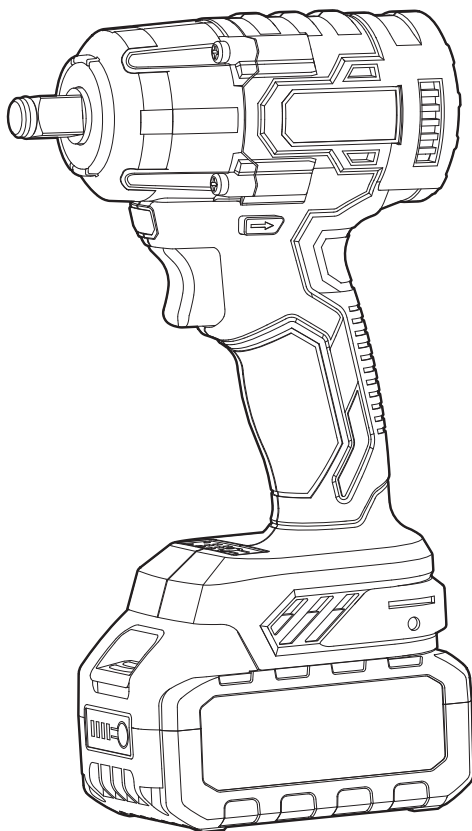


ZENTOR

ZT230-1

20V 300N.m Brushless Lithium Wrench



Please read this manual carefully before use and keep it in a safe place

General safety warning for power tools:



Warning:

Read all warnings and instructions. Failure to follow the warnings and instructions below may result in electric shock, fire and/or serious injury. All warnings and instructions shall be stored for future reference. The term "Power Tool" refers to mains-operated (corded) power tools or battery-operated (cordless) power tools in all the following warnings.

General safety warning for power tools. Working area:

- 1) Keep working areas clean and well lit. Accidents may occur in disordered or dark working areas.
- 2) Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Sparks produced by power tools may ignite the dust or gases.
- 3) Keep children and bystanders away before operating the power tools. Distraction during working may cause the operator to lose control of the power tool.

General safety warning for power tools - electrical safety:

- 1) The plug of power tools must match the socket. Do not modify the connector plug in any way. Power tools that should be grounded cannot be connected via any conversion plug. The unmodified plugs and their matching sockets can help reduce the risk of electric shock.
- 2) Avoid human contact with the grounded surfaces, such as pipes, cooling fins and refrigerators. The risk of electric shock may increase if your body comes into contact with the grounding surfaces.
- 3) Do not expose power tools to rain or damp environments. Ingress of water into the power tools may increase the risk of electric shock.
- 4) Do not arbitrarily use the wires. Never transport and pull the power tools or remove the plugs with wires. Keep the power tools away from heat sources, oil, sharp edges, or movable parts. Damaged or twisted cords may increase the risk of electric shock.

- 5) When the power tools are used outdoors, use the external cords suitable for outdoor use. Use of a cord suitable for outdoor use will reduce the risk of electric shock.
- 6) If it is unavoidable to operate the power tools in a damp location, a residual current operated protective device (RCD) shall be used. The use of RCD may reduce the risk of electric shock.

General safety warning for power tools - Personal safety:

- 1) Stay alert, watch what you are doing and use common sense when operating the power tools. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of negligence while operating power tools may result in serious personal injuries.
- 2) Use personal protective equipment. Always wear protective goggles. Safety equipment such as dust mask, non-skid safety shoes, safety helmets or hearing protection which are used for appropriate conditions will reduce personal injuries.
- 3) Avoid accidental starts. Ensure that the switch is in the off-position when connecting the power supply and/or battery case, picking up or transporting tools. Placing your fingers on a switch that has been turned on or inserting the plug while the switch is turned on may cause danger.
- 4) Remove any adjusting keys or wrench before turning on power tools. A wrench or a key that is left attached to a rotating part of the power tools may result in personal injuries.
- 5) Don't stretch your hands too long, and keep proper footing and body balance at all times. In this way, the power tools may be well controlled in unexpected situations.
- 6) Dress properly. Do not wear loose clothing or jewelry. Keep your clothing, gloves and hair away from moving parts. Loose clothes, jewelry or long hair can get caught in moving parts.
- 7) If devices are provided for the connection of dust extraction and collection facilities, ensure these are well connected and properly used. Use of these facilities may reduce dust-related hazards.

General safety warning for power tools - use and precautions of power tools:

- 1) Do not arbitrarily use the power tools. Use the correct power tools for your purpose. The correct power tools ensure that you will work in a better and safer manner.
- 2) Do not use the power tools if the switches do not turn them on/off. Any power tools that cannot be controlled with the switches are dangerous and must be repaired.
- 3) Before making any adjustments, changing accessories or storing power tools, the plug must be unplugged from the power supply and/or the battery case must be disconnected from the tool. Such preventive safety measures may reduce the risk of starting 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 tools. Power tools are dangerous for untrained users.
- 5) Maintain power tools. Check whether the moving parts are properly adjusted or stuck, check the damage of the parts and other conditions that affect the operation of power tools. If damaged, the power tool should be 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 get stuck and are easier to be controlled.
- 7) Use power tools, accessories and cutting heads in the manner specified in instruction manual, 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.

General safety warning for power tools - use and precautions of battery-operated tools:

- 1) Charge only with the charger specified by the manufacturer. There is a fire hazard when using a charger suitable for a certain battery pack on another battery pack.
- 2) Use power tools only when equipped with a special battery box. Using other battery packs may result in damage and fire hazards.

- 3) When the battery pack is not in use, keep it away from other metal objects such as paper clips, coins, keys, nails, screws or other small metal objects, in order to prevent one end of the battery pack from connecting to the other end. A short circuit at the end of the battery pack can cause combustion or fire.
- 4) If the battery is abused, liquid may spill out of the battery; avoid contact with it. If you accidentally come into contact with the liquid, rinse the affected area with water. If the liquid gets into eyes, please seek medical assistance. The liquid splashed out of the battery can cause corrosion or combustion.

General safety warning for power tools - repair:

- 1) Ask the professional maintenance staff to repair the power tools with the same spare parts. This will ensure the safety of the power tools to be repaired.

Professional Requirements:

- 1) Take out the battery pack before carrying out any repair work on the machine.
- 2) It is prohibited to place the machine in rain or water.
- 3) Do not store the battery pack in an environment above 40 °C.
- 4) Charging at 0-30 °C, the ideal charging temperature is 18-24 °C.
- 5) Only use the charger and battery pack provided with this machine.
- 6) Avoid short circuits in the battery pack connection. (For example: Do not let bolts, nails or other objects come into contact with the positive and negative terminals of the battery pack)
- 7) It is prohibited to burn the battery pack or discard it in fire, as it may cause an explosion.
- 8) It is prohibited to charge the damaged battery pack.
- 9) Replace the power cord on the charger in time if it is damaged.
- 10) Be sure to unplug the charger before removing the battery pack.
- 11) During the charging process, it is normal for the charger and battery pack to heat up.
- 12) Do not plug the charged battery pack into the charger when the machine is not in use.
- 13) Please unplug the battery pack from the charger immediately after charging.

- 14) It is normal that the machine body and battery pack will heat up when the machine is working.
- 15) It is strictly prohibited to place used battery packs in fire or dispose of them with household waste. They must be returned to the local collection station or recycling point for recycling.
- 16) Before tightening screws or drilling holes in walls, floors or ceilings, carefully check whether there are wires, cables, natural gas pipelines or water pipes laid to avoid damage from screws or drill bits.
- 17) Wear protective earmuffs when using the machine, otherwise, it may cause hearing loss.
- 18) It is normal that the accessories and metal parts will heat up when the machine is working.
- 19) When operating the machine, the machine may come into contact with hidden wires. You must hold the insulated surface of the machine. Contact with live wires will electrify the metal on the surface of the machine and shock the user.

**Warning:**

The battery pack may leak if it gets too hot or is overused. If the liquid from a battery comes into contact with your skin, wash it with soap first, then rinse it with lemon juice or vinegar. If it accidentally gets into your eyes, immediately rinse with clean water and go to the hospital for examination and treatment right away.












Safety Warnings for Electric Wrenches:

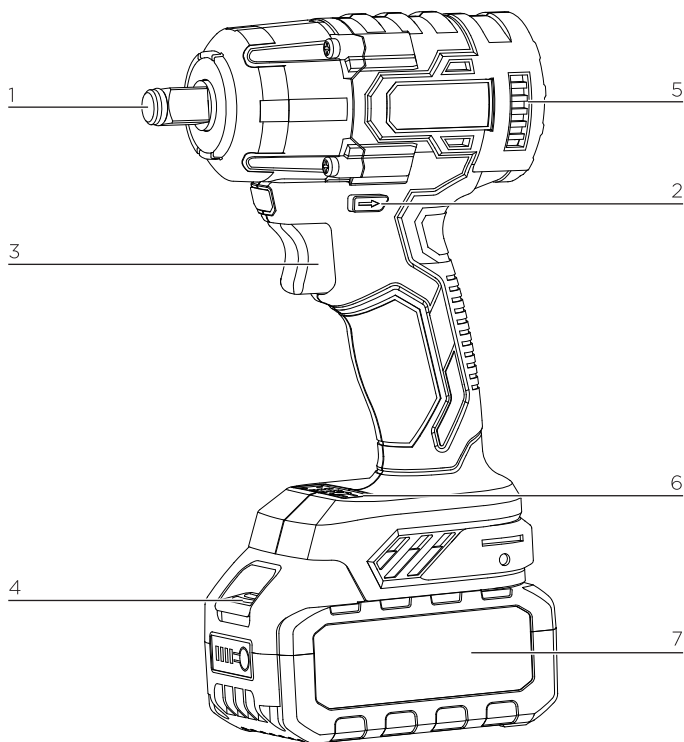
- 1) When operating in a condition where the fasteners may touch the hidden cord, the tool should be held through the insulating grip surface. When the fasteners touch a live wire, the exposed metal parts of the tool will become electrically live, causing the operator to suffer electric shock.
- 2) Please wear earmuffs.
- 3) Please carefully check the socket for wear, cracks or damage before installation.
- 4) Please hold the tools firmly.
- 5) When using the tool at heights, make sure to stand firmly and ensure that no one is underneath.
- 6) The appropriate tightening torque may vary depending on the type or size of the bolt and the material of the workpiece to be tightened.

Charger Safety warning:

- 1) Read the instruction manual before operation.
- 2) For indoor use only, do not place in rain or water.
- 3) Do not charge non-rechargeable batteries.
- 4) Damaged power cord must be replaced by a professional from the manufacturer, its maintenance department or similar professionals to avoid danger.

Symbols:

	The user should carefully read the manual to reduce injuries		It is prohibited to place in fire.
	Warning signs		Please do not discard the batteries, and return the used batteries to your local collection or recycling point for recycling.
	Please wear protective earmuffs		The product body (excluding battery pack) does not contain toxic and harmful substances or elements, and it is a green product. It can be recycled after being discarded and should not be discarded at will.
	Please wear protective glasses		
	Please wear dust masks		The battery of this product contains certain toxic and harmful substances, which can be safely used within the environmental protection service period, and should enter the recycling system after the environmental protection service period is exceeded.
	For indoor use only.		
	It is prohibited to place in rain or water.		



Parts:

1. Square drive head
2. Forward and reverse lever
3. On/Off switch
4. Battery removal switch
5. Heat dissipation holes
6. Switch button
7. Lithium-ion battery

We recommend that you select the accessories from the store where you purchased your power tool. Please use high-quality accessories with well-known brands. Please select correct accessories for your job. Please refer to the accessories package for more usage and help.

Operation Instructions:



Note:

Please read the instructions carefully before using the nail gun.

Before use:

1. Charging:

This charger and the machine must be used together. It is strictly prohibited to use any other charger.

This machine is equipped with a protection circuit. When the battery level is low, the protection circuit is turned on and the machine stops rotating.

The machine may get hot in a high temperature environment or after long-term use, so please don't charge it immediately, and then charge it after the battery cools down, otherwise the service life of the battery will be shortened or it can't be charged due to overheating of the battery.

When the machine is charged for the first time or not used for a long time, the charger's efficiency may only reach about 60% during the first charge. It is necessary to go through 2 to 3 charge and discharge cycles before the battery efficiency can reach 100%. The charger lights up red when charging and turns green when fully charged.

2. Install/remove the battery pack

To remove the battery pack, press the lock button on the front of the battery pack and then pull it out. To insert the battery pack, just gently push it into the machine. Avoid using excessive force.

Operation:

1. Start/Stop

Press and hold switch (3) to start the machine. Release it and the machine will stop running.

2. Switch speed regulation:

The force applied to the switch can change the rotational speed. The change range is between 0 and the maximum rotational speed. It has a small force, low rotational speed, and is easy to control. After a stable and reliable start-up, fully press the switch to achieve a faster speed.

3. Speed gear selection

When in use, first select the gear and then control the speed with the switch. The machine is set to the highest forward gear at the factory. Please press the function switch key (6) to adjust the fast/slow display to large/small (6). For reverse loose self-stop, also adjust the function switch key (6). A lit light indicates that the reverse loose self-stop function has been enabled.



Warning:

Do not operate at low speed by gently pressing the switch for a long time, otherwise overheating may occur inside the machine. # Change the speed gear of the machine each time after it stops.

4. Switch lock-on

The switch has a locking protection function, which helps to reduce the accidental start-up of the motor when it is not in use. Adjust the steering lever (2) to the center position, and the machine can be locked.

5. Change the rotation direction

Forward: To drill holes and screw in screws, push the side marked with “ ” of the gearshift lever (2) to the bottom (move to the left). Reverse: To loosen or remove screws, push the side marked with “ ” of the gearshift lever to the bottom (move to the right).

**Warning:**

The steering can only be changed when the machine is completely stationary.

**Note:**

When installing or disassembling the socket, be sure to check whether the machine is turned off and whether the battery pack has been taken out.

- 1) Socket without O-ring and pin:
 - a) Install the socket: Press it onto the square drive head (1) of the tool until it is fully in place.
 - b) To remove the sleeve: just pull it off. Tap gently if necessary.
- 2) Socket with O-ring and pin:
 - a) To install the socket: Remove the O-ring from the groove on the sleeve, take out the pin from the socket, place the socket on the square drive head (1), align the holes on the socket with those on the square drive head (1), insert the pin through the holes on the socket and the square drive head (1), and then move the O-ring back to its original position in the groove on the socket to secure the pin.
 - b) Dismantling the socket: Please follow the reverse steps of installation.

**Note:**

Make sure that the screwdriver head is completely fixed by the chuck before starting the machine.

7. Work light:

The machine is equipped with a work light. When the machine is in use and the switch is pressed, the light turns on; when the switch is released, the light will turn off after a 5-second delay.

8. Operation:

When inserting the battery pack, make sure it is fully locked in place. Otherwise, it may accidentally fall out of the tool, causing injury to yourself or others. Firmly hold the tool and place the socket over the bolt or nut. Start the machine and begin tightening at an appropriate time.

The appropriate tightening torque may vary depending on the type or size of the bolt and the material of the workpiece to be tightened. Overall, the longer the fastening time, the greater the fastening torque.

Note:

Align the tool straight with the bolt or nut.

Excessive tightening torque may damage the bolts, nuts or sockets. Before starting work, please be sure to conduct a trial run to determine the appropriate tightening time for the bolts or nuts. If the tool is used continuously until the battery pack is completely drained, it should be paused for 15 minutes before continuing operation with a fully charged battery pack.

The tightening torque is affected by the following multiple factors. Make sure to use a torque wrench to confirm the torque after tightening.

- 1) The voltage will drop and the tightening torque will decrease when the battery pack is about to be completely drained.
- 2) Socket:
 - a) Using sockets of incorrect size will result in a reduction of the tightening torque.
 - b) Damaged sockets (with worn hexagonal or rectangular ends) will reduce the tightening torque.
- 3) Bolt:
 - a) Even if the torque coefficient and bolt grade are the same, the required tightening torque varies due to different diameters.
 - b) Even if the diameters of the bolts are the same, the required tightening torque varies depending on their torque coefficient grades and lengths.

- 4) Using universal joint or extension rod will reduce the fastening force of impact socket wrench to some extent, which can be compensated by extending the tightening time.
- 5) The way the tool is held or the material of the bolted part can also affect the torque.
- 6) Operating this machine at a low speed will also reduce the tightening torque.

FAQ:

1) Why is the machine not running when the switch trigger is pressed?

There is a steering lever on the top of the switch, which is in the locked position. Move the lever to the position where it needs to be turned, then press the button, and the machine will start to rotate.

2) Why does the machine stop running before it was tightened?

The machine is equipped with low-voltage protection. When the battery pack's power is too low, the machine cannot operate. Please check the battery pack's power.

This machine is equipped with a temperature protection system. When it operates at full load for a long time, the battery pack may overheat. The temperature protection system will then activate, causing the machine to stop. Please cool the machine to room temperature before continuing to use it.

3) Why does the working time of the same battery pack vary?

If a battery pack is left unused for too long, it will shorten its working time, which is caused by the number of charging cycles. This situation will be improved after several charges and uses. The battery pack's power will also be consumed quickly when doing heavy work. Do not charge the battery pack in environments below 0 °C or above 35 °C, as this can also affect its performance.

Maintenance:

Before performing any replacement work on the machine, be sure to pull out the plug first:

Your power tool does not require any additional lubrication or maintenance. Do not clean your power tools by using water or chemical cleaning agents, just wipe them clean with a dry cloth. Tools should be stored in a dry environment and kept clean at the motor vents. Try not to use it in a dusty environment.

To benefit the lifespan of the battery pack, please note:

- 1) Battery pack storage: Charge the battery pack to 30% - 50% and store it in an environment below 26 °C.
- 2) Fully charge the battery pack and use it once within no more than six months.

Disposal of Used Battery Packs:



To protect natural environment, please properly recycle or dispose of battery packs. This battery contains a lithium battery. Please consult the local waste disposal department for information on recycling and/or disposal. Use a hand drill to drain the battery pack's power, remove the battery pack, and wrap the electrode ports with a strong tape to prevent short circuits and leakage. Do not attempt to open or disassemble any components.

Environmental protection:



Waste disposal:

In response to environmental protection, damaged machines, accessories and packaging materials must be sorted carefully for easy recycling.

In order to facilitate sorting and recycling, all plastic parts are marked with the materials used.

ZENTOR

Product Warranty Card

Dear users :

Thank you for buying our products. In order to ensure your profit, users who buy our products can contact local distributor or Specified repair stations with invoice and warranty cards if the product failures due to quality problems.

Warranty Notice:

1. From _____ (Year/Month/Day) to _____ (Year/Month/Day), If the failure happen in normal use, our company will provide free warranty, parts replacement and other services according to the failure situation.
2. This warranty card and purchase invoice are the voucher of after-sales service provided by our company to customers. The card must be detailed only after filling in the following form and affixing the official seal with the distributor.
3. In one of the following cases, free warranty service will be invalid, and maintenance fees will be required:
 - (1) Exceed the expiration date.
 - (2) Failure or damage caused by not following the requirements of the product manual, maintenance or improper storage.
 - (3) Failure or damage caused by disassembling, repairing or modification of the product without the permission of our company.
 - (4) Machine breakdown or damage caused by force majeure.
 - (5) Consumable accessories.

This card is issued with the product. One card for one machine, to ensure that you can fully enjoy the right to free warranty service provided by the company, please keep this card properly, lost will not be replaced.

Purchase Date: _____ (Year/Month/Day)

Product Certificate

Inspector:

01

Date of manufacture:

NINGBO DELI TOOLS CO., LTD.
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MADE IN CHINA

