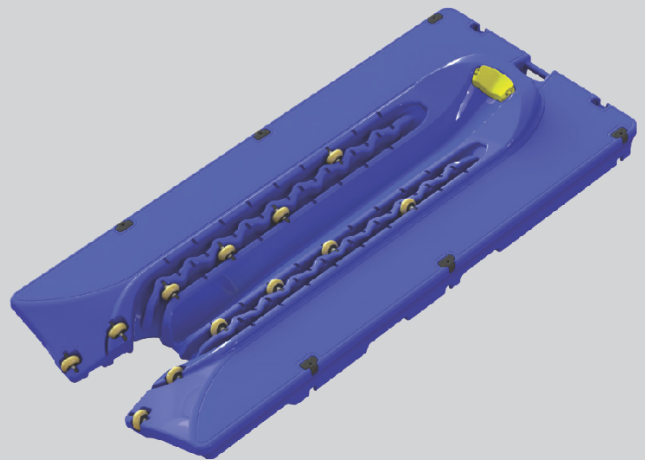


Installation Manual

HYDROPORT™ EPIC



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 **HydroHoist®**
BOAT LIFTS



INTRODUCTION

At HydroHoist, we take pride in bringing the most advanced, easiest to use, and lowest maintenance boat lift systems to the market. Installation of the lift is simple due to its lightweight design and ease of operation.

The following pages contain step-by-step instructions of the installation and operation processes.

The HydroPort EPIC™ platform takes **4 man-hours** (2 people/2 hours each/4 hours total) to assemble on average. Review all parts, hardware, and required tools before beginning assembly. Don't forget: safety first.

If you have questions, contact the Technical Support Team at 1-800-825-3379.

-  It is **STRONGLY** recommended that the installer read the manual before attempting an installation.
-  **Please Note:** The mounting hardware for the HydroPort EPIC is the same as the HP Extreme model. Within this manual, you will see the model HP Extreme part referenced when assembling the HP Epic.

Legend:



Requires careful consideration



WARNING: could cause harm or damage to the lift, vessel, and user

PRE-INSTALLATION CONSIDERATIONS

The following determinations must be made before installing the HydroPort EPIC:

- Location of HydroPort Assembly (remote or on-site)
- Method of transport from assembly to launch site
- Equipment required to safely build, transport, and launch the HydroPort
- Contact points between wheels and the hull (consider hull chines)

Other items to consider:

- Is the dock built sound enough to support mount a port to the face board?
- How will you transport the HydroPort from the launch site to the install location?
- Verify the location you plan to install the HydroPort will accommodate the overall size of the HydroPort. See **Chart 1**.
- See **Chart 2** for a list of the required tools.
- See Chart 3 for all torque requirements.



All references to the LEFT or RIGHT are considered to be facing forward, as if driving the personal watercraft onto the HydroPort platform.

- **LEFT is port side**
- **RIGHT is starboard side**
- **Parts are occasionally described as LEFT or RIGHT to identify their opposing construction, not location on the HydroPort.**

Working through these considerations is the first step in a successful build.

- **No alterations or modifications may be made to HydroHoist® equipment without the express written consent of HydroHoist®. It is the obligation of the End User to inform all equipment operators of the above conditions.**
- **It is the responsibility of the End User to ensure that:**
 - **The HydroPort EPIC is operated in a safe manner**
 - **Regular inspection is performed on the HydroPort EPIC components**
 - **Customer and user reads and understands all safety and warning labels**

Chart 1: General Specification of the HydroPort EPIC

HYDROPORT EPIC DIMENSIONS			
ALL DIMENSIONS IN INCHES			
WIDTH	LENGTH	HEIGHT	WEIGHT
70	160-5/8	17	430 LBS

Chart 2: Required Tools	
1/2" Drive Ratchet (minimum 9" handle length for leverage)	Drift Pin or other hole aligning tool
Electric Drill/Impact	5/32 Hex Key
1/2" Drill Bit	J-Hook Connecting Kit Tool (4154029) Note: only needed if connecting to a second HydroPort
3/8" Drill Bit	Large Hammer (3 or 4 lb. shop hammer is best)
3/4" Deep Well Socket	Knife or tool for cutting
9/16" Deep Well Socket	Measuring Tape
3/4" Open-end or Combination Wrenches	(2) 15/16" Open-end or Combination Wrenches
9/16" Open-end or Combination Wrenches	15/16" Deep Well Socket
#2 Phillips Screwdriver	15/16 Sock & wrench regardless of dock bracket

Chart 3: Torque Specifications	
BOLT SIZE	FOOT POUNDS OF TORQUE
1/4-20	5 FT. LBS.
5/16-18	9 FT. LBS.
3/8-16	16 FT. LBS.
7/16-14	26 FT. LBS.
1/2-13	35 FT. LBS.
9/16-12	47 FT. LBS.
5/8-11	76 FT. LBS.

Chart 4: PARTS LIST—EPIC

EPIC HYDROPORT		
Part	Description	Expected Quantity
HPT-02-0008	BODY-HP EPIC, HH BLUE (BODY ONLY)	1
HPRT-07-0009	AXLE-HP EPIC	12
4154004	5 X 2 WHEEL, HP EPIC	12
HDW-02-0001	SPACER-WHEEL-HP EPIC	34
4154006	AXLE RETAINER, HP EPIC	24
4154008	BOW STOP-HP EPIC	1
4154023	SCREW-1/4-20 X 2"-LG Ø TRUSS HD HPE	4
300124	INSERT- HEX-1/4-20 X .72	12
4154009	CAP PLUG-MOORING-HP EPIC	6
4150008	SCREW-1/4IN.-20 X .75 316 SS PAN HEAD	6
400167	SPINWELD #81 BLUE	6

Chart 5: PARTS LIST—HYDROPORT EPIC FIXED DOCK BRACKET

FIXED DOCK MOORING KIT 4154032		
Part	Description	Expected Quantity
4154044	BRACKET-FIXED DOCK MOORING - REINFORCED	2
3151200	BACK PLATE - REINFORCEMENT - GALV	2
4154126	KIT - BAG HP EXTREME HARDWARE FIXED FEMALE MOORING PLUG	1
4154084	MOORING PLUG 5/8-II FEMALE BRASS PLUG HP EXTREME	2
4154031	KIT-MOORING KIT HPE	1

Chart 6: PARTS LIST—HYDROPORT EPIC FLOATING DOCK BRACKET

FLOATING DOCK MOORING KIT 4154025		
Part	Description	Expected Quantity
4154025	KIT - HARDWARE HP EPIC FLOATING DOCK	1
4154143	HARDWARE KIT- HP EPIC FLOATING 5/8" GALV FEMALE MOORING PLUG	1
4154084	MOORING PLUG 5/8 II FEMALE BRASS PLUG HP EXTREME	2
4154080	FLOATING MOORING, HP EPIC WELDED CORNERS AND STRESS RELIEVE	2
4154047	PLATE - MOORING HINGE HP EXTREME FLOATING MOORING	2
2000000	LITERATURE - REGISTRATION CARD	1

Chart 7: PARTS LIST—HYDROPORT EPIC CONNECTING KIT

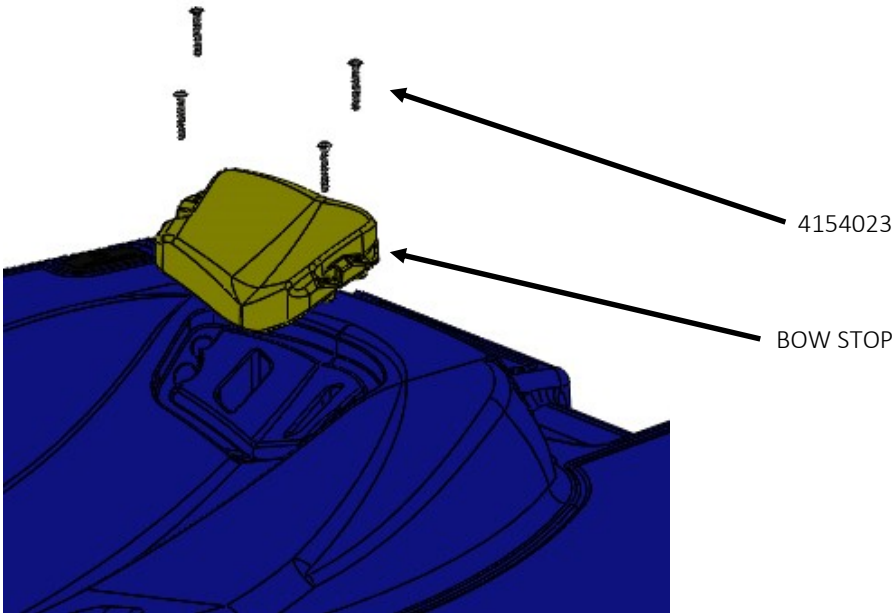
KIT—CONNECTING FOR HP EXTREME OR EPIC		
Part	Description	Expected Quantity
4154028	KIT - CONNECTING HP EXTREME	1
4154015	BOTTOM PLUG CONNNECTION THREADED, HP EXTREME	2
4154016	TOP PLUG THREADED, HP EXTREME	2
2099610	BOX - HP2 (16" X 8" X 6 1/2") DRY BIX WAXED	1
4154033	KIT BAG - HP EXTREME CONNECTION HARDWARE	1
HDW-06-0002	SPACER TUBE— 1/2" DIA. ALUMINUM PIPE	2
HPT-13-0011	CARD—DIRECTIONS TO ONLINE HYDROPORT MANUAL	1

STEP 1: BOW STOP INSTALLATION

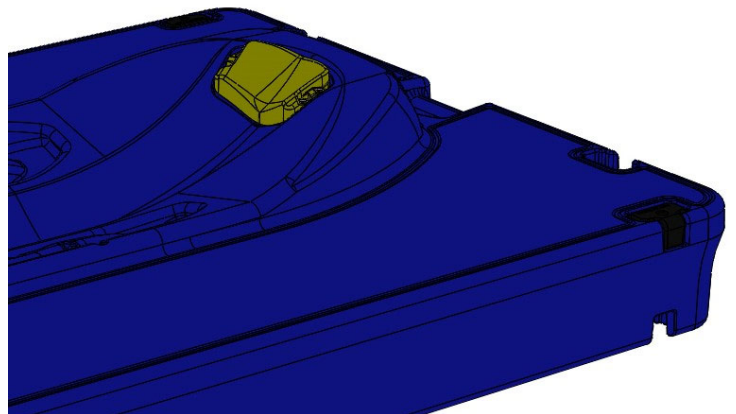
Part #	Parts Required (Per Port)	Quantity
BODY	BODY - EPIC (BODY ONLY)	1
4154008	BOW STOP-HP EPIC	1

Part #	Hardware Required	Quantity
4154023	SCREW—1/4-20 X 2"- LG Ø TRUSS HD	4

1. Insert the Bow Stop into the EPIC body.
2. Insert Screws 4154023 through the Bow Stop in the four locations, shown below.
3. Tighten the four screws.



FULLY ASSEMBLED



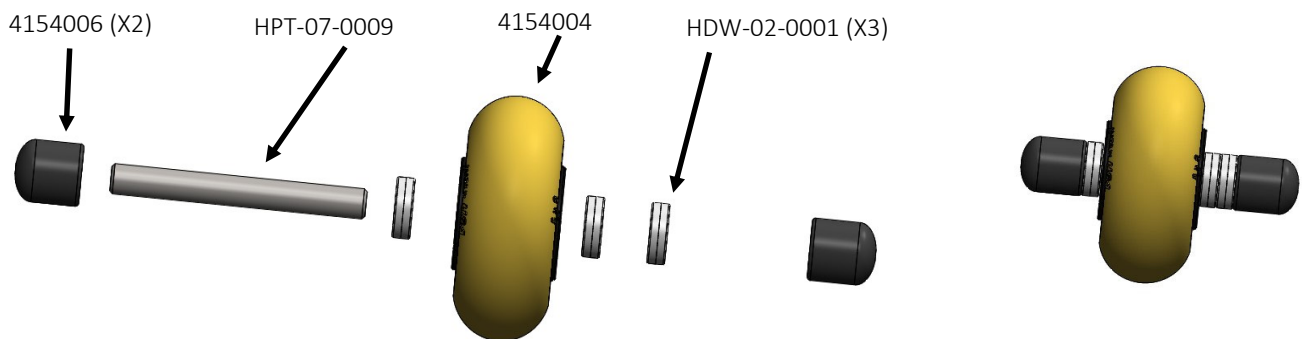
STEP 2: WHEEL ASSEMBLY

Part #	Parts Required (Per Port)	Quantity
4154004	5 X 2 WHEEL-HP EPIC	12
HPT-07-0009	AXLE-HP EPIC	12
4154006	AXLE RETAINER, HP EPIC	24

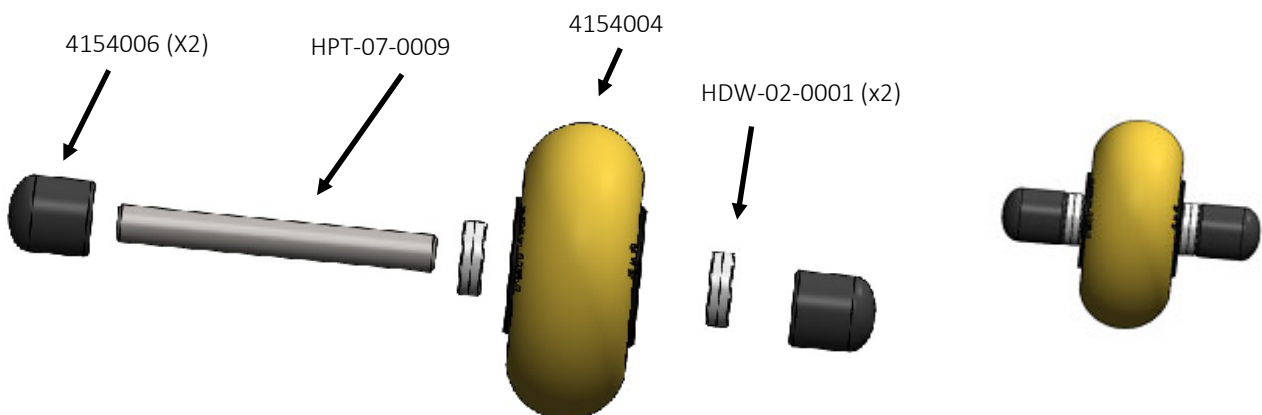
Part #	Hardware Required	Quantity
HDW-02-0001	SPACER-WHEEL-HP EPIC	36

1. Slide the Axle Retainer (4154006) on one end of the Axle HPT-07-0009.
2. Slide one Spacer (HDW-02-0001) onto the Axle (HPT-07-0009) and through the Wheel (4154004).
3. Add two more Spacers (HDW-02-0001) onto the Axle (HPT-07-0009).
4. Insert Axle Retainer (4154006) onto the Axle (HPT-07-0009) to complete assembly.

Port Wheel Assembly (Standard install 4 sets)



Port Rear Entry Wheel Assembly (Standard install 2 sets)



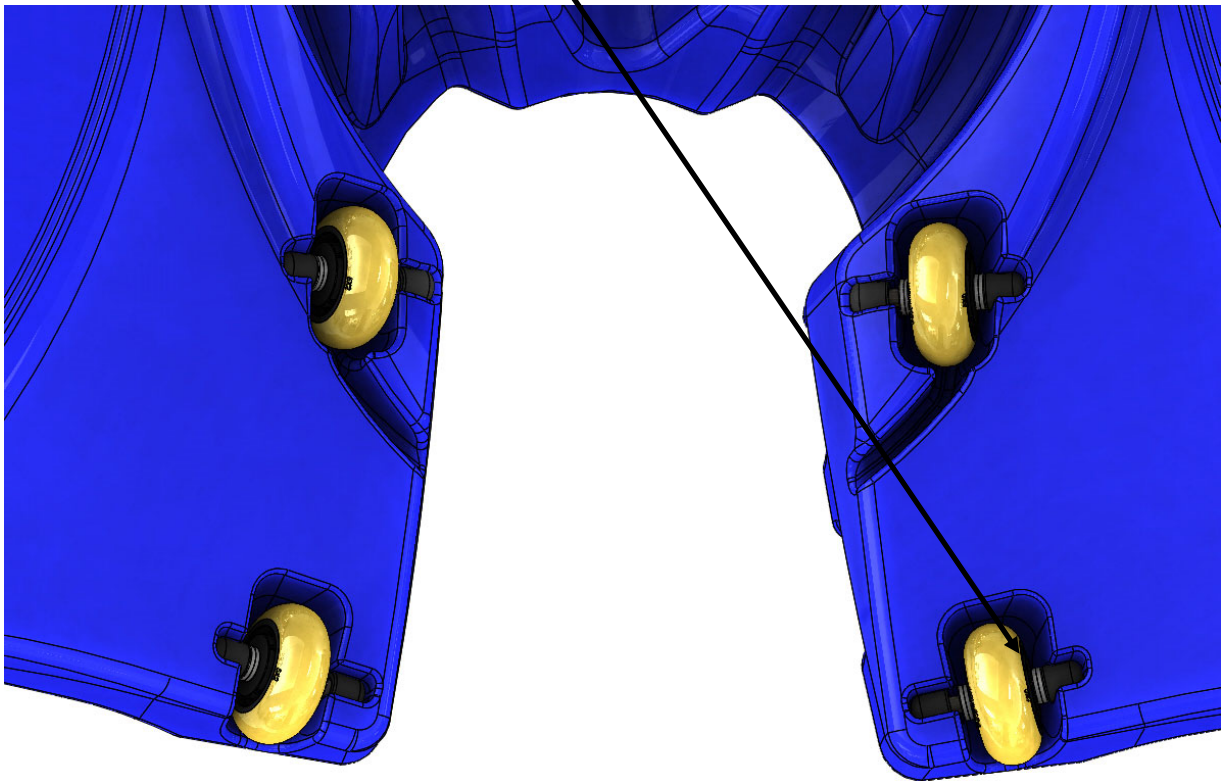
STEP 2: WHEEL PLACEMENT— Port Entry

1. Snap the wheel assembly (ACC-01-0002) into the EPIC body (PHT-01-0008) axle cavities. Many Axle locations are provided to custom fit the EPIC body to your craft. The wheel placement is shipped with all wheel assemblies placed on the inside track.



Due to the differences between each model and manufacture of hulls it may take some trial and error to determine location of each wheel set for proper loading of your vessel. Additional axle sets are available for purchase if more wheels are required.

The single axil spacers should be on the either side of the wheel to avoid wheel coming in contact with the port.



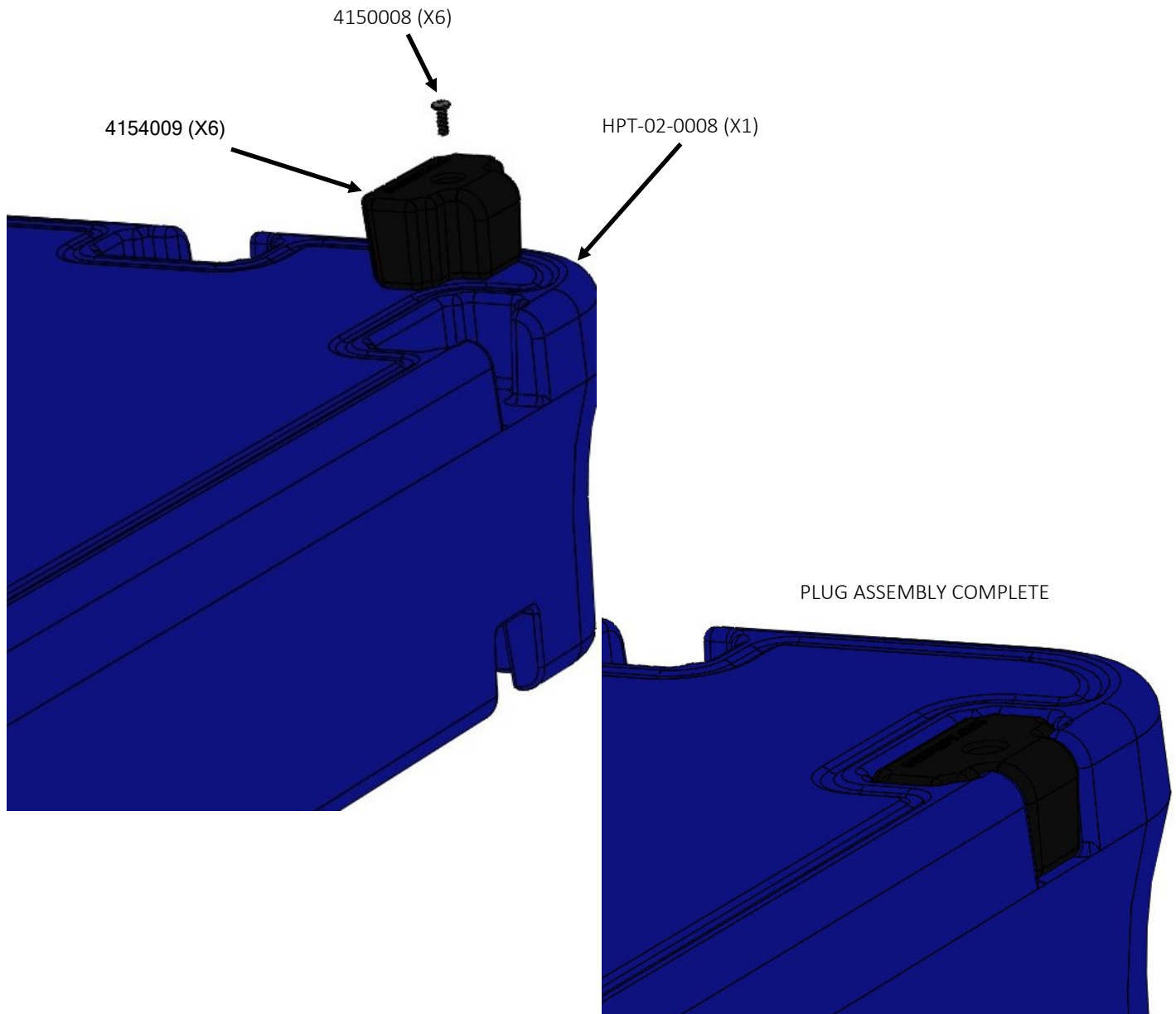
STEP 3: PLUG MOORING CAVITIES

Part #	Parts Required (Per Port)	Quantity
BODY	BODY - EPIC (BODY ONLY)	1
4154009	CAP PLUG- MOORING - HP EXTREME	6

Part #	Hardware Required	Quantity
4150008	SCREW - 1/4IN. - 20 X .75 316 SS PAN HEAD	6

1. Place the Cap Plug into the mooring cavity in the EPIC body.
2. Insert screws through the Cap Plug into the threaded insert in the EPIC body.
3. Tighten Screws until snug.

i **IMPORTANT: DO NOT OVERTIGHTEN THE SCREWS. THE SCREWS ONLY NEED TO BE TIGHTENED ENOUGH TO RETAIN THE CAP PLUG.**



STEP 4: ATTACH TO THE DOCK - FLOATING DOCK APPLICATION

Part #	Parts Required (Per Port)	Quantity	Part #	Hardware Required	Quantity
4154025	KIT—HARDWARE HP EXTREME FLOATING DOCK	1	4154143	HP EXTREME HARDWARE BAG FLOATING	1
4154080	FLOATING MOORING, HP EXTREME WELDED CORNERS AND STRESS RELIEVE	2	4151927	BOLT - 5/8-11 X 1.5	2
4154084	MOORING PLUG 5/8-11 FEMALE BRASS PLUG HP EPIC	2	2090707	LOCK WASHER—5/8 GALV	2
			2090212	WASHER—FLT-5/8" GALV	2

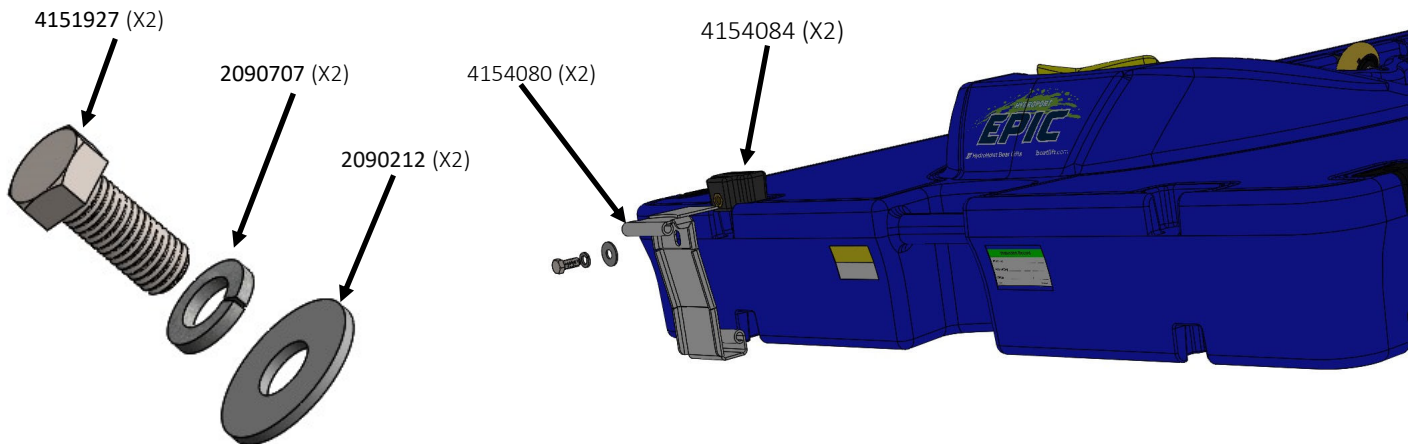
1. Place the Lock Washer and the Washer on both Bolts. (4151927, 2090707, 2090212)
2. Insert the Mooring Plug (4154084) into the mooring cavity in the EPIC.
3. Hook the Mooring Bracket (4154080) into the mooring cavity on the underside of the EPIC body.
3. Pivot the bracket up to the EPIC body. May need to use a hammer to tap the bracket into place.
4. Insert the Bolt and Washers (see 1.) into the Mooring Plug and tighten until the Bracket is snug against the EPIC body.



IMPORTANT: Do not exceed the maximum torque required of 72 ft-lbs.



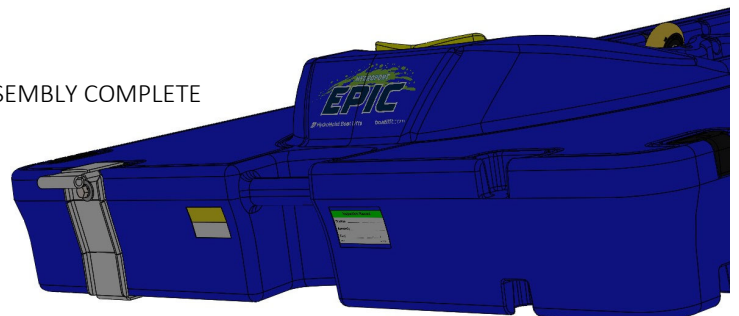
REMINDER: TIGHT IS TIGHT AND TOO TIGHT IS BROKEN!



BOLT ASSEMBLY
COMPLETE



ASSEMBLY COMPLETE





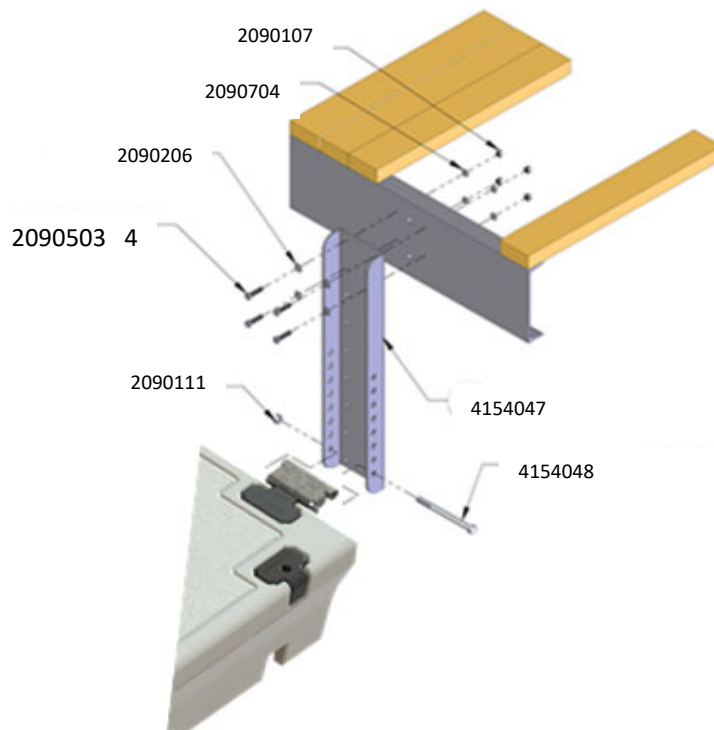
IT IS CRITICAL TO VERIFY THE DOCK IS BUILD STRONG ENOUGH TO ATTACH THE PORT TOO. ADDITIONAL REINFORCEMENT MAY BE NECESSARY IN ROUGH WATER.

STEP 5: ATTACH TO THE FLOATING DOCK

Part #	Parts Required (Per Port)	Quantity
4154080	BRACKET-FIXED MOORING HP EXTREME HEAVY DUTY	2
4154084	MOORING PLUG 5/8-11 FEMALE BRASS PLUG HP EXTREME	2
4154047	PLATE - MOORING HINGE HP2	2

Part #	Hardware Required	Quantity
4151927	BOLT - 5/8-11 X 1.5	2
2090707	LOCK WASHER-5/8 GALV	4
2090212	WASHER-FLT-5/8" GALV	2
4154048	BOLT—5/8-11 6 1/2 IN. GALV	2
2090111	NUT-HEX 5/8-11 GALV	4
2090507	BOLT-HEX 1/2-13 IN. GALV	4
2090705	WASHER-LOCK 1/2 IN. GALV	4
2090209	WASHER—FLAT 1/2 IN. GALV	4

1. Drill four 3/8" holes into dock face and attach the Extended Hinge Mooring Plate (4154047). See Below.
2. When using the HD Dock Bracket (5049000) with the Mooring Hinge Plate, holes only need to be drilled when using the thru-bolt method of dock bracket connection.



When connecting the port to part 41544047 Mooring Hinge float the port in and bolt it to the hole that is either aligning its self to the port bracket hinge or the next hole higher. When bolted the center of the bolt will be 7" to 7.5" above the water surface.

STEP 6: ATTACH TO THE DOCK - FIXED DOCK APPLICATION

Part #	Parts Required (Per Port)	Quantity
4154027	KIT-FIXED DOCK MOORING HP EXTREME	1
4154032	HP-EXTREME HD FIXED MOORING KIT	1
4154031	KIT-MOORING KIT HPE	1
4154044	BRACKET-FIXED MOORING HP EXTREME HEAVY DUTY	2
4154084	MOORING PLUG 5/8-11 FEMALE BRASS PLUG HP EXTREME	2

Part #	Hardware Required	Quantity
4154126	KIT-BAG HP EXTREME HARDWARE FIXED	1
4151927	BOLT - 5/8-11 X 1.5	2
2090707	LOCK WASHER-5/8 GALV	2
2090212	WASHER-FLT-5/8" GALV	2

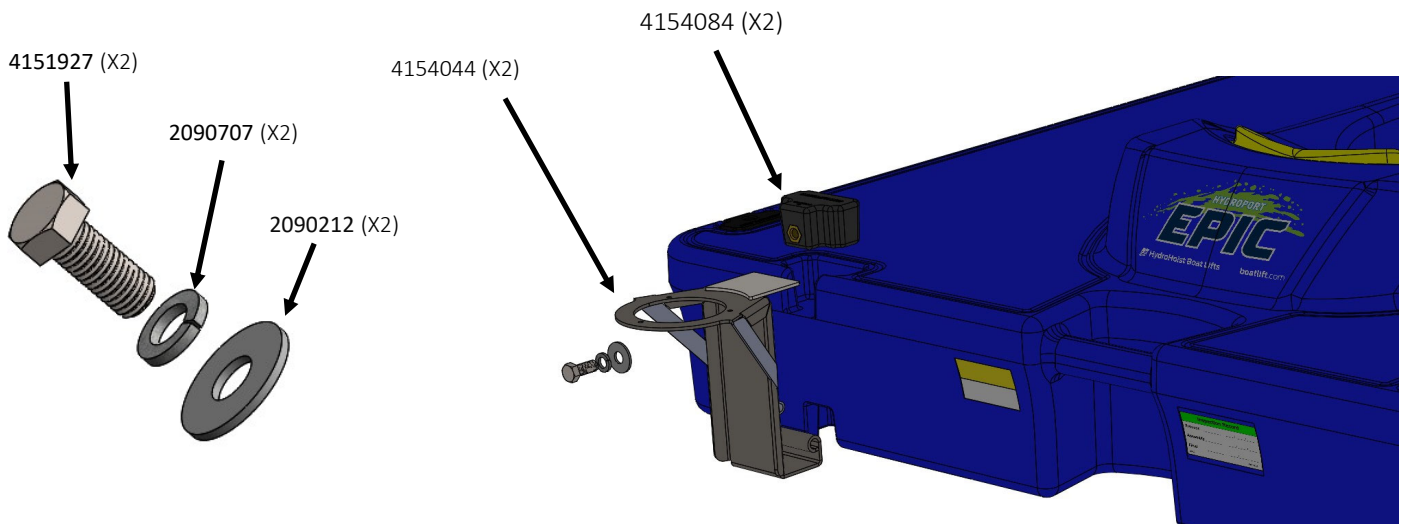
1. Place the Lock Washer and Washer on both Bolts. (4151927, 2090707 & 2090212)
2. Insert the Mooring Plug (4154084) into the mooring cavity in the EPIC body.
3. Hook the Mooring Bracket (4154080) into the Mooring Cavity on the underside of the EPIC body.
3. Pivot the bracket up to the EPIC body.
4. Insert the Bolt and Washers (see 1.) into the Mooring Plug and tighten until the Bracket is snug against the EPIC body.



IMPORTANT: Do not exceed the maximum torque requirement of 70 ft-lbs.



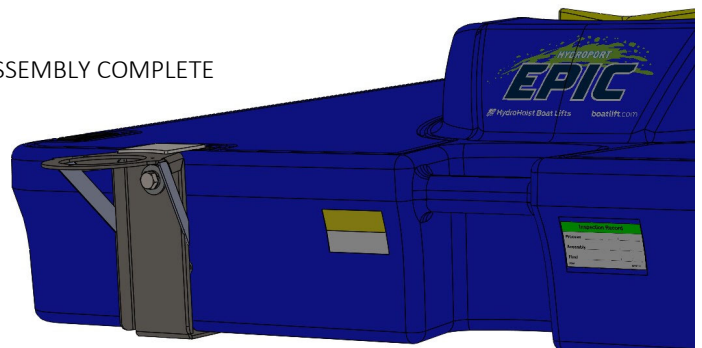
REMINDER: TIGHT IS TIGHT AND TOO TIGHT IS BROKEN!



BOLT ASSEMBLY
COMPLETE



ASSEMBLY COMPLETE



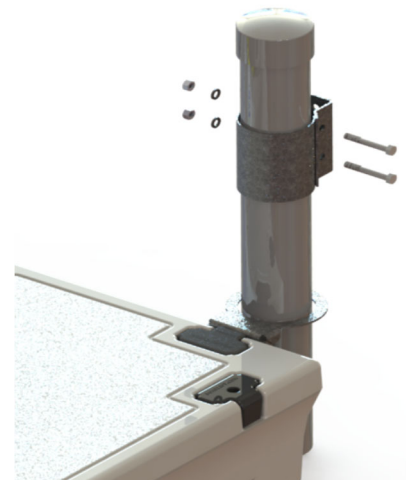
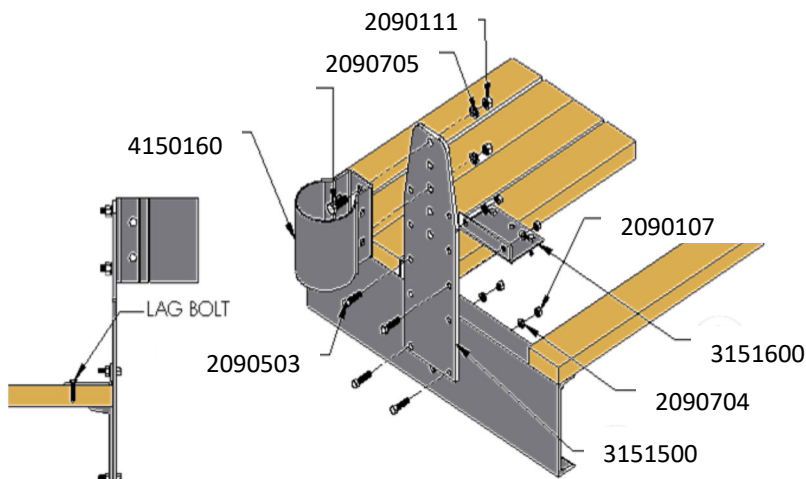
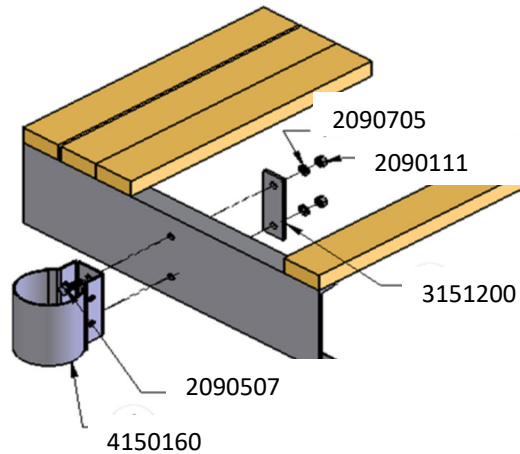
STEP 7: ATTACH TO THE FIXED DOCK

Part #	Parts Required (Per Port)	Quantity
4154044	BRACKET-FIXED MOORING HP EXTREME HEAVY DUTY	2
4154084	MOORING PLUG 5/8-11 FEMALE BRASS PLUG HP EXTREME	2
5049000	HD CAST DOCK BRACKET ASSEMBLY	2
4150160	FIXED DOCK BRACKET	2
3151200	REINFORCING BACK PLATE	2
3151300	4" SCH 80 PVC PIPE 48"	2
3151500	RISER PLATE (OPTIONAL)	2
3151600	RISER-ANGLE ATTACHMENT	2

Part #	Hardware Required	Quantity
4151927	BOLT - 5/8-11 X 1.5	2
2090707	LOCK WASHER-5/8 GALV	4
2090212	WASHER-FLT-5/8" GALV	2
4154048	BOLT—5/8-11 6 1/2 IN. GALV	2
2090111	NUT-HEX 5/8-11 GALV	4
2090507	BOLT-HEX 1/2-13 IN. GALV	4
2090705	WASHER-LOCK 1/2 IN. GALV	4
2090209	WASHER—FLAT 1/2 IN. GALV	4

1. Attach Fixed Dock Bracket (4150160) to the dock as shown (3 different methods are illustrated).
2. Insert the 4" SCH 80 PVC Pipe (3151300) through 4150160 and the Fixed Mooring Bracket (4154044).
3. Bolt together as shown and tighten until the PVC Pipe (3151300) is held firmly in place.

i **IT IS UP TO THE INSTALLER TO DETERMINE IF THE ATTACHMENT IS STRONG ENOUGH. ADDITIONAL REINFORCEMENT MAY BE NECESSARY IN ROUGH WATER.**



OPTIONAL MOORING POLL WITH EXTENSION USING RISER PLATE 3151500

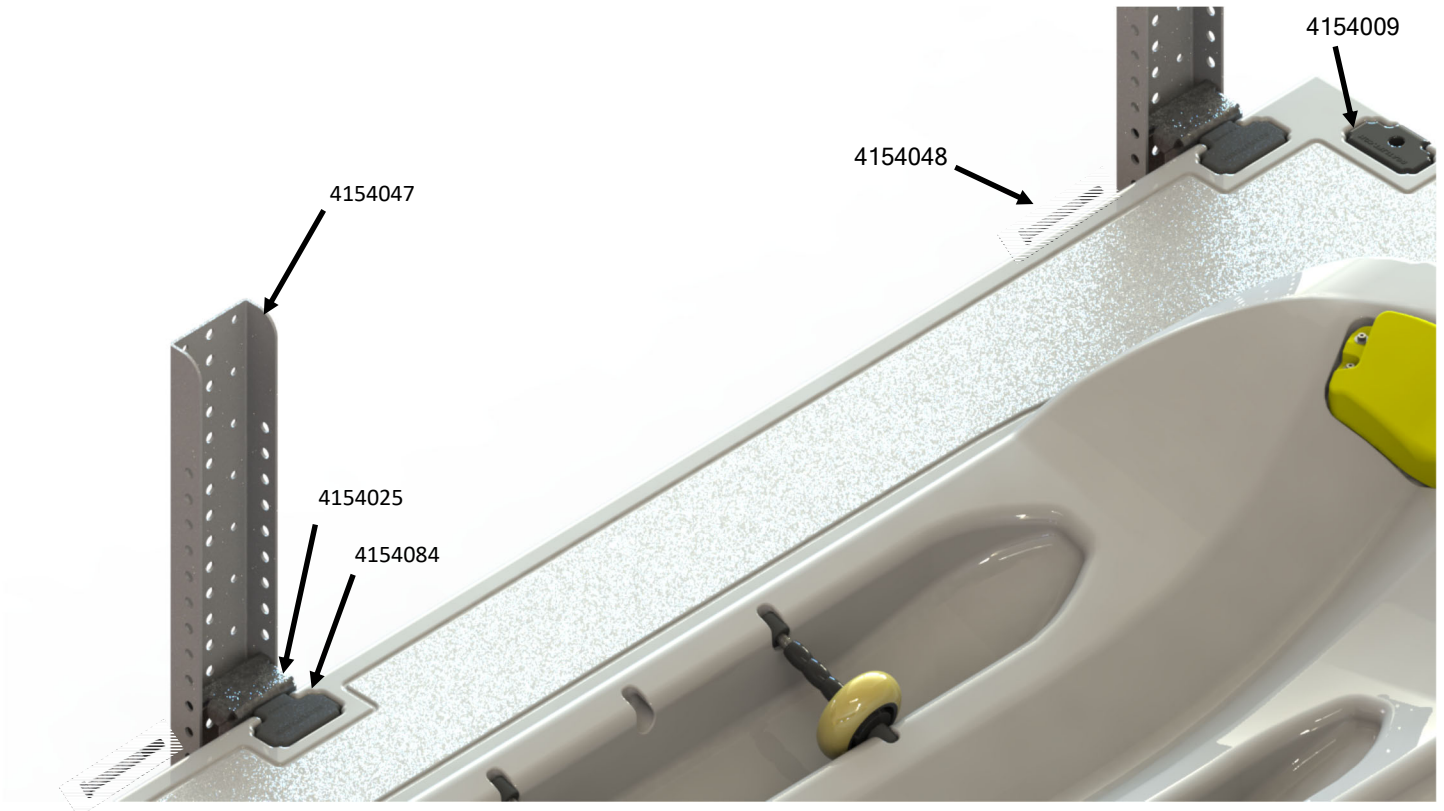
OPTIONAL METHOD USING 4154044

STEP 8: IF SIDE MOORING TO FLOATING DOCK

Part #	Parts Required (Per Port)	Qty
4154025	KIT—HARDWARE HP EXTREME FLOATING DOCK	1
4154080	FLOATING MOORING, HP EXTREME WELDED CORNERS AND	2
4154084	MOORING PLUG 5/8-11 FEMALE BRASS PLUG HP EXTREME	2
4154047	PLATE - MOORING HINGE HP2	2

Part #	Hardware Required	Qty
4154143	HP EXTREME HARDWARE BAG FLOATING	1
4151927	BOLT - 5/8-11 X 1.5	2
4154048	BOLT—5/8-11 6 1/2 IN. GALV	2
2090707	LOCK WASHER—5/8 GALV	2
2090212	WASHER-FLT-5/8" GALV	2

1. Mount the dock brackets using the same instructions as in STEP 5,



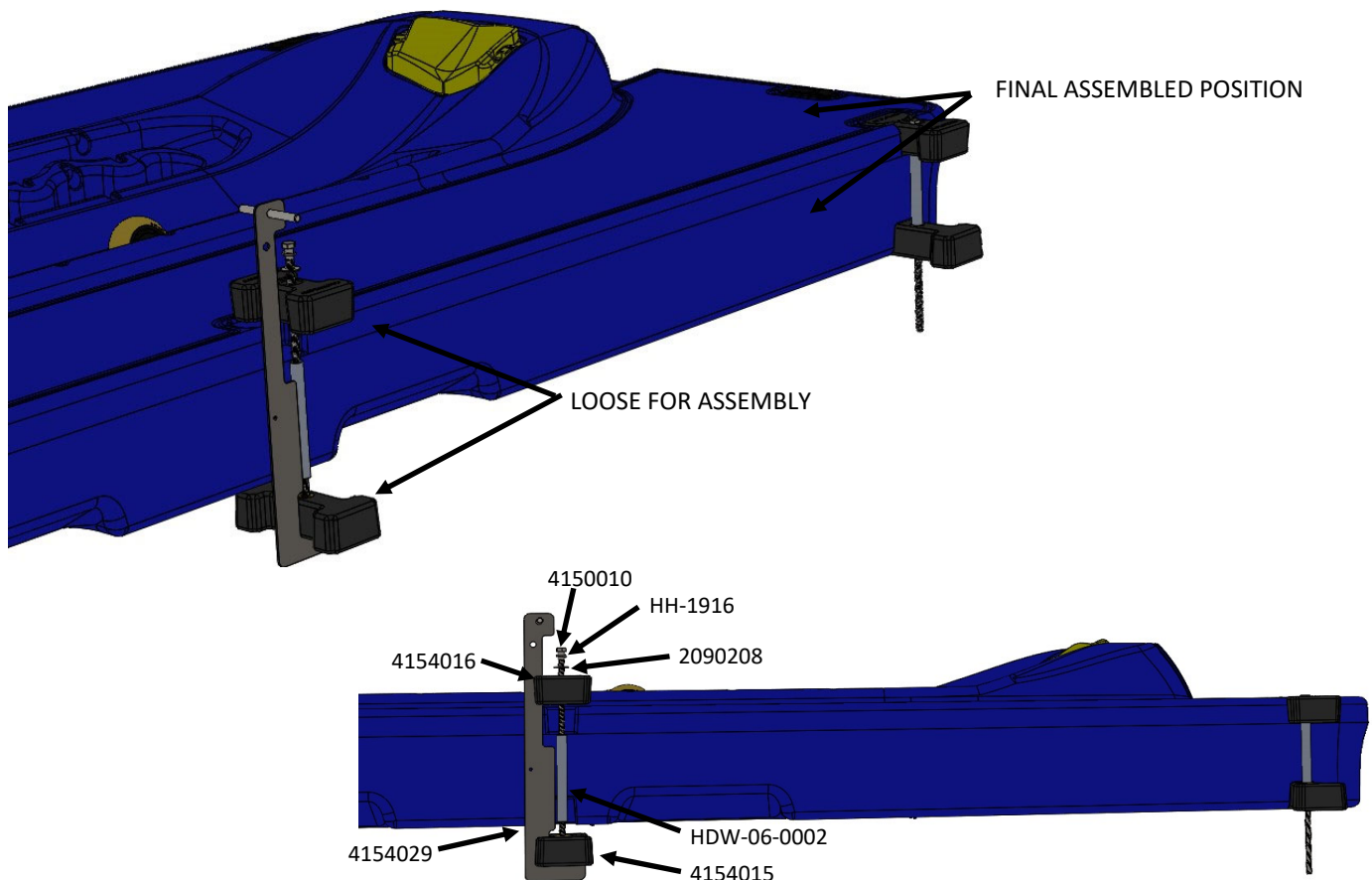
When connecting the port to part 41544047 Mooring Hinge float the port in and bolt the forward bracket to the hole that is either aligning its self to the port bracket hinge or the next hole higher. When bolted the center of the bolt will be 7" to 7.5" above the water surface. The aft bracket should be bolted one hole lower than it naturally floats.

STEP 9: CONNECT HYDROPORT TO HYDROPORT

Part #	Parts Required (Per Port)	Quantity	Part #	Hardware Required	Quantity
4154028	KIT-CONNECTING HP EXTREME	1	4154033	KIT BAG-HP EXTREME CONNECTING HARDWARE	1
4154015	HP EXTREME BOTTOM PLUG CONNECTION	2	4150010	BOLT-HEX HEAD 1/2-13 X 16-3/4 IN 18-8 SS	2
4154016	TOP PLUG THREADED, HP EXTREME	2	2090208	WASHER-FLAT 1/2 IN. SS	2
4154029	HP EXTREME INSTALLATION TOOL	1	HH-1916	WASHER-LOCK 1/2" SCREW SIZE 18-8 SS	2
			HDW-06-0002	1/2" X 7-3/4" ALUMINUM PIPE	2

ASSEMBLE THE PORTS:

1. The rear shows the Connection Plugs assembled for installation. The front shows how the Connection Plugs will appear when installed.
2. The top and bottom Connection Plugs are connected by 4150010 but not tightened AT THIS TIME.
3. The Connection Plug (4154016) (the shorter of the two Connection Plugs) can be placed in the Mooring Plug cavity on the first port and the bolt placed through the hole.
4. The Bottom Connection Plug (4154015) can then be threaded onto the bottom of the bolt (4150010), leaving the Bottom Connection Plug (4154015) very loose.
5. Float the second HydroPort to the first HydroPort with the Connection Plugs INSTALLED. Pull the Top Connection Plugs up just enough to clear the top of the port.
6. The Bottom Connection Plugs should still be loose enough to clear the bottom.
7. When the HydroPorts are close enough together, lower the Top Connection Plugs so that they rest in the cavities created by the REMOVED Mooring Caps.

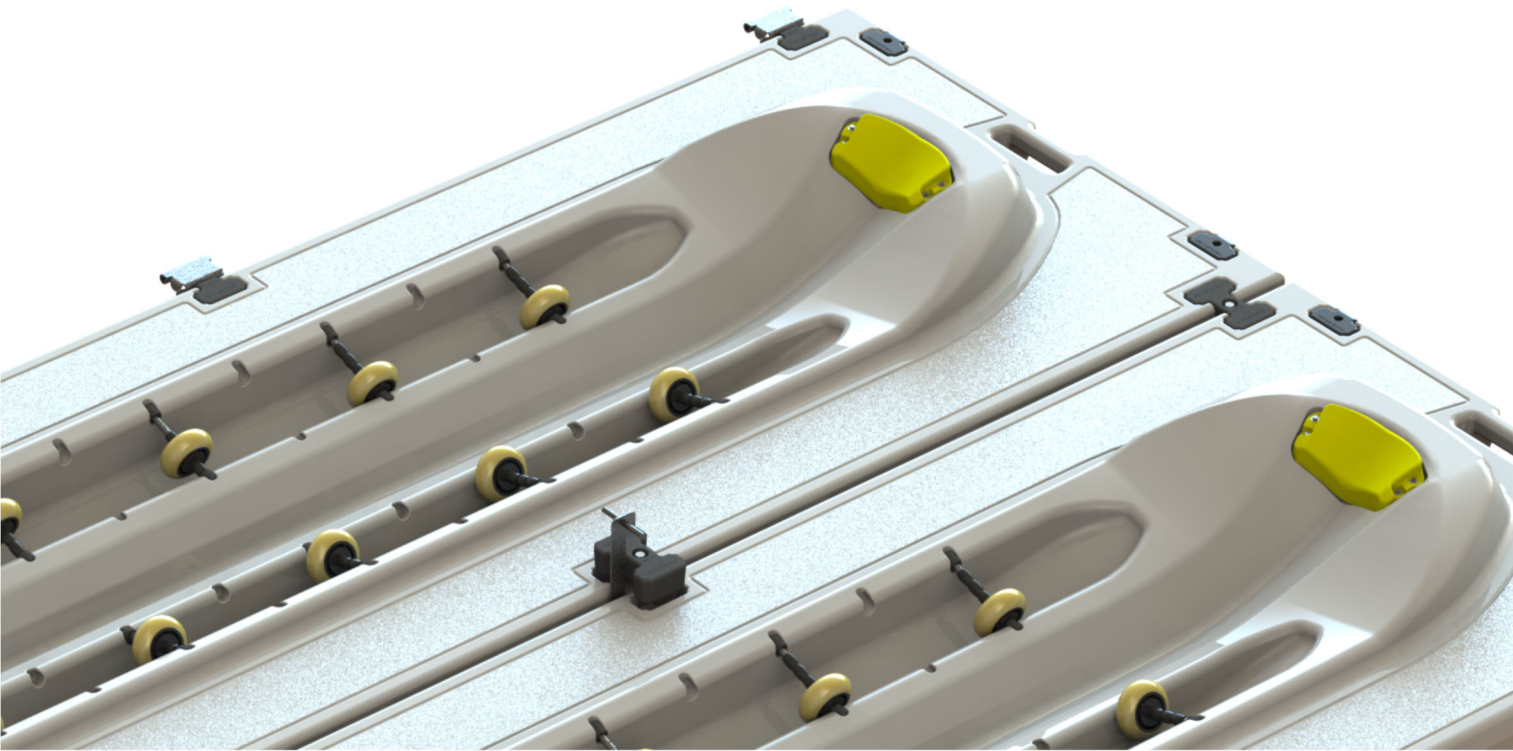


STEP 10: CONNECT HYDROPORT TO HYDROPORT (con't)

Part #	Parts Required (Per Port)	Quantity	Part #	Hardware Required	Quantity
4154028	KIT-CONNECTING HP EXTREME	1	4154033	KIT BAG-HP EXTREME CONNECTING HARDWARE	1
4154015	HP EXTREME BOTTOM PLUG CONNECTION	2	4150010	BOLT-HEX HEAD 1/2-13 X 16-3/4 IN 18-8 SS	2
4154016	TOP PLUG THREADED, HP EXTREME	2	2090208	WASHER-FLAT 1/2 IN. SS	2
4154029	HP EXTREME INSTALLATION TOOL	1	HH-1916	WASHER-LOCK 1/2" SCREW SIZE 18-8 SS	2
			HDW-06-0002	1/2" X 7-3/4" ALUMINUM PIPE	2

8. The top should look like the front Connection Plug. See below.
9. Insert tool (4154029) between the HydroPorts and hook the Bottom Connection Plug. The tool will help you manipulate the Bottom Connection Plug and align it with the cavity in the bottom of the HydroPort.
10. Pull the tool (4154029) up to hold the Connection Plug in the cavity.
11. Tighten the bolt (4150010) while holding the tool firmly in position until the top and bottom Connection Plugs are snug. **DO NOT OVERTIGHTEN.**

i An HP Extreme and HP EPIC can seamlessly connect at this point.



Operating Instructions

Loading



WARNING: Only load PWC when the HydroPort EPIC™ is unoccupied.

1. Approach the HydroPort EPIC at idle speed only.
2. Position the PWC's bow between entry rollers as closely centered as possible.
3. Apply necessary throttle to drive onto the platform until PWC's bow rests on the bow bumper of the HydroPort EPIC.
4. To secure the PWC, dismount and connect the Strap Hook through the front mooring eyelet of PWC.

Launching

1. If the PWC is secured with a lock or strap release it before launching.
2. Board PWC and shift weight towards rear of craft.
3. Apply a rocking motion to initiate the launch.
4. If PWC will not launch after rocking motion is applied, dismount.
5. Move to the side of the HydroPort EPIC, grasp the handlebars and seat of the PWC, and push backward.
6. Once the PWC starts to move, board the PWC and apply a rocking motion to initiate launch.

TROUBLESHOOTING

CONDITION: PWC won't stay on the HydroPort EPIC when I pull onto the platform

- POSSIBLE CAUSES:**
- A. Coming in too fast
 - B. The PWC's weight is too far to the rear of the HydroPort EPIC
 - C. Wheel Locations

- CORRECTION:**
- A. Try to just touch the bow of the PWC to the entry point and gently throttle on. When a PWC rides up on the bow bumper it slides back down and that momentum can take the craft off of the EPIC.
 - B. Adjust the wheels so that the forward wheels are wider than the wheels at the rear. This will cause the front of the craft to sit lower than the rear. This will help the craft stay on the HydroPort EPIC; however, it may make unloading a little more difficult.
 - C. If using the floating mooring bracket, the mounting position can be moved down one hole in the bracket, which will change the way the craft sits on the platform.

CONDITION: PWC won't slide off the HydroPort EPIC

- POSSIBLE CAUSES:**
- A. The PWC's weight is too far forward
 - B. Wheel Locations
 - C. The level of the port is leaning forward when the ski is on the port

- CORRECTION:**
- A. Adjust the wheels so that the forward wheels are narrower than the wheels at the rear. This will cause the front of the craft to sit higher on the port. This will help the craft roll off easier; however, it may make loading a little more difficult.
 - B. If using the floating mooring bracket, the mounting position can be moved up one hole in the bracket, which will change the way the craft sits on the platform. The effects are similar to changing the wheel position.
 - C. Additional wheel and axle sets can be purchased to put in the other wheel pocket locations. This will reduce the weight per wheel, making the PWC easier to roll.

Warranty and Registration

What Is Not Covered By This Warranty*

HydroHoist® does not warrant any product, component, or part:

- (a) That is not manufactured by HydroHoist®
- (b) That is not installed or serviced by employees or contractors of HydroHoist® or an Authorized HydroHoist® Dealer
- (c) Damaged by failure to provide a suitable installation environment for the lift
- (d) Damaged by use of the lift for purposes other than those for which it was designed
- (e) Damaged by disasters such as but not limited to fire, flood, wind, and lightning
- (f) Damaged by unauthorized attachments or modifications
- (g) Damaged by operation, maintenance, or repair of the product contrary to written instructions of HydroHoist®
- (h) Damaged during shipment
- (i) Damaged by any other abuse or misuse by the user
- (j) Which has an altered or defaced service number

*Terms and conditions can change without notice. For the latest warranty terms, contact HydroHoist® Customer Service at customerservice@boatlift.com

Parts and Customer Service Contact

Customer service, parts, and shipping: customerservice@boatlift.com

Product Registration

Verify that a HydroHoist® dealer registered your boat lift. If it is not registered, warranty support may be limited. Visit www.boatlift.com to register your lift.

