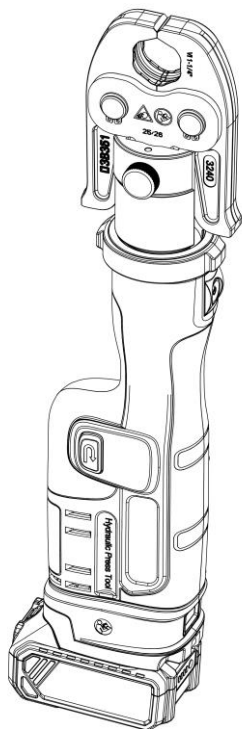


Instruction Manual

Battery Powered Press Tool ZEP-1550



Due to continuing improvements, actual product may differ slightly from the product described herein.



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.



CAUTION. To operate carefully, beware of injury.



The fly off debris may cause injury if misuse or use the worn jaws



Important information

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 bystanders away while operating the Battery powered Tool. Distractions will cause you to lose control.
- e. Do not use or charging the tool around flammable, explosive environment.

2. Electrical safety

- f. Make sure the plug matches with the plug seat. Never try any changes on the plug.
- g. 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.
- h. 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.
- i. 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.
- j. 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.

- k. 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.
- l. Do not wait until the battery runs over for recharging, the recharging will cause the battery does not work anymore. Please keep the battery out of the tool to avoid the power discharge.
- m. Please do not burn the battery or make it being short-circuited, it may cause explosion.
- n. Do not use the waste battery otherwise it will cause the electric shock.
- o. Do not disassemble the battery and charger. If any problem, please contact with manufacturer or agent.

3. Personal safety

- p. 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.
- q. Use safety equipment. Always use safety equipment such as mask, helmet, safety cap, insulating shoes and etc to reduce the risk of personal injury.
- r. 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.
- s. 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.
- t. 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.
- u. 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 Powered Tool serviced by a qualified service technician using only identical replacement parts. This will ensure that the safety of the Battery Powered Pressing 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 knock any parts of the tool, otherwise it will cause injury.
- 6) Do not operate at will, it will damage the MCU and electric system
- 7) The design of the limit screw on the head is for preventing the head from dropping or popping.
- 8) Make sure the head was locked firmly during operation.
- 9) Do not use this tool for continuous use. After 30 to 40 cycles, allow the tool to cool for 15 minutes.
- 10) Do not secure this tool in a vise. This tool is designed for hand-held operation.
- 11) 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.
- 12) 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.

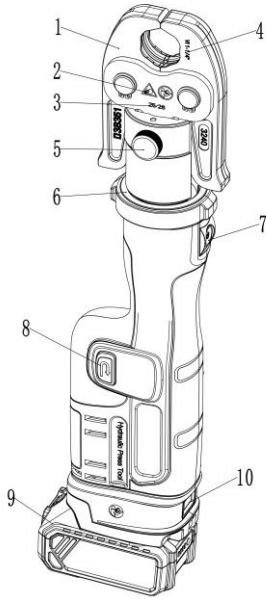
UNDERSTAND YOUR TOOL

ZEP-1550 is a tool for pressing Stainless steel pipe, Copper pipe, XPAP, PEX pipe, ACR copper pipe with fittings. 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 plumbing and heating installations.

1. Specification

Rated pressure:	32kN
Stroke	40mm
Pressing range:	up to 4" copper pipe up to 2" carbon steel pipe up to 2" stainless steel pipe up to 4" PEX pipe
Oil capacity:	115ml
Hydraulic oil:	Shell Tellus T15# S2V HV15
Ambient temperature	-10~40℃
Voltage of battery:	DC 18V,4.0Ah
Charging voltage:	AC 100V~240V ;50~60Hz
Charging time:	Approx.80mins
Weight:	3.7kgs(with battery, without jaw)
Size of tool:	455x142x82mm
Accessories:	
Battery:	2 pcs
Charger:	1 pc
Sealing ring of cylinder:	1 set
Sealing ring of safety valve:	1 set

2. Description of components:



Parts No.	Description	Function
1	Jaw	For pressing, interchangeable jaw
2	Security icon	For warning
3	Date of production	For record, year/week
4	Jaw size	For differentiating, showing standards and specifications
5	Pin	For locking/removing the jaw
6	LED light ring	For lighting and warning
7	Trigger	For starting operation
8	Retract button	For manual retracting the piston in case of an incorrect operation
9	Battery	For supplying power, rechargeable Li-ion (18V)
10	OLED display	Show pressing time, electricity errors info

3. Function description



Micro computer control system - Automatically detects the pressure when in working with double safety protection.



OLED display - Dot matrix OLED display, which shows working times, battery power, working pressure (if equipped with pressure sensor), maintenance reminding and fault code.



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



One key control - Press the trigger to start working, releasing the trigger means stop forcing pressure, piston stops moving.



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 working motion.



The head can be smoothly turned by 180 °in order to gain better access to tight corners and other difficult working areas.



Suspend - Finish working or withdraw the hand from the trigger or any accident happened, the device inside of the tool can stop power supply.



When working in a dimly lit environment, high-brightness LED work lights brighten the working environment and improve safety.



If a deviation from the set operation pressure or low battery charges is identified, an acoustic signal sounds and a red display flashes.



The overall structure of the tool is compact. It is ergonomically designed with a non-slip rubber grip and an optimized center of gravity for easier operation.



A temperature sensor makes the tool stop working automatically when the temperature over 70°C under long time working, the fault signal sounds, it means the tool can't continue working until the temperature reduce to the normal.

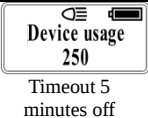


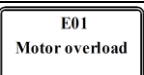
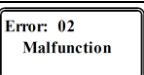
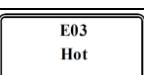
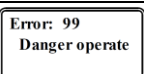
High-performance Li-ion battery in strong power supply, No discharge memory effect, Ultra lower power consumption standby design keeps the tool 6 months storage, meanwhile over discharge device prolongs the life span of the battery.



Microcomputer control system with the feature of self-pressure detection, double protection during operation, counting and realizing the exchange between computer with data by the converter.

Table 1 Signal Instruction and Meaning:

Series No	Instruction	LED red/green	LED (white)		OLED screen	What it means
1	Light		Delay 20s off			Enter the working state, the battery is full
2	Press is normal	 (5S) green				The press is normal
3	Charging reminding	 (flicker) red		 	 	Lacking power and need charging

				 (0.1S))		No power and need charging immediately
4	Motor overload	 (light on) red		 (3S)		Motor overload, battery reloading, please contact the dealer or manufacturer if still can't work normally
5	Hydraulic system malfunction	 (light on) red		 (5s)		Tool doesn't release pressure automatically when working over 2mins, reload battery
6	High temperature warning	 (flicker) red		 		Motor surface temperature is too high, waiting for cooling to restart the tool
7	Dangerous operation protection	 (light on) red		 (5s)		Auto-protection when press the trigger on and off quickly, reload battery
8	Maintenance reminding	 (flicker) red	 (flicker)			Tools must be maintained

OPERATING INSTRUCTION

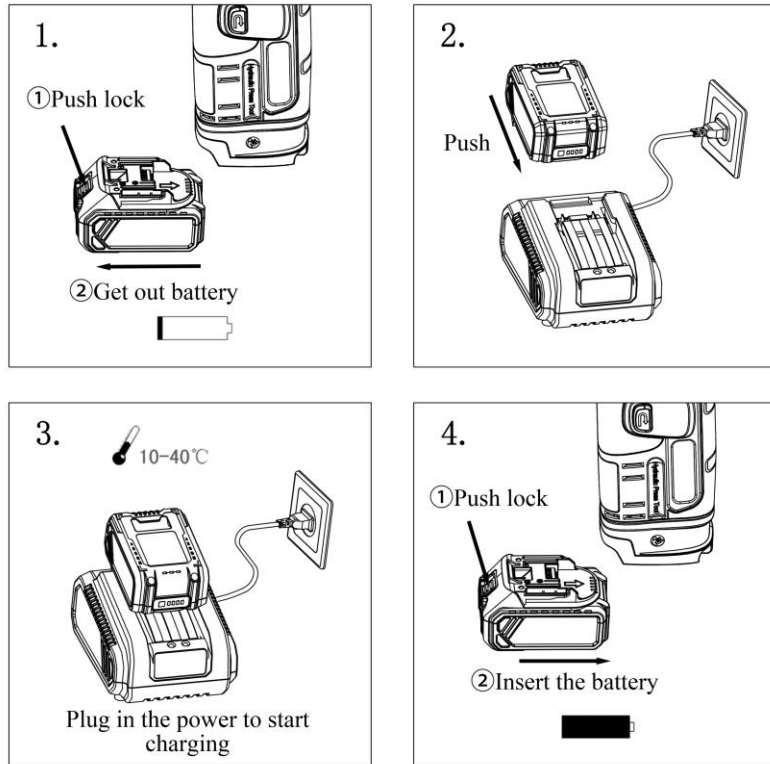
Read the entire **SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before using this product.

Use this tool for the manufacturer's intended purpose only. Use other than that which is described in this manual can result 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 80mins. Please see the

illustration below.



⚠ CAUTION

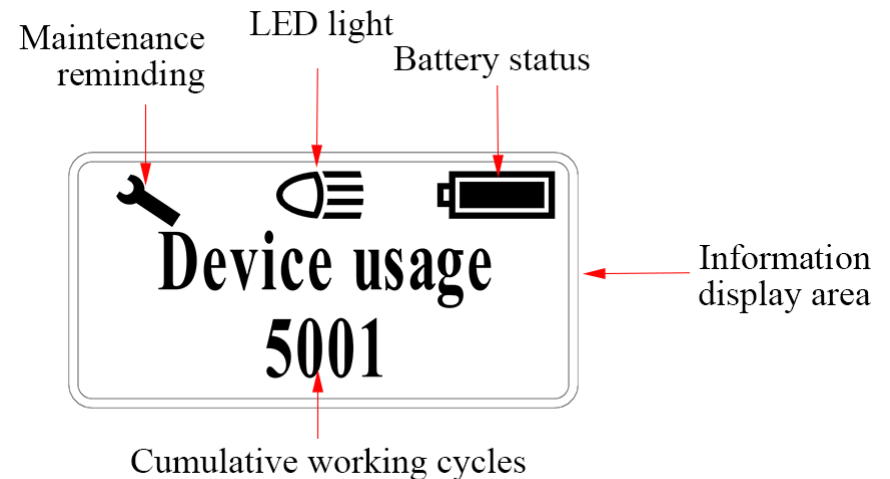
- 1) When use the factory original battery, must be charged by the original charger. 4.0Ah/5.0Ah battery charging current shouldn't exceed 5.0Ah. 2.0Ah battery charging current shouldn't exceed 3.0Ah. Battery will be smoking, burnt, even explode if charge with a non-compliant charger.
- 2) The battery can be used for hundreds of times, when the life span reduced obviously, change to a new battery please.
- 3) 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.

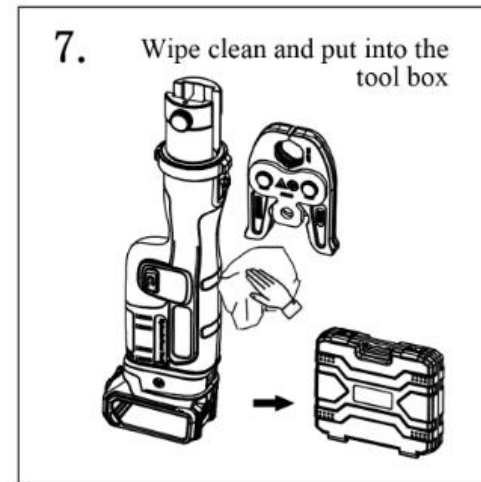
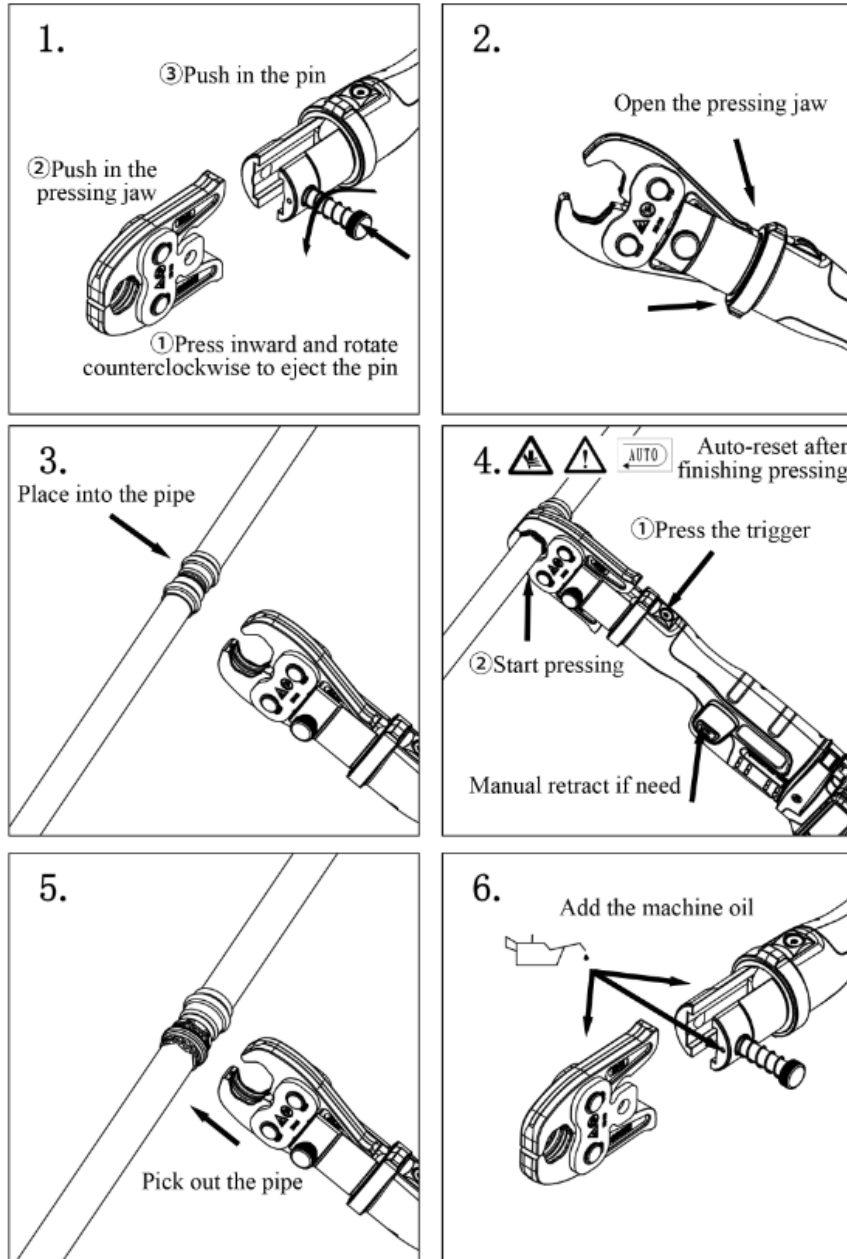
- 4) Do not connect the two poles of the battery with a wire, which is likely to cause electric spark, combustion or even explosion.
- 5) Do not use the damaged battery or charge it, or it will increase the risk of electric shock.
- 6) Under no circumstances should batteries be burned, or they may explode.
- 7) When charging the battery, do not cover the charger with any object, so that the charger cannot dissipate heat, which is likely to cause fire.
- 8) Disconnect the charger when not in use. It will reduce the risk of injury to children and untrained personnel.
- 9) Do not use the charger in humid environment, and do not expose to rain and snow, or it will increase the risk of electric shock.
- 10) Do not disassemble the battery and charger without permission. If there is any fault in the process of use, please send it to the professional or the manufacturer for maintenance, until the problem is solved.

2. Usage of the tool

2.1 OLED display interface description:

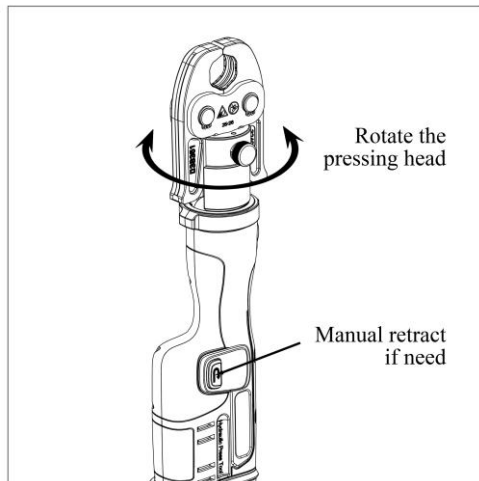


2.2 Pressing Operation



1. This tool is a high-pressure, high-strength, heavy-duty appliance. Please follow the instructions and precautions strictly to operate carefully!
2. Before operating, you must check the tool for any damage, aging, missing parts, stuck components, and any other unfavorable factors that threaten safety. If you find any problems, please stop using it immediately until the problem is solved.
3. After pressing the jaw arm and holding the pipe, please keep your hands and fingers away from the jaw, press the **trigger** and hold it until the pressure reaches the set value and reset automatically. Release the **trigger** halfway to pause, press the release button to return the piston.
4. Do not let the tool or jaws hang directly on the pipe fittings, to avoid unnecessary injury or even fatal accidents caused by the tools falling accidentally.
5. Before starting the tool, the ram pin must be fully inserted into the ram, otherwise it will easily cause damage to the ram and even personal injury.

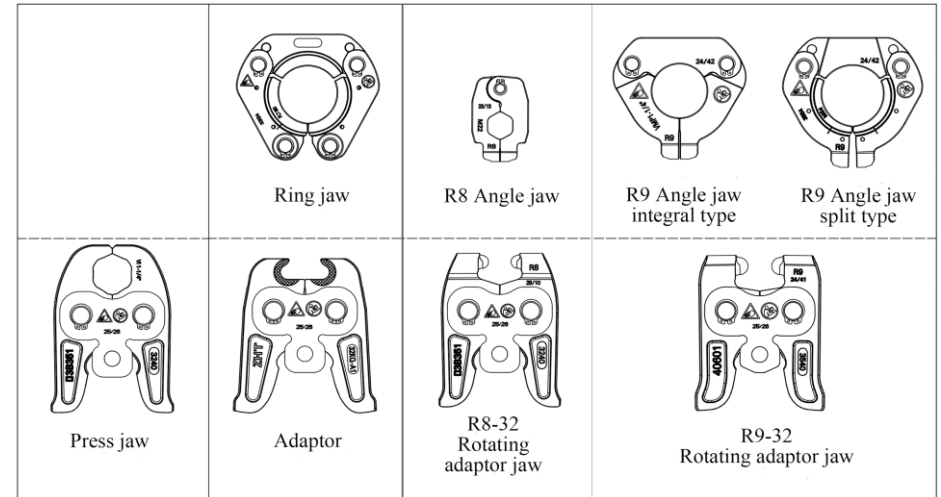
6. Remove the grease from the non-lubricated parts of the tool, especially the hand-held parts, to avoid the tool slipping during use.
7. Do not disassemble and assemble tools at will, otherwise tool damage or even personal injury may occur.
8. Do not put your fingers and any part of the human body into the moving parts of the jaws during use, and avoid pointing the tool head at yourself or others.
9. The pressure of the tool should be checked and calibrated regularly. The pressure check and calibration need to be carried out under the special pressure detection device. Do not adjust it without permission, otherwise the tool may be damaged or even personal injury may occur.
10. After 30 minutes of continuous use, the tool should be cooled down before use. Otherwise, the temperature will over high resulting in early seal failure and oil leakage.
11. The head can be rotated 180 degrees. If there is difficulty in rotating, please press the pressure retract button, and rotate the head after the tool piston is completely reset.



3. Jaws

3.1. Introduction of jaws

The tool can be used with Press jaw, Ring jaw with adaptor, Angle jaw with rotating adaptor jaw, as following picture shows



When you purchase this tool you can choose any type of the jaws. Please supply us with the relative fitting standards and sizes. Different materials and designed fittings pressing effects are different.



CAUTION:

- 1) The operation staff must have participated in professional training, and the construction engineering company must have the corresponding construction qualification recognized by the state.
- 2) Pressing tool and pressing jaw are only for the corresponding piping system and fittings. Use of other ways or modified standard accessories for other applications may damage tools and accessories, and may even result in personal injury.

3) This standard series press jaws only suit for 32kN press tool



Important information:

- 1) Jaws are consumable parts. When it is often used for pressing, the material will be fatigued and cracks will occur. A heavily worn jaw is prone to breakage, especially if it is used improperly (such as over-sized fittings, skewed presses, etc.) or illegal operation.
- 2) Check the jaw for any breakage, cracks, or component jams and any other unfavorable factors that compromise safety and normal operation, either periodically or before each use. If you find any problems, please stop using them immediately, and return it to the professional repair manufacturer or return to the factory for repair until the problem is solved.
- 3) Once you find the following phenomenon, please stop using it and replace it with a new one!
 - a. the board is cracked
 - b. the jaw arm is cracked and deformed
 - c. the jaw is cracked, scratched, sunken or severely worn
 - d. other anomalies
- 4) It is forbidden to disassemble the tools by yourself. It is strictly forbidden to weld, polish, drill or other changes to the die accessories!
- 5) Do not put any part of the human body, such as your fingers, into the jaw ring during use!
- 6) This tool is a high-strength, heavy-duty equipment. Please strictly follow the instructions and precautions!



CAUTION:

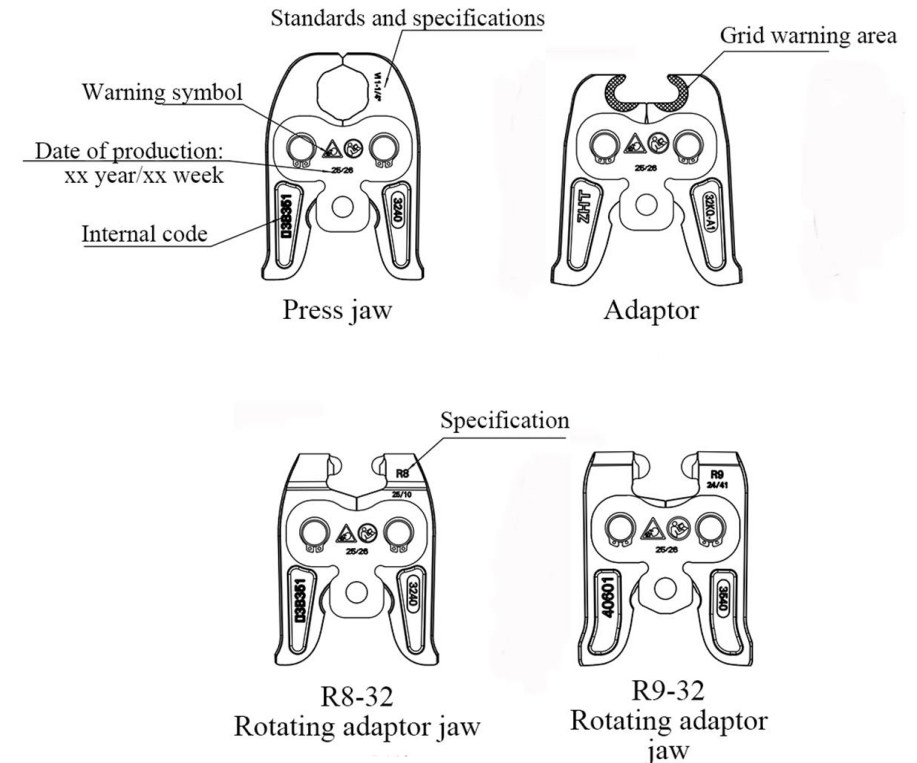
Improper operation can lead to leaks at the joint

- 1) Please ensure that the press fitting specifications are the same as the jaw's.
- 2) It should be confirmed that the jaw has been completely closed after the pressing is completed.

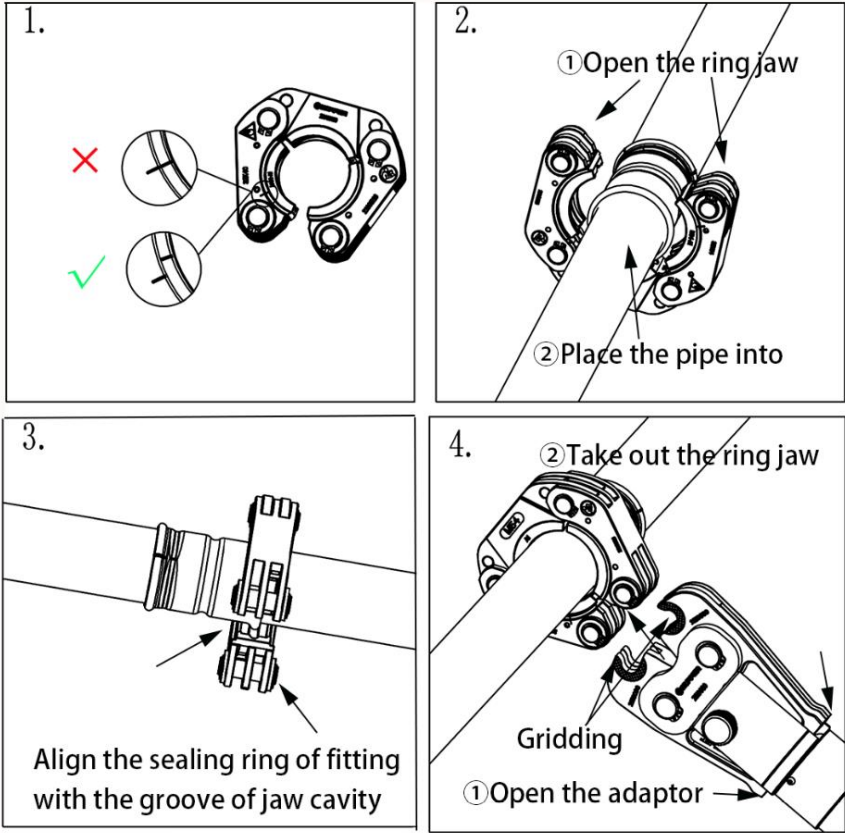
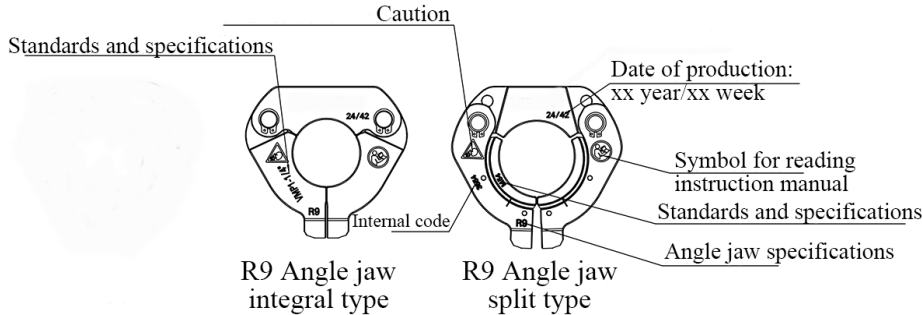
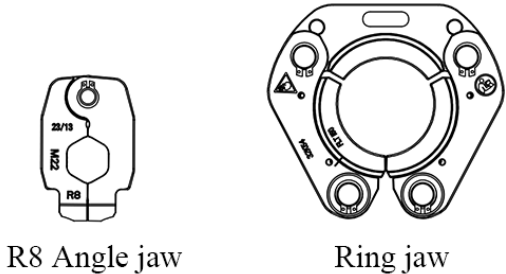
- 3) When pressing, make sure that the jaw and the pressing tool are properly positioned on the flange of the fitting.
- 4) If the jaw cannot be completely closed when pressed, it should be sent to the tool dealer or manufacturer for repair.
- 5) If the jaw's connecting part is incorrectly squeezed, replace a new jaw and do not continue to use it.
- 6) If there is a burr on the pipe joint after pressing, it should be handed over to the tool dealer or manufacturer for inspection.

3.2. The symbols and codes on jaws:

3.2.1.Jaws:

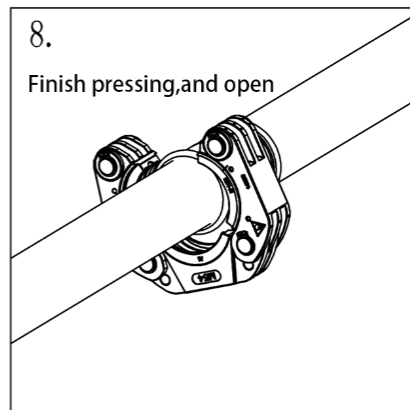
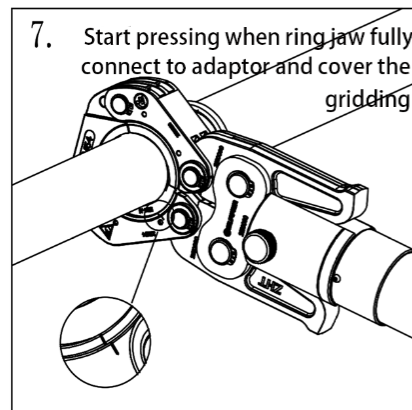
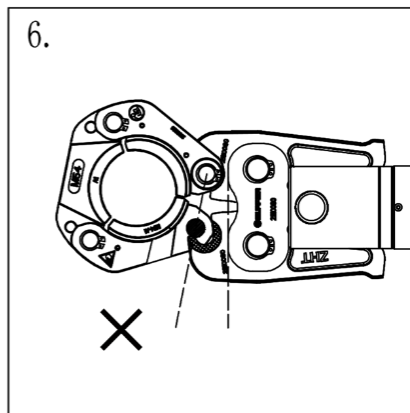
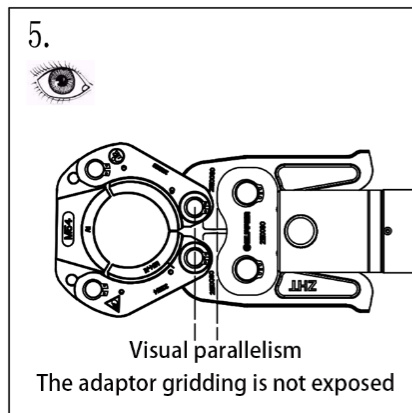


3.2.2 Ring jaw:



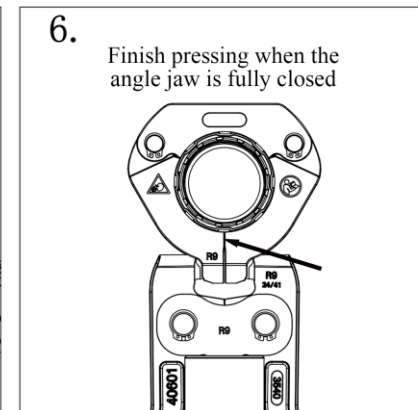
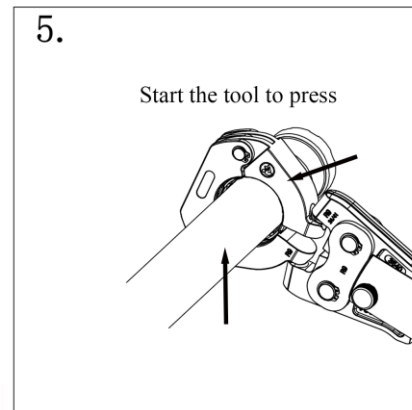
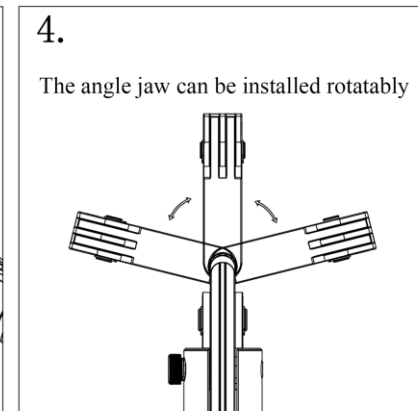
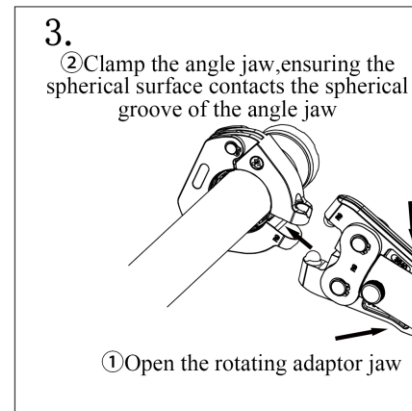
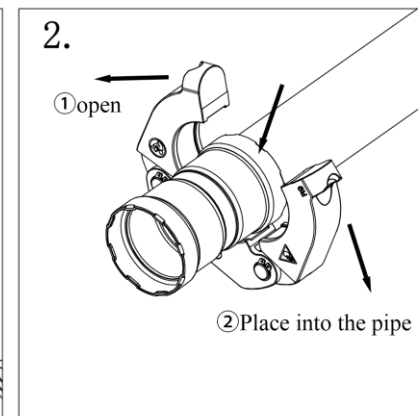
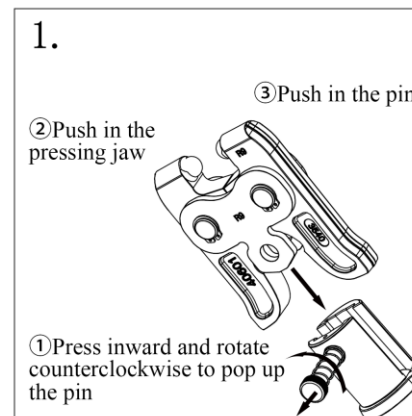
3.3. Operation of jaws

3.3.1. Please refer the illustration for ring type below:

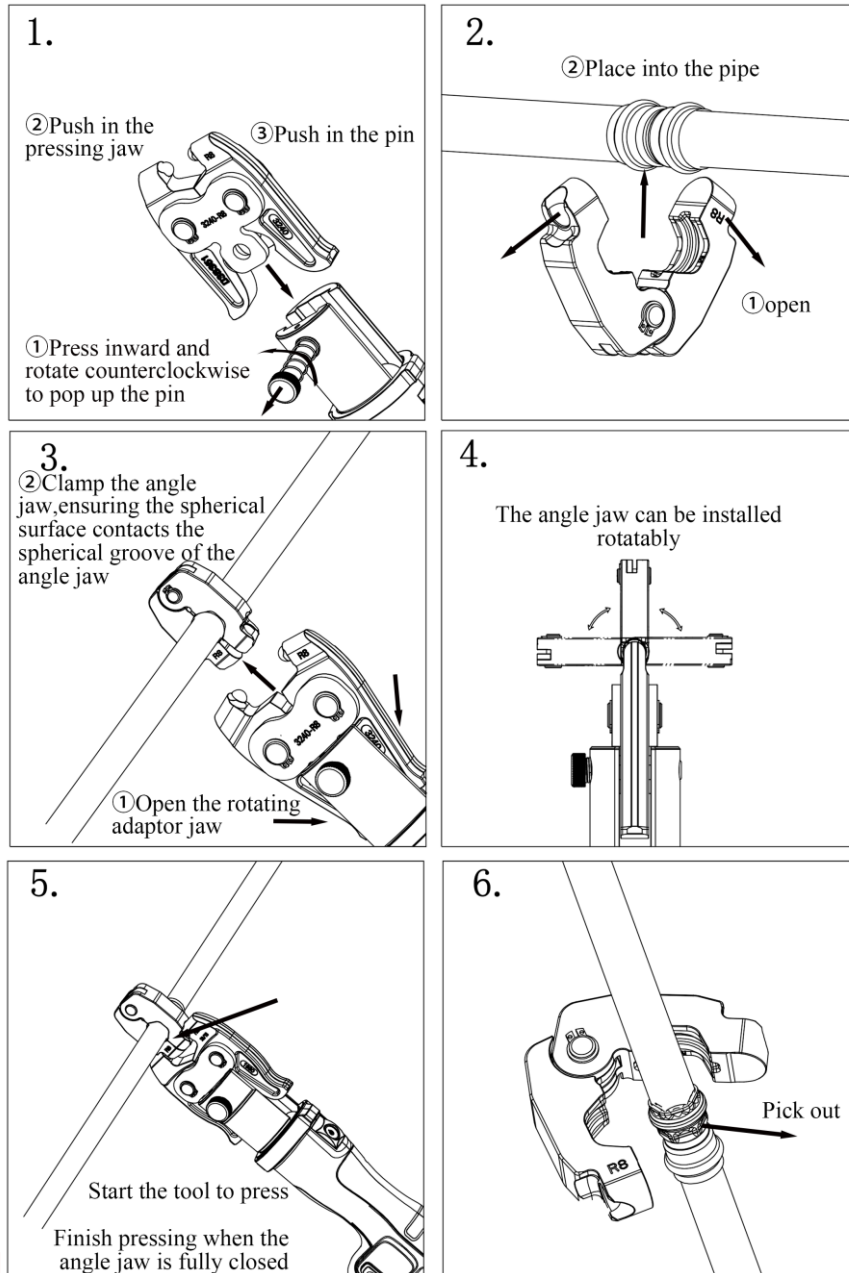


Note:  Start pressing when ring jaws fully connect to adaptor and cover the gridding. The other operations are the same.

3.3.2. Please refer the illustration for R9 jaws below:

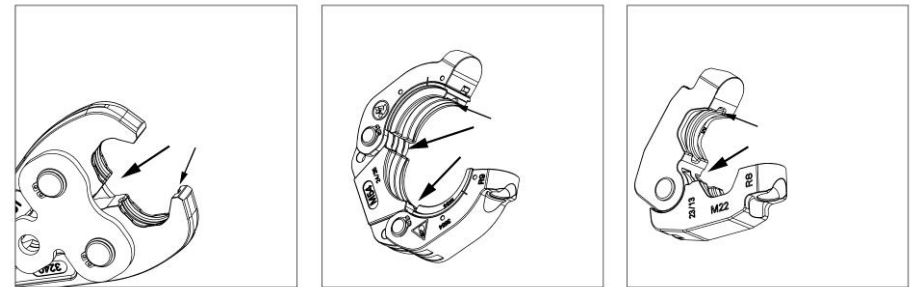


3.3.3. Please refer the illustration for R8 jaws below:



3.4. Jaw cleaning and maintenance

- 1) Clean the residue accumulated in the pressing jaws in time. Cleaning the residue can be done with a scouring pad or a steel wool, but it can't be cleaned with something harder (such as sandpaper, file, etc.), which will accelerate the wear on the edge of the cavity.
- 2) After each pressing is completed, remove the impurities and dust on the surface of the jaws, especially the gap at the bottom of the jaws; then rub the lubricant on the surface of the jaw, especially the pin and jaws, and then put it into the dedicated toolbox.
- 3) It is strictly forbidden to collide with any metal. It is strictly forbidden to contact any jaws with any sharp object.
- 4) Check the jaw return spring before each use. Normally, the jaw can be easily opened and closed by applying a finger.
- 5) It is recommended to check the wear of the jaw once a year by the dealer or manufacturer.



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 use.

1. Please note that routine maintenance and inspections can extend the life of your tools.
Before each use, 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.
After using, clean the 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. Store the tool in a dry environment.
2. Service to the tool should only be done by a qualified Service Technician.
3. Keep the tool and spare parts dry. If the tool is wet, take out the battery, and wait until the tool is completely dry before reloading the battery.
4. Do not put the tool in too hot or cold place. Otherwise, the spare parts will be damaged.
5. Do not use aggressive chemical cleaners or strong detergents to clean tools.
6. The warranty of the tool is 2 years or 30,000 cycles. To prolong the life of the tool please maintain it every 10,000 cycles.
7. If the tool not used for a long time, please make sure the piston stays 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.

8. 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.

TROUBLESHOOTING

FAULT	ANALYSIS	SOLUTION
A. Tool is inoperative	1. The battery runs out 2. Circuit problem 3. Dirt, contaminants, etc in the hydraulic system of the tool.	1. Charge the battery 2. Contact the dealer or manufacturer, and to be repaired by professional maintenance personnel 3. Change the hydraulic oil
B. No power during operation or not up to the rated power	1. Lack of hydraulic oil 2. Dirt, and contaminants inside of oil sac. 3. Inner leakage	1. Fill or change the hydraulic oil 2. Change the hydraulic oil 3. Contact the dealer or manufacturer, and to be repaired by professional maintenance personnel
C. Fitting didn't press tight or cause wrinkles, even crack	1. Not up to rated power 2. Error select on the press jaw	1. Refer to the B 2. Select the appropriate press jaw
D. Leakage on the head or plunger	1. Worn on the sealing kits	1. Contact the dealer or manufacturer, and to be repaired by professional maintenance personnel
E. Running of the motor but no power output	1. Lack of hydraulic oil 2. Air into the hydraulic system 3. Cold oil	1. Fill or change the hydraulic oil 2. Contact the dealer or manufacturer, and to be repaired by professional maintenance personnel 3. Use the tool under -10℃-40℃

LIMITED 2 YEARS 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 two years from the date of shipment (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.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

The warranty gives you specific legal rights and you may also have other rights which vary from state to state.