

Hydraulic HY Boat Lift Assembly Instructions

SSV80120HYDW SSV100120HYDW SSV80132HYDW SSV100132HYDW







The assembly process explained in this document should be performed by a qualified ShoreStation technician who understands the proper techniques and applications of the equipment used during the assembly process.



WARNING

DO NOT ATTEMPT TO ASSEMBLE THIS SYSTEM WITHOUT FIRST STUDYING THIS MANUAL AND INFORMATION ON LABELS INCLUDED WITH THE SYSTEM. FAILURE TO DO SO CAN LEAD TO IMPROPER OPERATION RESULTING IN SERIOUS PERSONAL INJURY AND/OR PRODUCT DAMAGE. IF YOU HAVE FURTHER QUESTIONS AFTER REVIEWING THIS INFORMATION, CONTACT A SHORESTATION REPRESENTATIVE AT (800) 859-3028.

Safety Definitions

Safety messages are presented throughout this document and labels affixed to the product. The messages alert you to potential hazards to you and/or property. The signal words **DANGER**, **WARNING**, and **CAUTION** are preceded by an alert symbol and communicate the severity of potential hazard. The severity of each type of message is defined as follows:

- DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.
- **WARNING** indicates a hazardous situation which, if not avoided, could result in death or serious injury.
- **CAUTION**, used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

Safety Instructions

A WARNING

- Never install or work on the equipment without first verifying that the A/C power supply (if present) is protected by a functioning Ground Fault Circuit Interrupt (GFCI) in accordance with National Electric Code section 210.8 and any additional local code requirements.
- Disconnect all A/C power from the dock before installing or working on the equipment.
- Assembly and installation of this system my require working over water. Always wear a personal floatation device (PFD) when working over the water.
- Remove any metallic objects from your person before working with DC or AC electrical components.
- Always wear proper personal protective equipment such as safety glasses, gloves, hardhats, and clothing.
- Never work alone and observe safe lifting practices such as team lifting and proper lifting posture.
- Never pair the remotes to operate more than one boat lift. Doing so could cause unintended operation and result in injury and product damage.
- The system should only be run if the operator has clear vision of the lift equipment and its surrounding location.
- Do not modify the equipment unless you have received direct written approval from the manufacturer (ShoreStation).





Tools Required

Cordless Drill SAE sockets & wrenches

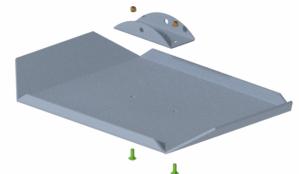
Assembly Instructions

1 - Organize Parts

Open the hardware box and bag and sort the hardware and other contents by size. Locate the fastener finder sheet in the hardware box to help identify the fasteners used in the assembly of these lifts.

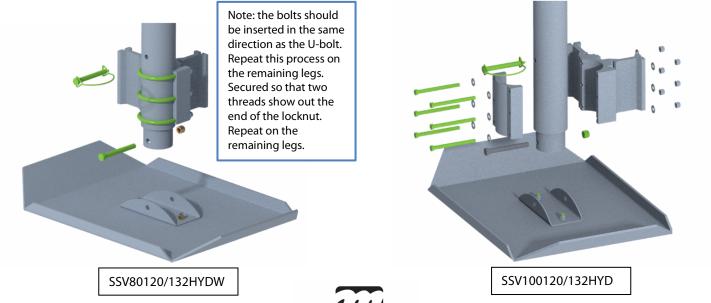
2 - Assemble Base Pads

Collect enough of the fasteners and items shown below to assemble four base pads. Align the channel clamp with the holes in the base pad as shown, insert bolts from the bottom up and secure with lock nuts. Tighten and repeat for all four base pads.



3 - Base Pads to Legs

Locate the leg bundle(s), bolts, and nuts for the base pads/legs connection. Slide the bolt thru the channel clamp and the adjustable leg tube as shown and secure with a brass locknut. The pin will be in the leg when the corner block is installed.

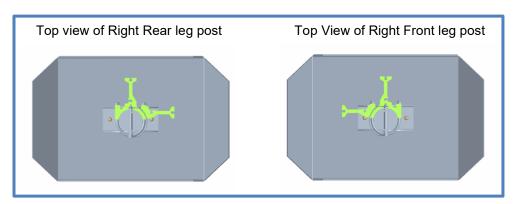




4 – Lower Frame Side Tube

Using the chart at the bottom of the page find the model that you are assembling, locate the necessary components that are included in the lower frame bundle. Your assembly will start by laying two legs down with the corner blocks as shown and using the chart slide a side frame tube over the corner block and insert the *short bolt* (see chart) with a flat washer into the hole closest to the post assembly. Secure with flat washer and brass locknut. **DO NOT TIGHTEN.**





Boat Lift	Lower Frame Components		Bolts to Assemble	
	Front & Rear Crossmembers	Side Frames	Short Bolts	Long Bolts
SSV80120HYDW	6" X 2" X 119"	6" X 2" X 155"	3/8-16 X 7"	3/8-16 X 7-1/2"
SSV80132HYDW	6" X 2" X 131"	6" X 2" X 155"	3/8-16 X 7"	3/8-16 X 7-1/2"
SSV100120HYDW	6" X 2" X 119"	6" X 2" X 155"	3/8-16 X 7"	3/8-16 X 7-1/2"
SSV100132HYDW	6" X 2" X 131"	6" X 2" X 155"	3/8-16 X 7"	3/8-16 X 7-1/2"



5 - Crossmember Tubes

Locate the crossmember tubes (see chart for length) and with the rear legs still laying on their side, slide the side frame tubes over the corner blocks. Insert the short bolt with a washer into the hole closest to the post.

Secure it on the bottom with a washer and locknut. **DO NOT TIGHTEN.**



6 - Attach Left Side of Lower Frame

Push the pin through the roll tube and splice, and secure it using the hair pin. Insert the corner blocks into the tubes and drop in the short bolts. Add the washers and nuts underneath the lower frame.

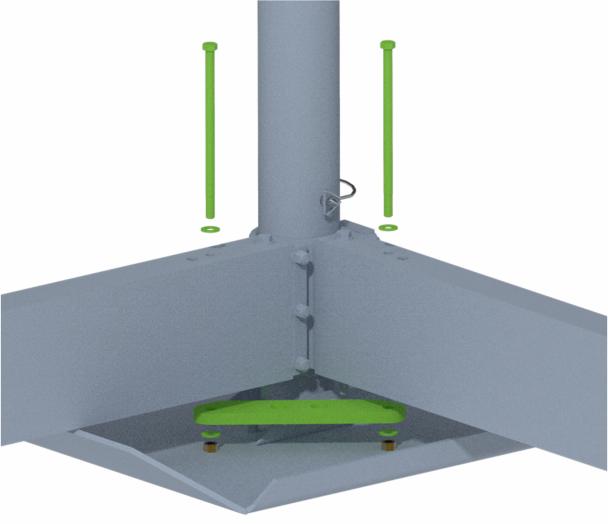






7 - Corner Frame

Use the long bolts and the bottom corner cable plate. Only on the lift tube side, insert the long bolt with a flat washer thru the second hole from the post, thru the frame tubes, and then thru the corner cable bracket on the bottom as shown. Use short bolts on the other side of the frame in the holes second from the post. Secure with washers and locknuts. Square the frame by measuring diagonally corner to corner and tighten all hardware installed.



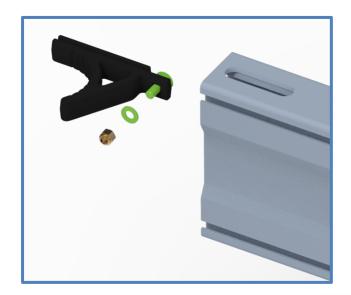


8 - Start the Platform

Lay the V-Shaped cradle tubes across the lower frame as shown. Place the end with the lift cable threaded out the bottom on the same side as the corner cable brackets.



Attach 3/8 carriage bolt to a plastic corner guide with a flat washer and locknut as shown below on the left. Slide two carriage bolts into the top T-slot and two into the bottom T-slot on the inside of the cradle tube as shown below on the right. Slide the corner guide with hardware into the top slot on the outside of the cradle tube.

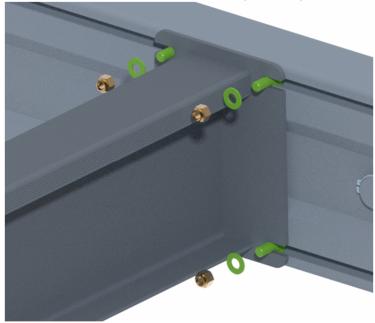






9 - Attach Side Rails

Insert the platform rails between the V-cradles and secure with bolts, washers, and nuts as shown below.



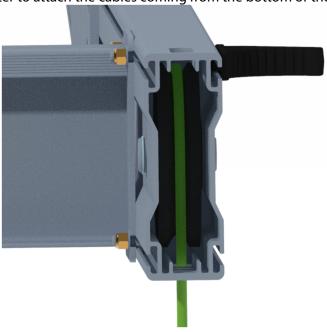






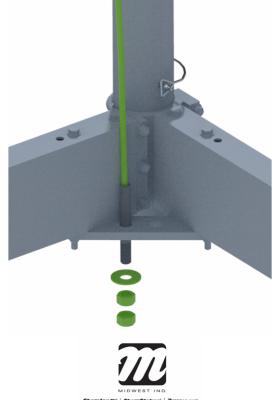
10 - Level Cable

The following picture shows the position of the level cable as it comes over the pulley in the cradle tube and out the bottom to go to the corner cable bracket attached to the corner of the lower frame. Note the other hole on the end of the cradle tube will be used later to attach the cables coming from the bottom of the lift tube.



11 - Attach Level Cable

Attach the level cable by inserting the cable into the hole <u>closest to the side frame</u> and securing with a flat washer and two brass hex nuts. The first nut will be run to the bottom of the threads and the second run down and secured tightly against the first. Repeat on other level cable.



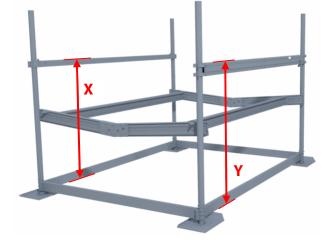


Measuring Guidelines

The lift measurements can vary up to 1-1/2" due to cable length variation. Adjust the placement to ensure the platform is level and the lift cables can reach the cradle attachment.

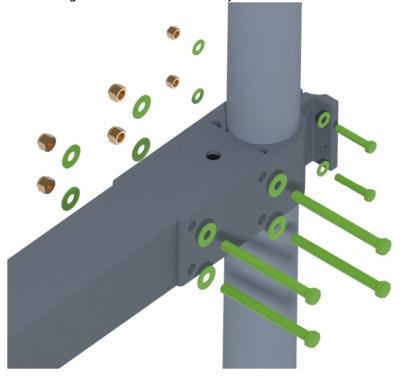
Chart below shows starting point measurements for each lift model. Find the lift model in the table and place the components as shown in the images. Tighten all components according to the assembly instructions after properly adjusting the lift tubes.

Boat Lift	Brace Tube Height (X)	Lift Tube Height (Y)	
SSV80120HYDW	87"	87"	
SSV80132HYDW	87"	87"	
SSV100120HYDW	87"	95"	
SSV100132HYDW	87"	95"	



12 - Brace Tube

The side brace tube is located opposite the lift tube so install it on the posts opposite of the corner cable plates. Use the appropriate brackets, bolts, and washers to mount the side brace tube to the post as shown below. Make sure the lock nuts are on the outside and tighten all fasteners securely.





13 - Brace Tube Level Cable

Insert the ends of the level cables (from the cradle tubes) directly up thru the side brace tube and secure with an aluminum washer, flat washer, and two brass nuts. Block the platform off the lower frame about 6 inches to create enough slack for the cable to pass thru the brace tube easily.

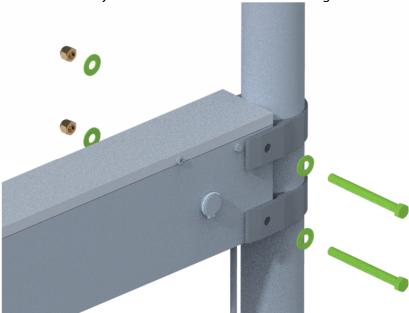


Boat Lift	Level Cable		Lift Cables	
	Hex Nut	Washers	Hex Nuts	Washers
SSV80120HYDW	5/8-11	5/8 & A314	5/8-11	5/8 & A314
SSV80132HYDW	5/8-11	5/8 & A314	5/8-11	5/8 & A314
SSV100120HYDW	5/8-11	5/8 & A314	7/8-9	7/8 & 73384
SSV100132HYDW	5/8-11	5/8 & A314	7/8-9	7/8 & 73384



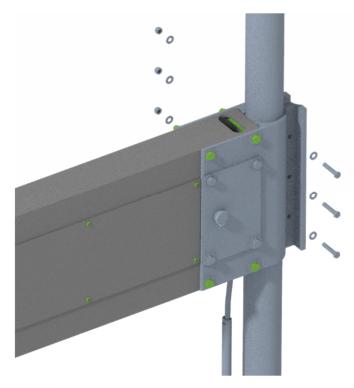
14 - Lift Tube

The lift tube contains the hydraulic cylinder which is heavy. Several people or a powered assist is needed to lift and hold in position until it is secured. Orient the lift tube on the side of the lift with the corner cable brackets, the cables exiting the bottom and hydraulic ports to the outside. Position the brackets at the height indicated on the chart above and attach the hydraulic lift tube as shown below. Tighten all fasteners securely.



SSV80120/132HYDW

SSV100120/132HYDW







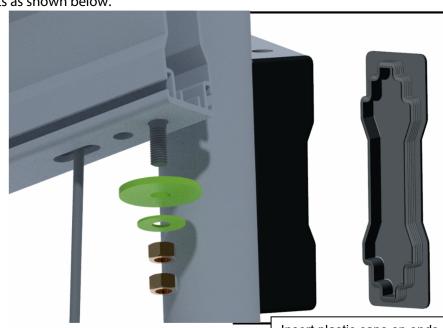
15 - Mount the Pump Box

Refer to instructions included in the pump box. Place battery in box and place inside pump box. **Do not allow the cables to make contact with each other or any part of the lift.**

16 – Connect Lift Tube Cables

Push the Down Button to run the cables down so they can be attached to the lift platform. The cable coming from the <u>outside pulley</u> of the Lift Tube goes thru the <u>outside holes</u> in the cradle tube. The cable coming from the <u>inside pulley</u>, on the other end of the lift tube, goes thru the <u>inside hole</u> on the cradle tube. Make sure to insert the 6-1/2" square tube into the end of the V-cradle and the cable goes thru it. Secure the cables to the cradle tubes with an aluminum washer, flat washer, and two brass nuts as shown below.

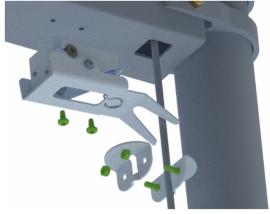




Insert plastic caps on ends of cradle tubes.

<u> 17 – Upper Limit Switch</u>

Attach the upper limit switch to the bottom of the lift tube assembly as shown below. The holes will allow the switch to be adjusted so the cable will travel thru the center of the slot in the pivot arm. The two halves of the bump stop will be mounted to the cable with carriage bolts and kep nuts. The final placement will not be made until the lift is in the water and the boat can be loaded into the lift.





18 - GlidePole Braces

Refer to assembly instructions for GlidePole Braces HA0275

19 - Anchoring

ShoreStation boat lifts can, under certain circumstances, be susceptible to wind loads that can cause rollovers. The wind speed that causes rollovers varies due to depth, orientation, and weight of the lift. Anchoring a boat lift to the earth can greatly mitigate rollover risk.

ShoreStation's recommendation is to ensure a lift is anchored if EITHER of the following are true:

- 1. The lift has a ShoreScreen installed, OR
- 2. The lift has a canopy system installed AND spends consecutive days with no boat in it.

Lift location and depth are the main factors. Lifts installed in locations prone to a large amount of unobstructed wind (fetch) such as on a point, long open shoreline, or large body of water will have higher risk of wind exposure. Deep water installations reduce the stability of the lift in windy conditions.



