



U.S. Patent No. 6,782,842

INSTALLATION INSTRUCTIONS

Manufactured by:
La Conner Maritime Service
Maritime Fabrications, Inc.
920 West Pearle Jensen Way
LaConner, WA 98257

Phone: 360-466-3629
Fax: 360-466-3632
Email: sales@laconnermaritime.com

Please Read

Overview

Thank you for choosing the Hide-A-Davit for use on your vessel. Please take a few minutes before starting installation to familiarize yourself with the davit parts and the installation instructions.

Many different installations have been considered when making these instructions, but due to the variations of vessel models, and after-market hardware add-ons, questions may arise that are not covered by the scope of this instruction manual. It's the installer's responsibility to make the best decision for the installation and/or consult with factory.

Unless otherwise noted, this manual will refer to the vessel being lifted by the Hide-A-Davit as the "tender," and the boat the Hide-A-Davit is mounted to as the "vessel." The Hide-A-Davit will either be referred to by its name or simply "lift."

Fit to Tender

The Hide-A-Davit tender cradle arms are designed to fit the V angle of your tender's hull at the transom, and support the bow of the tender on the keel. The lifting operation work best when both arm angles are the same; it is normal for the bow arm to contact the tender at the keel only. **Warning: The Hide-A-Davit is not intended for use with persons in tender, or for lifting people!** Standard cradle arm options will fit most hard bottom, V-hulled tenders, including RIB's and hard-tube type "RIB" styles. Custom arm variations are available for multi-hull and flat bottomed tenders.

Fit to Vessel

The lift will generally be mounted off center of the vessel's keel. This is necessary to optimize placement of the tender and minimize or eliminate any part of the tender protruding past the side of the vessel while on the lift. The mounting hardware for the lift is versatile in its placement, and can usually be configured around stern thrusters, transom lights, trim tabs, and even outdrives. Care must be taken during installation to ensure that Hide-A-Davit hardware placement does not interfere with operation of any existing hardware on vessel. Consult factory if needed.

Vessel Integrity

Some vessels may not be structurally capable of handling the Hide-A-Davit system. Transom thickness and structure should be a consideration before and during installation. Additional structure to tie the Hide-A-Davit hardware into the stringers or other hull shapes may be necessary, and has been used successfully in past installations. ***It is the installer's / customer's responsibility to ensure structural integrity of vessel Hide-A-Davit is being installed on, and the installation!!***

Warranty

Please see Warranty page at the end of instruction manual.

Hide-A-Davit Installation Instructions

Before You Begin:

- Make sure you have all parts
- Check the parts list
- Understand the function of each part and its location relative to the other parts in the system.
- In case of missing parts, contact the factory at (360) 466-3629

Required tools:

- ✓ Heavy-Duty Electric Drill
- ✓ Center Punch
- ✓ Drill Bits: 5/16", 11/32", 13/32", 7/16", 1/2"
- ✓ Hack Saw, Abrasive Chop Saw, or Metal-Cutting Band Saw
- ✓ Assorted Wrenches--Combination and Socket
- ✓ Bastard Cut Mill File
- ✓ Hydraulic Press or Very Large Bench Vise (for crimping brace ends; you may wish to take the pieces to a metal fabricator for this step)
- ✓ Tape Measure
- ✓ Level
- ✓ Wire strippers/cutters
- ✓ Heat shrink hot air gun
- ✓ Safety goggles and/or face shield

Necessary Supplies (not included with supplied parts):

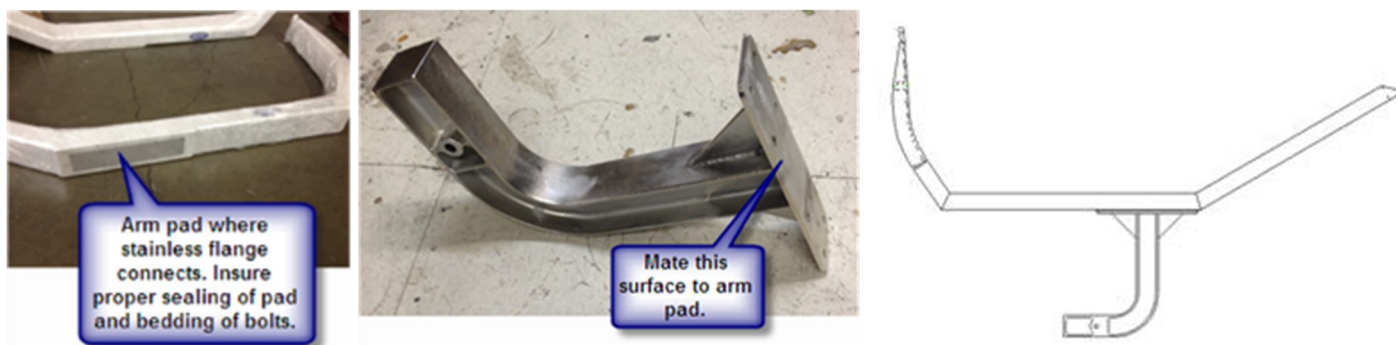
- ✓ Masking tape
- ✓ Sharp Tip Marking Pen
- ✓ Marine corrosion control grease
- ✓ 30 or 50 Amp marine circuit breaker (see step #5)
- ✓ Heat-shrink-type electrical connectors
- ✓ Marine Electrical Cable per Voltage Drop Table (Step 29)
- ✓ Hydraulic Fluid (standard ATF or hydraulic AW32 type)
- ✓ Marine sealant: 3M 5200 or equivalent for all hull penetrations; 3M 4000 or equivalent for hardware assembly.
- ✓ Jack stands and lumber for temporarily supporting system under swim platform
- ✓ UHMW or 1/2" x 2" stainless steel flat bar for shims if necessary
- ✓ Miscellaneous fasteners to supplement those included with kit
- ✓ Other miscellaneous hardware and items as needed

NOTICE

- **Sealing surface prep:** All surfaces on the hull where bedding or sealing compound is used *must have antifouling paint removed*. Failure to do so will result in eventual water intrusion into the hull or laminate, and / or corrosion to metal surfaces. Further protection to core exposed by drilling holes is obtained by coating exposed area with resin.
- **Bonding:** All underwater metal must be properly bonded to vessel bonding system, or have sufficient sacrificial anodes installed to prevent galvanic or stray-current corrosion (electrolysis).
- **Bedding and sealing fasteners:** Bed all parts and fasteners that contact the boat's fiberglass structure with 3M 5200 or equal sealant.
- **Using lubricant on ss fasteners will reduce chances of galling during installation.**

1. Tender Cradle Arms

Tender cradle arm and stainless steel elbow will need final assembly after shipping. Use the supplied 3/8"x1" bolts, washers (and nuts if applicable), 8 each per elbow/arm assembly. Use 3M 4000 or equivalent between arm pad and stainless elbow flange. Ensure that elbow is attached in the orientation shown below.



Note that supplied arms may vary from images shown.

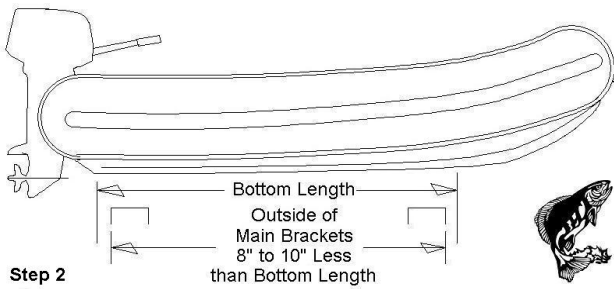
2. Determining the location of your tender and spacing of the two main brackets:

Considerations for locating the tender:

- Tender will typically be centered on swim platform (lift is typically NOT centered).
- Avoid overhanging any part of tender or outboard motor past the side of the vessel.
- Position lift/tender to keep tender weight as close to transom as possible, but ensure clearance between cradle arms and transom when lift is raised is minimum 2".
- Consider positioning bow of tender on same side of vessel as transom door to swim platform. This will allow better access to transom door. In some circumstances other conditions may override this (swim ladders, kicker motors mounted on transom, etc.).
- The keel of the tender should be perpendicular to the keel of the vessel when on lift.
- Personal preference should be factored in when locating tender, along with the above guidelines.

A. Determining hardware location: Decide which side of the vessel the hardware supporting the tender stern will correspond with. Measure 36" inboard from side of vessel and mark with tape on transom or swim platform. **NOTE:** This measurement can and should be adjusted to keep tender centered on swim platform, or to avoid interference with existing hardware. The 36" is a starting reference point.

- B. Determine spacing of the main brackets/cradle arms by measuring the straight portion of the tender keel, as shown in the diagram. The outside-to-outside measurement of the main brackets (not including brace tube mount tabs) should be 8" to 10" less than this "straight keel" dimension. **Locate main bracket supporting tender stern approximately 4" from tender transom.**



- C. From the tape mark on the vessel transom made in step A, and using the main bracket spacing measurement from step B, mark this point on the transom or swim platform of the vessel with tape. These two tape marks will be the location of the main brackets and cradle arms on the vessel. If these locations interfere with existing hardware, adjustments can be made.

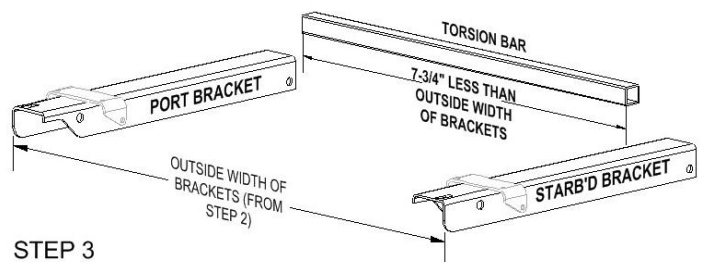
Remember: appropriate weight distribution on cradle arms is essential for lift operation, and should be considered when making adjustments to hardware locations. This is particularly important with tenders that have heavier motors and tend to balance closer to the tender transom.

- D. Temporarily assemble main brackets and arm sockets, and support with blocks or stands at tape locations to check for any potential fit or clearance issues (see picture). Fore/aft position of main brackets is not critical at this point, but torsion bar sockets should be in-line with each other, and main brackets should be parallel to keel of vessel.

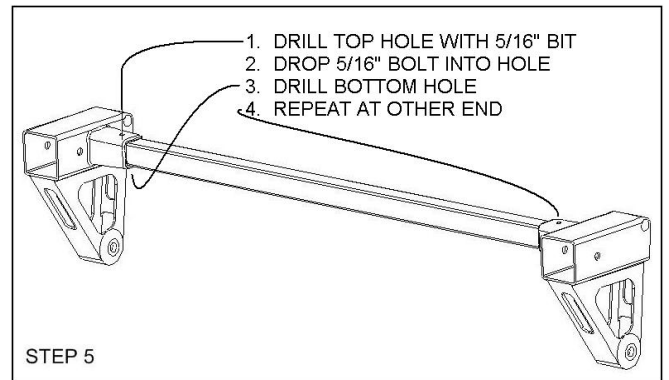
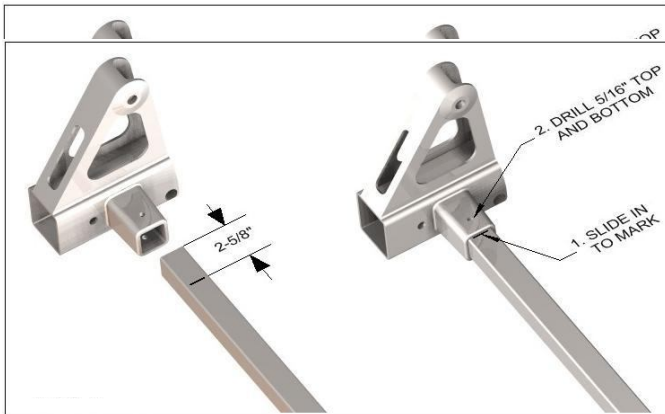


3. Mounting Main Brackets and Torsion Bar

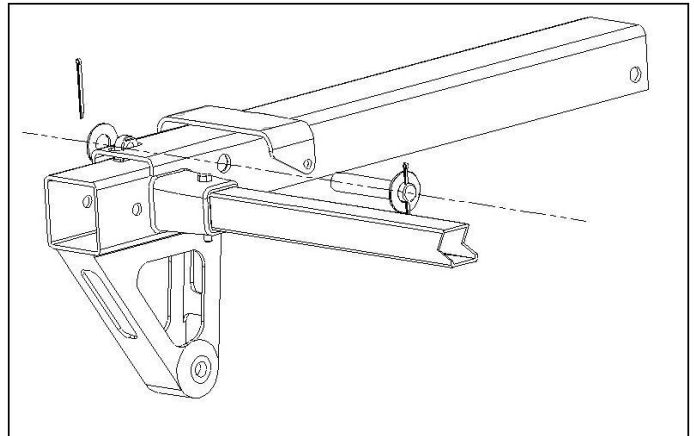
- A. Subtract 7-1/2" from the outside width of the main brackets determined in step 2.D. Cut the square torsion bar to this length. De-burr the cut ends of the torsion bar.



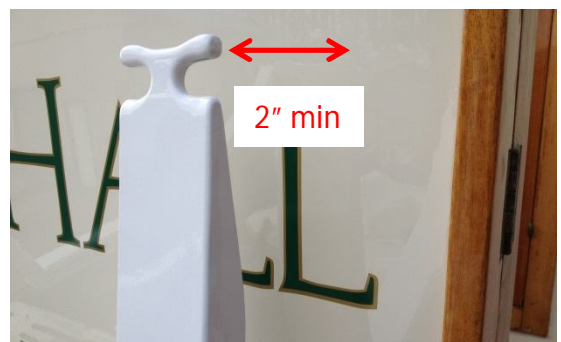
- B. Mark the torsion bar at 2-5/8" from each end. Slide the torsion bar into the receivers on the arm sockets so marks are even with the ends of the receiver tubes. Drill 5/16" holes at one end, then insert 5/16" bolt before drilling holes on opposite end. It is recommended to drill from each side of torsion bar receiver to ensure best alignment of hole for through bolting (see illustrations). **NOTE:** Ensure no portion of the torsion bar protrudes into arm socket area.



- C. Bolt the torsion bar to the arm sockets with two 5/16" x 2-1/2" bolts. **NOTE:** the bolts used to secure the torsion bar can also be used to secure lanyards for 1/2" diameter cradle arm securing pins, and 3/8" diameter safety pins. Alternately, these pins can be attached to the torsion bar loosely with a plastic zip tie. Ensure that pins will not interfere with lift operation. Connect the arm sockets and torsion bar to the main brackets with the two 3/4" pins, cotter pins, and 3/4" flat washers. Apply marine grease to the insides of the pivot holes before assembling.



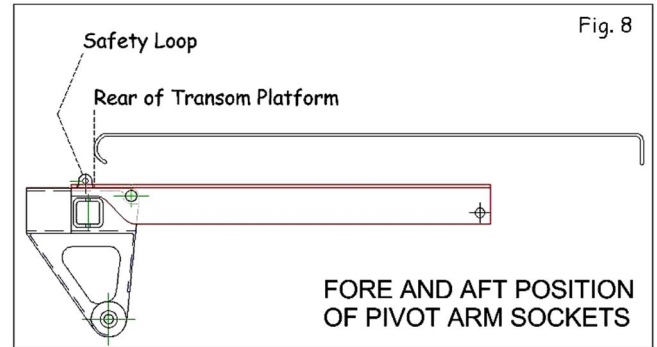
- D. Support the assembly temporarily under the swim platform using jack stands and lumber. Determine the preferred vertical and fore/aft position of the davit system. Hardware should be kept as close to the swim platform in a vertical direction as possible. Consideration should be made for access to safety pin hole (see fig. 8). Mount cradle arms into arm sockets and pin temporarily. Ensure minimum 2" clearance between forward portion of arm and transom (see picture). **NOTE:** Transom-to-arm spacing will likely be different from one side to the other.



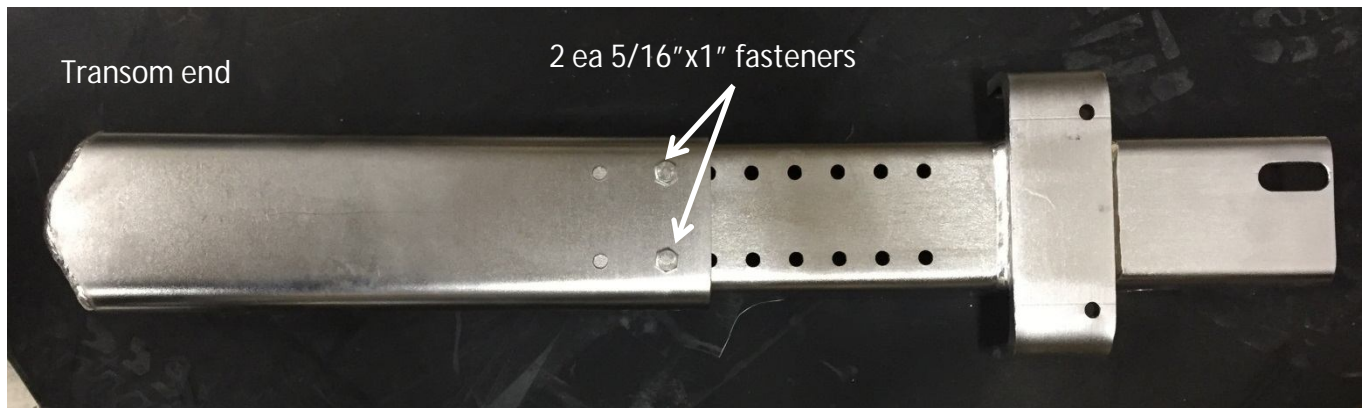
- Move the cradle arm up and down by hand making sure it does not rub on the swim platform between the two positions.
- Make certain that nothing on or in the transom or swim platform will interfere with the hole locations in the hardware.



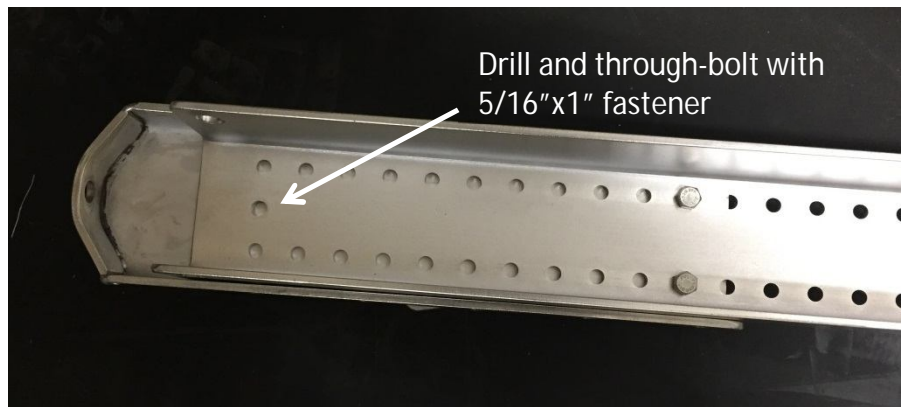
- A vessel with out-drives must take caution when raising the drives all the way up or when raising the drives in a turned position. If the drives and lift system meet it will damage the vessel and lift system.



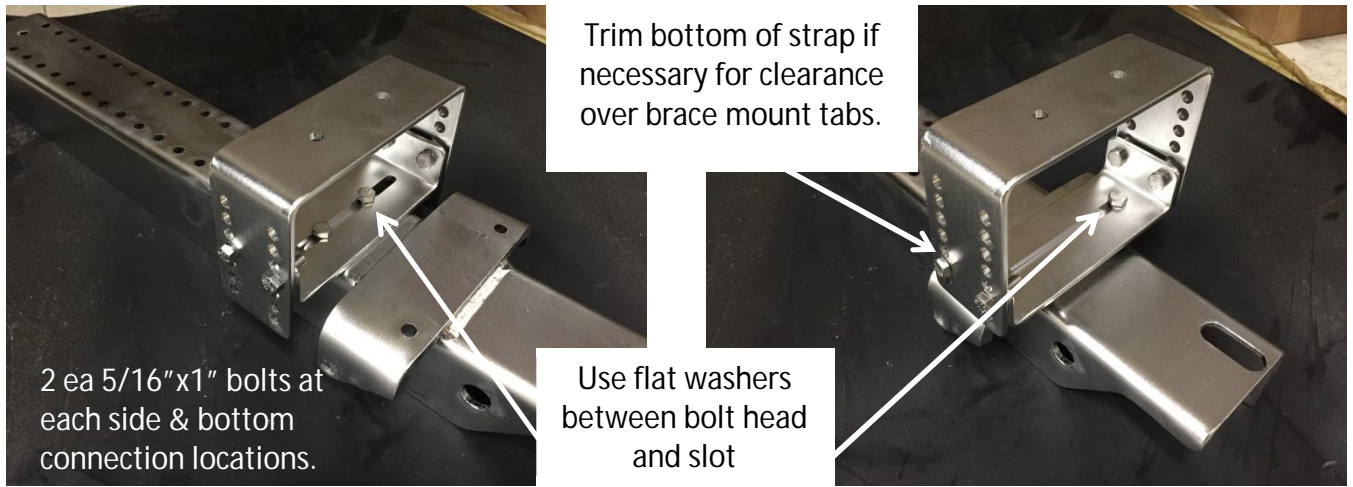
- E. Position the adjuster bracket on the top of the main bracket with tapered end of adjuster touching transom. Establish spacing so transom end contacts transom; connect main bracket to adjuster using 2 ea 5/16"x1" bolts in pre-drilled holes, using either of two hole sets.



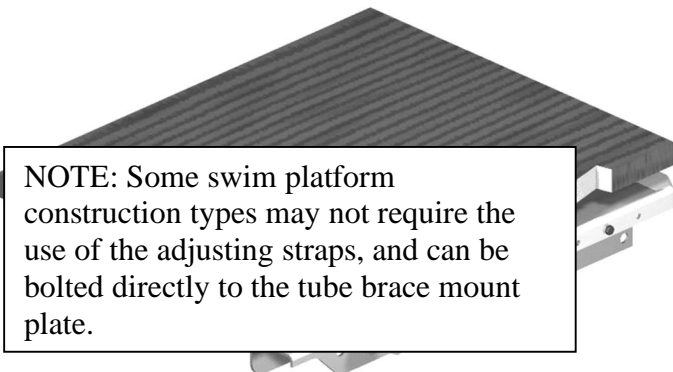
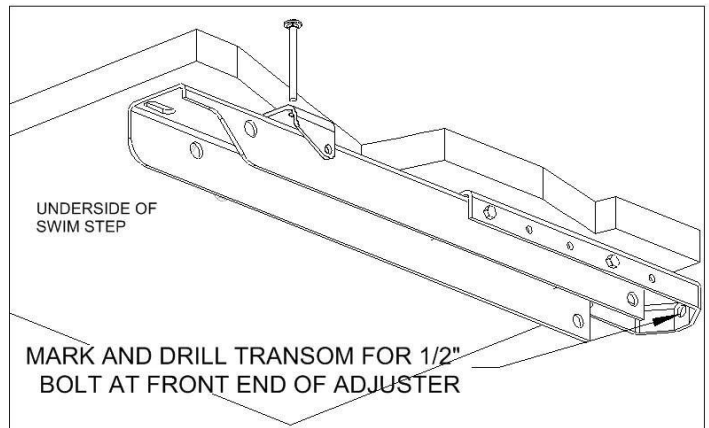
From the underside of the main bracket / adjuster assembly, locate the center hole on the transom end and drill into the adjuster bracket. Fasten with 1 ea 5/16" x 1" bolt (NOTE: Some hardware may have a supplied slot that eliminates the need to drill in the adjuster)



F. Install the adjuster straps between the main bracket and the underside of the swim platform. These can either be mounted on the surface of the main bracket channel, or on the brace tube mount plate (see pictures). If mounted to the brace tube mount plate, trimming the adjuster strap may be necessary to avoid interference. Mount adjuster straps as far aft as reasonably possible, while insuring a structural connection with the swim platform.

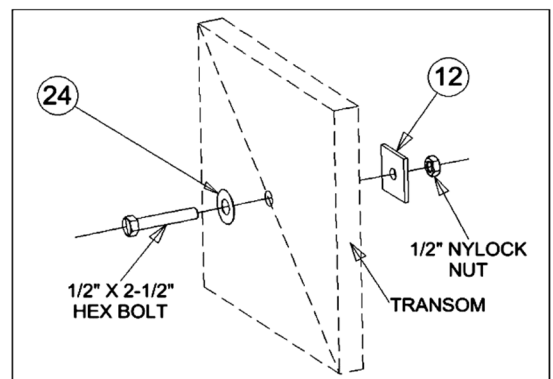


G. Mark the location of the main bracket mount holes on the underside of the swim platform. Also mark the transom for the forward, 1/2" mounting hole at the front of the adjuster bracket. Double-check **ALL** measurements and ensure all hole locations are free and clear of interferences inside and outside the hull.





- H. Drill the swim platform and the transom. When drilling, align the drill so it's perpendicular to the upper surface of the swim platform for the four 5/16" holes, and parallel to the adjuster brackets for the two 1/2" holes.
- I. Use four 5/16" stainless carriage bolts to mount the main bracket adjuster straps or main bracket to underside of swim platform; use marine sealer to seal the holes on the top and bottom of the swim platform (carriage bolts may need to be trimmed). Shims at the mounting points may be necessary to keep the main bracket level with the swim platform.
- J. Use two 1/2" stainless hex bolts to secure the adjuster brackets to the transom (see picture). Use a large fender washer (24) between the transom and the bracket adjusters to protect the gel coat. NOTE: depending on the profile of the transom where this bolt penetrates, a formed shim may be fabricated to ensure no gap between adjuster and transom. Install a backing plate (12) on the inside of the transom. Use marine sealer to waterproof the transom penetration.



- K. Determine the approximate, desired locations for the lower brace tube mount pads. These should mount as low as possible on the transom, while allowing clearance for backing plates on the inside of the transom. You have the choice of using two, three, or four lower brace mount pads, depending on the arrangement of swim platform brackets, outdrives, zincs, etc. on the transom. **Using four brace tube pads will ensure the strongest mounting, is highly recommended, and is required for lift loads over 350 lbs.;** two pads is not recommended unless load on lift system is less than 250 lbs. Ensure nothing on the inside of the transom will interfere with bolts and backing plates used to mount the lower brace tube mounts, or will be damaged while drilling. Temporarily secure the mounts to the transom with tape (the finished brace tube will be used to establish final location of the mount; see next step).

NOTE:

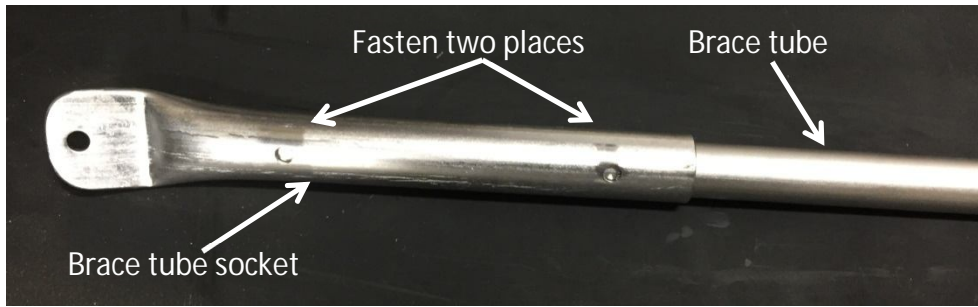
Try to keep the lower brace tube mounts in line with the tabs on the main brackets. Deviation from this is OK, and often necessary to accommodate other hardware, but should be limited to not more than 30 degrees.



- L. Temporarily mount brace tube to tabs on main bracket (see picture). Place brace tube socket on lower end of brace tube; determine amount of brace tube to be trimmed (if necessary) using the lower brace tube mount pad as a reference. Remove socket and trim brace tube. **Do not cut brace tube socket.**



Ensure brace tube is long enough to fasten to socket in two places. Drill holes through brace tube using holes in socket as a guide. Use 5/16" x 1-3/4" bolts to connect brace tube to socket. **Ensure mounting tabs on end of socket and brace tube are in the same plane prior to drilling holes.** Repeat for all brace tubes and socket assemblies.



NOTE:
Use marine sealer when final-fitting brace tube into brace tube socket to reduce risk of crevice corrosion.

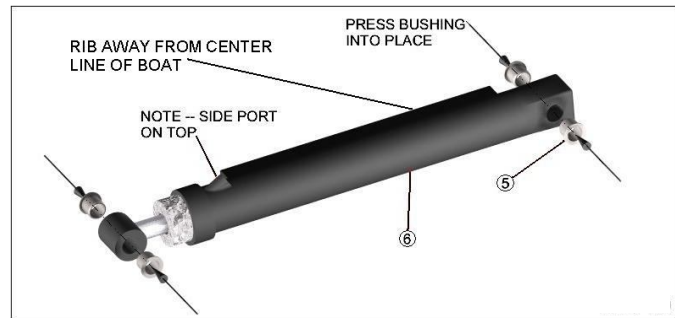
M. Temporarily mount assembled brace tube and sockets to establish final location of lower brace mount pads. With brace tube assembly in place, locate, mark and drill the transom for the brace tube pad mounting bolts. Install the brace mount pads and backing plates. Use 5/16" bolts, washers, nylocks and marine sealer.

NOTE:
Remove any antifouling paint prior to sealing brace mount pad to hull surface.

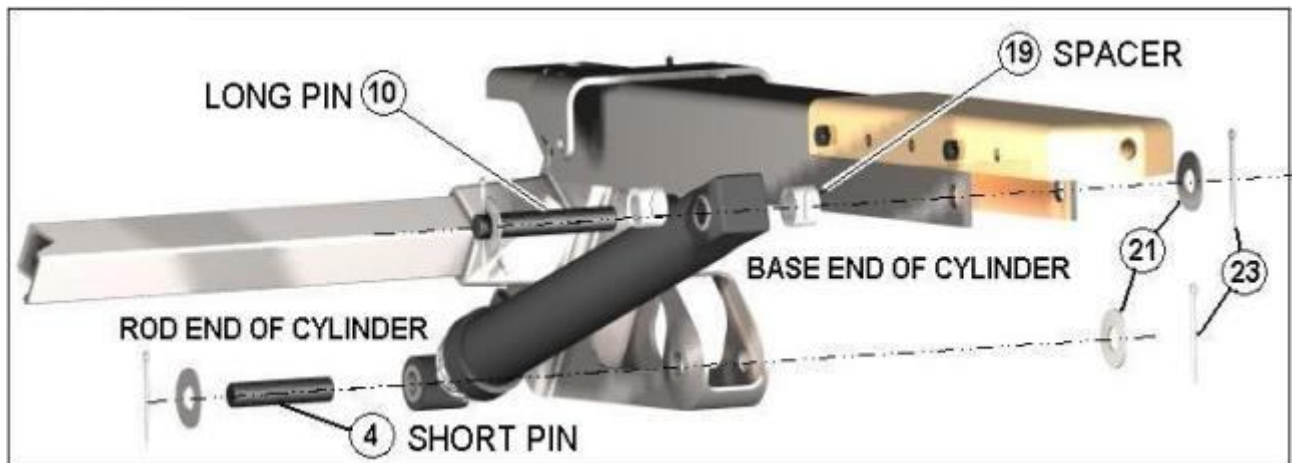
N. Install the brace tubes using the 3/8"x1" hex head bolts provided. If you have two brace tubes landing on a single brace tube pad, use a longer (3/8" x 1-1/2") bolt and position one brace tube on each side of the brace tube pad. **Do not stack or double up brace tubes when mounting to the main bracket.**

4. Assembling Cylinders and Plumbing Hydraulics

A. Insert the ram bushings (5) in the ends of the hydraulic cylinders (6). Make sure each is fully seated with its flange against the side of the cylinder.



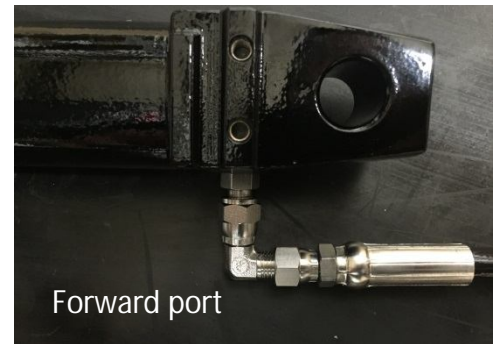
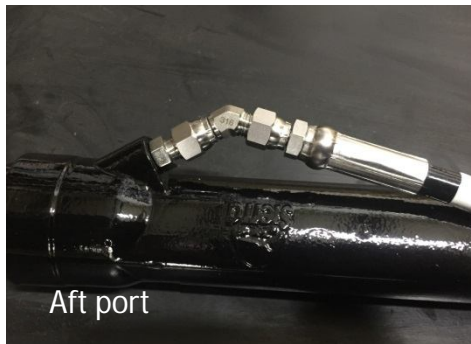
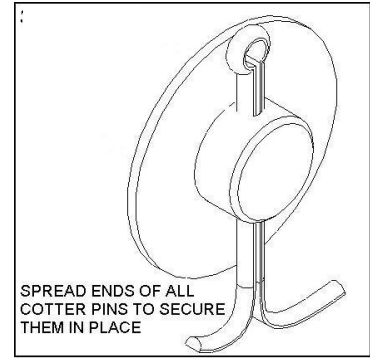
B. The two hydraulic cylinders are a left and right-hand pair. Position the cylinders so the slanted side port is on the top and the ribs on the sides of the cylinders face outboard. Mount the rams, one on each main bracket assembly, using the 5/8" diameter pins (4,10), flat washers (21), and cotter pins (23). Note that the base end of the cylinder is located in the main bracket using the short and long UHMW spacers (19).



C. Spread the ends of all cotter pins to secure them in place. There are a total of 12 pins to secure, including those on the 3/4" arm socket pivot pins.

D. Install the hydraulic lines.

- a. The short lines install on the forward ports of the cylinders
- b. The long lines install on the aft ports of the cylinders
- c. Keep the hoses and fittings clean
- d. **Cylinder adapters are stainless, and may look similar to supplied pump adapters; they are not interchangeable.**



NOTE:
Torque fittings to 11-12 ft.-lbs. Thread compound is not needed for fitting connections.

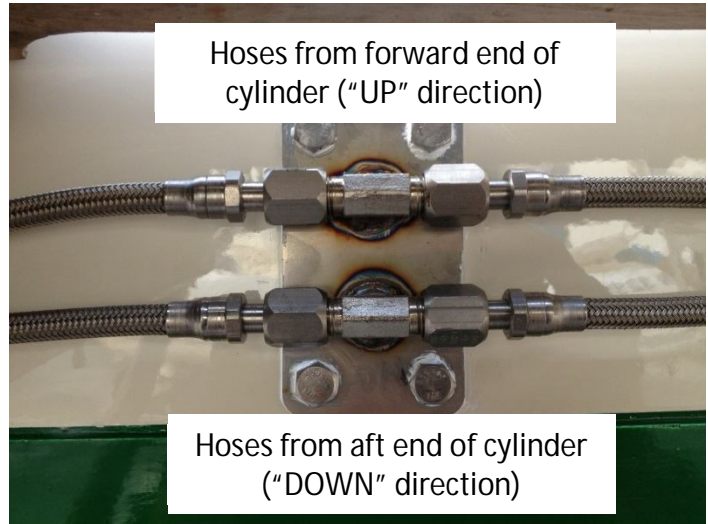
NOTE: Ensure hoses used externally have "Poly Flow" designation on hose, and stainless steel hose ends. Hoses used inside the boat may look similar, but are not intended for use outside the boat. A magnet may be used to check hose ends (stainless steel hose ends have low magnetism).

E. Installing tee fitting plate: Using hoses connected to cylinders, locate a suitable place on the transom for the hydraulic thru hull tee fitting plate. Ensure hydraulic lines from the cylinders will reach the selected spot. The fitting plate should be as high above the waterline as possible while leaving some slack to allow for the movement of the cylinders. Using the plate as a guide, drill holes through the transom for the fittings and mount bolts. Insert the fitting plate from the outside of the transom, sealing around fasteners and plate with marine sealant. Secure the plate with appropriately sized fasteners (not included).

TIP: Due to transom thickness, it may be necessary or easier to connect the internal hoses to the tee fitting plate before mounting plate to transom.

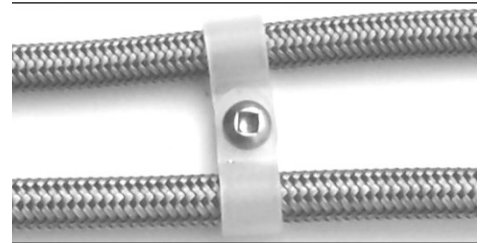
NOTE:
Remove any antifouling paint prior to sealing fitting plate to hull surface.

Caution: Do not allow hoses to kink in the process of installation.



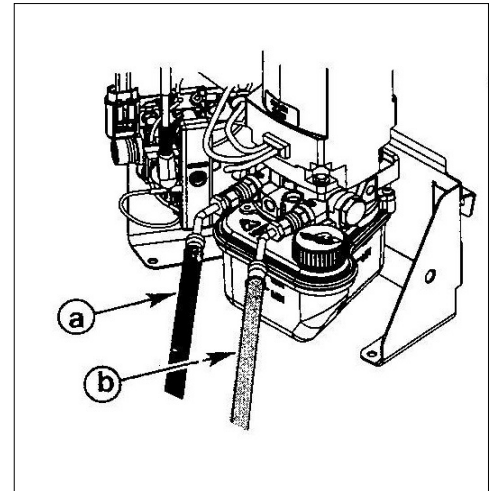
NOTE: Ensure corresponding ends of the cylinders connect to the same tee. Pressure to the upper tee will raise the davit and pressure to the lower tee lowers the davit.

- F. Use included cable clamps to secure hydraulic hoses in place on transom. Ensure sufficient slack in lines to allow the hydraulic cylinders to move as the arm socket rotates. Use loops to take up extra slack in hose. **Ensure any radius in hose is no less than 1.5"**. Protect against chafing as needed. Apply marine sealant to the hole in the transom before inserting the screw.



- G. Mount the hydraulic pump in the stern of the vessel, within the range of the supplied hydraulic hoses (with plated steel ends; standard length is 72"). We recommend reading any instructions included in the pump package (if applicable) before installing it.

H. Install pump adapter fittings, if needed, into pump ports; it may be necessary to remove the “quick disconnect” type fittings from the pump prior to installing adapters. **NOTE: pump adapters look similar to cylinder adapters, but are not the same and are not interchangeable. Pump adapters are plated steel; cylinder adapters are stainless steel.** Connect the pump to the tees in the transom using the 72” hoses with plated steel ends. Connect hose from upper tee fitting to port labeled “up” on pump, as shown in diagram; connect hose for down function accordingly.



A = “UP” Function (top connection on thru-hull fitting)
 B = “DOWN” Function (bottom connection on thru-hull fitting)

5. Wiring Remote and Pump

A. GEM Remote Control: Connect the wires as shown in the diagram at right.
 →



Blue: To UP relay connection on pump (blue wire on pump)

Green: To DOWN relay connection on pump (green wire on pump)

Yellow: To DC – (black wire on pump)

Red: To DC + w/ 5A inline fuse (red or red/white wire on pump)

Optional connection method: un-mount plug (not used for Hide-A-Davit application), cut wires close to plug and connect wires to remote according to above diagram. This provides 5A inline fuse.

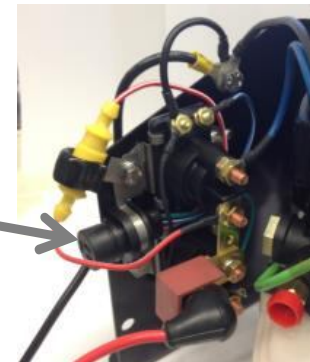


Table 1: Wire Gauge for 3% Voltage Drop at 12 Volts													
Length of conductor from source to Device and back to Source (feet)													
	10'	15'	20'	25'	30'	40'	50'	60'	70'	80'	90'	100'	
Total circuit current in Amps	12 Volts - 3% Drop Wire Sizes (gauge) - Based on minimum CM area												
	15	12	10	10	8	8	6	6	6	4	4	2	2
	20	10	10	8	6	6	6	4	4	2	2	2	2
	25	10	8	6	6	6	4	4	2	2	2	1	1
	30	10	8	6	6	4	4	2	2	1	1	0	0
	40	8	6	6	4	4	2	2	1	0	0	2/0	2/0
	50	6	6	4	4	2	2	1	0	2/0	2/0	3/0	3/0
	60	6	4	4	2	2	1	0	2/0	3/0	3/0	4/0	4/0
	70	6	4	2	2	1	0	2/0	3/0	3/0	4/0	4/0	
	80	6	4	2	2	1	0	3/0	3/0	4/0	4/0		
	90	4	2	2	1	0	2/0	3/0	4/0	4/0			
	100	4	2	2	1	0	2/0	3/0	4/0				
	24 Volts - 3% Drop Wire Sizes (gauge) - Based on minimum CM area												
15	16	14	12	12	10	10	8	8	6	6	6	6	
20	14	12	10	10	10	8	6	6	6	6	4	4	
25	12	12	10	10	8	6	6	6	4	4	4	4	
30	12	10	10	8	8	6	6	4	4	4	2	2	
40	10	10	8	6	6	6	4	4	2	2	2	2	
50						4	4	2	2	2	1	1	
60						4	2	2	1	1	0	0	
70						2	2	1	1	0	0	2/0	
80						2	2	1	0	0	2/0	2/0	
90						2	1	0	0	2/0	2/0	3/0	
100						6	6	4	4	2	2	3/0	

Circuit Breaker Size
 50 amp for 12 volt system
 30 amp for 24 volt system

NOTE: in the event of a conflict between voltage drop table and ampacity table, use larger wire size.

B. Power to Pump: Consult the Wire Gauge Chart to determine the size of wire you will need. Wire the positive terminal of the pump pack to circuit breaker (circuit breaker not included in kit); wire the other terminal of the breaker to the positive battery bus or terminal. Wire negative terminal of pump pack to negative battery bus or terminal. We suggest following ABYC color codes when wiring: **RED** for positive leads and **YELLOW** for negative. It's optional to install an on/off solenoid or switch for the system.

WARNING:
 Ensure arm securing pins are fully in place before lift is operated with arms installed.



6. Testing and Operation

A. **Before launching vessel:** Insert cradle arms into sockets and secure with supplied 1/2" stainless steel detent pin. Keep hands and body free of any moving parts while operating lift.

Fill the reservoir with oil to "MAX" level with cylinders in retracted position. Use standard ATF (automatic transmission fluid) or hydraulic AW32 type oil, and cycle the unit six to ten times to bleed the system. You may need to loosen fittings on the cylinder ends to bleed trapped air. **WARNING: use extreme caution when loosening fittings that may be under pressure. Wear proper personal protective equipment, including eyewear and gloves** Prevent oil from spilling if this is necessary. Re-

tighten fittings; cycle and check the hydraulic connections to be sure there are no leaks. Check the fluid level in the reservoir after bleeding and add oil if necessary. Check directional operation of lift corresponds with remote button labels. **NOTE:** **Using 10W-30 specified in some trim pumps will lead to decreased pump performance due to oil viscosity.**



B. Tender Launch and Retrieval: Launching and retrieving tender is facilitated by the use of assist lines (see picture at right). These lines are best rigged when vessel is in the water, lift is lowered and tender is positioned snugly against arms. Ensure there is at least 4” from tender transom to edge of arm supporting tender stern. The lines help in the following ways:

- Secure tender from side-to-side movement when being raised.
- Help tender transition into seated position on arms as lift is being raised.
- Reduce amount of physical effort required when launching and retrieving tender.

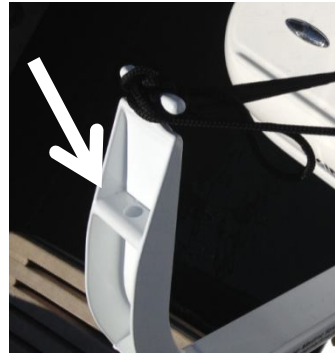
Attach assist lines using the picture at right as a guide. Variations, including fewer lines or more lines, can be made depending on individual configurations. Some Hide-A-Davit owners do not use assist lines. Heavier tenders are more likely to need them. Keep in mind the following points:

- The lines should be secured to the tender on the side closest to the lift, to securely attached hardware. Ensure lines will not interfere or damage any part of the tender during the lifting motion.
- Tensioning the vertical lines as much as possible before lifting tender will provide maximum assistance. It is recommended that final tension be made by lift operator from swim platform, with all persons out of tender. **WARNING: The Hide-A-Davit is not intended for use with persons in tender, or for lifting people!**
- Most tenders have existing hardware to use with assist lines; installation of strategically placed hardware may optimize the assist line function.
- If tender is not sliding in place naturally as lift is raised, operator may need to stop lift part way up and help tender begin to transition into seated position (this usually occurs about the half way point). Lifting can then be resumed to fully raised position.
- Once established, optimum lift line configuration usually will not change. Factors affecting this could be load variations in tender at time of launch or retrieval, and inflation of tubes (if applicable). Lift works best when tubes are inflated to manufacturer’s recommended pressures.
- The height of your swim platform out of the water will affect the ease of launch and retrieval. Higher swim platforms require greater effort to lift and seat tender.

C. Tender Storage:

- When tender is on lift, it should be secured with supplied ratchet straps (one per cradle arm). The short, double-loop straps are used between connection points on the lift arms and the stainless steel ratchet strap hooks. We suggest using the long double-loop strap on the aft end of the cradle arm, and

the short strap on the forward end. Strap connection points are indicated by arrows in the pictures below:



- Ensure bilge drain plug is removed from tender when on the lift, and that water does not collect in the tender. Most tender covers are compatible with tender on the lift, and are recommended.
- Safety pin should be in place when davit is not in use (see image at right).



7. Troubleshooting

A. GEM Remote programming (if needed):

- Press the learn button (on GEM control box) once and release.
- Press the “DOWN” button 2 times on handheld transmitter within 6 seconds of pressing learn button.

GEM Remotes
356 Capri Blvd
Naples, FL 34113
239-642-0873 phone
239-642-8391 fax
info@gemremotes.com
www.gemremotes.com

B. Lift will operate but will not lift tender to fully raised position:

- Reverse hoses from hydraulic power pack to transom. Note that hydraulic pump has a lower relief setting in one direction; the hose providing “up” pressure should correspond with pump port with higher relief setting (determined by above test).
- Load test battery(ies) supplying hydraulic power pack. Even though correct voltage may be present, if battery strength is insufficient, lift will not perform properly.

C. Tender cradle arms are “mushy” when weight is applied, or will not stay fully raised. Bleed air from system by cycling unit. Ensure fluid level in reservoir is correct. Loosen hose connection fittings on cylinder ends, if needed, to allow entrapped air to escape.

- **WARNING: use extreme caution when loosening fittings that may be under pressure. Wear proper personal protective equipment, including eyewear and gloves.**
- **NOTICE: protect against any oil spills.**

D. Pump is noisy when operating: Pump noise is most often caused by air bubbles in the fluid (scratchy or grating sound). Check fluid level and ensure level stays between “MIN” and “MAX” lines on reservoir. See step “C” above for instructions on bleeding air from system.

E. Cradle arms bleed down slowly and will not hold weight: Check all fittings and hoses for leaks; observe for any sheen that may be present on the water or ground around the vessel caused by leaking oil. Contain and clean any spilled oil according to local laws and regulations.



By: Maritime Fabrications, Inc. d.b.a La Conner Maritime Service

Hide-A-Davit Warranty

- I. This warranty covers a period of two years from date of product shipping.
- II. In case of a warranty claim, contact our main office by phone at: (360) 466-3629; or by fax at: (360) 466-3632; or by email at: sales@laconnermaritime.com
- III. In the event any component of the Hide-A-Davit system supplied by La Conner Maritime Service (LMS) fails or is defective, LMS will repair or replace the defective part at their discretion. "Defective" shall mean a substantial defect that causes the lift to malfunction or not operate as intended.
- IV. La Conner Maritime Service warrants the following:
 - a. Fit of the lift to the vessel and tender based on the specifications outlined in the "Application Guide." If purchaser fails to supply necessary vessel and tender specifications to LMS prior to purchasing the Hide-A-Davit, or does not follow installation guidelines, then this portion of the warranty is void.
 - b. Material and labor contained in the components of the Hide-A-Davit kit, as supplied by LMS.

****NOTE****

IT IS THE INSTALLER'S RESPONSIBILITY TO DETERMINE STRUCTURAL INTEGRITY OF VESSEL AND TENDER HIDE-A-DAVIT SYSTEM WILL BE INSTALLED ON AND USED WITH.

- V. This warranty coverage is limited to components supplied by LMS, and does not cover consequential damages to vessel, tender, persons or property arising from any failure or defective part thereof. **This warranty excludes:** parts supplied by installer (except when LMS is the installer); damage or failure resulting from corrosion, lack of maintenance, misuse, exceeding recommended weight capacities and other manufacturer recommendations; improper installation; and other circumstances outside of normal use and storage.*
- VI. This warranty is the entire obligation of LMS, and no person connected with or representing LMS may express liability beyond what's contained in this written warranty.
- VII. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

*Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.