

Traction Block

Operation Manual

To help you know more about our product, we have provided installation and operating instructions and other information on labels and in this guide. Please read the instructions carefully so that to be familiar with the correct operation and some general security measures. This information alerts you to potential hazards that could hurt you or others. Please check and regular inspect the equipment, comply with the safety regulations seriously, in case of the occurrence of dangerous accidents.

This guide identifies potential hazards and has important safety messages that help you and others avoid personal injury or death. **WARNING** and **CAUTION** are signal words that identify the level of hazard.

Catalogue

Product Introduction · · · · · 3-11

Safety Precaution · · · · · 12-15

Operating Instruction · · · · · 16-19

Maintenance & Warranty · · · · · 20

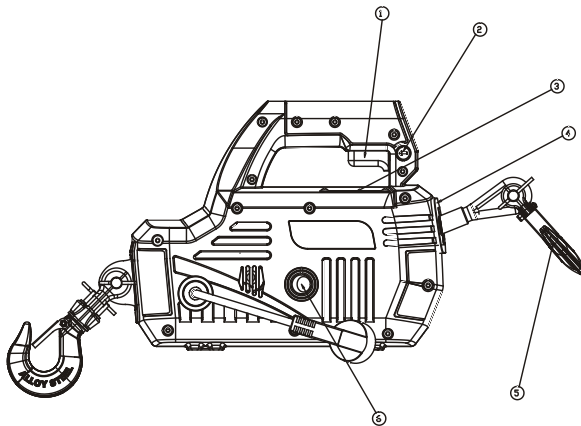
Product Introduction: Traction Block

ATQ-01 Manual Style:

This is a powerful lifting and pulling tools which widely used in mechanical, building, automobile, agriculture and other fields. Equipped with speed switches and current overload protection function. Powered by AC power source this compact tool has a pulling capacity of 1000 pounds / 454 kilos.

There are two kinds of operation mode of speed switch:

1. **Variable speed mode**——apply to short the good load position.
2. **Full speed mode**——apply to long distance pulling.



1. Variable Speed Trigger Switch	2. Directional Switch
3. Load Indicator Display	4. Fairlead
5. Safety Hook with Hook Strap	6. On / Off Switch

Specifications Data For The Product:

Max Pulling Capacity	1000 lbs. (454 kg)
Wire Rope Diameter	0.58 cm / 4.6m
Power Source	100-240 V AC
Power Input	1200 W

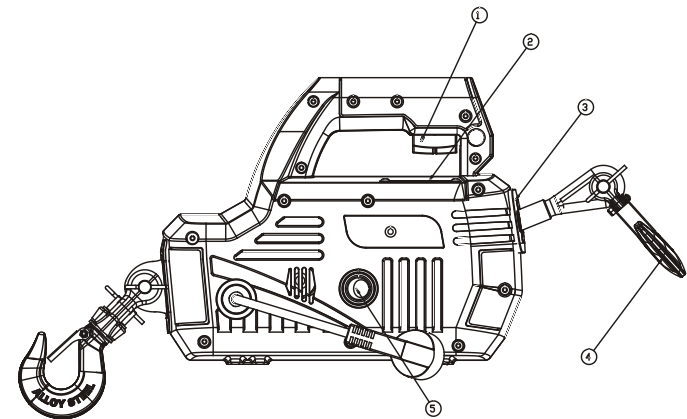
Product Introduction: Traction Block

ATQ-02 Remote Control Style:

This is a powerful lifting and pulling tools which widely used in mechanical, building, automobile, agriculture and other fields. Equipped with speed switches and current overload protection function. Powered by AC power source this compact tool has a pulling capacity of 1000 pounds / 454 kilos.

There are two kinds of operation mode:

1. **Manual mode**——Touch the switch by manual button, apply for pulling.
2. **Remote control mode**——Operated by remote control, apply for narrow and high position.



1. Change-over Start Switch	2. Load Indicator Display
3. Fairlead	4. Safety Hook with Hook Strap
5. On / Off Switch	

Specifications Data For The Product:

Max Pulling Capacity	1000 lbs. (454 kg)
Wire Rope Diameter	0.58 cm / 4.6m
Power Source	100-240 V AC
Power Input	1200 W

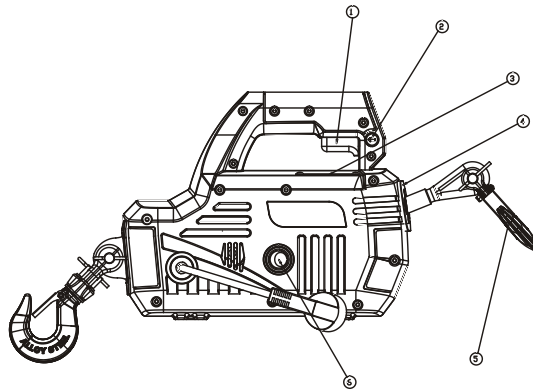
Product Introduction: Traction Block

ATQ-03 Manual Style:

This is a powerful lifting and pulling tools which widely used in mechanical, building, automobile, agriculture and other fields. Equipped with speed switches and current overload protection function. Powered by AC power source this compact tool has a pulling capacity of 555 pounds / 250 kilos.

There are two kinds of operation mode of speed switch:

1. **Variable speed mode**——apply to short the good load position.
2. **Full speed mode**——apply to long distance pulling.



1. Variable Speed Trigger Switch	2. Directional Switch
3. Load Indicator Display	4. Fairlead
5. Safety Hook with Hook Strap	6. On / Off Switch

Specifications Data For The Product:

Max Pulling Capacity	555 lbs. (250 kg)
Wire Rope Diameter	0.48 cm / 8m
Power Source	100-240 V AC
Power Input	1200 W

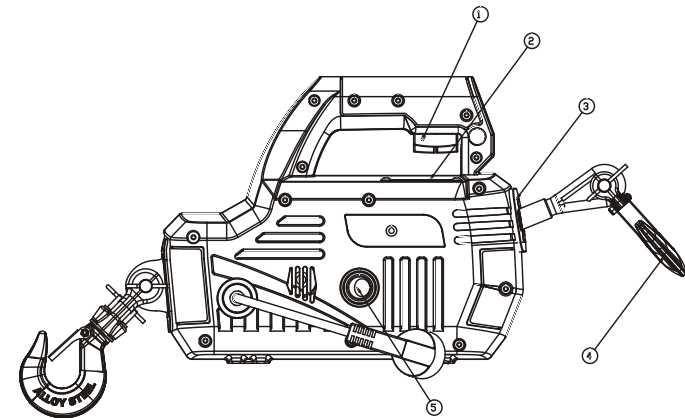
Product Introduction: Traction Block

ATQ-04 Remote Control Style:

This is a powerful lifting and pulling tools which widely used in mechanical, building, automobile, agriculture and other fields. Equipped with speed switches and current overload protection function. Powered by AC power source this compact tool has a pulling capacity of 555 pounds / 250 kilos.

There are two kinds of operation mode:

1. **Manual mode**——Touch the switch by manual button, apply for pulling.
2. **Remote control mode**——Operated by remote control, apply for narrow and high position.



1. Change-over Start Switch	2. Load Indicator Display
3. Fairlead	4. Safety Hook with Hook Strap
5. On / Off Switch	

Specifications Data For The Product:

Max Pulling Capacity	555 lbs. (250 kg)
Wire Rope Diameter	0.48 cm / 8m
Power Source	100-240 V AC
Power Input	1200 W

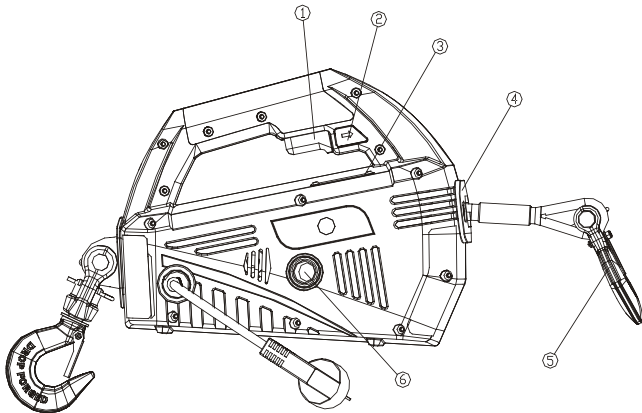
Product Introduction: Traction Block

SLQ-01 Manual Style:

This is a powerful lifting and pulling tools which widely used in mechanical, building, automobile, agriculture and other fields. Equipped with speed switches and current overload protection function. Powered by AC power source this compact tool has a pulling capacity of 1000 pounds / 454 kilos.

There are two kinds of operation mode of speed switch:

1. **Variable speed mode**——apply to short the good load position.
2. **Full speed mode**——apply to long distance pulling.



1. Variable Speed Trigger Switch	2. Directional Switch
3. Load Indicator Display	4. Fairlead
5. Safety Hook with Hook Strap	6. On / Off Switch

Specifications Data For The Product:

Max Pulling Capacity	1000 lbs. (454 kg)
Wire Rope Diameter	0.58 cm / 4.6m
Power Source	100-240 V AC
Power Input	1200 W

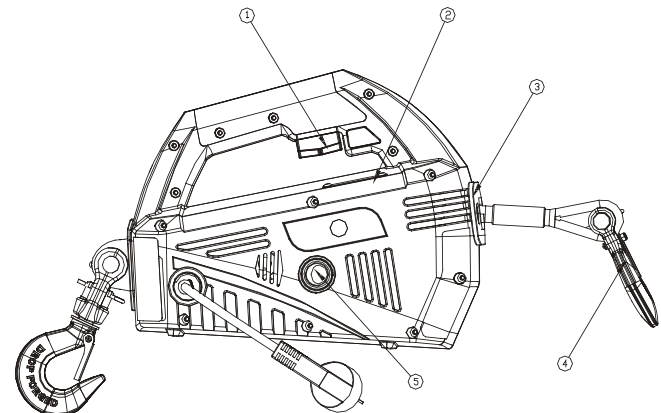
Product Introduction: Traction Block

SLQ-02 Remote Control Style:

This is a powerful lifting and pulling tools which widely used in mechanical, building, automobile, agriculture and other fields. Equipped with speed switches and current overload protection function. Powered by AC power source this compact tool has a pulling capacity of 1000 pounds / 454 kilos.

There are two kinds of operation mode:

1. **Manual mode**——Touch the switch by manual button, apply for pulling.
2. **Remote control mode**——Operated by remote control, apply for narrow and high position.



1. Change-over Start Switch	2. Load Indicator Display
3. Fairlead	4. Safety Hook with Hook Strap
5. On / Off Switch	

Specifications Data For The Product:

Max Pulling Capacity	1000 lbs. (454 kg)
Wire Rope Diameter	0.58 cm / 4.6m
Power Source	100-240 V AC
Power Input	1200 W

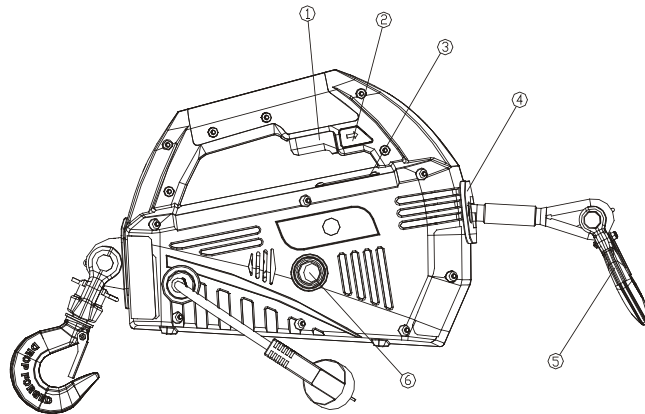
Product Introduction: Traction Block

SLQ-03 Manual Style:

This is a powerful lifting and pulling tools which widely used in mechanical, building, automobile, agriculture and other fields. Equipped with speed switches and current overload protection function. Powered by AC power source this compact tool has a pulling capacity of 555 pounds / 250 kilos.

There are two kinds of operation mode of speed switch:

1. Variable speed mode —— apply to short the good load position.
2. Full speed mode —— apply to long distance pulling.



1. Variable Speed Trigger Switch	2. Directional Switch
3. Load Indicator Display	4. Fairlead
5. Safety Hook with Hook Strap	6. On / Off Switch

Specifications Data For The Product:

Max Pulling Capacity	555 lbs. (250 kg)
Wire Rope Diameter	0.48 cm / 8m
Power Source	100-240 V AC
Power Input	1200 W

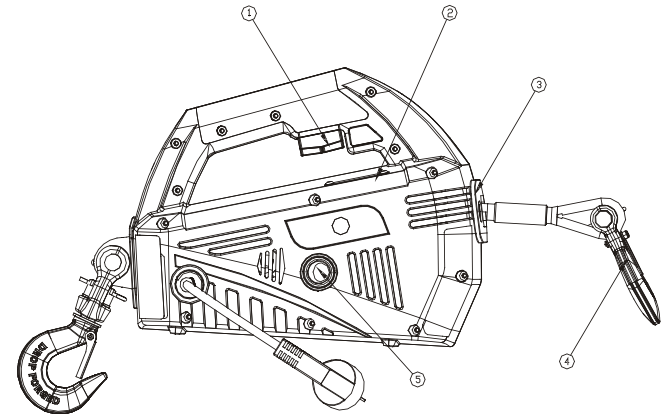
Product Introduction: Traction Block

SLQ-04 Remote Control Style:

This is a powerful lifting and pulling tools which widely used in mechanical, building, automobile, agriculture and other fields. Equipped with speed switches and current overload protection function. Powered by AC power source this compact tool has a pulling capacity of 555 pounds / 250 kilos.

There are two kinds of operation mode:

1. Manual mode —— Touch the switch by manual button, apply for pulling.
2. Remote control mode —— Operated by remote control, apply for narrow and high position.



1. Change-over Start Switch	2. Load Indicator Display
3. Fairlead	4. Safety Hook with Hook Strap
5. On / Off Switch	

Specifications Data For The Product:

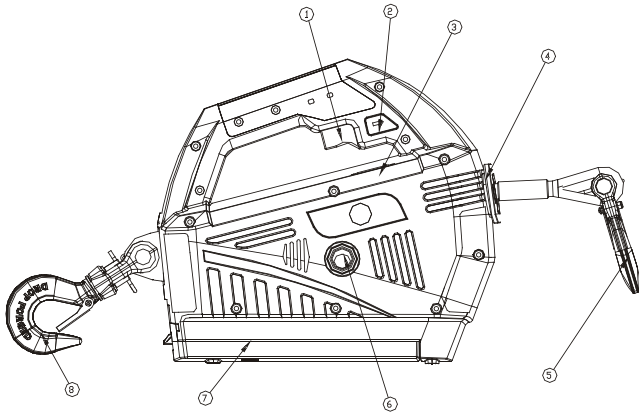
Max Pulling Capacity	555 lbs. (250 kg)
Wire Rope Diameter	0.48 cm / 8m
Power Source	100-240 V AC
Power Input	1200 W

Product Introduction: Traction Block

SLQ-05 Manual Style:

DC powered lifting and pulling tool. Lifts or pulls up to 1,000 lbs. (454 Kg). Cordless 24V version is great for use in the field. Includes two rechargeable battery packs (with charger).

The unit has a variable speed trigger for power-in and power-out operation, 15 ft (4.6m) of 0.58cm wire rope and two clasp hooks.



1. Variable Speed Trigger Switch	2. Directional Switch
3. Load Indicator Display	4. Fairlead
5. Safety Hook	6. On / Off Switch
7. Rechargeable battery	8. Safety Hook

Specifications Data For The Product:

Max Pulling Capacity	1000 lbs. (454 kg)
Wire Rope Diameter	0.58 cm / 4.6m
Power Source	24V DC Battery
Power Input	720 W (30A)

Safety Precautions

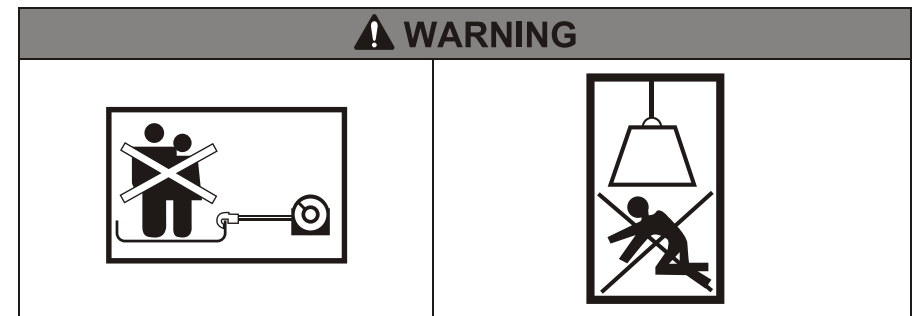
The following are general safety precautions that every operator should know. A few minutes spent reading these rules can make an operator aware of dangerous practices to avoid and precautions to take for his own safety and the safety of others. Frequent examinations and periodic inspections of the equipment as well as conscientious observance of safety rules may avoid safety accidents.



MOVING PARTS ENTANGLEMENT HAZARD

Failure to observe these instructions could lead to severe injury or death. To avoid injury to hands or fingers.

- **Always** keep hands clear of wire rope, hook loop, hook and fairlead opening during installation, operation and when spooling in or out.
- **Always** use extreme caution when handling hook and wire rope during spooling operations.
- **Always** use supplied hook strap whenever spooling wire rope in or out, during installation or operation to avoid injury to hands or fingers.



FALLING OR CRUSHING HAZARD

Failure to observe these instructions could lead to severe injury or death.

- **Never** use to lift or move persons.
- **Never** lift loads over people.



CHEMICAL AND FIRE HAZARD

Failure to observe these instructions could lead to severe injury or death.

- **Never** operate product in an environment containing explosive or combustible material.
- **Always** wear eye protection.
- **Always** insulate and protect all exposed wiring and electrical terminals.
- **Never** allow battery terminals to short circuit. Keep batteries in a safe location away from other metal objects like nails, screws, keys, etc.
- **Never** put batteries into fire or expose to high heat; this may cause batteries to explode.



MOVING PARTS ENTANGLEMENT HAZARD

Failure to observe these instructions could lead to minor to moderate injury.

General Safety:

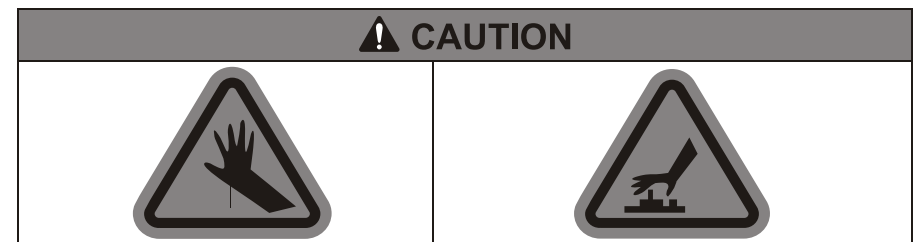
- **Always** Know Your product: Take time to fully read and understand the Operator's guide in order to understand your product and its operation.
- **Never** operate this product when under the influence of drugs, alcohol or medication.
- **Never** exceed product rated capacity.

Installation Safety:

- **Always** choose a support structure and load attaching devices that is sufficiently strong to withstand the maximum pulling capacity of your product.
- **Always** use factory approved switches, components, accessories, and replacement parts.
- **Always** spool the wire rope onto the drum with the rope coming off the top in line with the fairlead opening.

Operation Safety:

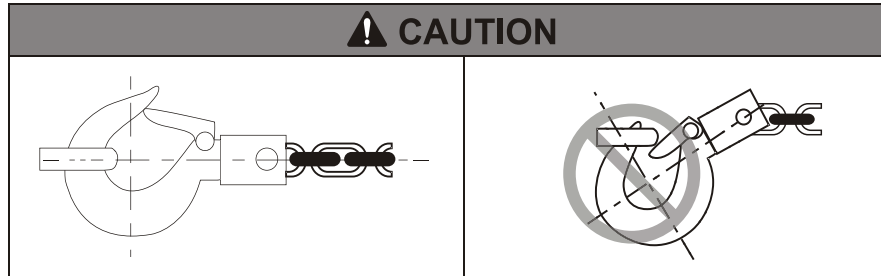
- **Never** operate at full load when in a break-in period, in case of parts from damage, reduce product life.
- **Always** inspect if the remote control could normal operation before use, put the remote control in a clean and dry environment, in case of parts from damage.
- **Always** inspect rope, hooks, and slings before operating product. Damaged components and rigging must be replaced immediately. Protect all parts from damage.
- **Never** use a product that is malfunctioning, has unusual performance or is damaged.
- **Always** spool the wire rope onto the drum with the rope coming off the top in line with the fairlead opening. Otherwise because of winding improperly, it will damage the steel wire rope. The service life of the wire rope is closely related with service condition.
- **Always** change in time when the wear quantities is higher and the fracture degree of wire rope exceed the prescribed requirements, Keep the changed wire rope be the same model specification.
- **Never** use ceiling hook to hook wire rope in case of damage.
- **Never** hook wire rope back onto itself. This damages the wire rope. Always use a choker chain, wire choker rope or a tree trunk protector.
- **Always**, before use, remove any element or obstacle that may interfere with safe product operation.
- **Always** take time to use appropriate rigging techniques and that the strap or chain will not slip.
- **Never** touch wire rope or hook while in tension or under load.
- **Always** be aware of stability of load during operation.
- **Never** swing or twist loads.
- **Never** leave suspended load unattended.
- **Never** spool out past length of red painted rope, or the rope could come loose or spool in the opposite direction.
- **Never** touch wire rope or hook while someone else is at the control switch or during operation.
- **Always** stand clear of wire rope and load and keep others away while operating.
- **Always** stand to the side of the product during operation.
- **Always** ensure hook travels in the same direction as directional switch indicates.
- **Always** remove the battery during rigging, when not in use, or during maintenance & cleaning.
- **Never** use the product to tow other vehicles. Shock loads can momentarily exceed capacity of wire rope & product.
- **Never** use the product to secure a load during transport.
- **Never** pull, hang the heavy item slanting when hoisting up, in order to avoid has the danger.
- **Never** hoist a heavy hanging in the air when not working, in case the permanent deformation of parts.



CUT AND BURN HAZARD

Failure to observe these instructions could lead to minor to moderate injury.
To avoid injury to hands and fingers:

- **Always** wear heavy leather gloves when handling a wire rope.
- **Never** let wire rope slip through your hands.
- **Always** be aware of possible hot surface during or after product use.



MOVING PARTS ENTANGLEMENT HAZARD

Failure to observe these instructions could lead to minor to moderate injury.

- **Always** use a hook with a latch.
- **Always** insure hook latch is closed and not supporting load.
- **Never** apply load to hook tip or latch. Apply load only to the center of hook.
- **Never** use a hook whose throat opening has increased, or whose tip is bent or twisted.

NOTICE

AVOID PRODUCT AND EQUIPMENT DAMAGE

- **Never** use the product to tow other vehicles. Shock loads can momentarily exceed capacity of wire rope & product.
- **Never** use the product to secure a load during transport.
- **Never** submerge any part of the product in water or use in a wet environment.
- **Always** store product in a protected, clean, dry area.
- **Always** turn power switch off when not in use. Permanent battery damage may occur if the unit is allowed to self-discharge in the ON position.

Operating Instructions

⚠ WARNING

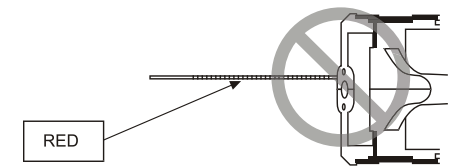
SHOCK HAZARD

Failure to observe these instructions could lead to severe injury or death.



- **Always** use properly grounded AC receptacle protected by a ground fault circuit interrupter (GFCI).
- **Never** remove ground pin from plug.
- **Never** operate this AC product in a wet environment.
- **Never** operate this product or charge the battery in a wet environment.
- **Never** route electrical cables across sharp edges.
- **Never** route electrical cables through or near moving parts.
- **Always** read and follow all wiring instructions included in operators guide.
- **Always** insulate and protect all exposed wiring and electric terminals.

⚠ CAUTION



PERSONAL INJURY HAZARD

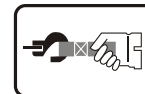
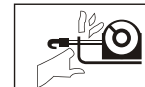
Failure to observe these instructions could lead to minor or moderate injury.

- **Always** wear leather gloves when handling wire rope.
- **Never** spool out past the length of red rope.

⚠ WARNING

MOVING PARTS ENTANGLEMENT HAZARD

Failure to observe these instructions could lead to severe injury or death.



- **Always** keep hands clear of the wire rope, hook loop, hook and fairlead opening during installation, operation and when spooling in or out.
- **Always** use supplied hook strap whenever spooling the wire rope in or out, during installation, or operation to avoid injury to hands or fingers.

Operating Instructions-Continued

Connect the product to an AC power source:

- **Always** connect the winch power cord to a properly grounded, 3-prong electrical socket with a ground fault circuit interrupter.
- **Always** verify that all wiring and power supply cord are positioned so that the wire rope or moving load will not damage the cord.
- **Always** make sure that it is rated to handle the current required to run at full capacity. If using an extension cord and/or generator,
- **Always** unplug the product while rigging, when not in use, or during maintenance & cleaning.

The precautions of remote control:

- The effective distance of remote control is 8 m.
- When remote operation, press the “up” and “down” button, the red light is on, the wire rope works in and out.
- Remote transmitters is lack of electricity or over remote distance, in such a case, there will be some slow or delay operation phenomenon, at this time, you should stop the operation until remove all the faults.
- Don't touch the internal components of remote control to avoid the damage. Don't take the internal switch apart or touch it.
- Don't put the remote control in the place of contact with water wet or signal interference.
- Don't use sharp objects to press the remote control in case of the failure of equipment.
- Please take the batteries out when not in use for a long time.

Spooling Rope In and Out

Do the following:

- **Always** take your time to assess your situation and plan your lift/pull carefully.
- **Always**, prior to a lift/pull, inspect mounting structure, the product, slings and/or other accessories for signs of damage. Replace damaged components prior to a lift.
- **Always** know the weight of the load and make sure the rigging, hoist, and mount will carry the weight.
- **Always** verify that the load is directly under or in line with the product, the rope is not tangled or kinked, and that all people are standing clear of the load.
- **Always** take up any slack in the rope slowly. Begin the lift slowly. If there is any evidence of overloading, immediately lower the load and correct the situation.
- **Always** avoid shock loads to the product caused by rapidly lifting or bouncing a load.
- **Always** inspect and carefully rewind rope after each use. Cuts, kinks, or frayed areas reduce the strength of rope. Replace rope if damaged.
- **Always** apply tension to the rope when spooling rope out. If no tension is applied, the rope can ball up inside the product, causing damage.

Avoid the following:

- **Never** use the Load Limiter to stop the travel of the load or to stop the hook against the fairlead.
- **Never** use the load limiting feature to measure the load.
- **Never** spool out rope past the length of red rope.
- **Never** attempt to lift/pull an off-center load of any kind. This can cause the load to swing dangerously. Make sure the load is directly under the product.
- **Never** allow the load to swing or twist.

Load Indicator Operating

1. Approximate load can be determined from the load Indicator Display, When the motor overload, the product will stop pulling and the last two bars on the display will flash red until the unit can be used again. If this happens, take tension off of the rope and adjust the load to be less than 454kg. Do not attempt to apply the same load if the overload sensor has tripped, as this can be harmful to the product.
2. Products can not be worked for a long time, after motor overheating should cool completely before used again, in order to extending the life of motor.
3. If the product will not spool in or out, verify that the Load Indicator Display is no longer flashing and that the battery is still fully engaged and has an adequate charge.

- (1) The first green LED will flash when the power is on to show the product is ready for use.

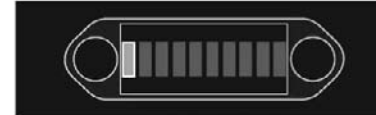


Figure B: Product Ready
(first green LED flashes)

- (2) As a load is applied, the LED's will light to show the level of load. The heavier the load, the more LED's will light.



Figure C: Low Load



Figure D: Maximum Load

- (3) If the weight limit is exceeded, the two red LED's will flash and the product will stop pulling. Release pressure on the load as soon as it is safe to do so. Do not attempt to move that load again with this product.

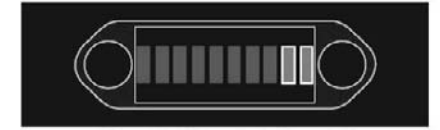


Figure E: Weight Limit Exceeded
(two red LED's flash)

- (4) If the motor overheats, the fourth yellow LED will flash and the product will stop pulling. Stop using the product and allow it to cool for at least 30 minutes before further use.

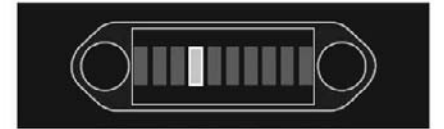


Figure F: Motor Overheated
(fourth yellow LED flashes)

Operating Instructions-Continued

Battery Care

1. Always turn power switch on/off when not in use. Permanent battery damage may occur if the unit is allowed to self-discharge in the ON position. Store battery and charger in locations where temperatures will not exceed 49°C.
2. When noticeable loss of performance is observed, replace battery pack with a fully charged battery. Avoid running the battery completely dead. This can cause permanent damage to the battery pack.
3. When the first LED flashing in green during the using, said the battery's voltage is insufficient, please replace the battery in time.

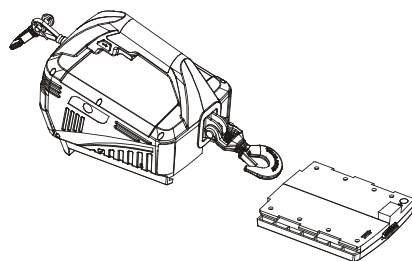
Removing the Battery Pack

1. Verify the Power Switch is in the OFF position.

2. Push down the release button at the back of the battery and slide the battery away from the body.

Installing the Battery Pack

1. Verify the Power Switch is in the OFF position.
2. Slide the battery pack in to the body, making sure that the latch is fully engaged (release button in the top position).



Operating Instructions-Continued

⚠ WARNING

- **Never** leave the product power cord plugged in or the battery in unit when installing, servicing or storing.
- **Always** let battery cool before using in tool and before charging.
- **Never** attempt to disassemble the battery or remove any component
- **Always** avoid contact with battery leakage, which may occur under extreme usage or temperature conditions.

Charging the Battery Pack:

1. Plug charger's power cord into a standard power outlet, then insert the battery charging plug from the charger into the battery. The charger's red LED indicator light will be solid, indicating charging.
2. A fully discharged battery should charge in approximately two hours, the longest charging time is not more than 3 hours, to prevent the battery overcharge make permanent damage.

The battery charger indicator light signifies:

- 1) Green LED on: Fully charged
- 2) Red LED on: Charging
- 3) Red LED flashing: A fault condition is present.
- 4) Green LED flashing: Over temperature protection.

If the red LED is flashing, stop charging the battery and follow the charger safety rules below. If the problem persists, contact our company.

Important Charging Notes :

1. The battery pack accepts only about 80% of its maximum capacity with its first few charge cycles. However, after the first few charge cycles and normal usage, the battery will charge to full capacity.
2. The charger was designed to fast charge the battery, only when the battery temperature is between 0°C and 49°C. If the battery pack is too hot or too cold, the battery pack should not be charged. (This may happen if the battery pack is hot from heavy use.) Wait until the battery returns to room temperature before charging.
3. A substantial drop in operating time per charge may mean that the battery pack is nearing the end of its life and should be replaced.

If the battery does not charge properly:

- a. Check for voltage at the outlet by plugging in some other electrical device.
- b. Verify charger voltage is 30vdc.
- c. Check battery pack terminals for dirt. Clean with a cotton swab and alcohol if necessary.

Charger Safety Rules:

1. Follow these important safety instructions and review the cautionary markings on the battery pack. Remove charger from power source when battery is fully charged.
2. Use only charge our company rechargeable batteries, other types of batteries may burst causing personal injury and damage.
3. Do not charge the battery in damp or wet environment.
4. Do not disassemble the charger.

Battery Disposal:

The battery uses NIMH technology. Check your local ordinances/regulations. Prior to disposal, protect exposed terminal with heavy insulating tape to prevent shortage.

Chemical First Aid:

If leakage from battery comes in contact with skin, wash with soap and water. If liquid gets into eyes, flush with water for 15 minutes.

Maintenance & Warranty

- Inspect the wire rope and hooks for signs of wear or damage before and after each operation. Worn and damaged parts must be replaced. Do not attempt to lengthen the wire rope or repair a damaged rope.

Keep the wire rope and hooks free from contaminants. Use a clean towel to remove dirt & debris. Using light oil on the wire rope and hooks can prevent corrosion from forming. When cleaning the tool be sure to keep clear of electrical terminals on battery pack and verify that the battery is not cracked or otherwise damaged.

Any hook that has twisted components or excessive opening may indicate over-loading of the product.

- Examples of rope damage are as follows: Kinks, cuts, knots, mashed or frayed portions, and broken strands.
- Examples of hook damage are as follows: Cracks, twisted components, excessive opening, seat wear, loose or unclosed safety gate, and corrosion.
- Any hook that has twisted components or excessive opening may indicate over-loading of the product.
- When the wear quantities of quick-wear parts like carbon brush are high, you should change in time.
- Keep the rope and hooks free from contaminants. Use a clean towel to remove dirt & debris. Using light oil on the wire rope and hooks can prevent corrosion from forming.
- Always use our company's replacement parts when your product needs a guarantee.
- Verify that the battery is not cracked or otherwise damaged.