# Manual for Heavy Duty Davit (tilting and with wheels)


VERSACHOCK®



FN: 552603b (LG f. ZRS Graz)
VAT No.: ATU76757859

Bank: RB Graz-Mariatrost
Swift/BIC: RZSTAT2G223
IBAN: AT08 3837 7000 0420 9185

1st-Relief GmbH
Schulgasse 5
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Content





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## 1 Preamble

Only use our product after you have carefully read and understood this description. Save this description for future reference.

### 1.1 Attention!

- Read this description carefully to gain complete knowledge of the product and how it works.
- Operate the product properly in accordance with these instructions to avoid injury or damage to persons or the product.
- Never operate the product based on assumptions.
- Have the operating instructions available and consult them if you have any doubts about carrying out an activity.
- The description must be accessible to all operating and maintenance personnel.
- In addition to the description and the binding accident prevention regulations applicable in the country or location of use, the recognized rules of technology for safety and professional work must also be observed.
- The user may not make any additions, modifications, or changes to the product without the permission of 1st-Relief GmbH.
- Always only use trained or instructed personnel!
- The product may only be used as intended and in perfect safety-related condition!
- The operational safety of the device is only guaranteed when used as intended!
- This description must be always accessible to everyone who works with the product!
- The user must familiarize himself with the safety regulations before using the device and follow all instructions given for safe operation.
- The copyright to these operating instructions remains with 1st-Relief GmbH.

### 1.2 Attention (especially with lifting tools)!

- Read a basic manual on lifting tools, cranes, and winch operating techniques to understand this product and how it works.
- Never operate this product if you are under 18 years old.
- Never operate this product under the influence of drugs, alcohol, or medication.
- Never exceed the rated capacity of the product, otherwise property damage, personal injury or even death may occur.
- No liability is assumed for improper use!
- The maximum lifting height range specified in this description must not be exceeded!
- The maximum load capacity stated in this description must not be exceeded!
- Never lift goods that exceed the rated load capacity of the lifting tool.
- Never lift goods unless the base is securely anchored.
- Never lift chemical goods that may directly or indirectly damage parts of the lifting tool (e.g. corrosion of the rope or other parts).
- Never lift inadequately packaged chemicals (chemical and fire hazard).
- Failure to follow this description could result in serious injury or death.
- Always remove your jewellery and wear safety glasses.
- Never lean over a battery when connecting.
- Always make sure the area you are drilling is clear of fuel lines, fuel tanks, brake lines, electrical wires, etc.
- Do not route electrical cables over sharp edges, through or near moving parts, or near parts that can become hot.
- Always insulate and protect all exposed cables and electrical connections.
- Always mount cable lugs as described in the assembly instructions.
- Always choose a mounting location that is sufficiently stable to withstand the maximum lifting capacity of your lifting tool.
- Always use manufacturer-approved switches, remote controls, accessories, and installation components.
- Always use hardware grade 8.8 or better, never weld screws, and always use spring washers and flat washers when screwing nuts onto screws.
- To avoid injury to your hands and fingers, always wear thick leather gloves when handling a rope or strap.



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- Never let the rope or strap slip through your hands.
- Before operation, make sure all connection points are well assembled and in order.
- People must not stand under the lifting device during operation (recommended safety distance: at least 50 cm from the goods and the lifting device).
- Do not violate the operating regulations and handle the lifting tool with care.
- Never use the lifting tool to lift or transport people or animals.

## 1.3 Important additional information

The warnings and notices in this description cannot cover all possible conditions and situations that may occur. It is the user's responsibility to use the product with common sense and caution. These are factors that cannot be built into the product but must be provided by the operator.

## 1.4 Disposal

Dear Customer,

Please help to avoid garbage. If you ever want to part with this product, please remember that many components are made from valuable raw materials and can be recycled. Therefore, do not dispose of it in the garbage container, but take it to your collection point, because the correct disposal of the product after it is functional is the responsibility of the operator. Please note the relevant regulations in your country. As part of the EU directive on the disposal of old devices, the device is accepted at municipal collection points or recycling centres or can be returned to a specialist retailer that offers a take-back service. Proper disposal helps protect the environment and prevents possible harmful effects on people and the environment. Other parts made of rubber, plastic or cables must be delivered to companies specializing in the disposal of industrial waste. If you are unsure, ask your local waste collection point.



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## 2 Validity, product images

This manual is valid for the VersaChock Heavy Duty Davit (tilting and with wheels) from 1st-Relief:

- Heavy Duty Davit (tilting and with wheels) Article number: 1st23VCTILTHD

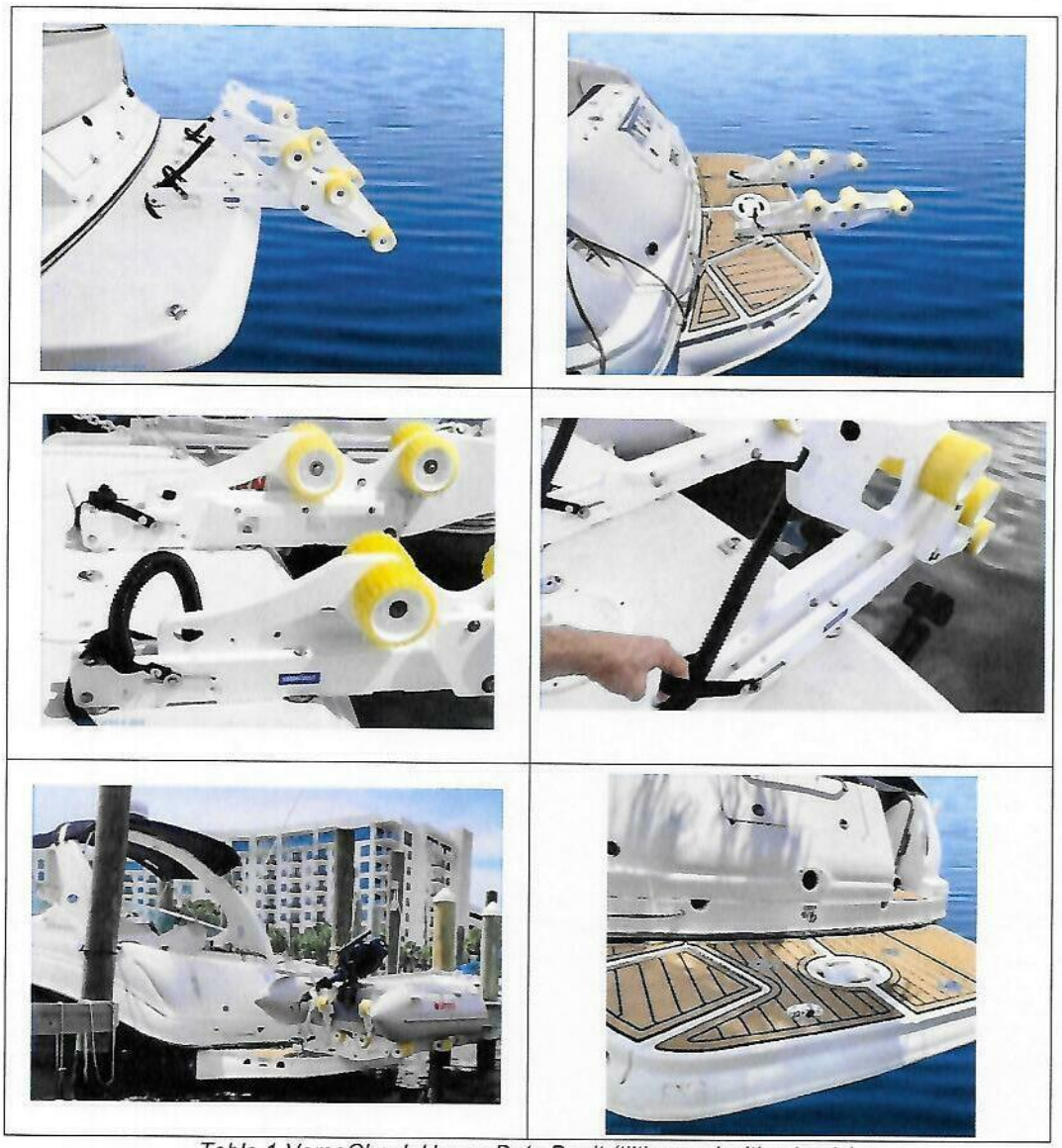

*Table 1 VersaChock Heavy Duty Davit (tilting and with wheels)*



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## 3 Specifications

3.1 Heavy Duty Davit (tilting and with wheels) (1st23VCTILTHD)

- 2 removable tilting davit arms made of HDPE/Stainless steel hardware.
- 4 low-profile stainless steel threaded deck plates, bolts, and wrenches included.
- Self-latching mechanism for hands free locking when davit arms are rotated down (hitch pins still need to be inserted for final securing).
- Mini wrenches attached to hitch pin lanyards for quick removal/attachment
- Capacity: 295 kg (650 lbs) on standard platform mounting;
  Capacity: 204 kg (450 lbs) on narrow platform mounting
- 12 Large TPR wheels provide easy loading and hull support
- Dimensions (approximate): 48 inch L x 5 inch W x 10 inch H.
- Tie downs and pad eyes sold separately.
- Winch options are sold separately.
- Twenty-four 1 / 4 inch screws required for installation (not included).

## 4 Installation

4.1 Important installation information

Please note the following important installation instructions:

- We strongly recommend that the product specification, use and installation be checked by a professional technician before purchase and that the installation is carried out by the same person.
- This manual is for advice only. THERE ARE TOO MANY HULL VARIATIONS IN ORDER TO SPECIFY AN EXACT INSTALLATION OR AN INSTALLATION LOCATION FOR EVERYONE.
- Not intended for use in extreme conditions (i.e.: high forces from water, wind, etc.)
- Tie downs must be installed in order to secure watercraft as described in chapter 4.4. Be sure to install at least 2 stern tie downs, and one bow tie down. We also recommend installing one tie down mid ship, which can greatly help keep the dinghy from rocking, as well as act as a spring line.
- Before each use, make sure that the davit arms are securely inserted into the deck plates.
- Before each use, make sure that the chock assemblies are firmly fixed with locking screws.
- Check the integrity of the hull, including hull thickness, chine and stringer locations, making sure proper support will be provided.
- Check where outboard engine will rest. A skid plate may be needed to protect deck. (Article number 1st23VCSKEG; https://www.1st-relief.com/en/outboard-skeg-rest.html ).
- Remove the davit arms when not in use.
- Rinse with freshwater after each use, as saltwater and other contaminants can cause staining, even though we use the most corrosion resistant materials.
- Under no circumstances should person/s or animal be allowed in watercraft whether loading, or in stored position.
- Do not add additional gear, etc. that may subject the watercraft to be over the maximum weight capacity.
- Always pull drain plug when stored to prevent excess water to accumulate, which could cause excess weight.
- Be sure the attachment bolts are secure before each use.
- Please note there are two spacing options. Standard spacing for most swim platforms and an optional spacing for narrower swim platforms. Standard spacing holes are provided in all models. For narrower swim platforms, the optional holes must be drilled by installer (see diagrams in the following pages).
- FAILURE TO FOLLOW THE ABOVE MAY RESULT IN DAMAGE, LOSS OR SERIOUS INJURY!



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## 4.2 Attaching the rollers to the arms of the davit

For this Davit the rollers must be attached to the arms of the davit. To do this, use the bolts and plastic wheels provided. The stop nuts provided must be tightened firmly. The rollers should still rotate easily, but the secure fit must be guaranteed.

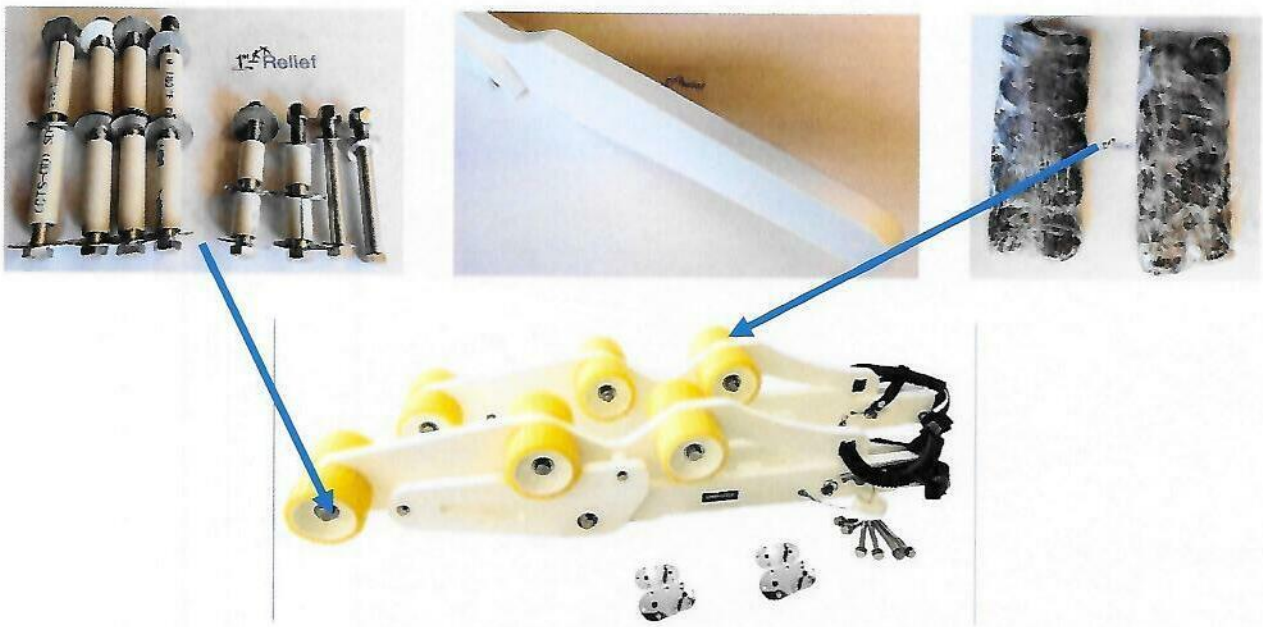

*Figure 1 Installation of the rollers on the arms of the Davit*

## 4.3 Positioning

Calculate the maximum size of the tender for your platform. A good starting point is 3 feet for an 8-9 foot tender and 4 feet for a 10-12 foot tender. These stops are for reference only as boats have many variables that can affect the clearance for proper support. Centring the davit arms on the platform also allows the tender to be positioned facing port or starboard (if possible). This can be helpful in certain docking situations.

Check:

- That there is sufficient floor material/structure under the davit arm positions of the yacht to support the weight and force of the davit and tender.
- That there are no obstructions or clearance issues for the davit, deck plates and deck plate bolts.

Use the following 4 questions to determine whether your dinghy with our tilting davit fits on your platform:

- Your platform provides a minimum space of 15 inch?
  ➔ Great, our tilting davit can be mounted in general!
- Multiply your platform depth x 2 and add 3 inches
  (i.e.: 30 inch platform depth x 2 + 3 inch = 63 inch spacing)
  Is your Dinghy Beam equal or less the result?
  ➔ **STANDARD DECK PLATE SPACING** is your solution
- Multiply your platform depth x 2 and add 10 inches
  (i.e.: 30 inch platform depth x 2 + 10 inch = 70 inch spacing)
  Is your Dinghy Beam equal or less the result?
  ➔ **OPTIONAL NARROW DECK PLATE SPACING** is your solution
  (Note: The rear holes in the davit arms are not factory drilled)
- Is your Dinghy Beam greater than the last result?
  ➔ Your DINGHY IS TOO WIDE for this solution.



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### 4.3.1 Standard deck plate spacing

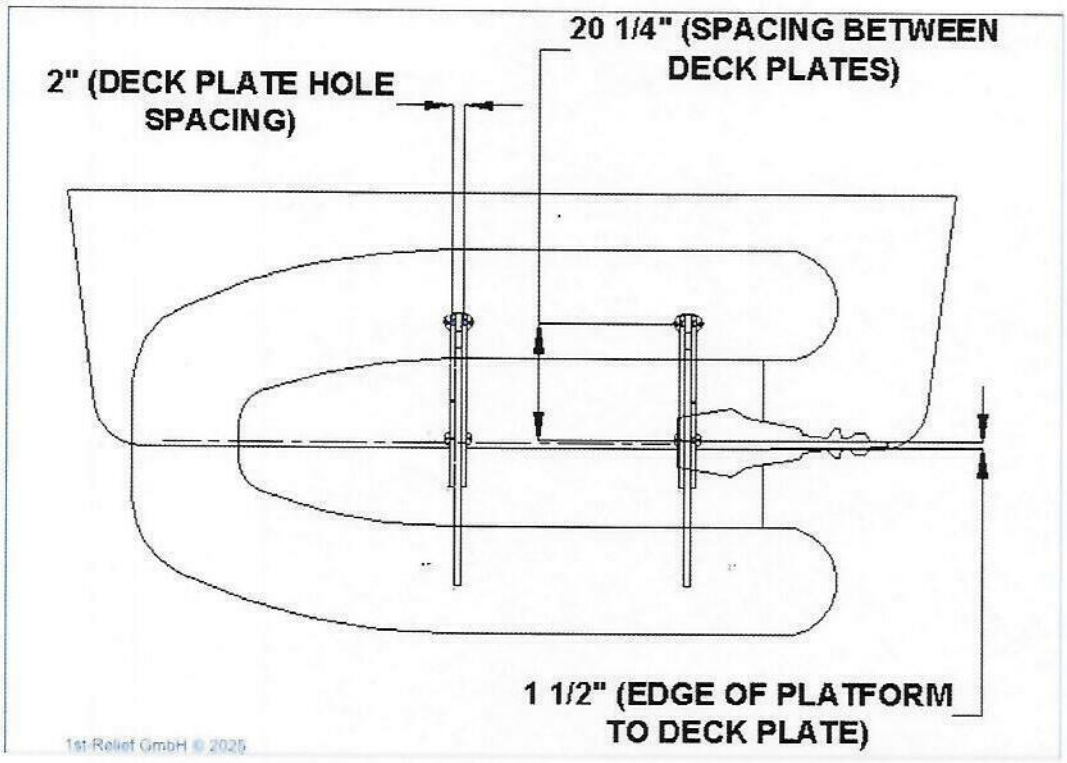


*Figure 2 Standard Deck Plate Spacing - Top View*

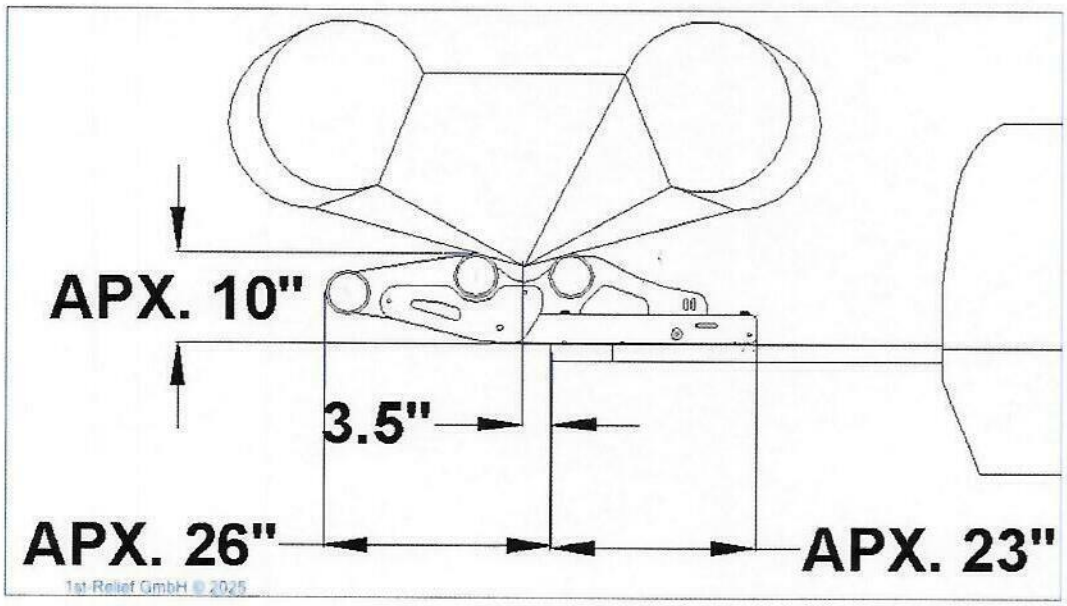


*Figure 3 Standard Deck Plate Spacing - Side View*



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### 4.3.2 Optional narrow deck plate spacing

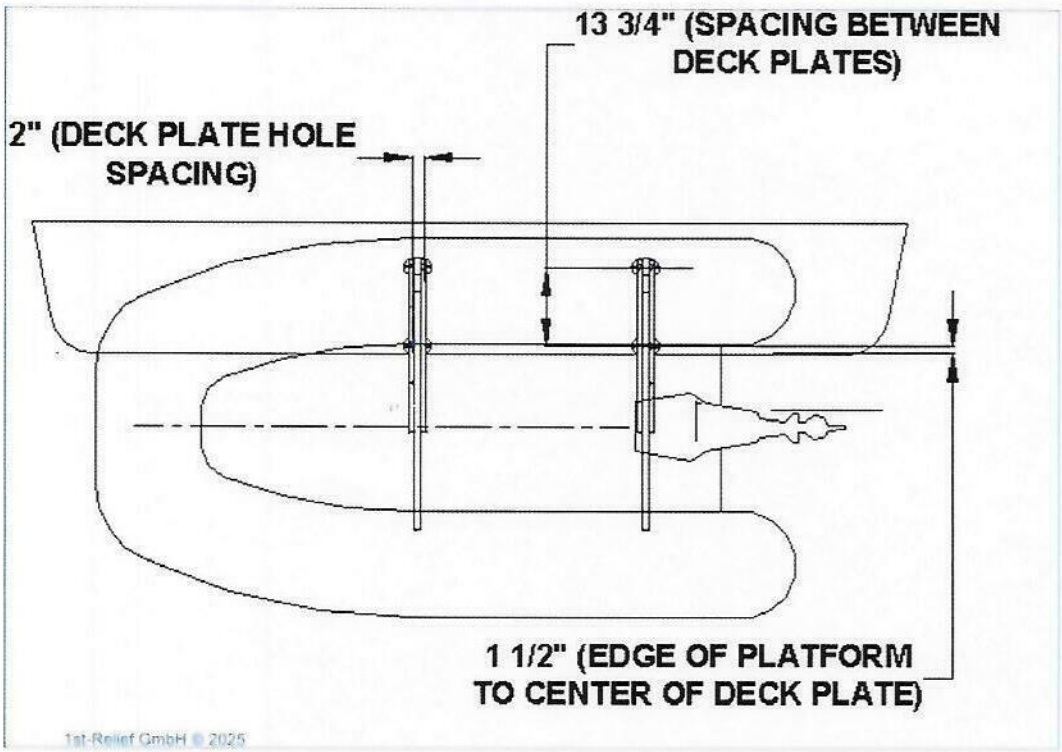


*Figure 4 Narrow Deck Plate Spacing - Top View*

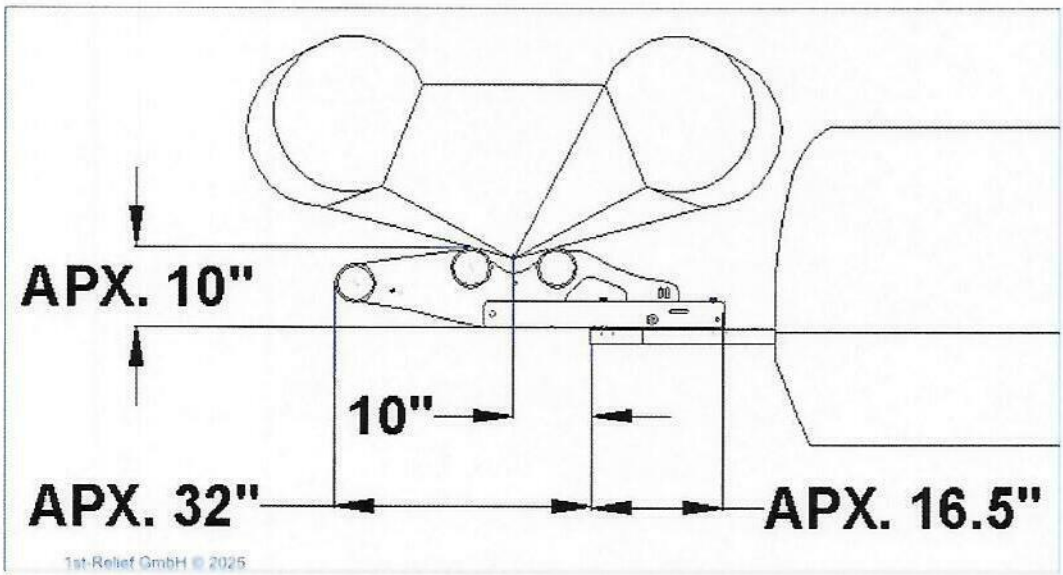


*Figure 5 Narrow Deck Plate Spacing - Side View*



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## 4.4 Step-by-step assembly instructions

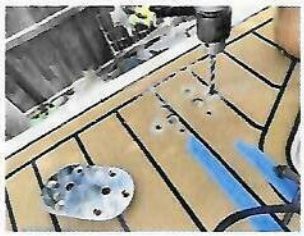
The exact position of the davit arms is now determined according to the previous chapters.

1. Once the davit arms are in the desired position, mark the four deckplate holes (3/4" holes for the domed nuts), for the deck plates closest to the edge of the platform.

2. Drill a 3 / 4 inch hole in each of the 4 locations.

3. Insert the threaded deck plates and mark the twelve screw holes.

4. Remove the deck plates and drill the twelve screw holes.



5. Apply sealant, as desired. Install deck plates with twelve screws, backing plates and/or washers and nuts.

6. Temporarily install davit arms with bolts into deck plates near platform edge and mark forward mounting hole locations by using a 7 / 16 inch drill (only drill far enough to make a mark. Do not drill deep/through).

Repeat steps 6-10 to install threaded deck plates.

DONE!



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## 5 Tips for the operation of the tilting Davit

### 5.1 Get Familiar with your Davit

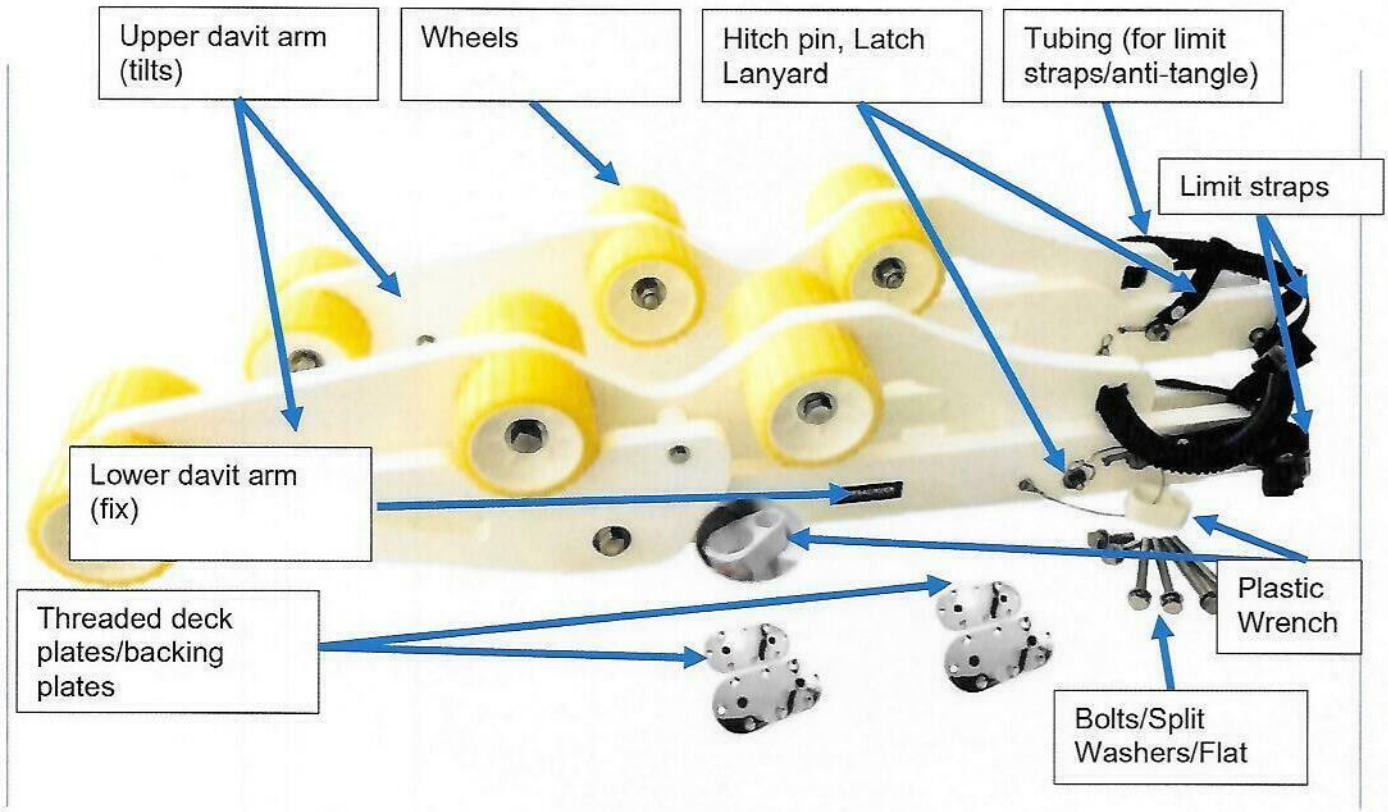


*Figure 6 Davit parts*

### 5.2 Attach davit to threaded deck plates

Install each davit arm using the three 3 / 8 inch long bolts and one 3 / 8 inch short bolt (included), as shown below. Tighten bolts with 9 / 16 inch wrench, or with plastic wrench provided.


*Figure 7 Attach Davit*



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## 5.3 Tighten

Tighten using a socket.

*Figure 8 Tighten Davit*

## 5.4 Remove lynch

Remove the lynch pin (or lock ring) then the hitch pin from each davit.

*Figure 9 Remove lynch*

## 5.5 Re-Insert lynch

Be sure to reinsert the lynch pin (or lock ring) in the hitch pin to prevent loss.

*Figure 10 Re-Insert lynch*

## 5.6 Using latch straps

Pull latch straps to release davit arms. Adjust limit straps so the tips of the davit arms are just below the centre of the dinghy tubes.

*Figure 11 Using latch straps*



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## 5.7 Dinghy lock into place

Once dinghy is loaded onto the davits, rotate the arms downward until both latches engage.

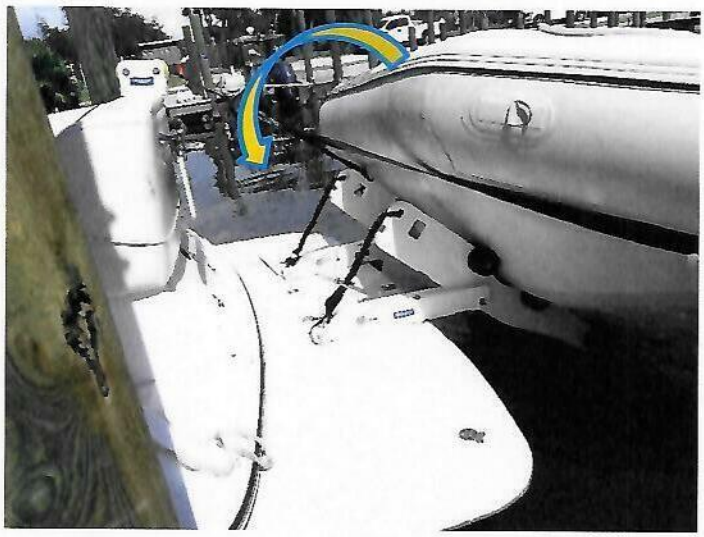

*Figure 12 Dinghy lock into place*

## 5.8 Re-insert hitch pins and hair pins

Insert hitch pins and hair pins to completely secure dinghy. Be sure to secure with tie downs.

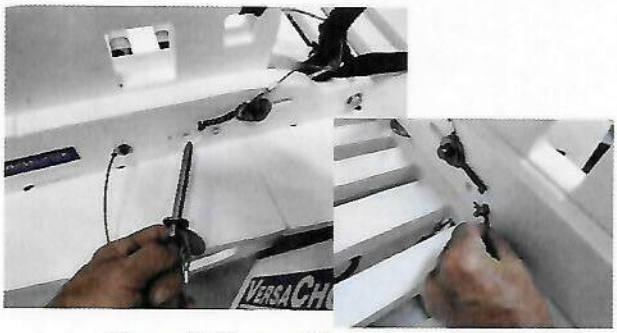

*Figure 13 Secure Dinghy*



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## 5.9 Install tie downs

Install the tie downs and consider the tips in the earlier chapter.

*Figure 14 tie downs front*

*Figure 15 tie downs rear*

## 5.10 Tie Down Configuration

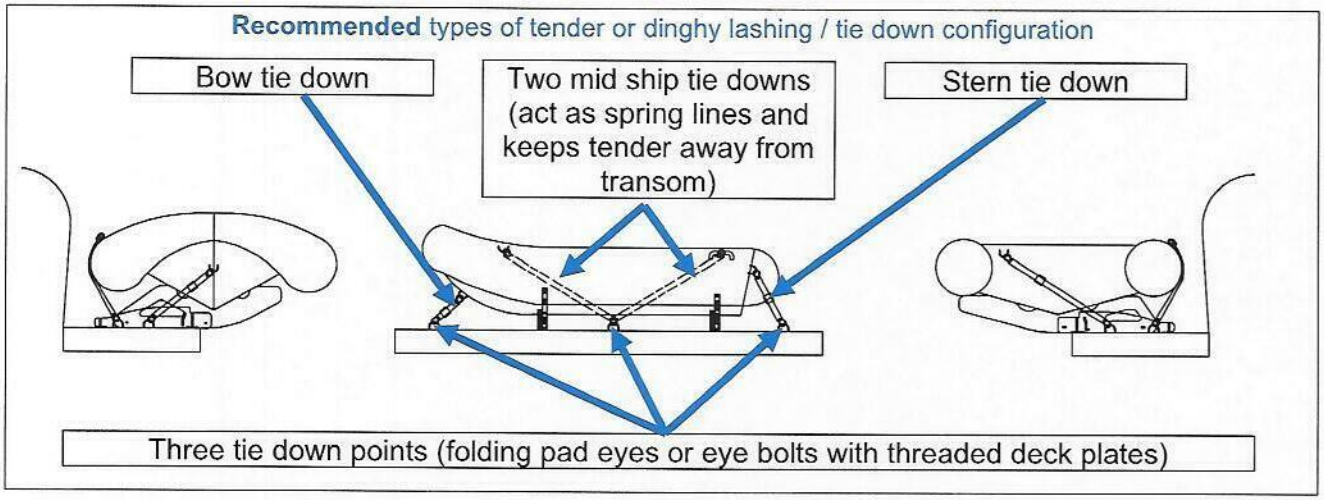


*Figure 16 Recommended Tie Down*

## 5.11 Size of tender or dinghy related to the yacht

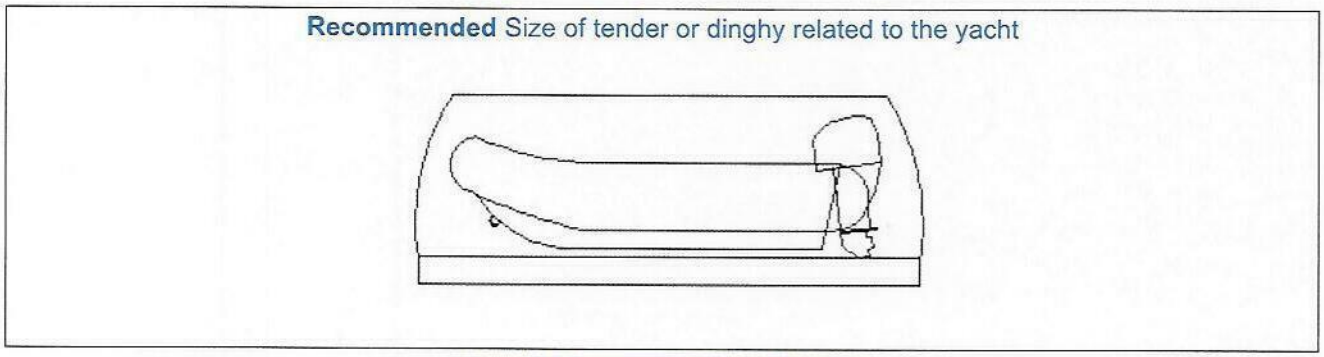


*Figure 17 Recommended Tender Size*

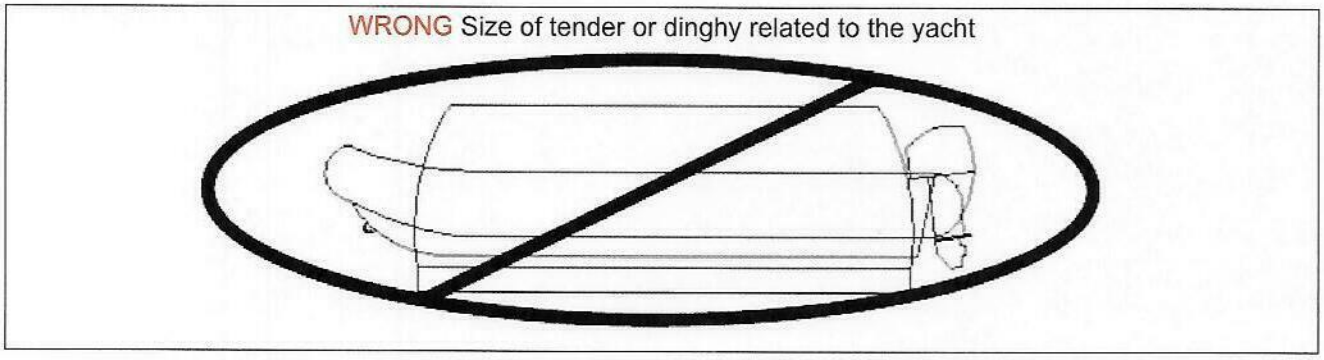


*Figure 18 Wrong Tender Size*



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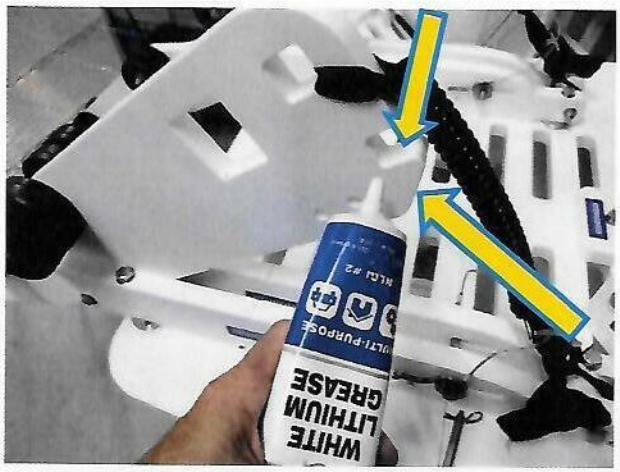
## 5.12 Other Helpful Hints

### 5.12.1 Grease, Cleaning

- Periodically, apply grease (white lithium works well) onto the latch surfaces.
- Rinse system with fresh water after use, especially if used in salt water.
- Periodically, apply anti-corrosion protectant to all hardware.




### 5.12.2 Latch Cable

Be sure latch cable release is routed behind limit strap, so cable does not get pinched under davit arm.

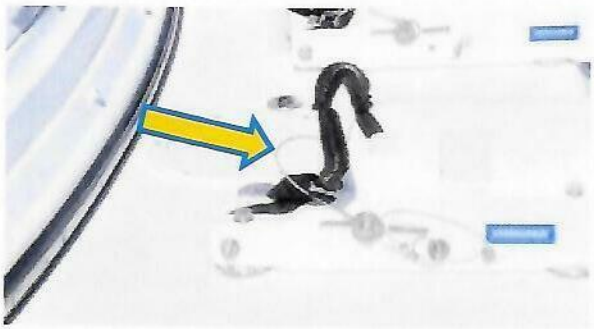


*Figure 19 latch cable release is routed behind limit strap*

## 5.13 Enjoy

Enjoy the usage of your tilting Davit.



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## 6 Additional information, liability

### 6.1 Updates and other tips

For updates and additional tips, see:
https://www.1st-relief.com/en/equipment-hardware/brackets-davits-load-securing-devices/

### 6.2 Liability

Installation and use of this product are at the customer's own risk. We strongly recommend that the product specification, use, and installation be checked by a professional technician prior to purchase and that the installation be carried out by them.
Your safety and customer satisfaction are our top priority!

### 6.3 Acknowledgments

Thank you for choosing our products. Together with our manufacturer VersaChock, we strive to deliver the most innovative products of the highest quality. VersaChock products are manufactured by Jefferson Design Inc. of Tampa Bay Florida. We hope you will enjoy our products for many years to come. We look forward to your
Comments and feedback!
Your satisfaction is our number one priority! If you have any questions, please contact our customer service office@1st-relief.com



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