



PORTABLE LIFTING AND PULLING TOOL



PT 1100

OWNER'S MANUAL


Zhejiang NOWVOW Mechanical & Electrical Corp.,Ltd

1689 Xianyuan Road, Jinhua, Zhejiang, China
Tel:0086-579-82262697 Fax:0086-579-82262706
E-mail:info@nowvow.net
www.novawinch.net

READ CAREFULLY BEFORE OPERATION

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WARNING

 (Failure to observe these instructions could lead to serious injury or death or equipment damaged)

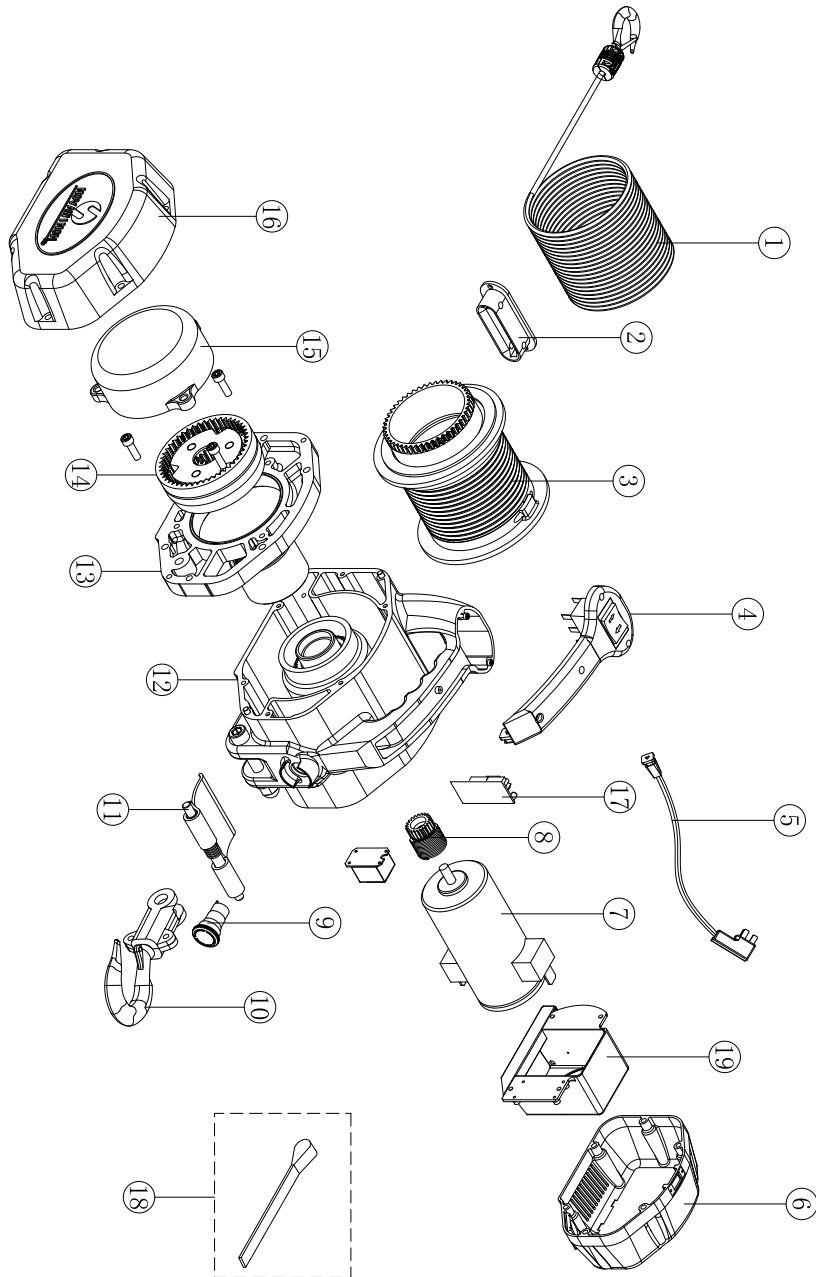
- Always stop the operation as LED indicator flash and alarm that tool overloading.
- **Never** use tool to lift or move people.
- **Never** use tool after drinking or taking medicine.
- **Never** work, walk or stand under and operating pulling tool, always check tool hook is tight and secure.
- **Never** cut out power during working.
- Avoid water or moisture inside the tool and Never operate product in a wet environment.
- **Never** touch load rope, rotate or shake object.
- **Never** remove ground pin from plug.
- **Never** let electrical cables near parts that become hot.
- **Never** disconnect earth wire.
- **Never** use the pulling tool's rope to tow impact object. Impact load during towing can exceed rope strength.
- **Never** use a hook which throat opening has increased, or the tip is bent or twisted.
- **Never** use bungee straps that develop tremendous and potentially dangerous amounts of force when stretched.
- **Never** hook rope back onto itself. This damages the rope.
- Always read all instructions and cautionary markings and check tool/ wire rope are in good order.
- Always lay something over the wire rope as pulling. Which can prevent the potential accident as wire rope is broken accidentally. For example, use a wire rope dampener, heavy blanket and so on.
- Avoid loads rotate freely during lifting, keep it steady.

- Always pay attention to the tool running and heavy lifting state as operation, if you find any abnormal noise or abnormal vibration, please press the stop button immediately.
- Pay attention to the position of the hook stopper during power in, When the distance between the hook stopper and the tool is less than 3cm, stop the rope continue winding back immediately, to avoid any damage.
- Always guarantee the drum to keep at least 5 circles wire rope as releasing wire rope; and stop releasing wire rope operation immediately as you see red paint marking on the outside of tool.
- After use, always need to stop immediately make tools to stay in a safe state and prohibit the non-operation person to operate tool.
- Always be certain the anchor you select will withstand the load and the strap or chain will not slip.
- Always use factory approved mounting hardware, components, and accessories.
- Always avoid “jogging” or “plugging” (quick on/off cycles) with the tool. This can damage motor controls and rope.
- **Never** apply load to hook tip or latch. Apply load only to the center of hook.
- Always ensure hook latch is closed and not supporting load.
- Always avoid side pull which can pile up rope at one end of the drum. This can damage rope or pulling tool.
- Always use suitable anchor point capable of handling load.

PT1100AC PARTS LIST

No.	Item No.	Item	Qty
1	PT1100001	Wire rope assembly	1
2	PT1100002	Roller fairlead	1
3	PT1100003	Drum assembly	1
4	PT1100004	Handle	1
5	PT1101005	Power plug with leakage protector (110-120V)	1
	PT1102005	Power plug with leakage protector (220-240V)	1
6	PT1100006	Motor end cap	1
7	PT1101007	Motor assembly (110-120V)	1
	PT1102007	Motor assembly (220-240V)	1
8	PT1100008	Brake assembly	1
9	PT1100009	Emergency stop button	1
10	PT1100010	Upper hook	1
11	PT1100011	Tensioner	1
12	PT1100012	Winch Frame	1
13	PT1100013	Drum supporting board	1
14	PT1100014	Gear system	1
15	PT1100015	Gearbox	1
16	PT1100016	Gearbox cover	1
17	PT1100017	PCB	1
18	PT1100018	Hand strap	1
19	Pt1100019	Motor wind scooper	1

PT1100AC



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1. Introduction

Suitable for the areas with pulling, lifting, tensioning, such as factory, workshop production line, under-construction buildings, Interior trim, maintenance, home usage and so on. Physical design is easy carry, operation friendly, exclusive patented.

2. Specification

Description /Specification

Mode: PT1100AC-1/ PT1100AC-2

Power: PT1100AC-1:AC110V~120V 50/60Hz

PT1100AC-2:AC220V~240V 50/60Hz

Maximum capacity: 1100lbs (500kg)

Wire rope: ϕ 4.8mm \times 4.88m (ϕ 3/16"X16')

Motor power: 0.75kW

Line speed: \geq 2m/min

Safety device: LED indicator lights as pulling tool works and LED indicator blinks and that warns as pulling tool overloading occurs.

Pulling tool weight: 11kg (24lbs)

Dimensions: 240mm \times 206mm \times 210mm (9.45"X8.11"X8.27")

Duty Cycle

- To begin, it is necessary to familiarize tool duty cycle. Once the time of pulling / lifting is longer, the calorific value of motor is bigger. At the meanwhile, it also has heat value as releasing wire rope. So always avoid over heating the tool motor. For extended pulling / lifting, stop at reasonable intervals to allow the tool motor to cool down, which can prevent motor to be damaged.
- Tool use S2 short-time duty, and load duty cycle is 20%.

Packing List

Tool	<input type="checkbox"/> PT1100AC-1	<input type="checkbox"/> PT1100AC-2	1
Installation and operator's guide			1

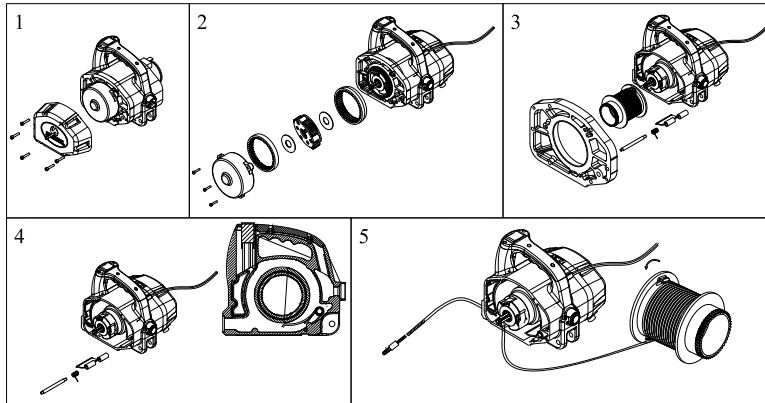
6. Troubleshooting

- When the tool working abnormal, please check the following items.

Situation	Troubleshooting	Solutions
The tool does not work	Power not connected	Put through power supply
	The power supply does not meet the requirements	Access to the product specification of the power supply.
	The emergency stop button is not opened	Turn on the emergency stop switch.
	Motor damage	Replace the motor
	Leakage protection works	Press the reset button on the power plug with the leakage protector
Any abnormal noise	Motor carbon brush worn	Replace motor carbon brush
Wire rope damage	Wire rope worn	Replace the wire rope
	Roller fairlead worn	Replace the roller fairlead
Wire rope is tangled	The traction tool is not perpendicular to the load (the wire rope is easy to slip out of the chute when it deviates from >3 degrees)	Adjust the tool perpendicular to the load Rope in/out again

Note: if the above situations are still unresolved, please contact the manufacturer.

6. As shown in Figure 3, the roller support plate is returned to the main body.
7. As shown in Figure 2 and Figure 1, the reduction system, the reduction gear box and the reduction gear cover are returned to the main body.
8. Power on and idling to check if the machine is working properly.



3. Pre-Installation Preparation

Unpacking

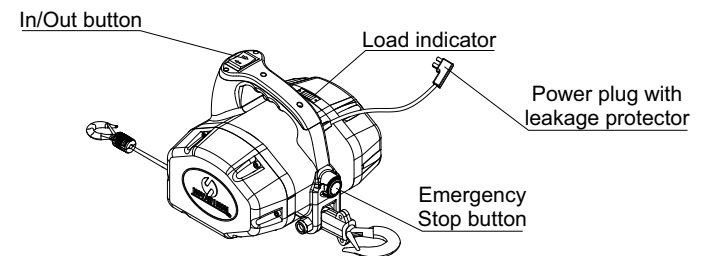
Once package has been opened, carefully inspect tool on base of packing list, damage that may have occurred during shipment. If damage is found please contact your representatives immediately.

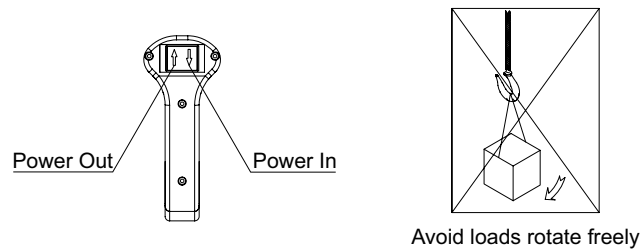
Pre-Installation Check

- Always read all instruction and cautionary, make sure power meets working requirement, check tool/ wire rope are in good order.
- Check that all fasteners and joints are tight and secure.
- Check that all external wiring is in good order

4. Operation Instruction

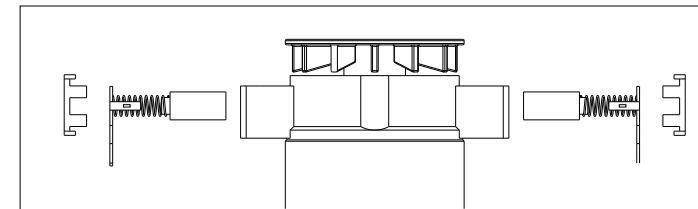
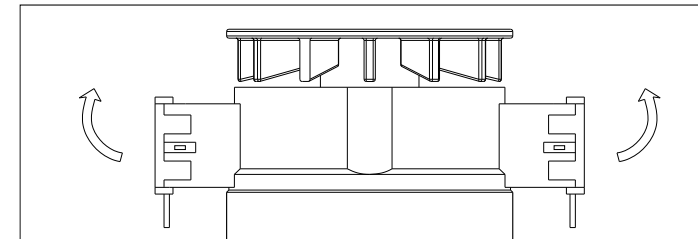
- Read the instruction manual carefully ,check the environmental conditions and be safety.
- Operator wears gloves and attach strap on hook.
- Connect the power plug with leakage protector to the required single-phase grounding power socket.
- If need the extension of the connection wires, ensure it can work safely at more than 15A current and it will not touch the sharp object, or close to the rotating object.
- Always use suitable anchor point capable of handling load.
- Turn the emergency stop button clockwise to confirm that the emergency stop button is in the open state. When the tool is not working, make sure the emergency stop button.
- Press the switch button to release the wire rope to check whether the tool is abnormal. When the red paint mark show out, stop the rope operation immediately to ensure that the steel wire rope is kept at least 5 layers on the drum.
- Press the button to rearrange the wire rope to ensure that the wire rope is arranged in an orderly way on the drum groove (the first layer cable capacity is 4.88 meters).





- Hang the wire rope hook on the object to ensure that the hook latch is locked and not stressed.
- Operate after the load is confirmed not exceeding the maximum load of the tool.
- Before using the tool, the non-operating person withdraw from the working area.
- Follow the instructions to ensure that the operator can observe the full process.
- When horizontal pulling, it is necessary to lay the protective blanket on the wire rope to prevent the accident which caused by the accidental fracture of the steel wire rope.
- Avoid loads rotate freely during lifting, keep it steady.
- Avoid side pulls. If necessary, use the pulley block to ensure that the wire rope is perpendicular to the drum.
- When the load exceeds the maximum load, load indicator flash and alarm, immediately stop the operation, wait one minute, when the load indicator lights flashing stop and press the out button, lighten the load and operation again.
- Always plug out when the tool is not in use.
- If there is any abnormal noise or vibration, press the emergency stop button immediately. Do not disassemble, please contact the local agent immediately.

1. Remove the motor cap to expose the motor.
2. Remove the connect wire from carbon brush.
3. Remove the plastic board from the carbon brush side.
4. Press the metal clasp at both ends of the motor carbon brush to remove the carbon brush from the motor.
5. Replace the motor carbon brush, assembly the plastic board and connect the wires on carbon brush (The one end marked with white point is the positive pole of the motor, connect with the red battery wires. the other end is the negative pole of the motor, connect with the black battery wires. Then assembly the end cap.



5. Maintenance

- Maintenance of the wire rope and hook:
 1. The wire rope is easy to be damaged in use, it is necessary to check carefully whether the wire rope has been worn, to prevent any accidents.
 2. Replace the wire rope immediately when the wire rope is worn seriously.

⚠ CAUTION

 Do not try to extend the wire rope or repair the damaged wire rope.
 3. Apply anti-rust oil to the wire rope and hook regularly. When applying oil, use a scrubbing brush or wood chip, and do not use hand to oil the wire rope directly when on working.
- Replacement of motor carbon brush.
(Motor carbon brush replacement should by professionals or under the guidance of professionals)

- Replace the wire rope
(Wire rope replacement needs to be carried out by a professional or under the guidance of a professional)
 1. As shown in Figure 1, use a hex wrench to disassemble the gearbox cover.
 2. As shown in Figure 2, unscrew the gearbox screw and take out the gears in the gearbox.
 3. As shown in Figure 3, forcefully lift the roller support plate, take out the pressure rope and the roller, and use a wrench to loosen the wire rope fixing screw on the roller and remove the wire rope.
 4. As shown in Figure 4, re-install the pressure rope to the main body, the installation direction is shown.
 5. As shown in Figure 5, the wire rope is inserted into the rope guide hole on the main body, and is inserted into the drum as shown in the figure, and the wire rope is fixed by the wire rope fixing screw; according to the direction shown, the wire rope is closely arranged on the drum. Open the pressure rope and put the roller into the main body; gently rotate the roller to ensure that the installation is in place and the rope has compacted the wire rope.