

# Pro//INCH



**User Manual and Security Warnings**  
**Manual de Usuario y**  
**Advertencias de Seguridad**

**SERIES PWA y PWX**





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PROWINCH LLC COMPANY WITH QUALITY MANAGEMENT SYSTEM



## PROWINCH® ELECTRIC ROPE HOIST MAINTENANCE

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1. It is the sole responsibility of the Client / User to verify that the acquired equipment, products and accessories comply with the characteristics, capacities, elements, components, accessories and other conditions for the use that the Client / user intends to give it.
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3. The possible support in the selection of the equipment, the capacities and characteristics required by the clients that Prowinch provides is delivered free of charge and provided based on the information of use and requirements indicated by the Client itself, information that Prowinch does not It may not correspond to verify. In this way, it is in any case the sole and exclusive responsibility of the Client -or who will use the equipment and products acquired- to ensure that they comply with the capabilities, characteristics, up-to-date maintenance and everything necessary for a correct and safe operation in relation to the intended use.
4. For personnel lifting Prowinch recommends the use of winches with 4 brakes. The use of winches of 3 or less brakes or safety features lower than the maximum available, for personnel lifting, is the sole responsibility of the customer.
5. In order to guarantee the safety of the users of the equipment, especially those of Personnel, it is necessary to carry out the inspections and maintenance of the equipment according to the recommended frequency in relation to its work cycle, as it is described by the ASME B30 standards. It is mandatory to keep record and evidence the written and photographic reports of: Maintenance, Start-up, Load Tests, Training, Certifications, Inspections and Reports of failures and accidents.
6. The aforementioned reports must be sent by email to [registros@prowinch.com](mailto:registros@prowinch.com) within the first 7 calendar days that said event has occurred.
7. Compliance with the timely implementation of the mandatory activities described in points 6 and 7, plus all the activities mentioned in the corresponding rules applied, are the sole responsibility of the user. Failure to comply with the foregoing, releases Prowinch from any type of Liability and Warranty to the team, customer, staff and / or user or any other liability that could be attributed to Prowinch.

The information contained in this manual may contain technical errors or inaccuracies, Prowinch® LLC, is not responsible for errors typing, omission or incorrect information.

This manual is subject to change without prior notice. Download the latest version available at [www.prowinch.com](http://www.prowinch.com)

Always check [www.prowinch.com](http://www.prowinch.com) for latest information regarding this product.

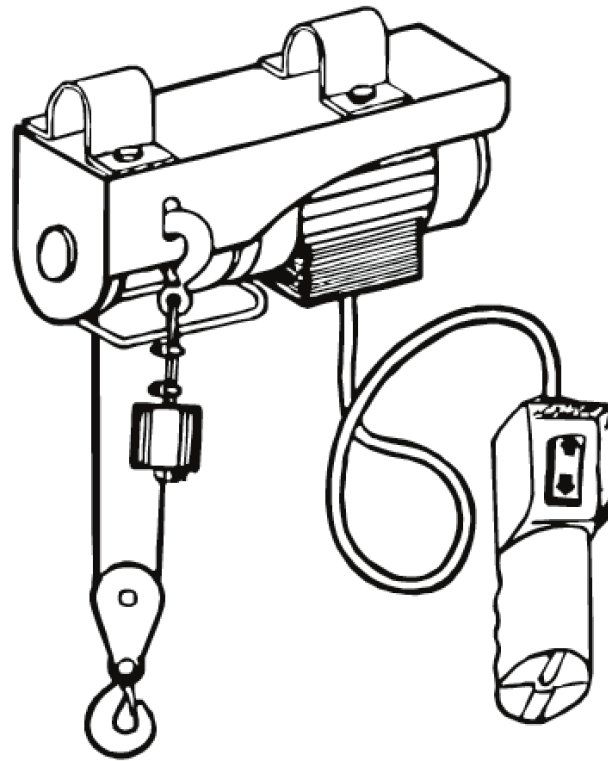
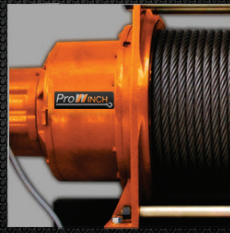


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# PWA ELECTRIC HOIST



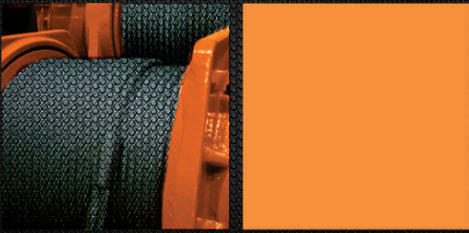
## ASSEMBLY AND OPERATING INSTRUCTIONS

Read carefully and understand all ASSEMBLY AND OPERATION INSTRUCTIONS before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.



**DO NOT USE PULLEY WHEN OPERATING IN SINGLE LINE**





## SAVE THIS MANUAL

You will need this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures, parts list and assembly diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep this manual and invoice in a safe and dry place for future reference.

## GENERAL SAFETY RULES



**WARNING**  
**READ AND UNDERSTAND ALL INSTRUCTIONS**  
Failure to follow all instructions listed below may result in Electric shock, fire, and/or serious injury.  
**SAVE THESE INSTRUCTIONS**

## WORK AREA

1. Keep your work area clean and well lit. Cluttered benches and dark areas invite accidents.
2. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Power tools create sparks which may ignite the dust or fumes.
3. Keep bystanders, children, and visitors away while operating a power tool. Distractions can cause you to lose control. Protect others in the work area from debris such as chips and sparks. Provide barriers or shields as needed.

## ELECTRICAL SAFETY

4. Grounded tools must be plugged into an outlet properly installed and grounded in accordance with all codes and ordinances. Never remove the grounding prong or modify the plug in any way. Do not use any adapter plugs. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. If the tools should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user.

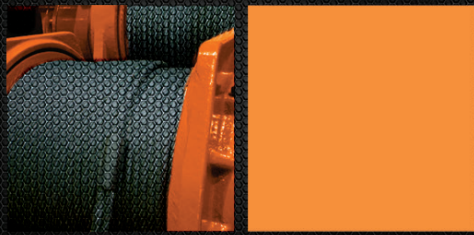


5. Double insulated tools are equipped with a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way. Double insulation eliminates the need for the three wire grounded power cord and grounded power supply system.
6. Avoid body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerators. There is an increased risk of electric shock if your body is grounded.
7. Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
8. Do not abuse the Power Cord. Never use the Power Cord to carry the tools or pull the Plug from an outlet. Keep the Power Cord away from heat, oil, sharp edges, or moving parts. Replace damaged Power Cords immediately. Damaged Power Cords increase the risk of electric shock.
9. When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W". These extension cords are rated for outdoor use, and reduce the risk of electric shock.

## **PERSONAL SAFETY**

10. Stay alert. Watch what you are doing, and use common sense when operating a power tool. Do not use a power tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.
11. Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.
12. Avoid accidental starting. Be sure the Power Switch is off before plugging in. Carrying power tools with your finger on the Power Switch, or plugging in power tools with the Power Switch on, invites accidents.
13. Remove adjusting keys or wrenches before turning the power tool on. A wrench or a key that is left attached to a rotating part of the power tool may result in personal injury.
14. Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enables better control of the power tool in unexpected situations.
15. Use safety equipment. Always wear eye protection. Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.





16. Do not force the tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it is designed.
17. Do not use the power tool if the Power Switch does not turn it on or off. Any tool that cannot be controlled with the Power Switch is dangerous and must be replaced.
18. Disconnect the Power Cord Plug from the power source before making any adjustments, changing accessories, or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.
19. Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hands of untrained users.
20. Maintain tools with care. Keep cutting tools sharp and clean. Properly maintained tools with a sharp cutting edge are less likely to bind and are easier to control. Do not use a damaged tool. Tag damaged tools "Do not use" until repaired.
21. Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.
22. Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool may become hazardous when used on another tool.

## **SERVICE**

23. Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.
24. When servicing a tool, use only identical replacement parts. Follow instructions in the "Inspection, Maintenance, And Cleaning" section of this manual. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury

## **SPECIFIC SAFETY RULES**

1. Maintain labels and nameplates on the Hoist. These carry important information. If unreadable or missing, contact the distributor, Northern Tool + Equipment for a replacement.
2. Always wear safety impact eye goggles and heavy work gloves when using the Hoist. Using personal safety devices reduce the risk for injury. Safety impact eye goggles and heavy work gloves are available from Northern Tool + Equipment.
3. Maintain a safe working environment. Keep the work area well lit. Make sure there is adequate surrounding workspace. Always keep the work area free of obstructions, grease, oil, trash, and other debris. Do not use a power tool in areas near flammable chemicals, dusts, and vapors. Do not use this product in a damp or wet location

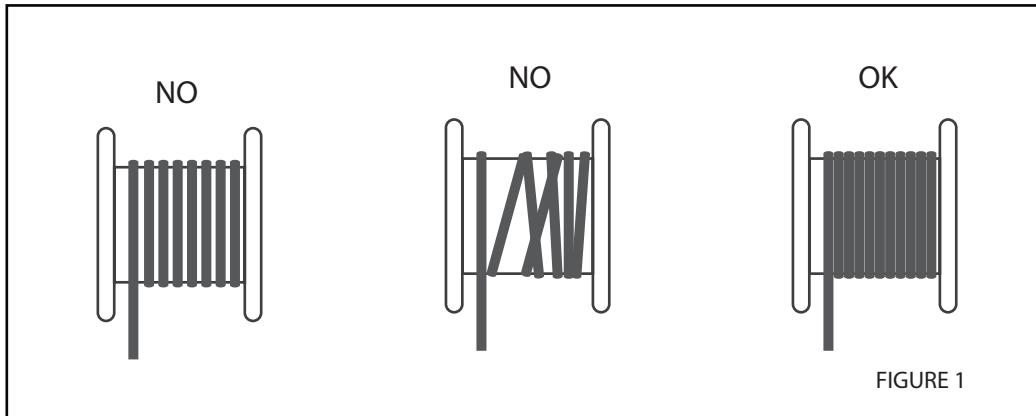


4. Always maintain a firm grip on the tool.
5. Always keep the extension cord away from moving parts on the tool.
6. Avoid unintentional starting. Make sure you are prepared to begin work before turning on the Hoist.
7. Do not force the Hoist. This tool will do the work better and safer at the speed and capacity for which it was designed.
8. Never use the Hoist to lift people or animals.
9. Always leave a minimum of 4 wraps of cable on the drum. The cable fastener on this wire rope Hoist is not rated for the maximum capacity of the Hoist.

#### Additional Specific Safety Rules

10. Do not exceed the maximum lift capacity. The application, size and type of load, the attachments to be used and the period of use must be taken into account.
11. Do not stand under hoisted loads.
12. Do not operate the Hoist in wet conditions. Do not allow the Hoist to freeze.
13. If pushing the lift button continually does not have any effect, do not continue. This is a sign that the load exceeds the maximum capacity.
14. Never adjust the cable or work on the Hoist when it is plugged into an outlet.
15. Always inspect the cable and hook prior to use. If the cable is damaged in any way, do not use it. Hooks that are bent, worn or whose openings are enlarged beyond normal throat opening should not be used.
16. If the Hoist is stopped during the lowering of a load it is normal for the load to drop a few inches more due to inertia.
17. The Hoist motor does not have an overload cut-out. If you are unable to hoist a load and the load is under the maximum lift capacity, stop the Hoist and allow the motor to cool down before trying again.
18. Make sure the cable is correctly wound around the wheel. See FIGURE 1 below.
19. Do not support a load over or around people or animals.
20. Do not leave load suspended in the air unattended.
21. Do not allow a load to bear against the hook latch. Allowing a load to bear against the hook latch can result in loss of load.
22. Do not allow load to swing or twist while hoisting.
23. Do not use cable as a sling or wrap cable around a load.





### WARNING

Improperly connecting the grounding wire can result in the risk of electric shock. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the tool. Never remove the grounding prong from the plug. Do not use the tool if the power cord or plug is damaged. If damaged, have it repaired by a service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.

## GROUNDING TOOLS: TOOLS WITH 3- PRONG PLUGS

1. Tools marked with "Grounding Required" have a 3-wire cord and 3-prong grounding plug. The plug must be connected to a properly grounded outlet. If the tool should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user, reducing the risk of electric shock. (See Figure A.)
2. The grounding prong in the plug is connected through the green wire inside the cord to the grounding system in the tool. The green wire in the cord must be the only wire connected to the tool's grounding system and must never be attached to an electrically "live" terminal. (See Figure A.)
3. Your tool must be plugged into an appropriate outlet, properly installed and grounded in accordance with all codes and ordinances. The plug and outlet should look like those in the following illustration. (See Figure A.)

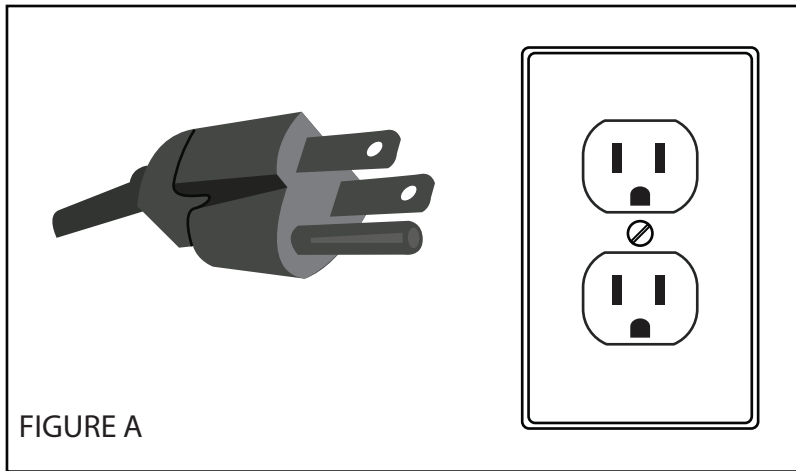


FIGURE A

## DOUBLE INSULATED TOOLS: TOOLS WITH TWO PRONG PLUGS

4. Tools marked “Double Insulated” do not require grounding. They have a special double insulation system which satisfies OSHA requirements and complies with the applicable standards of Underwriters Laboratories, Inc., the Canadian Standard Association, and the National Electrical Code. (See Figure B.)

5. Double insulated tools may be used in either of the 120 volt outlets shown in the following illustration. (See Figure B.)

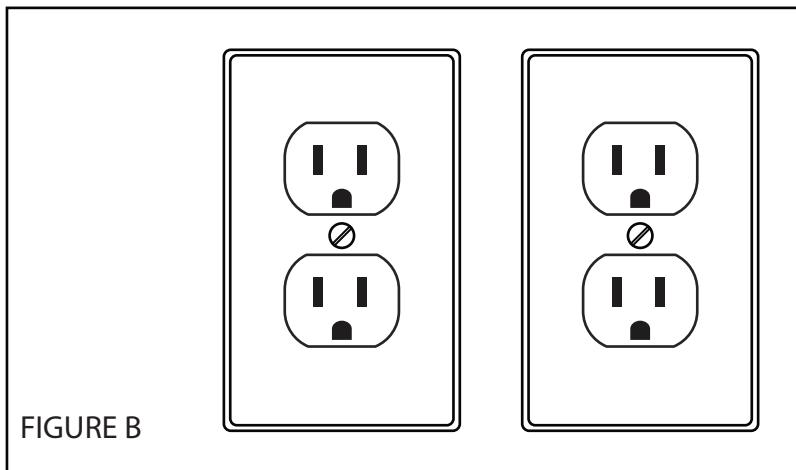


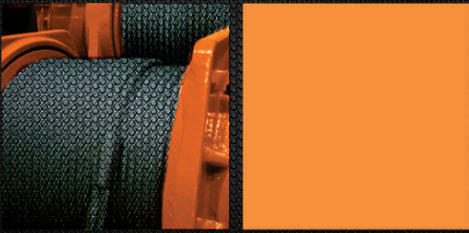
FIGURE B

## EXTENSION CORDS

1. **Grounded** tools require a 3-wire extension cord. Double Insulated tools can use either a 2- or 3-wire extension cord.




2. As the distance from the supply outlet increases, you must use a heavier gauge extension cord. Using extension cords with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible tool damage.

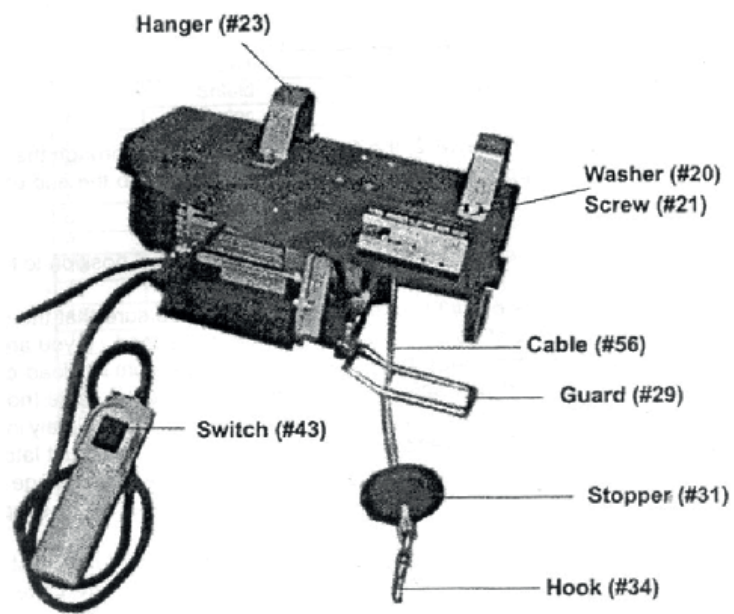




3. The smaller the gauge number of the wire, the greater the capacity of the cord. For example, a 14- gauge cord can carry a higher current than a 16- gauge cord.
4. When using more than one extension cord to make up the total length, make sure each cord contains at least the minimum wire size required.
5. If you are using one extension cord for more than one tool, add the nameplate amperes and use the sum to determine the required minimum cord size.
6. If you are using an extension cord outdoors, make sure it is marked with the suffix "W-A" ("W" in Canada) to indicate it is acceptable for outdoor use.
7. Make sure your extension cord is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified electrician before using it.
8. Protect your extension cords from sharp objects, excessive heat, and damp or wet areas.

## SIMBOLOGY

	Double Insulated
	Canadian Standards Association
	Underwriters Laboratories, Inc.
<b>V ~</b>	Volts Alternating Current
<b>A</b>	Amperes
<b>n<sub>o</sub> xxxx/min.</b>	Nº Load Revolutions Per Minute (RPM)



Assembly and operating instructions

### HOIST SET-UP



**WARNING**  
Unplug the Hoist before set-up.

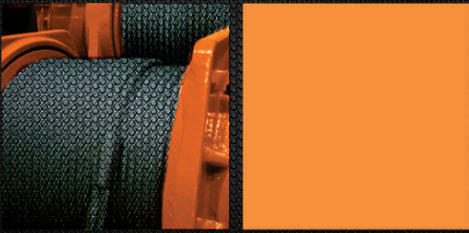
1. This Hoist is designed to be attached to a beam or steel pipe and bed securely held in place by both of the Hangers (#23). See FIGURE 2.

Note: The beam or steel pipe must be capable of carrying several times the weight of the Hoist and its designated maximum capacity. If in doubt, consult a registered engineer and building code.

Note: Make sure the area underneath or around the Hoist is clear of obstructions. Do not Hoist loads over people or animals.

2. After determining the location of the Hoist, make sure the beam or pipe is the proper size to fit inside of the Hangers (#23). Have a second person hold the top of the hoist flush against the beam or pipe. Line up the holes on each Hanger (#23) with the holes on the top of the Hoist. Thread in the two Screws (#21) and Washers (#20) per Hanger (#23) to secure the Hoist to the Beam or Steel Pipe. Check that it is secure. Before each use, check that the Hangers (#23) are securely fastened to the Hoist.





3. Ideally, the Hoist needs to be set-up within a reachable distance to a 3- prong power outlet without the need of an extension cord. However, extension cords are safe and acceptable when properly used.

## **OPERATION (continued)**

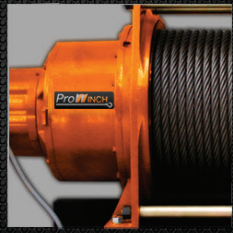
Using the Hoist Refer to FIGURE



### **WARNING**

**As illustrated in FIGURE 2, the Cable (#56) must flow through the cable Guard (#29), and the Stopper (#31) must be securely attached to the end of the Cable (#56).**

1. Plug in the unit and press the Switch (#43) toward the “down” position to lower the Hook (#34) to the load.
2. When connecting the Hook (#34) to the load, you must be sure that the connection point on the load is capable of holding the weight of the entire load. If you are not sure, use a separate cable (not included) that is rated above maximum lift load capacity, to surround the unit and tie it off securely. Then, attach the load is completely inside of the hook and safety tab on the Hook (#34) and the load is centered under the hoist. The safety tab on the hook must latch or close over the connection point or cable or the load may fall causing serious damage and injury.
3. Make sure no people or animals are near the immediate area. Never support a load over people or animals.
4. Standing clear, push the Switch (#43) toward the “lift” position. Slowly raise the load only enough to clear the floor or support and check to be sure the load is securely fastened. Proceed only after you are ensured the load is secure and free of all obstructions. If the Hoist refuses to lift the load you might have exceeded maximum lift capacity. If you are under the maximum capacity and the Hoist stops on its own, release the lift switch and stay clear while the motor has sufficient time to cool down. Then, resume the process.
5. When you are ready to lower the load, press the Switch (#43) toward the “down” position.
6. When the load is completely on the ground, keeping clear of it, shake or move the load to make sure it is sitting firmly on the ground. Then, remove the Hook (#34) from the load.
7. Push the Switch (#43) toward the “lift” position and bring the Stopper (#31) up to within a few inches of the Guard (#29).
8. When finished, unplug the unit.



## INSPECTION, MAINTENANCE, AND CLEANING



### WARNING

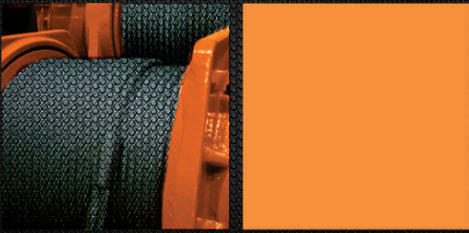
Before each use, inspect the general condition of the hoist. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, damaged electrical wiring, and any other condition that may affect its safe operation. If abnormal noise or vibration occurs, have the problem corrected before Further use. Do not use damaged equipment.

1. Wipe the Hoist down with a lint free cloth.
2. Check the cable for tears, excessive wearing, damage or frays. If you find any, Do not use the Hoist until the cable is replaced by a qualified technician. Only use genuine replacement cable (Cable (#56)). Do not substitute rope or any other type of cable.
3. Periodically lubricate the cable with a light oil.

## PARTS LIST

Part No.	Description	Part No.	Description
1	Cover Fan	30	Screw
2	Impeller	31	Stopper
3	Shield	32	Clamp
4	Stator	33	Connector
5	Screw	34	Hook
6	Bearing	35	Bearing
7	Basket	36	Pinion
8	Hub	37	Key
9	Hub Gasket	38	Connector
10	Spring	39	Switch/Cable
11	Shaft	40	Spring
12	Bearing	41	Screw
13	Flange	42	Cover
14	Gasket	43	Switch
15	Bushing	44	Screw
16	Wheel	45	Grip
17	Bearing	46	Condenser
18	Crankcase	47	Grip
19	Support	48	Screw
20	Washer	49	Screw
21	Screw	50	Cable
22	Screw	51	Clamp
23	Hanger	53	Terminal
24	Key	54	O-ring
25	Shaft	55	Cable
26	Spool	56	Cable
27	Cable	57	O-ring
28	Bushing	58	Clip
29	Guard	59	Cable
		60	Wheel

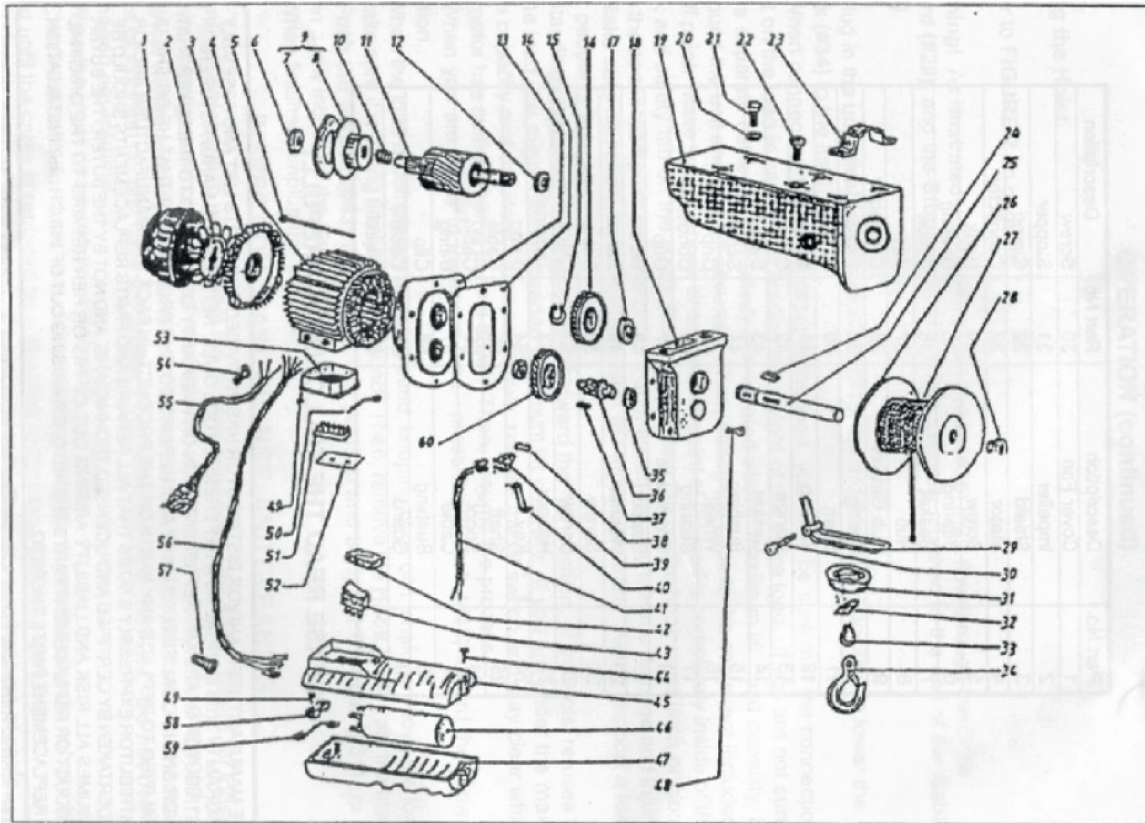




## PLEASE READ THE FOLLOWING CAREFULLY

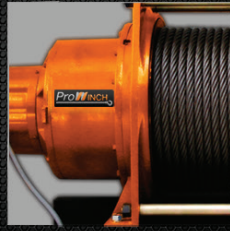
The manufacturer and/or distributor has provided the parts list and assembly diagram in this manual as a reference tool only. neither the manufacturer or distributor makes any representation or warranty of any kind to the buyer that he or she is qualified to make any repairs to the product. in fact, the manufacturer and/or distributor expressly states that all repairs and parts replacements should be undertaken by certified and licensed technicians, and not by the buyer, the buyer assumes all risk and liability arising out of his or her installation of replacement parts thereto.

NOTE: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.





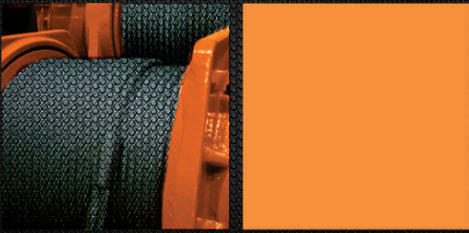
# PWX ELECTRIC HOIST



## ASSEMBLY AND OPERATING INSTRUCTIONS

Read carefully and understand all ASSEMBLY AND OPERATION INSTRUCTIONS before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.





## I. CHARACTERISTIC AND USE

This product with small volume, light weight, convenient to install, reliable to use. Those related electrical machinery all use alternating current 230V/50Hz or 120V/60Hz single phase power, Suitability is extensive.

This trolley of the product fix under I steel track, it can compose bridge style, single girder or hang micro lift. Widely used at factory, mine, quay warehouse, machine, pressing, assemble the mould, construction site, etc as to install equipment machines and lift goods.

The requirement of working environment:  
The products can't be used in the following conditions.

1. The temperature of the working environment lower than -20°C or higher than 40°C.
2. Relative moisture of the working plate higher than 85%.
3. The working place has the danger of fire, explosion and full of corruption gas.
4. Carried with melt and poisonous and explosive goods. ±
5. Outdoors when is raining or lightning.
6. The working place power supply is not single phase 230 10%.

## II. MAIN STRUCTURE

1. Lifting motor: this motor is with magnetism, type single-phase electric capacity and operate motor, adopt B grade Insulation, the motor designed with stop transfer namely brake promptly's magnetism structure, safety and reliable use.
2. Trolley motor: this motors is single-phase electric capacity and operate motor, the PWX trolley main structure the whole lift and fixed using.
3. Gearbox: adopt two grade gear down equipment, Gear wheel and bearing are all made by steel, through modulating the heat treatment. Motor and gearbox form an organic whole. Shell adopt aluminium alloy die casting becomes. The structure compactness is durable, appearance is beautiful.
4. Rope roll and Support structure: the rope tube was pressed with high-quality steel, jointing with steel tube, fix on the output bearing, rotate the steel rope lift the goods. The regular rack was pressed and welded with the high-quality steel, for support the whole lift and fixed using.



4. Rope roll and Support structure: the rope tube was pressed with high-quality steel, jointing with steel tube, fix on the output bearing, rotate the steel rope lift the goods. The regular rack was pressed and welded with the high-quality steel, for support the whole lift and fixed using.

5. Regular seat and Support structure: those use high-quality steel plate taken shape by machining, use to support to fix connect the hoist and vehicle.

6. Hook: choose the ring type hook, lift the rating weight; choose the Pulley type hook, the lift weight will double.

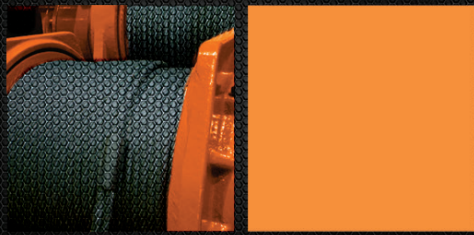
7. Switch and electric apparatus: Our product come with IP 65 switch which control the up and down of the goods. It can operate the things lift and horizontal move. When the things go up to limit rack, or down to the electric apparatus, limit rack stir the limit switch automatism, cut off the power, guarantee to operate the security.

8. When the rope drum left 2-3 circles rope, down limited switch will play the role to stop automatically.

### III. Mainly technique data

Model	Lift weight (kg)	Lift height (m)	Lift speed (m/min)	Hoist power (w)	Trolley power (w)	Power supply	Trolley speed m/min	Least radii (m)	Recommend I steel		Wire rope dia (mm)	Weight of machine
									Nº	Width (mm)		
PWX 200 PWA 200	100/200	12/6	10/5	480	160	220V/50Hz	13	1	10 - 16 #	68 - 88	3.0	26
PWX 500 PWA 500	250/500	12/6	10/5	1020	160	220V/50Hz	13	1	10 - 18 #	68 - 94	4.2	33
PWX 1000 PWA 1000	500/990	12/6	8/4	1600	540	220V/50Hz	13	1.5	14 - 20 #	80 - 102	5.6	53





#### **IV. INSTALLATION AND DRIVE TEST**

1. After electric hoist with vehicle unpacking should check appearance to is it damaged, situation of damaging etc. Confirm that there is not flawed or damaged situation intact. Use 500v M ohmmeter measures coil connecting no less than 0.5M insulation with the shell. If occur insulation the resistance is too low, it shows the motor made moist, should do dry treatment.
2. Check the parts whether intact, open hexagon bolt, utilize and adjust the regular rack of about two according to the width of I-steel, also adjust the two side wheel. (Attention: let the electric hoist hook strength direction and vehicle wheel keep the same side. Hung on the I steel, push the vehicle by hand if no hinder phenomenon then please tighten four hexagon bolt insert the good split pin. Check if all of nuts are tighten, then insert th power).
3. The power is 230V/50Hz or 120V/60Hz single phase alternating current, musk take a trial run after being grounded appropriately on inserting the socket three times.
4. For safety drive test, electric hoist with vehicle must completely checked one time after connect the power. Right connect line, power and volt match case, could carry on load go up and down many times, make sure the brake system flexible when brake under wading down can ´t over 100 mm distance. If the distance over 100 mm, please open the cover, disassembly the wind and plate. The operate man should keep distance with the trolley, can ´t test drive or carry on load things under the trolley.

#### **V. USE SAFETY NOTICE**

1. It had better operate by profesional personnel to drive a vehicle, attendant should know safety knowledge.
2. Must carry on empty load before using each time, check the following projects.
  - a. If the switch is flexible, if it can control up and down, left and right moving, if it can stop any time.
  - b. If limitr device is flexible and reliable.
  - c. If there inusual noise when operating.
3. Forbid overloading. Do not lift the same object by two or more hoists.
4. Do not lift the object slantways, or to pull the heavy object on the ground with it.
5. No using machine outdoors when it rains or thunders.
6. When change the steel wire, make sure to keep two or three circles on the drum, disassembly the screw five pieces on the limit box, to let the gear drive (A) and then put the switch to limit off.
7. No standing under the machine when if lift the goods.
8. When lifting goods, every time, please move a bit first, when the goods and steel rope is straining, then lift up.

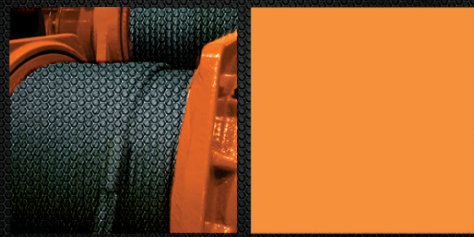


10. Limitr is safe device, to prevent exceeding limit height. Do not take it as journey switch and use often. Do not remove it even more.
11. During working, if the brake is ineffective and heavy object falling rapidly, please press the switch up by hand immediately, then press down by hand. After unload, check if the tripping spring is broken. If the brake slice covers grease. Use again after recover.
12. Do not hang the heavy object in the air for a long time, in case the part is out of shape and lead to accident.
13. If the steel wire rope is loose, please put the steel wire rope in order in time, wind it well, to avoid damage. Steel wire rope in order in time, wind it whell, to avoid damage. Steel wire rope surface wear or tear above 40% breaking steel wire or break pff up to 22 roots in pitch point must change.
14. Keep each lubricate part with available lubricating grease. Hook, Tube axle of the rope, gearbox, bearing, etc. put lubricating grease every six months.
15. Electric hoist with trolley should go on overall maintenance at regular intervals according to the frequency of utilization. Generally once every year.
16. Attention: this electric hoist motor work system is S3-20% 10 min. (This work system Circulation cycle is 10 min, work 2 min, rest 8 min, it is Intermission work).

## VI. COMMON TROUBLESHOOTING

Common troubles	Mainly reason	Solutions
Press the switch by hand, The motor can't run.	1、 the power is not through. 2、 wiring is broken or loose 3、 the switch doesn't work 4、 The condenser burns out 5、 Limitr device doesn't reset or journey switch does not work	1、 put through the power 2、 check the wiring and repair 3、 repair or adjust the switch 4、 replace the condenser 5、 check limitr device and replace the journey switch
Press the switch by hand the motor is too noisy ,can't lift the load	1、 the power supply is too lower. 2、 the condenser damaged 3、 brake slice has not been totally uncoupled	1、 Adjust the power supply. 2、 Replace the condenser 3、 Adjust the clearance of brake slice

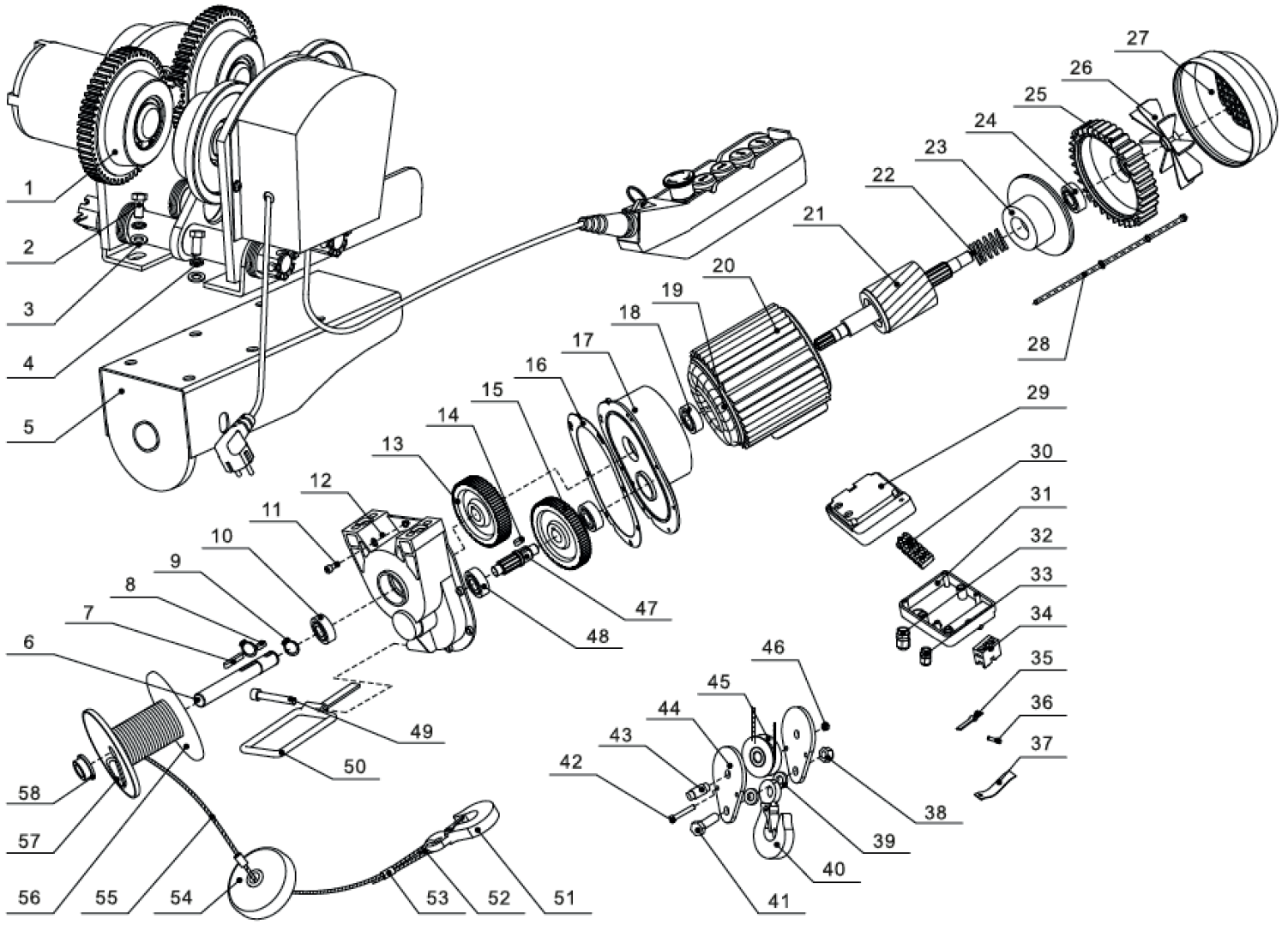




Common troubles	Mainly reason	Solutions
The machine can't brake after power off or the gliding amount is too big	<ol style="list-style-type: none"> <li>1、 Tripping spring is broken.</li> <li>2、 Brake slice is damaged</li> <li>3、 Brake slice have serious greasy dirt.</li> <li>4、 The gap of brake slice too big.</li> </ol>	<ol style="list-style-type: none"> <li>1、 adjust the distance of brake slice</li> <li>2、 replace the tripping spring</li> <li>3、 replace the brake slice or adjust the clearance</li> <li>4、 clear the appearance of brake slice</li> </ol>
The noise increases unusually.	<ol style="list-style-type: none"> <li>1、 It is bad to lubricate</li> <li>2、 The gear and bearing damaged after using for a long time</li> <li>3、 Assemble badly and knocking against after dismantling</li> </ol>	<ol style="list-style-type: none"> <li>1、 put more lubricating grease</li> <li>2、 check or replace the gear and bearing</li> <li>3、 check assemble again and repair the knocking against part</li> </ol>
Electric hoist has leakage	<ol style="list-style-type: none"> <li>1、 Do not work in earth or no earth</li> <li>2、 Interior wiring touches the shell</li> </ol>	<ol style="list-style-type: none"> <li>1、 check earth or connect the earth</li> <li>2、 check or remove the interior wiring</li> </ol>
Limitr device doesn't work	<ol style="list-style-type: none"> <li>1、 The limitr journey switch does not work</li> <li>2、 Limitr device blocks</li> </ol>	<ol style="list-style-type: none"> <li>1、 recover or adjust he journey switch</li> <li>2、 check and adjust the limitr device</li> </ol>
Motor can't lift the rated load	Because unnormal continuous work cause inside coil of motor rise warm , burn out the motor when being serious	Use according to the work system of the motor, after complete cooling, then use again.



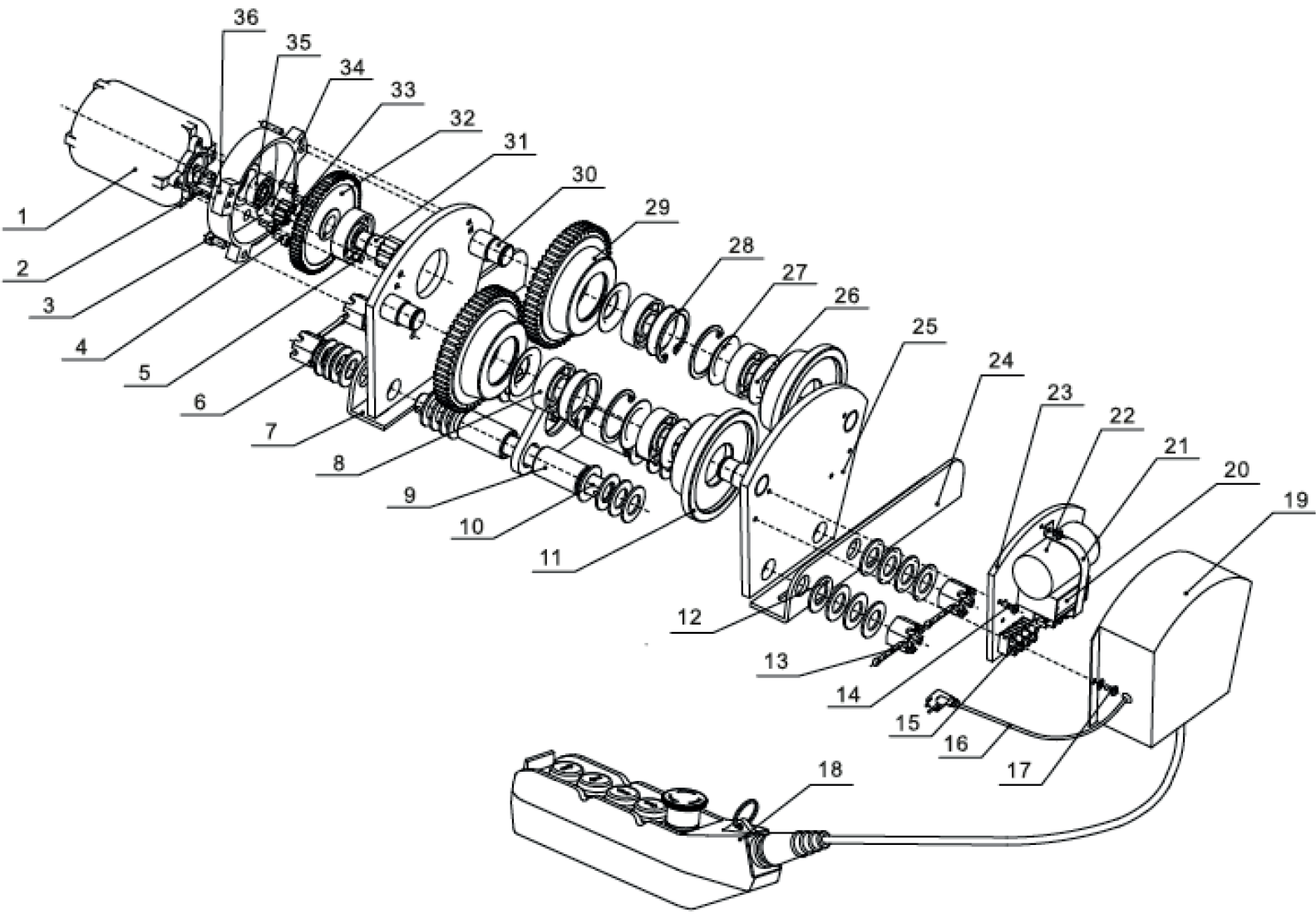
**VII. EXPLODED DRAWING AND PARTS LIST**



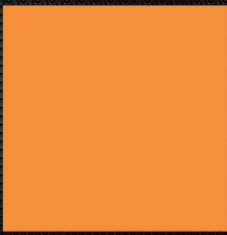




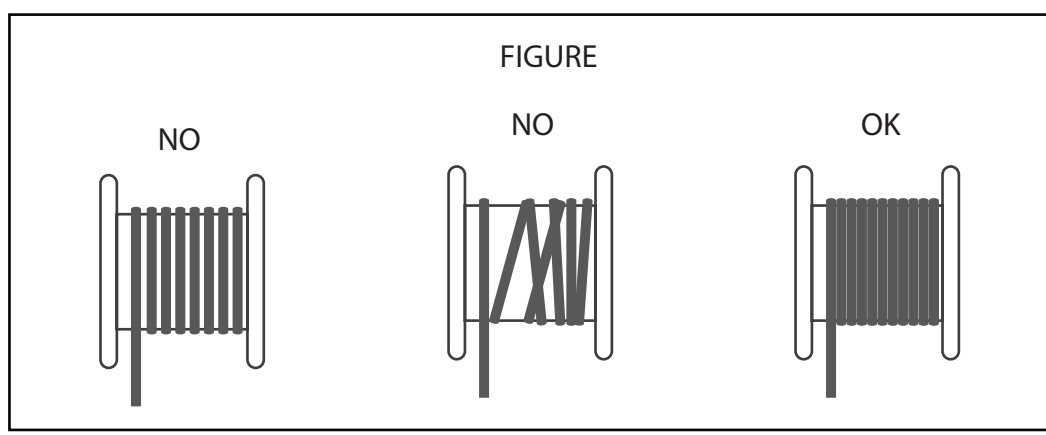
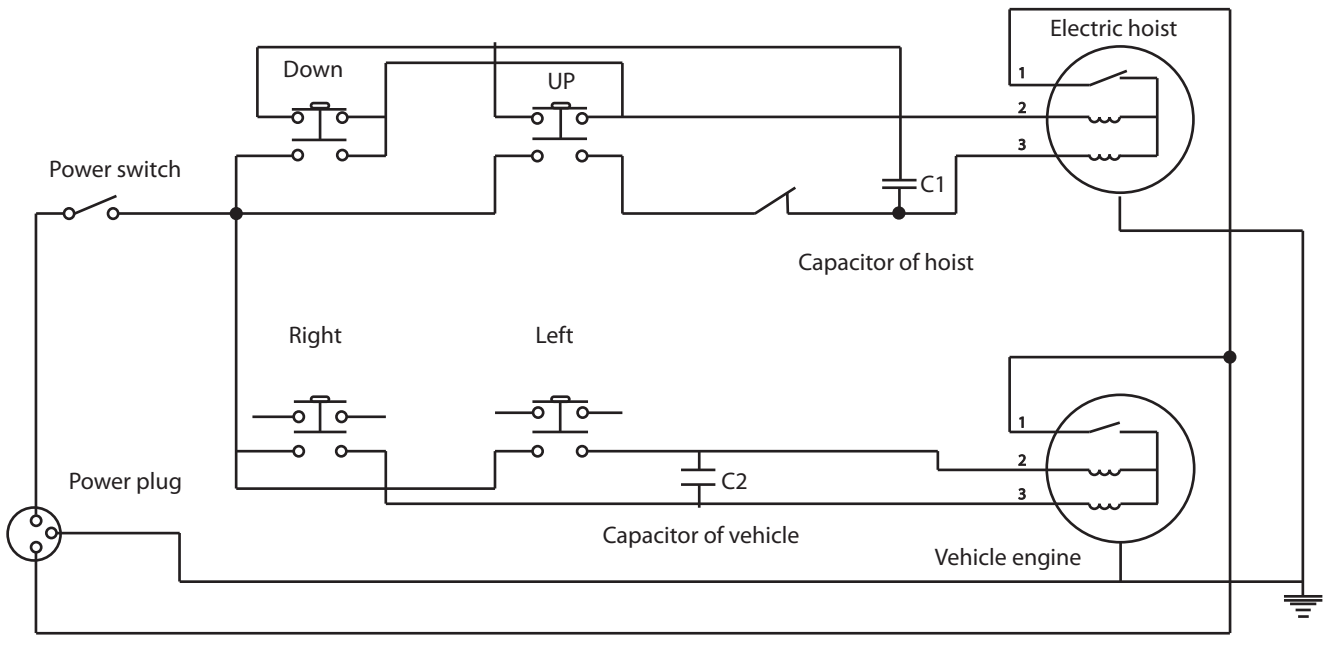
NO.	Part name	NO.	Part name
1	Vehicle organization	30	Terminal
2	Hexagon bolt	31	Cover
3	Flat washer	32	Holding fixture
4	Spring washer	33	Holding fixture
5	Support structure	34	Safety switch
6	Rope roll shaft	35	Breaker contactor
7	Flat key	36	Locating pin
8	Flat key	37	Spring tab
9	Elastic collar	38	Locknut
10	Bearing	39	Hook washer
11	Hexagon fillister head screw	40	Hook
12	Gear case	41	Hexagon bolt
13	Gearwheel	42	Hexagon bolt
14	Flat washer	43	Wheel axle
15	Gear wheel	44	splint
16	Cushion board	45	pulley
17	Front cover	46	Hook fixed nut
18	Bearing	47	Gear shaft
19	Stator	48	Bearing
20	Stator shell	49	Hexagon bolt
21	Rotor	50	Limiter
22	Tripping spring	51	Hook
23	Brake component	52	Rope thimble
24	Bearing	53	Aluminum pipe
25	Aft closure	54	block
26	Fan blade	55	Wire rope
27	Fan cover	56	Rope roll
28	Hexagon bolt	57	Wedge
29	Junction box	58	bushing



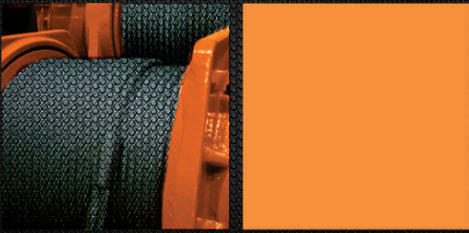




NO.	Part name	NO.	Part name
1	Vehicle motor	28	Check ring for hole
2	Pin	29	Gear wheel
3	Hexagon slot round bolt	30	Support structure
4	Hexagon slot round bolt	31	Gear wheel bearing
5	Flat key	32	Gear wheel
6	Hexagon bolt	33	Pin
7	Locating block (left)	34	Gear wheel
8	Bearing	35	Bearing
9	Position sleeve	36	Gear case
10	Double-edged bolt	37	
11	Drive wheel	38	
12	Gasket	39	
13	Splint pin	40	
14	Crossed bolt	41	
15	Terminal	42	
16	Plug	43	
17	Crossed bolt	44	
18	Handle switch	45	
19	Electric case cover	46	
20	Capacitance	47	
21	Capacitance press plate	48	
22	Capacitance	49	
23	Electric orientation plate	50	
24	Locating block (left)	51	
25	Support structure	52	
26	Baffle for bearing (2)	53	
27	Baffle for bearing (1)	54	







# Warranty

## LIMITED WARRANTY COVERAGE

PROWINCH products are warranted to the original purchaser for a period of three (3) years after the date of purchase only to be free from defects in material and workmanship when subjected to normal, proper and intended use. Within this period, PROWINCH will only repair or replace free of charge any part on a product, after examination, is determined by PROWINCH to be defective in material or workmanship and was not caused or substantially contributed to by other factors or circumstances beyond PROWINCH control, including (but not limited to) defective installation, maintenance or repair, product modification or alteration, any neglect misuse or excessive use, mishandling, product exposure to extreme or unsuitable conditions, normal wear and tear or failure to follow manufacturer's instructions. This warranty does not apply to damage that PROWINCH determines to be from repairs made or attempted by anyone other than PROWINCH authorized personnel.

Return of the product with a copy of proof of purchase to PROWINCH, freight prepaid and insured, are required for this warranty to be effective. If more than one year has elapsed from purchase date, proof of periodic and regular maintenance by an authorized service must also be provided for this warranty to be effective. PROWINCH does not cover freight or labor charges associated with the inspection and testing of products which are found by PROWINCH not to be a valid warranty claim.

## DISCLAIMER

In no event shall PROWINCH be liable for any labor, removal and installation expenses, loss of time, manufacturing costs, transportation, materials, loss of profits, incidental, special, consequential or punitive damages, or for any costs, attorney fees, expenses, losses or delays, direct or indirect, alleged to be as a consequence of any damage to, failure of, or defect in any product including, but not limited to, any claims for loss of profits. PROWINCH disclaims any implied warranties, including without limitation, any implied warranty of merchantability or fitness for a particular use or purpose.

Acceptance of the exclusive repair and replacement remedies described herein is a condition of the contract for the purchase of every PROWINCH product. If you do not agree to this condition, you should not purchase the product.



REGISTRO DE PROPIEDAD INTELECTUAL N° 189487  
PROHIBIDA SU REPRODUCCION TOTAL O PARCIAL  
TODOS LOS DERECHOS RESERVADOS PROWINCH® 2017 - V8.0  
PROWINCH LLC. EMPRESA CON SISTEMA DE GESTIÓN DE CALIDAD  
CERTIFICADO SEGÚN LA NORMA ISO 9001



## TECLES PROWINCH®

Prowinch® LLC declara que ha puesto a disposición del Cliente todas y cada una de las advertencias de seguridad relativas al producto adquirido y que, en razón de ello, no asume responsabilidad alguna por los eventuales daños o perjuicios que pudiera sufrir el cliente o terceros a causa o como consecuencia directa o indirecta del incumplimiento u omisión a alguna de las instrucciones o advertencias de seguridad que constan en el **Manual de Usuario y Advertencias de Seguridad** correspondiente a la unidad adquirida.

En este sentido, Prowinch® LLC, no responderá por accidentes y/o daños a las personas y/o a la propiedad, que resultasen a consecuencia de la negligente utilización del producto.

En ningún caso Prowinch® LLC, asume ninguna responsabilidad derivada del uso de estas recomendaciones voluntarias, y no ofrece ninguna garantía en relación a ellas. Estas recomendaciones no tienen prioridad sobre las normas vigentes de seguridad de la planta.

Para efectos de hacer valer la Garantía del producto adquirido, Prowinch® LLC, sólo responderá por eventuales desperfectos cuando sea posible acreditar que el usuario del mismo ha seguido todas y cada una de las advertencias que constan en el **Manual de Usuario y Advertencias de Seguridad**.

1. Es responsabilidad exclusiva del Cliente/usuario verificar que los equipos, productos y accesorios adquiridos cumplan con las características, capacidades, elementos, componentes, accesorios y demás condiciones para el uso que el Cliente/usuario pretende darle.
2. Es además responsabilidad exclusiva del Cliente/usuario asegurar que los equipos y productos adquiridos sean operados y mantenidos en condiciones de seguridad y por parte de personal debidamente capacitado en el uso de los mismos, implementando además todas las medidas de seguridad que fueran necesarias para prevenir accidentes o daños a personas o bienes y observando las indicaciones y advertencias de los manuales de uso correspondientes.
3. El eventual apoyo en la selección de los equipos, de las capacidades y características requeridas por los clientes que brinda Prowinch es entregado de forma gratuita y proporcionado en base a la información de uso y requerimientos indicados por el Cliente mismo, información que Prowinch no puede ni le corresponde verificar. De esta forma es de todos modos responsabilidad única y exclusiva del Cliente -o de quien hará uso de los equipos y productos adquiridos- asegurar que los mismos cumplan con las capacidades, características, mantenciones al día y todo lo necesario para una operación correcta y segura en relación al uso que pretende darle.
4. Para Izaje de personal Prowinch recomienda el uso de winches con 4 frenos. El uso de winches de 3 o menos frenos o características de seguridad inferiores a las máximas disponibles, para Izaje de Personal, es de exclusiva responsabilidad del cliente.
5. Con el propósito de garantizar la seguridad de los usuarios de los equipos, en especial los de Izaje de Personal, es necesario realizar las inspecciones y mantenimientos de los equipos según la frecuencia recomendada en relación a su ciclo de trabajo, tal como está descrito por las normas ASME B30. Es obligatorio mantener registro y evidenciar los Informes escritos y fotográficos de: Mantenimiento, Puesta en Marcha, Pruebas de Carga, Capacitaciones, Certificaciones, Inspecciones e Informes de fallas y accidentes.
6. Los informes antes mencionados deberán ser enviados mediante correo electrónico a [registros@prowinch.com](mailto:registros@prowinch.com) dentro de los primeros 7 días corridos que dicho evento haya ocurrido.
7. El cumplimiento de la realización oportuna de las actividades obligatorias descritas en los puntos 6 y 7, más todas las actividades mencionadas en las correspondientes normas aplicadas, son de exclusiva responsabilidad del usuario. El no cumplimiento de lo anterior, desliga a Prowinch de cualquier tipo de Responsabilidad y Garantía hacia el equipo, cliente, personal y/o usuario o cualquier otra responsabilidad que pudiese atribuirse a Prowinch.

La información contenida en este manual puede contener errores técnicos o inexactitudes, Prowinch® LLC, no se hace responsable por errores de digitación, omisión o información errada.

Este manual está sujeto a cambios sin previo aviso. Descargue la última versión disponible en [www.prowinch.com](http://www.prowinch.com)





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## Modelos



**PWX200 Ri 220V**  
**PWX200 Ru 110V**

**PWX500 Ri 220V**  
**PWX500 Ru 110V**

**PWX1000 Ri 220V**  
**PWX1000 Ru 110V**



**PWA200 Ri 220V**  
**PWA200 Ru 110V**

**PWA500 Ri 220V**  
**PWA500 Ru 110V**

**PWA1000 Ri 220V**  
**PWA1000 Ru 110V**



**CPE2Pi**  
Contro Remoto  
PWA



**CPE2P**  
Contro Remoto  
PWA



**CPE4Pi**  
Contro Remoto  
PWX



# Precauciones Generales de Seguridad

## 1. PRECAUCIONES GENERALES DE SEGURIDAD



“ Gracias por adquirir un Winche Prowinch®. Este manual describe la operación y el mantenimiento del Winche. Toda la información en esta publicación está basada en la información de producción más nueva que está disponible al momento de imprimir. ”

La línea de Tecles Prowinch® de las series PWA, PWS y PWX son productos que adoptan una avanzada tecnología. Estos productos tienen como características un volumen pequeño y peso ligero. Este producto es apto para ser usado en instalaciones de pequeña y mediana escala, en bodegas, en obras de construcción; es la herramienta ideal para el movimiento de carga.

Es importante que lea cuidadosamente este manual antes de utilizar su unidad. Si tiene cualquier duda al respecto no dude en contactarse con nosotros en [www.prowinch.com](http://www.prowinch.com)

### Uso Obligatorio de:

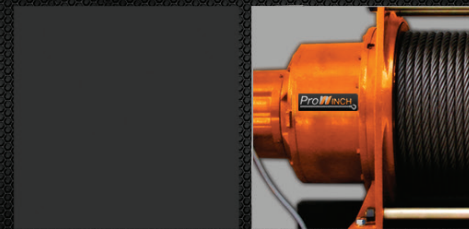


**ATENCIÓN:** Este símbolo indica que hay una situación peligrosa que si no se evita puede causar heridas menores o moderadas. Esta nota también es usada para avisar sobre prácticas inseguras.



**PELIGRO:** Este símbolo indica una situación peligrosa que si no se evita puede causar heridas graves o muerte.

# Precauciones Generales de Seguridad



## PELIGRO

Tanto los usuarios como todas las personas que se encuentren al alcance del cable de acero o de la proyección de su carga, estarán en todo momento obligados a utilizar los elementos de seguridad exigidos para la operación de esta unidad, a saber: guantes, casco de trabajo, zapatos de seguridad y protección de policarbonato para la vista.

### 1. Precauciones generales:

- Asegúrese que el Teclé cumple con las condiciones de uso.
- Mantenga el Teclé en buenas condiciones y asegúrese que el cable de acero no sobresalga del tambor al enrollar.
- No use poleas ni accesorios que no estén aprobados para este Teclé.
- No use cable defectuoso, desgastado o con hebras rotas.
- Para reducir el riesgo de descarga eléctrica, asegúrese que el Teclé está eléctricamente conectado a tierra, por personal calificado.
- Asegúrese que el Teclé funciona adecuadamente en vacío, sin carga, antes de cargarlo.
- Enrolle de forma ordenada y uniforme el cable de acero en el tambor. Si el cable de acero se monta uno sobre otro de forma cruzada es necesario que lo enrolle de nuevo.
- Desconecte el equipo de la alimentación eléctrica cuando no se use para evitar accionamientos involuntarios.

### 2. Use ropa adecuada:

- No use ropas sueltas ni joyas. Se pueden enganchar en las partes que se mueven.
- Use guantes de cuero cuando toque el cable del Teclé. No toque el cable con las manos desnudas ya que cables rotos pueden causar heridas. Debe usar zapatos de seguridad antideslizantes, casco de seguridad y protección para la vista.

### 3. Mantenga una distancia segura:

- Asegúrese que todas las personas estén lejos del cable del Teclé y la carga, cuando el Teclé está en operación. Es recomendable que esa distancia sea 1,5 veces la longitud del cable. Si el cable se suelta o se rompe por la carga puede azotar y causar daño personal grave o muerte.
- No pase por encima del cable.
- Es necesario asegurar que todos los visitantes y espectadores se queden lejos del área de trabajo.

### 4. No abuse del cable Eléctrico:

- Nunca levante el Teclé por el cable ni tire para desconectar.
- Aleje el cable del calor, aceite y borde afilados.
- Nunca saque todo el cable, mantenga al menos 5 vueltas en el tambor.

### 5. No haga que el Teclé trabaje demasiado:

- Si el motor se pone muy caliente, deténgalo y deje que se enfríe por algunos minutos.
- Si el Teclé se detiene en la operación, detenga la operación y revise la carga y el carro.
- No exceda la capacidad máxima mostrada en la tabla. Las cargas no deben exceder esas medidas.
- Es normal que al detener el Teclé mientras se está bajando una carga, ésta baje unos centímetros más debido a la fuerza de inercia.



# Precauciones Generales de Seguridad

## 6. Revise las partes dañadas:

- Antes de usar, es necesario revisar el Tecele completamente. Es necesario que un centro de servicio autorizado Prowinch repare o sustituya cualquier parte que está dañada.

## 7. Repare el Tecele:

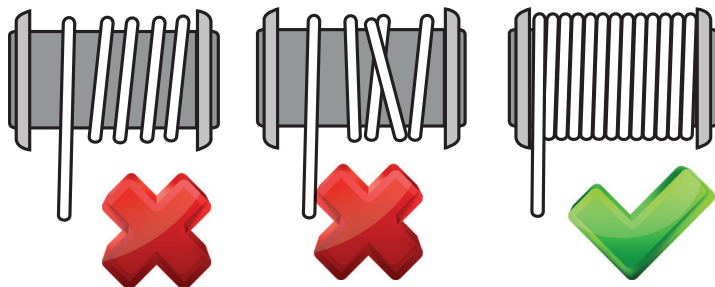
- Para reparar use sólo repuestos originales Prowinch, en caso contrario puede poner el usuario en peligro. El uso de cualquier otro repuesto hará que la garantía caduque y quede sin efecto. Sólo use accesorios fabricados para este Tecele.  
- Si el cable está desgastado hay que reemplazarlo, siempre y únicamente por el cable original y producido por nosotros en un taller autorizado.

## 8. Enrollar el cable:

- Antes de comenzar a trabajar controle con detenimiento que el cable de acero esté correctamente enrollado sobre el rollo, con un paso correspondiente al diámetro del cable.  
- Debe llevar guantes de cuero para enrollar el cable. Para enrollar correctamente es necesario mantener una carga pequeña en el cable. Mientras el operador enrolla el cable otra persona debe guiarlo en su correcta ubicación. Empiece lo más lejos y lo más al centro que pueda. Camine con la carga en el cable

mientras el Tecele enrolla.

- Guarde por lo menos tres vueltas de cable en él para no forzar la conexión del tambor a este.
- No permita que el cable se caiga y no se acerque al Tecele.
- Apague el Tecele y repita el proceso hasta que sólo quede 1 metro de cable.
- Desconecte el control remoto y/o corte el suministro eléctrico.
- Nunca enrolle la totalidad del cable, deje siempre 25 cm para evitar cualquier peligro.

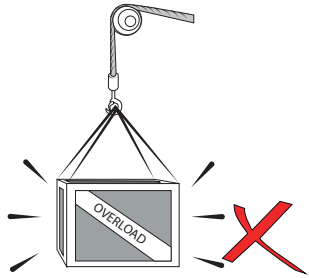


### PELIGRO

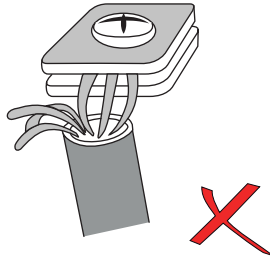
Asegúrese de desconectar el suministro eléctrico una vez terminada la operación, para evitar así accionamientos involuntarios del equipo. Nunca dejar el equipo alimentado sin supervisión del operador.



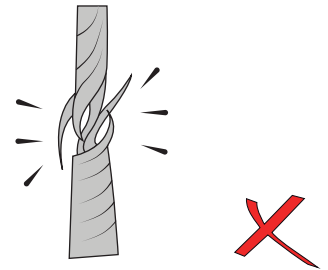
## 2. PRECAUCIONES DE MANEJO



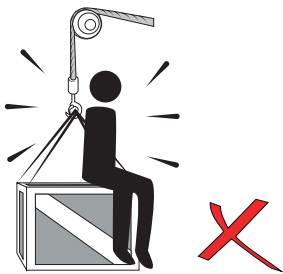
1. No lo sobrecargue. Asegúrese que conoce su propia habilidad de levantar y la capacidad máxima de su Winche.



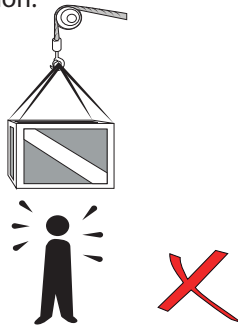
2. Revise la calidad de las conexiones eléctricas. El voltaje puede tener bajas considerables si no se cumple con una buena conexión.



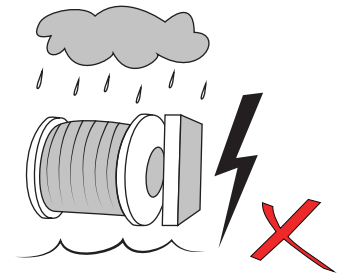
3. Examine periódicamente la totalidad y el estado del cable de acero. En caso de detectar daños, replácelo.



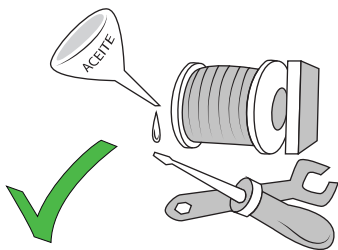
4. No transporte a personas, si el equipo, su accesorios e instalación no cumplen con las normas exigidas para tal efecto.



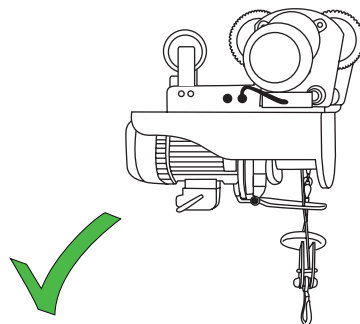
5. No se pare bajo la carga. Si la carga se cayera podría aplastarlo.



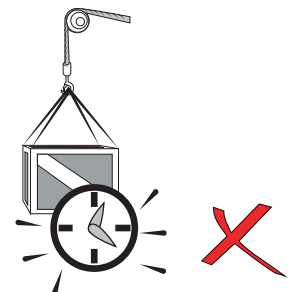
6. Evite el uso del Winche en la lluvia. No moje el interruptor ni el motor.



7. Realice revisiones de mantenimiento de forma periódica.

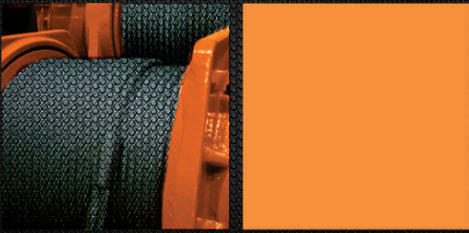


8. Verifique la instalación del equipo.



9. Un objeto pesado no debería ser sostenido en el aire por un tiempo largo, ya que puede causar deformación y es un accidente en potencia.



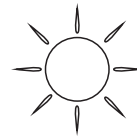


# Precauciones del Medio Ambiente

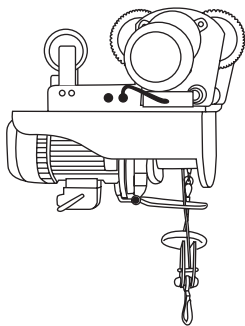
## 3. PRECAUCIONES DEL MEDIO AMBIENTE

Las siguientes condiciones del medio ambiente pueden causar fallar en el funcionamiento del Winche.

Cuando se utiliza al aire libre, se requiere de un refugio para proteger de las condiciones ambientales adversas. Temperaturas bajo de  $-10^{\circ}\text{C}$  y arriba de  $40^{\circ}\text{C}$  y/o humedad relativa de 85% puede producir fallas en el equipo.

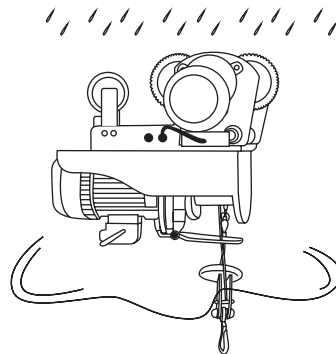


Advertencias:

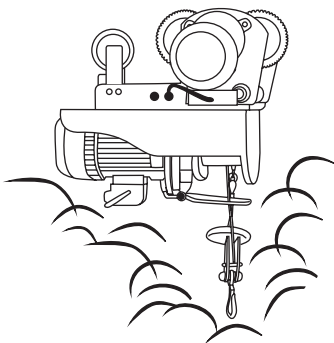


Exposición a la lluvia y/o a la nieve puede hacer que el Cabrestante se oxide.

Estar cerca de químicos, gas corrosivo y/o explosivos puede causar explosión. Exposición al ácido y/o a la sal puede causar mal funcionamiento.



Exposición a la arena puede causar un mal funcionamiento.



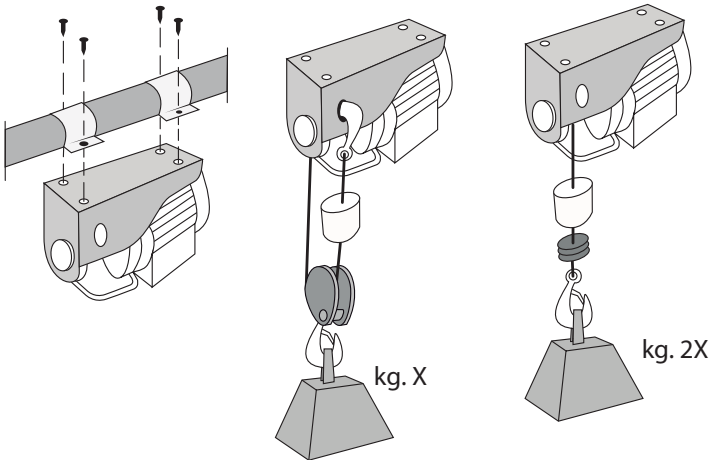
# Instrucciones de Instalación



## 4. INSTRUCCIONES DE INSTALACIÓN

### a. Instalación y prueba de funcionamiento

La versión básica del Tecele va provista con un sistema de anclaje por estribos especialmente diseñados para colgar en tubos.



Largo Extensión	Sección Cable Alimentación
Hasta 20 m	1,6 mm
De 10 a 50 m	2,5 mm

En el lugar de trabajo, instale la máquina y fijela según normas de cálculo.

Pruebe que la instalación eléctrica cumpla con los requerimientos de la unidad a instalar. Si el voltaje de trabajo probado en el sitio no cumple con los requerimientos estipulados en las placas de datos del producto, puede ocasionar daños a las partes eléctricas y motor del Tecele. El voltaje debería estar en el rango de +10% del valor especificado.



### ATENCIÓN

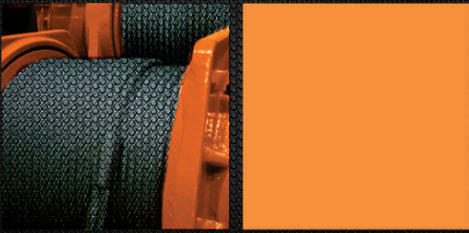
Cualquier tipo de intervención en la unidad por personas ajenas a Prowinch® o no capacitadas por Prowinch®, hará caducar inmediatamente la garantía del mismo.

**Prueba Inicial:** Mientras se eleva o se baja un determinado número de veces, no debe sentirse vibración ni ningún sonido inusual.

**Prueba de una carga:** Elevar y bajar una carga clasificada varias veces. Revisar el Tecele y el carro durante la prueba, revisar y medir las conexiones eléctricas para confirmar que son normales y confiables.

Cuando se baja la carga de prueba, aplicar el freno mientras aún se encuentra colgando en el aire para probar su efectividad.





## Mantenimiento e Inspección



### ATENCIÓN

Tras haber comprobado que las características de corriente al enchufe (voltios/hertzios) son las requeridas e indicadas en la placa que se encuentra al lado de la máquina, se podrá comenzar su utilización. En el caso que se necesite una extensión del cable, habrá entonces que atender a las indicaciones de la tabla, en referencia grosor/largo cable alimentación.



### ATENCIÓN

Toda instalación eléctrica debe considerar el peak o consumo máximo de partida.  
Nota: Verificar curva del automático.

## 5. MANTENIMIENTO E INSPECCIÓN

### Inspección:

- 1. Comprobar** periódicamente el buen estado del cable de acero.
- 2. Comprobar** el apretado de los pernos de sujeción de los estribos y de la Polea.
- 3. Comprobar** las condiciones y el apretado de las tuercas en las abrazaderas de sujeción del cable de acero.
- 4. Comprobar** periódicamente el buen funcionamiento del interruptor de parada del motor y del interruptor del Control.



### ATENCIÓN

Es responsabilidad del usuario revisar periódicamente el estado del cable de acero, anclaje o cualquier pieza que pueda estar suelta gastada o dañada, tanto en la unidad como en el objeto a remolcar.





## 6.CONTROL REMOTO

### a. Control remoto PWA - CPE2P



### b. Control remoto PWX - CPE4Pi







# Localización y Resolución de Problemas

## 7. LOCALIZACIÓN Y RESOLUCIÓN DE PROBLEMAS

Antes de usar el Tecle Prowinch®, asegúrese de que el cable está enrollado adecuadamente. Para asegurarse que el Tecle opere sin complicaciones, pruebe el interruptor de encendido. Si el Tecle sigue fallando después de algunos intentos, revise lo siguiente:

### 1. Sin reacción

- Fuente de energía.
- Revise el interruptor de encendido en el control.

### 2. Suena pero no gira

- Revise el interruptor de encendido y cambie cables.

### 3. Velocidad baja con vibración fuerte

- Cortocircuito en el capacitor de encendido.
- El punto de contacto del interruptor centrífugo.

### 4. Falla en la Partida

- Revise la bobina del freno y/o el circuito.
- El punto de contacto del interruptor centrífugo.
- Capacitor de encendido.
- Desgaste del freno de disco.

### 5. Falla de re encendido

- Sobrecarga.
- Es posible que una caída del voltaje hiciera que el freno se cerrara.
- Pernos sueltos en el interruptor de encendido.
- Cable del motor.
- Conexión del cable.

### 6. Falla de freno o escape de lubricación

- Bobina del freno.
- Freno de disco.
- Freno de disco metal.
- Resorte del freno.
- Es posible que una caída del voltaje hiciera que el freno se cerrara.

### 7. Rotación inversa

- Primera etapa: Cambie el cable blanco con el cable amarillo del interruptor de encendido.
- Tercera etapa: Intercambie los cables del motor.

### 8. Pérdida de electricidad

- Si no funciona con "tierra" o no tiene "tierra". Revisar o conectar a "tierra".
- Si el cableado interior toca la carcasa. Revisar o remover el cableado interior.

### 9. El ruido, usualmente aumenta

- Si no está bien lubricado. Agregar grasa lubricante.
- Si los engranajes y rodamientos están dañados después de un uso prolongado. Revise o cambie los engranajes y rodamientos.
- Si los sujetadores están sueltos o han sido removidos. Revise si el sujetador está armado.

### 10. Al presionar el Interruptor para elevar se escucha un fuerte ruido del motor, aparece una gran chispa desde el interruptor. No se puede elevar la carga.

- Si el voltaje es demasiado bajo, revise la alimentación.
- Si el cable de entrada es demasiado largo, entonces el voltaje es demasiado bajo. Revise si la sección del cable cumple con los requerimientos.
- Si la bobina, al ser aplicado el freno, se ha quemado, cambie el electromagneto del freno.



## COBERTURA GARANTÍA

Prowinch garantiza por 3 años a partir de la fecha de compra, el funcionamiento de este producto contra cualquier defecto en los materiales y mano de obra empleados para su fabricación. Nuestra garantía incluye la reparación o cambio de componentes sin cargo alguno para el cliente, incluyendo mano de obra.

Prowinch se compromete a entregar el producto en un lapso no mayor de 30 días contados a partir de la fecha de recepción del mismo en nuestros talleres de servicio. No asumirá responsabilidad alguna en caso de demora del servicio por causas de fuerza mayor.

## LIMITACIÓN DE LA RESPONSABILIDAD.

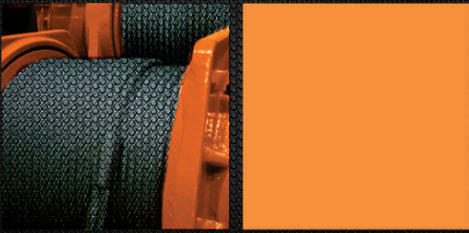
1. Toda garantía es dada en nuestras instalaciones.
2. En el caso se solicite visita técnica a terreno, está siempre será cancelada por parte del cliente, independiente de que en ella se hagan servicios sin costo cubiertos por la garantía. Se entiende como visita técnica a terreno a los costos involucrados por el traslado del personal, transporte, combustible, alimentación, alojamiento, horas extra, etc.
3. Esta garantía no cubre daños consecuenciales, ocasionados por el paro del equipo bajo revisión, no cubre costos de traslado de los equipos, desmontaje, traslado de personal, lucro cesante, faenas detenidas o cualquier otro costo que se pudiese relacionar al cese de funcionamiento de un equipo ya sea por cualquier razón o motivo.
4. Para hacer efectiva esta garantía, será necesario:
  - a) Dentro del primer año solo presentar la factura o boleta de compra.
  - b) Luego del primero año transcurrido, comprobantes de mantenimientos anuales en servicios autorizados.

## EXCLUSIONES

### ESTA GARANTIA NO SERÁ VÁLIDA BAJO LAS SIGUIENTES CONDICIONES

1. Cuando el uso, cuidado, instalación y operación del producto no haya sido de acuerdo con las instrucciones contenidas en el manual de operación y las Normas aplicadas correspondientes a cada equipo.
2. Falta de mantenimiento preventivo por parte del usuario, según lo estipulado en el Manual de Operación y Mantenimiento del Equipo.
3. Falta de mantenimiento preventivo anual en un distribuidor Prowinch autorizado.





## Garantía

4. Cuando el producto haya sido usado fuera de su capacidad, maltratado, golpeado, expuesto a la humedad, mojado por algún líquido o substancia corrosiva, así como por cualquiera otra falla atribuible al consumidor, uso inadecuado del equipo, abuso o negligencia.
5. Conexión de componentes eléctricos o electrónicos alimentados por fuentes externas (Red Normal), sujetos a variaciones de potencial.
6. Cuando el producto haya sido desarmado, modificado o reparado por personas no autorizadas por Prowinch.
7. Cuando la falla sea originada por el desgaste normal de las piezas debido al uso.
8. El uso incorrecto e inadecuada manipulación de equipos resistentes al agua o inmersión.
9. Daños ocasionados en el El transporte o en maniobras de Carga o descarga.
10. Ocurrencia de siniestros (Incendios, Terremotos, Inundaciones, Descargas Eléctricas, etc).
11. Uso de partes de repuesto no originales o no recomendadas por el fabricante.
12. La garantía no cubre elementos consumibles ni otros sujetos a desgaste.
13. Puesta en marcha del equipo por personal no autorizado por Prowinch.
14. Realizar reparaciones, modificaciones y/o retiro de piezas del equipo.
15. Instalación de Winches en bases no adecuadamente alineadas y sin las perforaciones exactas de anclaje.
16. Falta de rodaje y cambio de aceite a las primeras 20 horas en equipos con motores a combustión.

Los costos de mantenimiento no son cubiertos por la Garantía.

Ninguna otra Garantía verbal o escrita diferente a la aquí expresada será reconocida por Prowinch



**Pro//INCH**

The logo features the text "Pro//INCH" in a bold, sans-serif font. The word "Pro" is in white, followed by two slanted parallel bars in orange and white, and "INCH" is in orange. Below the text is a thick white horizontal line that ends in a silver-colored hook on the right side.