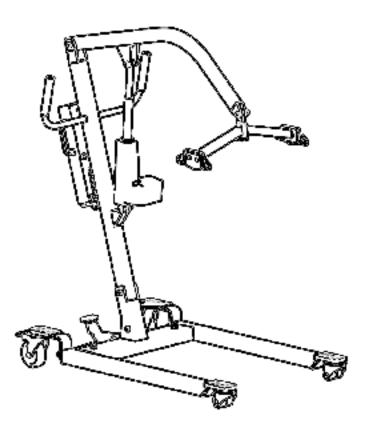


### **PW-PL400 Series**

User's Manual / Manual de usuario Safety Warnings / Advertencias de seguridad



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### **PROWINCH® DISCLAIMER**

Prowinch® LLC declares that it has made available to the Customer each and every one of the security warnings related to the purchased product and that, as a result, it does not assume any responsibility for any damages or losses that may be suffered by the client or third parties. cause or as a direct or indirect consequence of the breach or omission of any of the instructions or safety warnings contained in the User Manual and Security Warnings corresponding to the unit purchased.

In this sense, Prowinch<sup>®</sup> LLC will not be liable for accidents and / or damages to persons and / or property resulting from the negligent use of the product.

In no case does Prowinch<sup>®</sup> LLC assume any liability arising from the use of these voluntary recommendations, and does not offer any guarantee in relation to them. These recommendations do not take precedence over the current safety regulations of the plant.

For purposes of enforcing the Warranty of the product purchased, Prowinch<sup>®</sup> LLC, will only be liable for any damage when it is possible to prove that the user has followed each and every one of the warnings contained in the User Manual and Safety Warnings.

1. It is the sole responsibility of the Client / User to verify that the acquired equipment, products and accessories comply with the characteristics, capacities, requirements, components, accessories and other conditions for the use that the Client / user intends to give it.

2. It is also the sole responsibility of the Client / User to ensure that the equipment and products purchased are operated and maintained with adequate safety standards and by personnel duly trained in the use thereof. The Client / User is also responsible for implementing all the security measures necessary to prevent accidents or damages to people or property and for following the indications and warnings of the corresponding manual.

3. Any assistance provided by Prowinch<sup>®</sup> LLC in the selection of the equipment, the capacities and characteristics required by the clients is delivered free of charge and based on the information about the application, use and requirements indicated by the Client itself. It does not correspond to Prowinch<sup>®</sup> LLC to verify the accuracy of the given information. It is the sole and exclusive responsibility of the Client -or who will use the equipment and products acquired- to ensure that the specifications 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. Prowinch<sup>®</sup> LLC recommends the use of winches with 4 brakes for personnel lifting. The use of winches of 3 brakes or less or safety features lower than the best available for personnel lifting, is the sole responsibility of the customer.

5. In order to guarantee the safety of the personnel and users of the equipment it is necessary to carry out the inspections and maintenance of the equipment according to the recommended frequency in relation to its work cycle. 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 within the first 7 calendar days after the occurrence of an event.

7. Compliance with the timely implementation of the mandatory activities described in points 6 and 7 in addition to all the activities mentioned in the corresponding rules applied are the sole responsibility of the user. Failure to comply with the foregoing conditions releases Prowinch<sup>®</sup> LLC from any type of Liability and Warranty to the team, customer, staff or user, or any other liability that could be attributed to Prowinch<sup>®</sup> LLC.

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

This manual is subject to change without prior notice. Download the latest version available at www.prowinch.com. Always check www.prowinch.com for the latest information regarding this product.

# Safety Bulletin



#### WARNING

Hoists, Cranes and other Lifting and material-movement related equipment USERS, must be knowledgeable about the safe and proper use of this equipment and be aware of their responsibilities as outlined in all applicable standards and regulations.

The ASME/ANSI B30 Standard contains provisions that apply to the construction, installation, operation, inspection, testing, maintenance, and use of cranes and other lifting and material-movement related equipment.

As OSHA's, ASME and ANSI standards state, the installation, setup and operation of these units and equipment shall be performed by a qualified person.

OSHA requires rated load tests for new and altered cranes, OSHA's standard at 29 CFR 1910.179(k) states:

Operational tests.

Prior to initial use all new and altered cranes shall be tested to insure compliance with this section including the following functions:

Hoisting and lowering.

Trolley travel.

Bridge travel.

Limit switches, locking and safety devices.

The trip setting of hoist limit switches shall be determined by tests with an empty hook traveling in increasing speeds up to the maximum speed. The actuating mechanism of the limit switch shall be located so that it will trip the switch, under all conditions, in sufficient time to prevent contact of the hook or hook block with any part of the trolley.

Rated load test. Test loads shall not be more than 125 percent of the rated load unless otherwise recommended by the manufacturer.

Once a rated load test is performed, paragraph 1910.179(k)(2) requires that "[t]he test reports shall be placed on file where readily available to appointed personnel."

In order to ensure Safety and installation requirements Prowinch requires Load Tests to be performed prior to initial use for all Hoists, Winches and Cranes, as well as other related components. Not fulfilling this requirement is dangerous, could lead to equipment failure and will automatically void the warranty.

The B30 Standard is intended to:

(a) Prevent or minimize injury to workers, and otherwise provide for the protection of life, limb, and property by prescribing safety requirements.

(b) Provide direction to manufacturers, owners, employers, users, and others concerned with, or responsible for, its application.



#### WARNING

(c) Guide governments and other regulatory bodies in the development, promulgation, and enforcement of appropriate safety directives.

The equipment covered by the B30 Standard is subject to hazards that cannot be abated by mechanical means, but only by the exercise of intelligence, care, and common sense. It is therefore essential to have personnel involved in the use and operation of equipment who are competent, careful, physically and mentally qualified, and trained in the proper operation of the equipment and the handling of loads. Serious hazards include, but are not limited to, improper or inadequate maintenance, overloading, dropping or slipping of the load, obstructing the free passage of the load, and using equipment for a purpose for which it was not intended or designed.

Failure to Read, Understand and Follow the information in the corresponding ASME B30 Standard for your Hoist and Lifting equipment may result in severe INJURY or DEATH. It is YOUR RESPONSIBILITY to consider all risk factors and follow all the equipment related ASME B30 standard, which comprises the following volumes:

B30.1 Jacks, Industrial Rollers, Air Casters, and Hydraulic Gantries.

B30.2 Overhead and Gantry Cranes (Top Running Bridge, Single or Multiple Girder, Top Running Trolley Hoist).

B30.3 Tower Cranes.

B30.4 Portal and Pedestal Cranes.

B30.5 Mobile and Locomotive Cranes.

B30.6 Derricks.

B30.7 Winches.

B30.8 Floating Cranes and Floating Derricks.

B30.9 Slings.

B30.10 Hooks.

B30.11 Monorails and Underhung Cranes.

B30.12 Handling Loads Suspended From Rotorcraft.

B30.13 Storage/Retrieval (S/R) Machines and Associated Equipment.

B30.14 Side Boom Tractors.

B30.15 Mobile Hydraulic Cranes.

B30.16 Overhead Hoists (Underhung).

B30.17 Overhead and Gantry Cranes (Top Running Bridge, Single Girder, Underhung Hoist).

B30.18 Stacker Cranes (Top or Under Running Bridge, Multiple Girder With Top or Under Running Trolley Hoist).

B30.19 Cableways.

B30.20 Below-the-Hook Lifting Devices.

B30.21 Lever Hoists.

B30.22 Articulating Boom Cranes.

B30.23 Personnel Lifting Systems.

B30.24 Container Cranes.

B30.25 Scrap and Material Handlers.

# Safety Bulletin



#### WARNING

B30.26 Rigging Hardware.B30.27 Material Placement Systems.B30.28 Balance Lifting Units.B30.29 Self-Erecting Tower Cranes.B30.30 Ropes.

#### **DO NOT**



#### WARNING

1. DO NOT Operate, install, or repair the hoist unless trained and authorized.

2. DO NOT Operate the hoist unless you have first read the operator's manual.

3. DO NOT Operate the hoist without appropriate PPE and without performing a pre-shift inspection.

4. DO NOT Operate the hoist if not complying with all required OSHA regulations.

5. DO NOT Lift more than the rated load.

6. DO NOT Lift people or lift loads over people.

7. DO NOT Wrap the hoisting rope or chain around the load.

8. DO NOT Operate with the chain/rope not properly seated in the sprockets, drum, or sheave.

9. DO NOT Operate unless the direction of the hook travel agrees with the direction shown on the control.

10. DO NOT Operate the hoist unless the hook travel limit devices function properly. (Test without a load PRE-SHIFT )

11. DO NOT Operate the hoist with twisted, kinked, damaged, dirty, or unlubricated chain or rope.

12. DO NOT Operate a damaged or malfunctioning hoist.

13. DO NOT Operate the hoist when the hook is not centered under the hoist

14. DO NOT Remove or obscure this tag or other WARNING & SAFETY LABELS.

#### **DAILY CHECKLIST**



WARNING

TAGGED HOIST: Ensure the crane or hoist is not tagged out of order.

CONTROL DEVICES: Test Run. Ensure all motions agree with control device marking.

BRAKES: Check all motions for excessive drift and abnormal stopping distances.

HOOK: Check for damage, cracks, nicks, gouges, deformations on throat opening, wear on saddle or load-bearing point, and twist.

HOOK LATCH: Check for proper operations.

# **Safety Bulletin**



#### WARNING

WIRE ROPE: Check for broken wires, broken strands, kinks, and deformation or damage to the rope structure.

CHAIN: Check for corrosion, wear, elongation, twist, nicks, or gouges. Keep Chain/ Wire Rope Clean and Lubricated.

REEVING: Check the rope for proper reeving and that rope parts are not twisted.

LIMIT SWITCHES: Ensure that all limit devices stop lifting motion before the load block or chain/rope stop strikes the hoist.

OIL LEAKAGE: Check for any signs of oil leakage on the crane/hoist and the floor.

UNUSUAL SOUNDS: Check for unusual sounds from the hoist while operating.

WARNING & SAFETY LABELS: Ensure that labels are not missing and they are legible.

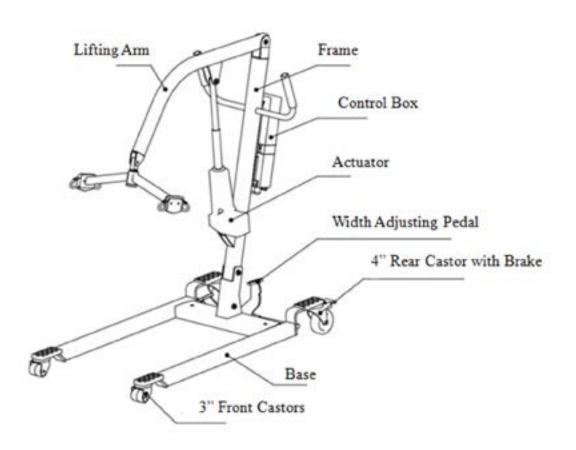
Disclaimer	3
Safety Bulletin	4
Safety Precautions	9
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Installation	
Operation	
Troubleshooting	

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### **1. SAFETY PRECAUTIONS**

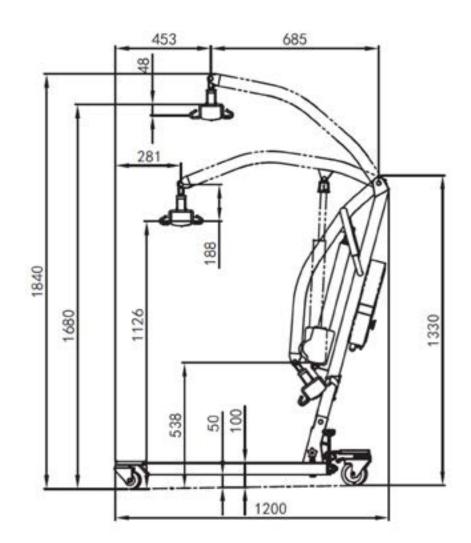
- Property assemble the product according to the owner's manual.
- Property fix the actuator to the body of the lift.
- Charge the battery no less than 4 hours or until fully charged.
- Read and understand the owner's manual.
- Training shall be performed to be able to use this device.
- For the safety of the users, please select the appropriate capacity, model and size and materials.

### 2. PARTS

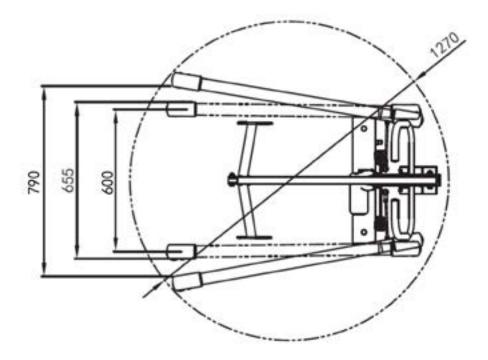


### 2. SPECIFICATIONS

Specifications			
Item	Value		
Dimentions (L x W x H)mm	47.25 x 26.37 x 52.36		
Maximum range	31.1		
Lifting Range	21.65 (lowest), 66.14 (highest)		
Max speed without load	0.3 in/sec		
Input Power	24VDC		
Motor	24V/8000N		
Load Capacity (lb)	396		
Net Weight	100		
Noise	<50dB		



### **Specifications**



# Installation

### **3. INSTALLATION**

Inspection and Acceptance:

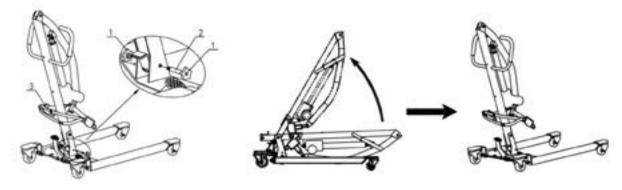
Please verify if there are missing part (compare the parts listed in this manual with the parts that you received). If you received damaged parts or your missing any component please contact us intermediately.

Description	Qty.	Image
Frame	1 set	A State
Control Box	1 pc	Ĩ
Actuator	1 pc	Side-
Controller + Cable	1 set	
Open Spanner #16 and #17	1 set	N/A
User's manual	1 pc	N/A

#### Installation Procedure:

Step 1: Release the locknut and bolt and then raise up the frame and align the holes. Fix bolt as shown in drawing on the right and have the nut properly attached (make sure there frame stand solid).

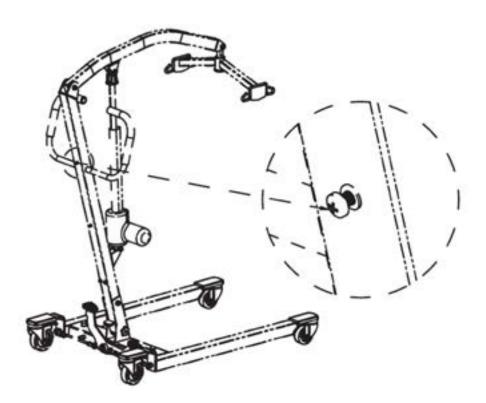
Step 2: Release the strap.



- 1. Locknut
- 2. Bolt
- 3. Strap

Step 3: Installing control box

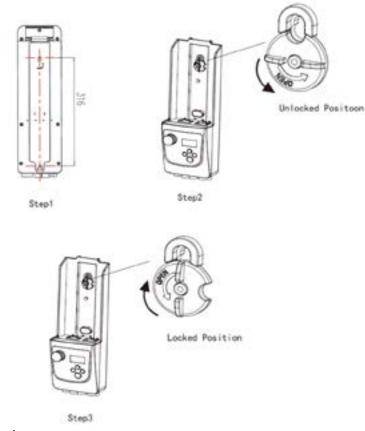
1. Fasten the 2xM5x10 screws into the threaded holes on the frame as shown on the following image.



## Installation

2. Rotate the locking dial to the open position. Fasten the control box to the frame and lock the upper screws.

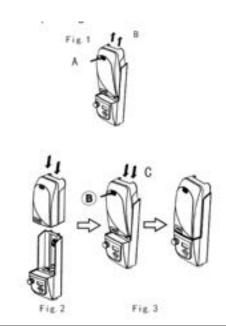
3. Rotate the lock 90 degrees to the right and lock the control box.



Step 4: Remove and install the battery box

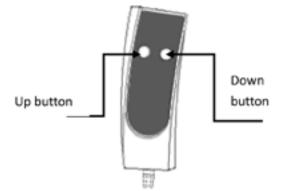
Removal: Press down the switch A and remove the battery.

Installation: Place the battery in place and press the switch. Ensure the battery won't be separated without pressing the switch.



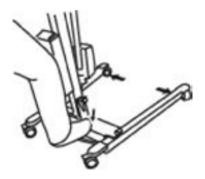
### **4. OPERATION**

#### 4.1. Controller Usage



#### 4.2. Base adjustment

Base width can be adjusted by pressing the pedal. Press the pedal on the left to increase base width, press the pedal on the left to decrease base width.

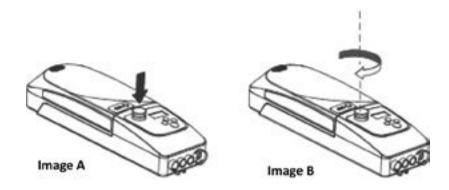


#### 4.3. Emergency Stop

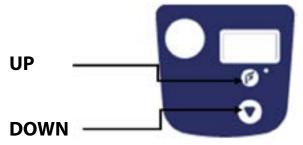
The Emergency Stop button is used for turning off the Power to the unit. It disables the motor in case of an emergency.

To activate the emergency stop press the red button on the remote control.

To reset the emergency stop please rotate the button clockwise.

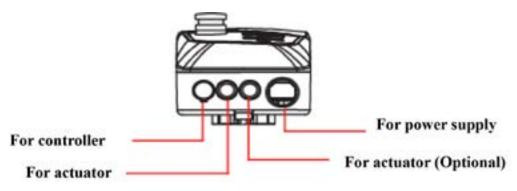


In case of controller malfunction, press the Up / Down keys to get the actuator back in position.

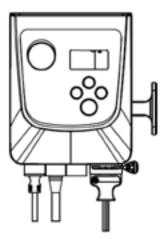


#### **4.5 Control connection**

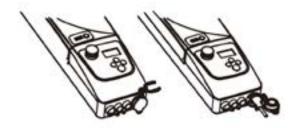
There are four ports on the control, 1 for controller, 2 for the actuator and 1 for power supply.



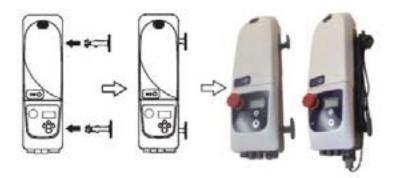
Insert all the connectors to the corresponding port.



There is a plastic cap on the charging port, please replace after charging.

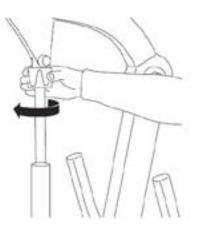


#### 4.6 Charge the battery



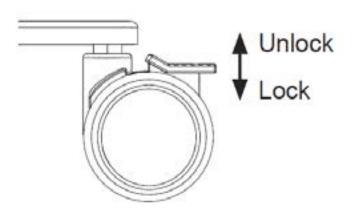
#### **5 Manual emergency operation**

Rotate the red sleeve in the direction of the arrow to lower the unit, do the opposite to raise the unit.



### 6 Lock and unlock the rear wheels

Rear wheels can be locked to prevent the unit from moving. Use your feet to lock/unlock the wheels.

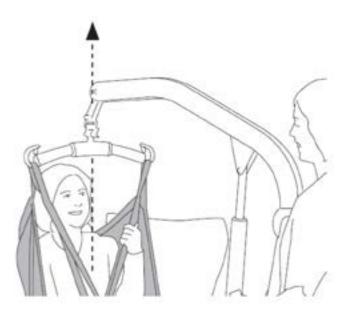


Attention: It's not necessary to lock the wheels when lifting or lowering the unit. Prowinch recommends locking the wheels when the lifter unintentionally moves.

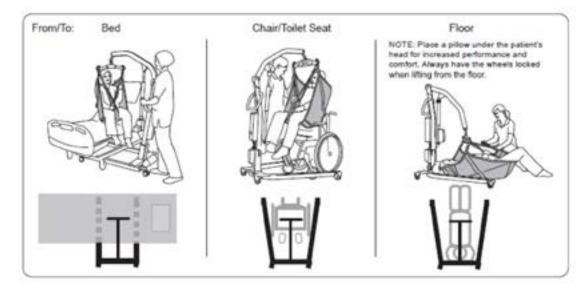
### 7 Operating the lift

Keep the lifting arm and body vertical.

Form more details, please refer to "Placement location of patient lift". Make sure the operation of the patient lift is correct each time. **Warning: Imbalance may cause the unit to tip over.** 



#### 8 Application of patient lift



Note: A pillow under the patient's head can make the operation more comfortable.

#### 4.6 Charge the remote

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- 1. Lower the actuator and secure the lifting arm.
- 2. Remove the bolt before folding the frame.
- 3. Release the support plate before raising the frame.

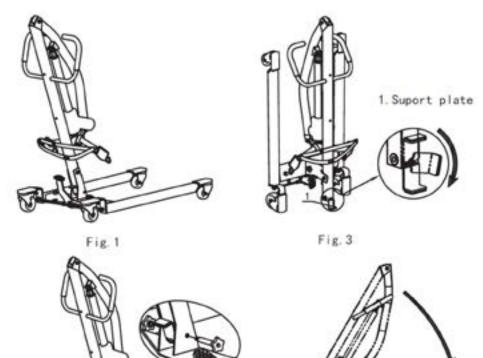


Fig. 2

Note: Please remove the control box before folding the frame

### Troubleshooting

### 7.1. Battery Charging

When the battery runs low the remote will start beeping as a reminder to charge immediately.



Battery level: 100% Battery level: 75% Battery level: 50%

Battery Charging procedure:

When the battery starts beeping turn of the controller and plug it to start charging. Once the battery is fully charged the battery status will show 4 bars (100%) and the LED on the remote will no longer flash.

Note:

1. Do not turn off the emergency STOP button, stop using the patient lift when charging the remote.

2. Remove the control box and store it in a normal environment when the unit is not to be used for prolonged periods.

3. Do not charge battery in a humid environment.

4. If the unit will not be used in a daily basis we recommend to engage the emergency stop to save power on the remote.

### 7.1. Care and maintenance

For the safety of the user please perform these steps before every use.

- 1. Visually check if there is any damage of wear.
- 2. Make sure screws and nuts are secured.
- 3. Check if hook on lifting arm works properly.
- 4. Controller, actuator and base width adjustment.
- 5. Emergency lowering function check (manually and electronically)

If needed, clean the patient lift with water and alcohol. Make sure there is no dust and hairs caught on the wheels.

DO NOT clean the unit with Bleach or Phenol.

Inspection:

Make a full inspection of the unit at least once a year, pay close attention to worn parts, such as connectors and bolts.

Description	Trouble Shooting
Patient lift can not work (ascend and descend)	<ol> <li>Check if the emergency stop button is pressed down.</li> <li>Verify the controller and cables from actuator is properly connected</li> <li>Check the battery level from display screen on the control box.</li> <li>Verify if there is any problem or damage on battery contact panel.</li> <li>Ask for after-sale service if patient lift still can not work.</li> </ol>
Charger can not charge the battery	<ol> <li>Check if the charger fully plugs into socket</li> <li>Verify if there is any problem or damage on battery contact panel.</li> <li>Ask for after-sale service if patient lift still can not work.</li> </ol>
Patient lift stops when ascending	<ol> <li>Check if the emergency stop button is pressed down.</li> <li>Employ the emergency descend device (see user guide)</li> <li>Ask for after-sale service if patient lift still can not work.</li> </ol>



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