

## **Chain Hoist**

# Model Number: 7067300 7067400

- Forged 360° swivel hooks for strength
- Mechanical load brake for safety
- Fully portable for indoor or outdoor use
- Steel housing protects gears and bearings
- 1 year limited warranty





This Instruction Sheet contains IMPORTANT safety information. Please read and keep for future reference.



## **AWARNING**

## READ and FOLLOW all instructions and safety messages before using the Chain Hoist.

#### **Basic Safety Information**

- Do not lift more than rated load. Be aware of dynamic loading! Sudden load movement may briefly create excess load causing product failure.
- Do not operate hoist with twisted, kinked, or damaged chain. Inspect chain carefully before every use.
- Do not operate a damaged or malfunctioning hoist. Inspect hoist carefully and test operation before every use.
- Do not lift people or lift loads over people. Falling loads can injure or kill people.
- Do not operate hoist with anything other than manual power (by hand).
- The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

## **Installing Specific Safety Information**

- The supporting structure the hoist is mounted to (including trolley, monorail, or crane) must be designed to withstand the loads and forces imposed by the hoist for the rated load.
- Install in location that allows the operator to move and stay clear of the load
- Where the slack chain hanging from the hoist may create a hazard, use an appropriate chain container (not provided) to contain the excess chain.
- Inspect the hoist as explained in Frequent Inspection section after installation but before use.

## Operation Specific Safety Information

- Wear ANSI-approved safety goggles, ANSI-approved hardhat, and steel-toed work boots during setup and use.
- This product is not a toy. Do not allow children to play with or near this item.
- Use as intended only.
  Do not use to handle molten materials.
  Do not use for aircraft purposes.

## Inspection, Testing, and Maintenance Specific Safety Information

- Perform a "Frequent inspection" <u>at least</u> monthly.
- Perform a "Periodic (Thorough) Inspection" <u>at least</u> yearly.
- More frequent inspections are needed for hoists that are used heavily.
- Raise test loads only to the minimum extent needed and stay well clear of load at all times during testing.

#### THIS WARNING IS GIVEN IN COMPLIANCE WITH CALIFORNIA PROPOSITION 65

**WARNING:** 

This product contains chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

#### **Installation Instructions**

- The supporting structure the hoist is mounted to (including trolley, monorail, or crane) must be designed to withstand the loads and forces imposed by the hoist for the rated load.
- Properly seat the suspension hook on the supporting structure at its intended load bearing point (see the left side of diagram).

Do not allow the hook hitch to support any part of the load.

Do not apply the load to the point of the hook (shown in the diagram on the right side.)





Correct and Incorrect suspension hook attachment

### **Operation Instructions**

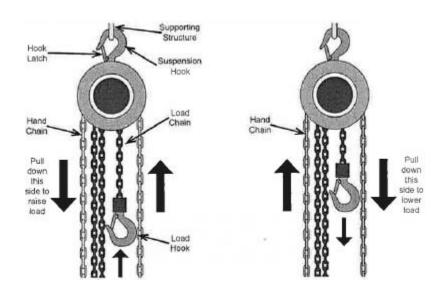
### AWARNING

TO PREVENT SERIOUS INJURY: Operation of a vertical hoist involves more than pulling the hand chain of a hand chain operate hoist. The use of vertical hoist is subject to certain hazards that cannot be met by mechanical means, but only by the exercise of intelligence, care, common sense, and experience in anticipating the will occur as are a result of operating the controls.

#### **Before Operating Hoist**

- Familiarize yourself with all operating controls of the hoist and with the operations to be performed. Instructions include, the warnings on the hoist, and the safety and operating instructions portion of this manual.
- 2) TO PREVENT SERIOUS INJURY FROM HOIST FAILURE: Do not use damaged equipment. If adjustments or repairs are necessary, or any defects are known, have the problem corrected before further use.
- Do not operate a hoist with an out-of-order sign.
- Only a qualified technician should perform maintenance to the hoist.
- Do not use the chain or rope as a ground for welding.
- 6) Do not touch a welding electrode to the chain or rope.
- Only operate hand chain operated hoists with hand power, with no more than one operator per hand chain.
- Designate a work area that is clean and welllit. The work area must not allow access by children or pets to prevent distraction and injury.
- There must not be objects, such as utility lines, nearby that will present a hazard while working.
- Inspect the hoist as explained in Frequent Inspecting section after installation but before use.

#### **Operating Controls**



To Raise the Load

To Lower the Load

#### **Applying the Load**

- Do not wrap the hoist rope or chain around the load.
- Attach the load to the load hook securely by properly rated, suitable mean, such as chains, shackles, hooks, lifting slings, etc. Load must be attached to prevent accidental disconnection.
- Properly seat the sling or other device (see the left side of the diagram below). Do not allow the hook hitch to support any part of the load.
- Do not apply the load to the point of the hook (shown in the diagram below on the right side).
- Before moving the load, make sure chains or wire rope are not kinked or twisted or that multiple part chains or ropes are not twisted around each other.
- Do not operate the hoist unless rope or chain is seated properly on the drum, sheaves, or sprockets.
- Do not operate the hoist unless the hoist unit is centered over the load.
- 8) Do not pick up a load in excess of the rated load appearing on the hoist or load block, except during properly authorized tests. Do not use a hoist overload limiting device to measure the maximum load to be lifted.
- 9) Give specific attention to load balancing and hitching or slinging to prevent load slipping.





Correct and incorrect load hook attachment

#### Moving the Load

- Do not engage in any activity which will divert the operator's attaention while operating the hoist.
- Respond to signals from a designated person only. However, always obey a stop signal no matter who gives it.
- Do not lift or lower a load with the hoist until the operator and all other personnel are clear of the load.
- Make sure the load with the hoist will clear all obstacles before moving or rotating the load.
- 5) Do not lift a load more than few inches until it is well balanced in the sling or lifting device.
- 6) Each time a load approaching rated capacity is handled, check hoist brake action by lifting the load just clear of supports and continuing only after verifying that the brake system is operating properly.
- 7) WARNING! Do not carry any load over any person.
- 8) WARNING! Do not carry personnel on the hook or the load.
- 9) Avoid swinging the load or load hook when traveling the hoist.
- On trolley mounted hoist, avoid contact between trolleys and between trolleys and stops.
- 11) Do not use the upper (or lower, if provided) limit devices as a normal means of stopping the hoist. These are emergency devises only.

#### Parking the Load

- Do not leave a suspended load unattended unless specific precautions have been instituted and are in place.
- 2) Position the load block above head level for storage when the hoist is not in use.
- 3) Exercise care when removing a sling from under a landed and blocked load.

### Inspection, Testing, and Maintenance



Procedures not specifically explained in this manual must be performed only by a qualified technician.

## **AWARNING**

TO PREVENT SERIOUS INJURY FROM HOIST FAILURE: Do not use damaged equipment. If any defect or damage is noted, have the problem corrected before further use.

#### **Frequent Inspection**

Perform the procedures in this section BEFORE INTIAL USE and AT LEAST MONTHLY. Inspection is needed more often for heavily used hoists.

- Check operating mechanisms for proper operation, proper adjustment, and unusual sounds.
- 2) Frequent Braking System Inspection

The braking system must automatically stop and hold up to the rated load if the hand chain is released.

- 3) Frequent Hook inspection
  - Distortion, such as bending, twisting, or increased throat opening
  - b. Wear
  - c. Cracks, nicks, or gouges
  - d. Latch engagement (if equipped)
  - e. Damaged or malfunctioning latch (if provided)
  - f. Hook attachment and securing means.
- 4) Frequent Hoist Load Chain Inspection
  - Test the hoist under load in lifting and lowering directions and observe the operation of the chain and sprockets. The chain should feed smoothly into and way from the sprockets.
  - b. If the chain binds, jumps, or is noisy, first see that it is clean and properly lubricated. If the trouble persists, inspect he chain and mating parts for wear, distortion, or other damage.
  - c. Examine visually for gouges, nicks, weld spatter, corrosion, and distorted links. Slacken the chain and move the adjacent links to one side to inspect for wear at the contact points. If wear is observed or if stretching is suspected, the chain should be measured as follows:

- 1) Select an unworn, unstretched length of chain (e.g., at the slack end).
- 2) Suspend the chain vertically under tension and, using a caliper-type gauge, carefully measure the outside length of any convenient number of links approximately 12" to 24" overall.
- Carefully measure the same number of links in the used sections and calculate the percentage increase in length.
- 4) If the used chain is 2.5% longer than the unused chain, replace the chain.
- 5) Check rope or load chain reeving.

#### Periodic (Thorough) Inspection

A qualified technician should perform the procedures in this section AT LEAST YEARLY. Inspection is needed more often for heavily used hoists.

First follow all Frequent Inspection procedures.

#### Additionally:

- 2) Check fasteners for evidence of loosening.
- 3) Check load blocks, suspension housings, hand chain wheels chain attachments, clevises, yokes, suspension bolts, shafts, gears, bearings, pins, rollers, and locking and clamping devices for evidence of wear, corrosion, cracks, and distortion.
- Check hook retaining nuts or collars, and pins, welds, or rivets used to secure the retaining members for evidence of damage.
- Check load sprockets, idler sprockets, drums and sheaves for evidence of damage and wear.

#### Periodic (Thorough) Inspection cont'd.

- 6) Check the brake mechanism for evidence of worn, glazed, or oil contaminated friction disks, worn pawls, cams, or ratchets, and corroded, stretched, or broken pawl springs.
- 7) Check supporting structure or trolley, if used, for evidence of damage.
- 8) Check warning label for legibility and replacement.
- Check end connections of wire ropes or load chains for evidence of wear, corrosion, cracks, damage, and distortion.
- 10) Check the hoist and hoist mounting for evidence of missing parts.

#### **Storage Inspection**

- A hoist that is used in infrequent service, which has been idle for a period of a month or more, but less than a year, must be inspected before being placed in service according to the Frequent Inspection requirement.
- A hoist that is used in infrequent service, which has been idle for a period of a year or more, must be inspected before being placed in service according the Periodic inspection requirements.

#### Maintenance

- Quarterly (every 3 months), clean off load chain, then lubricate load chain links with lithium grease. Apply grease to inner surfaces of load chain, where the links rub against each other.
- Repair or replacement of hoist components must be performed only by a qualified technician using only identical replacement parts with the same rating.