



**Forespar Products Corp.**

22322 Gilberto

Rancho Santa Margarita, CA 92688

Phone 949-858-8820

Fax 949-858-0505

Email sales at forespar.com

www.forespar.com

## FITTING INSTRUCTIONS FOR THE NOVA LIFT™

### FIRST, PLEASE READ THESE INSTRUCTIONS CAREFULLY!

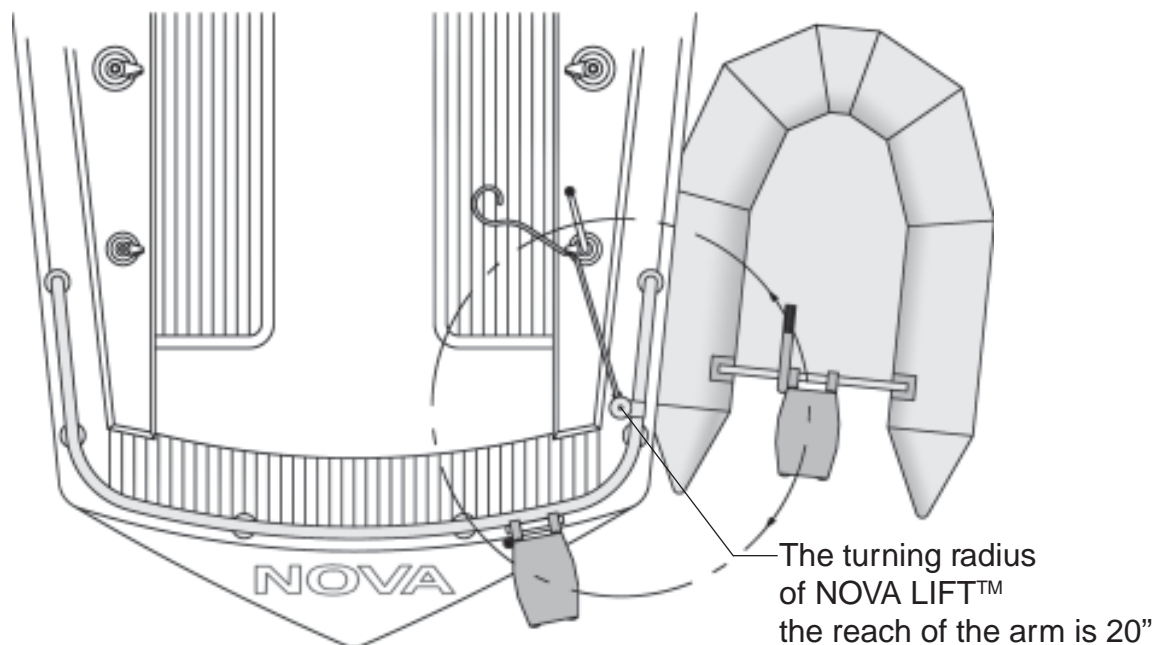
#### Picking the best location for your NOVA LIFT™

Location is everything when it comes to positioning your NOVA LIFT™. The correct positioning will give you the greatest benefit from NOVA LIFT™ and allow it to operate smoothly and reliably with freedom from snags.

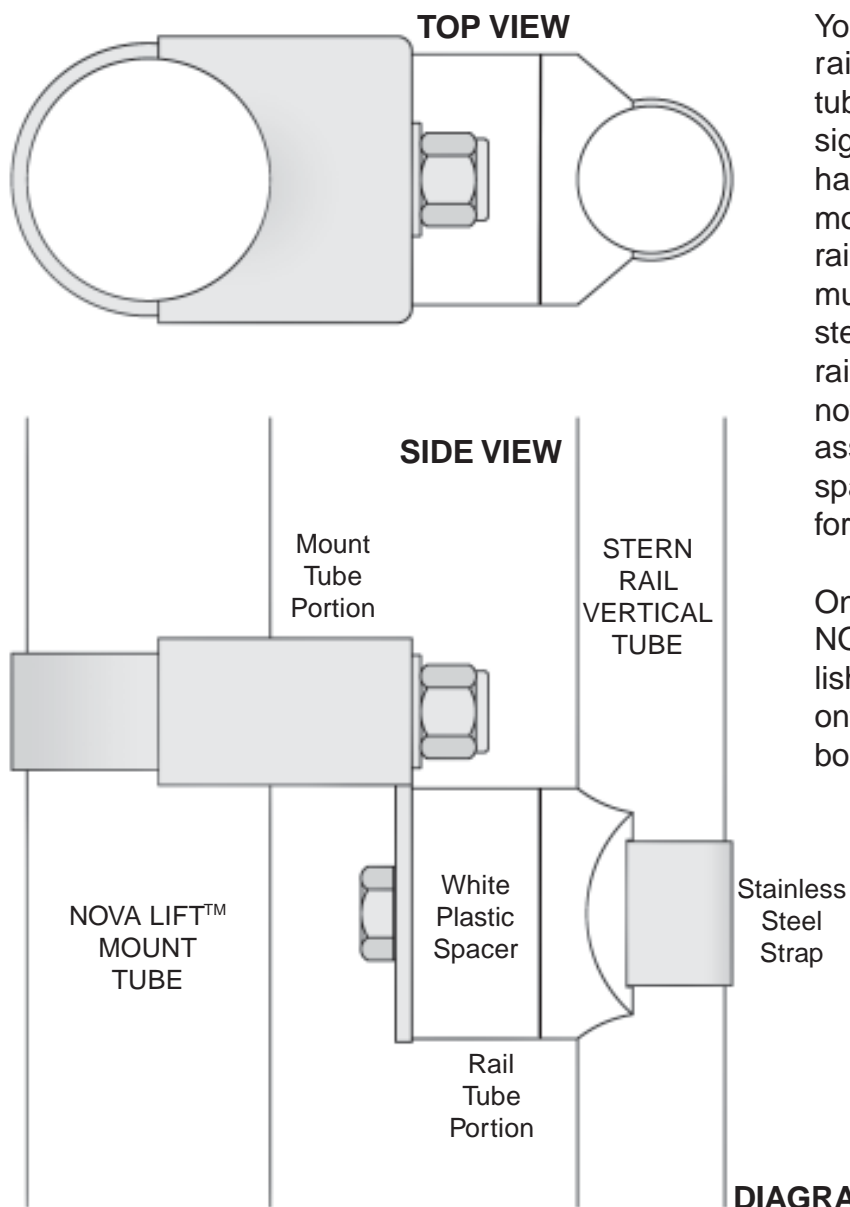
#### Assessing your existing stern rail

Very important! You should carefully inspect your rails for secure mounting to the vessel, and their overall strength and suitability to stabilize NOVA LIFT™. Obviously, rails that rock about, move or distort when leaned on are not suitable and would require appropriate attention. Please pay particular attention to the base fittings of your rails. If you have the push in type socket you must be very sure your rails are securely fastened within these sockets. Replace the set screws or through bolt if necessary. Rail faults must be repaired for safety.

1. The best mounting position is inboard of the stern rail and generally close to a corner on your vessel's rails where the greatest stability can be gained.
2. For best reach outboard, you should be on the side portion of the stern rail and in a position that when your outboard is lifted and swung inboard it can be lowered directly onto its rail mounting pad.
3. You should also note that the load line which exits the mount tube six inches from the deck should have a clear run to the chosen cockpit winch.



# FITTING THE NOVA LIFT™ RAIL CLAMP



**DIAGRAM 1**

Your NOVA LIFT™ comes with a stern rail clamp assembled on the mount tube. Hold the unit against your rail to sight its intended location. This clamp has two basic components, one the mount tube portion and the other is the rail tube portion. The rail tube portion must be disassembled so the stainless steel strap can be placed on the stern rail as shown in diagram 1. Please note the order in which the clamp is assembled. Note that the white plastic spacer components can allow rotation for mounting on rails at various angles.

Once the location for installing your NOVA LIFT™ has been carefully established, assemble the stern rail clamp onto the rail. Do not fully tighten the bolt at this point to allow for adjustment.

Bolt the two part of the deck socket assembly together with the 3/8-16 X 1" bolt and nylock nut. Do not fully tighten.

Slip the deck socket onto the base of the mount tube and rotate the deck socket assembly unit until it suits the deck angle when the mount tube is in its correct perpendicular position. The mount tube can be twisted at this stage to align the line outlet sheave with the chosen cockpit winch.

At this point the entire assembly will be positioned correctly and hanging loosely on you stern rail. Now is the time to stand back and assess proper positioning.

Q: *Will the load line have a clear run to the winch?*

A simple rail mounted turning block can be used here to facilitate line run.

Q: *Will the arm swing the outboard motor to its rail storage position?*

Q: *Is the mount tube assembly positioned as perpendicular as possible?*

Q: *Is the deck socket twisted to correctly accommodate deck angle?*

The deck socket assembly must sit squarely on the deck surface to bear the load.

# FITTING THE NOVA LIFT™

You can now drill the holes into or through the deck. Use either (3) #14 X 1-1/4" long stainless steel screws or stainless steel through bolts with large backing washers and nylock nuts. These fasteners are not provided.

**NOTE:**

The deck socket plate must be completely secure as it will come under a lot of load both downward and sideways.

When the deck socket assembly is secure, push down on the top of the mount tube to insure that it is seated in the deck socket. When you are sure the mount tube is seated, and the outlet sheave is aligned with the cockpit winch, drill the holes in the mount tube through the side of the deck socket and secure the mount tube using the (2) 5/32" rivets provided.

***Drilling the stainless steel mount tube is easy if you do the following:***

Use a new, good quality, 5/32" drill bit. A slow drilling speed and plenty of continuous pressure is important. If insufficient pressure is used, the metal surface will harden and become almost impossible to drill. Ease up on the pressure as you feel it going through the tube wall. Keep cooling lubricant such as a light cutting oil or kerosene on the drill bit as necessary.

You can now tighten the bolts in the rail clamp to keep your NOVA LIFT™ from sliding when the load is swung around parallel to the rail. Keep an eye on this as it may need to be retightened from time to time. Never let the clamp slip back and forth on the rail, as it can severely load and damage the deck socket assembly.

When the rail clamp is secure, place the lift arm into the mount tube. Make sure it passes through the bottom bushings and comes to rest on its base bearing. It will make a metallic clunk when it is properly seated. You will probably feel it bump past the lower bushing before it reaches its correct position. It is important to always install the lift arm completely into the mount tube before reeving the load line

Tie one end of the load line onto the shackle at the head of the lift arm and reeve the swivel block and hook onto the line.

Now reeve the load line over the sheave in the lift arm head. Your NOVA LIFT™ is designed internally to always automatically direct the load line to the outlet sheave, so just keep feeding the load line into the lift arm head until its end comes out of the outlet. The line can now be taken to your winch and is ready to use. This method facilitates easy installation and removal of the lift arm when required or desired - it should only take around 20 seconds. It does, however, take a bit of time to get the hang of it.

## UNIT WEIGHTS AND CAPACITIES STATIC TESTS USING DILLAN FORCE GAUGE

NOVA LIFT™ Full Unit Weight	16 Lbs.
Lift Arm with Block Weight	9.5 lbs.
Safe MAX Working Load	220 lbs.
Maximum Load at Distortion	420 lbs.
Full Collapse of Lift Arm	480 lbs.

# IMPORTANT SAFETY INFORMATION FOR THE NOVA LIFT™

**SKIPPER:** PLEASE READ THIS SAFETY INFORMATION THOROUGHLY!

The skipper must make sure all crew members operating NOVA LIFT™ have been instructed in the safe use of this device, and are competent to perform the pre-use safety check.

As heavy and potentially dangerous loads are lifted by NOVA LIFT™, it is important that the skipper frequently inspect the unit for secure mounting. The vessel's existing railings which form the main support for the NOVA LIFT™ should also be frequently checked with particular attention being paid to the rail's bases. It should be understood that NOVA LIFT™ exerts side loads on the vessel's supporting rails equivalent to 50% of the load being lifted.

**NOTE:**

If the existing rails have the push in socket style bases, special attention must be paid to them. Be very sure that your rails are well secured within these base sockets. Replace set screws or through bolt as necessary. **DO NOT USE NOVA LIFT™ UNTIL THESE MODIFICATIONS HAVE BEEN PERFORMED.**

***DO NOT EXCEED THE STATED LOAD CAPACITY OF THE UNIT.***

Forces on the NOVA LIFT™ and the supporting rails are greatly increased by shock loads resulting from bouncing the load particularly in a rolling sea condition. Pay attention to maintaining the load in a controlled lifting state, and constrain the load from swinging about freely.

NOVA LIFT™ is designed for vertical lifting only! **DO NOT** attempt to drag in objects for lifting that are not directly below the lift arm. This would greatly increase the load on the NOVA LIFT™ and the vessel's rails.

Only crew members competent in the use of and regular and self-tailing winches should be allowed to operate NOVA LIFT™.

**REMEMBER:**

**Operate this device with the same care and caution one should use when hoisting a man aloft.**

## CHECK LIST FOR SAFE OPERATION OF THE NOVA LIFT™

1. Frequently check the load line for chafe and for secure fastening to the shackle on the head of the lift arm. All blocks, sheaves and pins should be inspected for wear periodically and replaced prior to further use if seen to be worn. Severe and rapid line chafe will occur if the sheaves wear and become misaligned. Washing the entire unit out with fresh water and keeping sand from entering the bearings is important to the life of the unit.
2. Never allow or cause a crew member to be in a position beneath a lifted load.
3. Prior to lifting an outboard motor from a dinghy transom, be sure the motors clamping screws are fully unscrewed and that their metal clamping disks will clear the transom completely.
4. Never leave a load hanging from your NOVA LIFT™.
5. When a load is in the fully lifted position prior to the arm being swung inboard, it is advisable to clear the load line rather than relying entirely on the self-tailing part of the winch.

We believe that NOVA LIFT™ is a quality product and we want you, the customer, to be completely satisfied. If you feel for any reason that NOVA LIFT™ will not perform the tasks that you require of it, or if you are unhappy with it in any way, on return of the unit we will refund your purchase price up to sixty (60) days from date of purchase. We will happily repair or replace this product within one year of purchase date if any fault or problem occurs due to manufacture.

Forespar Products Corp. shall in no event be liable for any damages or injuries of any kind resulting from neglect or otherwise use of NOVA LIFT™.

# LIMITED WARRANTY FOR NOVA LIFT™

We are proud of NOVA LIFT™ and the benefits it brings to yachtsman and we want you, the purchaser, to be completely satisfied with your new NOVA LIFT™. If you are not completely satisfied with the quality or performance of NOVA LIFT™ we will gladly repair or replace it within one year for the original purchaser.

**Forespar Products Corp.**  
22322 Gilberto  
Rancho Santa Margarita, CA 92688

THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER EXPRESS WARRANTIES, AND NO PERSON (INCLUDING ANY AGENT, DEALER OR REPRESENTATIVE OF FORESPAR PRODUCTS CORPORATION) IS AUTHORIZED TO MAKE ANY REPRESENTATION OR WARRANTY CONCERNING THIS PRODUCT, EXCEPT TO REFER PURCHASERS TO THIS WARRANTY. ANY IMPLIED WARRANTIES (INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE) ARE LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY. SOME STATES DO NOT ALLOW THIS LIMITATION SO THIS LIMITATION MAY NOT APPLY TO YOU.

YOUR EXCLUSIVE REMEDY WITH RESPECT TO ANY AND ALL LOSSES OR DAMAGES RESULTING FROM ANY CAUSE WHATSOEVER SHALL BE AS SPECIFIED ABOVE. WE SHALL IN NO EVENT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGE OF ANY KIND, HOWEVER OCCASIONED, WHETHER BY NEGLIGENCE OR OTHERWISE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES SO THIS LIMITATION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

# FITTING THE NOVA LIFT™ WINCH RAIL CLAMP

When installing the winch on your NOVA LIFT™ (power boat option), it is critical that the winch mounting plate be installed with the stainless steel saddle ***BELOW*** the winch plate clamp as shown in Diagram 2.

As the load is applied to the line on the winch, the stainless steel saddle below the winch provides the necessary support. If this assembly is installed on your NOVA LIFT™ upside down (with the stainless steel saddle above the winch), the winch plate clamp will fail. This failure could result in property damage and bodily injury. Study Diagram 2 to ensure that you install the winch correctly.

