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190 Junior Crane Installation Instructions

These instructions were written with the owner in mind. If you are the installer make sure these instructions are passed along to the owner of the boat. Please read through the entire instructions before beginning the installation.

TERMINOLOGY

ARM – Stainless steel arm that comes with a welded on cleat.

MAST SECTION – The long cylindrical tube, the two tabs are the upper part and the bottom has a hole in it to hold the pin.

UPPER BRACKET – Stainless steel bracket with a 90-degree bend and a 2 1/2" hole in it.

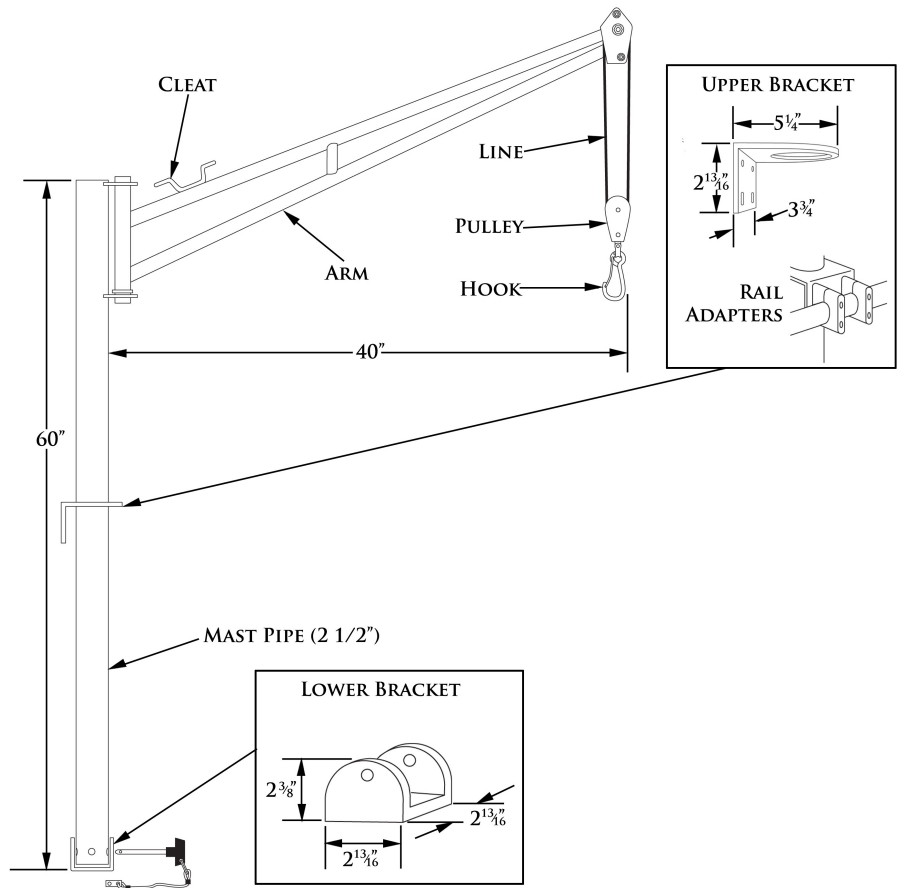
LOWER BRACKET – Is a stainless steel U with two holes in it to accept the fast pin.

RAIL ADAPTERS – Two black plastic rail adapters that fit either 1" and 1 1/4" rails.

PULLEY – One black 4-sheave pulley.

HOOK – 3 1/4" stainless steel snap hook.

LINE – 100' feet of 5/16" braided line.



This covers what you have in your 190 Little Crane box. Now, put everything back in the box and head off to the boat. Don't forget to take some basic tools with you for the job. You don't need an engineering degree to install the crane, but you should think about what you are going to do to your boat. You are going to drill holes in your boat. Careful planning eliminates the need to explain to your friends, dock neighbors and the higher authority on your boat what all the extra holes are for.

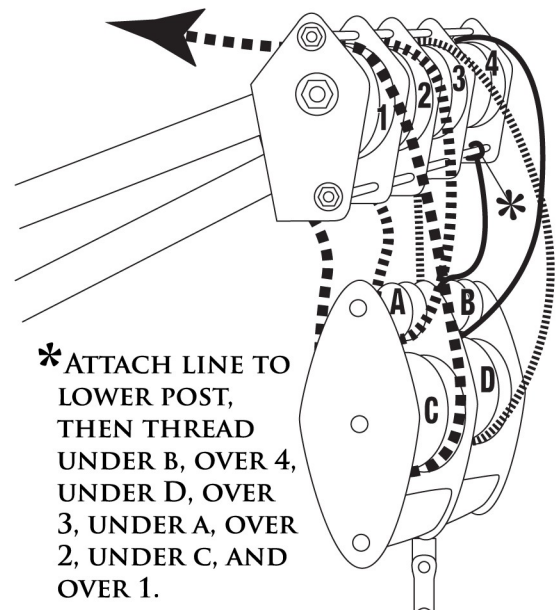
GETTING STARTED

There are five rules that apply to using and installing the St. Croix 190 Little Crane on your boat.

- 1.) Use the crane to lift any non-human object that does not exceed the 200 lbs. capacity of the crane. (i.e. anchor, outboard motor, small inflatable, dive gear, large wet dog.)
- 2.) Use bolts, not screws to attach the upper and lower mounts. Through bolt all brackets.
- 3.) Take your time and properly layout the crane on your boat before drilling any holes. The crane arm is 40" long. You might want to mount it 40" from the load that you are going to pick up.
- 4.) Mount the crane so that when pulling on the line and lifting the object you are able to stand directly behind the vertical mast and the rotating arm. This will ensure that the lines run through the pulleys in the correct manner. Do not pull the line off to the side of the arm when lifting or lowering. This will cause the rope to fray and weaken.
- 5.) Make sure your boat and/or its rails are strong enough to handle what you are lifting. The working load of the crane is 200 lbs. This does not necessarily mean that the railing or surface of the boat you mount it to is strong enough to handle the load. Reinforce as necessary.

ASSEMBLY, LAYOUT, DRILLING AND LIFTING

- 1.) Keeping in mind that the crane mast is 60" high and the arm has a 40" reach and a 270° rotation, decide where on your boat you will mount the brackets and make sure you can access behind the brackets to through bolt them to the boat. Ensure that the upper and lower brackets are a minimum of 30" apart. The lower bracket can be mounted in a vertical or horizontal position. The upper bracket can be mounted in a vertical position or on a rail using the rail adapter.
- 2.) Re-check your layout. Drill the holes and through bolt the brackets to the boat adding bedding or caulking. Do not use screws. If using the rail adapter, attach uppers bracket to rail.
- 3.) Position the mast in the brackets and insert the fast pin through the lower bracket and through the holes in the mast. **Make sure fast pin is fully inserted and locked into place, and anchored down to the deck or bulkhead so as not to lose it.**
- 4.) Follow the directions in the diagram below to lace the Line on the arm and pulley.
- 5.) Attach the snap hook to the becket on the pulley.



- 6.) Position the arm into tabs welded on the top of the mast, inserting it into the top tab first it is larger for ease of position, then into the bottom tab always make sure the black bearing is on the bottom post of the arm.
- 7.) Before lifting any load, pull down on the pulley end of the arm. If there is any deflection in your boat where the upper and lower mounting brackets is positioned, stop and reinforce your boat and/or rails. If using the rail adapter, there will be a small amount of movement in your railing when lifting. If there are more than a couple inches of movement, a rail brace is required. The railing of your boat is the weakest part of the system.
- 8.) Attach the snap hook to the item you are lifting. Standing directly behind the vertical mast, slowly pull on the line and lift the item to the lowest dry point (i.e. swim platform, dock). Tie off the line to the cleat on the arm. Rotate the arm as needed. **Always make sure you are standing directly behind the mast and arm when lifting so the line is running through the pulleys in the correct manner.** Lifting from the side will fray the line and lessen the designed lift ratio. Use the cleat on the arm to tie off the load before rotating the arm and when removing the item from the crane. **DO NOT EXCEED THE 200 LB. WEIGHT LIMITATION OF THE ST. CROIX JUNIOR CRANE.**
- 9.) Congratulate yourself on a job well done! Show off your new St. Croix Junior Crane to your dock neighbors and friends. You'll be the envy of the marina.
- 10.) Find your camera and take some pictures of your installation and show us what you are lifting. Send them to us. We use customer photographs in our display at the boat shows we attend. We also will use some pictures in our product brochures. We look forward to seeing your photos.

CARE AND FEEDING

Stainless steel will rust if you neglect it. Periodically, wipe the arm with metal polish and a little wax. Check the lines periodically for wear and/or fraying. Replace as necessary, re-read rule #1. Do not exceed the weight limitations of the St. Croix Little Crane. Enjoy using your new crane. We look forward to seeing your photos.

JUNIOR CRANE ACCESSORIES

The Spare Mounting Kit (196) – The extra set of upper and lower brackets and rail adapters will allow you to have a second place to use the crane. Mount one