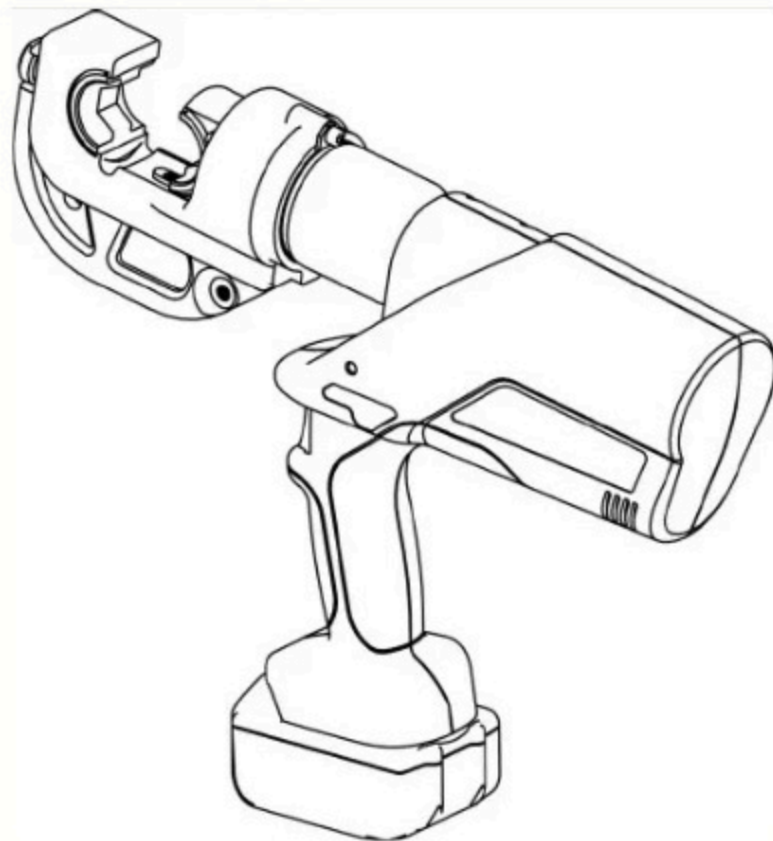


Instruction Manual

Battery Crimping Tool EZ-400



Read this material before using this product.

Failure to do so can result in serious injury.

SAVE THIS MANUAL

SAVE THIS MANUAL

Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the month and year of purchase. Keep this manual and the receipt in a safe and dry place for future reference.

IMPORTANT SAFETY INFORMATION

In this manual, on the labeling, and all other information provided with this product:



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

▲ DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

▲ WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

▲ CAUTION

CAUTION, used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

GENERAL SAFETY RULES

TO WORK IN SAFE CONDITIONS WITH THIS TOOLING, IT IS IMPERATIVE TO READ CAREFULLY THE DIRECTIONS FOR USE AND TO FOLLOW THE INSTRUCTIONS IT CONTAINS. IF YOU DO NOT RESPECT THE INFORMATION WRITTEN IN THAT INSTRUCTION MANUAL THE WARRANTY WILL BE CANCELLED.

1. Work area safety

- a. Keep work area clean and clear. Cluttered or dark areas invite accidents.
- b. This tool is not insulated; please do not use it on live conductor.
- c. Please do not use or store the tool under high temperature, or one surrounding filling with corrosive fluid. Pay attention to the sealing kits becoming aging.
- d. Keep children and bystander away while operating the Battery powered crimping tool. Distractions will cause you to lose control.

2. Electrical safety

- e. Make sure the plug matches with the plug seat. Never try any changes on the plug.
- f. Do not put tool, battery and charger under a rainy or humid surroundings, it is easy to trigger an electric shock accident if any water goes into the electric system of the tool.
- g. Do not use electric wire to carry, pull, or to draw out the plug and do not connect the “-” and “+”, the damaged or twined wire may cause an electric shock accident.
- h. If the charger was strongly crashed, or dropping down or any other damages happening, please do not try to repair it by yourself, send it back to the authorized service center as soon as possible. The damaged charger may cause an electric shock accident.
- i. The best temperature for charging is between 10 °C-40 °C. Make sure the air hole of the battery and charger are uncovered during charging.

- j. Please cut off the power of the charger each time to reduce the hazard from child or the person who not expert on the tool.
- k. Do not wait until the battery runs over for recharging, the recharging will caused the battery does not working anymore. Please keep the battery out of the tool to avoid the power discharge.
- l. Please do not burn the battery or make it being short-circuited, it may cause explosion.
- m. Do not use the waste battery otherwise it will caused the electric shock.
- n. Do not disassemble the battery and charger. If any problem please contact with manufacture or agent.

3. Personal safety

- o. Stay alert, watch what you are doing and use common sense when operating the tool. Do not use the tool while you are tired or still under the influence of drugs, alcohol or medication. A moment of inattention may result in series personal injury.
- p. Use safety equipment. Always use safety equipment such as mask, helmet, safety cap, insulating shoes and etc to reduce the risk of personal injury.
- q. Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes jewelry or long hair can be caught in moving parts.
- r. Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the tool operation. If damaged, have the tool repaired before use. Many accidents are caused by poorly maintained power tools.
- s. Please use the tool properly, the tool with correct power will do the job better and safer at the rate for which it was designed.
- t. Do not put your fingers into the head of the tool during operating. Your fingers could be pinched very severely.

4. Service

Have your Battery Crimping Tool serviced by a qualified service technician using only identical replacement parts. This will ensure that the safety of the Battery Crimping Tool Kit is maintained.

SPECIFIC SAFETY RULES

1. Maintain labels and nameplates on the tool which carry important safety information. If unreadable or missing, contact the agent to replace.
2. This product is not a toy, keep it out of reach of children.
3. Do not put your fingers into the head of the tool during operating. Your fingers could be pinched very severely.
4. Make sure the head was locked firmly during operation.
5. Do not use the tool without dies
6. Do not crimp on live cables or conductors
7. Do only crimp Cu copper or Al conducting material
8. Do not knock any parts of the tool, otherwise it will cause injury.
9. Do not operate at will, it will damage the MCU and electric system
10. The design of the limit screw on the head is for preventing the head from dropping or popping.
11. Make sure the head was locked firmly during operation.
12. Do not use this tool for continuous use. After 30 to 40 cycles, allow the tool to cool for 15 minutes.
13. Do not secure this tool in a vise. This tool is designed for hand-held operation.
14. The built-in safety valve goes through strict pressure test before marketing; please do not adjust the pressure by unprofessional person. If the pressure is not enough please return the tools back to the service center. The tool only can be reused after checking and testing by trained person.
15. The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

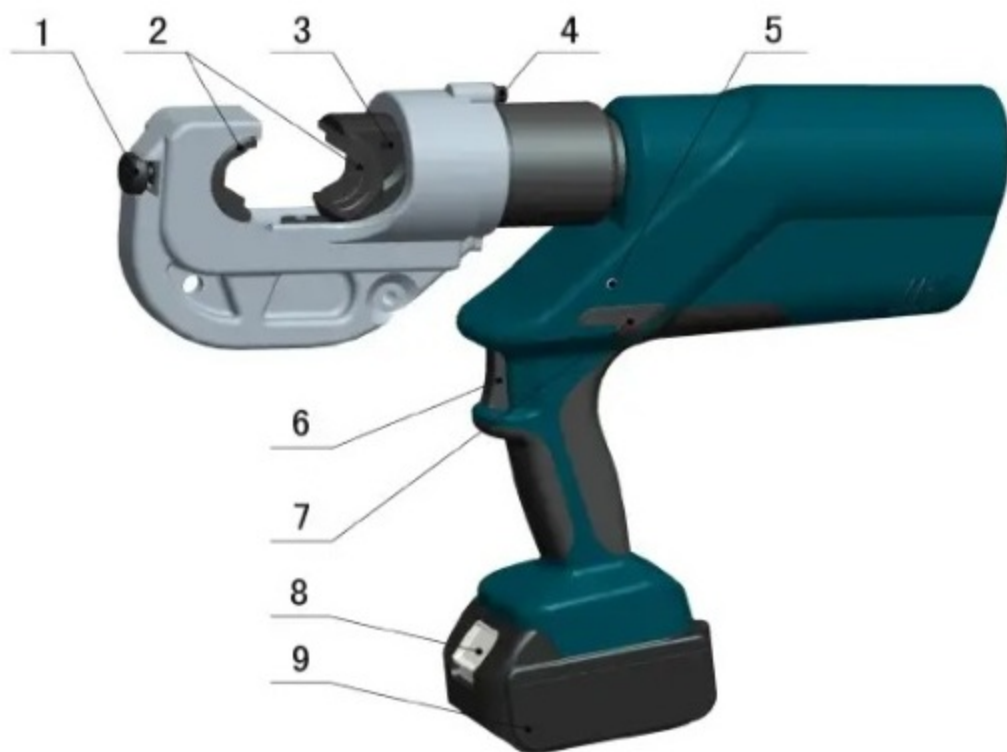
UNDERSTAND YOUR TOOL

EZ-400 is a tool for crimping Cu/Al lugs with cable from 16-400mm². It is powered by Li-ion, actuated by motor and controlled by MCU, with a high pressure hydraulic system, it is a perfect tool to be used in electrical construction site.

1. Specification

Max. crimping force:	120KN
Crimping range:	Cu 400mm ² /Al 300mm ²
Stroke:	42mm
Hydraulic oil:	Shell Tellus T15#
Ambient temperature	-10-40°C
Voltage:	18V
Time/crimp:	6-18s(Depend on the size of cable)
Time/charger:	Approx. 120 times (CU 150 mm ²)
Charging time:	Approx.2 hours
Package:	Steel box
Accessories:	
Crimping dies:16.25.35.50.70.95.120.150.185.240.300.400mm ²	
Battery:	2 pcs
Charger:	1 pcs
Sealing ring of cylinder	1 set
Sealing ring of safety valve:	1 set

2. Description of components



Parts No.	Description	Function
1	Pin	For locking/unlocking the upper die
2	Die	For crimping, interchangeable crimping die
3	Retaining clips	For locking/unlocking the down dies
4	Limited block	For preventing head from dropping or popping
5	LED indicator	For indicating the operating condition and battery discharging situation.
6	Trigger	For starting operation
7	Retract button	For manual retracting the piston in case of an incorrect operation.
8	Battery lock	For locking/unlocking the battery.
9	battery	For supplying power, rechargeable Li-ion (18V)

3. Function description



MCU –automatically detect the pressure during operation and provide security protect, shut off the motor and reset automatically after operation.



Auto reset- Release the pressure automatically, retract the piston to the starting position when reached the max output.



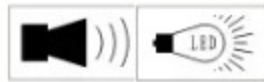
Manual reset —Can retract the piston to the starting positioning in case of an incorrect operation.



The unit is equipped with a double piston pump which is characterized by a rapid approach of the die towards the connector and a slow crimping motion.



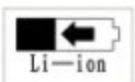
The head can be smoothly turned by 360°around the longitudinal axis in order to gain better access to tight corners and other difficult working areas.



One significant sound will be heard and a red display flashes if any error occurs.



The whole tool is controlled by one trigger. This results in an easy handling and a better grip compared to a two button operation.





Li-ion batteries do neither have a memory effect nor self discharge. Even after long periods of non operation the tool is always ready to operate. In addition we see a lower power weight ration with 50% more capacity and shorter charging cycles compare to

NIMH batteries.



A temperature sensor makes the tool stop working automatically when the temperature over 60 °C under long time working, the fault signal sounds, it means the tool can't continue work until the temperature reduce to the normal.

Series No			Instruction	What it means
1	★ ★		Self-checking	Self-checking to assure everything is ok
2	★—5sec		Overload	Hydraulic system may be damaged and need check immediately
3	★ ★ ★	● ● ●	Charging signal	Lacking power and need charging.
4	★—5sec	●—5sec	Power lacking warning	No power and need charging immediately
5	★★★★★	● ● ● ●	Temperature warning	Temperature too high and need to cool down.
6	★★★★★★	● ● ● ● ●	No pressure	Motor working but without pressure

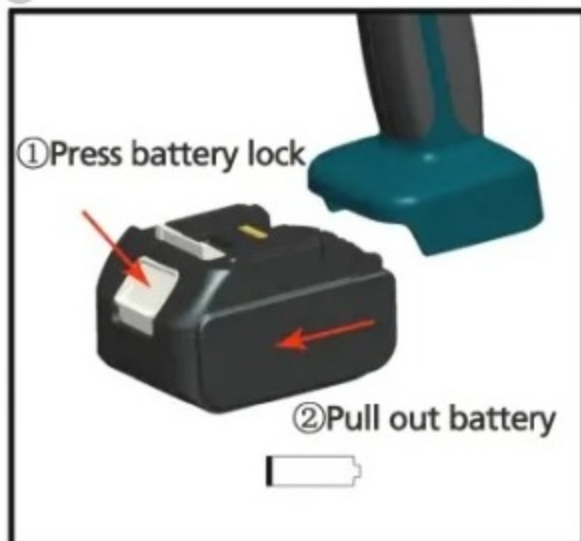
OPERATING INSTRUCTION

Read the entire SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before using this product.

Use this tool for the manufacturer's intended purpose only. Use other than that which is described in this manual can result in injury or property damage.

1. Charging

Push battery into charger and connect the plug with the plug seat. Make sure the room temperature is between 10°C-40°C. The charging time is around 2 hours. Please see the illustration below.



1.



2.



3.



4.

The detail of the charging information, please refer to the manual (MANUAL FOR CHARGER)

⚠ CAUTION

The battery can be used for hundreds of times, when the life span reduced obviously, change to a new battery please.

Please charging the battery in time to avoid it to be used up absolutely; otherwise it will become useless forever. if the battery not be used for a long time, it will discharge automatically. Make sure to charge it one time per/each quarter.

2. Usage of the tool

⚠CAUTION

Make sure that all the parts are clean without any oil, dust, especially on the handle and control parts, to avoid the tool slip from the hand easily during the operation.

- 1) First you have to check the LED indicator is light or not. If the indicator is light on for more than 5 seconds, it means no power of the battery and should change the full powered battery to settle on the tool.
- 2) Select the right dies for the intended application,

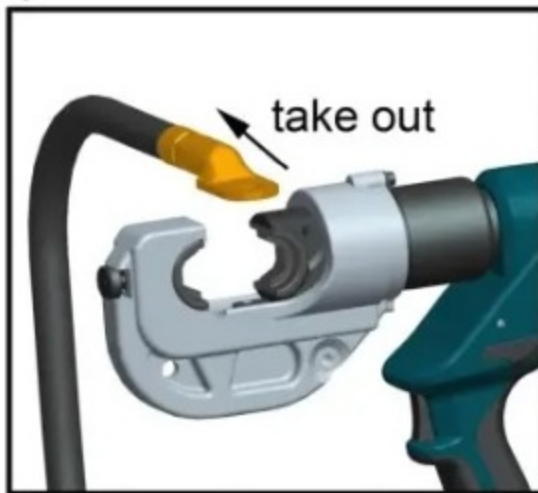
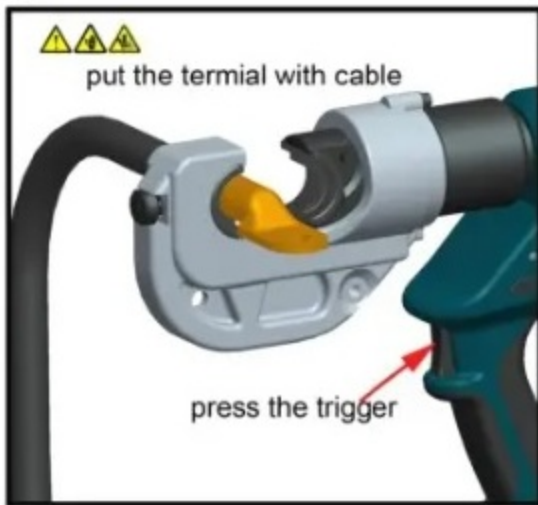
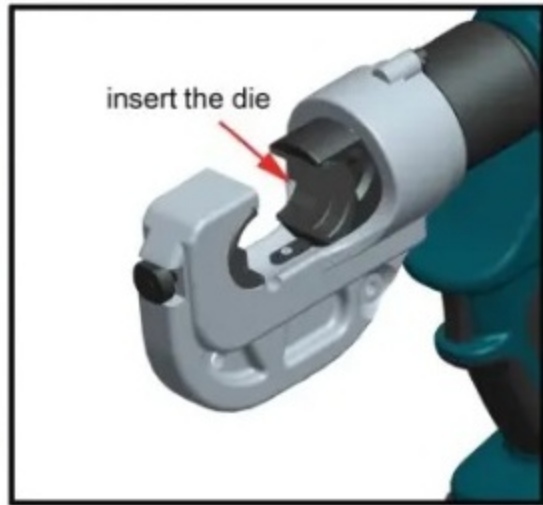
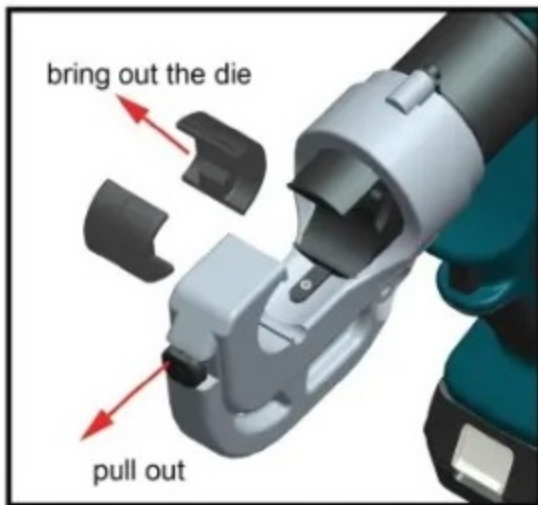
⚠CAUTION Don't operate the tool without dies.

insert the dies into the "C" opened head by pressing retaining clips. Then the connecting material shall be positioned in the crimping head correctly, in order to start the crimping procedure,

- 3) A crimping process is initiated by switching the trigger. It is defined by the closing motion of the dies. The connection material is positioned in the stationary half of the crimping dies and the moving part is approaching the compression point.
- 4) A crimping cycle is terminated when the dies contacted each other and when the maximum crimping force is reached. After the crimping cycle is completed the piston retracts automatically. Afterwards a new crimping cycle can be initiated or the crimping process can be terminated by opening the latch and remove the connecting material out of the head.

⚠DANGER

The crimping process can be interrupted at any moment by releasing the trigger.



MAINTENANCE AND SERVICING

⚠WARNING

Damaged equipment may cause serious personal injury. Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further using.

1. **Before each using**, inspect the general condition of the tool. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, or any other condition that may affect its safe operation.
2. **After using**, clean external surfaces of the tool with clean, moist, smear the rust preventing oil on the metal surface of the tool and the dies to avoid rusty. Take out the battery from the tool each time to avoid operating the tool unconsciously. Store the tool in the dry environment.
3. Service to the tool should only be done by a qualified Service Technician.
4. In order to prolong the life of the tool please change the oil per year. Make sure the oil filtered by 120 mesh net or over 30 μ m strainer. Meantime avoid the dusty into the oil cup.
5. After a long time using, the sealing kits will be damaged, if there is leakage please contact with the manufacturer and/or the distributor to change the sealing kits.
6. If the tool not used for a long time, please make sure the piston stay on its starting position, clear up the tool and paint the rustproof oil both to the tool and accessories. Take out the battery and put them into box and store the tool in a dry surrounding.

TROUBLESHOOTING

FAULT	ANALYSIS	SOLUTION
Tool is inoperative	<ol style="list-style-type: none">1. Dirt, contaminants, etc in ram area of tool.2. Tool battery contacts damaged3. Tool components worn or damaged.	<ol style="list-style-type: none">1. Clean tool2. Reform contacts3. Return tool to manufacture or distributor

Motor is inoperative	<ol style="list-style-type: none"> 1. Low or uncharged battery 2. Broken switch components 	<ol style="list-style-type: none"> 1. Check charged battery. Inoperative battery may be discharged or may have reached life expectancy 2. Return tool to manufacture or distributor
Motor runs but tool will not complete a cycle	<ol style="list-style-type: none"> 1. Oil level low 2. Air in hydraulic system 3. Cold oil 	<ol style="list-style-type: none"> 1. Return tool to manufacture or distributor 2. Pull trigger and hold retract button simultaneously. Run for approximately 10-15 seconds and then attempt to cut. If unsuccessful, return tool to manufacture or distributor 3. Pull trigger and hold retract button simultaneously to warm oil. Store tool in warm area.
Dies stop during operation	<ol style="list-style-type: none"> 1. Oil level low 2. Air in hydraulic system 	<ol style="list-style-type: none"> 1. Return tool to manufacture or distributor 2. Pull trigger and hold retract button simultaneously. Hold for 10-15 seconds
LED glows for 20 seconds	<ol style="list-style-type: none"> 1. Battery charge low 	<ol style="list-style-type: none"> 1. Charge or replace battery
Tool loses oil	<ol style="list-style-type: none"> 1. Damaged internal seal 	<ol style="list-style-type: none"> 1. Return tool to manufacture or distributor

LIMITED 1 YEAR WARRANTY

We make every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of one year from the date of purchase(90 days if used by a professional contractor or if used as rental equipment). This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.