



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

Revision Date 2018-12-10

WARNING



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

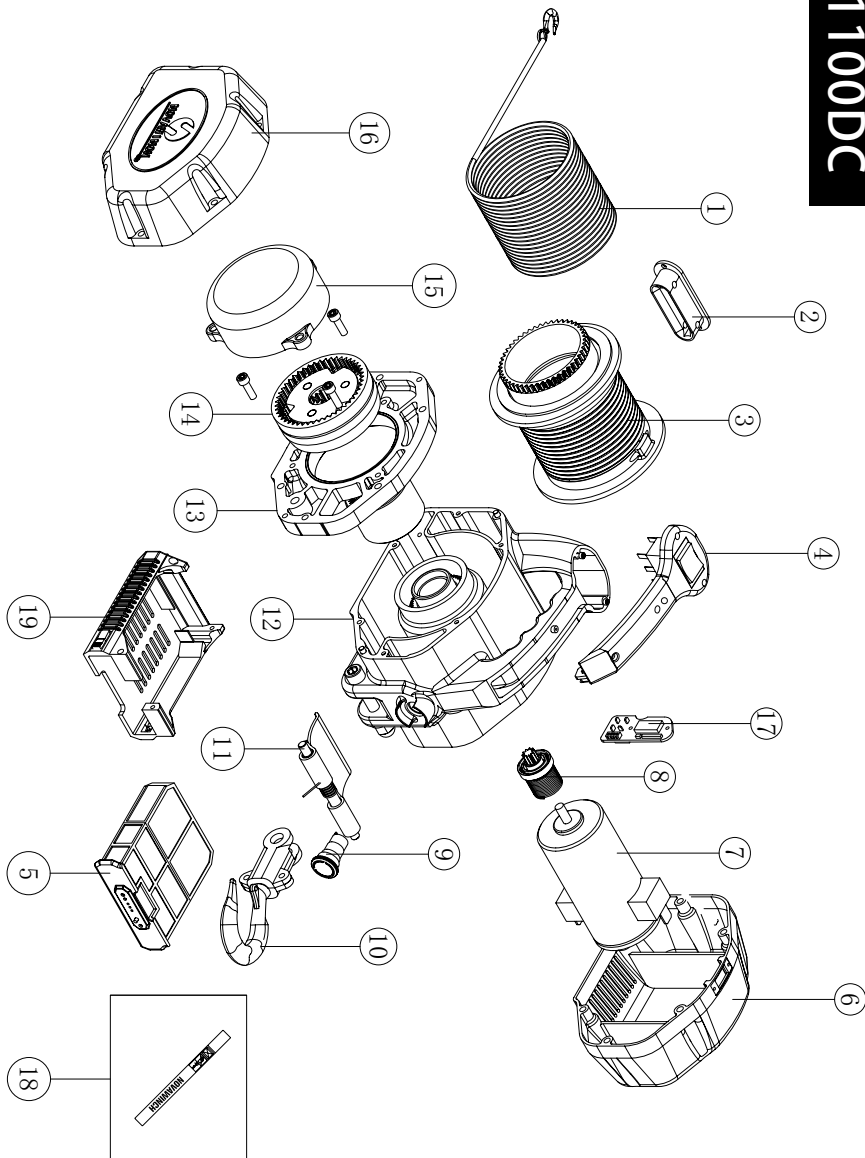
- Always stop the operation as LED indicator flash and alarm that tool overloading.
- **Never** use tool to lift or move people.
- **Never** use tool after drinking or taking medicine.
- **Never** work, walk or stand under and operating pulling tool, Always check tool hook is tight and secure.
- **Never** plug out battery during working.
- Avoid water or moisture inside the tool and Never operate product in a wet environment.
- **Never** shock load rope, rotate or shake object.
- **Never** route battery near parts that become hot.
- **Never** press battery, or drop it from high places.
- **Never** use the pulling tool's rope to tow impact object. Impact load during towing can exceed rope strength.
- **Never** use a hook whose throat opening has increased, or whose 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 make sure battery in full and safe condition. Check pulling tool/ wire rope are in good order before operation.
- 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.
- Always guarantee the distance of Wire rope hook and tool is not less than 30 cm as using.
- 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 use correct charger to charge battery.
- Always keep battery out of reach of children.
- Always avoid side pull which can pile up rope at one end of the drum. This can damage rope or tool.
- Always use suitable anchor point capable of handling load.

PT1100DC PARTS LIST

No.	Item No.	Item	Qty
1	PT1100001	Wire rope assembly	1
2	PT1100002	Roller fairlead	1
3	PT1100003	Drum assembly	1
4	PT1103004	Handle	1
5	PT1103005	Battery Pack	1
6	PT1100006	Motor end cap	1
7	PT1103007	Motor assembly (24V)	1
8	PT1100008	Brake assembly	1
9	PT1100009	Emergency stop button	1
10	PT1100010	Upper hook	1
11	PT1100011	Tensioner	1
12	PT1103012	Winch Frame	1
13	PT1100013	Drum supporting board	1
14	PT1100014	Gear system	1
15	PT1100015	Gear box	1
16	PT1100016	Gear box cover	1
17	PT1100017	PCB	1
18	PT1100018	Handsaver	1
19	Pt1100019	Battery support	1

PT1100DC



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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: PT1100DC

Power: DC24V

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: 13kg (28lbs)

Dimensions: 240mm \times 206mm \times 240mm (9.45"X8.11"X9.45")

Duty Cycle

1. 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.
2. Tool use S2 short-time duty, and load duty cycle is 20%.

Packing List

Tool <input type="checkbox"/> PT1100DC	1
Installation and operator's guide	1
Battery Pack	1
Charger	1

7. Battery charge Safety instruction

Charge Notes

1. A 100V-240V, 50/60Hz, DC29.4V/2A output power source is suitable for battery charger.
2. Always use original charger or authorized charger when charging.

Charge time

Battery capacity (Ah)	6
Charge time(min)	210

Charge temperature

Battery should stay in static room temperature before charge, environment temperature should between -10 $^{\circ}$ C to 40 $^{\circ}$ C.

Charge protection

Charger PCB integrate temperature control, short circuit protection, overcharge protection and electric quantity detection function.

Charge procedure

1. Disassemble battery from tool, turn off battery power.
2. Connect charger and battery.
3. Connect charger to power source, red light on means charging.
4. Green light on means battery full charge.
5. Always disconnect charger and power source first.
6. Press power display button to check electric quantity. (example, three lights on/battery full, one light on/battery low)

Charge Warning

- Do not use tool under battery low. Please charge battery immediately.
- Always read owner's manual before operation.
- Always use original charger or authorized charger when charging.
- Environment temperature should between -10 $^{\circ}$ C to 40 $^{\circ}$ C during charging. It is normal battery surface warm during charging.

6. Troubleshooting

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

Situation	Troubleshooting	Solutions
The tool does not work	Battery not connected	Connect battery
	Power button is not turn on	Turn on power button
	The emergency stop button is not opened	Turn on the emergency stop switch.
	Motor damage	Replace the motor
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.

3. Pre-Installation Preparation

Unpacking

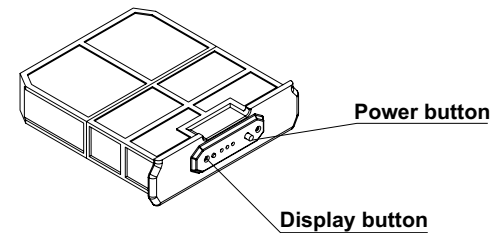
Once package has been opened, carefully inspect tool on base of packing list, damage that may have occurred during shipment. If damage is found please contact your representatives immediately.

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

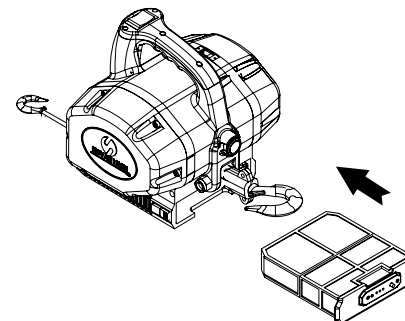
- Read the instruction manual carefully, check the environmental conditions and be safety.
- Press the power button on battery, make sure it bounce up. Press battery power display button to check battery power before every operation.



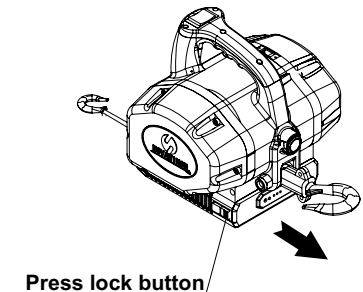
Caution:
Please charge battery in time, avoid battery damaged.

- Insert battery to the tool, make sure it was fixed in place.

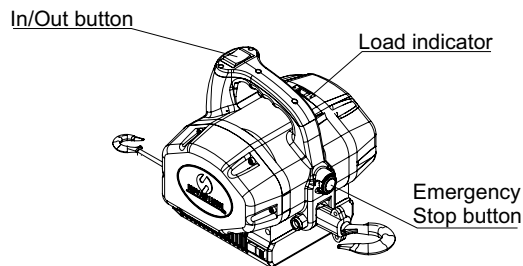
Insert battery



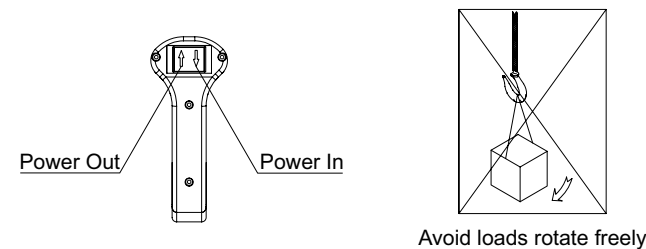
Disassemble battery



- Operator wears gloves and attach strap on hook.
- 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 pulling. 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 turn OFF battery power and disassembly it 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.



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)
 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.

