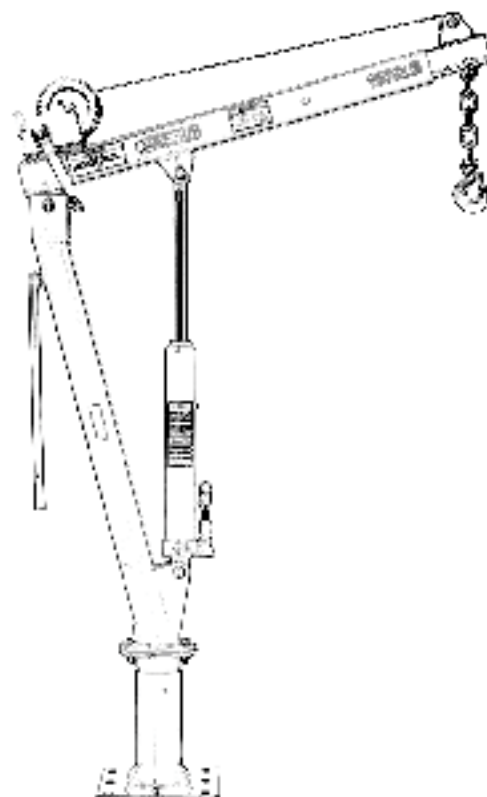




PWPHW Series

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



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PROWINCH LLC COMPANY WITH QUALITY MANAGEMENT SYSTEM

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® 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® 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® 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® 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® 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® 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® 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® 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.



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.



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.



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.

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WWW.PROWINCH.COM

Thank you for purchasing our Prowinch® Hydraulic crane. This User Manual provides important information for personnel involved with the installation, operation, and maintenance of this product. Read this User Manual before installing, operating, or maintaining the product.

1. SAFETY PRECAUTIONS

The Prowinch® Hydraulic crane is designed for a safe and reliable service if operated according to the User Manual. Respect and follow all warnings for personnel and third party safety indications. Inadequate operation may cause serious risks of injuries to personnel or damage to the equipment. Read and understand this User Manual carefully before installing and commissioning the equipment. Always keep this User Manual in an accessible place for future reference. Improperly installed, maintained, or operated cranes can be the cause of serious accidents or death. This User Manual

highlights symbols and notes for caution, warning and danger. Following these indications greatly improves the safety of the operator and personnel in the area.

The compact and lightweight structure of the PWPHW models together with their ease of use makes them a preferred crane for daily use in factories, mines, sea ports and warehouses.

Mandatory use of:



Hard Hat



Safety Glasses



Safety Gloves



Safety Shoes

1.1. Hoist Safety Precautions

**WARNING:**

This symbol indicates unsafe practices or situations which may cause damage to the property and even injuries to the personnel.

**DANGER:**

This symbol indicates a potentially dangerous situation which if not avoided may cause severe injuries or death

**DANGER**

All operators and other users who are near the steel chain or its load must wear required safety equipment: gloves, safety helmet / hard hat, safety shoes and eye protection.

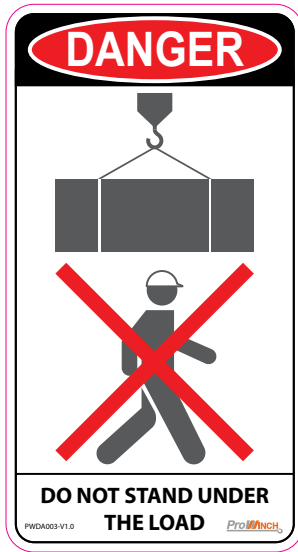
1.2. Before using the Equipment:

- Read and understand the instructions in this user manual and all the labels associated with the crane before operating the equipment.
- Wear appropriate clothing: Do not wear jewelry or loose clothes as they can get caught in moving parts.
- Wear sturdy leather gloves.
- Wear non-slip safety shoes, a hard hat, and eye protection.
- Perform a full check of the crane. Check for damaged parts or unusual conditions.
- Secure the hydraulic crane to a suitable surface that is capable of withstanding the load being lifted with the crane.
- Visually inspect the hydraulic crane and winch before each use in addition to the regular inspections and maintenance.

1.3. During Operation:

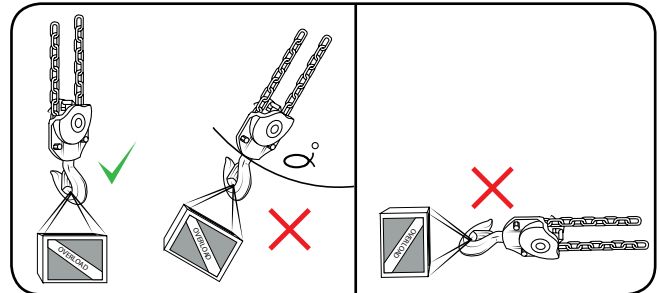
ALWAYS:

- Refer to the maximum load capacity displayed on the ID plate attached to the crane, not the capacity of the hook.
- Stop operation immediately if unauthorized personnel enter the working area.
- Check the working condition of crane before operation.
- Stop, check, and secure the load if the crane stops or loses movement during operation.
- Focus on the operation. Pay attention at all times and keep the load properly balanced.



NEVER:

- Never exceed the maximum load capacity of the crane.
- Never operate a damaged or malfunctioning crane.
- Never operate the crane if it shows abnormal behavior.
- Never lift, support, or transport people or loads over people.
- Never walk or step on the wire rope.
- Never operate the hydraulic crane with twisted, kinked, damaged, or worn wire rope or chain.
- Never use the wire rope as a sling around load.
- Never operate a crane if the ID plate or safety labels are missing or illegible.
- Never operate a hydraulic crane if exposed to rain or water.
- Never use if operator is sick or not completely attentive.
- Never leave the crane unattended with a suspended load.
- Never operate the crane with non-centered load.
- Never operate beyond the limits of the wire rope or chain.
- Never use the crane or hook as an electrical or welding ground.
- Never remove the labels placed on the hydraulic crane.
- Never use the crane to lift load at an angle, nor pull or drag load.



1.4. Inspection, Maintenance and Repairs:

- Only trained and authorized personnel may perform repairs on the equipment.
- Use only original ProWinch® parts. The use of any other part immediately voids the warranty.
- Failure to use only original ProWinch® parts may create dangerous conditions for the operator.

ALWAYS:

- Prevent others from stepping under lifted load.
- Inspect and maintain the crane regularly.
- Verify the correct installation of crane before using.
- Avoid contact with explosive gases or materials.

NEVER:

- **Never** overload the crane.
- **Never** transport people or animals with the crane.
- **Never** stand under suspended load.
- **Never** use the crane if exposed to rain, snow, or lightning
- **Never** leave loads suspended for an extended period of time. This may cause component deformation and accidents.
- **Never** exceed the allowable operating temperatures stated in this User Manual (differs depending on the model).
- **Never** expose the crane to water, sand, corrosive materials or other substances which may damage the equipment.

3. INSTALLATION

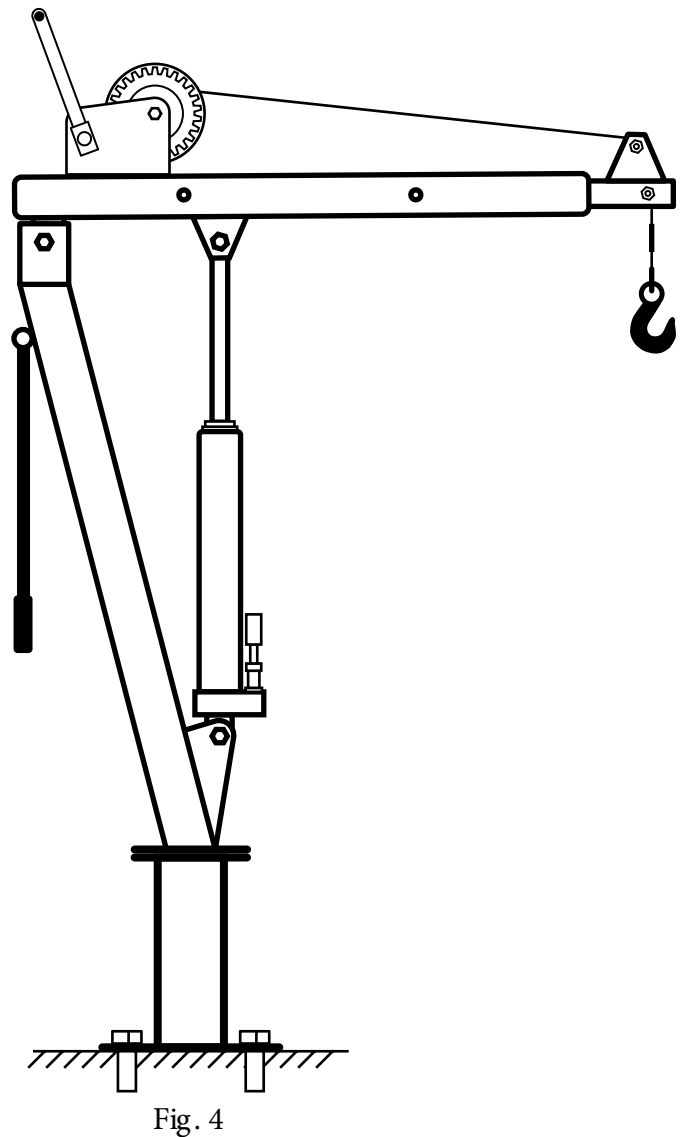
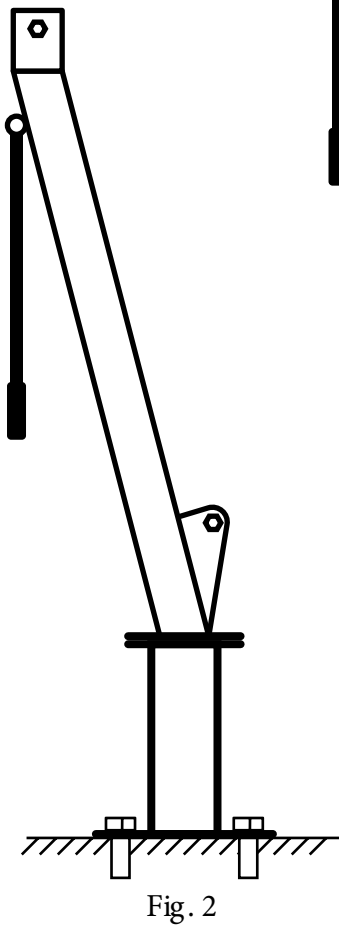
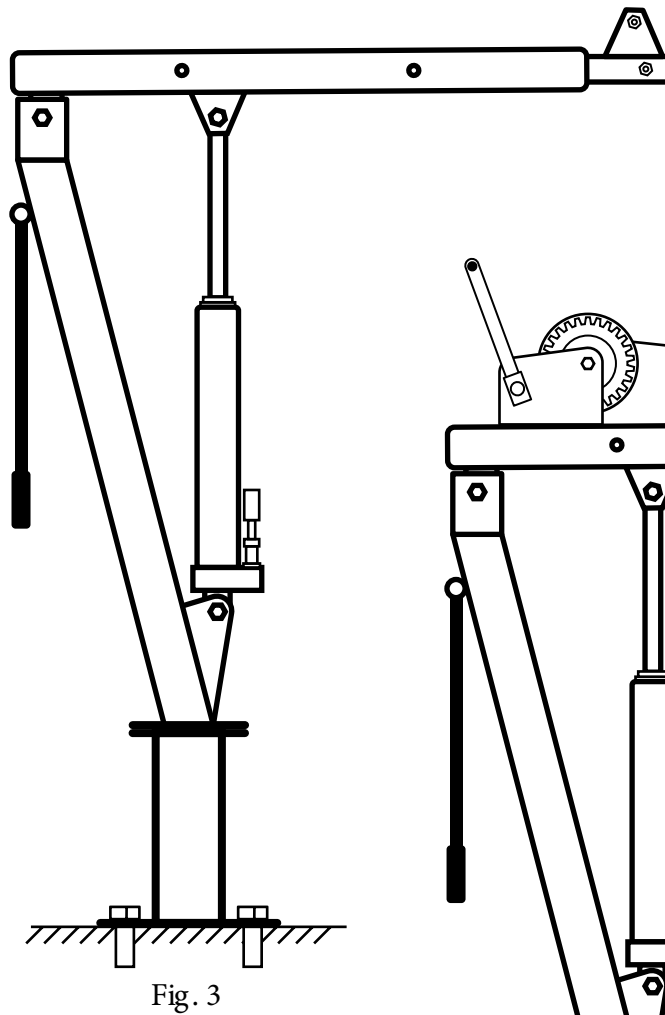
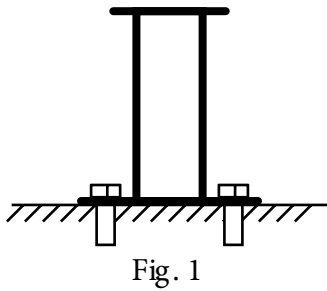
3.1 Unpacking

Cranes should be carefully inspected upon delivery for any damage that may have occurred during shipment or handling. Check the crane frame for: dents or cracks, wire rope for damaged or cuts, and load chain for nicks and gouges.

Check and document crane characteristics:

- a. Model number
- b. Rated capacity (tonnage)
- c. Lifting length of load chain (meter)

1. Select a flat horizontal surface to install the base (fig. 1). The base must be flat, level, and capable of withstanding any load lifted with the crane.
2. Install and secure the base to the chosen surface with 4 bolts.
3. Attach the mast to the base with bolts, as shown in fig. 2. After securing the mast, attach the boom to the mast, making sure to not overtighten it.
4. Attach the hydraulic jack to the mast and boom and raise the boom until it is parallel to the ground (fig. 2).
5. Attach the manual winch to the boom and feed the wire rope through the pulley as shown in fig. 4.



4. OPERATION

4.1. Qualified Operator

Crane operators are required to read and fully understand the operation section of this manual, all warnings contained in the manual, and labels attached to the equipment.

Operator training must be provided to ensure proper operation of equipment in compliance with instructions provided by the equipment manufacturer and the provisions of ASME B30, and proper rigging procedures for the attachment of loads to the crane.

Safe and efficient operation of the crane requires an operator who exercises caution, common sense, and good judgment in anticipating the effects of operating the crane. The operator must be fully alert, focused, and aware of the surroundings at all times.

The job must be strictly carried out under the good practices defined by the applicable international and national safety standards, such as ANSI, OSHA and ASME.

This crane must not be operated by individuals who:

- Cannot read, understand and speak the language in which the security labels, ID Plate and User Manual of equipment is written.
- Does not meet the legal age requirements.
- Is under the influence of alcohol, drugs, or medication.
- Has visual or hearing impediments, or below normal reaction times.
- Has a history of or experiences seizures, mental, heart, or other illnesses that could interfere with safe operation of the equipment.
- Has not been trained for the proper use of the crane.
- Has not received and read the User Manual for the exact equipment.
- Has not demonstrated qualifications through practical operation of crane.

4.2 Handling Precautions

ALWAYS:

- Keep crane in good condition and able to freely operate.
- Make smooth movements; avoid sudden changes of direction.
- Check the function of the crane without a load before operation.
- Make sure no one is beneath the load.

NEVER:

- Use pulleys or other accessories that are not specifically approved for the relevant crane model.
- Raise a load with the tip of the hook.
- Use the crane to pull or drag the load.
- Exceed the maximum capacity of the crane.

4.3 Recommended Operation



WARNING

Always carry out a complete inspection before starting the operation of the hoist.
See ASME B30.

Always let all personnel know that crane maneuvers are about to begin!
Do not allow Unauthorized Personnel to be in the lifting area.

Start with a complete revision of the structural integrity and mounting points of the crane, make sure everything is in order and no damage is visible.

This unit includes all the tools required to perform the job. Use the handle to rotate and position the crane boom directly over the load. With the use of the handle (Fig. 2), fasten the release valve to stop any loss of pressure. Start pumping to raise the arm, use the provided chain and hook to raise the load using the hydraulic pump. You may also set a boom height and use the manual winch to raise or lower the load.

To release pressure of the hydraulic cylinder just slowly rotate the release valve.

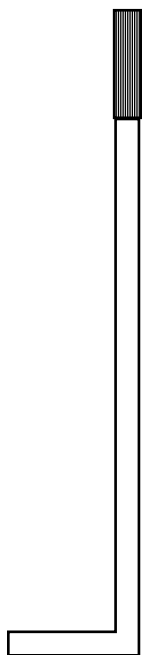


Fig. 1



Fig. 2

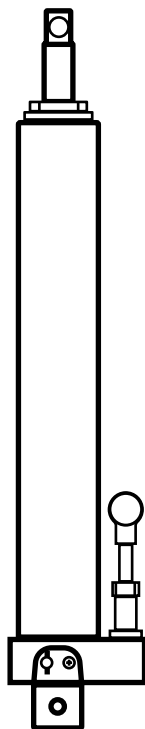


Fig. 3

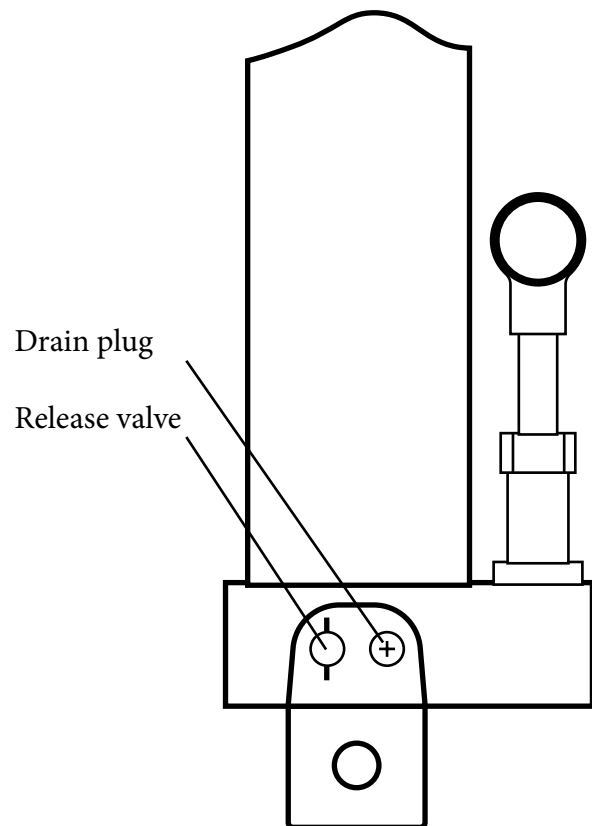


Fig. 4



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