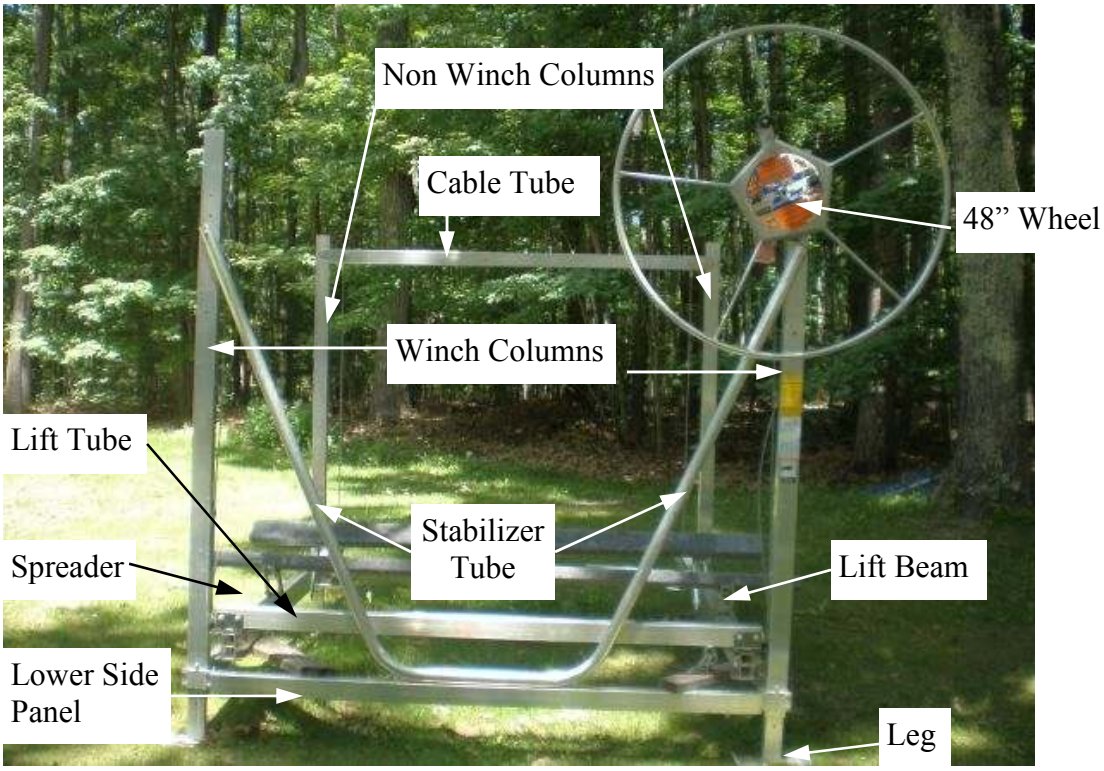
# 1600 lb Vertical Boat Lift
# Assembly Instruction Manual
# Safety & Warranty Information
# for model V1684

NuCraft Metal Products
402 Southline Rd
Roscommon, MI 48653

Manuals, pictures, and drawings are also on the web www.craftlander.com

A-MH-V1684manual

Created by Rachel Wiltse




^ Picture of completed V1684 hoist^

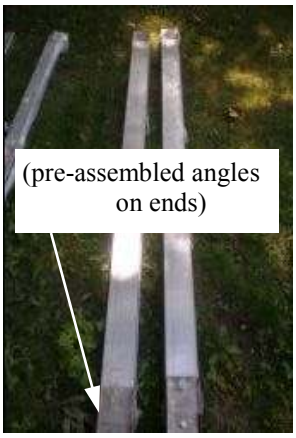
Make sure before you start putting your hoist together that you consider labeling the tubes with a marker so that assembly is easier and more efficient. To do this just simply measure each tube. Below are pictures of the major parts of the hoist to help you.


Two Bunks and the Wheel

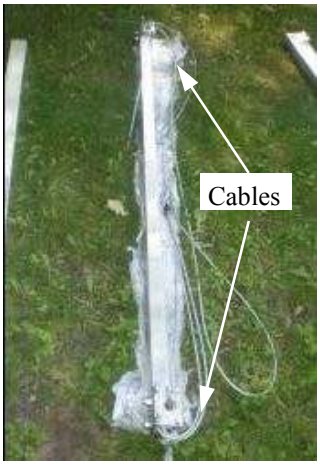
Four V1684 welded legs

Stabilizer Tube

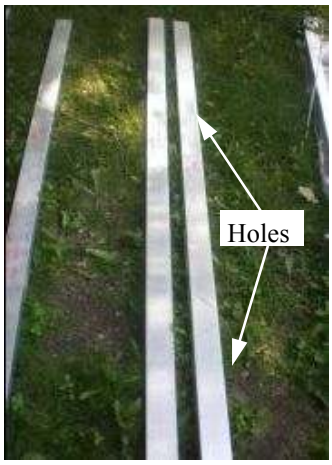
Winch columns (left)
~ 2 x 3  84” long
Non-winch columns (right)
~ 2 x 3  78”long




Lift Beams
~ 2 x 4  87 1/2” long

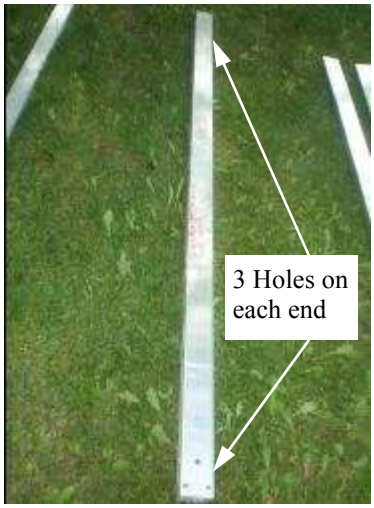



Lift Tube
~ 2 x 3  80” long

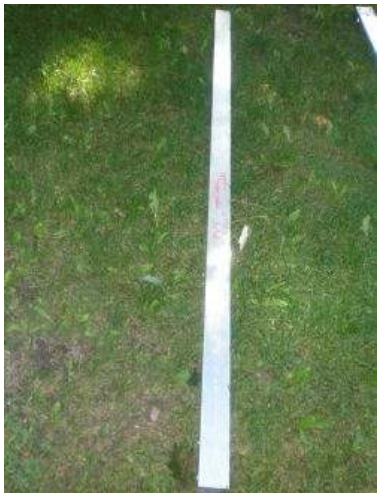



Lower side panel tubes
~ 2 x 3  80” long

Lower Spreaders
~ 2 x 3  83” long




Upper cable tube
~ 2 x 3  82” long

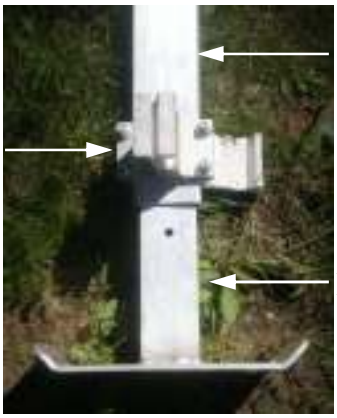


Cradle tube
~ 1 1/2 x 2 1/2  81” long

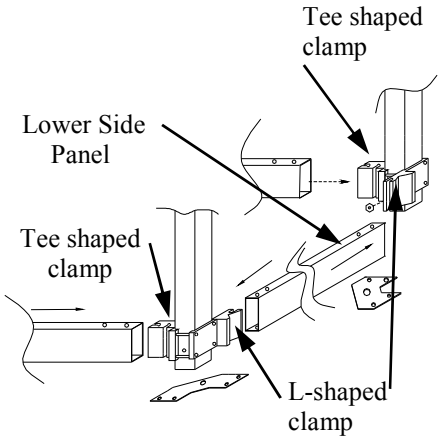
Nuts, Bolts, Washers, and Caps

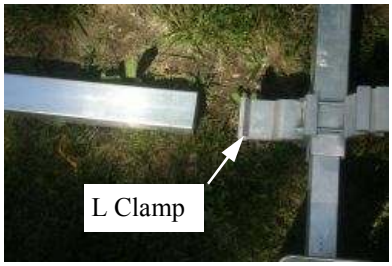
Also included is a winch and brackets
[Not Shown]

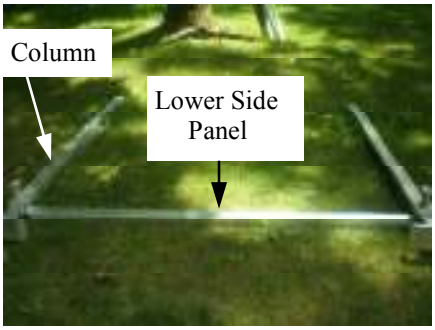
# Assembly Instructions




**Step 1:** Put the welded legs into winch and non winch columns. (no particular legs for columns) Keep together with 3/8 x 2 3/4" bolts and 3/8" whiz nuts.

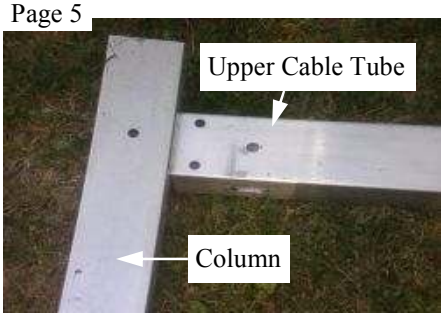


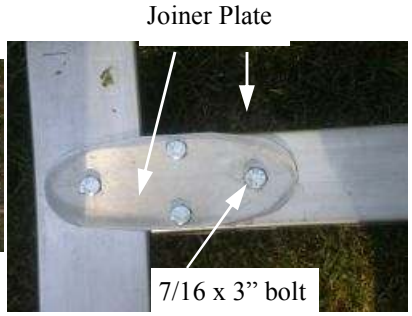

Both sides of the hoist should look like this after step 2

**Step 2:** Put the lower side panel tubes over L clamps on the winch and non winch columns. If holes don't line up, you either put on the wrong tube or put it on the wrong clamp (possibly both). Put a 3/8 x 4" bolt through each hole (one on each corner) and use a 3/8" whiz nut to hold the columns and side panels together. Do NOT over tighten bolts at this point– can cause tubes to collapse in. NOTE: WHEN ASSEMBLING MAKE SURE ALL BOLT THREADS POINT OUTSIDE OF THE HOIST.

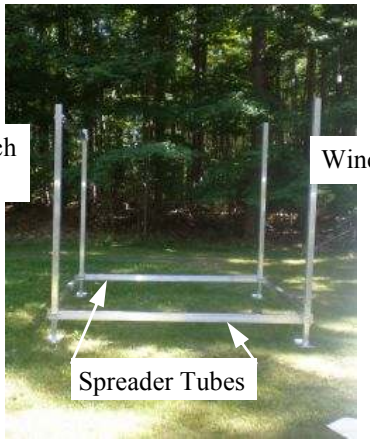




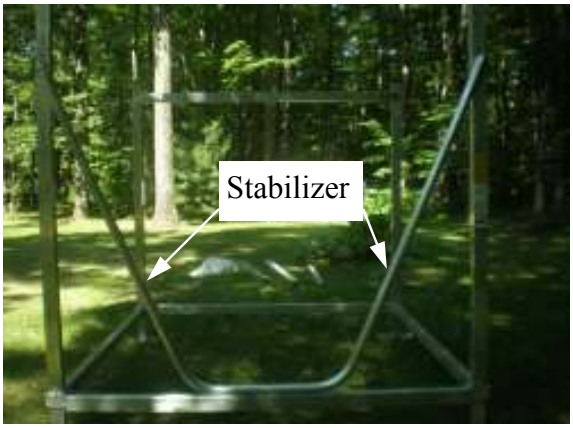
Joiner Plate




**Step 3:** As the non winch side is laying on the ground lay the upper cable tube out across the top of the hoist. Put bolts (3/8 x 3") through the joiner plate, the cradle tube or column, and back through another joiner plate. The bolt closest to the inside of the hoist is thicker (7/16 x 3") for later cable assembly.

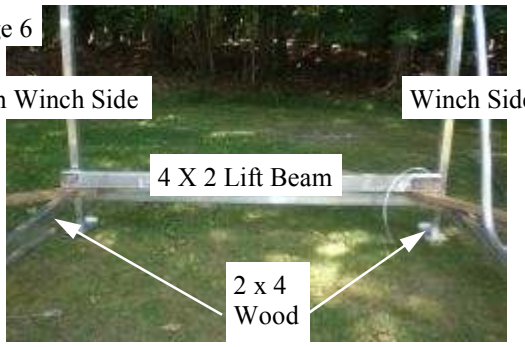



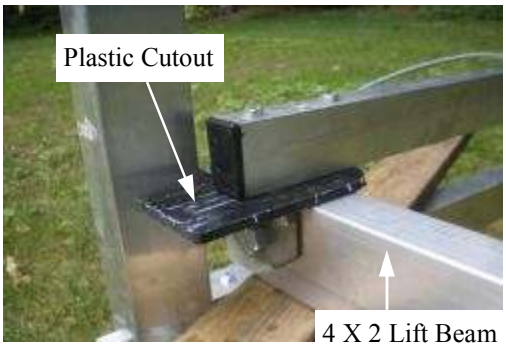

**Step 4:** Next we attach the spreader tubes (83" long) from side to side. Put the spreader tube in the tee clamp on non winch side and put the other end of the spreader through tee clamp on the winch side. Attach with 3/8 x 4" bolts and whiz nuts (2 bolts for each tee clamp/corner)




Winch
Side View

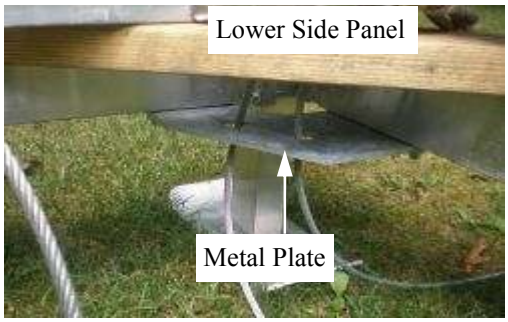
**Step 5:** Now attach the stabilizer tube to the winch side of the hoist. Use 5 1/2 x 3/8" bolts on the bottom of the tube and 4 1/2 x 3/8" bolts on the top. You may need help holding the tube while bolting it on.



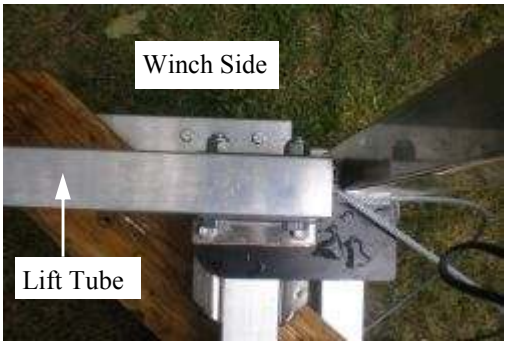

**Step 6:** Next, lay wood 2 x 4s across the corners of the hoist to hold the beams, cradle tube, and the lift tube above the frame for easier assembly. Then lay the beams across the frame from side to side. Make sure the cables are going in the right direction (refer to assembly drawing). Now, put the black plastic cutouts on the corner of the beams with the holes lining up and lay the cradle tube (non-winch side) and lift tube (winch side) on top of the beams.

(Winch Corner)
Plate is held up using bolts that joined the side panel and spreader tubes to the clamps. Another bolt is added onto the lower side panel to help hold the metal plate up.



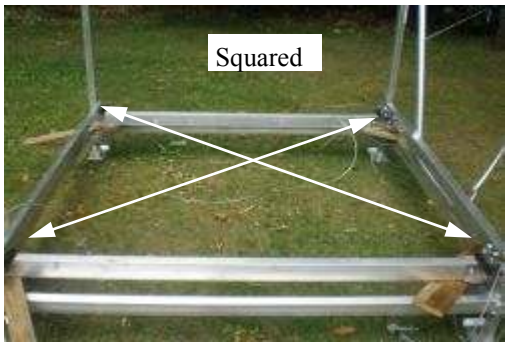

Helps to keep bolts loose in the next few steps in case of later adjustments

**Step 7:** Now bolt the metal plates (see above) on the corners of the hoist connecting the lower side panel to the spreader tubes. Bolt the side panel and spreader tube to the metal plate with 4 x 3/8" bolts and 3/8" whiz nuts. (these plates will later be used in cabling the hoist). Make sure that all the cables that have a copper end face down and put the cables through the metal plate as shown.


**Step 8:** Now go over to the non winch side of the hoist and bolt the cradle tube to the black plastic cut out and the top of the lift beam with 3 1/2" bolts and whiz nuts.
(At this point, you need to put the cable that comes out of the bottom of the lift tube in the lift beam beneath it- one on each corner of the winch side.) After that, you'll notice that there are bolts toward the end of the lift tube that run from top to bottom and bottom and bottom to top. First, you need to take the nuts off these, and then put all four bolts through the black plastic cut out, the top of the lift beam, and the lift tube. These bolts hold the lift tube and lift beam together. Notice that 2 face up and 2 bolts face down.

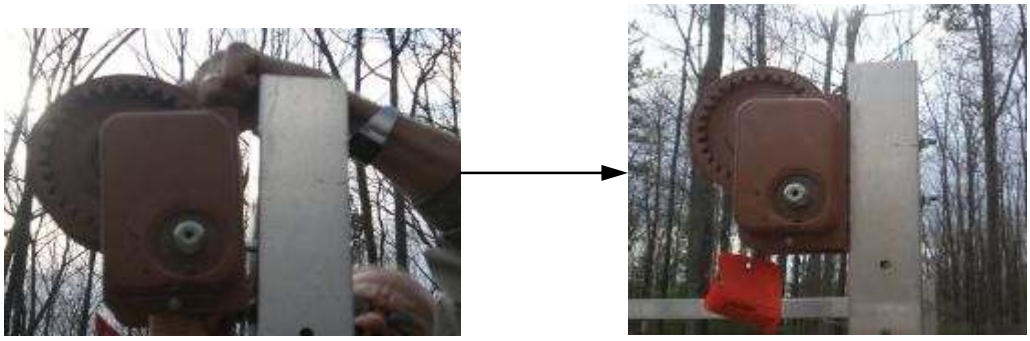
Non Winch Side




Winch Side

**Step 9:** Once this is all done, most of the assembly is completed. So, now you need to take a tape measure and measure from corner to corner on the hoist to make sure what you have completed so far is squared with equal diagonal measurements. If for some reason it is not, you may need to loosen bolts to help you to square the hoist. Also double check to make sure that all bolt threads stick outside of the hoist.

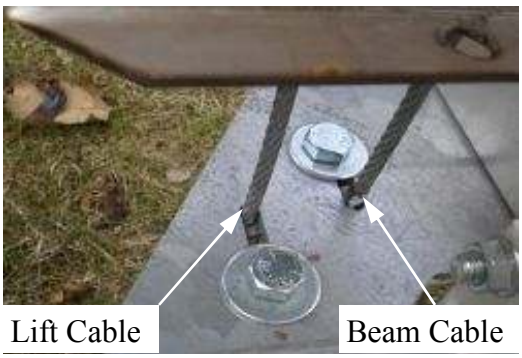
# Cabling



**Step 10:** Now go to the winch side of the hoist and install the winch (as pictured above) with two 3/8 x 4" bolts, 3/8 washers, and 3/8 whiz nuts. Put the top bolt through the winch into the slot in tube, and then put on the washer before putting on the whiz nut. Do the same for the lower bolt, washer, and whiz nut.

**Step 11:** Then go to the non winch side of the hoist and take out the 7/16 x 3" bolt and insert the cable through the slot in the upper cable tube. Put the bolt back through the cable and the upper cable tube and put the nut back on. Do this to the front and back of the non winch side.

Winch Side




**Step 12:** Go back over to the winch side and make sure the cables goes through the key hole slots in the plate attached to the lower beams. The beam cable gets the hole closest to the inside of the hoist. Then put a 1/2 x 1 1/2" bolt through a washer and through the large part of the keyhole through another washer, and then finally pt a 1/2" nut on. This is done to only the winch side in order to keep the cables in place. Make sure this is done to both cables that go into the plate and on both corners on the winch side. Refer to pictures above.

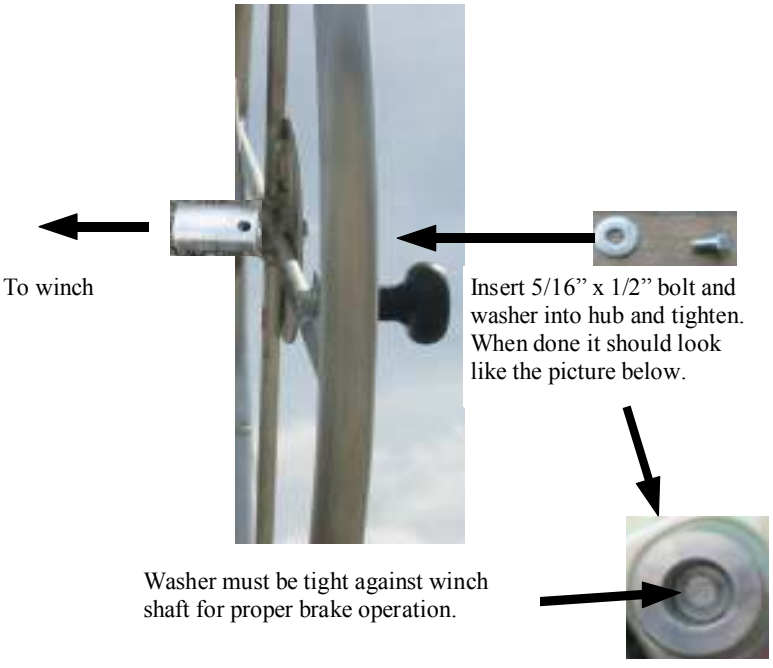

**Step 13:** Next, the cable guider goes on underneath the winch with two 3/8 x 2 3/4" bolts and 3/8" whiz nuts. Continue to make sure that the bolts face outward.



**Step 14:** Now take out the pre-installed bolt (2 x 1/2") in the guider and put the bronze tubing inside the cable loop from the lift beam. Then put the bolt back through the guider, bushing, and cable. Lastly, put the lock nut back on. See right picture for finished assembly of this.

**Step 15:** Thread the lift tube cable up through the back side of the guider and thread around the winch. Put the end through the hole opposite the wheel side. (As shown above.)

**Step 16:** The small bag of bolts are shown above. DO NOT USE THE SPRING when putting on the wheel. Before putting the wheel on, however, <u>make sure that the threads are greased</u>. Put the 5/16 x 1/2" bolt through the washer and screw into the winch shaft. You'll need a deep socket wrench for this. Once the wheel is on spin it clock wise until it clicks.




**Step 17:** Take the cable that was put through the hole in the winch and crimp it with pliers so that it is in the shape of a U. Stick the carriage bolt inside the winch facing the inside of the hoist, lay the U against the winch, put the clamp on over top, and finally, twist the nut on so that the cable will be held in place. Make sure to tighten the nut with a wrench– failure to do so will cause cable to slip and hoist not to work. This process takes a lot of patience because the carriage bolt is so short.

**Step 18:** Last Cabling Step: Now attach the bolt with the welded pipe on the winch side of the hoist (on the column without the winch). Put it through the center hole of the column and tighten with a 1/2" nut. There should be one cable with an eyebolt on it left (this side of the lift tube cable must be attached last). Lift the cable up and put it through the pipe on the end of the bolt. Put a washer and a 1/2" nut on the end in order to keep it in place. (See picture above for details)

**Step 19:** Now pull the excess cable back through the winch and wind the cable up by turning the winch clockwise. Lastly, you need to tighten all of the bolts (after making sure the hoist is square) and hammer all of the black caps on the tops of the tubes so that the sharp edges do not hurt anyone.

# Bunks

**Step 20:** Finally, attach the flat metal bars to the lift beams (on the front and back of the hoist) with 3 1/2" x 1/2" bolts and 1/2" nuts. There will be four flat bars for each carpeted bunk. Make sure that the bolts are facing outward. Do not use the hole on the very bottom of each flat bar, and make sure that the rounded end of the bars are facing up.

**Step 21:** Lastly, attach the bunk brackets to the top bolt on the flat bars, and attach the carpeted bunk the bracket with two 3/8" whiz nuts. Make sure that the bunks are angled like the picture above shows to support the boat. Boat weight should be loaded 100% on the bunks.

Warning: If a boat is loaded on the hoist with to much weight on one end of the hoist it may cause the lift not work properly going down. The lift may bind and only one end go down. If this situation happens more weight needs to placed on the light end of hoist to relieve pressure on the cables leveling it in that direction. (Do not put people in the boat for weight injury could result). When the hoist is down remove the weight and reload load the hoist with better weight distribution. See sticker on hoist for further details.

# Safety Precautions!!!

In order to prevent possible injury to both the operator and equipment it is extremely important that the lift wheel is always turned clockwise (clicking of ratchet should be heard) when raising the platform. Close attention should be paid to the decal on the wheel with raise and lower arrows (***clockwise raises, counter clockwise lowers***). If cable is unwound counter clockwise and continues to turn counter clockwise hoist will begin to raise causing winch damage, and **brake will not work** which could cause injury. Under no circumstances should one raise the platform by turning the wheel counter clockwise.


**Sticker on wheel**

Lower (counter clockwise)

Raise (clockwise)

Lower

Raise

These  stickers are similar to ones on the hoist wheel and column. Wheel brake works when cranking in the up direction only.

Stickers say:

Failure to follow below instructions will result in **uncontrolled spin down** and possible **personal injury** and or hoist damage.

Lift wheel must be turned clockwise for lifting. Do not raise hoist by turning wheel counter clockwise/down direction.

Possible personal injury and or hoist damage may result.

**DO NOT** work or play around or under hoist with boat in.

**DO NOT** leave hoist unattended without first securing wheel.

**DO NOT** reach through hoist wheel serious personal injury may result.


Column sticker


Wheel sticker


Blow up of  sticker (see right) on hoist.

Follow instructions on the stickers on the hoist and manual. Do not disregard.

After the hoist installation is complete, it is important to next check and see that the winch mechanism is functioning properly. You can do this by raising the empty platform up about a 1/3 of the way up and releasing your grasp on the lift wheel. If the winch is operating properly, clutch brake will automatically hold the platform (described as carriage sometimes). Repeat at higher locations. Next, repeat this with your boat on the hoist. If the lift wheel begins to spin down freely from any of these test positions, at no time should you attempt to prevent it from doing so. Such action could result in injury to arms and hands. Instead simply let the platform spin down into the water. Doing so will neither damage your boat or hoist.
If for some reason your winch mechanism does not function as described, call you local Craftlander dealer. Do not tamper with winch mechanism.

It is recommended that your Craftlander be thoroughly inspected at least once a season. Tighten all bolts. Check all pulleys and make sure they are turning freely. Inspect all cables for fraying, wearing or deteriorating. If any signs appear, replace cables. Check frame thoroughly. Grease the winch drive chain. Turn lift wheel off shaft. Remove washer and grease threads on winch **do not grease clutch plate on winch**. Install wheel back on lift with retaining bolt and washer and follow the raising instructions in this manual and winch manual is in the winch box.

This is a typical safety precaution sticker that is applied to our hoists. If your sticker is not legible be sure to contact your Craftlander dealer for a new one.

*Since 1979*

# *Craftlander Boat Hoists*

## Your Craftlander Hoist Limited Warranties

During the terms of the Limited Warranties on your aluminum Craftlander hoist, NuCraft Metal Products, Inc. (hereafter referred to as "NuCraft") covers the cost of all parts needed to repair or replace any NuCraft supplied item that proves defective in material, workmanship or factory preparation. These replacements will be supplied by your dealer at no charge using new or remanufactured parts.

## Your Legal Rights Under NuCraft's Limited Warranties

All of the NuCraft Limited Warranties stated in this booklet are the only express written warranties made by NuCraft applicable to the aluminum Craftlander hoist. These Limited Warranties give you specific legal rights and you may also have other rights which vary from state to state. You may have some implied warranties, depending on the state in which your aluminum hoist is registered.

For example, you may have:

1. An "implied warranty of fitness for a particular purpose," (that your hoist is reasonably fit for the general purpose for which it was sold);

2. An "implied warranty of fitness for a particular purpose," (that your hoist is suitable for your special purposes; if your special purposes were specifically disclosed to NuCraft itself-not merely to the distributor or dealer-prior to purchase.)

These implied warranties are limited, to the extent allowed by law, to the time period covered by the written warranties set forth in this publication. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

## SUBSEQUENT BUYER/OWNER

This Warranty is extended only to the first buyer/owner of the hoist. This is defined as the first legal owner of a NuCraft aluminum Craftlander other than an authorized Distrubutor or Dealer who has bought the hoist from NuCraft for resale to the public.

## HOIST ALTERATION

This warranty does not cover alteration of the aluminum Craftlander hoist, or failure of hoist components caused by such alteration.

## PRODUCTION CHANGES

NuCraft and its distributors/dealers reserve the right to make changes in aluminum Craftlander hoists built and/or sold by them at any time without incurring any obligation to make the same or similar changes on hoists previously built and/or sold by them.

## Your 2-Year Basic Limited Warranty

WHAT IS COVERED:

The 2-Year "Basic Warranty" covers every NuCraft supplied part on your aluminum Craftlander hoist and aluminum canopy support frame.

The “Basic Warranty” begins on your hoist’s Warranty Start Date. The Warranty Start Date is the earlier of (1) the date you take delivery of your new aluminum Craftlander hoist, OR (2) the date the hoist was first put into service (for example, as a dealer “demo” or as a NuCraft company hoist). The “Basic Warranty” lasts for 2 years (24 months) from this date.

The “Basic Warranty” covers the cost of all parts needed to repair any item on your aluminum Craftlander hoist that are defective in material, workmanship or factory preparation.

## Your 15-Year Fabricated Frame & Extrusion Warranty

WHAT IS COVERED:

The “Frame and Extrusion Warranty” covers these parts and components of your aluminum Craftlander hoist frame for 15 years counted from your hoist’s Warranty Start Date:

Extruded Aluminum: columns, rails, spreaders, crossmembers, “Twin Beams”, legs, stands, extensions, canopy inserts, bows, rails, and clamps.

Fabricated: hoist wheel, winch, corner brackets, column guide plates, and footpads.

## What your NuCraft Limited Warranties Do Not Cover

Vinyl canopy covers are covered by a 5-Year Limited Warranty by the material manufacturer.

Your NuCraft Limited Warranties do not cover the costs of repairing damage caused by environmental factors or acts of God. “Environmental factors” include such things as airborne fallout, chemicals, tree sap, salt, electrolysis, ocean spray, and water hazards. “Acts of God” include such things as hailstorms, windstorms, tornadoes, sandstorms, lightning, floods and earthquakes. Some water situations may require Anodes to be placed on your Craftlander hoist. Please check with your dealer or local marina for additional information as damages done by electrolysis is not covered under warranty.

Your NuCraft Limited Warranties do not cover the costs of repairing damage caused by poor or improper maintenance.

Your NuCraft Limited Warranties do not cover the costs of normal/scheduled maintenance of your aluminum Craftlander hoist.

Your NuCraft Limited Warranties do not cover the costs of repairing damage or conditions caused by fire or accident; by abuse or negligence; by misuse: by tampering with parts; by improper adjustment or alteration; or by any changes made to your aluminum Craftlander hoist; the cost of rental hoist or slip; gasoline, telephone, travel or lodging; the loss of personal or commercial property; the loss of revenue, etc. NOTE: Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

## How To Get Warranty Service for Your Hoist

Please contact the dealer from whom you bought the hoist for warranty service. When contacting your dealer, please provide them with your hoist’s model number, hoist serial number, date of purchase and the nature of the problem. If contact with the dealer is not feasible, please contact NuCraft Metal Products for further assistance.

*Proudly Made in Michigan*
*By*
NuCraft Metal Products
402 Southline Rd.
Roscommon, MI 48653