

INSTRUCTION MANUAL



LIANGYE®

Cordless Pruning Shears

LGS770-5



Read before use.

INDENTIFICATION




1. Lower shear blade
2. Upper shear blade
3. Hex Bolt
4. Shear blade cover
5. Switch Trigger
6. Blades tightening nut
7. Soft Handle
8. Vents
9. Button of Battery Cartridge
10. Battery Cartridge
11. I/O switch
12. Hex Wrench
13. Machine lubricating oil
14. Inner hexagon wrench

EC Declaration Conformity

For European countries only

Liangye declares that the following Machine(s):
 Designation of Machine: Cordless Pruning Shears
 Conforms to the following European Directives:

		
LGS770-5	2006/42/EC 2014/30/EU 2011/65/EU	EN 62841-1 EN ISO 12100 EN 55014-1 EN 55014-2 EN IEC 63000
	Avrin Zheng/Product Management	Mark Chen/Head of Product Certification <i>Mark Chen</i>
Ningbo Liangye Electric Appliance Co., Ltd. QianHouChen Village, YunLong Town, Yinzhou, 315137 Ningbo, P.R. China		

SPECIFICATIONS

Model:	LGS770-5
Max. cutting capacity	30mm
Cutting Speed	1.4S/Time
Overall length (Bare tool)	300mm
Rated voltage	D.C.20V
Net weight (Bare tool)	0.95 kg

- Due to our continuing program of research and development, the specifications herein are subject to change without notice.
- Specifications and battery cartridge may differ from country to country.
- Weight, with battery cartridge, according to EPTA-Procedure 01/2003

Applicable battery cartridge and charger

battery cartridge	(1) LY770X-Li-20V(2) LY770XS-Li-20V
battery charger	(1) LY77-2150-3000G(B) (2) LY77-2200-2300G(B)

- Some of the battery cartridges and chargers listed above may not be available depending on your region of residence.

⚠ WARNING: Only use the battery cartridges and chargers listed above. Use of any other battery cartridges and chargers may cause injury and/or fire.

Symbols

The followings show the symbols used for the equipment. Be sure that you understand their meaning before use.

	Read instruction manual.
	Do not expose to moisture.
	Danger; be aware of thrown objects.
	Keep bystanders away.
	Wear protective gloves.
	Wear safety glasses.
	<p>Ni-MH Li-ion</p> <p>Only for EU countries Do not dispose of electric equipment or battery pack together with household waste material! In observance of the European Directives, on Waste Electric and Electronic Equipment and Batteries and Accumulators and Waste Batteries and Accumulators and their implementation in accordance with national laws, electric equipment and batteries and battery pack(s) that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.</p>

Intended use

The tool is intended for pruning twigs or branches.

Noise

The typical A-weighted noise level determined according to EN62841-1:

Model LGS770-5

Sound pressure level (L_{pA}) : 67 dB(A) or less
Uncertainty (K) : 3 dB(A)

The noise level under working may exceed 80 dB (A).

⚠ WARNING: Wear ear protection.

Vibration

The vibration total value (tri-axial vector sum) determined according to EN62841-1:

Model LGS770-5

Vibration emission (a_h) : 2.5 m/s² or less
Uncertainty (K) : 1.5 m/s²

NOTE: The declared vibration total value(s) has been measured in accordance with a standard test method and may be used for comparing one tool with another.

NOTE: The declared vibration total value(s) may also be used in a preliminary assessment of exposure.

⚠ WARNING: The vibration emission during actual use of the power tool can differ from the declared value(s) depending on the ways in which the tool is used especially what kind of workpiece is processed.

⚠ WARNING: Be sure to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

SAFETY WARNINGS

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.

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.

Work area safety

1. **Keep 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.

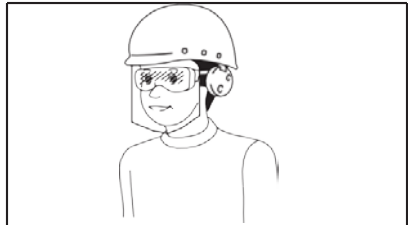
Electrical Safety

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 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.
7. **Power tools can produce electromagnetic fields (EMF) that are not harmful to the user.** However, users of pacemakers and other similar medical devices should contact the maker of their device and/or doctor for advice before operating this power tool.

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 a 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 energising power tools that have the switch on invites 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 jewellery. Keep your hair and clothing away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
7. **If devices are provided for the 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.
9. **Always wear protective goggles to protect your eyes from injury when using power tools. The goggles must comply with ANSI Z87.1 in the USA, EN 166 in Europe, or AS/NZS 1336 in Australia/New Zealand. In Australia/New Zealand, it is legally required to wear a face shield to protect your face, too.**



It is an employer's responsibility to enforce the use of appropriate safety protective equipments by the tool operators and by other persons in the immediate working area.

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, from the power tool before making any adjustments, 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.
9. **When using the tool, do not wear cloth work gloves which may be entangled.** The entanglement of cloth work gloves in the moving parts may result in personal injury.

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 designed 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 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.

Service

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.
3. **Follow instruction for lubricating and changing accessories.**

Pruning shears safety warnings

⚠ WARNING: Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

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.

1. **Use personal protective equipment. Always wear eye protection.** Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.
2. **Always wear protective goggles to protect your eyes from injury when using power tools.** The goggles must comply with ANSI Z87.1 in the USA, EN 166 in Europe, or AS/NZS 1336 in Australia/New Zealand. In Australia/New Zealand, it is legally required to wear a face shield to protect your face, too.



It is an employer's responsibility to enforce the use of appropriate safety protective equipments by the tool operators and by other persons in the immediate working area.

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 energising power tools that have the switch on invites accidents.
4. **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
5. **This tool is for pruning branches.** Do not use it for any job except that for which it is intended.
6. **Never allow children, persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge or people unfamiliar with these instructions to use the tool.** Local regulations may restrict the age of the operator.

7. **Children should be supervised to ensure that they do not play with the appliance.**
 8. **Never operate the tool while people, especially children, or pets are nearby.**
 9. **Do not overreach and keep balance at all times.** Always be sure of footing on slopes and to walk, never run.
 10. **Do not touch moving hazardous parts before the tool is disconnected from the mains and/or the battery pack is removed from the tool.**
 11. **Always wear substantial footwear and long trousers while operating the tool.**
 12. **Disconnect the supply and/or remove the battery pack from the tool:**
 - whenever the tool is left by the user,
 - before clearing a blockage,
 - before checking, cleaning or working on the tool,
 - after striking a foreign object to inspect the tool for damage,
 - if the tool starts to vibrate abnormally, for immediately check.
 13. **Never operate the tool with defective guards or shields, or without safety devices, or if the cord is damaged or worn.**
 14. **Avoid using the tool in bad weather conditions especially when there is a risk of lightning.**
 15. **Don't use the tool or perform battery charging operations in the rain.**
 16. **Don't leave the tool in rain or wet locations.**
 17. **Be careful not to catch foreign matter between the blades.** If the blades are jammed with foreign matter, immediately switch off the tool and disconnect the battery from the tool. Then remove the foreign matter from the blades.
 18. **Never hold the branch you are pruning with your free hand.** Keep your free hand away from the cutting area. Never touch the blades, they are very sharp and you may cut yourself.
 19. **Don't force the tool to make it cut.** You could slip and injure yourself or cut something else unintentionally.
 20. **Avoid cutting electrical wires that may be hidden.**
 21. **Always check the blades carefully before operation.**
 22. **Handle the blades with extreme care to prevent cuts or injury from the blades.**
 23. **Disconnect the battery from the tool after each use and before attempting to perform inspection or maintenance.**
 24. **When not in use, always keep the tool in its holster.**
4. **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.
 5. **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.
 6. **Do not dispose of the battery(ies) in a fire.** The cell may explode. Check with local codes for possible special disposal instructions.
 7. **Do not open or mutilate the battery(ies).** Released electrolyte is corrosive and may cause damage to the eyes or skin. It may be toxic if swallowed.
 8. **Do not charge battery in rain, or in wet locations.**

Service

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. **Follow instruction for lubricating and changing accessories.**
3. **Keep handles dry, clean and free from oil and grease.**

⚠ WARNING: DO NOT let comfort or familiarity with product (gained from repeated use) replace strict adherence to safety rules for the subject product. MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

Important safety instructions for battery cartridge

1. **Before using battery cartridge, read all instructions and cautionary markings on (1) battery charger, (2) battery, and (3) product using battery.**
2. **Do not disassemble battery cartridge.**
3. **If operating time has become excessively shorter, stop operating immediately.** It may result in a risk of overheating, possible burns and even an explosion.
4. **If electrolyte gets into your eyes, rinse them out with clear water and seek medical attention right away.** It may result in loss of your eyesight.
5. **Do not short the battery cartridge:**
 - (1) **Do not touch the terminals with any conductive material.**
 - (2) **Avoid storing battery cartridge in a container with other metal objects such as nails, coins, etc.**
 - (3) **Do not expose battery cartridge to water or rain.**

A battery short can cause a large current flow, overheating, possible burns and even a breakdown.

Battery tool use and care

1. **Avoid dangerous environment. Don't use the tool in damp or wet locations or expose it to rain.** Water entering the tool will increase the risk of electric shock.
2. **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.
3. **Use power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.

6. Do not store the tool and battery cartridge in locations where the temperature may reach or exceed 50 °C (122 °F).
7. Do not incinerate the battery cartridge even if it is severely damaged or is completely worn out. The battery cartridge can explode in a fire.
8. Be careful not to drop or strike battery.
9. Do not use a damaged battery.
10. The contained lithium-ion batteries are subject to the Dangerous Goods Legislation requirements.

For commercial transports e.g. by third parties, forwarding agents, special requirement on packaging and labeling must be observed. For preparation of the item being shipped, consulting an expert for hazardous material is required. Please also observe possibly more detailed national regulations.

Tape or mask off open contacts and pack up the battery in such a manner that it cannot move around in the packaging.

11. Follow your local regulations relating to disposal of battery.
12. Use the batteries only with the products specified by Liangye. Installing the batteries to non-compliant products may result in a fire, excessive heat, explosion, or leak of electrolyte.

SAVE THESE INSTRUCTIONS.

⚠ CAUTION: Only use genuine Liangye batteries. Use of non-genuine Liangye batteries, or batteries that have been altered, may result in the battery bursting causing fires, personal injury and damage. It will also void the Liangye warranty for the Liangye tool and charger.

Tips for maintaining maximum battery life

1. Charge the battery cartridge before completely discharged. Always stop tool operation and charge the battery cartridge when you notice less tool power.
2. Never recharge a fully charged battery cartridge. Overcharging shortens the battery service life.
3. Charge the battery cartridge with room temperature at 5 °C - 45 °C . Let a hot battery cartridge cool down before charging it.
4. Charge the battery cartridge if you do not use it for a long period (more than six months).

FUNCTIONAL DESCRIPTION

⚠ CAUTION: Always be sure that the tool is switched off and the battery cartridge is removed before adjusting or checking function on the tool.

Installing or removing battery cartridge

⚠ CAUTION: Always switch off the tool before installing or removing of the battery cartridge.

⚠ CAUTION: Hold the tool and the battery cartridge firmly when installing or removing battery cartridge. Failure to hold the tool and the battery cartridge firmly may cause them to slip off your hands and result in damage to the tool and battery cartridge and a personal injury.



- 1. Button 2. Battery cartridge

To remove the battery cartridge, slide it from the tool while pressing the button on the front of the cartridge.

To install the battery cartridge, align the tongue on the battery cartridge with the groove in the housing and slip it into place. Insert it all the way until it locks in place with a little click.

⚠ CAUTION: Always install the battery cartridge fully. If not, it may accidentally fall out of the tool, causing injury to you or someone around you.

⚠ CAUTION: Do not install the battery cartridge forcibly. If the cartridge does not slide in easily, it is not being inserted correctly.

Tool / battery protection system

The tool is equipped with a tool/battery protection system. This system automatically cuts off power to the motor to extend tool and battery life. The tool will automatically stop during operation if the tool or battery is placed under one of the following conditions:

Overload protection

When the battery is operated in a manner that causes it to draw an abnormally high current, the tool automatically stops. In this situation, turn the tool off and stop the application that caused the tool to become overloaded. Then turn the tool on to restart.

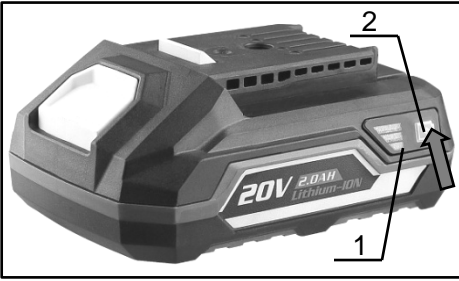
Overheat protection

When the battery is overheated, the tool stops automatically. In this case, let the tool and battery cool before turning the tool on again.

Overdischarge protection

When the battery capacity is not enough, the tool stops automatically. In this case, remove the battery from the tool and charge the battery.

Indicating the remaining battery capacity



- 1. Indicator lamps 2. Check button

Press the check button on the battery cartridge to indicate the remaining battery capacity. Below for detail remaining capacity information.

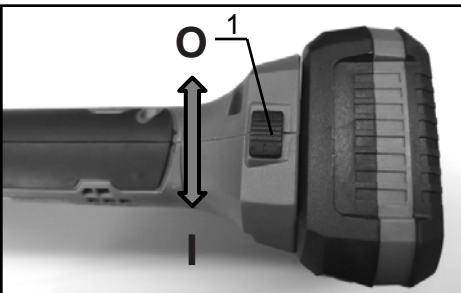
Indicator lamps		Remaining capacity
Lighted	Off	
		75% to 100%
		25% to 50%
		10% to 25%

NOTE: Depending on the conditions of use and the ambient temperature, the indication may differ slightly from the actual capacity.

Switch action

⚠ CAUTION: Before connecting the battery to the shears, always check to see that the switch trigger actuates properly and returns to the "OFF" position when released.

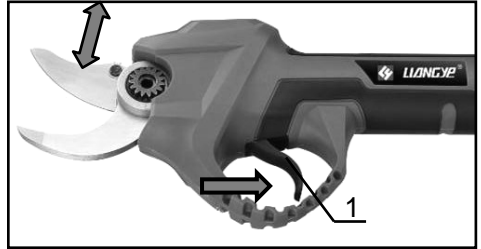
⚠ CAUTION: When not operating the tool, always make sure that the I/O switch is on the "O" side.



- 1. I/O switch

To turn on the tool, perform as follows:

1. Insert the battery cartridge.
2. Hold the shears firmly, and slide the I/O switch to the "I" (on) position. The tool makes two ticking sound to indicate that the I/O switch has been on the "I" (on) position.



- 1. Switch trigger

3. The shear blades are on locked-mode when the I/O switch is on. To release the lock, depress the switch trigger two times. The upper shear blade opens automatically.

4. To close the shear blade, depress the switch trigger once again.

To turn off the tool, perform as follows:

1. Depress down and hold on the switch trigger for about three seconds and then the tool makes two ticking sound.

2. Slide the I/O switch to the "O" (off) position. The tool makes continuous ticking sound to indicate that the I/O switch has been on the "O" (off) position.

3. Remove the battery cartridge.

Accidental re-start preventive function

Even if suddenly insert the battery cartridge and press the switch trigger when the I/O switch is locked on the "I (ON)" position and the shear blades are on unlocked-mode with the battery removed, the tool does not start to prevent accidental accident.

To start the tool in this situation, depress the switch trigger two times and then depress the switch trigger once by once.

Auto locked-mode and shut-off mode shift

For safety reasons, the tool shifts into shut-off mode automatically if the tool is left untouched for a certain period of time.

After approximately 10 minutes: The tool is shift into shut-off mode. Slide the I/O switch to the "O" (off) position once and slide the I/O switch to the "I" (on) position again, then depress the switch trigger two times to release the lock.

ASSEMBLY

⚠ CAUTION: Always be sure that the tool is switched off and the battery cartridge is removed before carrying out any work on the tool.

Replace the upper shear blade

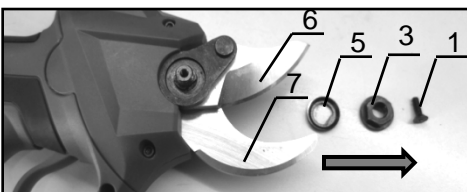
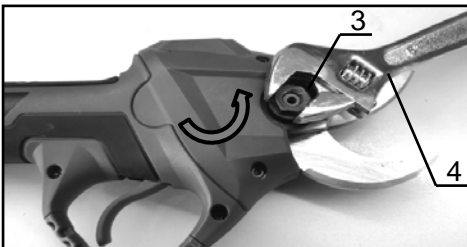
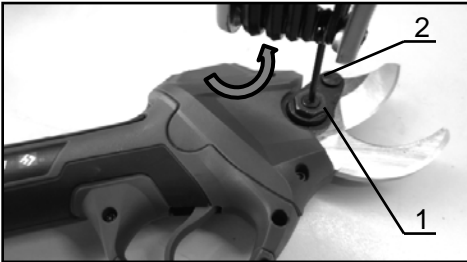
To remove the upper shear blade, perform following steps:

1. Insert the battery cartridge. Remove the blade cover.
2. Switch on the tool, and pull the switch trigger to open the upper shearblade fully.
3. With the upper shear blade open, switch off the tool and remove the battery cartridge.



4. Remove the hex bolt near the shear blades with the hex wrench by turning it anticlockwise.

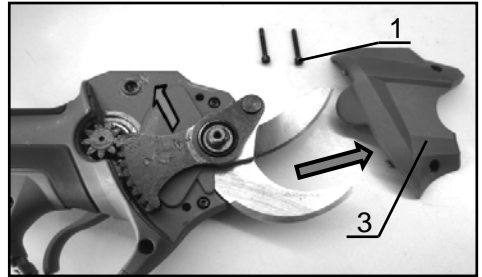
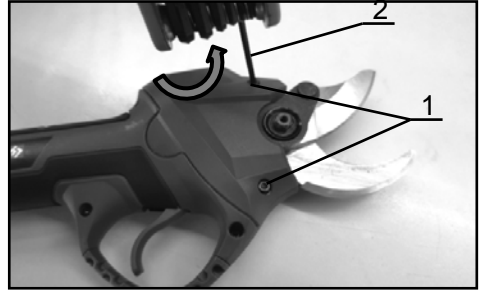
Remove the blades tightening nut near the shear blades with a suitable wrench or alike by turning it anticlockwise and take out the washer.



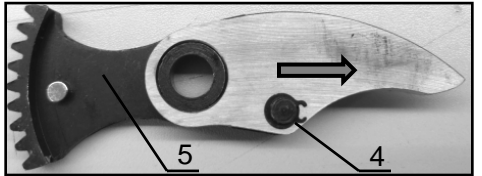
- 1. Hex Bolt 2. Hex wrench 3. Blades tightening nut
4. Wrench 5. Washer 6. Upper shear blade 7. Lower shear blade

5. Remove two bolts near the shear blades with the hexwrench by turning anticlockwise.

Remove the head cover by separating the tongue on the head cover from the groove of the housing. Take out the upper shear blade assembly.



6. Remove the E-ring on the link arm with a E-ring plier or alike and replace the upper shear blade with a new one.



- 1. Bolts 2. Hex wrench 3. Head cover
4. E-ring 5. Link arm

To install the upper shear blade, perform the removal steps in reverse. When installing the shear blades, pay attention to the following points:

1. Apply machine lubricating oil on to the shear blade.
 2. When installing the head cover, align the tongue of the head cover with the groove of the housing.
 3. Make sure all the bolts are securely tightened.
- After installing the blade, always adjust blade clearance. (Refer to "Adjustment for blade clearance".)

⚠ CAUTION: Only use shear blades specified in this manual by Liangye. The use of any other blades might present a risk of injury to persons or a damage of the tool.

Before use

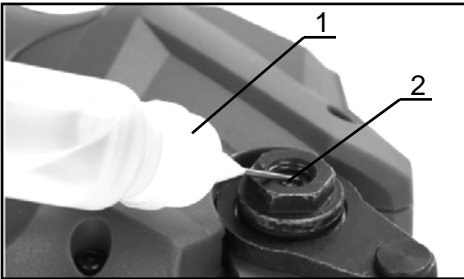
Refueling the shear blade

The shear blades requires refuel every time before using. To apply machine oil on to the shear blades, perform the following steps:

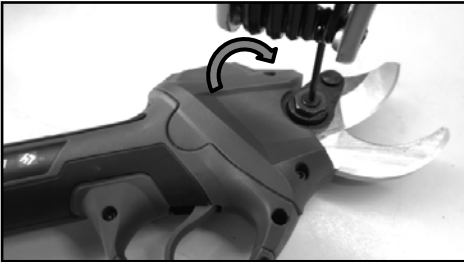
1. Insert the battery cartridge. Remove the blade cover.
2. Switch on the tool, and pull the switch trigger to open the upper shearblade fully.
3. With the upper shear blade open, switch off the tool and remove the battery cartridge.
4. Remove the hex bolt near the shear blades with the hex wrench by turning it anticlockwise.

Note: for steps1~4, refer to 1~4 steps of “Replace the upper shear blade”

5. Squeeze the oil from the machine oil bottle into the threaded hole.

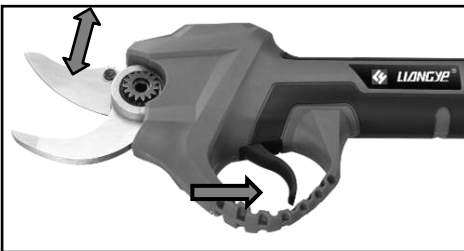


6. Reinstall the hex bolt by turning it clockwise.



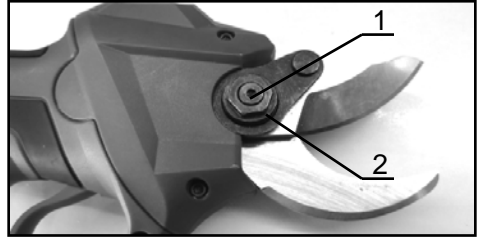
- 1. Machine Oil bottle 2. Threaded hole

7. Turn on the tool to operate unloaded for several times to distribute the lubricant evenly.



NOTICE: Always fill the right amount of lubricating oil each time. Avoid too much or too little.

Adjustment for bladeclearance



- 1. Hex bolt 2. Blades tightening nut

From time to time, adjust the clearance of the shear blades as follows:

1. Insert the battery cartridge. Remove the blade cover.
2. Switch on the tool, and pull the switch trigger to open the upper shearblade fully.
3. With the upper shear blade open, switch off the tool and remove the battery cartridge.
4. Loosen the hex bolt near the shear blades with the hex wrench by turning it anticlockwise.
5. Adjust the tightness of the blades tightening nut with a suitable wrench by turning it clockwise or anticlockwise (fastening torque for the blade tightening nut: approximately 0.5 Nm).

Note: for steps1~5, refer to 1~4 steps of “Replace the upper shear blade” for reference.

6. Tighten the hex bolt again.

7. Check the tightness of the blades whether the blades never rattle or swing sideways. If the blades are too tight or loose, adjust the clearance again.

⚠ CAUTION: Pay attention to the clearance of the blades. Too loose clearance may result in dull cut, and too tight blade clearance may result in overload for the motor and short running time of the tool.

⚠ CAUTION: When the blades are closed, the blades should not swing sideways. Lateral swing is an abnormal state. Lateral swing will create a gap between the two blades, resulting in the gear teeth not meshing properly and causing damage to the mechanical structure.

OPERATION

⚠ CAUTION: Always hold the tool firmly. And keep firm footing.

⚠ CAUTION: Do not put any of your body parts near to the blades during operation.

⚠ CAUTION: Before use, inspect if the blades, blade bolts or other parts are not worn or damaged. Replace worn or damaged parts for safe operation.

NOTICE: If the blade is stuck in a branch during operation, do not twist the blade. In that situation, turn off the tool and pull the blades straight out slowly from the branch. Otherwise the blade may be damaged.

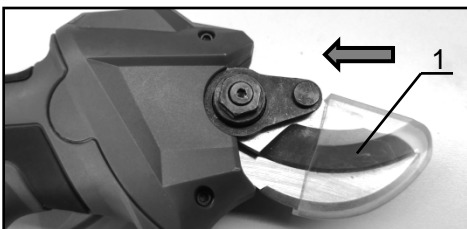
Pruning operation



Cut branches one by one. The maximum thickness of branches which can be cut with these shears is about 30mm. Maintain your proper footing and balance at all times.

After use

Close the shear blades, press the I/O switch to the "O" (off) position, and remove the battery cartridge. Store the shears in dry, high or locked-up place out of reach of children. Install the shear blade cover on.



► 1. Shear blade cover

NOTICE: Remove the battery when not using the shears. Otherwise the battery capacity is reduced during course of time.

MAINTENANCE

CAUTION: Always be sure that the tool is switched off and the battery cartridge is removed before attempting to perform inspection or maintenance.

CAUTION: Wear safety gloves when handling the blade. Otherwise it may result in personal injury.

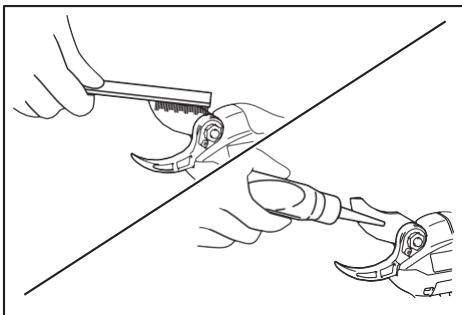
NOTICE: Never use gasoline, benzine, thinner, alcohol or the like. Discoloration, deformation or cracks may result.

Blade maintenance

NOTICE: Failure to perform blade maintenance may cause excessive blade friction and shorten the operating time per battery charge.

Before and after operation, check the shear blades carefully. After operation, clean off the blades with a stiff brush.

Then wipe the blades with a cloth. And apply Liangye genuine machine oil onto the blade edge and movable part.

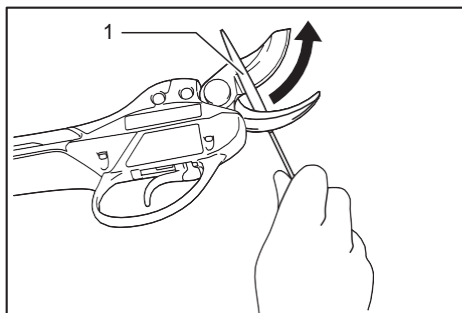


Sharpening blades

Upper shear blade

1. Apply the flat surface of the diamond file to the blade edge. Push the diamond file towards the tip of the blade to sharpen along the entire blade edge.

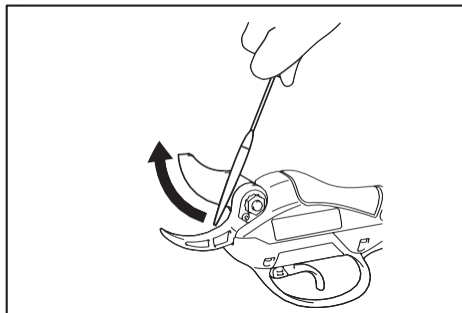
Maintain the same flat contact with the file consistently along the entire blade edge.



► 1. Diamond file

2. Apply the flat surface of the diamond file lightly to the opposite side of the blade.

Move the diamond file towards the tip of the blade lightly to remove burrs.

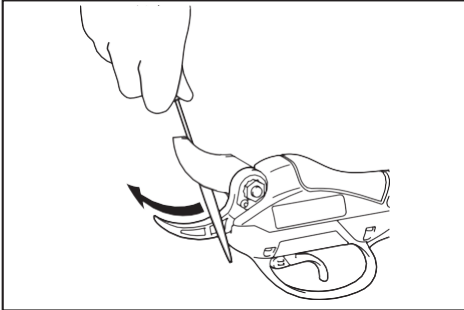


NOTICE: Do not sharpen this side too much. File lightly only for removing burrs. Otherwise the blade clearance may become too much or the blade life may be shortened.

Lower shear blade

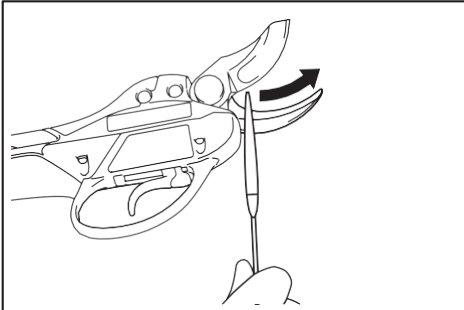
1. Apply the round surface of the diamond file to the blade edge.

Push the diamond file towards the tip of the blade to sharpen along the entire blade edge.



2. Apply the flat surface of the diamond file lightly to the opposite side of the blade.

Move the diamond file towards the tip of the blade lightly to remove burrs.



NOTICE: Do not sharpen this side too much. File lightly only for removing burrs. Otherwise the blade clearance may become too much or the blade life may be shortened.

To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by Liangye Authorized or Factory Service Centers, always using Liangye replacement parts.

OPTIONAL ACCESSORIES

CAUTION: These accessories or attachments are recommended for use with your Liangye tool specified in this manual. The use of any other accessories or attachments might present a risk of injury to persons. Only use accessory or attachment for its stated purpose.

If you need any assistance for more details regarding these accessories, ask your local Liangye Service Center.

- Upper shear blade
- Lower shear blade
- Hex Wrench
- Machine lubricating oil
- Inner hexagon wrench
- Liangye genuine battery and charger

NOTE: Some items in the list may be included in the tool package as standard accessories. They may differ from country to country.

Trouble shooting

Before making a request for repairs, check for trouble by yourself. If any abnormality is found, control your tool according to the description of this manual. If the remedy mentioned below cannot solve the problem, ask your local authorized service center for repair. Never tamper or dismount any part contrary to the description.

State of abnormality	Probable cause (malfunction)	Remedy
The shear blade does not move even after pulling the switch trigger.	The battery is low.	Charge the battery.
	I/O switch is "Off" position.	Press the I/O switch to "I" position.
	The shears are locked.	Unlock the shears by performing the steps in "Switch action".
	I/O switch is "on" position when inserting the battery cartridge.	Press the I/O switch to the "O" (off) position once, and press the I/O switch to the "I" (on) position again.
	Switch trigger defect.	Stop using the tool immediately, and ask your local authorized service center for repair.
The shear blades are stuck on the branch.	The branch is too thick.	Release the switch trigger. Press the I/O switch to "O" position. Then pull the blades straight out slowly from the branch.
The cut is not smooth.	The shear blades are dull.	Sharpen the shear blades, or adjust blade clearance.
	The shear blades are worn out.	Replace the shear blades.