

## INSTALLATION MANUAL

## Version 2- Aluminum- 4' Travel

<u>Summary of Installation:</u> This lift is bolted onto the swim deck of a boat using a receiving plate system under the swim deck and a top anchoring plate. Once the top and lower receiving plate is installed, the lift is then set into the receiving arm just under the swim deck. Some boats will have various swim deck sizes. Adjustments of bolt length and transom bulkhead fittings will need to be specified before installation. Swim Decks are also of different heights from the water line, and variations of lift lengths will also need to be specified before installation. 60" travel lifts are currently in production for – 2025.

## **PARTS LIST:**

- 1. Lift apparatus, Includes:
- 2. Vertical Lift Apparatus
- 3. Top Receiving Plate
- 4. Lower Receiving Plate
- 5. Lift Receiving Arm
- 6. \* Hoses #6 hydraulic hoses (Deck Size and distance to pump determines hose length)
- 7. \* Fittings #6 hydraulic fittings (2) #6 x 3" Bulkhead Fittings, (2) #6 couplings
- 8. Hydraulic Pump
- 9. Remote Control Transmitter With a spare
- \*DEDICATED BATTERY, HYDRAULIC FLUID and PLATE BOLTS RE SOLD SEPARATELY UNLESS REQESTED OTHERWISE. USUALLY INSTALLERS HAVE THESE ITEMS. Longer Hoses Available

## LIFT APPARATUS



The Lift apparatus - The Lift apparatus is a one piece apparatus that connects to a hitch type system like on a car or truck. Once the receiving plates are mounted the vertical lift apparatus slides in place and secured with set screws. This is latest Aluminum Version

One set of two hoses then connects to the hoses from the lift apparatus and ran under the swimdeck back through the transom and connected to the hydraulic pump.





Through Hull Bulkhead fittings are used to connect hoses through the transom, length may vary.







The hydraulic pump unit or power unit with a 12vdc marine battery is used to power the lift apparatus using remote control to operate the lift moving it up and and down as needed. Positioning of the battery and pump unit is behind the transom anywhere there is room. Use of anchor staps and battery anchors are recommended.

Wireless remote control FOB's are used to operate the lift in both up and down directions.





The receiving plates hitch system is sandwhich bolted to the swimdeck and allows for the lift to drop into the receiving arm and secured with set screws. Adjustments using the set screws allow for precise positioning of the lift before use.

This is a sample of using 4" spacer blocks if needed. Spacer blocks can be Aluminum square tubing like this or using fiberglass tubing or even Sch40 PVC underneath the deck will be strong enough.



The length of carriage bolts are determined when the swim deck thickness is determined. Use the appropriate length of carriage bolt for the thickness of your swim deck. Some swin decks curve over and give the illusion it could be a 4" thick deck. You can use spacer blocks (shown above) between the deck underneath to lower the bottom plate so the arm will stab into the receiving plate. Then the lift drops into the receiving arm and the height is then adjusted for use.

**Step 1:** Determine the type and size of swim deck you have for lift installation. Determine if the swim deck is flat on the top and bottom side. Most swim decks have a flat surface underneath which will allow for the receiving plate to be bolted through. The Swim Deck also may have a ladder under a cover or door on top of the deck. Which would be where the lift top plate will be installed once the ladder assembly is removed. Or leave the ladder and install the lift elsewhere.

**Step 2:** Select area to Bolt through the swim deck using the proper length of carriage bolts. Drill holes through the swim deck where the top and bottom plates are positioned. Use the carriage bolts to bolt through the top plate, through the swim deck and through the lower receiving plate to "sandwich" the swim deck between the top and bottom receiving plates. If the existing ladder assembly is in the covered space, remove the ladder within the space and install the top plate in that covered space. Or leave as is and select another area.





The receiving plate and arm can be installed on top of a swim deck or dock or underneath. Once the receiving plte is bolted in place, with the top plate the receiving arm is pushed into it just like a trailer hitch, then tightened in place.



New version 2 - Aluminum Lift side and back view, illustrating the vetical square tube that drops into the receiving arm on the receiving plate.

Lift Installed on the swim deck of a boat.



**Step 3:** Install the lift horizontal receiver arm. Slide the horizontal hitch receiving arm into the lower receiving plate. Position the square tubing receiver arm, so that it extends past the swim deck, allowing for the vertical lift post to drop inside it. Once the horizontal receiver arm is in position. Tighten the set screws on the receiving plate to secure the horizontal arm in place.

**Step 4:** Install the lift. Slide the vertical anchor post of the lift into the vertical receiving arm positioned in step 3. Adjust the vertical post upward if necessary to make it even with the swim deck. Hold in position and tighten the vertical receiving arm set screws against the vertical post of the lift. The lift is now set in position and ready to connect the hydraulic hoses.

Step 5: Next, determine where the hydraulic power pump unit will be located. The unit should be positioned closely behind the transom, and close to the lift location, where there is space to access it and where you can feed 12vdc power to it. If you are not using the boat's house batteries, then allow for another 12vdc marine battery to be positioned close to the hydraulic pump unit (this is recommended, wiring further away may need bigger guage wire). Once decided on where the power hydraulic pump unit will be located, determine how far the unit is to the hose connections on the lift. Hydraulic hoses are provided, to accommodate 6' of distance from the lift to the power hydraulic unit. (NOTE: if more than 6' of hose is required, would be using longer hoses, and would need to be requested or gotten from installer). Fill the hydraulic reservoir with hydraulic fluid (marine grade preferred), fill to all the way to about 1" below top of tank. After running the lift all the way in one direction, fill the reservoir to the top again, so that fluid can leave and fill the whole system.

**Step 6:** Next, Locate where the hydraulic hoses will go through the transom. Drill two 1/2" holes side by side through the transom. Install the supplied 3/8" through hull bulk head hydraulic fittings. Tighten the fittings on each side of the transom (longer bulkhead fittings may be needed). Attach hoses from the inside to the hydraulic pump unit. Connect 12vdc power to the Pos + and Neg— to the power hydraulic unit. Then attach hoses from the outside bulkhead fittings to the lift hoses. Hoses should be female ends connected to male fittings. (Note: if lift travels opposite of the FOB button indications, then swap hoses either at the pump or at the lift, to correct direction of travel.

**Step 7:** Attach the remote control FOB controller to the lanyard provided, Locate the other FOB provided and attach the FOB holding bracket anywhere close the back of the boat and close to the swim deck, for an additional remote operation of the lift, if ever needed. Test Operation, look for leaks.

The Lift is now installed and ready for operation. Press the up and down functions on the FOB several times. As the hydraulic fluid starts to fill the lift cylinder it will start to move. Once the lift platform moves fully up and down, it is ready for lift operation. Enjoy!