# 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

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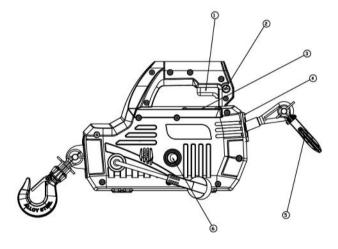
# **Product Introduction: Traction Block**

## 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

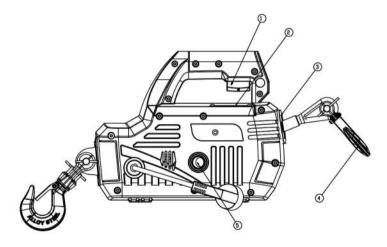
# **Product Introduction: Traction Block**

## 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

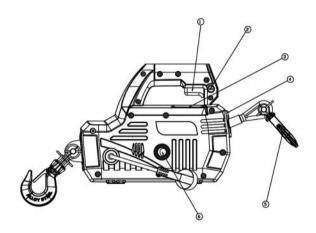
## **Product Introduction: Traction Block**

## 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

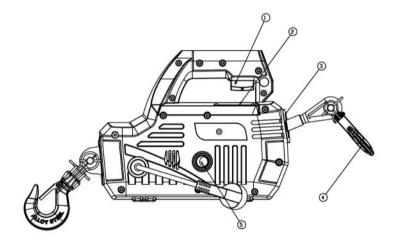
## **Product Introduction: Traction Block**

## 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 / 8 m
Power Source	100-240 V AC
Power Input	1200 W

## **Safety Precautions**

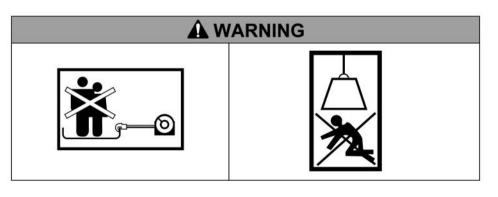
The following are general safety precautions that every operator should know. A few minutes spent reading these rules can make an operator aware of dangerous practices to avoid and precautions to take for his own safety and the safety of others. Frequent examinations and periodic inspections of the equipment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

# **A** CAUTION

#### MOVING PARTS ENTANGLEMENT HAZARD

Failure to observe these instructions could lead to minor to moderate injury. General Safety:

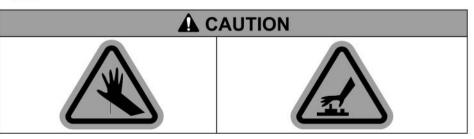
- Always Know Your product: Take time to fully read and understand the Operator's guide in order to understand your product and its operation.
- · Never operate this product when under the influence of drugs, alcohol or medication.
- · Never exceed product rated capacity.

#### 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:

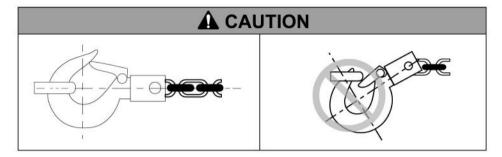
- Never operate at full load when in a break-in period,in case of parts from damage,reduce product life.
- Always inspect if the remote control could normal operation before use, put the remote control
  in a clean and dry environment, in case of parts from damage.
- Always inspect rope, hooks, and slings 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 unplug power cord 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 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.

## **Operating Instructions**

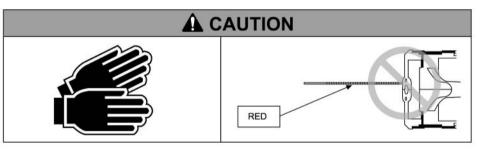
# **A** WARNING

#### 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 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.



### 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.

# **A** 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.
- 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.
- (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.

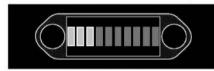


Figure C: Low Load



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 30minutes before further use.



Figure F: Motor Overheated (fourth yellow LED flashes)

# **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.
- 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.
- · 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.
- · Alway use the our company's replacement parts when your product needs to guarantee.