

## **INSTALLATION NOTES**

### **PLEASE READ THIS BEFORE ATTEMPTING INSTALLATION**

Dear Customer:

Thank you for your purchase, and for the confidence and trust that you have placed in ***Ocean Marine*** and in our products. The installation guide that we have supplied is to be used along with the verbal recommendations which we gave you at the time you placed your order. Some standard rules apply that need to be followed in order to ensure that the system we have supplied to you will perform as advertised.

### **TO THE INSTALLER**

We, at ***Ocean Marine*** have an ongoing commitment to product development and changes to our products occur on a regular basis as a result. Aside from engineering considerations, a davit installation is also somewhat a matter of personal choice. As a result, the instructions in this guide are “generic”. However, some standard rules apply that should be considered. Please observe the following essential points:

- If you are installing this system on any production yacht, please keep in mind that Ocean davits may have already been installed on a sister ship. Accordingly, we may have already developed an engineered installation for the yacht you are working on.

### **“CALL BEFORE YOU DRILL!”**

- Most dinghies have the lifting points located between 55” to 72” apart. The davits should be mounted approximately the same distance apart. If two dinghies are being lifted, choose an installation where the davits will be closer rather than farther apart.
- Many modern beamy yachts with swim platform amenities such as showers, cove rail seats, swim platform seats, etc., require that the davits be installed much farther apart than discussed in the last statement. When this is encountered, we almost always have an engineered and therefore preferred mounting location. If uncertain, please call first!
- The davits should be “splayed” slightly as outlined on page one of the guide. The guide exaggerates in order to make the point clear. What is important is that the davits’ outer ends be positioned about 6” - 12” ***closer together*** than the lifting points in the dinghy. This measurement varies as a function of sling length and how low that they are installed in the dinghy. The goal is to have the dinghy up as high as possible, level, in the “armpit” of the davit, and with the ropes set at a 45 degree angle as viewed from the bow of the yacht looking aft. This ensures that the dinghies own weight will act to assist in prevention of sway.
- We are gradually developing a file of installation photos that we now display on our web site. Please visit us at: [www.vru.com/ocean/](http://www.vru.com/ocean/) E-mail us at [oceanmarine@hotmail.com](mailto:oceanmarine@hotmail.com) or call toll free **800 883 2848 (800 88DAVIT)** if you uncertain as to any part of this installation.

## OCEAN MARINE SYSTEMS

Thank you for your purchase of Ocean Davits, and the confidence that you have placed in our products, and in our service. We at Ocean are committed to your complete satisfaction. Should you encounter difficulties, please call our toll free number for assistance. A knowledgeable installation expert will call you back as soon as possible.

### RULES FOR DINGHY STORAGE

**To protect your warranty**

- RAISED AS HIGH AS POSSIBLE TO MINIMIZE MOTION WHEN AT SEA.
- TIED UP TIGHT FOR THE SAME REASON - WITH ROPE, **NOT SHOCK CORD!**
- PULLED IN AND TIED SNUGLY TO THE RAIL OR TO THE SECOND SET OF CLEATS PROVIDED FOR THAT PURPOSE.
- DAVIT FALLS "CROSS TIED" - IE: STARBOARD DAVIT FALL LED DIRECTLY TO THE CLEAT ON THE PORT DAVIT, AND PORT DAVIT FALL LED DIRECTLY TO THE CLEAT ON THE STARBOARD DAVIT.
- IF YOU STILL HAVE TOO MUCH MOTION WHEN AT SEA, CONSIDER OCEAN'S CONNECTING STRUT SYSTEMS TO ELIMINATE THE PROBLEM.
- **DRAIN PLUG OUT AT ALL TIMES WHEN ON THE DAVITS!**
- **OUTBOARD REMOVED WHEN SAILING IN ROUGH OR SLOPPY SEAS!**
- **DINGHY OFF AND ON DECK WHEN VENTURING OFFSHORE!**
- **COMBINED WEIGHT OF DINGHY, OUTBOARD, FUEL TANK AND DINGHY CONTENTS NOT TO EXCEED 250 LBS.**

**Please check to ensure that you have received all of the items required to make a custom installation. You should have:**

- Two davits, either the short or the long model, depending on your yacht's rail design
- Two mounting bases - they may vary according to your yacht's transom design
- Two rail mounting clamps - "grooved" on one side for bending if your yacht has a "cove" rail seat system, supplied with spacers of up to 2" if we determined their need at the time of ordering
- Two adjustable lock strut assemblies - expandable from approximately 10" to 18", each complete with 2 rail clips and one plastic lock knob
- Four blocks - two with becket and two without
- One set of dinghy slings, as per your order

**Depending upon your order, you could also have:**

- Pre spliced rope installed on the blocks
- One or two connecting strut kits

<b>INSTALLATION INSTRUCTIONS (Figs. 1.0 to 1.3)</b>
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### **DINGHY FIRST!**

When set up properly, the lower double blocks of the davit falls should be below the gunwhale of the dinghy, and the outboard motor should be up **BESIDE** the davit - not below it. For the stern sling it is always possible to locate the transom eye bolts either lower or farther apart, if shortening the bridle sling is too inconvenient. Plug the old holes in the transom with bolts and sealer to prevent rot.

**Plywood floor inflatable** - Deflate dinghy, remove forward floor board and insert the webbing sling under the floor, centered. Re inflate dinghy.

**Roll up floor inflatable** - As with the plywood floor inflatable deflate the dinghy and slide the webbing strap under the floor. Some people want to place a spreader bar under the floor with the strap to fold the system in place if the floor should suddenly deflate. We suggest that you visit your sail maker for some cane or plastic batten stock, and then have your canvas maker sew it into the center of your sling, covered with another length of belt webbing. This will prevent the spreader bar from chafing on the dinghy's floor etc. Some roll up models have two lifting rings in the bottom of the dinghy on either side of the bow. If that is the case we provided you with a double cable bridle. If you have that type, merely snap the carbine hooks on when ready to lift your dinghy.

**Bow slings for R.I.B.s and Hard Dinghies - Transom slings for all dinghy's** - We supplied you with either a single or a double cable bridle, depending on your ordering instructions. Mount the lifting eyes (not supplied) low enough to ensure a high, snug lift and merely snap the carbine hooks onto the eye bolts when ready to lift.

<b>IF YOU NEED TO SHORTEN YOUR SLINGS</b>
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#### **CABLE SLINGS**

- Determine the amount that you need to shorten the slings.
- Carefully cut the old micro press sleeve from the sling at either end.
- Shorten the cable by the required amount (be sure to make a very clean cut).
- Trim 4" of plastic sleeve from the cable and re crimp.

#### **WEBBING SLINGS**

- Determine the amount that you need to shorten the sling.
- Cut the sling at one end by the required amount and re sew using UV resistant thread.

## DAVIT INSTALLATION

1. **Choose a strong mounting location.** Close to a stanchion is a good idea, or towards the outer corners, close to where the rail bends are usually the strongest points.  
(See Fig. 2.0)
2. Use a thread lubricant such as “Never Seize” to avoid ‘galling” stainless threads.
3. **Temporarily install the base mounts onto the davits.**
4. **Install the rail mounts onto the davits, with spacers if supplied.** Leave the bolts just loose enough to allow you to slide the mount about if necessary.
5. **Place some tape on your boat** where the davit base will mount in order to protect it from scratches .
6. **Install the rail mounts on your yacht’s rail with the U bolts provided.** The plastic saddles should be placed between the rail mount and your stern rail. If your yacht is equipped with “cove seats”, the rail mounts were supplied ‘pre bent’. You may need to bend them slightly in a vise with a plastic hammer to ensure that they conform properly with your rail’s curvature. On some yacht’s with cove seats , such as Hunter 430’s, it is necessary to mount to the lower rail, under the “cove seat”. On these models, it may be necessary to trim a small amount of plastic from the underside of the seat in order to make room for the U bolts. Again leave the U bolts loose enough to allow some movement. (see Fig. 2.1)
7. **Move your davits about on the rail until the base is where you want it, and the davit is visually correct when viewed from the side and from fore and aft.** Use a measuring tape to several reference points that are common to both sides of the boat, such as toe rail, for example. It is possible that your rail is not identical on both sides of the boat. Stainless can change shape substantially when welded, or the boat may have been “visited” by a neighboring boat at some point in the past. Choose the best balance between your measurements and what is visually pleasing to the eye.
8. **Mark the bolt holes.** Lift the davit up high enough to use the drill. You should not need to remove it.
9. **Drill the mounting holes.** We suggest through bolting with the use of fender washers or backing plates. Many people use sheet metal screws with no difficulty. When installing the bases onto a teak toe rail, it may be impossible to through bolt in any case. (see Fig. 2.2 and 2.3)
10. **Install the base mounts using a quality sealant such as 3M 5200.** Tighten the bolts, including the base mount pivot bolt.
11. **Tighten the rail mounts .**
12. **Choose a location for your locking struts.**
13. **Spread open the rail clips and snap them onto the davit and your rail.** Very handy here is a pair of lock ring pliers that will allow you to open them without scratching the stainless. If you do not have a pair, your auto mechanic.
14. **Fit the lock struts in place.** You will need to squeeze the rail clips together with a pair of slip joint pliers, and **thread the screws in several turns by hand.** It is a good idea here to have an assistant help by holding the strut and by holding a bucket underneath to avoid the horrible sound of ‘Sploosh!’

- 15. Swing the davits into position.** Center them on your boat and set them about 5" or so closer together than the lifting points on your dinghy. This causes the dinghy to become a "stiffener strut" when pulled up into position. Also, it ensures that the davits, blocks and rope will not chafe against your outboard motor. (see Fig. 3.1 and 3.2)
- 16. Drill the hole through on each locking strut.** Install the bolt and "nylock" nut supplied with the strut. **Do not over tighten the nut and collapse the strut!** (see Fig. 3.5)
- 17. Install the connecting strut (if supplied).** Snap the rail clips over the top davit tube at the outer end. Fasten the connecting strut to the rail clip with the screw provided, and tighten the screw. Finally, drill through the locating hole in the strut and install the bolt and "nylock" nut. Tighten the nut, being careful not to over tighten and collapse the tubing. (see Fig. 3.0 to 3.2 and 3.5)
- 18. Install the blocks with beackets onto the davit's outer mounting hole.**
- 19. Reeve the rope through the blocks.** The line should lead smoothly, starting with the sheave on the outboard side of the block, and finishing with the line leading straight forward on the inboard side of the davit to the upper cleat. (see Fig. 2.6)
- 20. Attach the davit falls and pull your dinghy up into position.** The dinghy should be pulled up as high as possible. Since the dinghy should also be pulled in as tightly as possible, some compromise may have to be made here. It may be that you need to lower the dinghy slightly in order to have it pulled in snugly. (see Fig. 5.0 to 7.1)
- 21. Stand back and admire your OCEAN DAVITS! You are now an expert Ocean Marine davit installer!**

We love to collect pictures and information from our customers. It helps us to correctly advise other customers with similar yachts. We welcome your comments and suggestions on ways that we could improve our products. Please feel free to write or call at any time.

#### **WARRANTY**

Ocean Marine Systems warrants this kit, fasteners, fittings and hardware, to be free of defects in material and workmanship for one full year from the date of purchase, shipping costs excluded. In the event you encounter a problem, please consult with the factory. We will discuss the problem, and mutually agree on the best course of action in order to rectify it as quickly as possible. Not covered under this warranty is damage to the davits or to the yacht's rail system caused by inertial forces set up by the dinghy in heavy seas, or by the same or similar damage caused by failure to tie the dinghy into place securely, or exceeding the weight restrictions. This system is designed to be installed on sail or power driven displacement vessels, and to carry a maximum weight of 250lbs. No warranty, express or implied will be honored when this system is installed on power driven planing or semi planing hull designs.

**Ocean marine Systems Ltd.**

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Tel: 800 883 2848 (800 88DAVIT) Fax: 604 214 1423



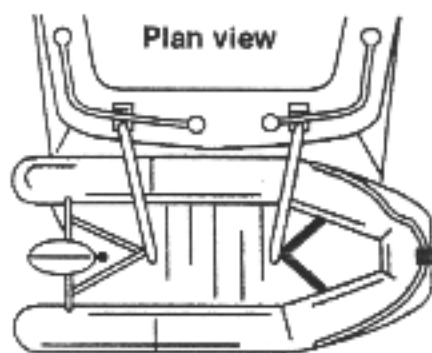
# OCEAN MARINE SYSTEMS

## Installation Guide

(SD SERIES)

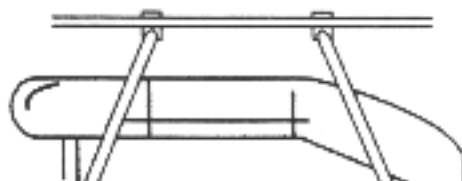
### How to achieve a proper davit installation

#### 1.0



Plan view

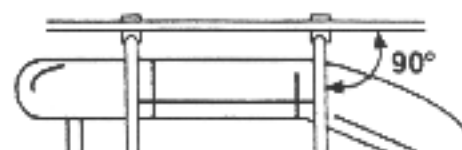
Davits should form a trapezoid



OKAY

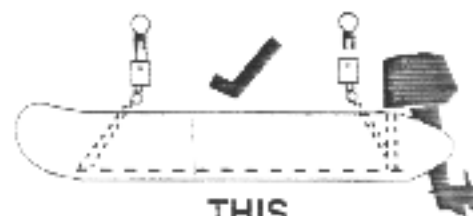


OKAY

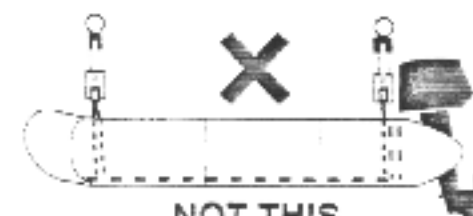


NOT AS STRONG

Your davit system is able to withstand beam seas and other transverse loads much more effectively when the davits form a trapezoid with your rail.

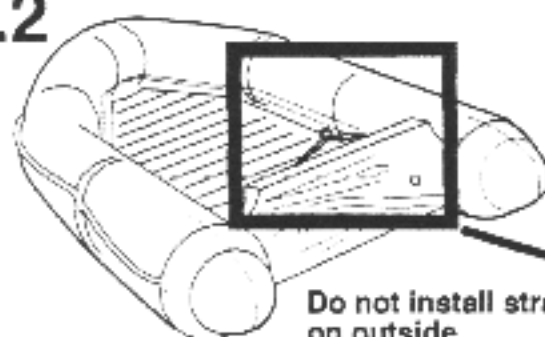


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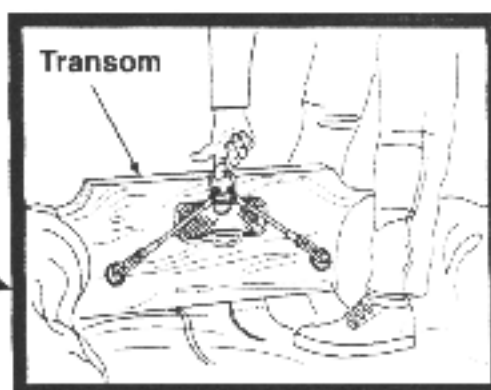
NOT THIS

#### 1.2

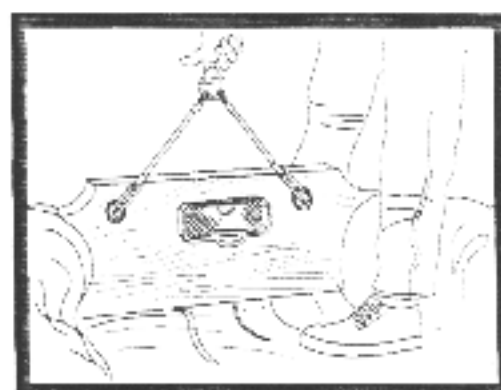


Do not install strap on outside

Slings must be as low as possible in order to minimize motion and to lift the dinghy as high as possible.



THIS



NOT THIS

#### 1.4

Webbing (floorboard) type slings



A

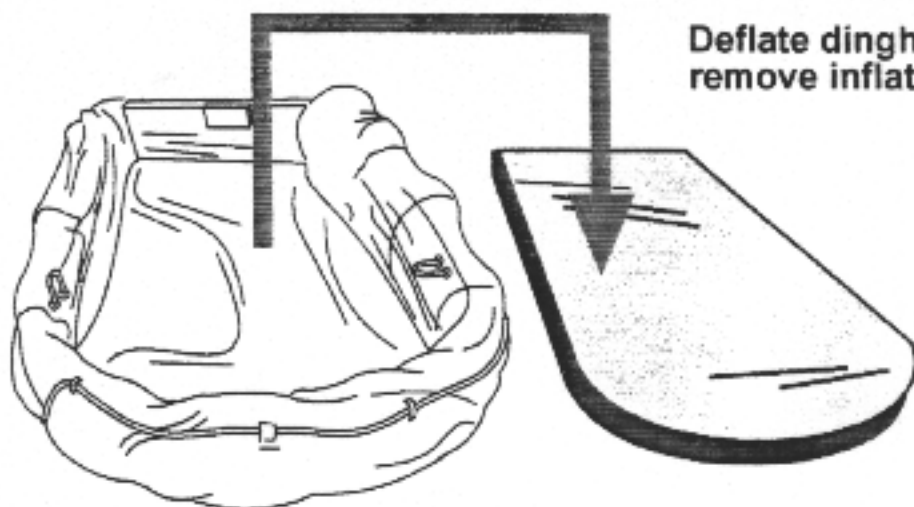


B

Webbing bow sling installation:

1. Deflate dinghy.
2. Slide webbing sling under floor.
3. Reinflate dinghy.
4. \*Inflatable floor models may require a stiffener to be placed under floor with webbing sling. This must be custom made to fit dinghy

# 1.5



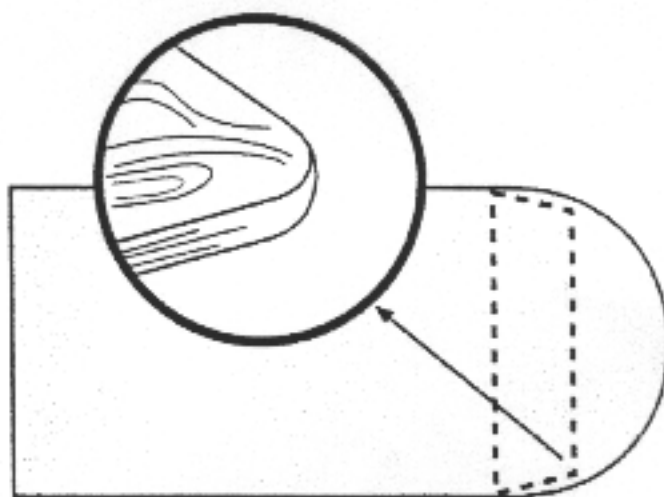
Deflate dinghy and  
remove inflatable floor.\*

\*Some inflatable dinghys  
are designed with integral  
floors which are not removable.

# 1.6

Make a floor stiffener out of  $\frac{1}{4}$ " plywood.  
Use floor as pattern. Stiffener should be at least  
8" wide.

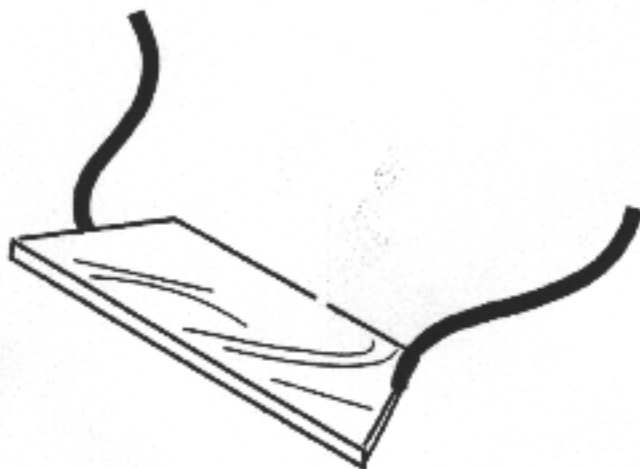
Round edges of plywood so  
they can not chafe dinghy.



Top view

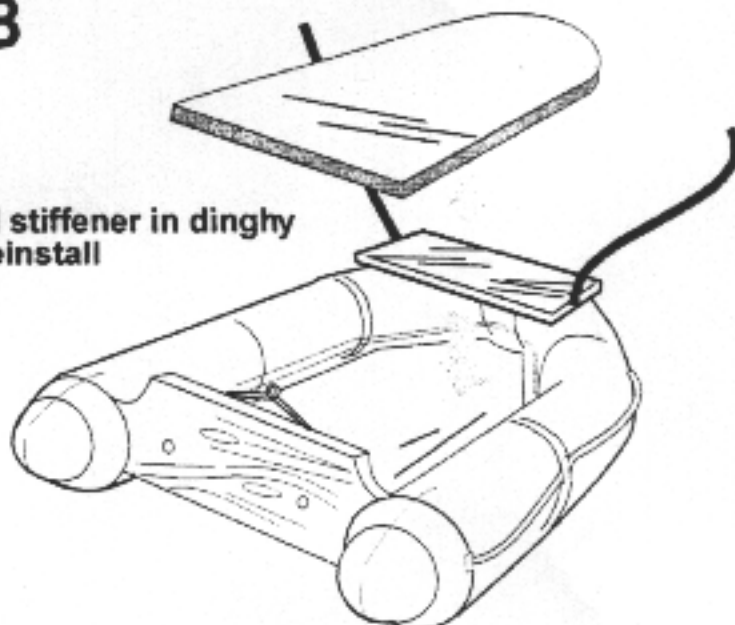
# 1.7

Glue webbing slings to under-  
side of stiffener.



# 1.8

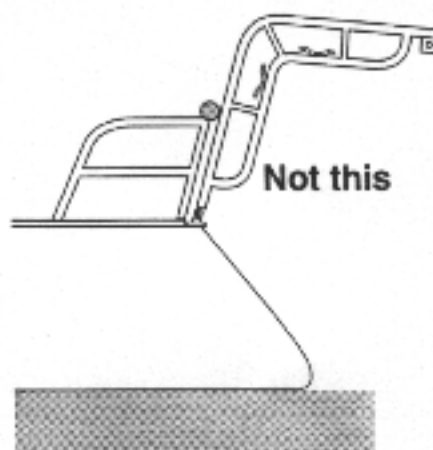
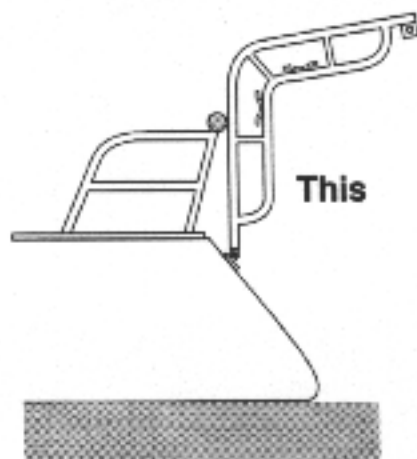
Install stiffener in dinghy  
and reinstall



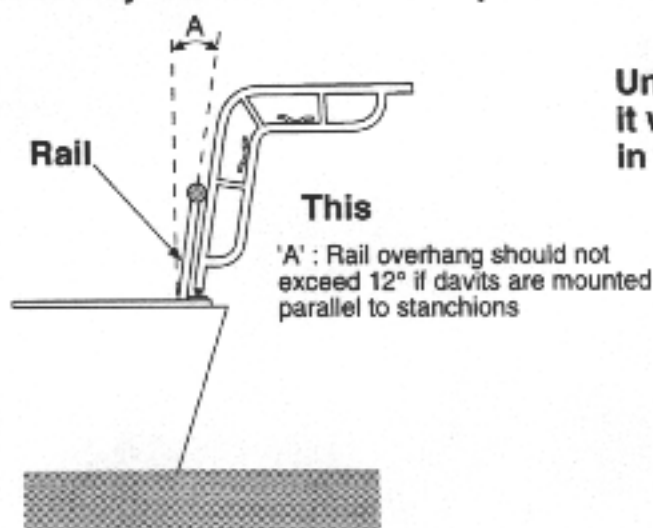


## 2.0 DECIDE ON PLACEMENT OF DAVITS

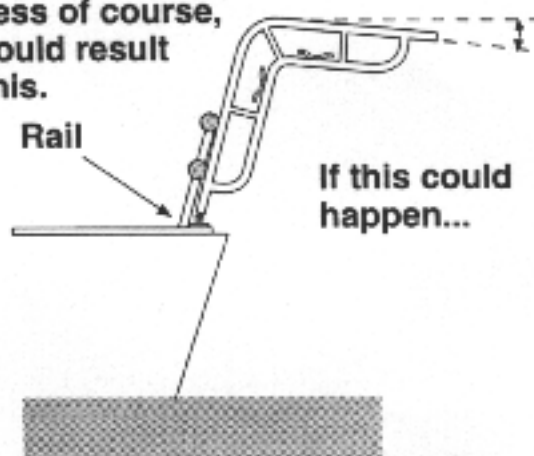
On most yachts with straight and reverse sheer transoms the davits look best when installed perpendicular



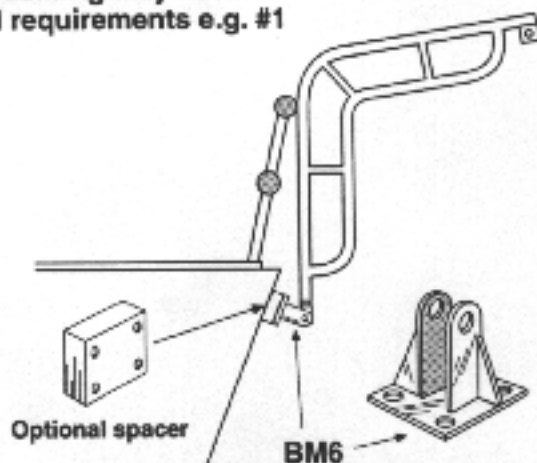
Many yachts, particularly yachts where the davit base mounts on teakcaprails, the davits may look best with davit parallel to stanchions.



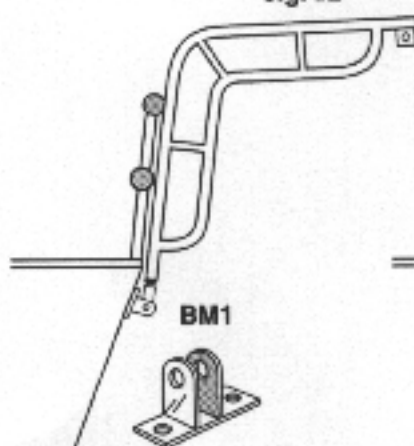
Unless of course, it would result in this.



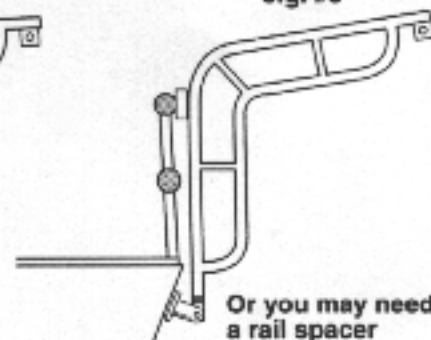
Your mounting may have special requirements e.g. #1



e.g. #2



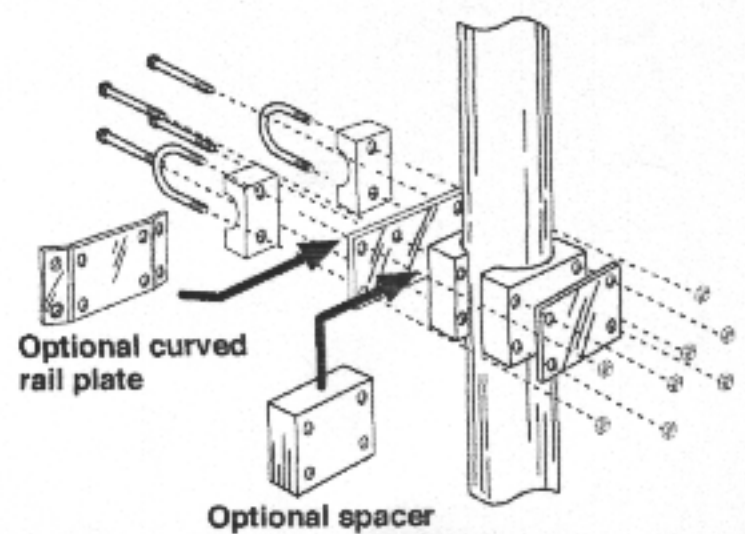
e.g. #3



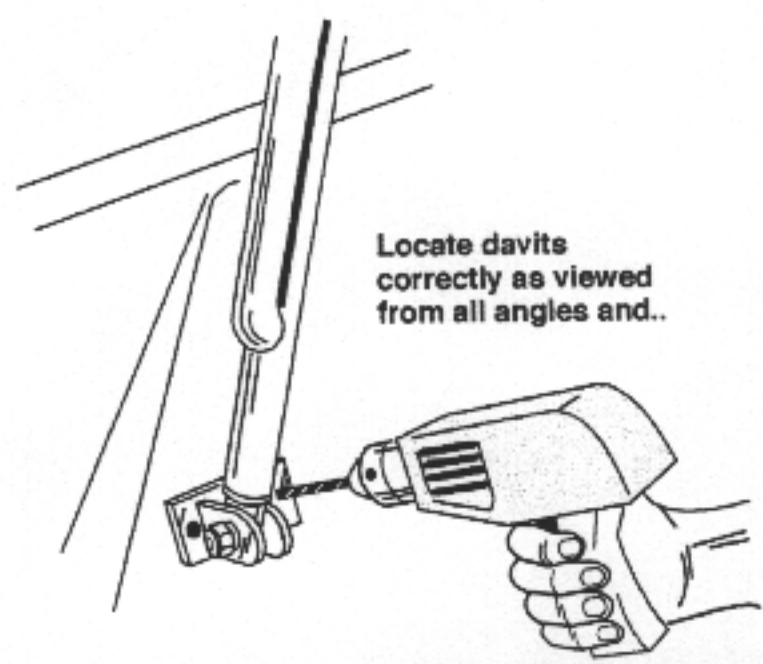
\* The distance from the top rail to your proposed base mount location will determine if you need a 30" or a 40" davit



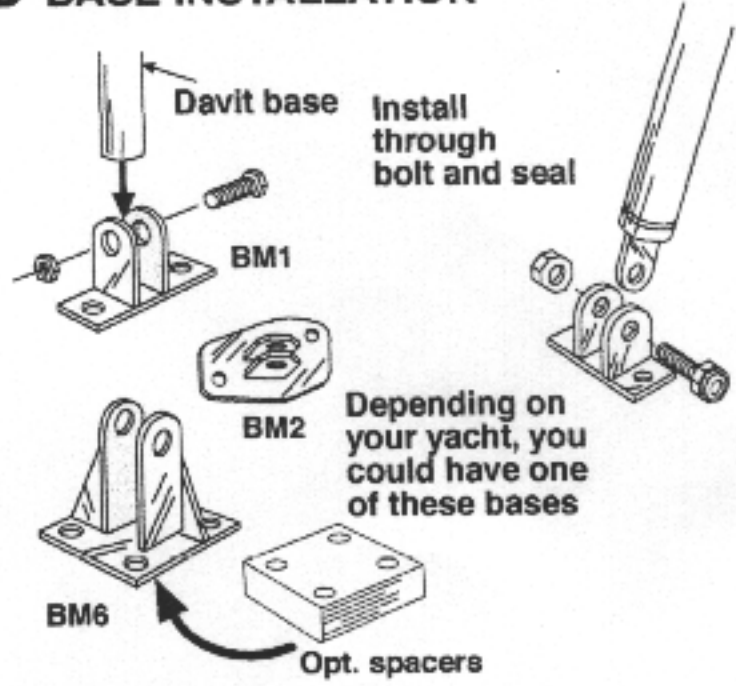
# 2.1 RAIL CLAMP INSTALLATION



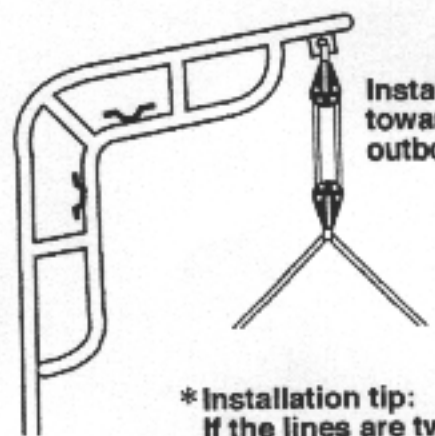
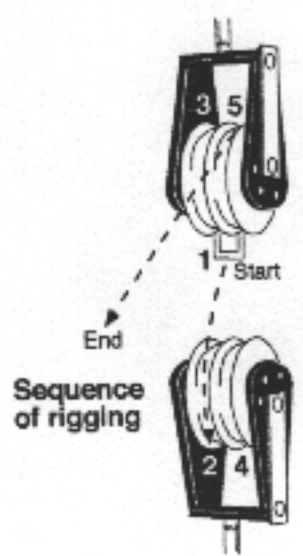
# 2.2 POSITION YOUR DAVITS VERTICALLY



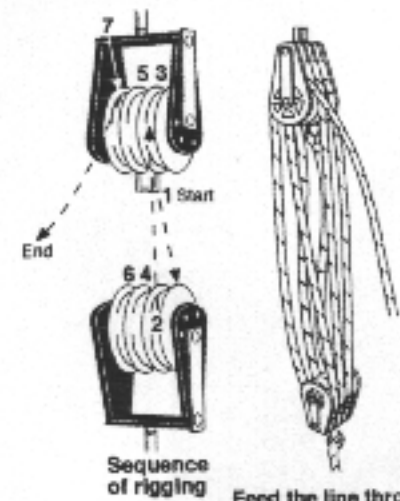
# 2.3 BASE INSTALLATION



# 2.6 REEVE DAVIT FALLS AND INSTALL ON DAVITS



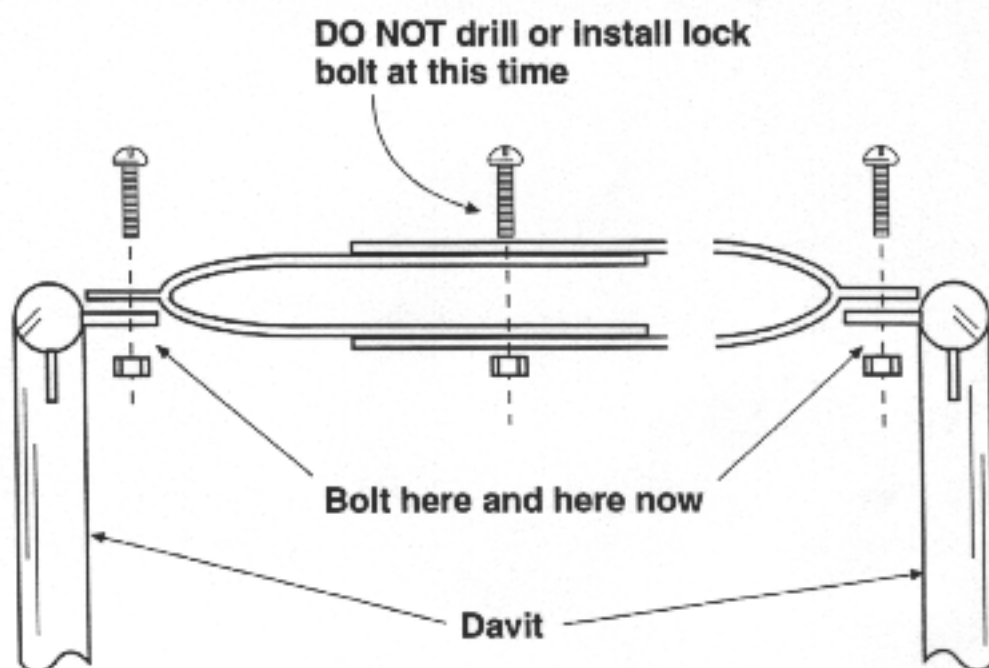
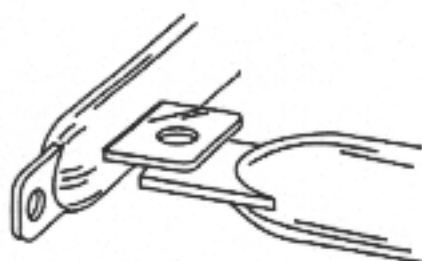
\* Installation tip:  
If the lines are twisted-try  
towing it behind boat for  
short distance



Feed the line through  
the block

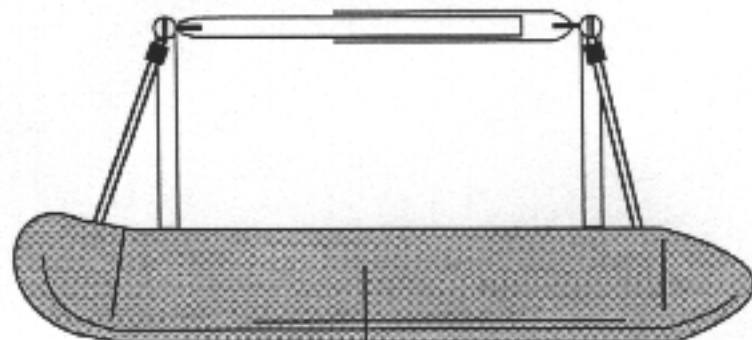
Feed the line through  
the block

## 3.0 CONNECTION STRUT

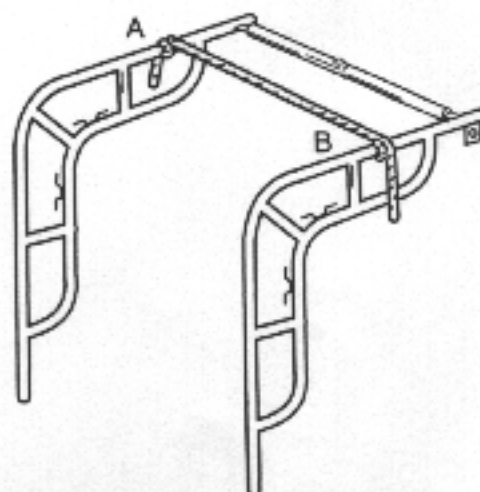


## 3.1

Tie the davits together temporarily with a length of rope and hoist dinghy

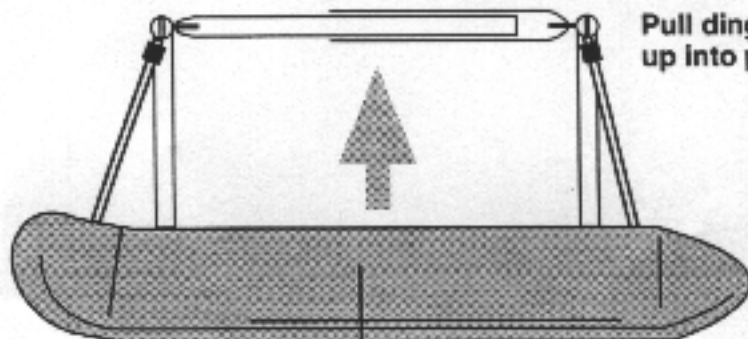


Pull rope tight until davit falls are at the correct angle



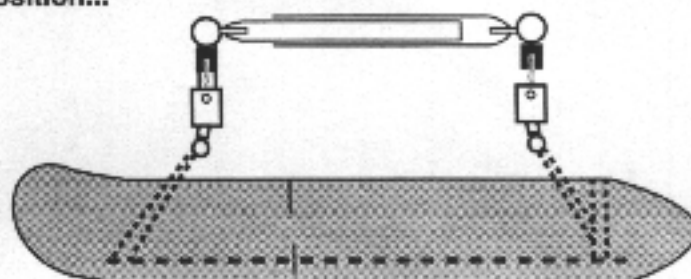
## 3.2

VIEW A



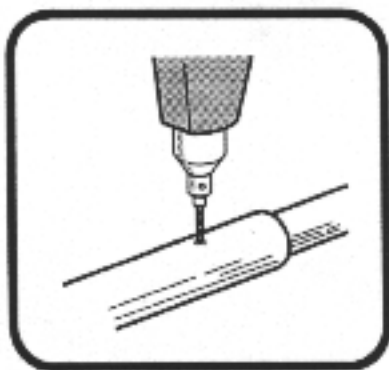
Pull rope tight to shorten strut as required until davit falls are at the correct angle

VIEW B



Pull dinghy up into position...

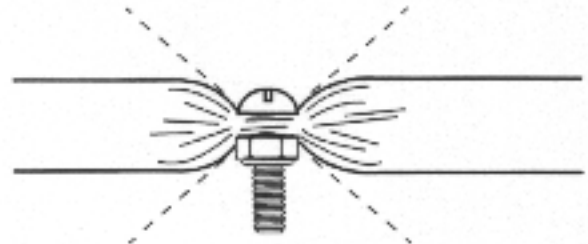
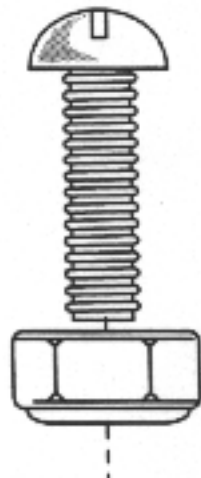
### 3.5 DRILL AND LOCK CONNECTING STRUT



C. Drill and lock

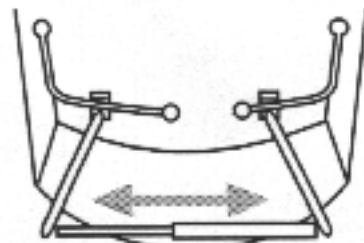


Phillips head

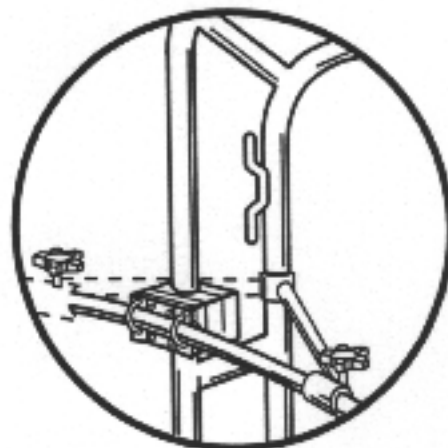


Gently snug nut to avoid collapsing tubing

### 4.0 INSTALL THE LOCK STRUTS



Center davits on yacht

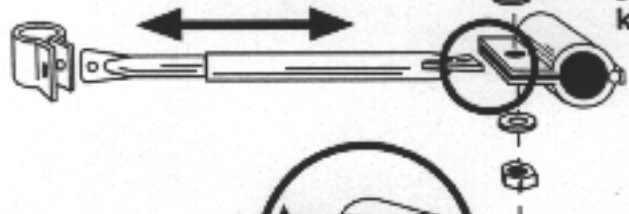


Struts may be located to the outboard or to the inboard side.

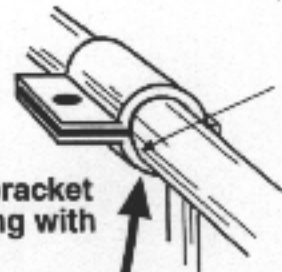
Struts may clamp to horizontal rail or to vertical rail tube.

Hinged rail clamp with knob always used when installing on horizontal rail to prevent slippage.

B. Install clamp without knob on davit



A. Mount bracket on railing with knob



Change mount bracket with knob on yacht railing



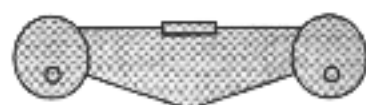
Standard bracket



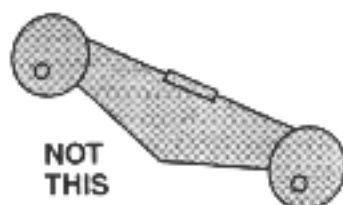
Hinged bracket

## 5.0 PULL THE DINGHY UP AND IN UNTIL THE DINGHY IS:

### A. Level

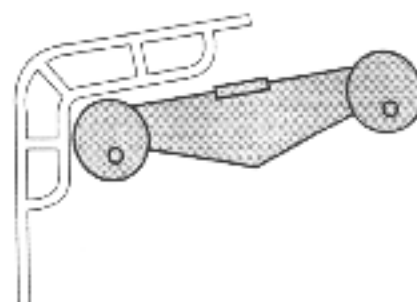


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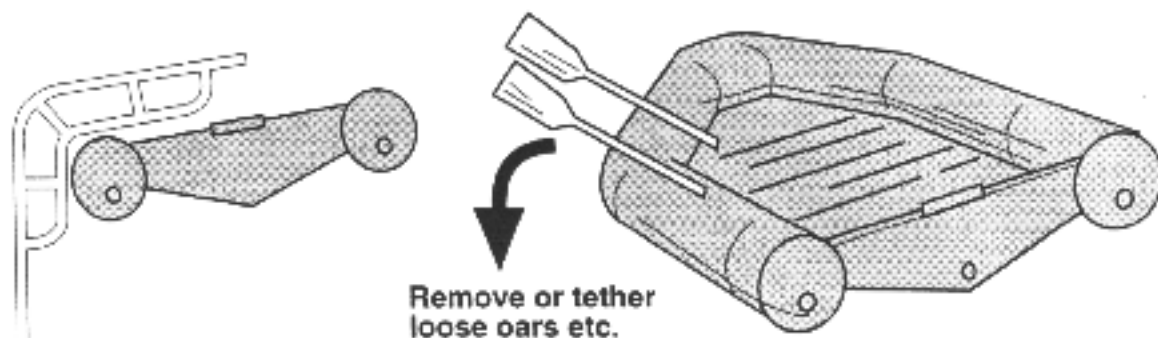


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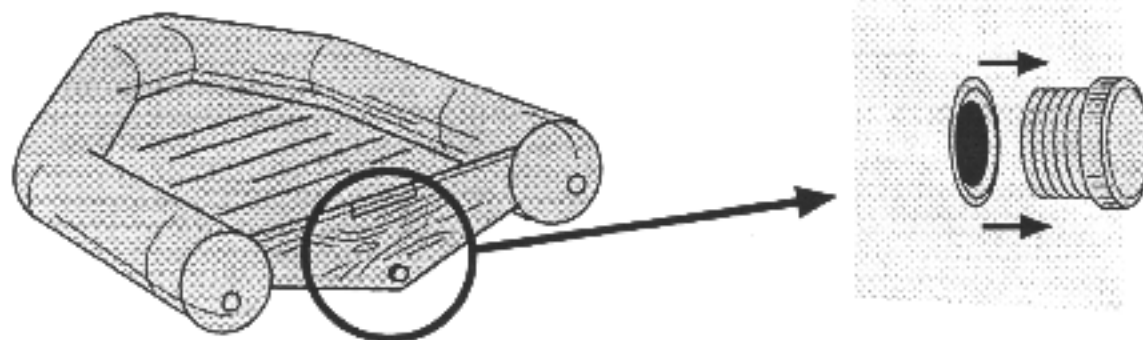
### B. Snugly in the radius of the davit arm



## 6.0 TIE DINGHY SECURELY AND REMOVE ALL FREE MOVEMENT



## 7.0 REMOVE DINGHY'S DRAIN PLUG!!



### 7.1 ON DINGHYS WITH RUBBER FLOOR, ENSURE THAT DRAIN PLUG IS AT THE LOWEST POINT WHEN DINGHY AND YACHT ARE LEFT UNATTENDED

