ELECTRIC HOIST DC12V

Operating Instructions



Safety Precautions

1. Read the instruction carefully: be familiar with the structure and performance of the machine.
2. Check the vehicle battery to make sure it's 12 V DC and amp draw bigger than 125Amps before power-on.
3. Make sure all the connecting points of the power and the quick connector are fixed firmly and that they work properly.
4. Make sure all connecting points are well-assembled and good before operation.
5. People are not allowed to stand beneath the crane or the goods when it's working, make sure that they are in the safety area (advising safety distance: at least 50cm from the goods and the arm).
6. Do not violate the operating regulations, do not handle the crane roughly.
7. Do leave five wraps of the wire rope on the drum(the part with red color),otherwise it'll be dangerous.
8. The motor of the winch is permanent magnet,it's for interminttent use only, it's easy for the motor to become hot. When it's above 60 degrees,wait for a few minutes and allow the motor to cool down before it resumes to work.
9. Never use the crane to lift or transport people or animals.
10. when the over current protector works,the crane will stop working. Put down the goods, and the weight needs to be reduced, use a pulley block for aid in lifting.
11. Over current protector (68A 12V DC) is a must for the crane,otherwise there might be danger.
12. Best temperature for using the crane is 25℃. If it's higher than this, it's recommended that only 75% of the rated lifitng capacity to be effected, otherwise over current protector will start to work and protect in advance.
13. When the crane is mounted to the edge of the vehicle, recommended lifting capacity is **660lbs (300KG)**, or the vehicle might turn over and cause accidents;
14. When using single line to lift, best rope length is 4.5m, while using double lines to lift, best rope length is 5.5m(best rope length means when there is 5 to 6 wraps of rope on the drum, and the swivel hook is hooking onto the goods)
15. Recommending lifting height for the crane: 60cm to 80cm.
16. Max single line capacity of this crane is 1100lbs (500kg); max double line lifting capacity of this crane is 1700lbs(800kgs).

⚠Warning

Never lift goods exceeding the crane's rated lifting capacity
Never lift goods when the base is not fixed firmly.
Never lift chemical goods that will directly or indirectly harm crane parts (like ones causing corrosion of the wire rope or other parts).
Never lift not-well-packed chemicals.
CHEMICL AND FIRE HAZARD
Failure to observe these instructions could lead to severe injury or death.
Always remove jewelry and wear eye protection.
Never lean over battery while making connections.
Always verify area when drilling is clean of fuel line,fuel tank,brake lines,electrical wires,etc.
Never route electrical cables:
-Across any sharp edeges.
-Through or near moving parts.
-Near parts that become hot.
Always insulate and protect all exposed wiring and electrical terminals.
Always install terminal boots as directed in installation instructions.

⚠CAUTION

General Safety:

Always know your winch:Take time to fully read and understand the included Installation and Operation guide,and Basic Guide to Winching Techniques, in order to understand your winch and winching operation.

Never operate this winch if you are under 18 years of age.

Never operate this winch when under the infulence of drugs, alcohol or medication.

Never exceed crane rated capacity otherwise there might be damage of goods, or injury even death of people.

Installation Safety:

Always choose a mounting location that is sufficiently strong to withstand the maximum lifting capacity of your crane.

Always use factory approved switches,remote controls,accessories and installation components.

Always use Grade 8.8 or better hardware,never weld bolts and always use spring washer and flat washer when you screw nuts onto bolts.

TO avoid injury to hands or fingers:

Always wear heavy leather gloves when handling a wire rope.

Never let wire rope slip through your hands.

Overview

HP1000 is one of our professional products, with 12 volt DC as the power. It is widely used in pick-up trucks, caravan cars, loading docks, platforms etc. With outstanding features such as structually compact , small sized, light weighted, and minimal space required, HP1000 is a good helper for lifting goods.

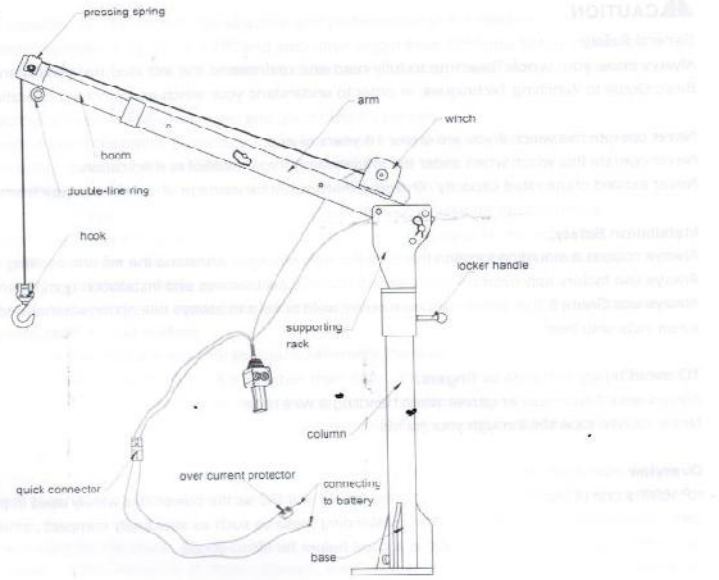


Figure 1

Structure Characteristics

This crane consists of five major parts: column, supporting rack,arm,boom and winch as well as other accessories (see Figure 1 for details). 6010&6011 ball bearings serves as the suppoting point for the crane. The user operates the locker handle making the boom rotate 360° to finish the job of loading and unloading. Goods can be lifted and lowered with the crane.

Installation

1. Electrical Installation

Fix the 1/2 quick connector (with electric cable 3700mm in length equipped) in an appropriate place of the vehicle. When applied on other occasions, the quick connector could be fixed near the crane. Connect the electric cable on this half of quick connector to the battery in the way of Red to positive and black to negative. The long cable (1800mm) from the switch shoud be connected to the winch motor , with red to positive and black to negative. Then, insert the 1/2 quick connector linked to the switch to the other half fixed in the vehicle. Now you are ready to lift or lower goods by operating the switch according to the arrow indications on the handheld control..

2. Crane Installation

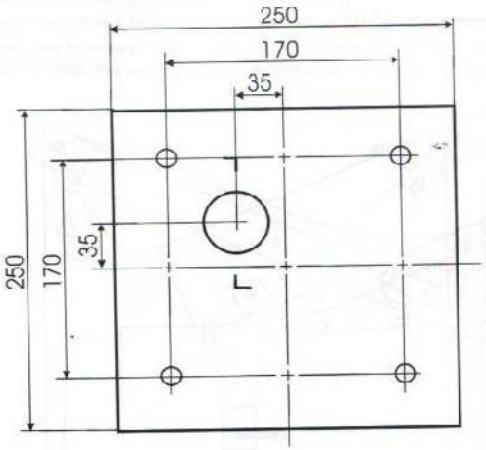


Figure 2

A) to install on a vehicle

There are four mounting holes (diameter 15mm)on the base, see picture 2 for detailed dimensions, drill four holes on a level surface of the vehicle,look up the flat washers,spring washers,bolts and nuts provided to fix the crane on the vehicle.Make sure that the surface that the crane is mounted to is level and that the crane is mounted firmly,otherwise,danger or injuries will be invited.

B) to install on the ground

Use metal expansion bolts to fix the crane base on the ground. Make sure that the surface that the crane is mounted to is level and that the crane is mounted firmly,otherwise danger or injuries will be invited.

Note:When drilling the four holes, we advise you to use the four mounting holes on the base as the mould so the dimensions could be specificly the same.

OPERATION

Adjust the height and length of the boom according to the characters of the goods and its weight,size,etc,put the pin through the boom and the use the safely pin to secure the boom,screw off the locker handle, press the lowering down arrow on the handheld switch to spool out the wire rope,hook the goods up and check the packing of the goods,if approved,press the lifting up arrow on the handheld switch and lift the goods to the height required,operate the push bar to rotate the goods to
the place needed and then press the lowering down arrow to put the goods down.

If you need to move the goods from a certain height to a lower place,operate the handheld switch oppositely.

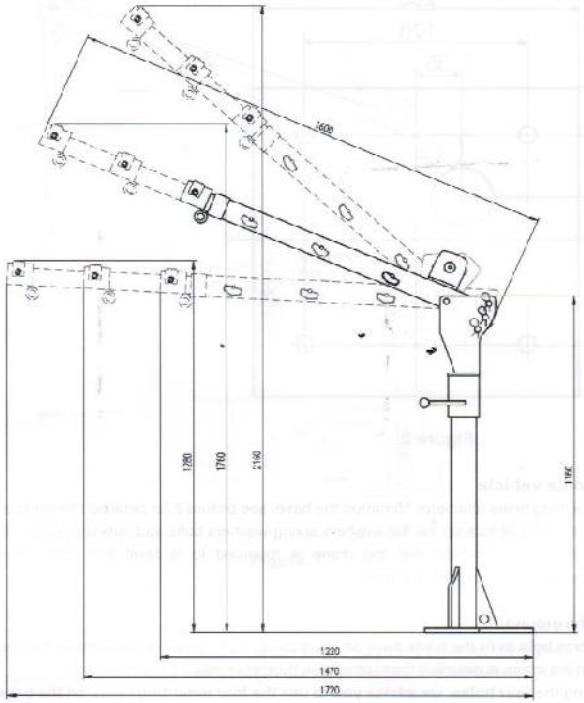
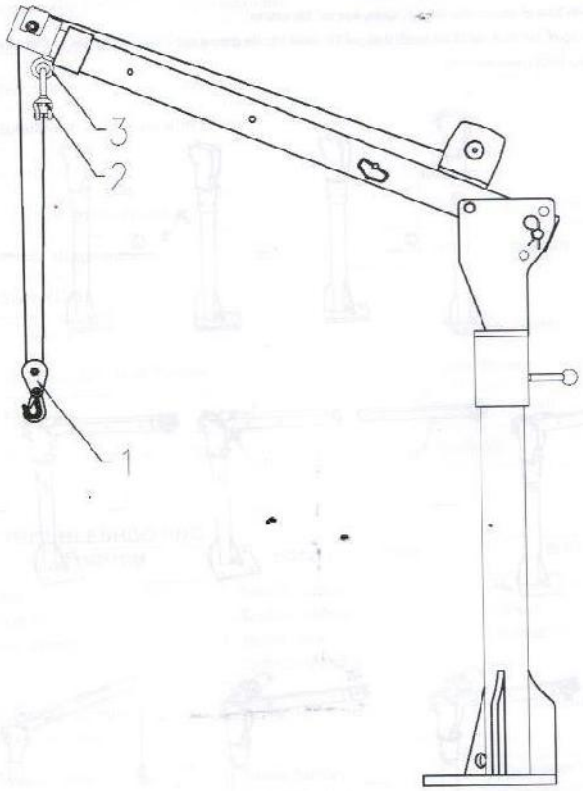


Figure 3

CAUTION:
ALWAYS REPLACE DAMAGED WIRE ROPE WITH MANUFACTURER'S IDENTICAL REPLACEMENT PART.

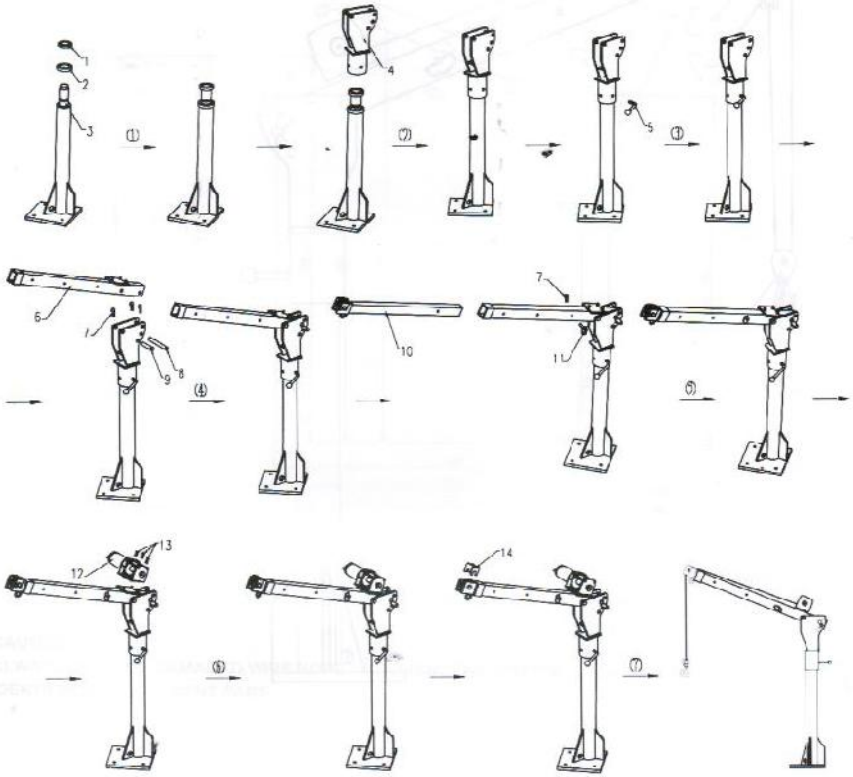
PULLEY BLOCK INSTRUCTIONS

TEP CNE. Hook up 2(swivel hook) and 3 iring)
TEP TWO: Screw off either of the two nuts on 1 (pully block), pull out the pulley shaft to a desired length, swing the over plate to an appropriate degrees, put the wire rope into the inner pulley groove.
TEP THREE: Put cover plate back to place, insert pulley shaft and screw on the nut



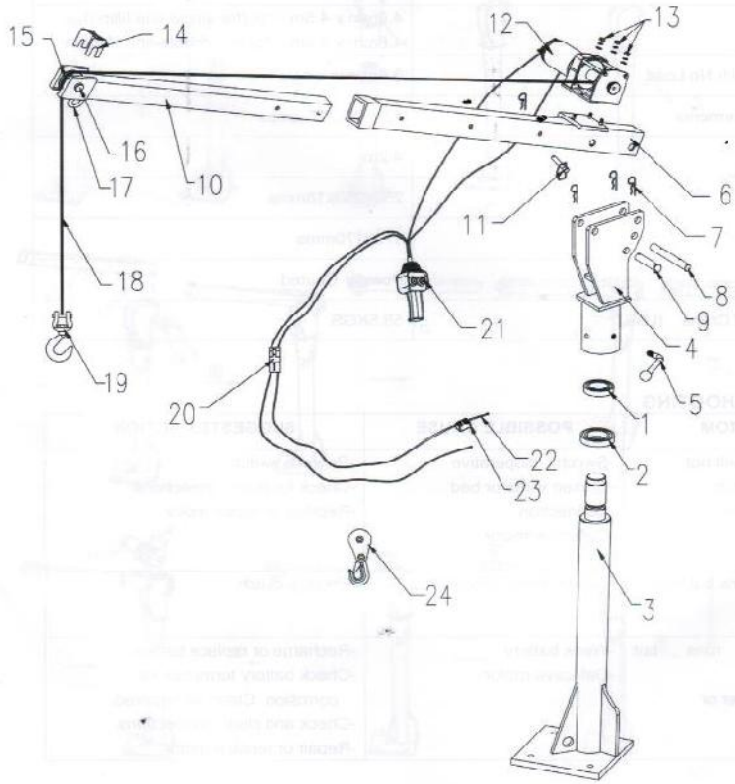
Crane installation instruction

(1) Place bearing 1 and bearing 2 into Part 3 respectively (secure Part 3 before assembly to avoid tilt occurrence during assembly)
(2) Install Part 4 into Part 3 properlyto erable 360-degree rotation
(3) Thread part 5 into the threaded hole of part 4 then tighten up to secure part 4
(4) Install Part 6 on Part 4 with pin shaft 8,9 then insert R pins 7 into the holes of pin shaft properly
(5) Insert Part 10 into Part 6 properly with the holes in proper position and put Part 11 into the holes then secure with R pin 7.
(6) Fix the winch on part 6 with 3pcs of accessories(M8 nut, spring washer, flat washer)
(7) Disassemble Part 14 and spool the cable out of the winch then put the cable into the groove and install and tighten up Part 14 with the nut to ensure the pulley block rotate smoothly



Winch Motor overheating	-over current protector	-Frequent lifting, decrease goods weight or allow winch to cool down; -Environment temperature too high, decrease goods weight or allow winch to cool down
	-Winch running time too long	-Allow winch to cool down periodically
	-Defective motor	-Repair or replace motor

EXPLOSIVE DRAWING



Parts List

Item #	Description	Qty
1	bearing 6010	1
2	bearing 6011	1
3	column	1
4	supporting rack	1
5	locker handle	1
6	arm	1
7	R-pin	4
8	Pin III	1
9	Pin I	1
10	boom	1
11	Pin II	1
12	winch	1
13	Nut, flat washwer, spring washwer M8	3
14	pressing spring for wire rope	1
15	snatch block	1
16	shaft for snatch block	1
17	ring for double rope lifting	1
18	wire rope 4.8mm x 4.5m	1
19	swivel hook	1
20	quick connector	1
21	yellow switch controller and switch cables	1
22	red input battery cable	1
23	circuit breaker	1
24	pulley block 2T	1