

INSTALLATION MANUAL

HydroPort

EXTREME®



915 W. Blue Starr Dr. Claremore, OK 74017
(918)341-6811

2003268 Rev C

HydroHoist® Marine Group Product Installation and Use Warning Disclaimer

ASSEMBLY, INSTALLATION OR REPAIRS OF A HYDROHOIST BOAT LIFT SHOULD ONLY BE PERFORMED BY AN AUTHORIZED HYDROHOIST TECHNICIAN. IF ASSEMBLY, INSTALLATION AND/OR REPAIR IS PERFORMED BY UNAUTHORIZED PERSONS, SERIOUS PERSONAL INJURY AND/OR PROPERTY DAMAGE COULD OCCUR.

IF UNAUTHORIZED PERSONNEL ASSEMBLE, INSTALL OR REPAIR A HYDROHOIST BOAT LIFT, HYDROHOIST MARINE GROUP HEREBY DISCLAIMS ANY AND ALL WARRANTIES, EXPRESS OR IMPLIED. HYDROHOIST MARINE GROUP LIMITS ITS WARRANTY TO HYDROHOIST MARINE GROUP'S PUBLISHED BOATLIFT WARRANTY FURNISHED WITH EACH PRODUCT. NO OTHER WARRANTY OF ANY KIND EITHER VERBALLY OR IMPLIED INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE RECOGNIZED.

THE CONTENTS OF THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE AND SHOULD NOT BE CONSTRUED AS A COMMITMENT, REPRESENTATION, WARRANTY OR GUARANTEE OF ANY METHOD, PRODUCT OR DEVICE BY HYDROHOIST MARINE GROUP.

REPRODUCTION OR TRANSLATION OF ANY PART OF THIS MANUAL, WITHOUT THE WRITTEN PERMISSION OF HYDROHOIST MARINE GROUP IS PROHIBITED.

ANY INQUIRIES CONCERNING HYDROHOIST MARINE GROUP'S PUBLISHED WARRANTY OR THIS MANUAL AND ITS CONTENTS SHOULD BE REFERRED TO:

CUSTOMER SERVICE
HYDROHOIST MARINE GROUP
915 WEST BLUE STARR DRIVE
CLAREMORE, OK USA 74017
PHONE 918-341-6811
OFFICE HOURS M-F 8AM TO 5PM CT

HydroHoist® Marine Group Safety Notice

TO ENSURE CONSUMER SAFETY, HYDROHOIST MARINE GROUP HAS INSTALLED IN THE CONTROL UNIT'S ELECTRICAL SYSTEM AN AC GROUND FAULT CIRCUIT INTERRUPTER (GFCI) DEVICE WHICH IS TO BE USED IN SERIES WITH THE USER'S PRIMARY AC POWER SOURCE. THE GFCI IS AN INTEGRAL PART OF THE HYDROHOIST BOAT LIFT AND IS DESIGNED TO OFFER A LIMITED MEASURE OF PROTECTION TO THE USER AGAINST HAZARDOUS ELECTRICAL CONDITIONS OR SHOCKS SHOULD THEY OCCUR.

THE USER SHOULD BE AWARE OF THE FOLLOWING WARNING:

WARNING!

IF USER DISABLES THE CONTROL UNIT'S GROUND FAULT CIRCUIT INTERRUPTER (GFCI) DEVICE, HE IS IN DIRECT CONFLICT WITH THE RECOMMENDATIONS OF THE UNITED STATES GOVERNMENT CONSUMER PRODUCTS SAFETY COMMISSION. DISABLING THE GFCI COULD RESULT IN SEVERE ELECTRICAL SHOCK OR DEATH.

BEFORE CONNECTING AC POWER TO THE CONTROL UNIT, BE CERTAIN THAT THE PRIMARY AC POWER SUPPLY MEETS ALL APPLICABLE ELECTRICAL CODES.

ANY INQUIRIES CONCERNING THE GROUND FAULT CIRCUIT INTERRUPTER (GFCI) DEVICE SHOULD BE REFERRED TO:

CUSTOMER SERVICE
HYDROHOIST MARINE GROUP
915 WEST BLUE STARR DRIVE
CLAREMORE, OK USA 74017
PHONE 918-341-6811
OFFICE HOURS M-F 8AM TO 5PM CT

CONTENTS

Getting Started - *Section 1*

Assembly - *Section 2*

Installation - *Section 3*

Operating Instructions - *Section 4*

Trouble Shooting - *Section 5*

Parts List - *Section 6*

Getting Started

Assembly Platform

Assembly can be performed on land, trailer, or water.

Tools

A list of tools needed for hoist assembly is given below. In addition to these, tools for boat dock preparation, dock bumper removal, etc. may also be required.

- ◆ 1/2" Drive Ratchet (minimum 9 inch handle length for leverage)
- ◆ Electric Drill/Impact
- ◆ 1/2" Drill Bit
- ◆ 3/8" Drill Bit
- ◆ 3/4" Deep Well Socket
- ◆ 9/16" Deep Well Socket
- ◆ 3/4" Open-end or Combination Wrenches
- ◆ 9/16" Open-end or Combination Wrenches
- ◆ #2 Phillips Screwdriver
- ◆ Drift Pin or other hole aligning tool
- ◆ 5/32 Hex Key
- ◆ J-Hook Connecting Kit Tool (4154029)
- ◆ Large Hammer (3 or 4 lb. shop hammer is best)
- ◆ Knife or tool for cutting
- ◆ Measuring Tape
- ◆ (2) 15/16" Open-end or Combination Wrenches (if using HD Dock Bracket)
- ◆ 15/16" Deep Well Socket (if using HD Dock Bracket)

Symbols & Conventions

All references to the LEFT or RIGHT are considered to be facing forward, as if driving a pwc on to the 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 hoist.

All numbers in brackets [] after part names refer to the item numbers on the assembly illustrations within the manual.

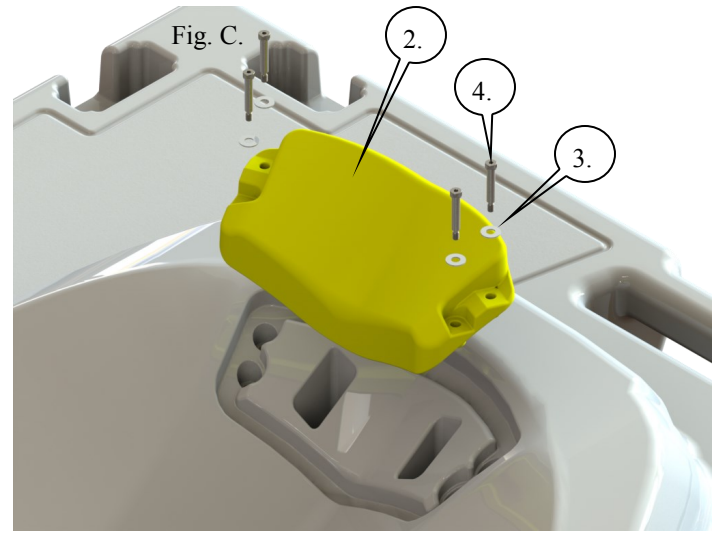
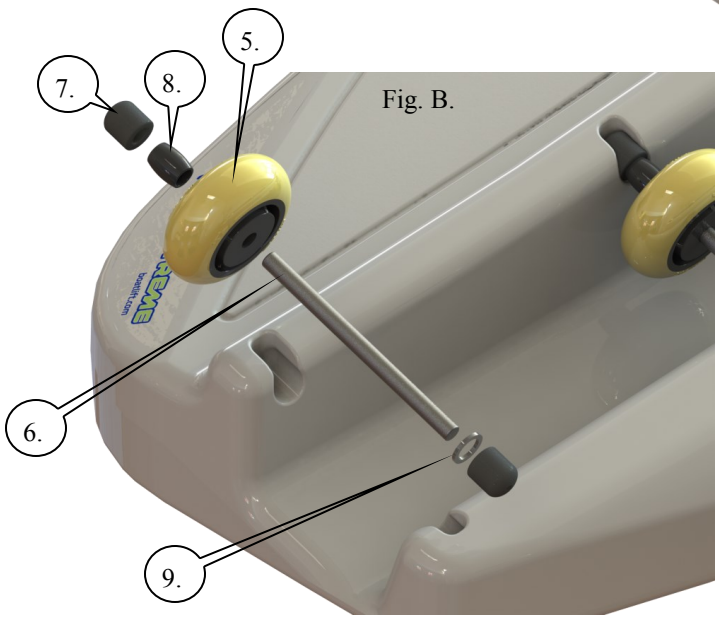
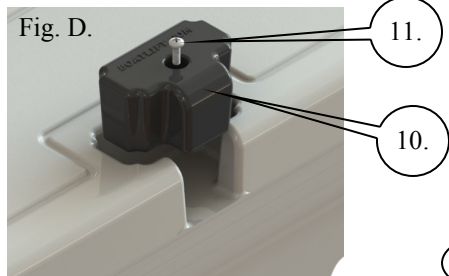
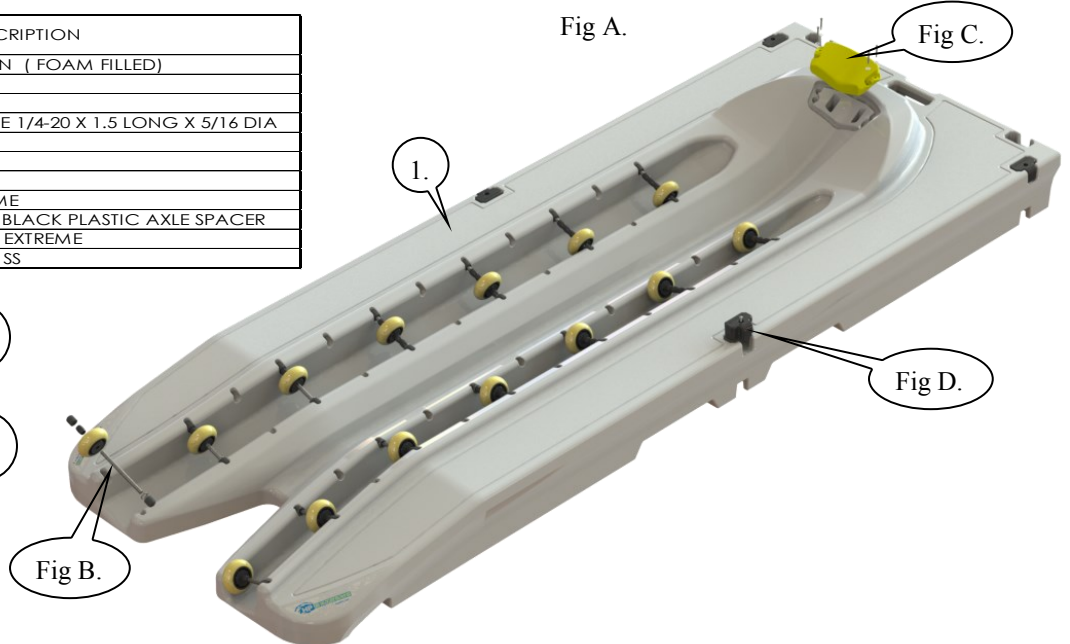
Assembly Instructions

Notes:

Steps 1.1-1.3 are completed on purchased unit.

Step	Procedure
1.1	Insert the Bow Bumper [2] into the Main Body. Place washer [3] on shoulder bolt [4] and insert through bow stop [2] for all four locations. The shoulder bolt will thread into the insert in the platform body [1]. Tighten the 4 bolts.
1.2	Slide axle [6] through wheel [5] with at least 1 Spacer [8] placed on the outside side of the wheel and 1 washer [9] on the inside side of the wheel. Additional Spacer(s) (Max 2) can be added to custom fit the rollers to the specific water craft. Place axle retainer [7] on each end of the axle. Snap the axle assembly into the platform body [1] axle cavities. The unit comes pre-assembled for the most common setup. Additional axle locations are provided to custom fit the platform to your craft. Additional axle assembly components can be purchased if additional wheels are desired.
1.3	Place cap plug [10] in mooring cavity. Insert screw [11] through cap plug [10] and thread into insert in the cavity. Tighten until snug. DO NOT overtighten, the screw only needs to be tight enough to retain the cap plug.

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1		HP EXTREME BODY- BLUE/TAN (FOAM FILLED)
2	1	4154008	BOW STOP- HP EXTREME
3	4	2090243	WASHER - FW - 5/16" - SS
4	4	4154023	SHOULDER BOLT, HP EXTREME 1/4-20 X 1.5 LONG X 5/16 DIA
5	14	4154004	5X2 WHEEL, HP EXTREME
6	14	4154005	AXLE, HP EXTREME
7	28	4154006	AXLE RETAINER, HP EXTREME
8	42	4154007	SPACER - WHEEL - HP EXTREME
9	14	400334	WASHER - FLAT 1/8 in. THICK BLACK PLASTIC AXLE SPACER
10	4	4154009	CAP PLUG - MOORING - HP EXTREME
11	4	4150008	SCREW - 1/4IN. - 20 X .75 316 SS

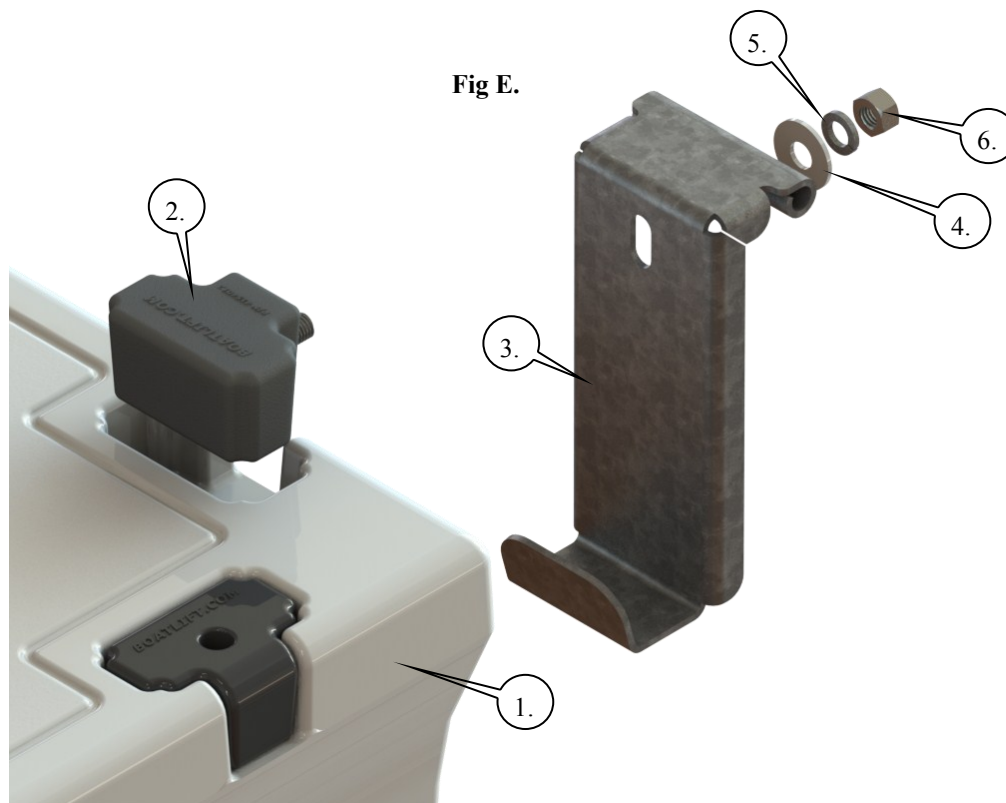


Installation Instructions

Floating Dock

Step	Procedure
1.1	Insert mooring plug [2] into mooring cavity in port body [1].
1.2	Hook mooring bracket [3] into the recess in the bottom of the platform body [1]. Pivot the bracket up against the port body. The bolt in item [2] should fit through the slot in the bracket [3]
1.3	Place the flat washer [4] and lock washer [5] on the bolt. Thread the nut [6] onto the bolt and tighten the bolt until the bracket is snug against the port body. Do not tighten over 73 ft-lbs.

ITEM NO.	QTY	PART NO.	DESCRIPTION
1	1	4154000/4154001	HP EXTREME BODY—BLUE/TAN
2	2	4154012	MOORING PLUG 5/8-11 THREADED, HP EXTREME
3	2	4154017	FLOATING MOORING, HP EXTREME
4	2	2090212	WASHER - FLAT 5/8 in. GALV
5	2	2090707	WASHER - LOCK 5/8 in. GALV
6	2	2090140	NUT - HEX - 5/8-11 18-8 SS

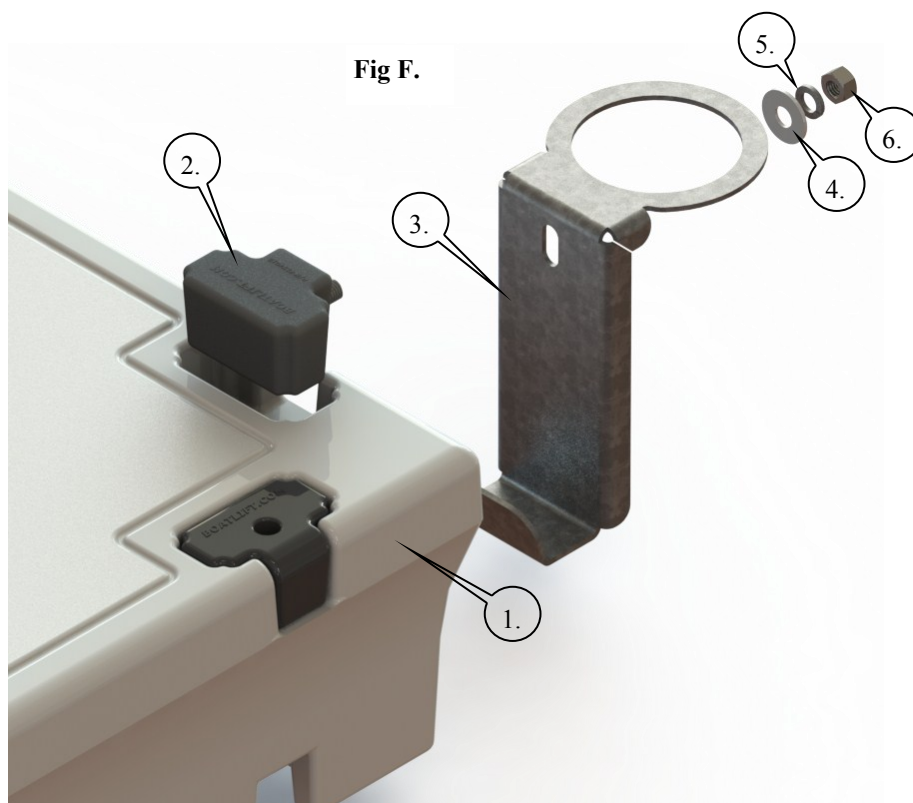


Installation Instructions

Fixed Dock / Wall

Step	Procedure
1.1	Insert mooring plug [2] into mooring cavity in port body [1].
1.2	Hook mooring bracket [3] into the recess in the bottom of the platform body [1]. Pivot the bracket up against the port body. The bolt in item [2] should fit through the slot in the bracket [3]
1.3	Place the flat washer [4] and lock washer [5] on the bolt. Thread the nut [6] onto the bolt and tighten the bolt until the bracket is snug against the port body. Do not tighten over 73 ft-lbs.

ITEM NO.	QTY	PART NO.	DESCRIPTION
1	1	4154000/4154001	HP EXTREME BODY—BLUE/TAN
2	2	4154012	MOORING PLUG 5/8-11 THREADED, HP EXTREME
3	2	4154018	FIXED MOORING, HP EXTREME
4	2	2090212	WASHER - FLAT 5/8 in. GALV
5	2	2090707	WASHER - LOCK 5/8 in. GALV
6	2	2090140	NUT - HEX - 5/8-11 18-8 SS

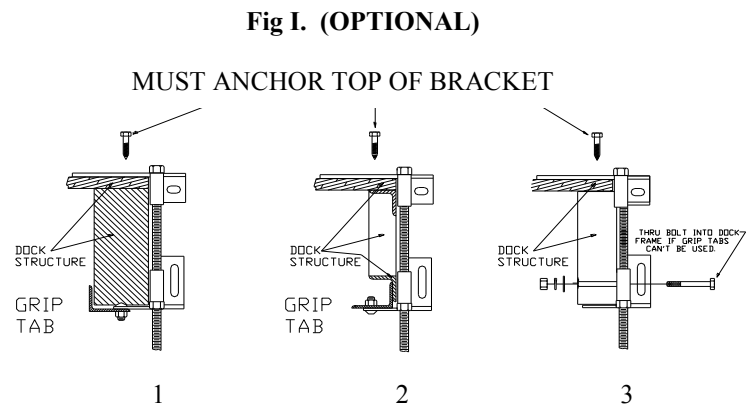
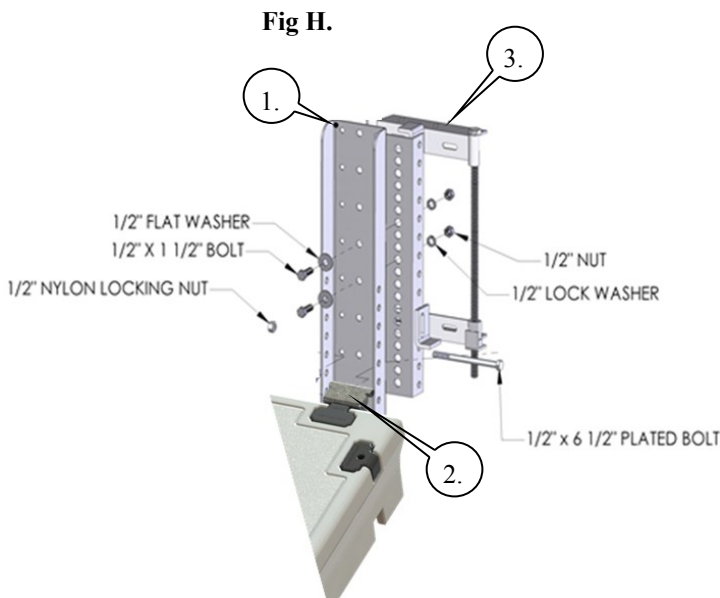
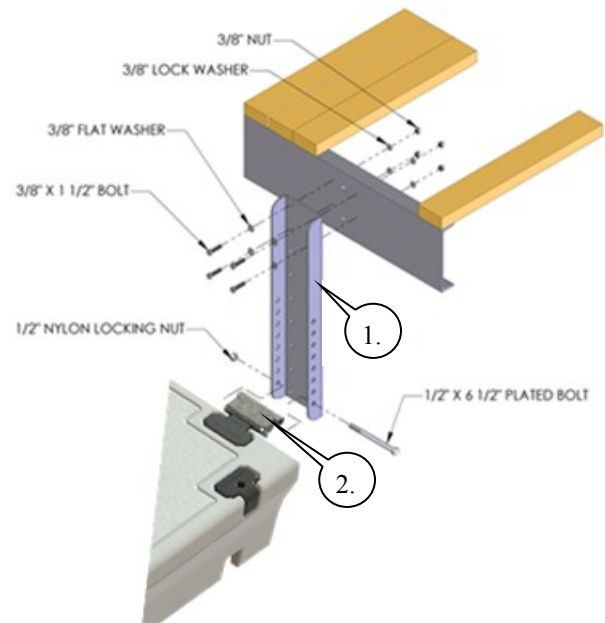


Installation Instructions

Floating Dock

Step	Procedure
2.1	Drill four 3/8" holes into dock face and attach the Extended Hinge Mooring Plate [1]. If using the HD Dock Bracket [3] with the Hinge Mooring Plate, holes will only need to be drilled if using thru-bolt method (Fig. 1 image 3) of dock bracket connection. NOTE: IT IS UP TO THE INSTALLER TO DETERMINE IF THE ATTACHMENT IS STRONG ENOUGH. ADDITIONAL REINFORCEMENT MAY BE NECESSARY IN ROUGH WATER.
2.2	Bolt the Floating Mooring Link [2] to either Hinge Mooring Plate [1] as shown. It is best to bolt Mooring Link to the nearest hole to its natural floating position depending on the watercraft. <i>Do not overtighten to the point the bracket clamps the link.</i>

ITEM #	PART NUMBER	DESCRIPTION	QTY.
1	4150170	EXTENDED HINGE MOORING PLATE	2
2	4154017	FLOATING MOORING, HP EXTREME	2
3	5049000	DOCK BRACKET HEAVY DUTY—CAST	2

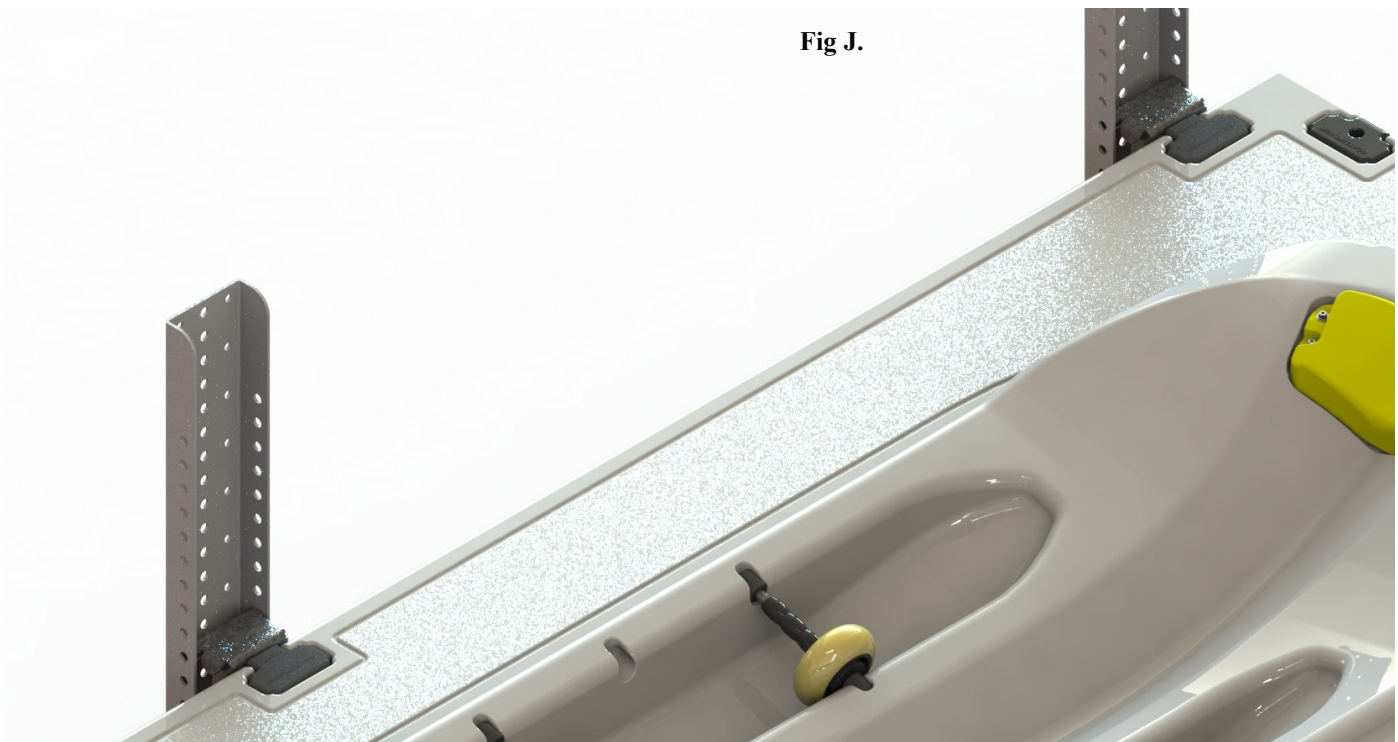


Installation Instructions

Side Mount (Floating shown)

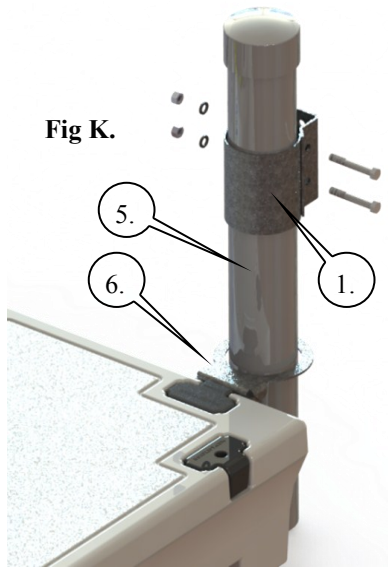
Step	Procedure
2.3	When attaching the Floating Mooring Bracket for side-mounted application remove the mooring cap plugs from the side that the mooring will be attached to. Reinstall the mooring cap plugs into the front mount mooring plug cavities.
2.4	Attach the appropriate brackets to the dock. Connect the port to the dock bracket by either bolting the floating dock bracket to the Hinge mooring plate as shown or by connecting the pipe through the bracket ring for the fixed dock/wall mounting option. If using the floating dock bracket kit shown, it is recommended to install the connecting bolt 1 hole below the position where the port naturally floats. The port should sit level when the craft is sitting on the docking platform. If it leans away from the dock/walkway then remove the pwc and install the bolt an additional hole lower until the platform sits relatively level with the pwc on the platform.

Fig J.



Installation Instructions

Fixed Dock \ Wall Installation



Step	Procedure
2.1 <i>Alt</i>	Attach the Universal Dock Bracket [1] to the dock as shown (3 different methods are illustrated). NOTE: IT IS UP TO THE INSTALLER TO DETERMINE IF THE ATTACHMENT IS STRONG ENOUGH. ADDITIONAL REINFORCEMENT MAY BE NECESSARY IN ROUGH WATER.
2.2 <i>Alt</i>	Insert the 4" SCH 80 PVC Pipe [5] through the Universal Dock Bracket [1] and the fixed mooring bracket [6]. Bolt together as shown in Fig K and tighten until the PVC Pipe is held firmly in place.

ITEM #	PART NUMBER	DESCRIPTION	QTY.
1	4150160	UNIVERSAL DOCK BRACKET FIXED/FLOATING	2
2	3151500	RISER PLATE (OPTIONAL)	2
3	3151600	LAGGING PLATE	2
4	3151200	REINFORCING BACK PLATE	2
5	3151300	4" SCH 80 PVC PIPE 48"	2
6	4154018	FIXED MOORING, HP EXTREME	2
7	5049000	HEAVY DUTY DOCK BRACKET (OPTIONAL)	2

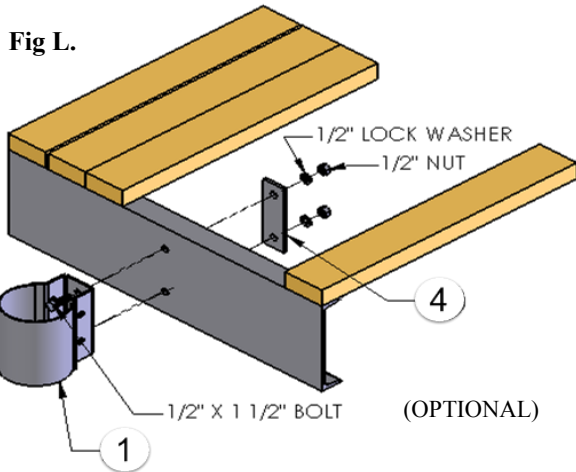


Fig M.

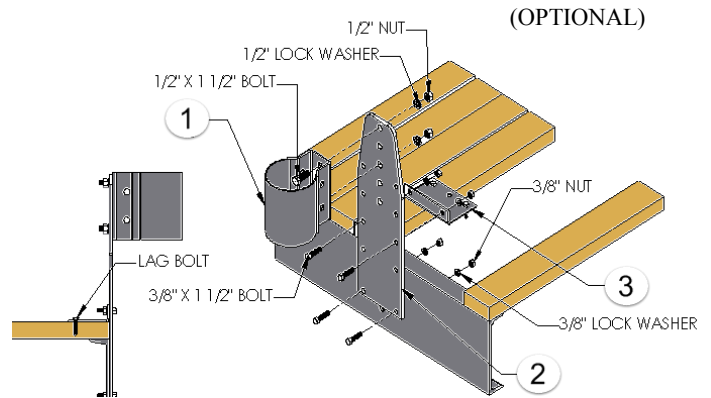
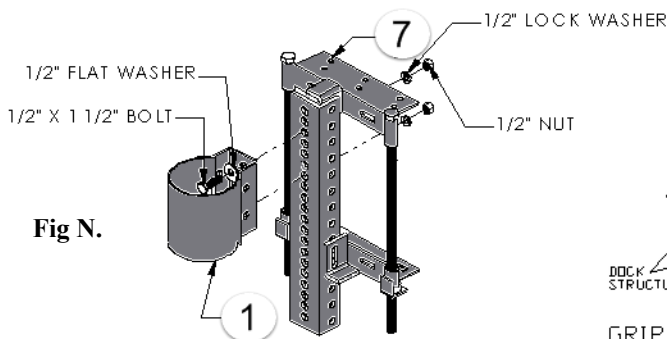
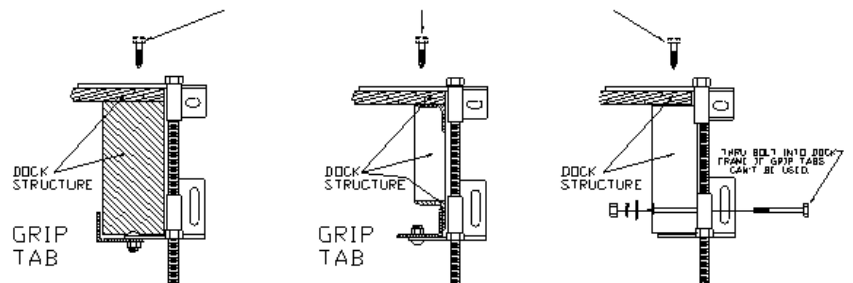


Fig O.



MUST ANCHOR TOP OF BRACKET



Installation Instructions

Connecting Units

Step	Procedure
3.1	Assemble parts as shown below. The front shows how the links will appear when installed, the rear shows the links assembled for installation. The top and bottom links are connected by the long bolt but not tightened.
3.2	The top link (the shorter of the 2 links without the threaded insert) can be placed in the mooring plug cavity on the first port and the bolt placed through the hole. The lower link can then be threaded onto the bottom of the bolt leave the lower link very loose.

Fig P.

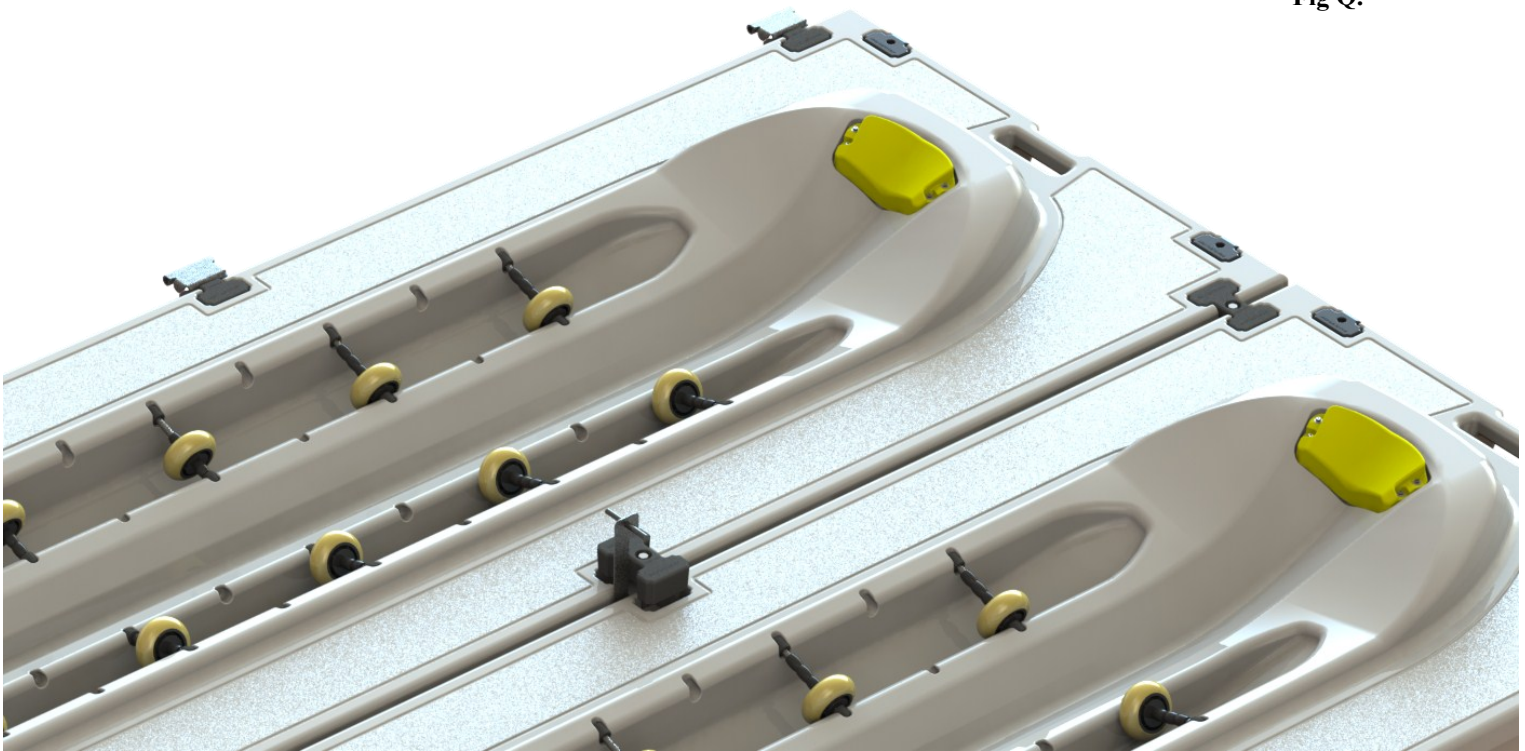


Installation Instructions

Connecting Units

Step	Procedure
3.3	Float the second port over to the port with the connecting links, pull the top plugs up just enough to clear the top of the port. The bottom links should still be loose enough to clear the bottom. Once the ports are close enough together you can lower the top links so that they rest in the cavities created by the mooring plug cavities. The top should look like the front connect link set in Figure Q.
3.4	Insert the tool between ports and hook the lower link, the tool will help you manipulate the lower link and align it with the cavities in the bottom of the port, pull the tool up to hold the link in the cavities. This will allow you to tighten the bolt up without having the lower link spin.
3.5	Tighten the bolts up until the upper and lower connecting links are snug. Do not overtighten .

Fig Q.

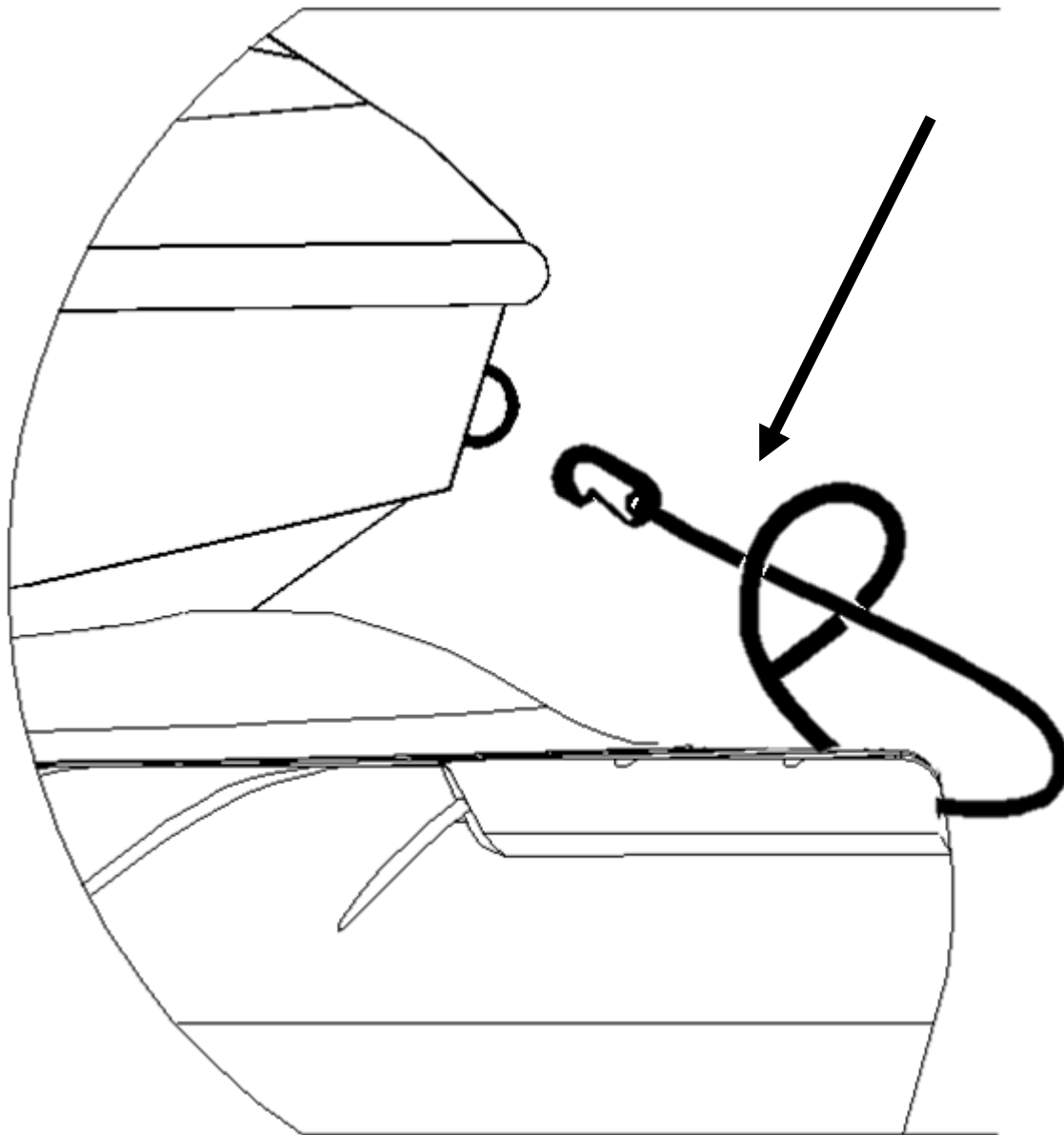


Strap Hook Installation

NOTE:

**TEMPORARY ATTACHMENT
CUSTOMER IS RESPONSIBLE FOR
PROVIDING SECURE
ATTACHMENT.**

Fig R.



Operating Instructions

Loading (WARNING: Only load PWC when HP EXTREME® is unoccupied.)

1. Approach HP EXTREME at idle speed only.
2. Position bow of PWC between entry rollers as centered as possible.
3. Apply necessary throttle to drive upon the platform until the bow of PWC rests on the bow bumper of HP EXTREME.
4. To secure the PWC, dismount from the watercraft and connect the strap hook through the front mooring eyelet of PWC.

Launching

1. Release strap hook from front mooring eyelet of PWC.
 2. Board PWC and shift weight towards rear of watercraft.
 3. Apply a rocking motion to initiate the launch.
 4. If PWC will not launch after rocking motion is applied, exit the PWC and move to the side of the HP EXTREME. Grasp the handlebars and seat of the PWC and push back. Once the PWC starts to move, board the PWC and apply rocking motion.
-

Trouble Shooting

CONDITION:

I can't get my PWC to stay on the HP EXTREME when I pull on to the platform

POSSIBLE CAUSE:

- A.) Coming in too fast
- B.) The PWC's weight is too far to the rear of the craft.
- C.) Wheel Locations

CORRECTION:

- A.) Try to just touch the bow of your PWC to the front of the unit 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 lift.
- B.) Adjust the wheels so that the forward wheel are wider than the wheels at the rear, this will cause the front of the craft to sit lower in the port than the rear. This change will help the craft stay on the port on load, however it will 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 also change the way the craft sits when on the platform.

CONDITION:

I can't get my PWC off the HP EXTREME

POSSIBLE CAUSE:

- A.) The PWC's weight is sitting too far forward
- B.) The Platform is mounted too low in the front
- C.) Wheel Locations

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 in the port than the rear. This change will help the craft roll off the port on launch, however it may make loading a little more difficult due to the ease of roll off.
 - B.) If using the floating mooring bracket, the mounting position can be moved up one hole in the bracket, which will also change the way the craft sits when 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 additional wheel pocket locations. This will reduce the weight per wheel making the PWC easier to roll.
-

Parts List

Floating Mooring (4154025)	Part #	Qty.
Nut - Hex - 3/8" Galv	2090107	8
Nut - Hex - 1/2" Galv	2090111	4
Nut - Hex - 1/2" Plated	2090122	2
Washer - FW - 3/8"	2090206	4
Bolt Hex Hd - 3/8" x 1 1/2"	2090503	8
Bolt Hex Hd - 1/2" x 1 1/2"	2090507	4
Bolt Hex Hd - 1/2" x 6 1/2"	2090524	2
Washer - LW - 3/8"	2090704	8
Washer - LW - 1/2"	2090705	4
Washer—Flat—5/8" Galv	2090212	2
Lock Washer—5/8 Galv	2090707	2
Nut—Hex—5/8-11 18-8 SS	2090140	2
Floating Mooring, HP Extreme	4154017	2
Mooring Plug 5/8-11 Threaded	4154012	2
Extended Hinge Mooring Plate	4150170	2
Strap Hook—HP2	4150085	1

Kit# 4154000/4154001 (Blue/Tan) HP EXTREME Platform Only - No Mooring	Part #	Qty.
HP Extreme - Main Body		1
Bow Stop	4154008	1
Washer—FW—5/16—SS	2090243	4
Shoulder Bolt—1/4-20 x 1.5	4154023	4
5x2 Wheel	4154004	14
Axle	4154005	14
Axle Retainer	4154006	28
Spacer—Wheel	4154007	42
Washer—Flat 1/8" Thick Plastic	400334	14
Cap Plug—Mooring	4154009	4
Screw—1/4"-20 X .75 316 SS	4150008	4

Fixed Mooring (4154027)	Part #	Qty.
Fixed Mooring	4154018	2
Bolt - Hex Head - 1/2" x 3 1/2"	2090590	4
Bolt - Hex Head - 1/2" x 1/2"	2090507	4
Nut - Hex - 1/2"-13 Galv	2090111	8
Washer - FW - 1/2" Galv	2090209	4
Washer - LW - 1/2" Galv	2090705	8
Washer—Flat—5/8 Galv	2090212	2
Lock Washer—5/8 Galv	2090707	2
Nut—Hex—5/8-11 18-8 SS	2090140	2
Reinforcing Back Plate	3151200	2
Mooring Plug 5/8-11 Threaded	4154012	2
Mooring Pipe	3151300	2
Dock Bracket - Fixed	4150160	2
Strap Hook—HP2	4150085	1

Connecting Kit (4154028)	Part #	Qty.
Bottom Plug Connection Threaded	4154015	2
Top Plug	4154016	2
Bolt—Hex Head 1/2-13 x 16 3/4 18-8 SS	4150010	2

Kit—Wheel HP Extreme (4154030)	Part #	Qty.
5x2 Wheel	4154004	1
Axle	4154005	1
Axle Retainer	4154006	2
Spacer - Wheel	4154007	3
Washer—Flat 1/8" Thick Plastic	400334	1