



INSTALLATION MANUAL

1-866-LIFT NOW

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- Service@FreedomLift.com

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Determining Sizing & Measurements

The *FreedomLift* can be mounted on virtually all inboard or Pod (IPS / Zeus) powered boats by determining the following measurements:

External Measurement Requirements

- Distance from the bottom of the swim platform to the bottom of the transom generally at or near the prop shafts – a minimum vertical distance of 23 inches is required for installation. (Call us for Models requiring less space)
- Distance from the water line to the bottom of the swim platform.
- Distance from the transom (under the swim platform) to the end of the swim platform (at approximately the prop shafts).
- Anticipated distance between the inside of the back plates (these plates measure 10” wide).
- Swim platform “thickness” from the bottom to the top of the platform.

Internal Measurement Requirements

- Based upon the anticipated external mounting location, verify that there is sufficient access for the mounting plates & bolts inside the boat.
- Be sure that stringers will not hinder thru bolts.
- Allow adequate room for backing plates, nuts, hydraulic fittings and hoses, stringer tie and Hydraulic Power Unit mounting location.
- Review anticipated mounting location for Hydraulic Power Unit verifying distance to transom, ability to mount, 12-volt (24 volt optional) DC access and serviceability (i.e. checking fluid level or accessing Remote Control Box).

Capacity

Note the *FreedomLift* is rated to carry a maximum weight of 800 lbs. in normal conditions. The recommended capacity for your particular boat may be limited to the capacity of the transom. For transom capacity information please consult your boat manufacturer.

Once determined, **NEVER** exceed this capacity.

Transom Installation

Step 1 – Connecting Spreader Bar

- Unpack *FreedomLift* equipment
- Fasten the Spreader Bar between the two Lift Assemblies utilizing the Stainless Steel Spreader Bolts ½” (4 or 8 per side depending on model) with red Loctite Thread locker. When using a Single Tube Spreader it can be mounted in the upper or lower hole pattern.



Step 2 – Drill Mounting Holes – Note – Remove Auto Locking System for access

DO NOT MOUNT FLUID PASSING BOLTS IN EITHER OF THE TOP TWO MOUNTING HOLES since they will prevent the Auto Lock system from working.

- Utilizing boat jack stands or other capable supporting devices, align the *FreedomLift* to the selected mounting location. Verify the following:
 - Mounting plates do not extend below the hull.
 - The thru bolts have adequate internal and external clearance.
 - Lift will operate unhindered by the swim platform, boat hull, trim tabs, or other transom accessories.
- Once the mounting location is verified, select six (6) holes on **each** mounting plate (3 on the inside and 3 on the outside) to attach the *FreedomLift*.

Note - the top bolts **MUST BE** in the top holes and the bottom holes should be as low as possible preferring location 5 or location 4. A minimum of 6 bolts must be used for securing each mounting plate – 2 on top, 2 in the middle and 2 towards the bottom. Additional mounting bolts may be used if desired. **The Fluid Passing Bolts must NEVER be used in the top holes or 2nd holes since they will interfere with the Auto Locking System.**

- With the *FreedomLift* against the transom, drill (6) ½” holes (per hydraulic side) in perpendicular alignment through mounting plates and transom.



Step 3 - Mounting

- Remove any anti-fouling paint from the transom where the *FreedomLift* will mount plus 1" in addition to the *FreedomLift* footprint. This assures that the *FreedomLift* is not be electrically bonded to the boat through the bottom paint which often contains copper.
- Mount the *FreedomLift* to the transom and LOOSELY tighten the mounting bolts. Use 3M 5200 to seal the bolts on the inside of the boat and outside at the *FreedomLift* back plate. Insert bolts with external washer through the top bolt holes. Be sure there is adequate 3M 5200 to assure a watertight seal. Fit internal top plates on the inside of transom and add washer, lock washer and nut. Snug tighten. **NOTE THAT EACH SIDE OF THE FREEDOMLIFT MUST BE PARALLEL TO EACH OTHER. ONLY SNUG TIGHTEN AT THIS TIME.**
- Fluid Passing Bolts – Prior to installing, be sure the hole bore through the bolt is covered to prevent **ANY** internal contamination with the 3M 5200. Use a sufficient grade of tape to assure the bore is sealed.
- On the exterior, add washer and using red Loctite Thread locker, lock the **fine threaded** nut in place leaving approx. $\frac{3}{4}$ " of thread for the hydraulic line. On interior add square aluminum backing plate, washer, locking washer, and **fine threaded** nut. Proceed by tightening interior nuts until snug. (Be certain not to run out of thread when tightening the nut) Also, do not mount these Fluid Passing Bolts in the top or 2nd set of holes as they will interfere with the Auto Locking System.
- FOR INSTALLATION ON A CURVED TRANSOM - Seal the gap between the plate and the transom using aluminum backed tape. Be sure to **COMPLETELY** seal the area so that no TCC product can leak out during filling. Cover any holes on the mounting plate that do not have bolts in them.
- SHAKE EACH TCC PRODUCT AT LEAST 1 MINUTE, then mix **2** parts of **TCC Part A** to **1** part **TCC Part B. (2:1)** only mix enough to fill approximately the bottom 2" of the gap. Working time is approx. 20 minutes. Once the product gets warm, pour mixed TCC into the top of the dammed area.
- Once this initial pour cures (approx. 15-40 minutes) continue additional pours until the gap is completely filled. Once the TCC is cured (several hours), fully tighten mounting bolts and remove the damming tape.

Once cured, the TCC product will have filled any gaps, eliminated the ability for water penetrations, and created a perfect mold fit between the mounting plate and the transom.



Step 4 - Tightening

Tighten all mounting bolts to a minimum of 80 ft. torque. Do not let the bolt turn while tightening.

BE SURE WHEN TIGHTENING BOLTS THAT THE MOUNTING UNIT REMAINS SQUARE TO EACH OTHER. USE A STRAIGHT EDGE ACROSS THE END OF THE UNITS TO DETERMINE IF THEY ARE SQUARE.

Step 5 - Load Distribution Cables

On interior of transom, attach the stainless steel Load Distribution Cable to the top of the plate and secure to L plate on the stringer or other structural area with lag bolts or through bolts (preferred). Tighten cable to VERY taught position. Repeat on the other side.



DO NOT CONNECT THE *FREEDOMLIFT*® TO THE BOATS BONDING SYSTEM IN ANY WAY.

Hydraulic Power Unit (HPU)

Step 1 - Determine mounting location of the Hydraulic Power Unit (HPU) verifying:

- Distance to the Fluid Passing Bolts
- Proximity to 12 volt (24 volt optional) power
- Access for servicing and checking fluid

Once verified, mount the HPU.

The HPU's measurements are approximately 16" L x 8" W x 13" H



Step 2 - Hydraulic Lines

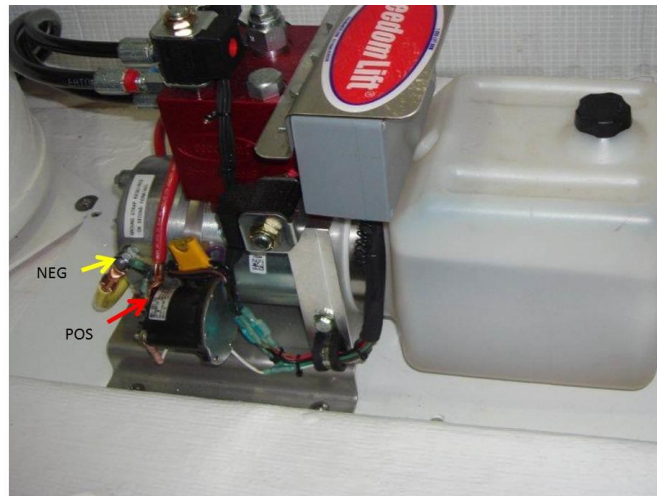
Run the hydraulic lines from the HPU to the Fluid Passing Bolts (FPB's) using the following schematic.

- Connect the BLUE marked fittings on the inside of the transom to the FPB and connect the BLUE marked fittings on the Hydraulic Cylinder line on the outside to the same FPB.
- Connect the RED marked fittings on the inside of the transom to the FPB and connect the RED marked fittings on the Hydraulic Cylinder line on the outside to the same FPB.
- i.e. BLUE to BLUE and RED to RED.

Tighten all connections (do not use any type of thread tape or sealer)

Step 3 - 12-Volt Power (24V Optional)

Connect HPU to 12V (or optional 24V) DC power source utilizing 120 AMP circuit breaker provided, and proper gauge power cables depending on length of cable run. Refer to marine gauge chart for correct cable size (generally #1 or larger). Mount the circuit breaker as close to the battery as possible (within 8" inches).



- Connect the POSITIVE Cable to the Solenoid (same stud where inline fuse connects)
- Connect the NEGATIVE cable to the isolated ground stud ON THE MOTOR

Verify that all mounting screws, hydraulic line fittings, and Power connections are securely fastened.

USE ONLY THE SPECIAL BIODEGRADABLE HYDRAULIC FLUID, NON-TOXIC TO AQUATIC LIFE PROVIDED BY *FREEDOMLIFT* LUBRIPLATE MARINE-SAFE 32.

Initial Operation

After verifying all connections, bolts, hydraulic lines, etc., operate the *FreedomLift* through complete up and down cycles **six (6) times**.

During these runs, check for any loose hydraulic fittings (no leaks) or any hull, swim platform or accessory interference. This will also bleed out any air trapped in the hydraulic lines during installation.

With the *FreedomLift* in the full upright position, check the HPU Fluid level and verify it is filled to $\frac{3}{4}$ capacity.

Lift Arm Receivers

Attach the Lift Arm Receiver using the 15/16" bolts & nuts provided (end pivot bolt and 2 securing bolts per Receiver). Insert Lift Arms into Receiver. **Adjust Receiver to allow the center of the bunks to travel approximately 12"-14" below waterline (since the *FreedomLift* has 44+" of vertical travel, this will allow the bottom V of the bunks to be approx. 30+" above the waterline in the full up position).** Adjust Lift Arm Bunks to accommodate PWC, Tender, or Dinghy. Be certain to adjust the bunks to position the tender tilted towards the swim platform as shown. This will assure the proper running angle at cruising speeds. Also, be sure that the Bunk touches the hull evenly.



Locking System

Beginning with late 2014 builds, the *FreedomLift* now features an automatic locking and un-locking system. When the *FreedomLift* is lowered, the Hydraulics will power the Lock Roller over the Lock Arm and then continue lowering. When raising the *FreedomLift*, the Hydraulics will power the Lock Roller over the Lock Arm and secure the *FreedomLift* in the full upright position. Note that the unit is only locked in the FULL UP POSITION.

Tie down straps (4) are included with the *FreedomLift* and must always be secured whenever the tender is on the lift. *FreedomLift* **STRONGLY** recommends securing the tender utilizing **FOUR (4)** straps. Two (2) from the outside bunk of each Lift Arm, over the top of the tender to the inside bunk arm and tightened. One (1) ratchet strap from the bow eye to the Lift Arm plate, and one (1) ratchet strap from the stern to the Lift Arm plate. **It is solely the operator's responsibility to secure the tender AT ALL TIMES. *FreedomLift* is not responsible for any damage to the boat, *FreedomLift*, or tender resulting from inadequate securing of the tender.**



Final Certification

Verify all connections, fittings, bolts, and wiring to proper torque specifications. Also, check to be sure all bolts on the *FreedomLift* are tight and secure.

Protection

The *FreedomLift* is shipped from the factory with Plascoat PPA571 – a marine rated thermoplastic powder coating. Sacrificial anodes (10-12) are also attached. However, it is the sole responsibility of the installer and the customer to properly coat and apply anti-fouling paint as necessary. *FreedomLift* assumes NO liability caused by corrosion. Proper coating and maintenance of the aluminum *FreedomLift* including the hydraulic cylinders is absolutely essential for proper operation and years of trouble-free operation. **ONLY USE ANTI FOULING PAINT SPECIFICALLY DESIGNED FOR USE ON ALUMINUM (LIKE TRI-LUX 33)**

Fluid Level

Regularly check the HPU Fluid level and maintain at $\frac{3}{4}$ of reservoir capacity (lift in up position). **Use ONLY the Biodegradable, Non-Toxic to Aquatic Life, hydraulic fluid provided by *FreedomLift* LUBRIPLATE MARINE-SAFE 32.**

Maintenance

- Maintain the *FreedomLift* to be clear of all marine growth.
- Replace the sacrificial anodes as needed – generally replace when the anode is 50% sacrificed.
- Every 3 months check all fittings, connections, bolts, and 12/24 volt wiring to verify that it is secure and to torque specifications.
- Annually assure that hydraulic rams are free from any corrosion, marine growth, and are clean and smooth.
- We recommend replacing the Hydraulic Fluid every two (2) years - Use **ONLY the Biodegradable, Non-Toxic to Aquatic Life, hydraulic fluid provided by *FreedomLift* LUBRIPLATE MARINE-SAFE 32.**

GALLERY PICTURES

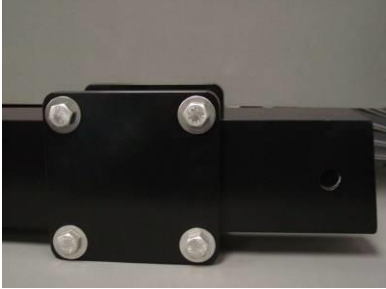


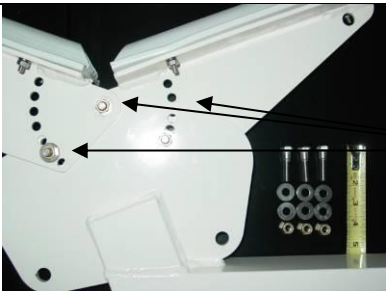





Hardware Kit

	<p>Spreader Bolts - 1/2" x 1" Bolts – (8) with Single Spreader, (16) with Double Spreader to attach Spreader Bar to threaded Frame sides. Use Red Loc-Tite, no washers</p>
	<p>Mounting Bolts - 1/2" x 5" mounting bolts with (2) flat washers, (1) 3"x 3" inside transom backing plate, (1) lock washer and nut. (8) sets included</p>
	<p>Same set shown above assembled</p>

	<p>Fluid Passing Bolts – (4) Fluid Passing Bolts with (2) FINE THREAD nuts each, (2) flat washers and (1) lock washer</p>
	<p>Inside Transom Backing Plate (Must be mounted in Top holes) – Flat washer, lock washer and nut</p>
	<p>Stainless Steel Cable – Attached to Backing Plate with (1) ½”x 2” bolt (2) flat washers, (1) lock washer and nut</p>
	<p>Stainless Steel Cable – L Plate attached to strong support (stringer) with (2) lag bolts, cable tensioned with (2) FINE THREAD nuts</p>
	<p>Receiver Spreader – Option for longer Receiver lengths. (2) 6” x 6” Plates (8) ½” x 6” Bolts (16) Flat Washers (8) Lock Washers (8) Nuts</p>

	<p>Receiver Spreader - Optional (outside view)</p>
	<p>Receiver Spreader – Optional (inside view)</p>
	<p>Receiver Adjustment (2) 5/8" x 7" Bolts (2) 5/8" x 3" Bolts (2) 5/8" x 2" Bolts (6) Nyloc Nuts</p>
	<p>Lift Arm Bunks (per Arm) (2) Bunks (3) 3/8" x 1.5" Bolts (6) Flat Washers (3) Brass Nyloc</p>
	<p>Lift Arm Pins (2) with (2) locking pins</p>



120A BUSS MRCB Circuit Breaker



Tender Tie Down Straps





Owner Introduction

Congratulations on becoming the owner of a new **FreedomLift** – The ULTIMATE Tender Lift Solution. Please take the time to carefully review the following information to effectively use and operate your **FreedomLift**. Also, have everyone who will operate the **FreedomLift** read and understand this information as well.

OWNER'S MANUAL & WARRANTY

OPERATING INSTRUCTIONS

To lower the *FreedomLift*

1. Press and hold the * button (lower left) on the Remote Control for 5 seconds – This will energize the system for 10 minutes.
2. Press the “DOWN ARROW” button on wireless remote control.

To raise the *FreedomLift*

1. Press and hold the * button (lower left) on the Remote Control for 5 seconds – This will energize the system for 10 minutes.
2. Press the “UP” button on wireless remote control.
3. Release the “UP” button when the *FreedomLift* is in the full upright and locked position.

CAUTION: PLEASE CAREFULLY REVIEW THE FOLLOWING

- When operating your boat, the tender **MUST BE SECURE AND TIGHTLY** strapped down to the Lift Arms in four ways – Two straps over the top of the tender to the Lift Arms, one strap from the bow of the tender to the Lift Arm and another from the stern of the tender to the Lift Arm. Check the tender frequently to be sure it remains properly secured. **FREEDOMLIFT IS NOT RESPONSIBLE FOR ANY DAMAGE OR LOSS DUE TO IMPROPER SECURING OF THE TENDER.**
- Do not exceed the lifting / carrying capacity of the **FreedomLift** (800 lbs.). Do not let water accumulate in the tender; remember that a gallon of water weighs 8.33 lbs! Several gallons of water accumulated in the tender can add a SIGNIFICANT amount of weight. Be sure the tender self-bails or has a functioning bilge pump.
- Never operate the **FreedomLift** with people in or on the PWC, Dinghy, or craft being lifted.
- Never operate the **FreedomLift** with people in the water near the **FreedomLift** and assure the **FreedomLift** is in the upright and locked position prior to swimming near the **FreedomLift**
- Never operate your boat unless the **FreedomLift** is in the full upright locked position and property secured.

- Never operate the **FreedomLift** when your boat is moving.
- When not in use, be sure the **FreedomLift** is in the full upright and locked position.
- Never attempt to tow anything from the **FreedomLift**
- Never operate with any engine running on the boat, PWC, or dinghy.
- Use caution when removing Lift Arms since your balance could be compromised. Lift Arms do not float. We suggest securing the Lift Arm with a line to a secure point on your boat when removing.
- Always secure your PWC or Dinghy to the **FreedomLift** when not in use.
- Never operate in rough seas.
- Never attempt to remove a Lift Arm while in the water.
- Stay completely clear of the **FreedomLift** when in operation.
- Never exceed the weight lifting capacity of your boats' transom or the **FreedomLift**
- Never lift objects other than those intended to be lifted by the **FreedomLift**
- The **FreedomLift** is to be operated only by an adult who has read and fully understood this Owner's Manual. Never allow children to operate the lift.

MAINTENANCE:

Annual inspection of the lift, pump, hoses and fittings is required. Inspect all lift bolts and pins to assure nothing has loosened up, tighten as required. Inspect pump, hoses and fittings for leaks and take required corrective action by tightening parts or replacing damaged parts. **Be certain bolts on Lift Arm Bunks are very tight.**

Inspect the seals in the hydraulic cylinders to make sure they are not damaged and/or leaking. Should other items require maintenance, or replacement, please contact **FreedomLift** directly at 1-866-LIFT NOW.

Replace the hydraulic fluid as needed or every 2 years.

Use **ONLY** the Biodegradable, Non-Toxic to Aquatic Life, hydraulic fluid provided by **FreedomLift** **LUBRIPLATE MARINE-SAFE 32.**

The **FreedomLift** anodes (aluminum) are **CRITICAL** in protecting the **FreedomLift**® from corrosion. Be certain to continuously monitor the anodes and **REPLACE ANODES (10-12) AS REQUIRED – DO NOT LET THE ANODES SACRIFICE**

MORE THAN 50%. FreedomLift is not responsible for corrosion due to insufficient anode protection.

Be certain to ONLY use anti-fouling paint specifically formulated for use on Aluminum like Interlux Trilux 33. Use of non-compatible anti-fouling paint will cause significant damage to the *FreedomLift*

RE – PROGRAMMING THE WIRELESS REMOTE TRANSMITTER

TO PROGRAM:

1. Locate the grey Remote Control Receiver box (6.25” long by 3.14” high) on the Hydraulic Power Unit. Take the cover off (4 screws).
2. Locate the Program Switch S1 (small red button in the upper left corner approx. 1” left of the red LED light)
3. Press the Program Switch
4. Press and release the **DOWN** Button on the Remote Transmitter
5. Wait 10 seconds for the red LED light to flash
6. The Remote Transmitter is now programmed
7. Repeat steps 3-5 for another Remote Transmitter

TO CLEAR ALL PROGRAMMING:

Press and hold the Program Switch (described above) for approximately 10 seconds until the red LED light goes off.

Limited Warranty – *FreedomLift* Hydraulic Transom Lift System

FreedomLift provides a 2-year Limited Warranty for its Hydraulic Transom Lift System. This Warranty is provided against defects in workmanship and materials on all aluminum structure and welds and for all other components of the Hydraulic Transom Lift System. These components include but are not limited to: a) hydraulic pumps and controls, b) hoses, c) fittings, d) valves, e) cylinders, f) flow divider, g) removable Lift Arms, h) Lock System, and i) radio controls. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

This Limited Warranty applies from the date of purchase of the *FreedomLift* for the applicable Limited Warranty periods and only under normal use and conditions and only to the original purchaser. Modifications to the *FreedomLift* or any of its components, use of the *FreedomLift* in salt water without proper protective coating, overloading the *FreedomLift* or other product abuse voids the Limited Warranty.

FreedomLift provides this Limited Warranty and makes no other warranties, expressed or implied. Some states provide certain implied warranties of merchantability and fitness for a particular purpose. To the extent that such implied warranties are applicable, the duration of such implied warranties shall be restricted to the duration of this Limited Warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

This Limited Warranty provides for the repair or replacement of the defective workmanship and/or materials by **FreedomLift** as determined in its absolute discretion. **FreedomLift** is not liable for (and this Limited Warranty does not extend to) any consequential or incidental damages such as time lost, travel or damage to boat, tender, dinghy, PWC, or other property. **FreedomLift** is not liable for damages to the **FreedomLift** or injuries of any kind relating to or arising from the installation, removal, mis-use, or overloading of the **FreedomLift**, negligence by others, or an Act of God, such as a hurricane, flood, or tornado. 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.

Any claim under this Limited Warranty requires the following as a condition precedent:

- Contact with **FreedomLift** before the expiration of the applicable Limited Warranty period with the following information: Model number of the product, date of purchase and place of purchase, description of the damage or defect and circumstances pertaining thereto and (where applicable) photograph of the damage or defect.
- Return, at the direction of **FreedomLift** of the defective or damaged part to the **FreedomLift** factory. **FreedomLift** is not responsible for dealer service calls or freight costs to or from the **FreedomLift** factory.
- **FreedomLift**, at its sole option, will repair or replace any defective part covered by this Limited Warranty within 30 days (if reasonably possible) after receipt of the defective part in compliance with the above procedure and the terms of the Limited Warranty.

You can contact **FreedomLift** at 1-866-LIFT NOW or 616-784-8759 with any questions or comments. **THANK YOU FOR CHOOSING THE FreedomLift**

FreedomLift
927 Alpine Commerce Park NW
STE 800
Grand Rapids MI 49544
Toll Free 1-866-543-8669
Phone 616-784-8759
Fax 616-784-0349
Email service@freedomlift.com
www.freedomlift.com

