

## Assembly Instructions Hydraulic Boat Lift

**SSV40108HS & HSDW, SSV40120HS & HSDW, SSV50120HS,  
SSPV50132LHS, SSPV60120LHS, & SSV60120HS & HSDW,  
SSV60132HS, SSV80132HSDW, SSV100132HSDW &  
SSPV100144HSDW, SSV100144HSDW, & SSV150144HSDW**

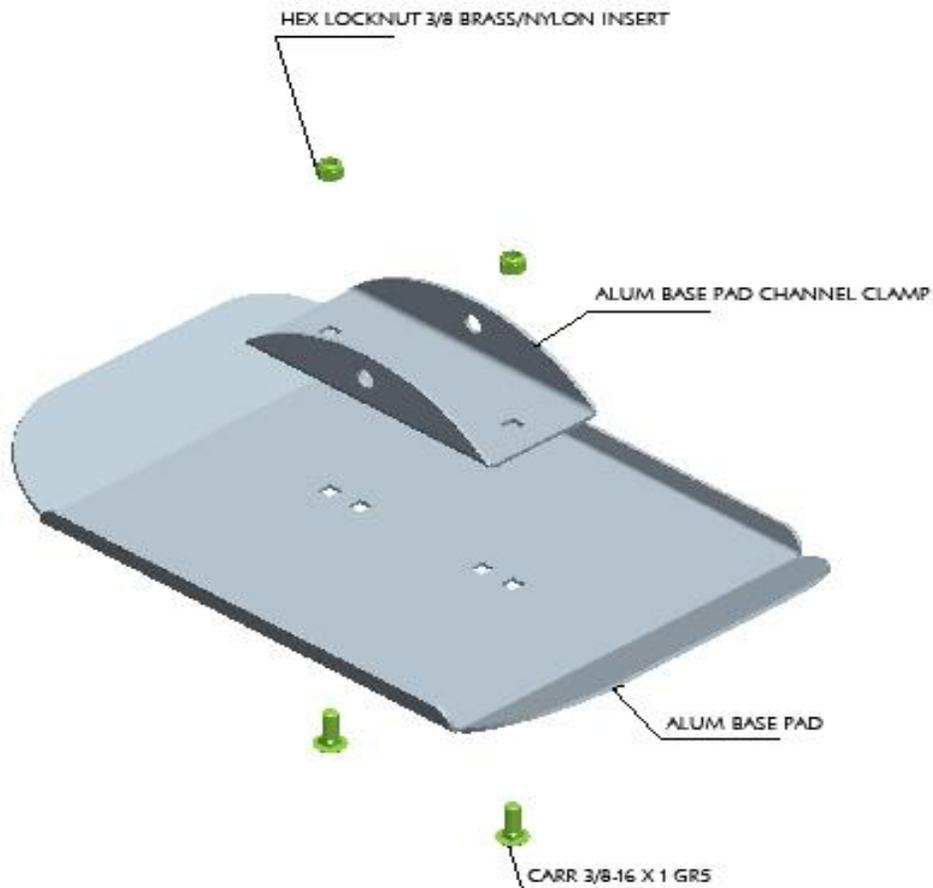


### **Step #1 – Sort Hardware**

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.

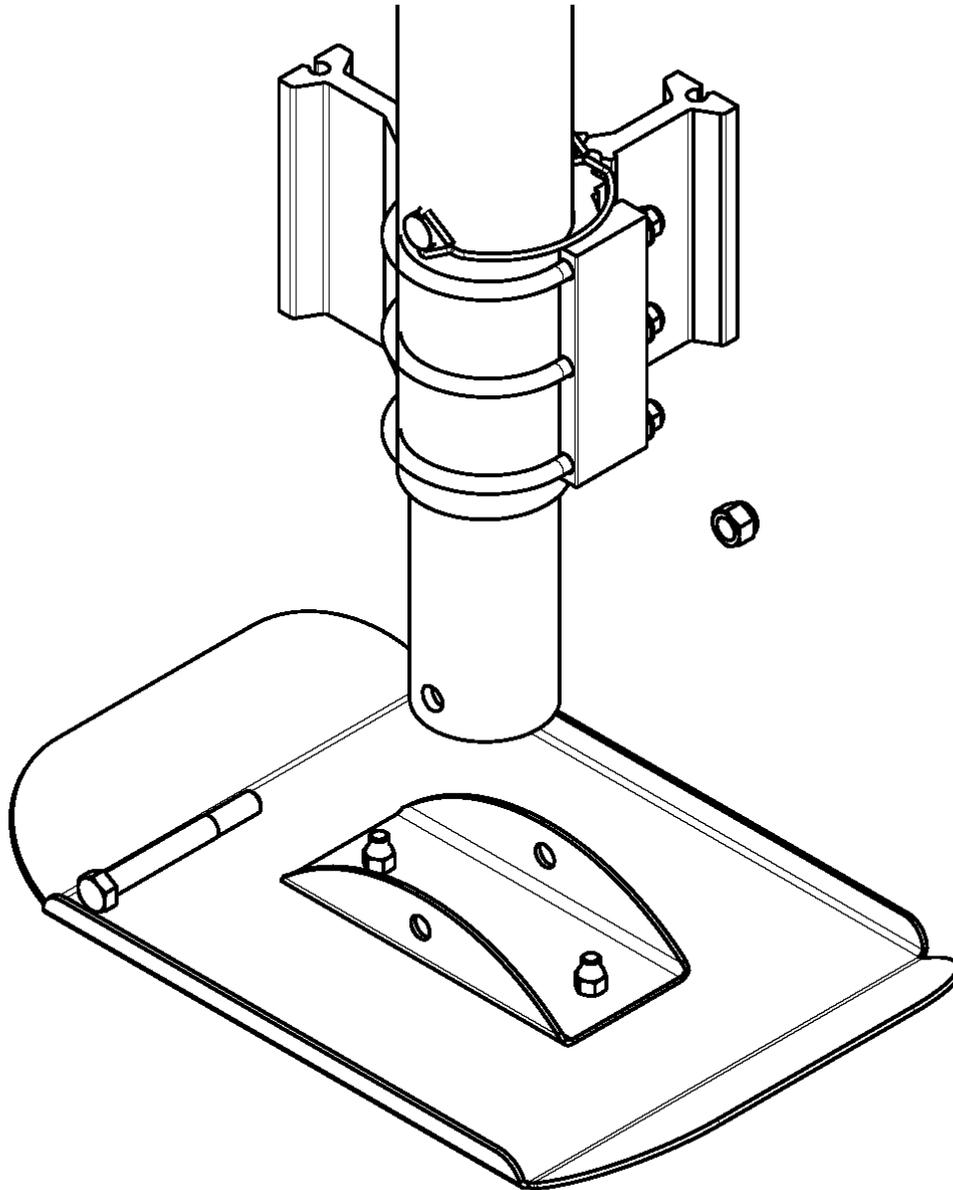
### **Step #2 – Assemble Base Pads**

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.



### **Step #3 – Assemble Base Pads to Legs**

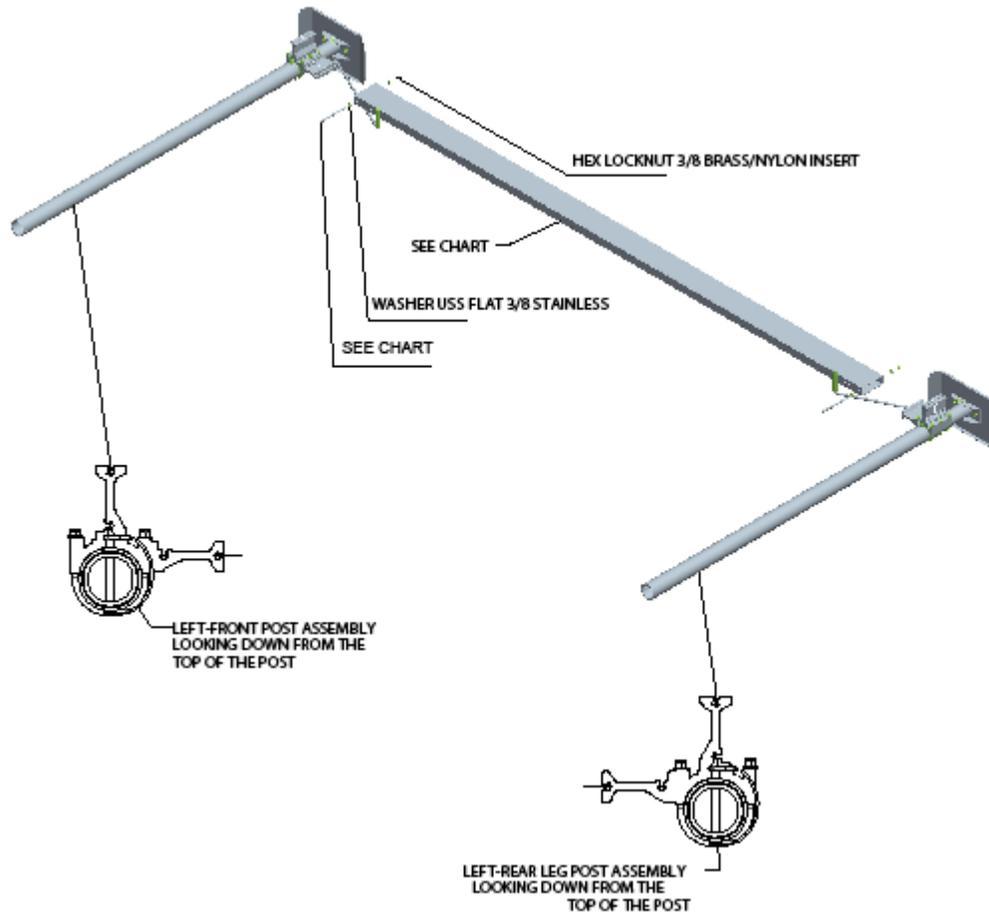
Locate the leg bundle or bundles and cut the bands to open it up. Locate bolts and nuts in the pre-packaged bag and slide the bolt thru the channel clamp and the adjustable leg tube as shown and secure with a brass locknut with nylon insert.



Note that the bolts (1/2-13 X 4 1/2" HC Stainless and Brass lock nut with nylon insert) should be inserted in the same direction as that of the u-bolt. Repeat this process on the remaining legs.

#### **Step #4 – Assembly of Lower Side Frame**

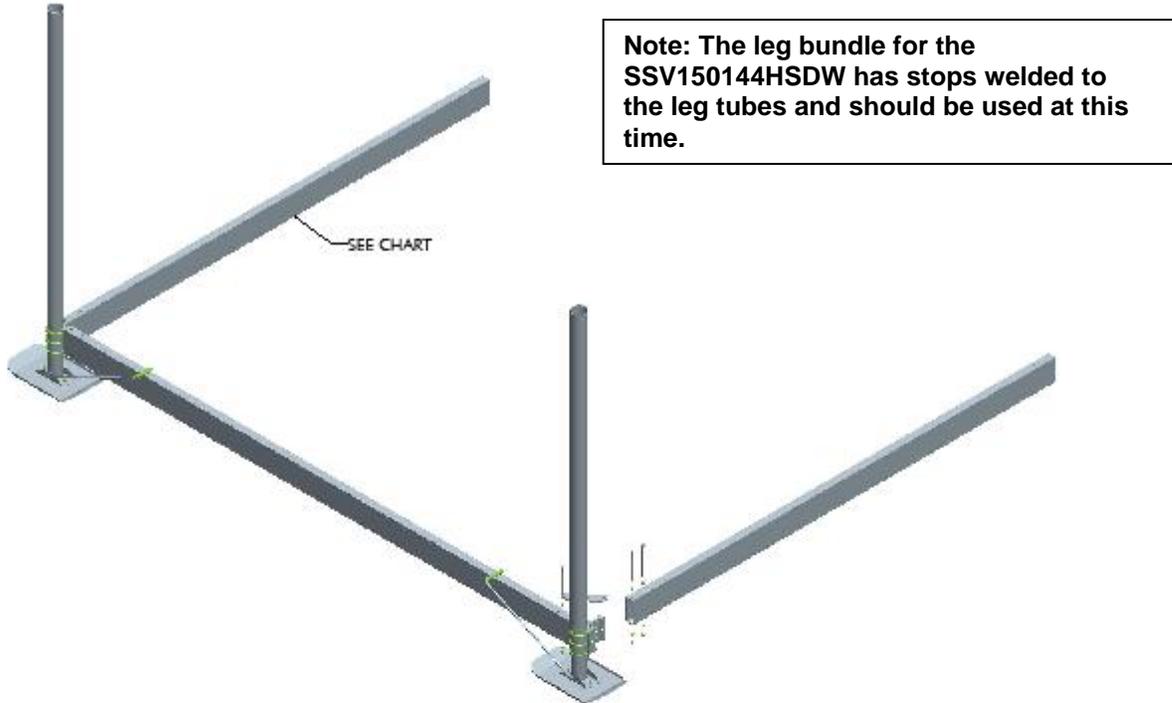
Using the chart at the bottom of the page find the model that you are assembling, locate the necessary components that are included in the lower frame bundle. Your assembly will start by laying two legs down with the corner blocks as shown and using the chart slide a sideframe tube over the corner block and insert the *short bolt* (see chart) with a 3/8" flat washer into the hole closest to the post assembly. Secure with flat washer and brass locknut. **DO NOT TIGHTEN.**



ER FRAME SSPV6012	Lower Frame Components		Bolts to Assemble	
	Front & Rear Crossmembers	Side frames	Short Bolts	Long Bolts
SSV40108HS & HSDW	5" X 2" X 107"	5" X 2" X 131"	3/8-16 X 6"	3/8-16 X 6 1/2"
SSV40120HS & HSDW, SSV50120HS	5" X 2" X 119"	5" X 2" X 131"	3/8-16 X 6"	3/8-16 X 6 1/2"
SSPV50132LHS	5" X 2" X 131"	5" X 2" X 167"	3/8-16 X 6"	3/8-16 X 6 1/2"
SSPV60120LHS	6" X 2" X 119"	6" X 2" X 167"	3/8-16 X 7"	3/8-16 X 7 1/2"
SSV60120HS & HSDW	6" X 2" X 119"	6" X 2" X 143"	3/8-16 X 7"	3/8-16 X 7 1/2"
SSV60132HS	6" X 2" X 131"	6" X 2" X 143"	3/8-16 X 7"	3/8-16 X 7 1/2"
SSV80132HSDW	6" X 2" X 131"	6" X 2" X 155"	3/8-16 X 7"	3/8-16 X 7 1/2"
SSV10132HSDW	6" X 2" X 131"	6" X 2" X 155"	3/8-16 X 7"	3/8-16 X 7 1/2"
SSPV100144HSDW	8" X 2" X 143"	8" X 2" X 155"	3/8-16 X 8 1/2"	3/8-16 X 9"
SSV150144HSDW	8" X 2" X 143"	8" X 2" X 185"	3/8-16 X 8 1/2"	3/8-16 X 9"

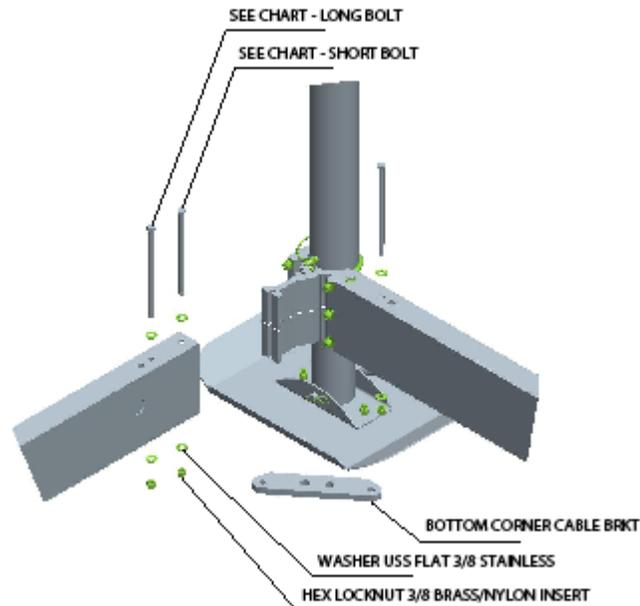
### Step #5 – Attach Front & Rear Frame Crossmembers

Using the chart, locate the correct length tubes for crossmembers. With the unit still laying on it's side, slide the crossmembers over the other corner block leg and insert the short bolt with a washer into the hole closest to the post and secure on the bottom with a flat washer and brass lock nut. **DO NOT TIGHTEN.**



### Step #6 – Complete Frame Corner Assembly

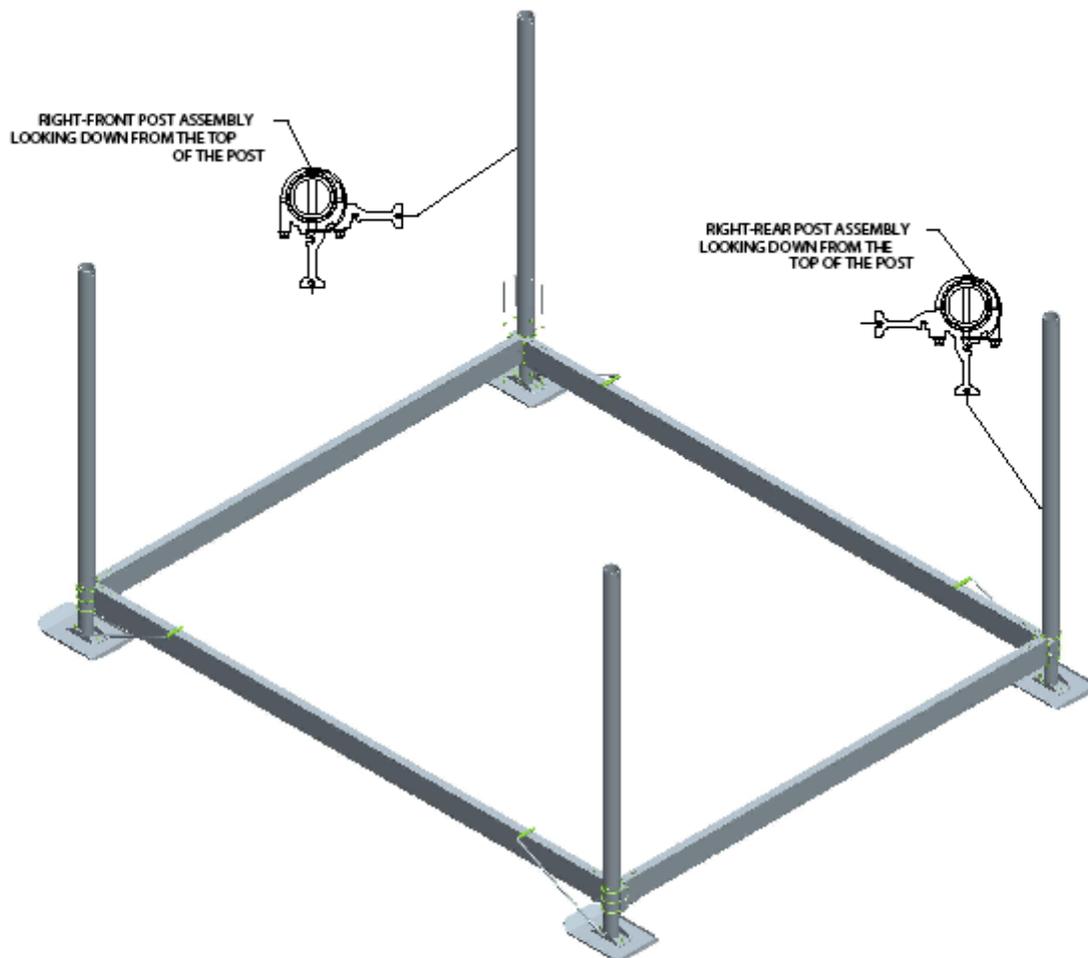
Flip the entire assembly upright onto the base pads.



Locate the long bolts and the bottom corner cable bracket. 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. Secure with a flat washer and brass lock nut. **Do not tighten.**

### **Step #7 – Complete Bottom Frame & Post Assembly**

Insert the corner blocks of the two remaining leg assemblies into the crossmembers as shown below, insert short bolts with washers in the holes closest to the posts to keep them in place. Pull the legs apart slightly and slide the other side frame over the corner blocks and secure these also with short bolts, washers, and brass lock nuts. Square the frame and tighten all hardware installed.

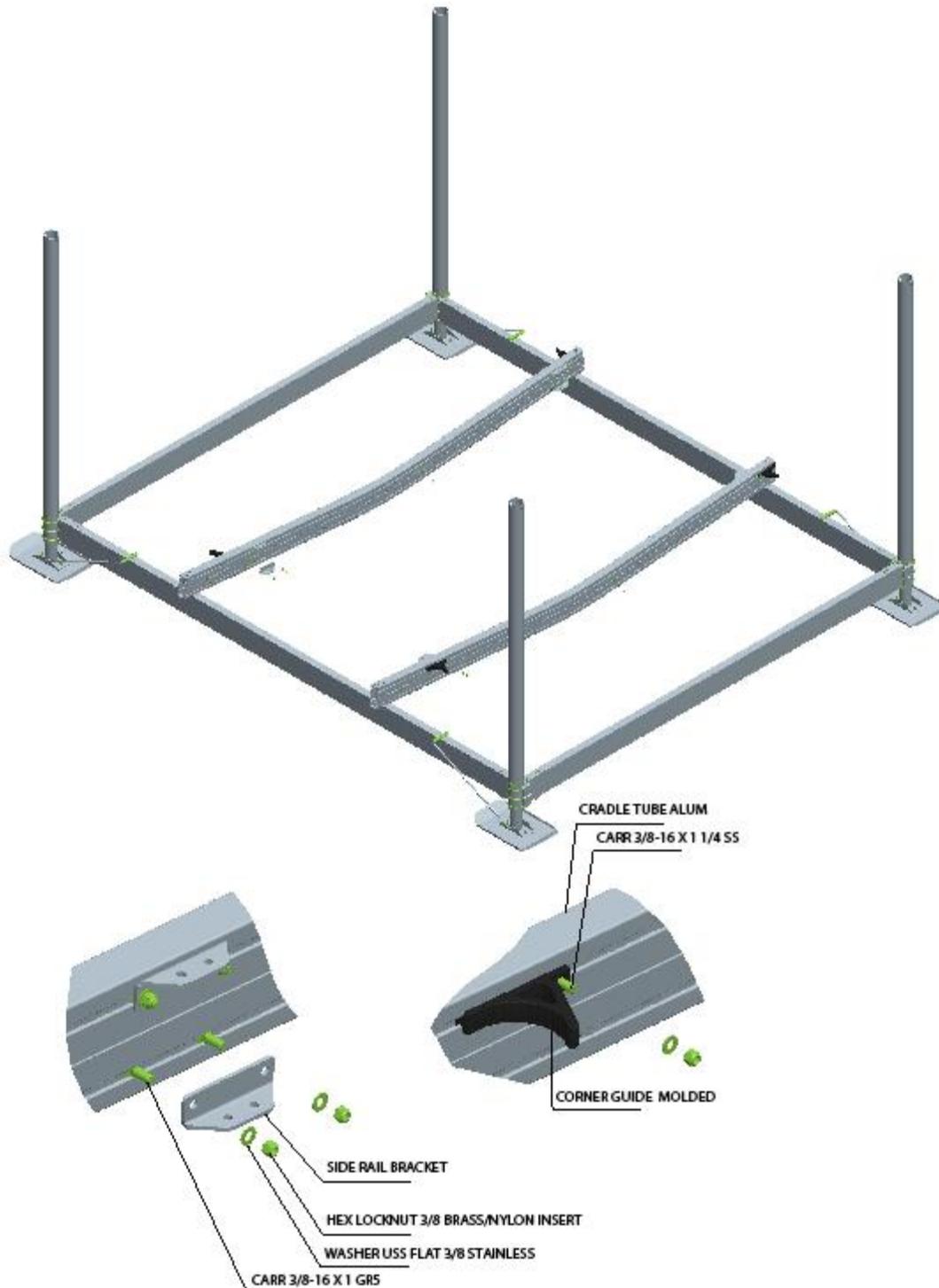


### **Properly Securing a Lift's Lower Frame**

Tighten all fasteners with an air or battery powered high torque impact wrench. It's important to tighten the fasteners so the platform tube pulls tight to the corner block. The fastener needs to slightly crease the tube wall until there is no gap between the tube and the corner block. In some instances the impact wrench may not have enough torque and it may be necessary to hand tighten in order to achieve contact with the corner block.

**Step #8A – Assemble the Lift Platform for 4000#, 5000#, and 6000#**

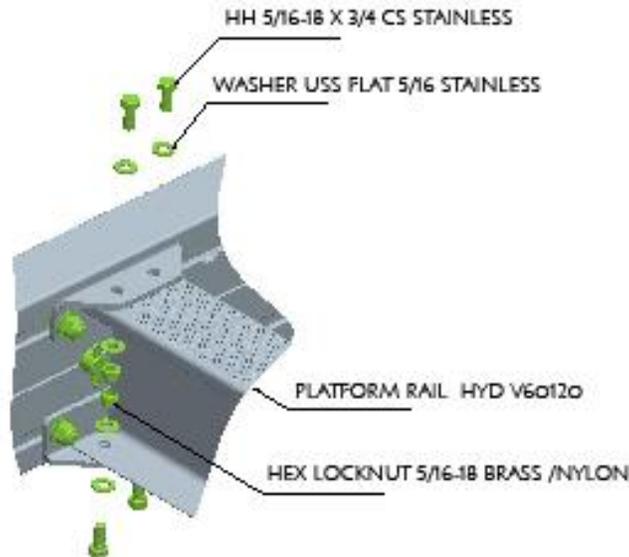
Lay the V-Shaped cradle tubes across the lower frame as shown (4000, 5000, and 6000lb). Place the end with the lift cable threaded out the bottom on the same side as the corner cable brackets.



For the 4000, 5000, and 6000 lb. models insert a carriage bolt into the corner guide as shown and slide the head into the top slot in the cradle tube. Secure corner guide with a flat washer and lock nut. Do the same on the other three corners. Slide two carriage bolts into the top slot

and 2 into the bottom slot on the inside of the cradle tube. Using those bolts, mount a pair of side rail brackets on each end of the cradle tube as shown above. Position the outer edge of the brackets at least 3 inches from the end of the cradle tube. It is important to keep this distance equal on all four corners to keep it square. **Do not tighten at this time.**

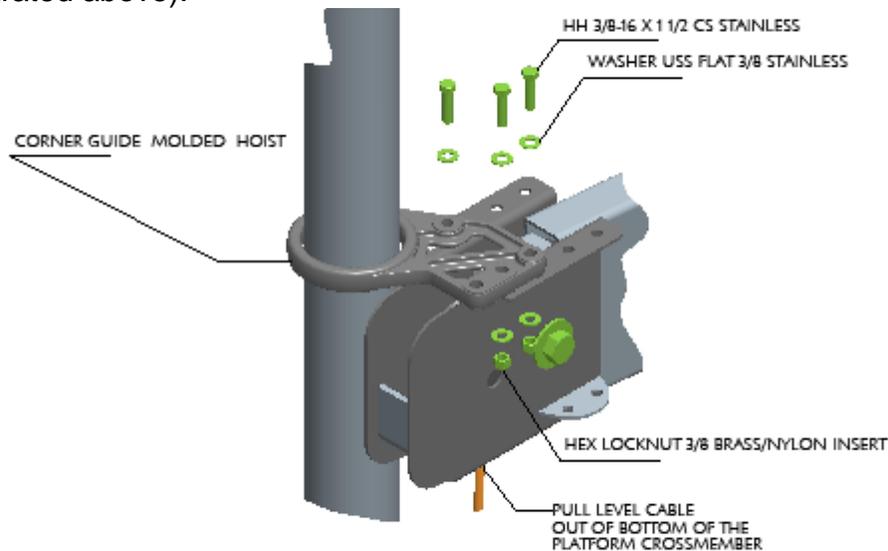
Insert the platform rails into the space between the mounting brackets and between the v-frames and secure with bolts, washers and nuts as shown.



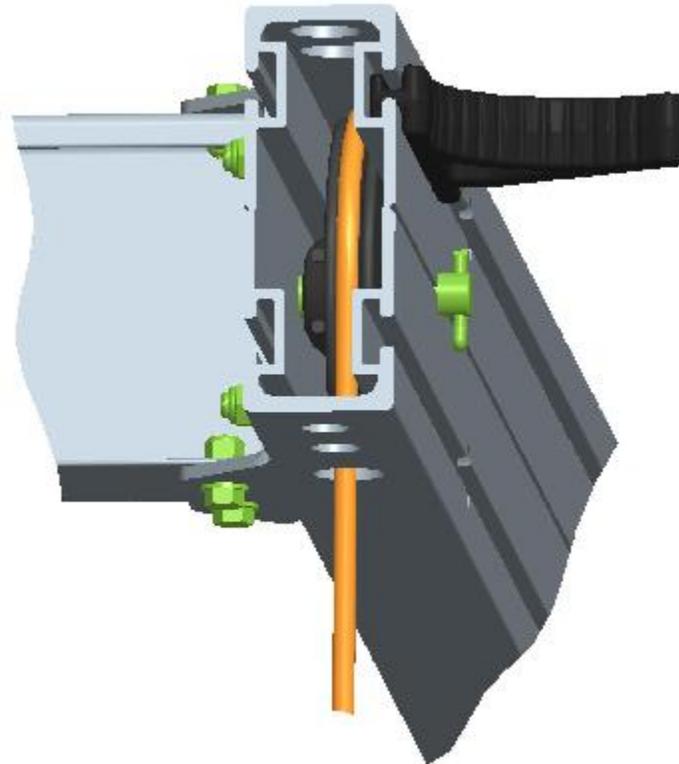
**Step #8B – Assemble the Lift Platform for 8000# - 15000#**

The cradle tubes on all the lifts above 8000# have galvanized steel cradle tubes with different attaching system. They also use the plastic (plastic and aluminum) ring style corner guides. Lay the galvanized cradle tubes on the bottom frame with the end with the cables coming out the bottom on the same side as the corner cable brackets. Slide the corner guides over the post and attach as shown.

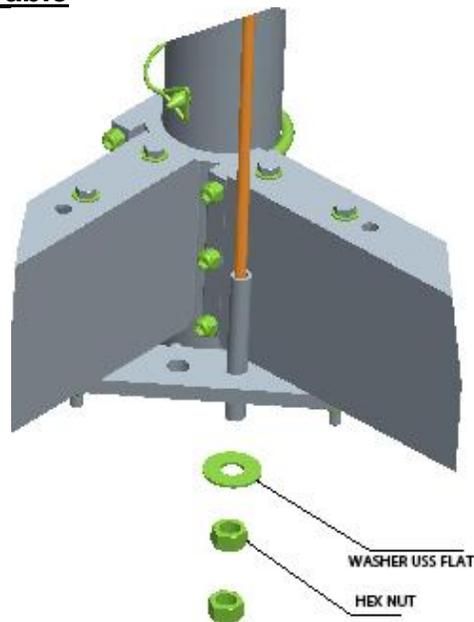
Place the platform side rails between the welded brackets on the cradle tube and attach as illustrated above (use the same fasteners as used for the aluminum cradle tube on the 4000# - 6000# lifts illustrated above).



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 cable mounting bar attached to the corner of the lower frame. Note the other two holes on the end of the cradle tube. These will be used later to attach the cables coming from the bottom of the lift tube.



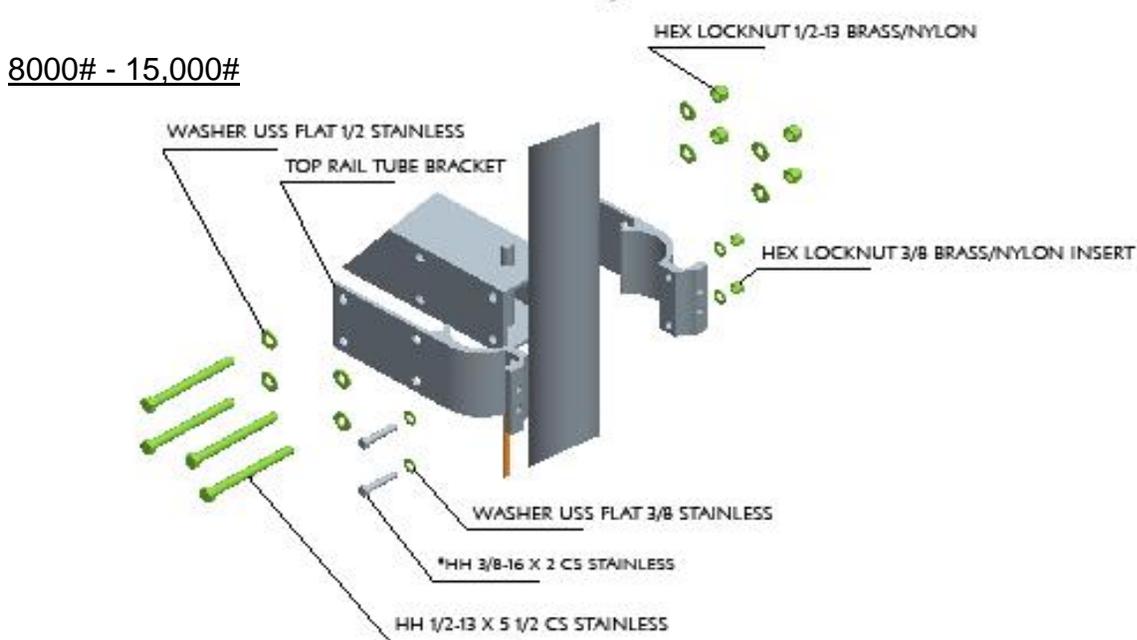
**Step #9 – Attach the Level Cable**



Attach the level cable as shown inserting the cable into the hole closest to the sideframe and securing with a flat washer and 2 brass hex nuts (see chart on page 12 for hardware sizes). 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.

**Step #10 – Install the Side Spacer Brace Tube**

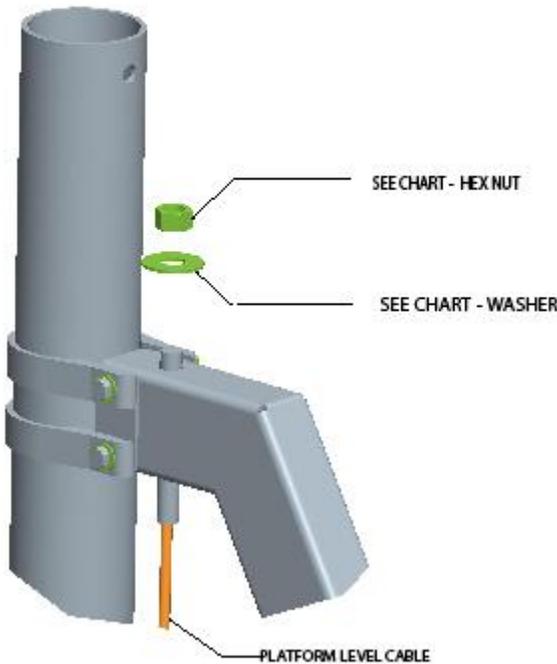
The side spacer brace tube is located opposite the lift tube so install it on the posts opposite the corner cable brackets. The 4000#, 5000#, & 6000# lifts use a drop side brace tube and the 8000# thru 15000# lifts use a straight side brace tube. Locate the appropriate brackets and hardware from the illustrations below. Mount the spacer tube to the post as shown, keeping the lock nuts on the outside. Adjust brackets on both sides to the height indicated by the chart on page 14 and tighten all fasteners securely.



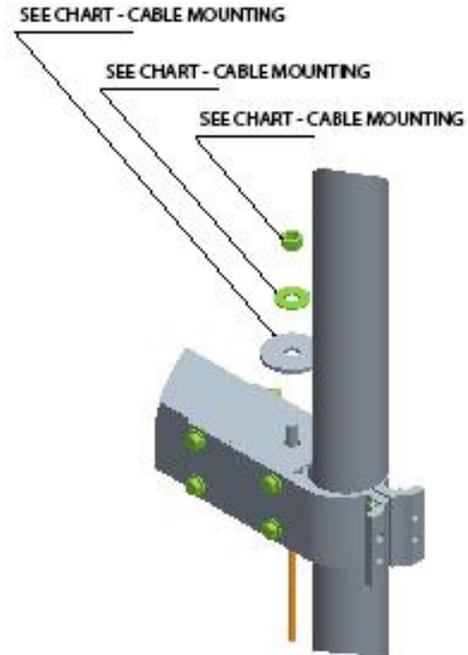
**Step # 11 – Attach Level Cables to Spacer Brace Tube**

Insert the ends of the level cables (from the cradle tubes) directly up thru the space brace tube and secure with hardware from chart below. Hint: Block the platform off the lower frame about 6 inches to create enough slack for the cable to pass thru the brace tube.

**4000# - 5000# - 6000#**



**8,000# - 15,000#**



Hoist Models	Level Cable		Lift Cables	
	Hex Nut	Washers	Hex Nuts	Washers
SSV40108HS & HSDW	5/8-11	5/8	5/8-11	5/8
SSV40120HS & HSWD, SSV50120HS	5/8-11	5/8	5/8-11	5/8
SSPV50132LHS	5/8-11	5/8	5/8-11	5/8
SSPV60120LHS & SSV60120HS &HSDW	5/8-11	5/8	5/8-11	5/8
SSV60132HS	5/8-11	5/8	5/8-11	5/8
SSV80132HSDW	5/8-11	5/8 & A314*	5/8-11	5/8
SSV100132HSDW	5/8-11	5/8 & A314*	7/8-9	7/8
SSPV100144HSDW	5/8-11	5/8 & A314*	7/8-9	
SSV150144HSDW	7/8-9	7/8 & 6767900*	1 1/8-7	

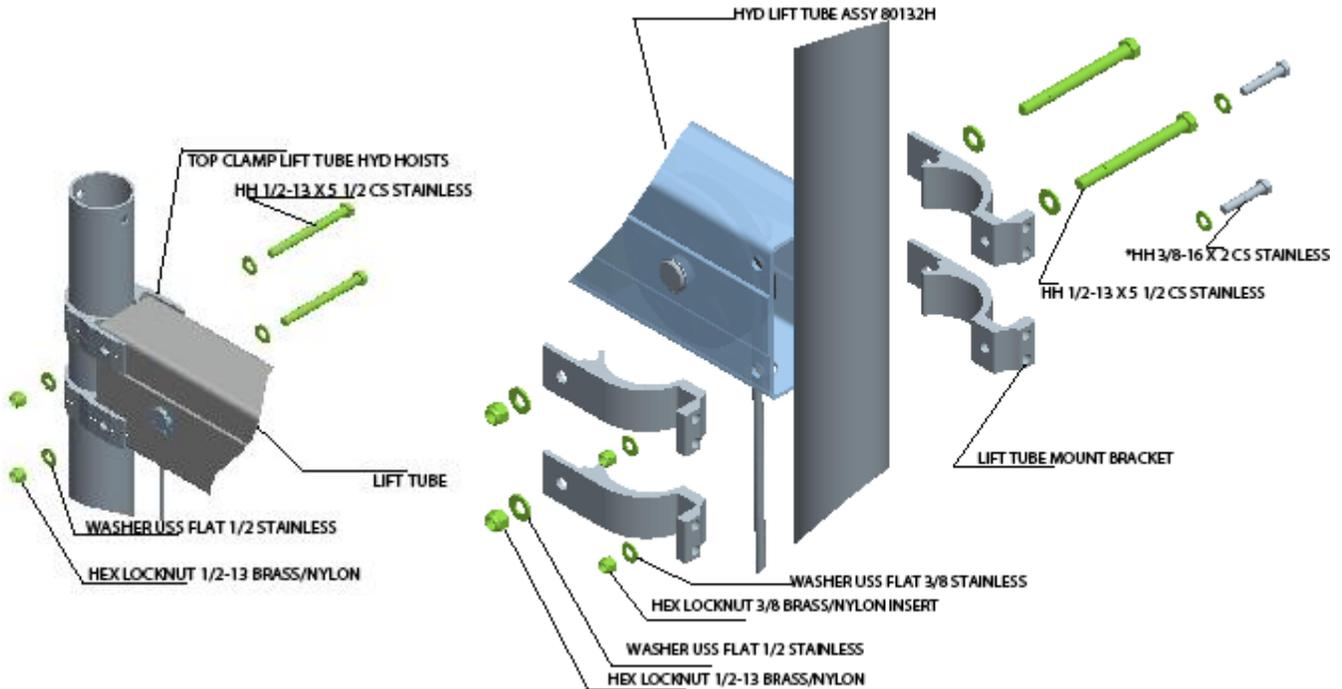
**Step #12 – Install the Hydraulic Lift Tube/Assemblies**

The lift tube contains the hydraulic cylinder and is quite heavy. You will need several people or powered assist to lift and hold it 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. Locate the brackets and hardware for your model as specified below. Locate the

brackets at the height indicated on the chart on page 14 and attach the hydraulic lift tube as shown. Tighten all fasteners securely

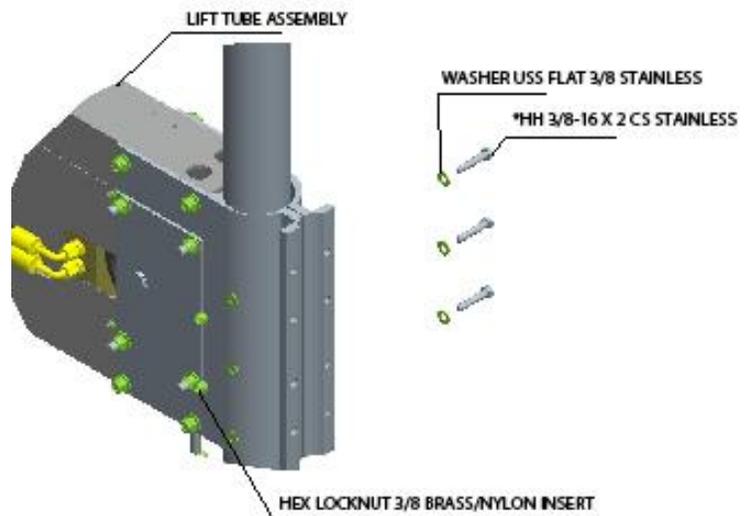
4,000# - 6,000#

8,000#



10,000# & 15,000#

On the fully assembled lift assemblies for the 10,000# and the 15,000# you will need to loosen the 1/2" lock nuts on the plates (**DO NOT REMOVE ANY OF THE 1/2" BOLTS OR LOCK NUTS**) which hold the assembly together. This will allow it to slide down over the corner post to get it in position at the according to measurements on the chart on page 14 or on the stops. Once in place complete assembly using shown hardware and tighten securely.

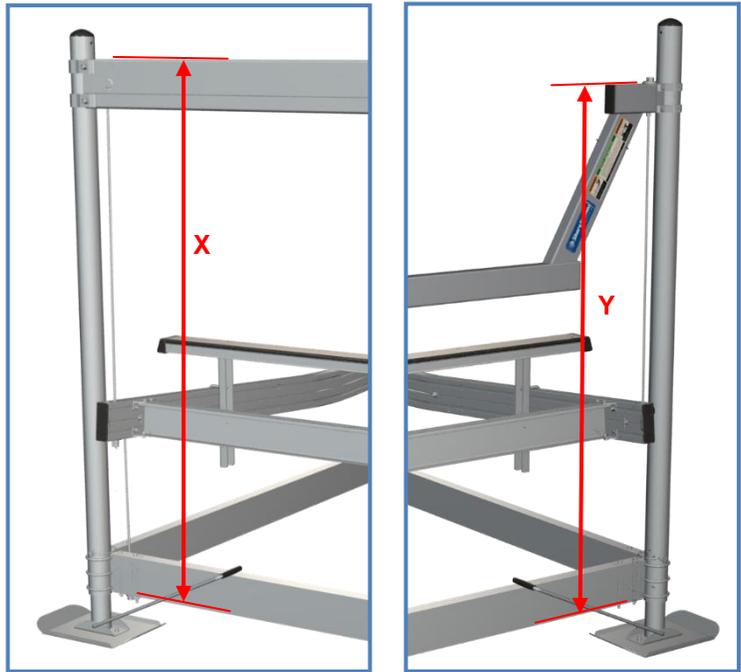


# Lift Assembly Measurements

The following table shows the lift tube and brace tube (drop side) measurements for each lift model. Find the lift model in the table and place the components as shown in the diagrams. Tighten all components according to the assembly instructions after properly locating the lift tubes.

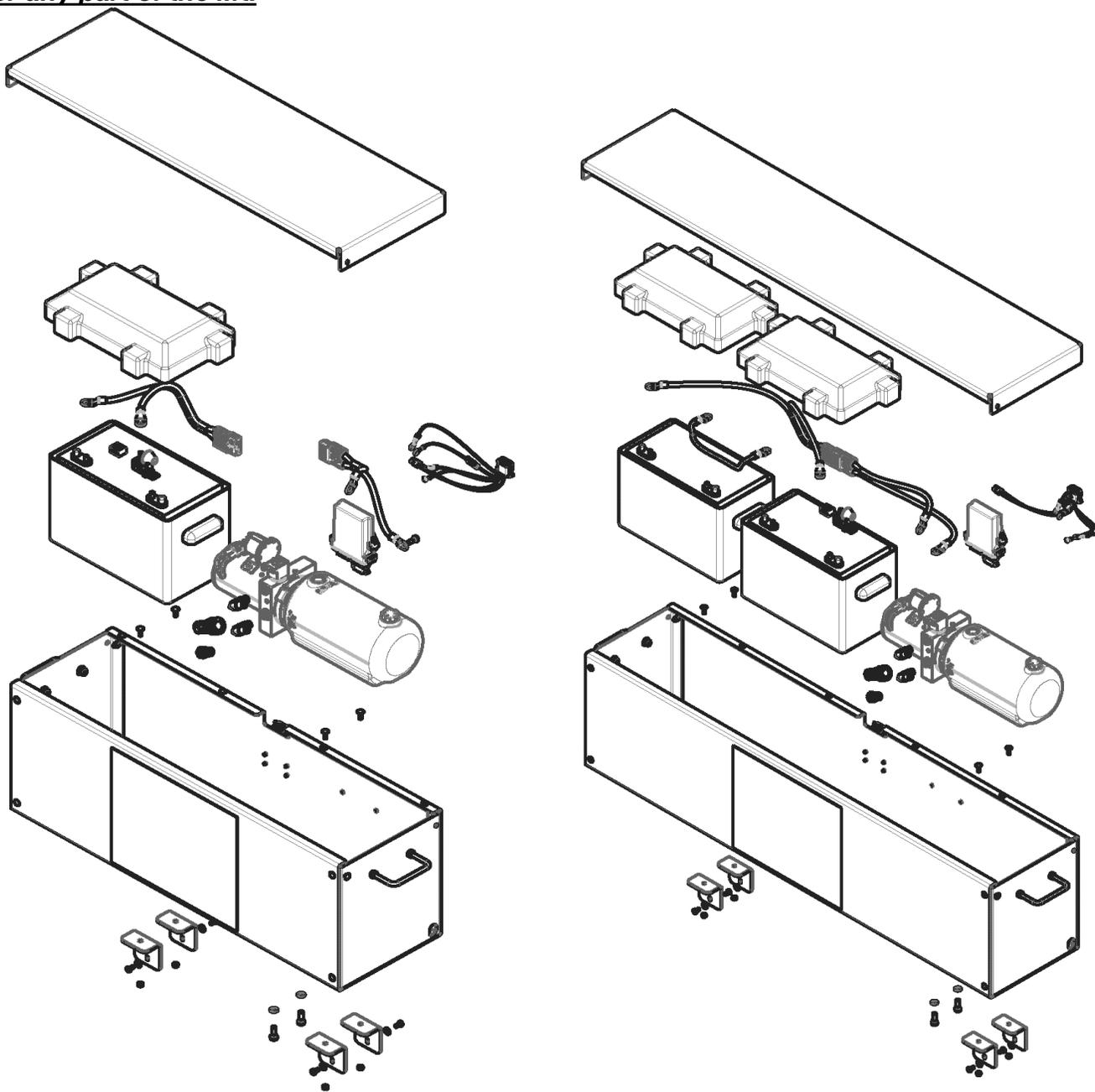
	Lift Tube Height (X)	Brace Tube Height (Y)
SSV1564ED	69"	69"
SSV1564M	69"	69"
SSV20100EDS	69-1/4"	69-1/4"
SSV20100MS	69-1/4"	69-1/4"
SSV30108EDS	68"	68"
SSV30108MS	68"	68"
SSV30120EDS	68"	68"
SSV30120MS	68"	68"
SSV40108EDS	68"	68"
SSV40108HS	71-1/2"	75-1/2"
SSV40108MS	68"	68"
SSV40120EDS	68"	68"
SSV40120HS	71-1/2"	75-1/2"
SSV40120MS	68"	68"
SSV50108EDS	76"	76"
SSV50108MS	76"	76"
SSV50120EDS	76"	76"
SSV50120HS	71-1/2"	75-1/2"
SSV50120MS	76"	76"
SSV60108EDS	78"	77-1/2"
SSV60120EDS	78"	77-1/2"
SSV60120HS	80"	75-1/2"
SSV60132HS	80"	75-1/2"
SSV70120HSDW	80"	87"
SSV70132HSDW	80"	87"
SSV80132HSDW	87"	87"
SSPV50132LEDS	76"	76"
SSPV50132LHS	71-1/2"	76-3/4"
SSPV50132MLS	76"	76"
SSV100132HSDW	95"	87"
SSV100144HSDW	97"	90-1/2"
SSV150144HSDW	109"	102"

**Note:** 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.



### **Step #13 – Mounting the Pump Box**

**Refer to instructions included in the pump box.** Place battery in box and place inside pump box. Attach red battery cable to the positive post and black to negative post. This would also be the time to attach the short Battery Tender harness to the battery matching the colored cable ends to the battery cables. **Do not allow the cables to make contact with each other or any part of the lift.**



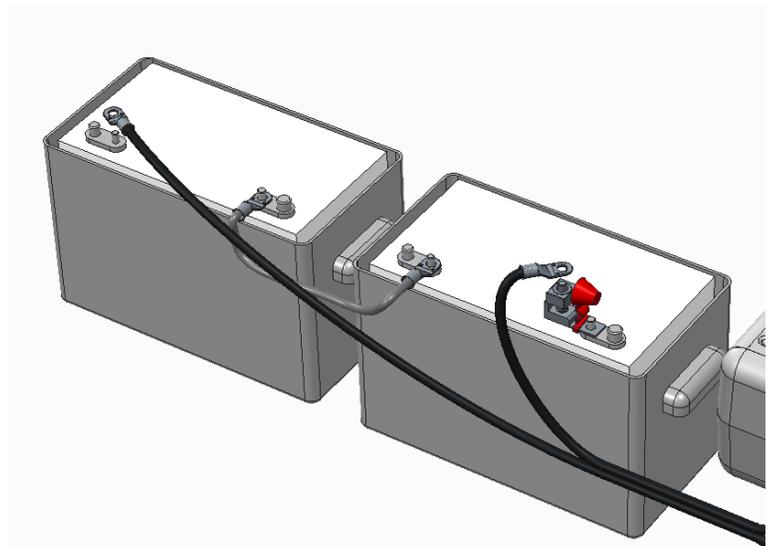


**Step #14 Connecting Battery to 12 Volt Pump**

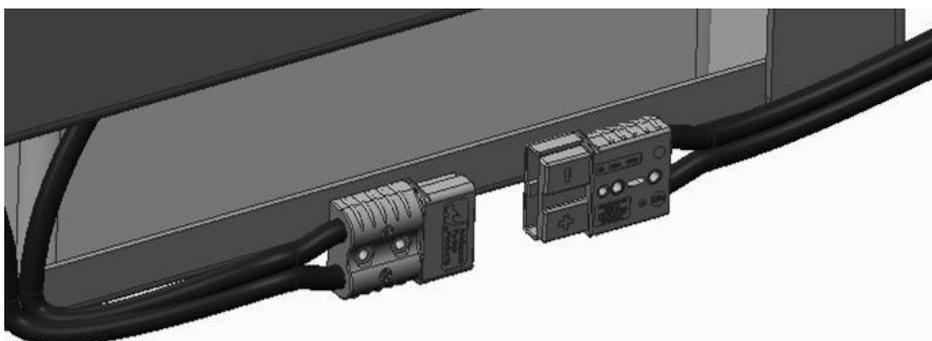
The positive and negative cables from the battery will be mounted as shown for 12 volt pumps..

**Step #14A – Connecting the Battery Cables 24-Volt Pump**

The long black ground cable will be connected to the negative post. The short black cable will be used to hook the batteries together positive on one battery to the negative on the other. The red battery cable will be hooked to the positive on the battery.



Connect the battery cable from the battery bank to the motor battery cable.



### **Step #15 – Dockside Control Box w/Lockout**

With the pump and battery mounted it will be time to mount the dockside control box and 35 foot cord unit to the post on the dock side of the lift. The cord will be routed thru the canopy and attached to the hoop with zip ties or use the underwater conduit kit to run it along the frame under water..

Open the hose clamps and insert the ends thru the slots in the controller bracket, place on the leg post next to the dock reconnect the hose clamp and secure. Plug the connector to the one mounted to the pump. At this time program or check the remotes (refer to the *Quick Start Hydraulic Controller* instructions included in the pump box for key fob programming and operation) to be sure they will operate the system.

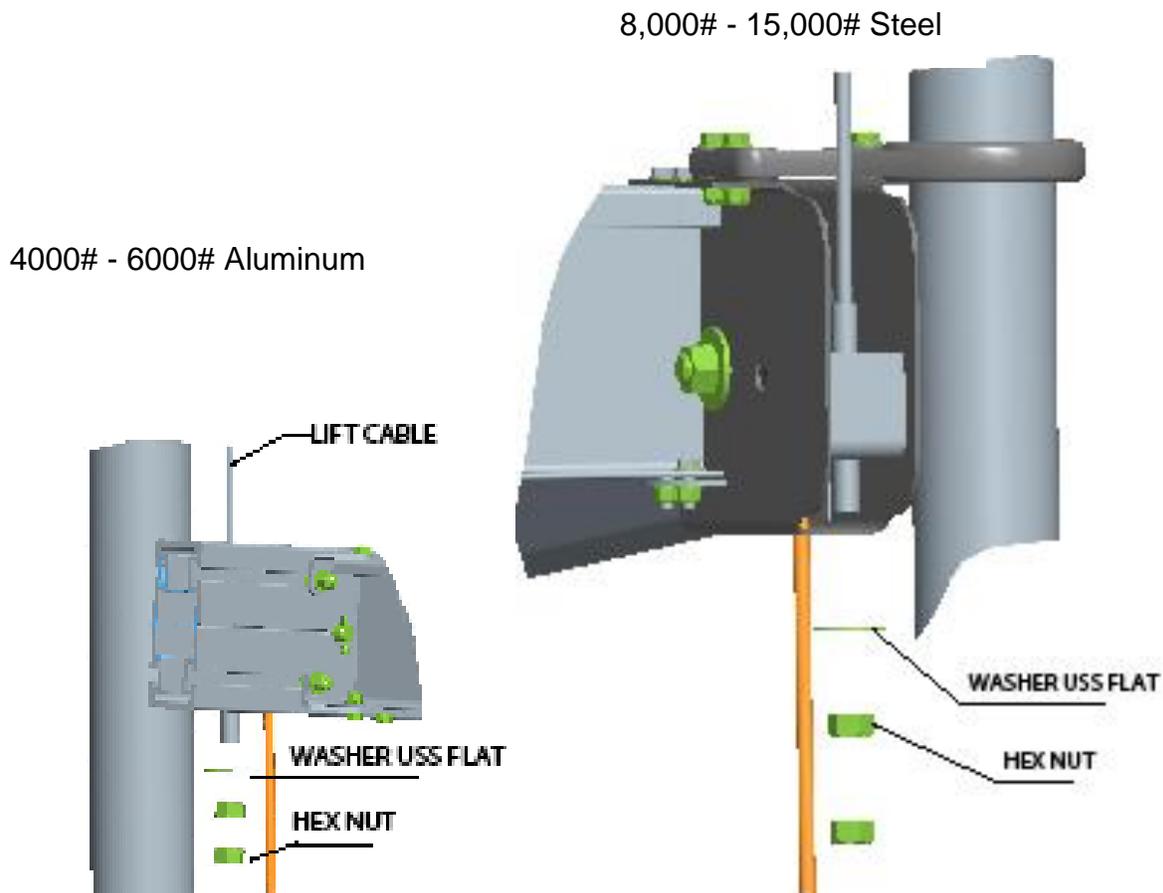


### **Step #16 – Connecting Lift Tube Cables**

Using the Key Fob remote controller, push the Down Button to run the cables down so they can be attached to the lift platform.

- *Attaching cables to Aluminum Cradle Tubes:* the cable coming from the outside pulley of the Lift Tube goes thru the outside holes in the Cradle Tube. The cable coming from the inside pulley, on the other end of the Lift Tube, goes thru the inside hole on the Cradle Tube.
- *Attaching cables to Steel Cradle Tubes:* both cables are attached to the cable mounting brackets welded into the end of the steel Cradle Tube.

Secure the cables to the Cradle Tubes with 2 brass nuts and a flat washer as shown below. Refer to the chart on page 11 for the proper sizes.



### **Step #17 – Attaching Upper Limit Switch**

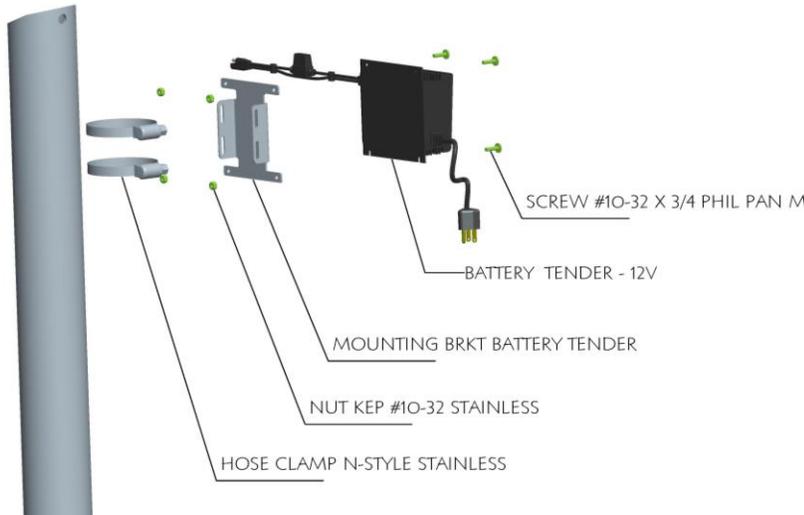
Attach the upper limit switch to the bottom of the winch tube assembly as shown. The holes will allow the switch to be adjusted so the cable will travel thru the center of the slot in the pivot arm. The two halves of the bump stop will be mounted to the cable with carriage bolts and kep nuts, the final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



## **Step #18A – Mounting the Battery Tender**

**Models: HA0083 (12V), HA0084 (24V)**

The Battery Tender battery charger is to be plugged into a properly and safely installed 110 volt power line near the lift. It is designed to rapidly re-charge the battery then maintain a full charge. The Battery Tender Kit included with this lift contains the charger unit with power cord, short battery harness and 25 ft. long connecting cord. *For additional operating and safety instructions, please see the Battery Tender Instruction Manual packed with this kit.* Mount the charger unit according to instructions included with the kit



## **Step #18B – Boat Lift Solar Charger**

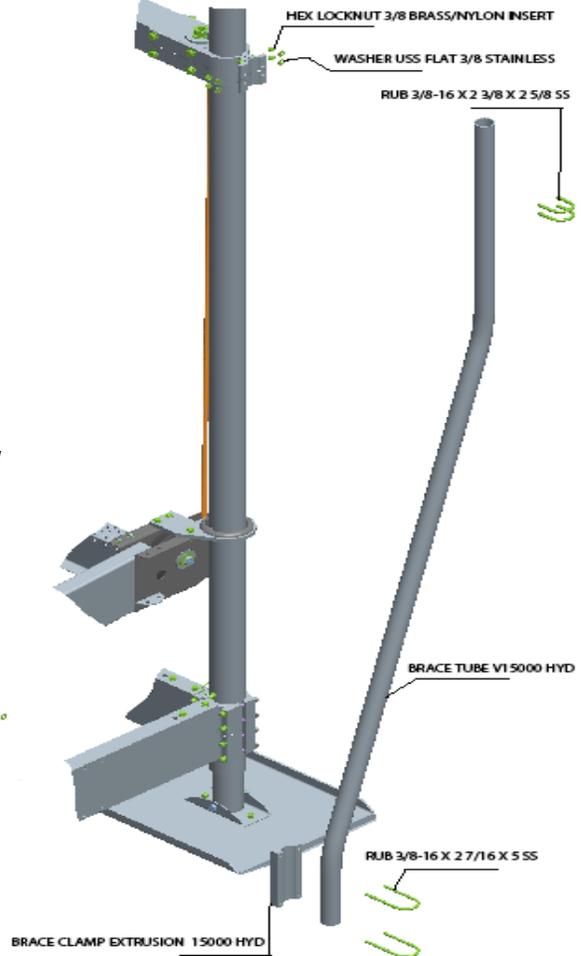
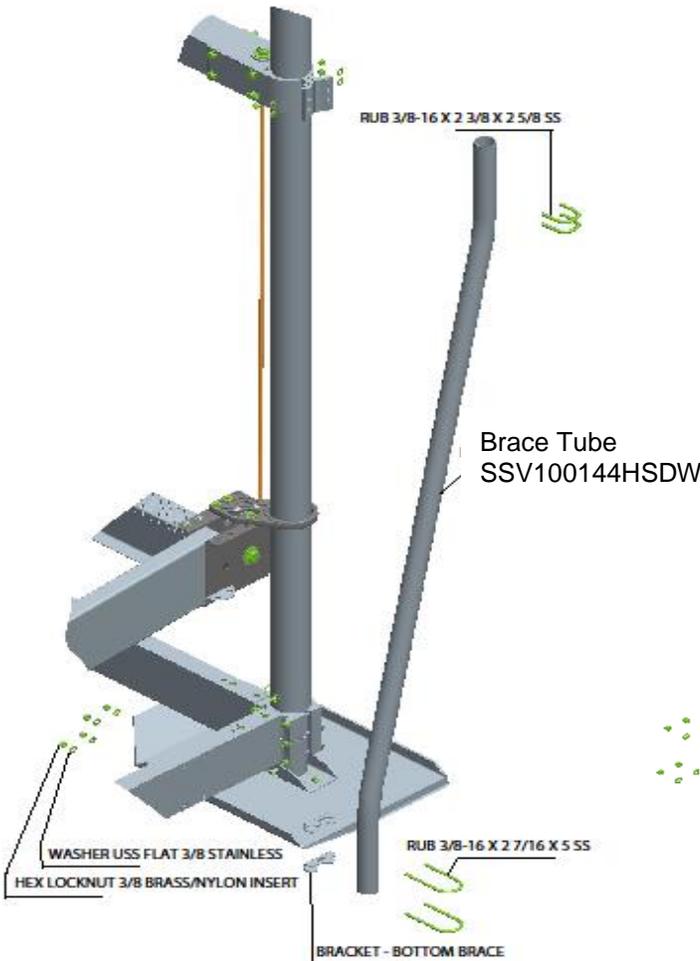
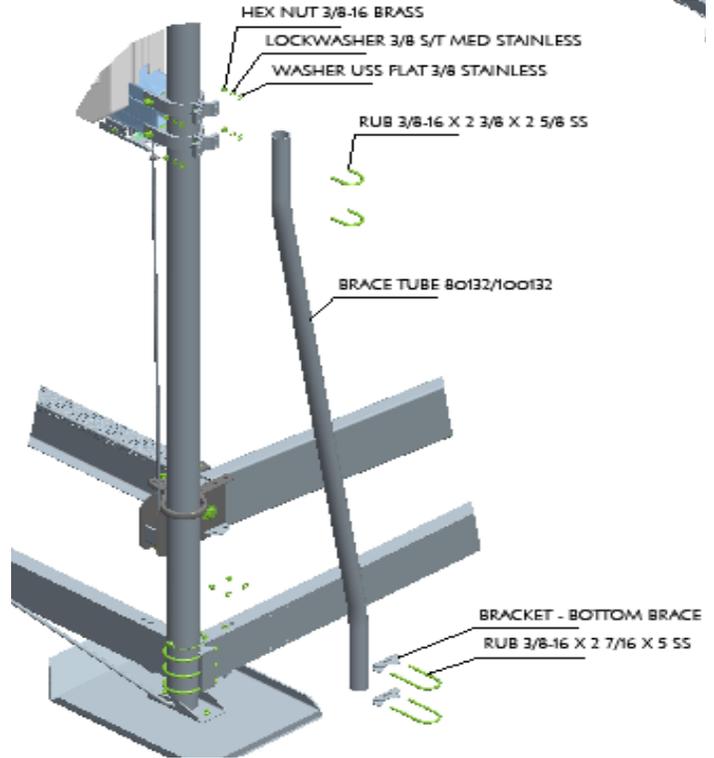
**Models: HA0110 (12V), HA0135 (24V)**

The ShoreStation Boat lift solar chargers are Specifically designed to provide reliable, trouble-free charging and maintenance of your ShoreStation lift battery. Proper installation of this charging system will maximize your charger's performance and will ensure your battery maintains a sufficient charge for your lift system.



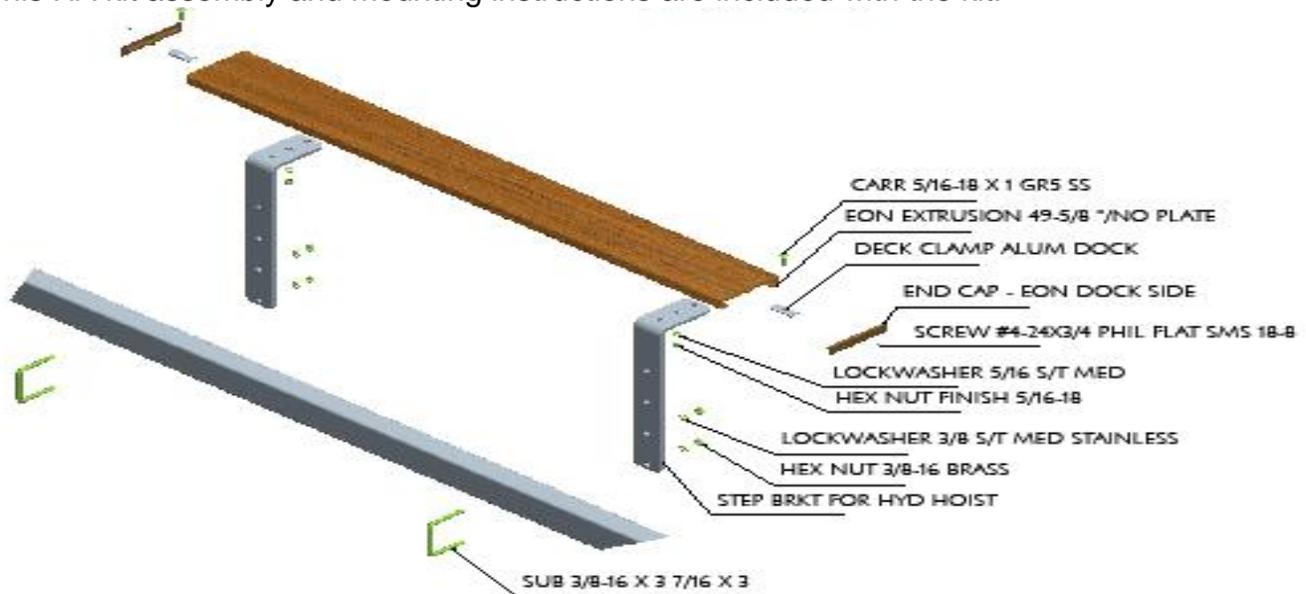
**Step #19 – Mounting Braces for 8000# Lifts and Larger**

At this point with the 8000 lb lifts and larger we will mount the braces to these hoists. Assemble the braces using the hardware shown 8000 lbs. & 100132 lbs. to the right, 10,144 lbs. below left, and 15,000 lb below right



### **Step #20 – Assemble and Attach the Step Kit to 4000# Thru 6000# with Drop Sides**

This HA kit assembly and mounting instructions are included with the kit.



### **Step #21 – Inserting Caps**

If you are adding a canopy you can omit this step in the assembly process. The last step would be to go around and put the black plastic caps in the top of the leg post. Before calling your assembly complete take one last walk around your hoist and make sure all nuts and bolts have been tightened, all cables are secured, and all hoses and electrical connections are together.

