# ELECTRIC PRUNING SHEARS — User's menu —



# PROTECH 400S









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Dear users, sincerely thank you for choosing our company's quality products! In order to better use this product, please read the instructions carefully before using it, and keep this manual for later inquiry. If you have any questions during use, please contact us in time, and we have professionals to answer your questions. wish you a happy use!

# Warming







Please read all safety warnings and instructions carefully. Failure to follow the relevant warnings and instructions may result in electric shock, fire or other serious injuries.

Please keep all warnings and instructions for future reference.

Packing list

Tool box



- This product is for professional use only.
- The final interpretation right of this product is owned by the cabinet company.

#### Product description











#### Product description

- 1. Please read the instructions carefully.
- 2. It can only be charged indoors.
- 3. Double insulation, no need to ground.
- 4. Fail safe transformer.
- 5. It will automatically power off when charging is overheated.
- 6. Do not dispose of the charger with household waste.
- 7. Do not dispose of the battery with household waste.

This product is a battery-driven electric pruning shears, which is composed of fixed blades, mobile blades, lithium batteries, chargers, cables, work bags, tool boxes, etc. The charging voltage is AC 110V-240V, and it is mainly used for grafting fruit branches below 40mm. Cutting and pruning, pruning and harvesting of large numbers of orchards. It is simple and convenient to use, 8-10 times the efficiency of traditional manual pruning, and the quality of pruning is significantly higher than that of traditional manual scissors.

#### Technical Parameters

Basic inform	ation of ele	ctric fruit tree p	runing machine
Working voltage	DC 36V	Motor speed	20000r/min
Lithium battery	36V 4.8A	motor power	1080W
Battery charging time	3-4 hours	Scissors weight	0.9KG
Battery working time	8-10 hours		
Charger working voltage Input		AC 110V-240V Output: DC 42.5V	

Cutting range (maximum size)				
maximum size	40mm diameter soft branches			
Working temperature	-10°C~65°C			



Please read all safety warnings and instructions carefully; Failure to follow the relevant warnings and instructions is likely to cause accidents such as electric shock, fire, and severe burns.



Don't use or expose electric pruning shears in the rain.

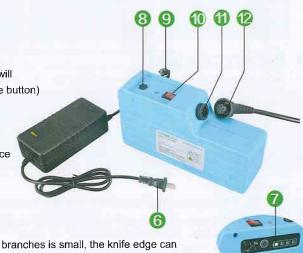


When operating the electric pruning shears, do not put your hands close to the cutting area to avoid injury.

#### Name and schematic diagram of each part



- 1. Moving blade
- 2. Fixed blade
- 3. Pin
- 4. Trigger
- 5. Fix the power cable
- 6. Charger AC input plug
- 7. Light up the display (note: it will display only when you press the button)
- 8. Battery charging plug
- 9. Charger charging plug
- 10. Battery power switch
- 11. battery power output interface
- 12 power link plug



★ When the diameter of the cut branches is small, the knife edge can be converted to a small position, which can speed up the cutting speed, improve work efficiency and save time.

### Product maintenance

#### Product operation

- 1. Open the special backpack, put the electric pruning shears and battery into the corresponding storage bag,
- 2. Put the power cord of the electric pruning shears through the backpack and connect it to the battery, wear the backpack, (put the power cord of the scissors into the designated fixing buckle of the strap to prevent the wire from being cut during use). Figure 1,2
- 3. Take out the electric pruning shears, turn on the battery power switch, a beep will sound, which means the battery is normally powered, as shown in Figure 5.
- 4. Pull the trigger 4-5 times continuously, the speed should be very fast, the blade will open automatically, as shown in Figure 3.

(This function is designed for safety protection to prevent accidents caused by pressing the trigger when not in use)

- 5. Before working, pull the trigger to let the blade run dry several times, and listen to whether there is noise or excessive speed or slowness.
- 6. Start working after normal.
- 7. Switching the size of the blade opening: Press the trigger, and when you hear the second sound of "DiDi", immediately release the trigger, and the blade opening size will automatically switch.
- 8. Shut down: Long press the trigger, wait for three sounds of "didi", release the trigger, the blade will automatically close,
- 9. Turn off the battery power switch
- ★Note: (1) It is normal for the grip to become hot during long-term use of the machine, please rest assured to use it.

(2)After the pruning work is completed this season, or when changing the blades, the blades need to be disassembled and lubricating oil is added between the blades for maintenance.







# Battery charging

The battery of the new product is not fully charged. Before charging, turn the battery switch to the off state, then insert the output plug of the charger into the battery socket, and finally insert the power plug of the charger into the power socket. At this time, the charger indicator is red , It indicates that the charger is charging; after 5-6 hours, the indicator light of the charger will be green, the charging operation is complete, and you can use the battery. A fully charged battery can be used for 8-10 hours (uninterrupted work).

#### Precautions

- 1. Before charging, please turn the switch to the off state. It is normal for the charger and battery to slightly heat up during charging.
- 2. If the battery is not used for a long time, in order to extend the service life, it must be recharged once every 3 months
- 3. A new battery or a battery that has not been used for a long time needs about 5 charge-discharge cycles to reach the maximum capacity
- 4. Do not recharge the battery after only a few minutes of operation, which may reduce battery working time and performance
- 5. Do not use damaged batteries, and do not disassemble the charger or battery

- 6. The battery will explode when thrown into the fire, do not grill the battery
- 7. Do not charge the battery outdoors and in humid environments
- 8. With the gradual decrease of battery power, it is normal that the ability to cut the diameter will decrease
- 9. During the charging process, it is strictly prohibited to use electric pruning shears.

## Blade sharpening



#### The power of the scissors must be disconnected before operation

- Turn off the power after the blade is opened. To ensure safety, please disconnect the power cord on the battery.
- 2. The two sides of the movable blade are polished with the angle of the cutting edge of the whetstone.
- 3. Clean the blade after polishing, connect the power cord, power on, and close the blade to complete.









# Blade tightness adjustment



#### The power of the scissors must be disconnected before operation

Check the tightness of the blade every morning before use. The blade with proper tightness will not swing from side to side. If the blade's tightness is normal, the scissors will save effort when cutting.

Elastic adjustment:

- 1. Loosen the screw counterclockwise with a screwdriver, as shown in the figure "1", take off the screw, as shown in "2".
- 2. Use an Allen wrench to adjust the lock nut until it reaches a proper state, not too tight, as shown in " (3) ".
- 3. Tighten the screw, as shown in " 4 ", and check the closing of the blade according to the normal procedure.









Note: When the blade is closed, the blade should not swing sideways. Lateral swing is an abnormal state. Lateral swing will create a gap between the two blades, causing the gear's teeth to not engage correctly and damage the mechanical structure.

#### Replace the blade



#### The power to the scissors must be disconnected before operation.

- 1. Use a Phillips screwdriver to loosen the two screws on the upper cover and remove the upper cover, as shown in Figure " 1 ".
- 2. Use the provided special tools to loosen the screws and anti-loosening washer, as shown in figure " 20 "...
- 3. Use a special tool to loosen the lock nut and remove the stop washer, as shown in figure " [3] "...
- 4. Remove the old moving blade and replace it with a new blade, as shown in the figure "4. ".
- 5. If necessary, oil the blade, as shown in " [5] ".
- 6. If necessary, clean the gears (warning: do not use chemical reagents), and grease them, as shown in " 6".
- 7. Install the blade and gear on the scissors, as shown in the figure " 7.
- 8. Put on the stop washer and lock the lock nut, as shown in the figure " 3 ".
- 9. Tighten the lock screw and anti-loosening washer, close the upper cover, and tighten the screw, as shown in " ".



















★ The fixed and movable blades can be replaced separately; there is no need to worry about the blade opening size when replacing, it will automatically return to the normal opening size after power on.

#### Precautions for use and maintenance

#### How to use electric pruning shears

- 1. Do not cut branches that exceed the working range of the scissors, do not cut non-plant materials such as metal, rocks, etc., do not clamp the tool with a vise. If the scissors are worn or damaged, please replace the scissors.
- 2. Keep the equipment clean, Use a clean cloth to clean the pruning shears, battery and charger (do not use any corrosive or solvent-based cleaners), and use a soft brush or dry cloth to clean the dust on the scissors.
- 3. Do not immerse electric pruning shears, batteries and chargers in any liquid such as water
- 4. Please use the equipment correctly in accordance with the instructions for use, and do not use the electric pruning shears, batteries, and chargers when they are damaged
- 5. If the switch cannot be turned on or off normally, do not use the electric pruning shears. The electric pruning shears that cannot be controlled by the switch are dangerous and must be repaired
- 6. Make sure that the switch is closed when making any adjustments, changing accessories or storing the electric pruning shears. This protective measure will reduce the risk of accidental activation of the electric pruning shears
- 7. Please keep the idle electric pruning shears out of the reach of children with the blades closed, and do not let people who are unfamiliar with electric pruning shears or do not understand the instructions to operate, untrained users It's dangerous to use
- 8. When using electric pruning shears and accessories, follow the instructions and methods of use, and also consider the working environment and the work to be completed. Using the electric pruning shears as operations that do not meet the requirements may cause danger.
- 9. After use, the movable blade and the fixed blade should first remove the dirt, and then apply lubricating oil or engine oil on the contact part to keep the blade in a normal maintenance state. The next use will reduce the resistance and blade life.

#### Precautions for battery use and maintenance

- 1. Do not charge in an environment lower than 0°C and higher than 45°C, which may damage the battery and charger
- 2. Before connecting the battery, please make sure that the switch is in the off position. The battery road electric pruning shears are prone to accidents when the battery is switched on.
- 3. Only use the charger specified by the manufacturer to charge the battery. Using a charger that does not match the battery to charge the battery may cause other dangers
- 4. When the battery is not in use, keep it away from paper clips, coins, keys, nails, screws and other small metal objects that can short-circuit the battery. Short-circuiting the battery may cause burns or fire.
- 5. It is forbidden to disassemble or reassemble the battery
- 6. Prohibit short-circuit batteries
- It is forbidden to use next to heat sources
- 8. It is forbidden to throw the battery into fire or water
- 9. It is forbidden to charge near fire or under sunlight
- 10. It is forbidden to insert nails into the battery, hit with a hammer or step on the battery or throw the battery
- 11. Prohibit the use of seriously damaged or deformed batteries
- 12. It is forbidden to solder directly on the battery
- 13. It is forbidden to charge the battery in reverse, reverse connection or over discharge
- 14. It is forbidden to connect the battery to the charging socket or car cigarette lighter socket.

- 15. Prohibited to be used on non-designated equipment
- 16. Prohibit direct contact with lithium batteries
- 17. It is forbidden to put the battery in a microwave oven or other high temperature and high pressure container
- 18. Prohibit the use of leaking batteries
- 19. Keep the battery away from the reach of children
- 20. It is forbidden to use or place the battery under sunlight (or direct sunlight on the car), otherwise it may cause the battery to overheat and catch fire, resulting in malfunction and shortened life.
- 21. It is forbidden to use batteries in places with static electricity (more than 64V)
- 22. When the battery is used for the first time, if there is corrosion, unpleasant smell or abnormal phenomenon, it is forbidden to use and return to the point of sale
- 23. If your skin or clothes are stained with electric fluid on the battery, please rinse with clean water
- 24. If you do not use electric pruning shears for a long time, you need to fully charge the battery for storage.

# **▶** Safety precautions



Warning! Please read all instructions carefully. Failure to follow all the instructions below may result in electric shock, fire or other serious injuries!

#### Site safety instructions

- 1. Keep the workplace clean and bright, chaotic and dark workplaces may cause accidents
- 2. Do not operate electric pruning shears in an explosive, flammable and humid environment
- Allow children and bystanders to leave before normal operation of the electric pruning shears to avoid accidental injury caused by distraction

#### Electrical safety instructions

- 1. The battery socket of the electric pruning shears must match the battery connection plug. Do not modify the socket and plug in any way
- 2. Do not expose the electric pruning shears to rain or humid environment. Water or other liquids entering it will increase the risk of electric shock and cause electrical damage
- 3. Do not abuse the wire, do not use the power cord to carry, pull the electric pruning shears or unplug its plug, keep the electric pruning shears away from heat, oil, sharp edges or moving parts, and do not when the power cord or plug is damaged Using a charger, damaged or entangled wires will increase the risk of electric shock

#### Personal safety instructions

- 1. Be vigilant, pay attention to the operation you are engaged in when operating the electric pruning shears and stay awake. Do not operate the electric pruning shears under fatigue, drug treatment or alcohol reaction. Dispersion of energy during the operation may cause serious personal injury
- 2. Use safety protection devices and always wear goggles. Under appropriate conditions, such as dust masks, non-slip safety shoes and helmets, hearing protection devices, etc. can reduce personal injury.

- Before the electric pruning shears are switched on, remove all adjustment keys or wrenches.
   The hands or keys left on the rotating parts of the electric pruning shears may cause personal injury.
- 4. During operation, do not extend your hands too long, keep your hands away from the cutting area, and never extend your hands under the knife edge for any reason during cutting. At the same time, ensure that any material or surface under the cutting area will not be damaged by the cutting blade. And always pay attention to your feet and balance, so that you can control the pruning shears well in unexpected situations.
- Dress appropriately. Do not wear loose clothes or accessories. Keep your hair, clothes and sleeves away from moving parts. Loose clothes, accessories or long hair may be involved in moving parts.

#### Abnormal situation and treatment method

- When you accidentally put the non-cutting material into the incision, immediately release the trigger, and the moving blade will automatically return to the open state
- When the cut branches are too hard, the trigger should be released in time, and the moving blade will automatically return to the open state
- The battery cannot be charged normally, firstly check whether the battery charger is the one that comes with the product, and secondly, note that the charging voltage must be consistent with the voltage on the nameplate
- 4. If electrical or mechanical failure occurs, please turn off the switch immediately
- 5. If the battery is not used in accordance with the operating instructions, the battery may spray liquid, please do not touch this liquid; in case of accidental contact, please wash with water immediately, if the liquid splashes into the eyes, in addition to washing with water, you must also go to the hospital Liquid ejected from the battery may cause irritation or burns

# ► After-sales Services

If you have any questions during use, please contact us in time (see the next page for contact information), we have professional personnel to answer your questions and problems, and let qualified maintenance personnel use exactly the same replacement parts to repair the electric Pruning shears, which can maintain the safety performance of electric pruning shears.

#### Statement

The company reserves the right to make technical improvements to the products described in this manual. If there are any changes, please understand! If the graphics, images and text descriptions involved in this manual differ from the actual product, please refer to the actual product!