULTIVION ALPHA soil cultivator with 16 cm V-blade	Speed 3 (887 strokes/min)
Front handle,	15.5 m/s ²
Rear handle,	9 m/s ²
Measurement uncertainty, K	1.5

Vibration emission value according to EN ISO 62841-1.

Note

Equipped with the 16 cm blade, at speed 1 and no load, the vibration values of the tool are 3.5 m/s², which offers more comfortable working.

The measured sound power level and the guaranteed sound power level were measured without load.



Warning

Vibrations and noise emissions during actual use of the machine may differ from the total declared value, depending on how the machine is used.

It is necessary to identify safety measures to protect the operator. The tool, due to its operation, emits significant vibrations. The user must therefore adapt the frequency and time of daily use of the tool accordingly.

4. COMMISSIONING

For information about mandatory PPE when handling your tool, refer to Section 2.6, "Personal protection equipment"

Remove the tool from its packaging and check its contents, refer to Section 3, "Description and technical features".

Caution

Before any maintenance intervention on the tool:



1. Check that the battery is switched off, via the push button on the battery.
2. Disconnect the battery.

For more information, refer to the instruction manual supplied with the battery.

4.1. ASSEMBLING / DISMANTLING THE FRONT HANDLE

Mounting

1. Fit the front handle (15) onto the pole (14).

Note

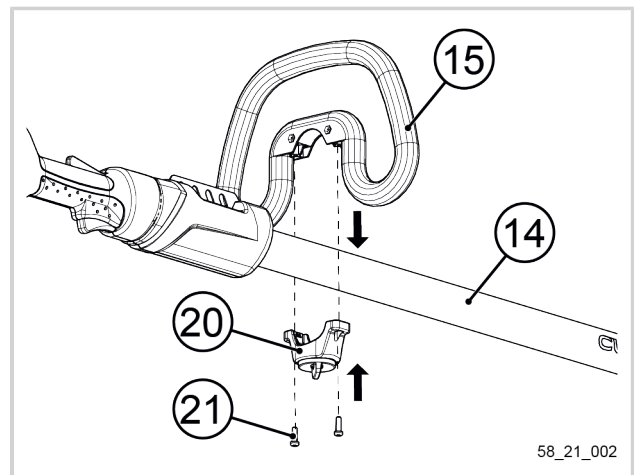
To obtain a comfortable position for the user, it is necessary to adjust the position of the front handle (15) on the pole (14).

2. Ensure that the adjustment knob (20) is loose.
3. Fit the adjustment knob (20) onto the pole (14).
4. Screw in the 2 screws (21) using a Torx 25 screwdriver.

Important

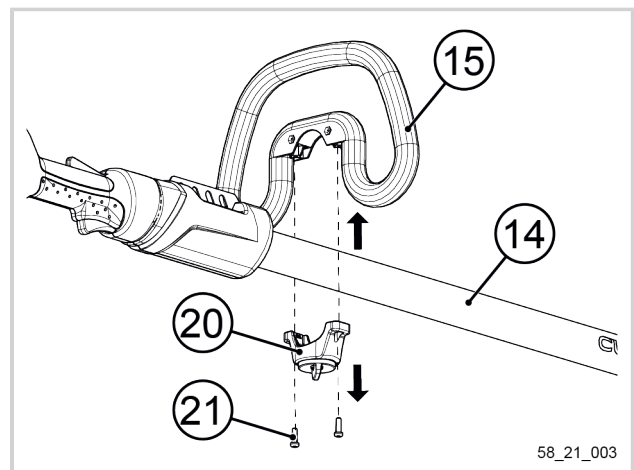
Tightening torque: 3 N.m.

5. Lock the adjustment knob (20) to block the position of the front handle (15) on the tool.



Disassembly

1. Unscrew the adjustment knob (20) of the front handle (15).
2. Remove the 2 screws (21) a Torx 25 screwdriver.
3. Remove the front handle (15) of the tool.
4. Remove the adjustment knob (20).



4.2. MOUNTING THE WORK TOOL ON THE HEAD OF THE CULTIVION ALPHA



Caution

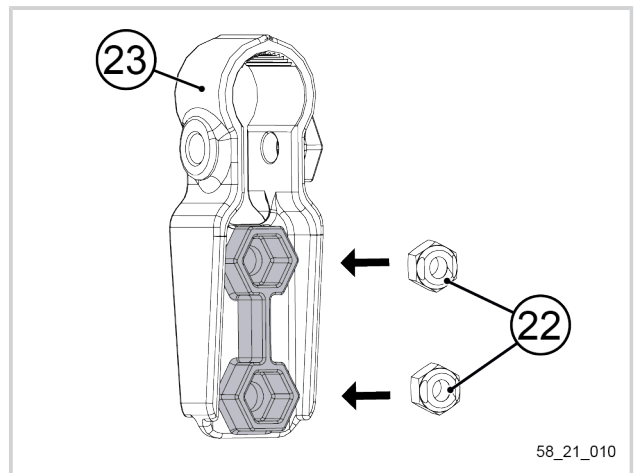
Always wear protective gloves when handling the tool.

4.2.1. FITTING THE BLADE MOUNTING ASSEMBLY

1. Insert the two nuts (22) in the spaces provided in the blade mounting part (23).

Important

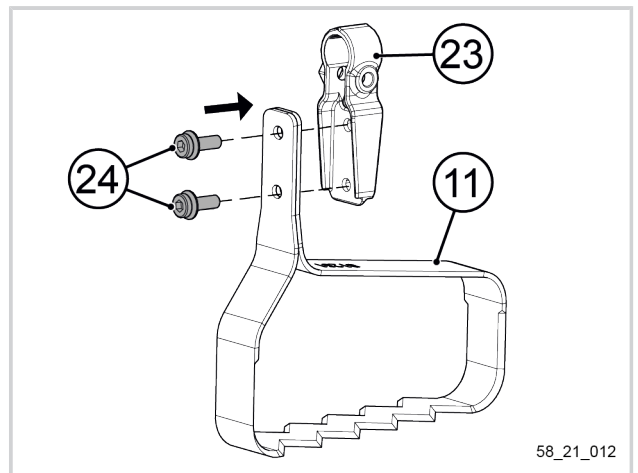
Check the mounting direction of the nuts, the domed part must face outwards.



2. Position the blade (11) on the blade mounting part (23).
3. Fit the clamping screws (24).
4. Tighten the clamping screws (24) using a 5 mm hex socket and a torque wrench.

Important

Tightening torque: 12 N.m.



Important

Ⓢ Never work with the clamping screws (24) not tightened.

Note

The procedure is identical for all blade models.

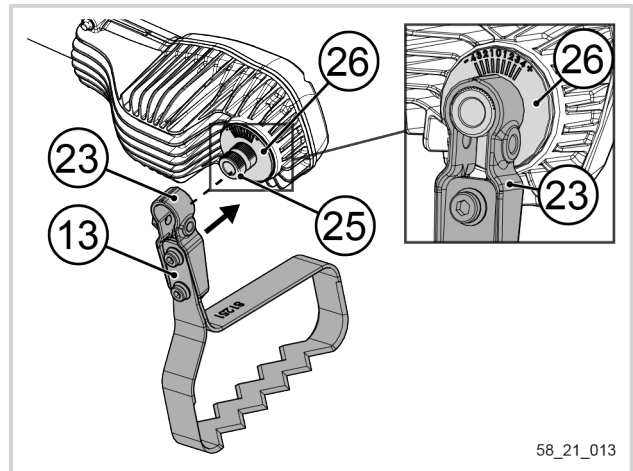
4.2.2. FITTING THE BLADE MOUNTING ASSEMBLY ONTO THE TOOL

1. Once fitted together, position the blade mounting assembly (13) on the output shaft (25), aligning the mark on the blade mounting part (23) with the "0" mark on the protective casing (26).

Note

The head of the machine has a graduated rotating shaft from -4 to +4, passing through a 0 position.

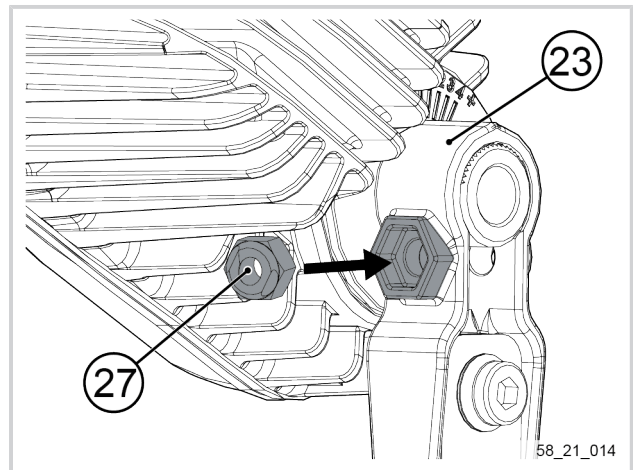
For further information on how to adjust the work tool position, see pages Section 5.7, "Adjusting the tool head tilting positions".



2. Place the nut (27) in the recess position provided on the blade mounting part (23).

Important

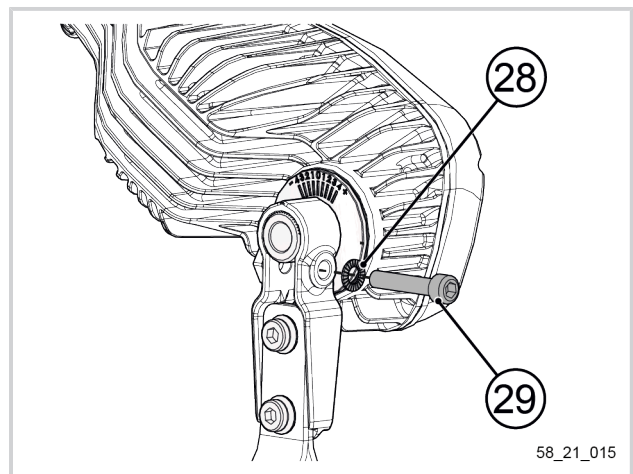
Check the mounting direction of the nuts, the domed part must face outwards.



3. Fit the washer (28) and screw (29).
4. Tighten the screw (29) using a 5 mm hex socket and a torque wrench.

Important

Tightening torque: 12 N.m.



Important

Ⓢ Do not forget the nut (27) and **the washer** (28) during assembly.

Important

Ⓢ Never work with the clamping screws (24) not tightened.

4.3. CONNECTING AND DISCONNECTING THE PELENC ALPHA 260 OR 520 BATTERY



Caution

 Use only PELENC ALPHA 260 or PELENC ALPHA 520 batteries to power the tool.

4.3.1. BATTERY CONNECTION



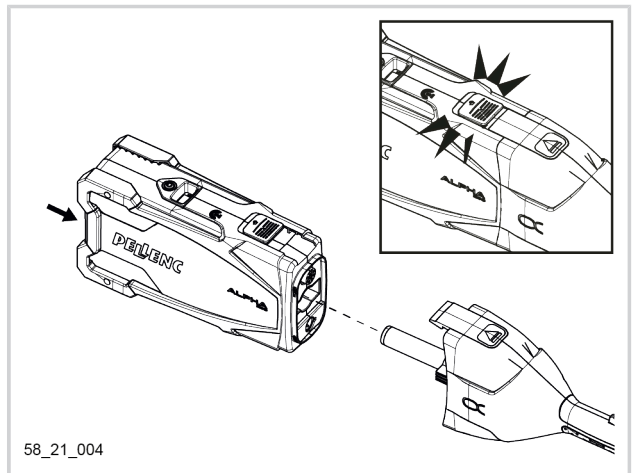
Warning

Be sure to keep your fingers out of the connection area between the tool and the battery.

Important

Check that there is no foreign matter in the connection area between the tool and the battery.

1. Position the battery with the digital display of the battery facing up.
2. Push in the battery until the locking clip engages and the safety lock is closed.



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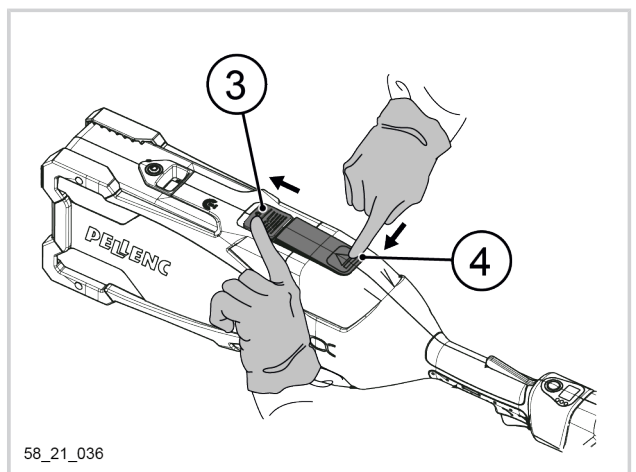


Warning

The lock prevents unintentional disconnection. Do not start the tool without checking that the clip is locked.

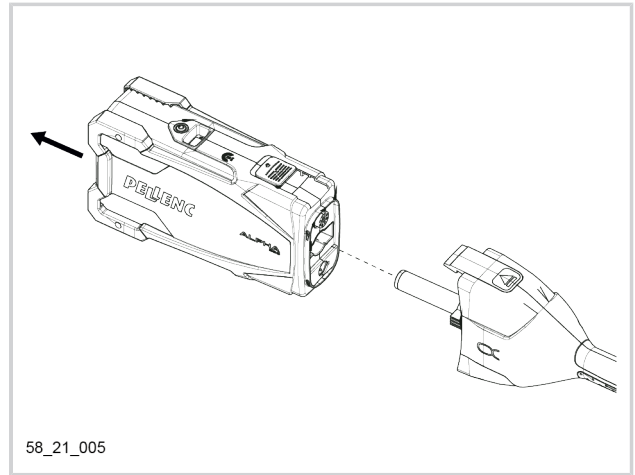
4.3.2. DISCONNECTING THE BATTERY

1. Pull the safety lock (3) to open it.
2. Press the locking clip (4) while keeping the safety lock open.



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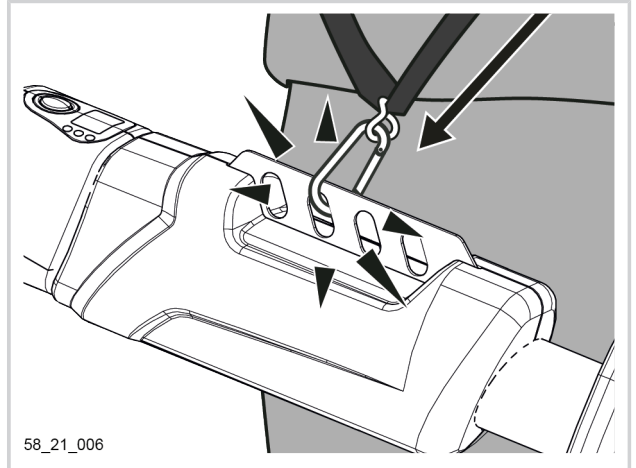
3. Remove the battery.



5. USAGE

5.1. ADJUSTMENT OF THE CARRYING STRAP AND BALANCING OF THE TOOL

1. Put on the carrying strap.
2. Put the harness hook on one of the 4 attachment positions available on the tool. Use the point of attachment that gives you the best balance of the tool to limit effort.



3. Adjust the length.



4. Pass the self-attaching fastener end of the strap under the main carrying strap.
5. Fold the self-attaching fastener over the main strap.



5.2. POWER ON OR OFF

5.2.1. POWERING ON

Check that the charge level is shown on the battery display:

The charge level is not displayed on the battery display:

- Press the battery On/Off button.
The battery should emit a beep.
The charge level is shown on the battery display.

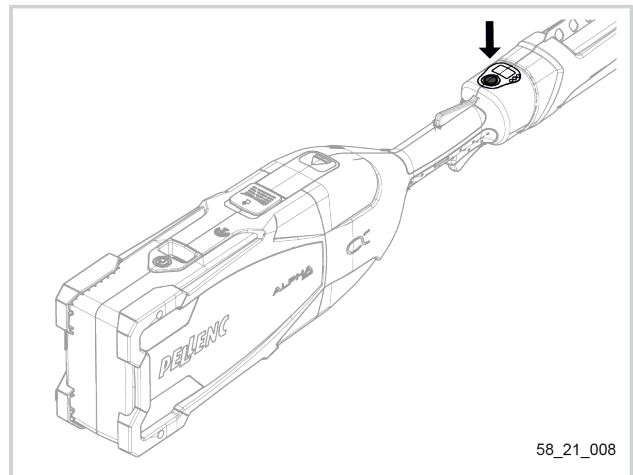
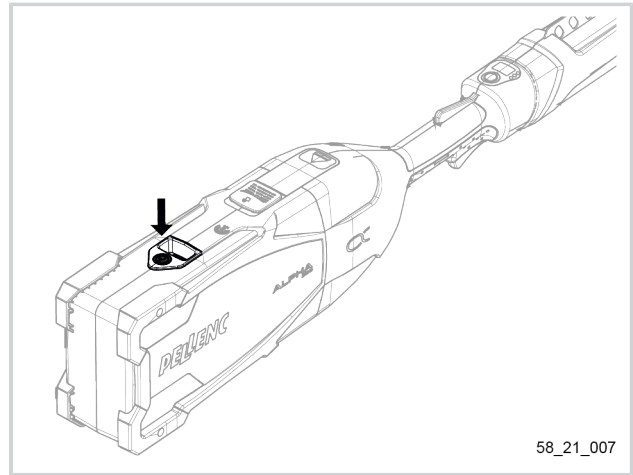
The charge level is displayed on the battery display:

Powering up can be done in 2 ways:

- Press the battery On/Off button.
The 3 "speed" LEDs should light up on the tool handle.
The charge level is shown on the handle display.
The current speed LEDs light up.

or

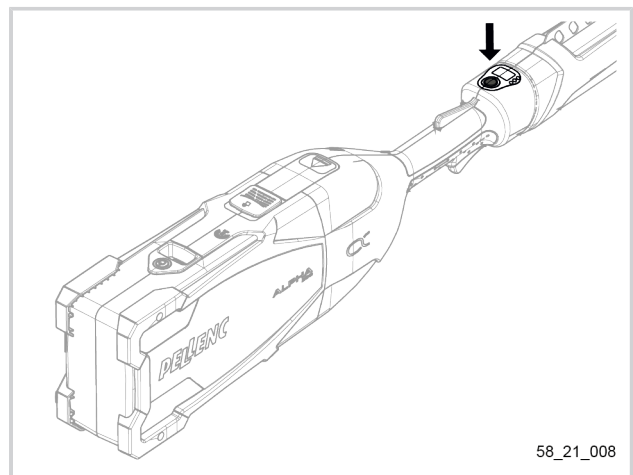
- Press the On / Off button on the tool handle for 1 second.
The battery should emit a beep.
The 3 "speed" LEDs should light up on the tool handle.
Then the charge level is displayed on the handle display.
The current speed LEDs light up.



5.2.2. POWERING OFF

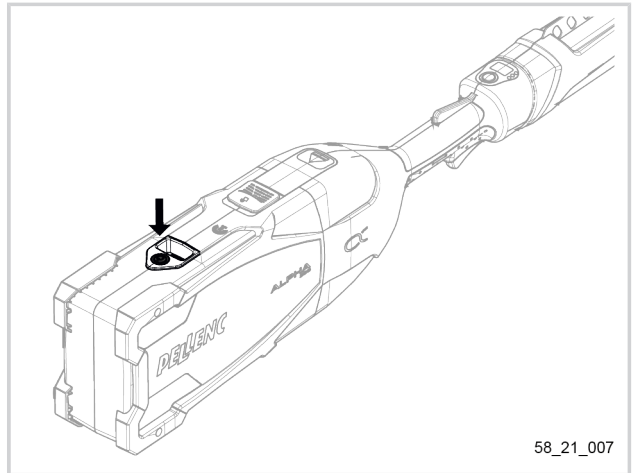
Powering off can be done in 2 ways:

- Press and hold the On / Off button on the tool handle for 3 seconds.
- "BY" is briefly displayed on the handle display.



or

- Press the battery On/Off button.



58_21_007

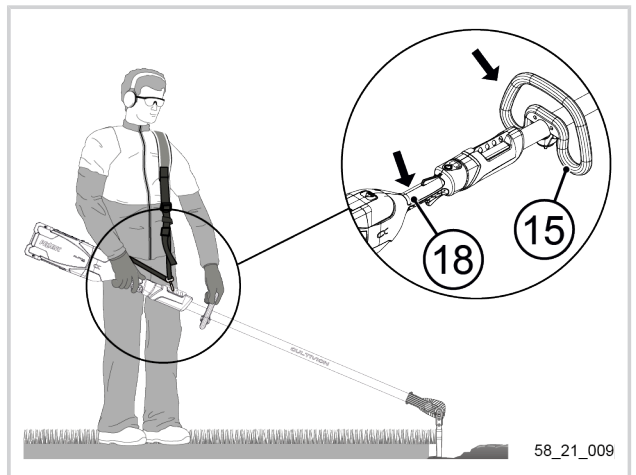
5.3. HOLDING THE TOOL

1. Hold the tool by the rear handle (18) and the front handle (15).
2. Be sure to check that the tool is not touching anything.
3. The Cultivion Alpha is in 'start' position.

Important

Do not work anywhere other than in soil.

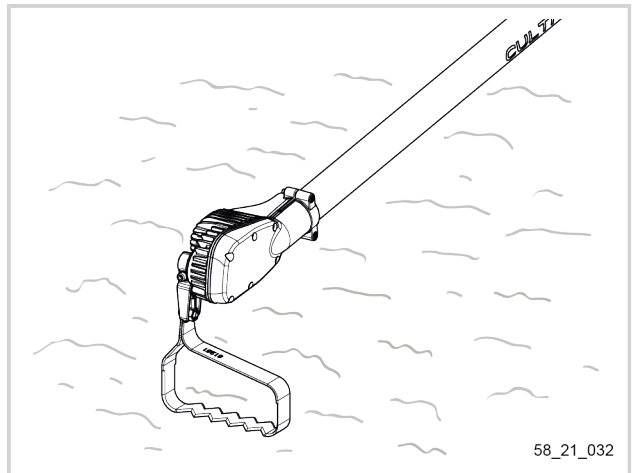
- Ⓢ Never remove the battery without checking that it is switched off.



58_21_009

5.4. START-UP IN NORMAL MODE

1. For improved stability hold the machine in its operating position, with the tool attachment held off the ground.



58_21_032

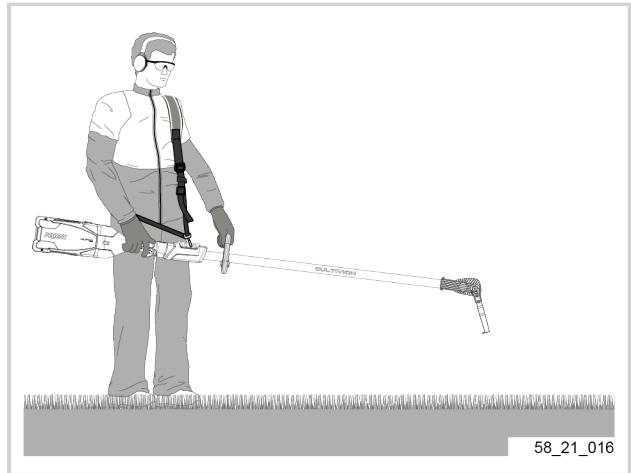
2. Switch on the battery by pressing the on/off button (refer to Section 5.2.1, "Powering on")

The battery capacity should be shown on the handle display.

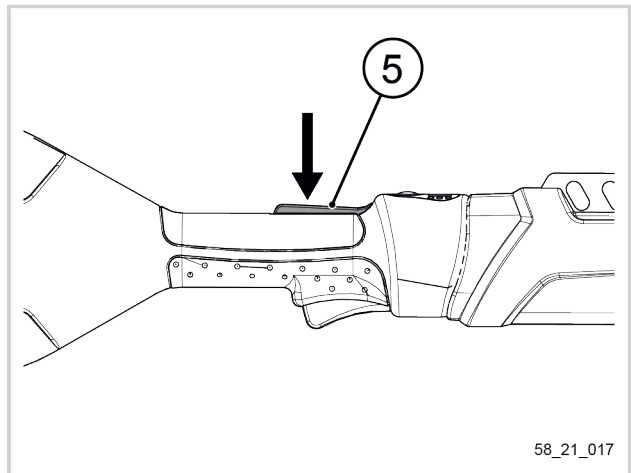
Important

Ⓢ Always start the motor before bringing the tool head into contact with the ground.

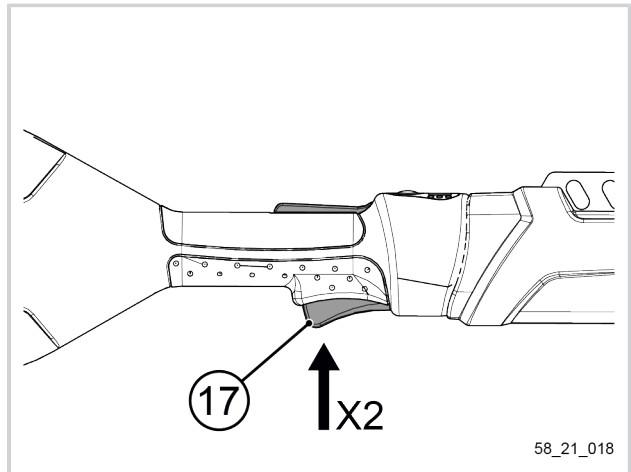
3. Lift the Soil Cultivator so that it is not touching the ground when starting up.



4. Press the safety trigger (5).
Keep the safety throttle pressed.



5. Press the control trigger (17) twice quickly to prime.

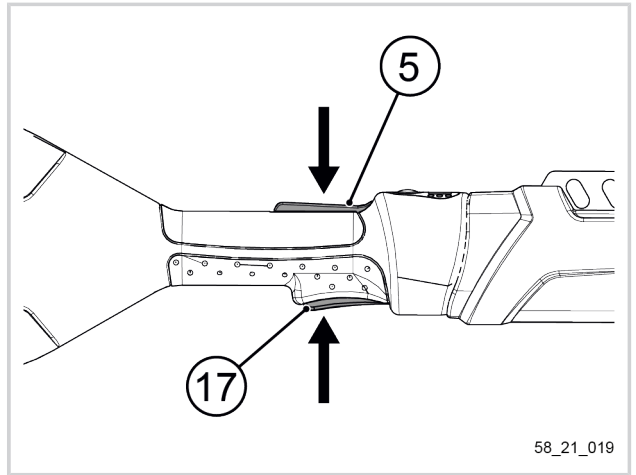


6. Keep the 2 triggers (5 and 17) pressed for the tool to work.

Note

Repeat priming if you have released the control handle for more than 5 seconds.

7. Gradually bring the tool into contact with the soil.
8. Release the control trigger (17) to stop the tool.



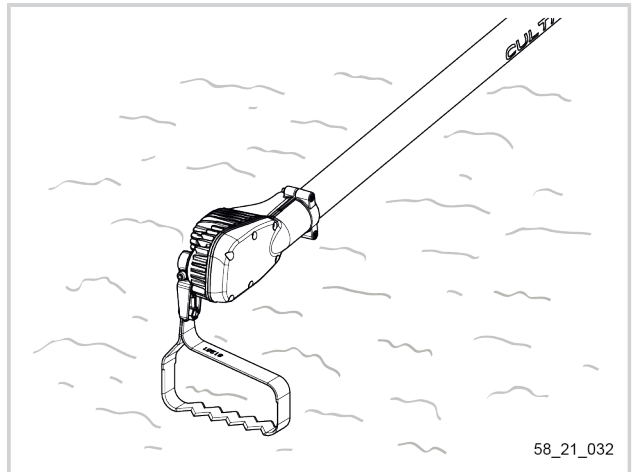
58_21_019

5.5. START-UP IN CONTINUOUS MODE

The Cultivion Alpha has a continuous mode which allows the user to work with the tool at constant speed without having to keep the trigger pressed.

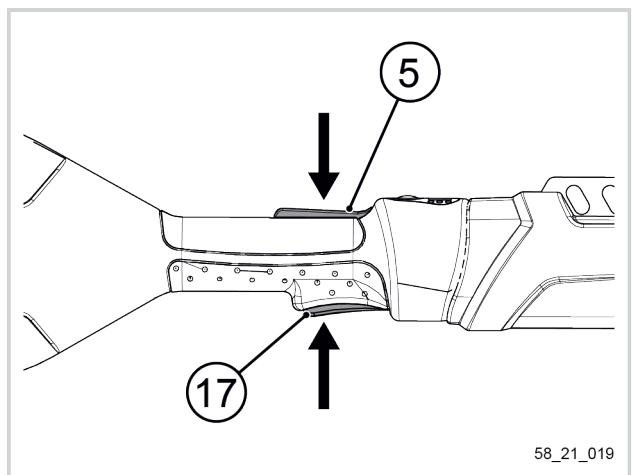
Activation of continuous mode

1. For improved stability hold the machine in its operating position, with the tool attachment held off the ground.



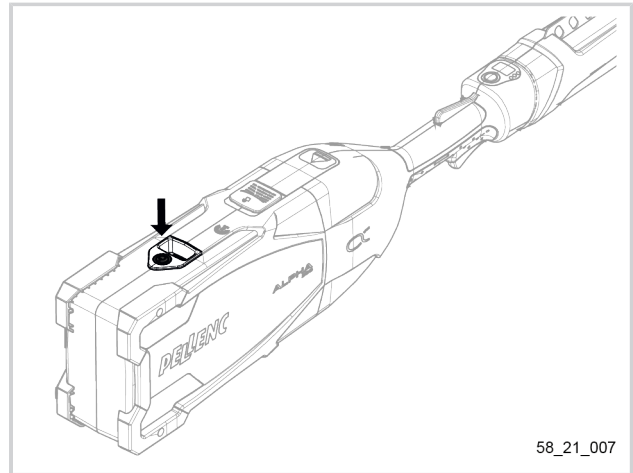
58_21_032

2. Hold down the 2 triggers (5 and 17).



58_21_019

3. While holding the control trigger (17), turn on the battery by pressing the on/off button (refer to Section 5.2.1, "Powering on")

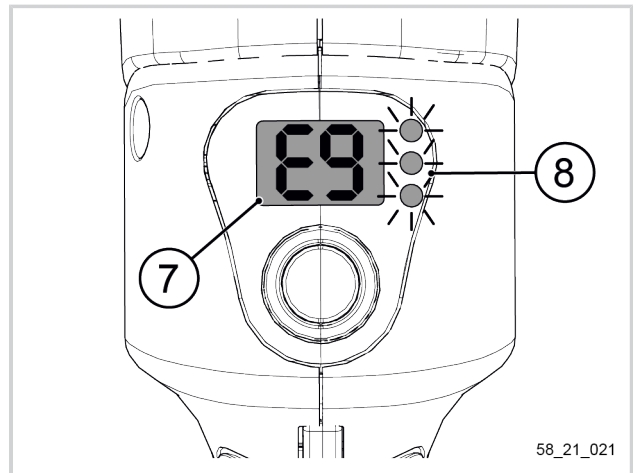


4. The code "E9" will appear on the tool display (7), release the control trigger (17).

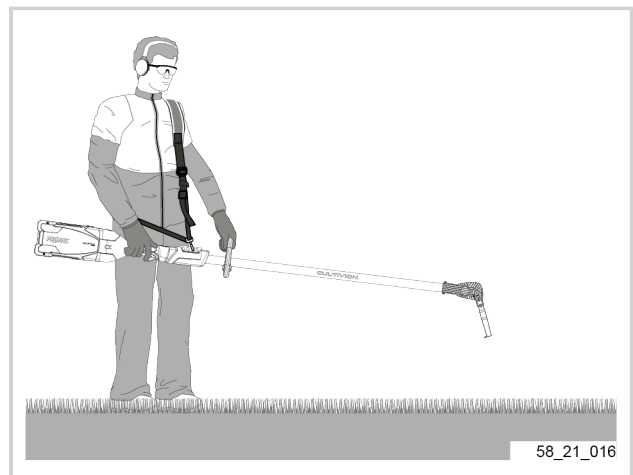
The tool is now 'On' and ready to operate in "continuous" mode.

Note

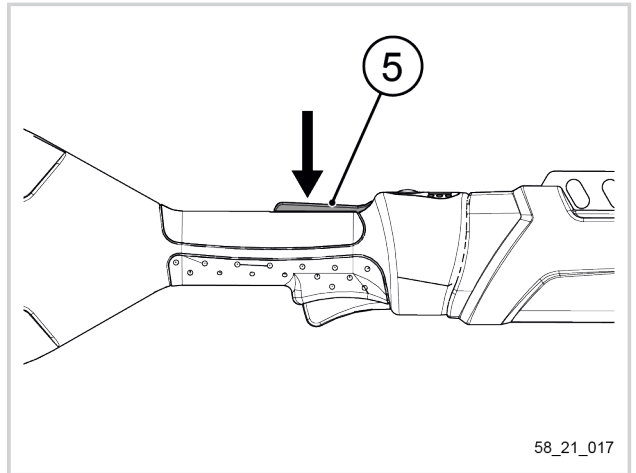
The LEDs next to the tool display will flash intermittently.



5. Lift the Soil Cultivator so that it is not touching the ground when starting up.



6. Press the safety trigger (5).
- Keep the safety throttle pressed.



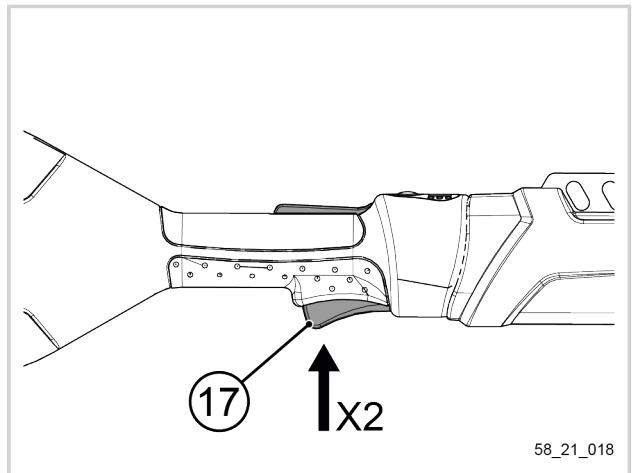
7. Press the control trigger (17) twice quickly to prime.
8. Release the 2 triggers (5 and 17).
9. The user works with the tool at a constant speed with the triggers released.
10. Gradually bring the tool into contact with the soil.

Note

Re-prime if you have released the control handle and the tool has been stopped for more than 5 seconds


Note

Hold down the 2 triggers (5 and 17) to stop the tool.



Caution

If any LED on the handle is on, the machine is still powered on.

 Always start the motor before bringing the tool head into contact with the ground.

Note

Let the Cultivion Alpha do the work by drawing it towards you without over-forcing.

5.6. SPEED SELECTION

Low speed: speed 1

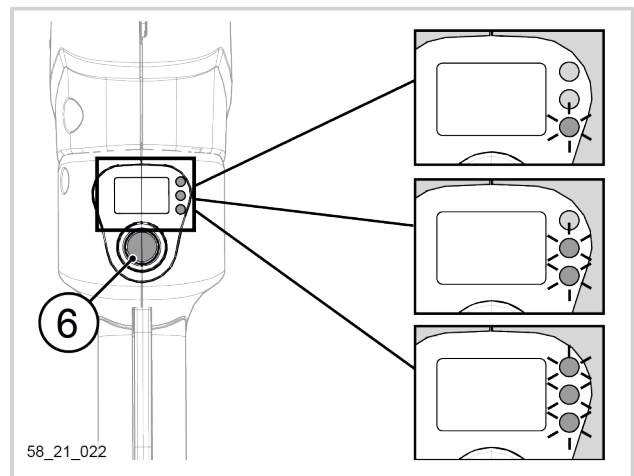
- Press the tool's on/off button (6) once.
- 1 LED lights up.

Medium speed = speed 2

- Press the tool's on/off button (6) twice.
- 2 LEDs light up.

High speed = speed 3

- Press the on/off button on the tool (6) three times.
- 3 LEDs light up.

**Caution**

These indicator LEDs may flash rapidly when the temperature of the tool approaches the safety threshold temperature.

5.7. ADJUSTING THE TOOL HEAD TILTING POSITIONS

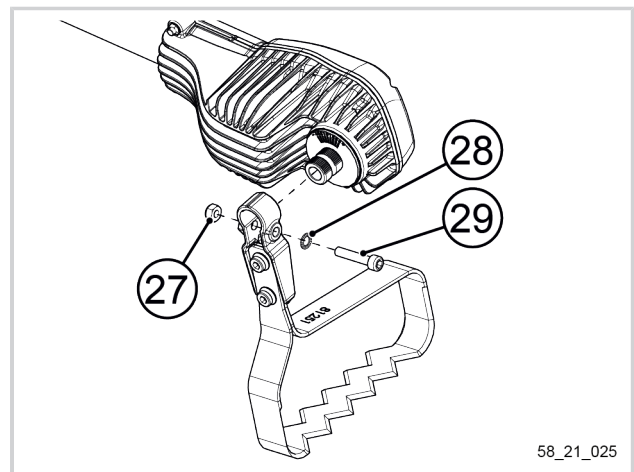
**Caution**

Always remove the battery and wear protective gloves when handling the blade.

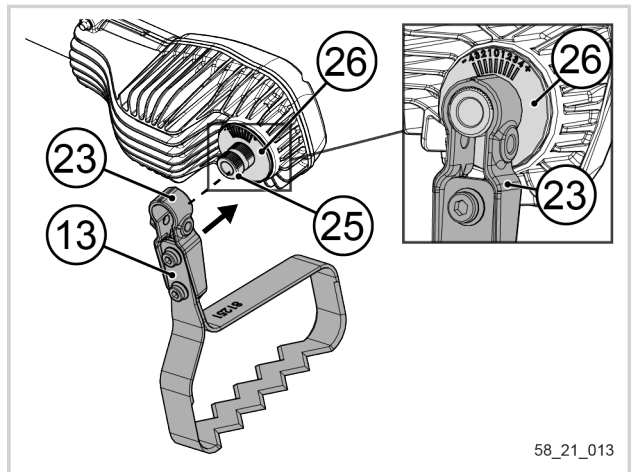
1. Remove the assembly: clamping screw (29), washer (28) and nut (27) using a 5 mm Allen key.
2. Take off the working tool assembly.

Important

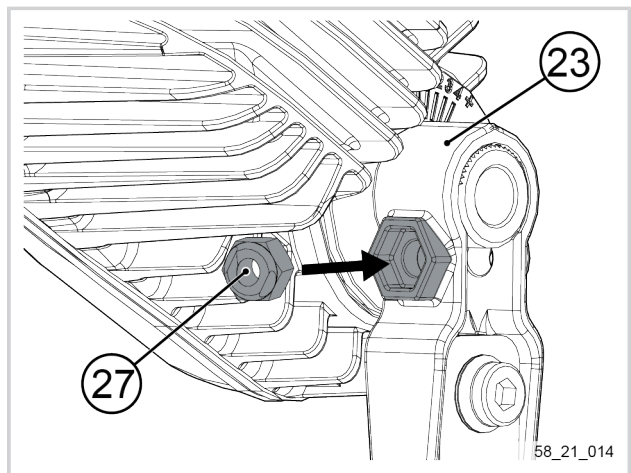
Ⓞ Be careful not to lose the nut (27) and washer (28).



3. Position the blade mounting assembly (13) on the output shaft (25), aligning the mark on the blade mounting part (23) with the required mark (-4 to +4) on the protective casing (26).
4. Push the work tool support into the casing (26) until it clicks into place.



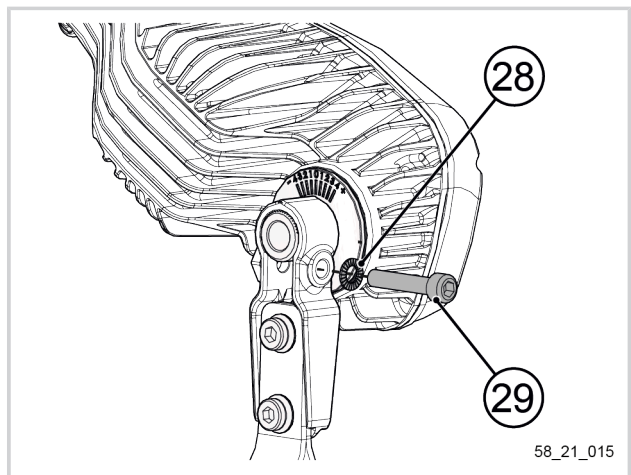
5. Place the nut (27) in the recess position provided on the blade mounting part (23).



6. Fit the washer (28) and screw (29).
7. Tighten the screw (29) using a 5 mm hex socket and a torque wrench.

Important

Tightening torque: 12 N.m.



The correct setting is reached when the machine moves back with almost no effort by the user.

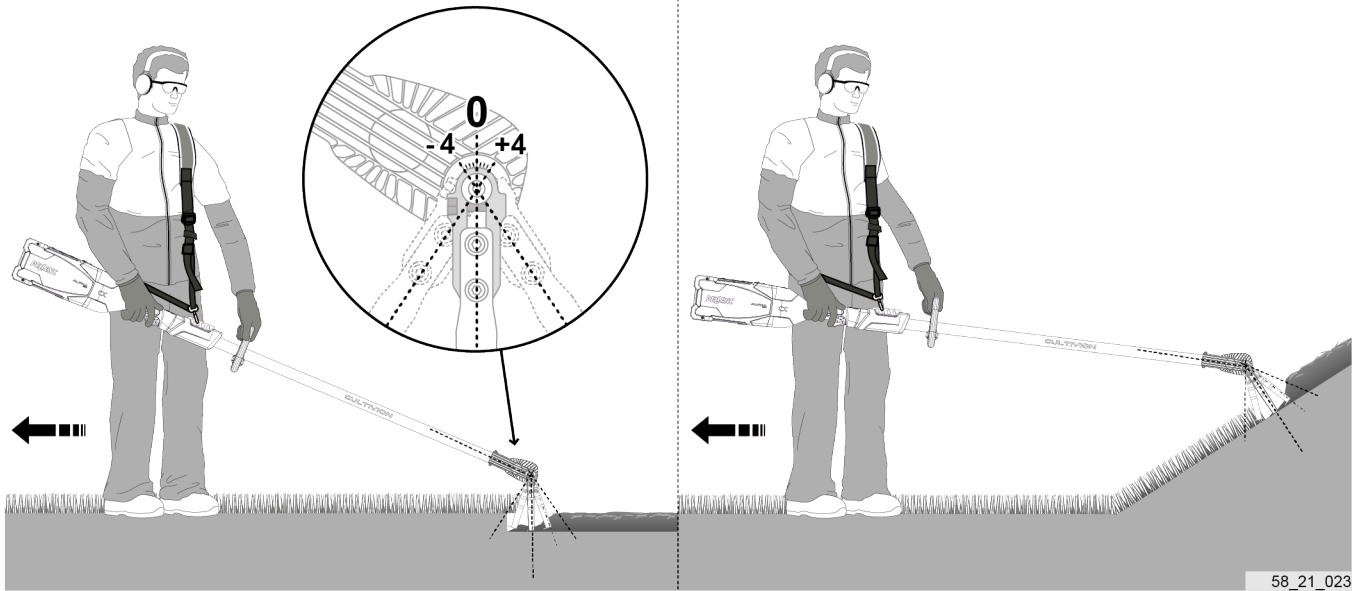
Ideally, the work is done while moving backwards.

To find the optimum setting, put the working tool in position “0”.

- If the machine tends to sink too far into the ground and does reverse towards the user, dismount the work tool following the procedure explained above and tilt it towards "+" side with respect to the position "0".
- If the machine tends not to dig deeply, and comes out of the soil jerking abruptly, tilt the work tool into a position towards the "-" side.
- Repeat the operation as many times as necessary until you find the optimum setting.

Note

It may be necessary to modify the tilt of the work tool depending on the topology of the terrain (embankments, ditches, mounds, etc.) and the size of the user.



58_21_023

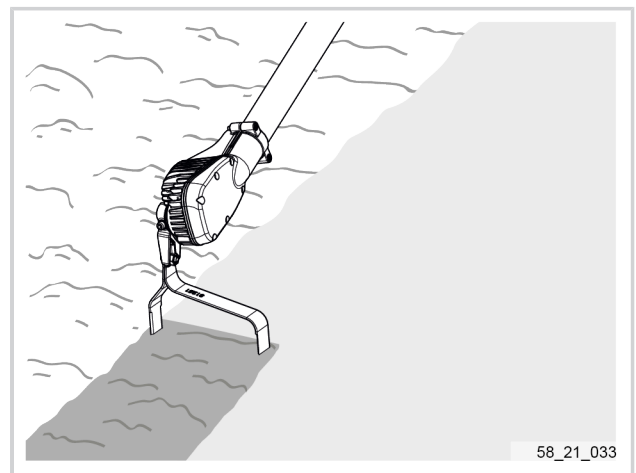
Note

The ideal working position is: left arm straight, left hand on the front handle, right arm slightly bent, right hand on the rear handle.

5.8. VARIOUS USES

The Cultivion Alpha is a soil cultivating or hoeing machine, that enables:

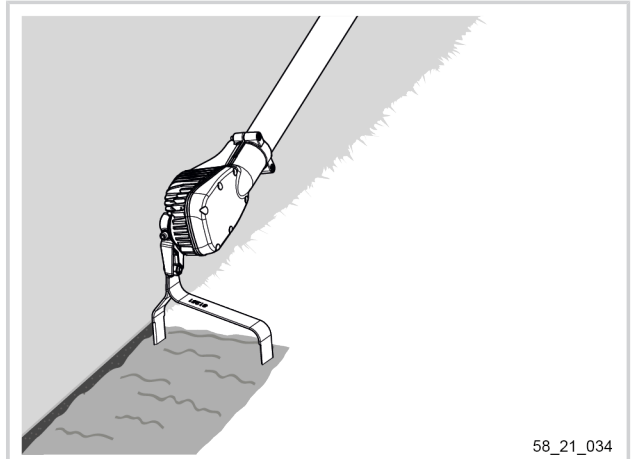
- Aerating, cultivating the soil
- Weeding
- Mixing compost, fertilizer, etc. into the soil.



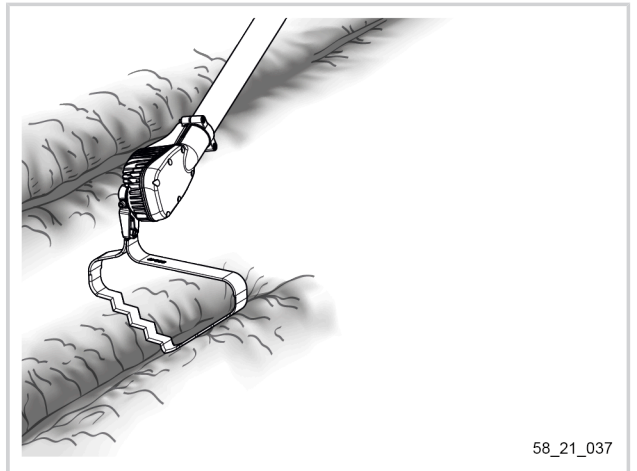
58_21_033

Cleaning borders and edges:

It can also be used to clean edges thanks to the sharp edges of its work tool.

**Digging furrows:**

It can also be used for digging furrows using the work tool (ref. 83849).




6. MAINTENANCE

6.1. MAINTENANCE TABLE

Maintenance tasks	At each start-up	After each use	Every year
Cleaning the tool (see Section 6.3, "Cleaning the tool")		X	
Visual inspection of the tool	X	X	
Checking the operation of the safety devices (see Section 6.4, "Checking of safety device functions")	X		
Checking that the blade is sharp (see Section 6.6, "Sharpening the work tool")	X		
Checking working tool clamp tightening (see Section 6.5, "Checking the work tool tightening")	X		
Have the tool inspected by an authorised distributor			X

Important

 Have your Cultivion Alpha overhauled every 200 hours or at least once a year.

6.2. MAINTENANCE ADVICE



Caution

Wear protective gloves when handling the tool.

Always disconnect the battery before performing maintenance on the tool.

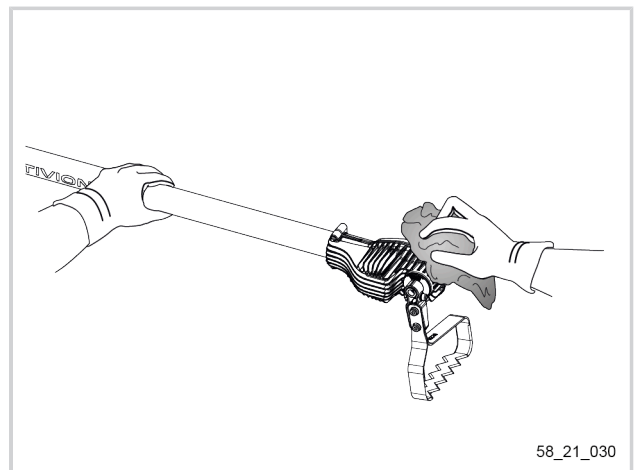
- Use products recommended by PELENC.
- In the event of any problem, consult an authorised PELENC distributor.

6.3. CLEANING THE TOOL

- Clean the tool with a damp cloth.
- Clean the motor cooling fins.

Important

Do not use a water jet directly on the tool and blade.

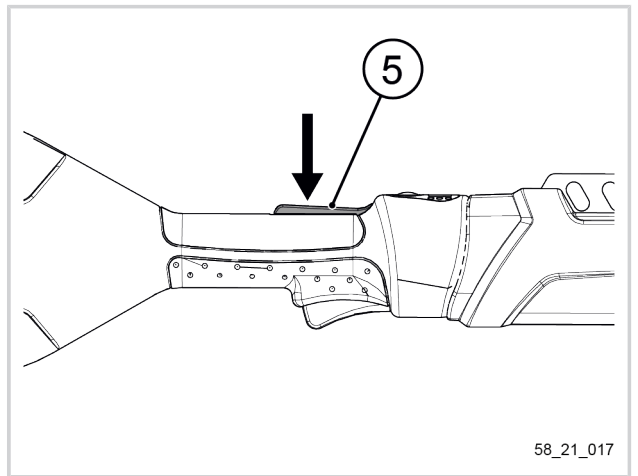


58_21_030

6.4. CHECKING OF SAFETY DEVICE FUNCTIONS

Check that the safety throttle trigger (5) is working properly.

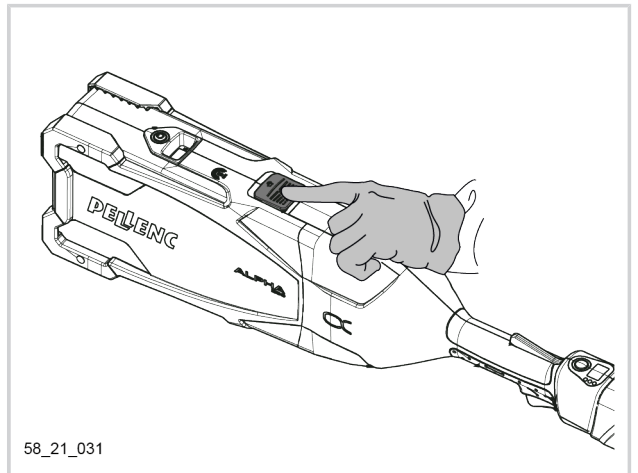
If a physical element (such as tape or clamp) obstructs the trigger, remove it.



58_21_017

Check the proper functioning of the click lock system.

If any physical item (e.g. tape, collar) interferes with the click-lock system, remove it.

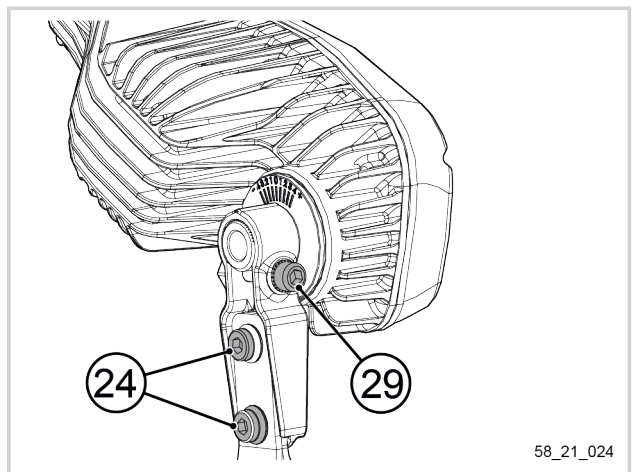


58_21_031

6.5. CHECKING THE WORK TOOL TIGHTENING

Battery is off, check the screw tightening torque:

1. (29): tightening torque 12 N.m.
2. (24): tightening torque 12 N.m.



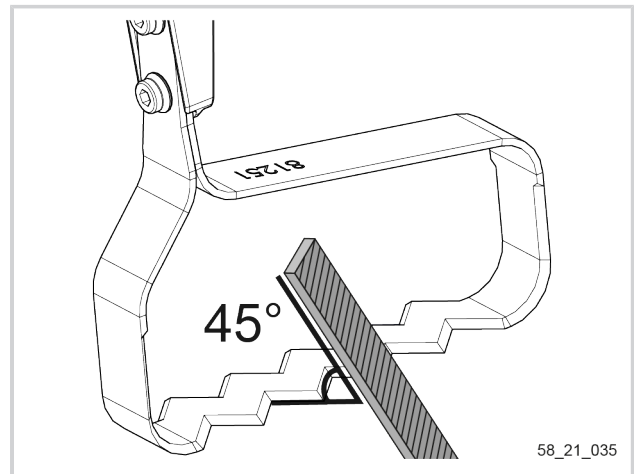
58_21_024

6.6. SHARPENING THE WORK TOOL

Sharpen the working tool lightly but often using a flat file.

Regularly check how sharp the blades are for the first few hours to determine the required frequency of sharpening.

Ensure the blade is at a 45° angle during sharpening.

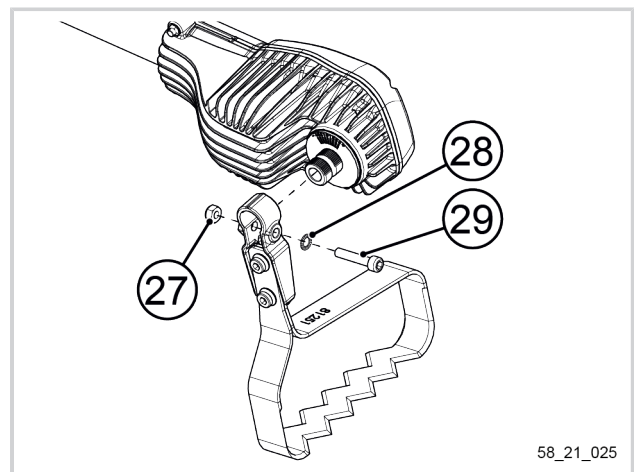


6.7. CHANGING THE WORK TOOL ATTACHMENT

1. Remove the assembly: tightening screw (29), washer (28) and nut (27) using a 5 mm hex. wrench.
2. Remove the tool head attachment from the shaft.

Important

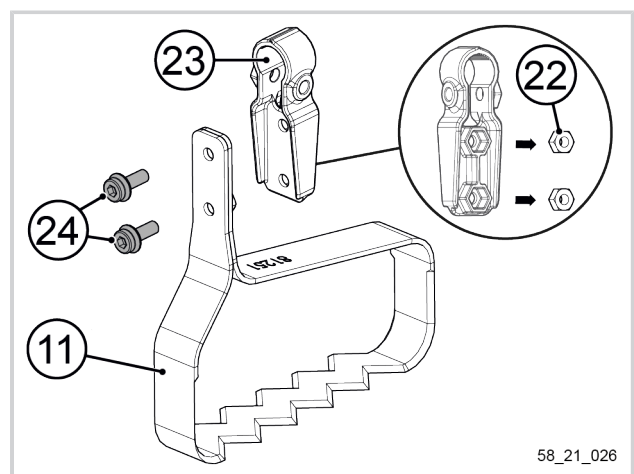
Ⓢ Be careful not to lose the nut (27) and washer (28).



3. Remove the clamping screws (24) using a 5 mm hex wrench.
4. Keep the two nuts (22) present on the blade mounting part (23).
5. Remove the blade (11).

Important

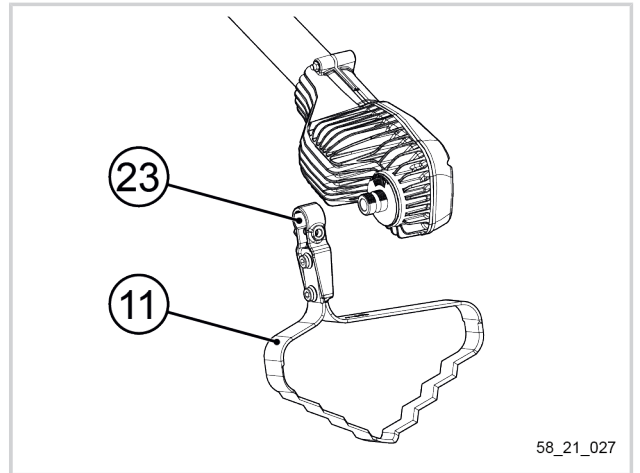
Ⓢ Never work with the clamping screws (24) not tightened.



6. Change the blade (11).
7. Fit the new blade (11) onto the blade mounting part (23).
8. Fit the head onto the tool (refer to Section 4.2, "Mounting the work tool on the head of the Cultivion Alpha").

Note

The procedure is identical for all blade models.



58_21_027

7. INCIDENTS AND TROUBLESHOOTING

7.1. TABLE OF INCIDENTS AND BREAKDOWNS - TROUBLESHOOTING

Note

Diagnostics display codes: When the battery is connected to the tool, the information is shown on the tool digital display, and is no longer displayed on the battery digital display.

Incident / break-down	Visual indicators			Probable cause	Checks	Solutions and repair
	Battery LEDs	Tool handle LEDs	Diagnostic display code			
The tool does not start	Off	Off	/	Battery is off	Battery switch	Press the battery switch (User)
	On	Off	/	Communication problem with battery	Check that the battery is properly connected	Connect the battery correctly (User)
			/	Battery	Check that the battery is not completely discharged	Recharge the battery (User)
			/	Circuit board	At an authorised PELLENC distributor	Replacement of defective part (PELLENC authorised distributor)
		On	/	Trigger no longer functions	At an authorised PELLENC distributor	Replacement of defective part (PELLENC authorised distributor)
			/	Circuit board	At an authorised PELLENC distributor	Replacement of defective part (PELLENC authorised distributor)
			/	The machine is blocked in the soil	Check that the tool is not stuck in the ground	Free the tool from the ground (User)
	/	Trigger priming not done properly	Check trigger priming	Make sure the trigger is properly primed. See Section 5.4, "Start-up in normal mode"(User)		

Incident / break-down	Visual indicators			Probable cause	Checks	Checks
	Battery LEDs	Tool handle LEDs	Diagnostic display code			
The tool does not start	On	On	E1	Abnormal current	At an authorised PELLENC distributor	Replacement of defective part (PELLENC authorised distributor)

Incident / break-down	Visual indicators			Probable cause	Checks	Checks
	Battery LEDs	Tool handle LEDs	Diagnostic display code			
			E2	Battery not compatible or faulty	Check the battery	Connect a compatible and functional PELENC battery. (User)
			E4	Tool temperature too high	Checking the conditions of use and condition of the tool.	Clean the motor cooling fins (see Section 6.3, "Cleaning the tool", sharpen the work tool, see Section 6.6, "Sharpening the work tool" (User)
			E5	Trigger problem	At an authorised PELENC distributor	Replacement of defective part (PELENC authorised distributor)
			E9	Trigger held down during power-up (normal and continuous modes)	Check the trigger	Release the trigger (User)
				Trigger failure on power-up or loss of magnet	At an authorised PELENC distributor	Replacement of defective part (PELENC authorised distributor)

Incident / break-down	Visual indicators			Probable cause	Checks	Checks
	Battery LEDs	Tool handle LEDs	Diagnostic display code			
The machine makes an unusual noise	On	On	/	Tightening of the two work tool screws	Tighten to 7.0 N.m.	Tighten to 7.0 N.m. (User)
			/	Tighten screw on working head	Tighten to 12.0N.m.	Tighten to 12.0 N.m. (User)
			/	Breakage of an internal part	Authorised PELENC distributor	Replacement of defective part (PELENC authorised distributor)
Display of "°C" flashing on the handle display	On	On	/	The tool is close to its temperature limit	Display of "°C" flashing on the handle display	- Reduce the speed of the blade or take a break - Clean the heat sink if necessary (User)
The tool stops during use	Off	Off	/	The tool has reached its temperature limit	4 beeps from the battery	Let the tool cool down for roughly 5 minutes (User)
			Stop then restart the battery, and see "The tool does not start"			

Important

Ⓒ Never attempt to dismantle the tool, under penalty of cancellation of the warranty. Contact your authorised repair person.

8. STORAGE AND TRANSPORT

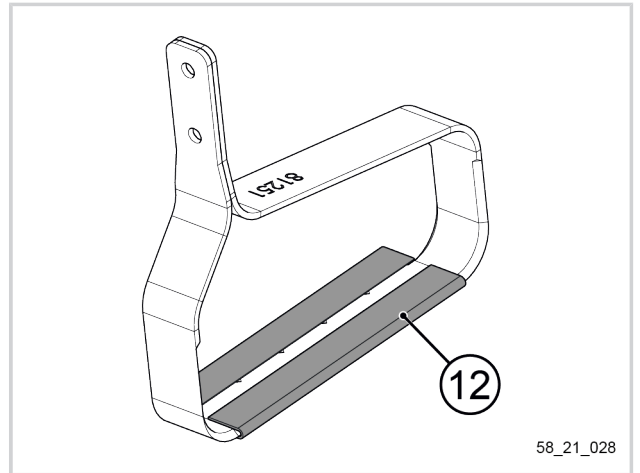


Caution

Wear protective gloves when handling the tool.

8.1. STORAGE

- Switch off the tool (see Section 5.2, “ Power on or off”).
- Disconnect the battery (see Section 4.3, “Connecting and disconnecting the Pellenc ALPHA 260 or 520 battery”).
- Store the battery (refer to the battery operating instructions).
- Clean the tool (see Section 6.3, “Cleaning the tool”).
- Store the tool in a dry place out of children's reach.
- Never store the tool at an ambient temperature above +45 °C.
- Always store a tool with its blade sharpened (see Section 6.6, “Sharpening the work tool”).
- Fit the clip-on seals (12).



8.2. TRANSPORT

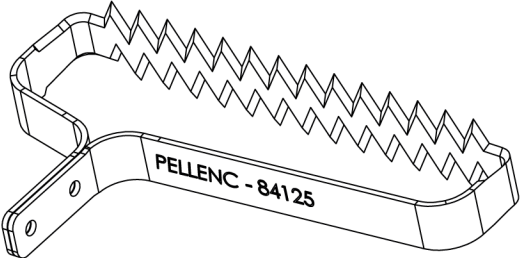
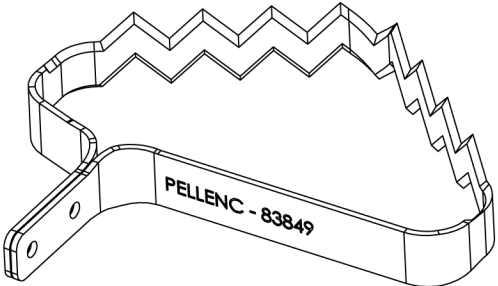
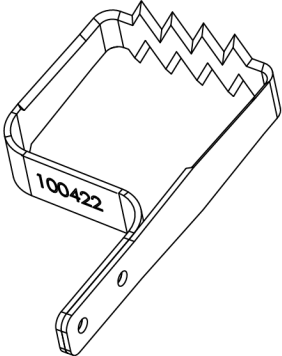
- Switch off the tool (see Section 5.2, “ Power on or off”).
- Disconnect the battery, see Section 4.3, “Connecting and disconnecting the Pellenc ALPHA 260 or 520 battery”.
- Fit the clip-on seals (12).
- Ensure that the tool and the battery are secured in the transport vehicle.

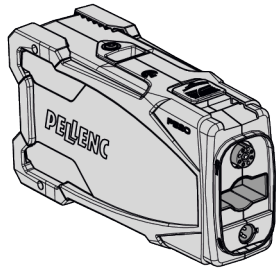
9. ACCESSORIES

9.1. ACCESSORIES INCLUDED

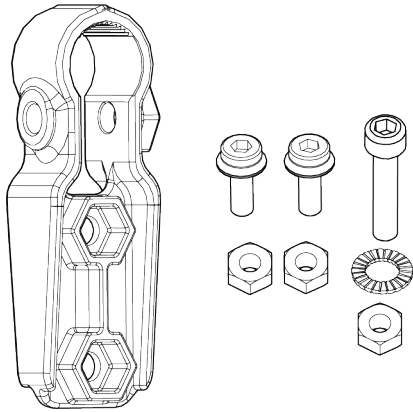
For a list of accessories included with the tool, see Section 3.2, "Cultivion Alpha box contents"

9.2. OPTIONAL ACCESSORIES

Name	reference	
<p>Working tool with a 220 mm wide blade with a reduced working depth.</p> <p>Used for surface clearing only.</p>	<p>84125</p>	 <p>58N_19_021</p>
<p>Working tool with 160 mm width V-shaped blade.</p> <p>Blade for working on heavy and stony ground.</p> <p>It is used for digging furrows and weeding around plants and shrubs while preserving the roots.</p>	<p>83849</p>	 <p>58N_19_019</p>
<p>Working tool with 80 mm wide blade.</p> <p>Used for digging between plants, in confined spaces. Its size helps reduce vibrations.</p>	<p>100422</p>	 <p>58N_19_020</p>

Name	reference	
PELENC ALPHA 260 bat- tery	57192	 <p data-bbox="1426 667 1509 689">53_20_071</p>
PELENC ALPHA 520 bat- tery	57193	

9.3. CONSUMABLES

Name	reference	
Cultivion blade attachment kit.	101003	 <p data-bbox="1426 1335 1509 1357">58_22_001</p>

10. WARRANTIES

10.1. GENERAL WARRANTIES

10.1.1. STATUTORY WARRANTY

10.1.1.1. LATENT DEFECTS WARRANTY

Apart from the commercial warranty provided for under Article II, Article 1641 of the Civil Code provides that "the seller is bound to a warranty on account of latent defects of the object sold which render it unfit for the use for which it was intended, or which would impair said use to the extent that the buyer would not have acquired it, or would only have given a lesser price for it, had he known of them".

Article 1648 of the Civil Code "The action resulting from latent defects must be brought by the purchaser within two years after the discovery of the defect."

10.1.1.2. LEGAL WARRANTY OF CONFORMITY

Article L.217-4 of the French Consumer Code "The seller delivers goods in conformity with the contract and is liable for defects of conformity existing upon delivery".

The seller is also liable for any lack of compliance resulting from the packaging, assembly or installation instructions whenever its contractual liability is engaged in this regard or the latter are carried out under its responsibility.

Article L.217-5 of the French Consumer Code "Goods are compliant with the contract":

1. Where they are fit for the purpose normally expected of similar goods and, where applicable:
 - If it matches the description given by the seller and possesses the qualities that were presented to the purchaser in the form of a sample or model;
 - If it possesses the qualities that a purchaser can reasonably expect given the public statements made by the seller, the producer or its representative, especially in advertising or labelling;
2. Or, if it has the characteristics defined by mutual agreement of the parties or is fit for any particular purpose that the buyer made known to the seller and that the latter accepted.

Article L.217-12 of the Consumer Code "legal action resulting from lack of conformity lapses two years after delivery of the goods".

10.1.2. COMMERCIAL WARRANTYPELLENC

10.1.2.1. CONTENT

10.1.2.1.1. GENERAL INFORMATION

In addition to legal warranties, client users benefit from the commercial warranty on products PELLENC covering the exchange and replacement of parts recognised as being out of order, due to machining defects, assembly defects or material defects, whatever the cause.

The warranty is fully integral to the product sold by PELLENC.

10.1.2.1.2. SPARE PARTS

The commercial warranty also covers original PELLENC spare parts, excluding labour and to the exclusion of certain parts of each product provided at delivery.

10.1.2.2. DURATION OF THE WARRANTY**10.1.2.2.1. GENERAL INFORMATION**

PELLENC Products are guaranteed under the commercial warranty as from delivery to the customer for a period of two (2) years for products connected to a PELLENC battery, and for a period of one (1) year for other PELLENC products.

10.1.2.2.2. SPARE PARTS

PELLENC Replacement parts replaced under the product warranty are guaranteed under the commercial warranty as from delivery of the PELLENC product to the customer user for a period of two (2) years for products connected to a PELLENC battery, and for a period of one (1) year for other PELLENC products.

In the case of products connected to a PELLENC battery, parts that are replaced under the product warranty after the 12th month of use, are covered for a period of one (1) year.

10.1.2.2.3. WARRANTY EXCLUSIONS

Excluded from the commercial warranty are products that have been subject to abnormal use, or were used under conditions and for purposes other than those for which they were manufactured, especially in the case of non-compliance with conditions stipulated in this operating instructions manual.

It does not apply in case of shock, fall, neglect, lack of supervision or maintenance or in case of transformation of the product. Also excluded from the warranty are products that have been subject to tampering, alteration or modification by the customer user.

Wear parts and/or consumables cannot be covered by the warranty.

10.1.2.3. IMPLEMENTATION OF THE COMMERCIAL WARRANTY**10.1.2.3.1. PRODUCT COMMISSIONING AND COMMISSIONING DECLARATION**

No later than eight days after the delivery of the goods to the customer user, the DISTRIBUTOR shall complete the computerized declaration of commissioning form in order to activate the latter on the website www.pellenc.com, under the heading "extranet", menu "Pellenc Extranet Service", using the identifier previously issued by PELLENC.

Failing that, commissioning declaration will not be effective and implementation of the commercial warranty PELLENC will not occur. As a consequence thereof, the DISTRIBUTOR must ensure the financial burden of its intervention under the warranty without being able to pass on the cost to the client user.

The DISTRIBUTOR shall also undertake to complete the warranty card or the certificate of warranty and commissioning for self-propelled equipment provided with the product after having the client user sign and date it.

10.1.3. PAID AFTER-SALES SERVICE**10.1.3.1. GENERAL INFORMATION**

Malfunctions, breakdowns, breakages resulting from misuse, neglect or improper maintenance by the client user as well as malfunctions resulting from normal wear of the product are subject to the payment of after-sales service, even during the period of the legal and commercial warranty. After-sales service repairs that fall outside of the legal and commercial warranty also include maintenance, adjustments, diagnostics of all types, and cleaning without the present list being exhaustive.

10.1.3.2. WEAR PARTS AND CONSUMABLES

Wear parts and consumables also fall within the after-sales service.

10.1.3.3. SPARE PARTS

Paid after-sales service also covers original PELLENC spare parts, excluding labour and outside the legal and commercial warranty period.

In case of replacement of original PELLENC spare parts in the context of after-sales service, said latter are covered by a warranty of one year as from the installation date.

11. COMPLIANCE STATEMENTS

11.1. STATEMENT  OF COMPLIANCE: CULTIVION ALPHA

MANUFACTURER / ENTITY AUTHORIZED TO COMPILE THE TECHNICAL FILE	PELENC
ADDRESS	Quartier Notre-Dame - 84120 Pertuis (France)

We hereby declare that the machine referred to below as:

GENERIC DENOMINATION	Soil Cultivator		
FUNCTION	Soil cultivator		
COMMERCIAL NAME	Cultivion Alpha		
TYPE	Cultivion Alpha		
MODEL	Cultivion Alpha		
SERIAL No.	58W00001 - 58W49999	58X00001 - 58X49999	58Y00001 - 58Y49999

Complies with the relevant provisions of the machinery directive 2006/42/EC.

Complies with the provisions of the following European Directives:

- 2014/30/EU EMC Directive; 2011/65/EU ROHS Directive; 1907/2006 REACH Regulation; 2012/19/EU WEEE Directive

The following harmonised European standards have been used in part or in full:

- EN 62841-1: 2015 ; EN ISO 12100: 2010 ; EN 55014-1: 2017 + A11: 2020 ; EN 55014-2: 2015

SIGNED IN PERTUIS, DATED 27/01/2022

JEAN-MARC GIALIS

CHIEF EXECUTIVE OFFICER



12. STATEMENT OF COMPLIANCE: CULTIVION ALPHA

MANUFACTURER / ENTITY AUTHORIZED TO COMPILE THE TECHNICAL FILE	PELLENC
ADDRESS	Quartier Notre-Dame - 84120 Pertuis (France)

We hereby declare that the machine referred to below as:

GENERIC DENOMINATION	Soil Cultivator		
FUNCTION	Soil cultivator		
COMMERCIAL NAME	Cultivion Alpha		
TYPE	Cultivion Alpha		
MODEL	Cultivion Alpha		
SERIAL No.	58W00001 - 58W49999	58X00001 - 58X49999	58Y00001 - 58Y49999

Compliant with the following standards:

European: 2014/30/EU EMC Directive	Moroccan: Décret # 2574-14
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The following standards have been used in whole or in part:

European: EN 62841-1: 2015 EN ISO 12100: 2010 EN 55014-1: 2017 + A11: 2020 EN 55014-2: 2015	Moroccan: NM EN 62841-1: 2017 NM IN 55014-2: 2014 NM IN 55014-1: 2014 NM ISO 1200: 2017
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SIGNED IN PERTUIS, DATED 27/01/2021
JEAN-MARC GIALIS
CHIEF EXECUTIVE OFFICER



PELLENC

   www.pellenc.com

PELLENC
Quartier Notre Dame - 84120 Pertuis (France)

