

INSTALLATION MANUAL

HydroPort PRO



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CUSTOMER SERVICE
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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:

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Getting Started

Assembly Platform

Assembly can be done 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
- ◆ 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
- ◆ 1/2" Open-end or Combination Wrenches (if attaching/removing Keel Guide)
- ◆ 12" Ratchet Extension (if attaching/removing Bow Bumper)
- ◆ Medium Phillips Screwdriver
- ◆ Drift Pin or other hole aligning tool
- ◆ 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)

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 already done on purchased unit.

Step	Procedure
1.1	Insert the Bow Bumper [2] into the Main Body by inserting the barbed feature on the bottom side of the Bow Bumper [1] into the hole on the Main Body and pushing down until it is firmly seated.
1.2	Slide the In Line Axle [6] through the In Line Wheel [7] with an Axle Spacer [8] placed on each side of the wheel. Screw [2] down Fig B in the Main Body. DO NOT OVERTIGHTEN
1.3	Slide the Bow Axle [5] through the Bow Roller [4] push into the pocket on the Main Body. Place Retainer [3] on top of the Bow Axle [5] and Screw [2] into the Main Body. DO NOT OVERTIGHTEN

ITEM #	PART NUMBER	DESCRIPTION	QTY.
1	4150081	BOW BUMPER W/BARB	1
2	4150008	1/4-20 X.75 SCREW	28
3	4150007	RETAINER, BOW ROLLER	4
4	4150017	BOW ROLLER	2
5	4150016	BOW ROLLER AXLE	2
6	4150025	INLINE ROLLER AXLE	10
7	4150022	WHEEL, INLINE 4IN ROUND	10
8	2021900	SPACER	20

Fig A.

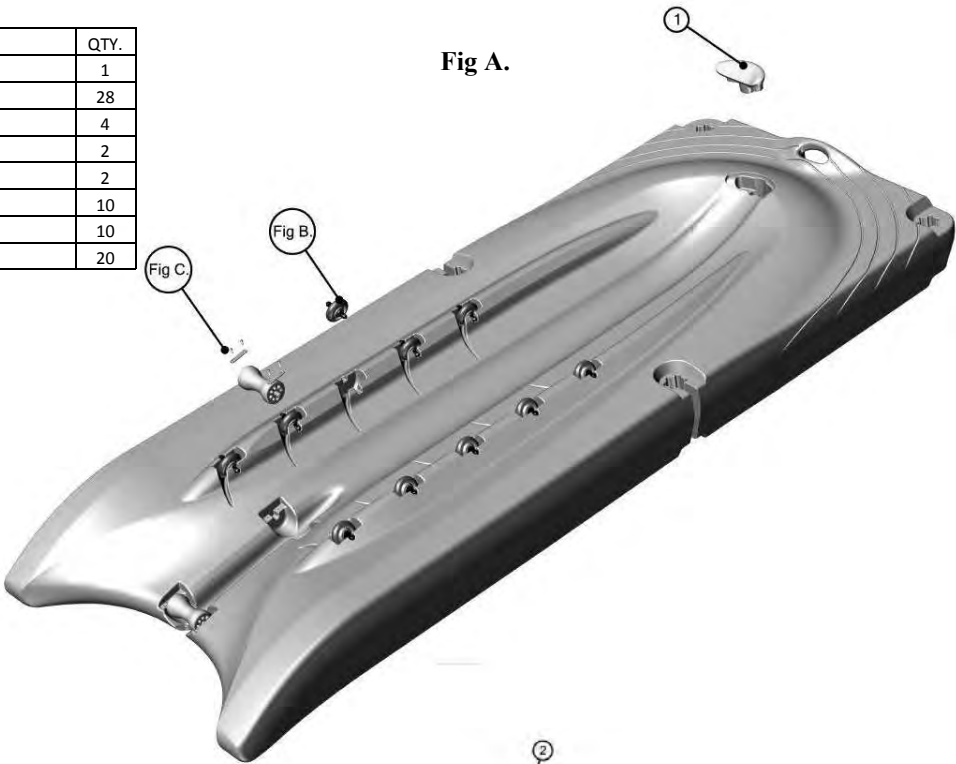


Fig B.

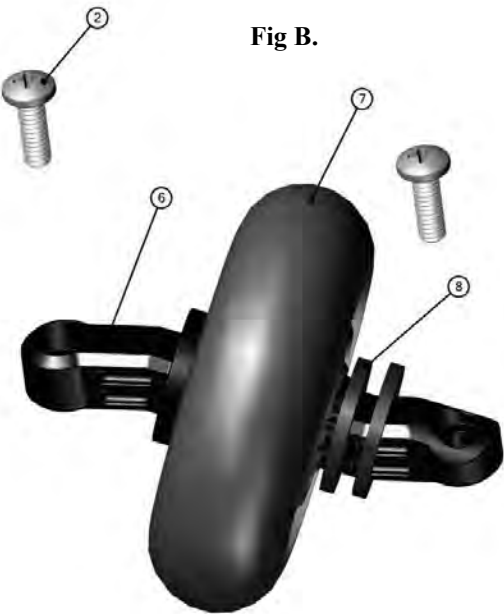
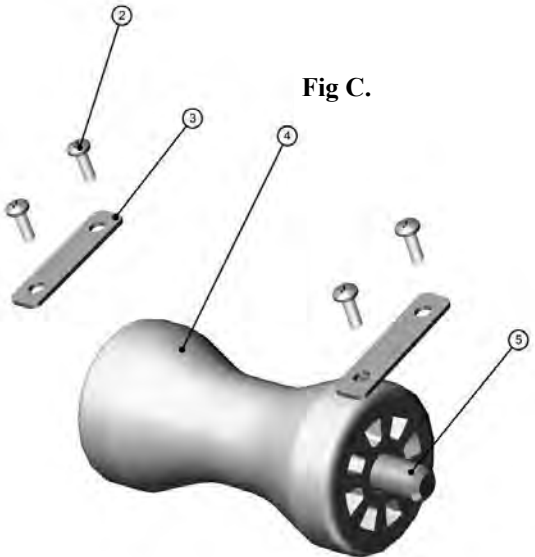


Fig C.



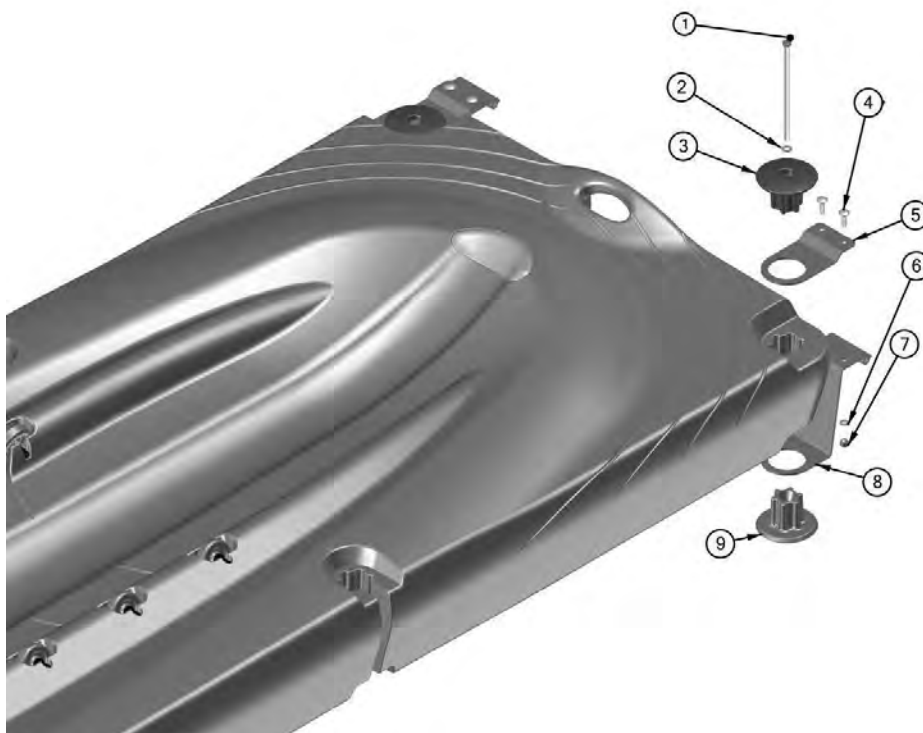
Installation Instructions

Rigid Dock

Step	Procedure
1.1	<p>Assemble upper [5] and lower [8] mooring brackets together loosely, then slide the assembly onto the HP PRO at mooring location. Holding the Bottom Plug [9] into the HP PRO Assy as shown, run the SS Connecting Bolt [1] and SS Flat Washer through the Top Plug [3] and thread into Bottom Plug [9]. Tighten bolt until top and bottom plugs are in contact with main body. To complete assembly, tighten the 1/2" carriage bolts on the rigid mooring brackets.</p> <p>[9] NOTE: DO NOT USE AN IMPACT WRENCH FOR FINAL TIGHTENING. FEEL THE BOTTOM PLUG AND VERIFY IT IS IN CONTACT WITH THE HP PRO BODY. OVERTIGHTENING CAN CAUSE INSERT TO PULL OUT OF BOTTOM PLUG. (TIGHTEN TO 15-20 FT/LBS.)</p>

ITEM #	PART NUMBER	DESCRIPTION	QTY.
1	4150009	BOLT 1/2-14 X 15 ALL THREAD	2
2	2090208	FLAT WASHER 1/2	2
3	4150030	PLUG- TOP HP SERIES	2
4	2090310	BOLT CARR- 1/2-13 X 1.5	4
5	4150180	BRACKET- UPPER RIGID MOORING	2
6	2090705	WASHER, LOCK 1/2	4
7	2090121	HEX NUT LOCKING, 1/2	4
8	4150185	BRACKET- LOWER RIGID MOORING	2
9	4150035	PLUG- BOTTOM HP SERIES	2

Fig D.



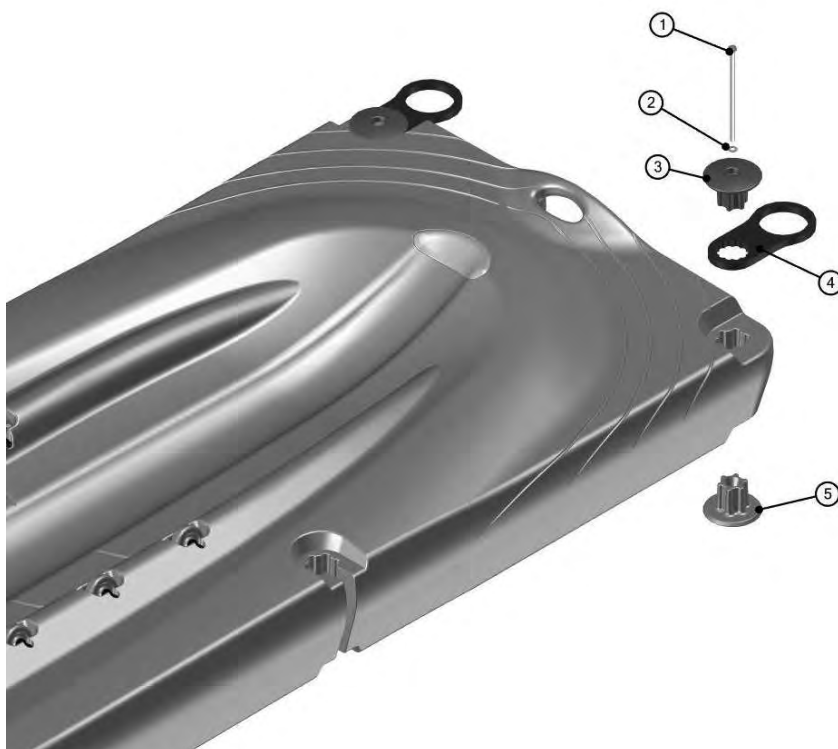
Installation Instructions

Universal Dock

Step	Procedure
1.1	Holding the Bottom Plug [5] into the HP PRO Assy as shown, run the SS Connecting Bolt [1] and Flat Washer Through the Top Plug [4] and Mooring Link-Universal [4] and thread into Bottom Plug. Tighten bolt until top and bottom plugs are in contact with main body. NOTE: DO NOT USE AN IMPACT WRENCH FOR FINAL TIGHTENING. FEEL THE BOTTOM PLUG AND VERIFY IT IS IN CONTACT WITH THE HP PRO BODY. OVERTIGHTENING CAN CAUSE INSERT TO PULL OUT OF BOTTOM PLUG. (TIGHTEN TO 15-20 FT/LBS)

ITEM #	PART NUMBER	DESCRIPTION	QTY.
1	4150009	BOLT 1/2-14 X 15 ALL THREAD	2
2	2090208	FLAT WASHER 1/2	4
3	4150030	PLUG- TOP HP SERIES	2
4	4150060	MOORING LINK- FIXED DOCK	2
5	4150035	PLUG- BOTTOM HP SERIES	2

Fig E.



Installation Instructions

Rigid Mount Floating Dock Only

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 [4] with Hinge Mooring Plate holes will only need to be drilled if using thru-bolt method 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 Rigid Mount Floating Mooring Link [2] [3] to either Hinge Mooring Plate [1] as shown. It is best to bolt Mooring Link 1 hole above its natural floating position depending on the watercraft. <i>Do not tighten to the point the bracket clamps the link.</i>

Fig F.

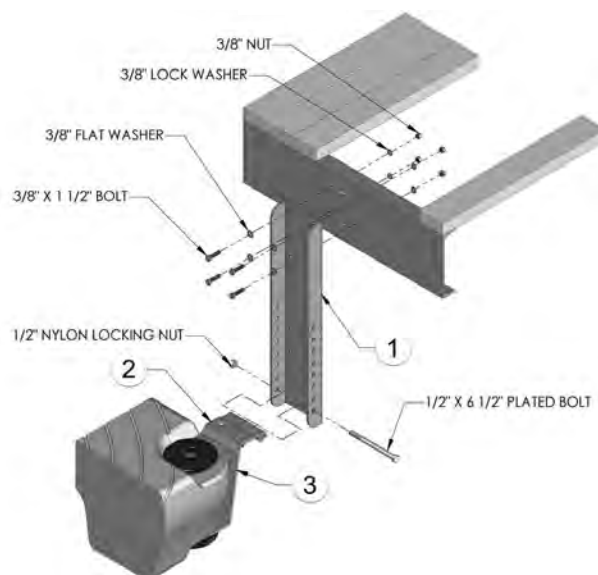


Fig G.

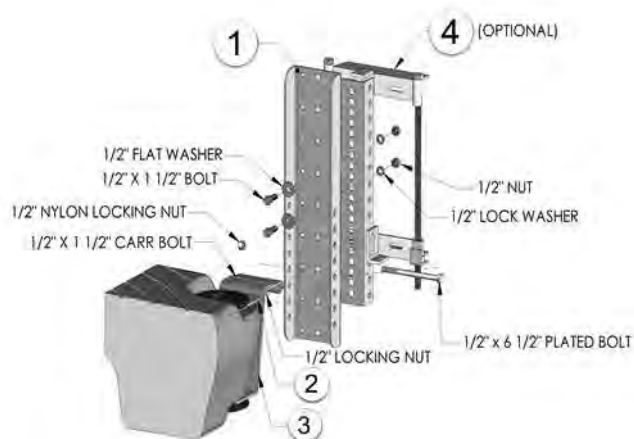
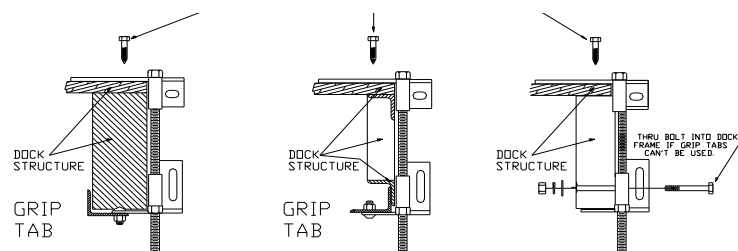


Fig H. (OPTIONAL)

MUST ANCHOR TOP OF BRACKET



Installation Instructions

Rigid Mount

Step	Procedure
2.3	When attaching the Mooring Bracket-Rigid in side mount application make sure your Upper Mooring Brackets (4150180) are oriented as shown.
2.4	It is recommended to bolt the front Mooring Bracket-Rigid about 1" down from neutral (neutral is defined as: where the link is positioned without a craft on it) and the rear Mooring Bracket-Rigid down 1" from neutral.

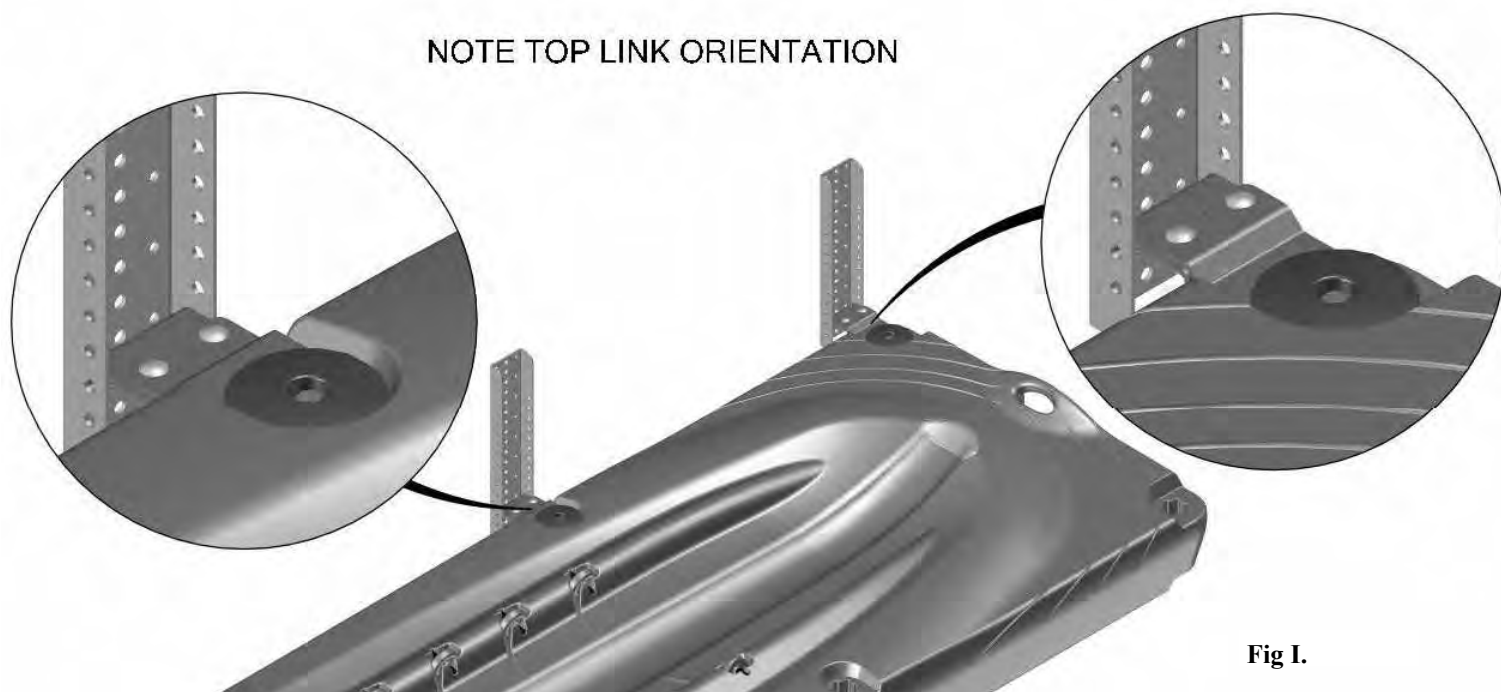
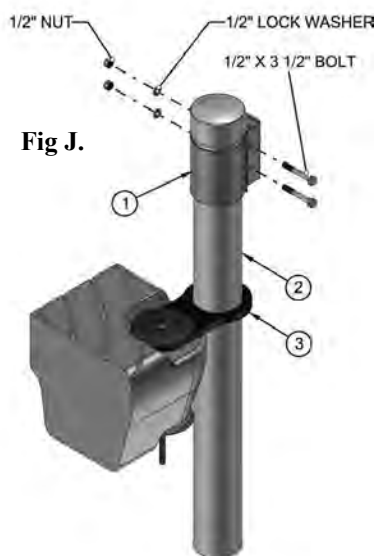


Fig I.

Installation Instructions

Universal Dock– Fixed or Floating Docks



Step	Procedure
2.1 <i>Alt</i>	Attach the Universal Dock Bracket [1] to the dock as shown (3 different kits 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 [2] through the Universal Dock Bracket [1] and the Mooring Link-Universal [3]. Bolt together as shown and tighten until the PVC Pipe is firmly in place.

ITEM #	PART NUMBER	DESCRIPTION	QTY.
1	4150160	UNIVERSAL DOCK BRACKET FIXED/FLOATING	2
2	3151300	4" SCHEDULE 80 PVC PIPE 48"	2
3	4150060	MOORING LINK-FIXED DOCK	2
4	3151200	REINFORCING BACK PLATE	2
5	3151600	LAGGING PLATE	2
6	3151500	RISER PLATE (OPTIONAL)	2
7	5049000	HEAVY DUTY DOCK BRACKET (OPTIONAL)	2

Fig K.

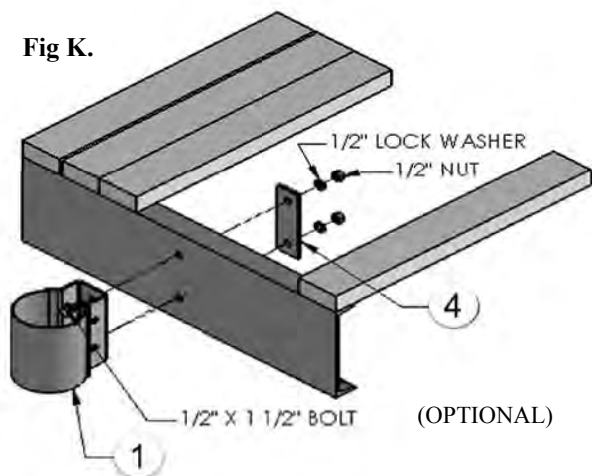


Fig L.

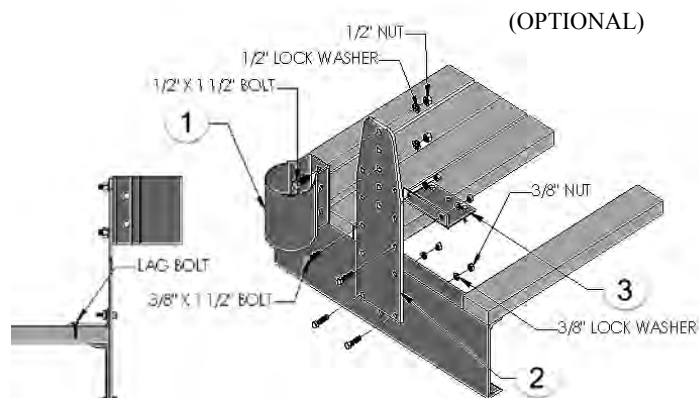


Fig N.

MUST ANCHOR TOP OF BRACKET

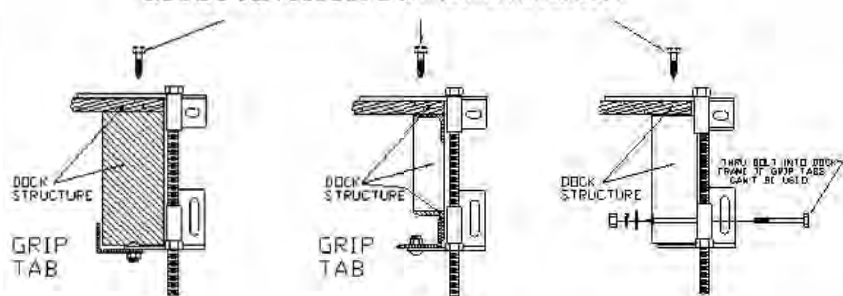
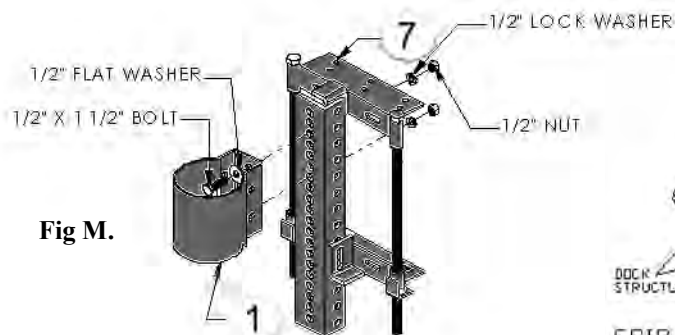


Fig M.

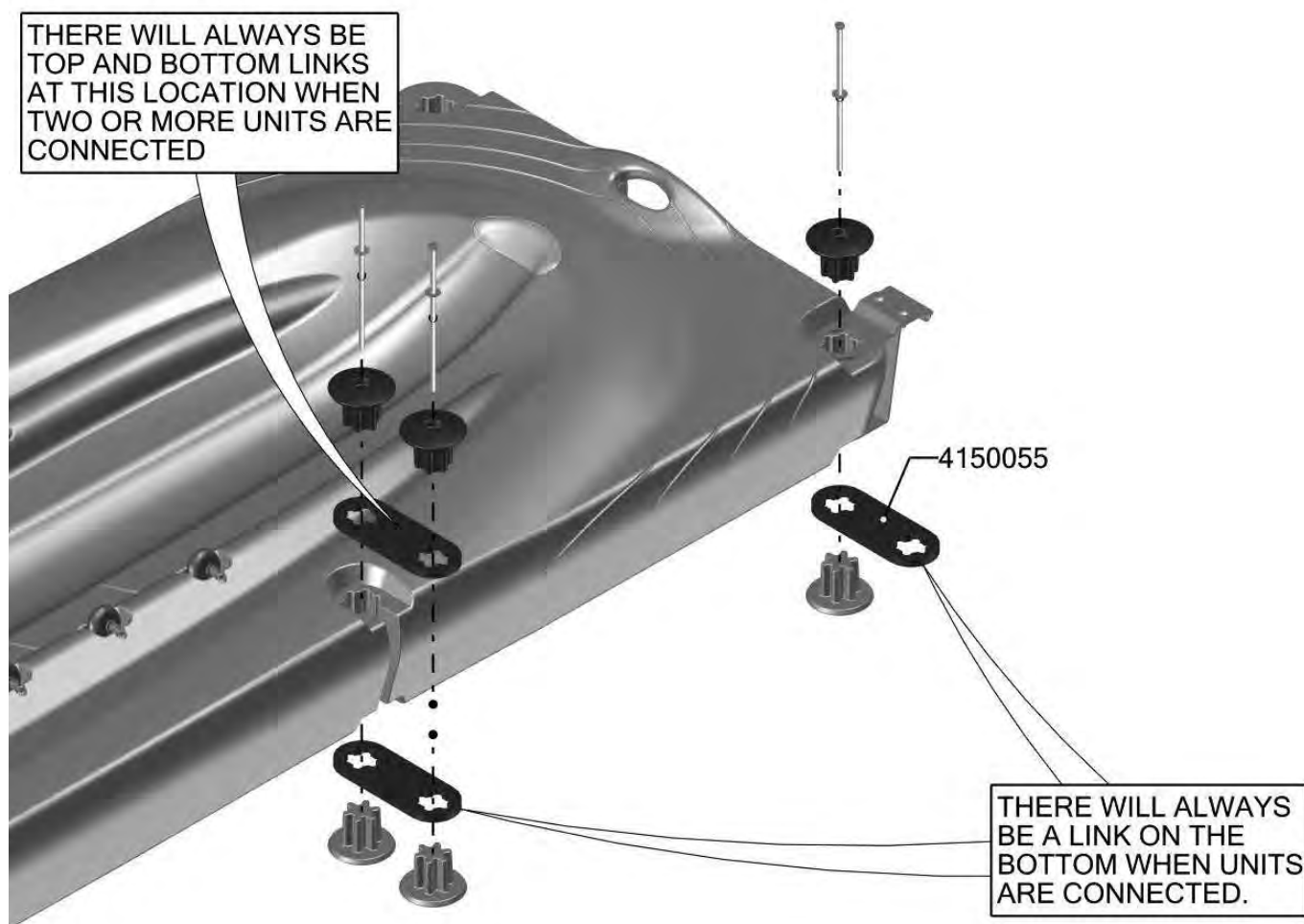


Installation Instructions

Connecting Units

Step	Procedure
3.1	Assemble parts as shown below. There will always be a top and bottom link in the middle and just a bottom link at the front.
3.2	Fasten Connecting Links (4150055) to one unit and leave unattached on the other side. Start threading the 15" Bolt (4150010) through the Top Plug and Connecting Links and into the bottom Plug (Only about 1/2" of Bolt should be threaded into Bottom Plug).

Fig O.



Installation Instructions

Connecting Units

Step	Procedure
3.3	Tighten the plugs on the side that is left unattached to the point that the bottom of the plugs are flush with the bottom of the Connecting Links. This ensures that the plugs will not rotate and, therefore, will be properly aligned with the feature on the HP PRO body. A spacer that is 2 1/2" tall will help ensure that the plugs stay in position. A 4" PVC Pipe cut 2 1/2" long and then cut in half lengthwise is found to be the best spacer.
3.4	When Plugs are in position slide the two units together (try to keep approximately the same weight on both units for best alignment). When units are pushed together the top plug is pulled up to lock the bottom plug in position. The Top Plug can then be tightened (It is important to keep pulling the top plug up while tightening to keep the bottom plug engaged).
3.5	Now that units are connected the Plugs may be assembled at the front location to finish the attachment (Refer to Connecting Units Chart to find out where mooring links attach).

Fig P.

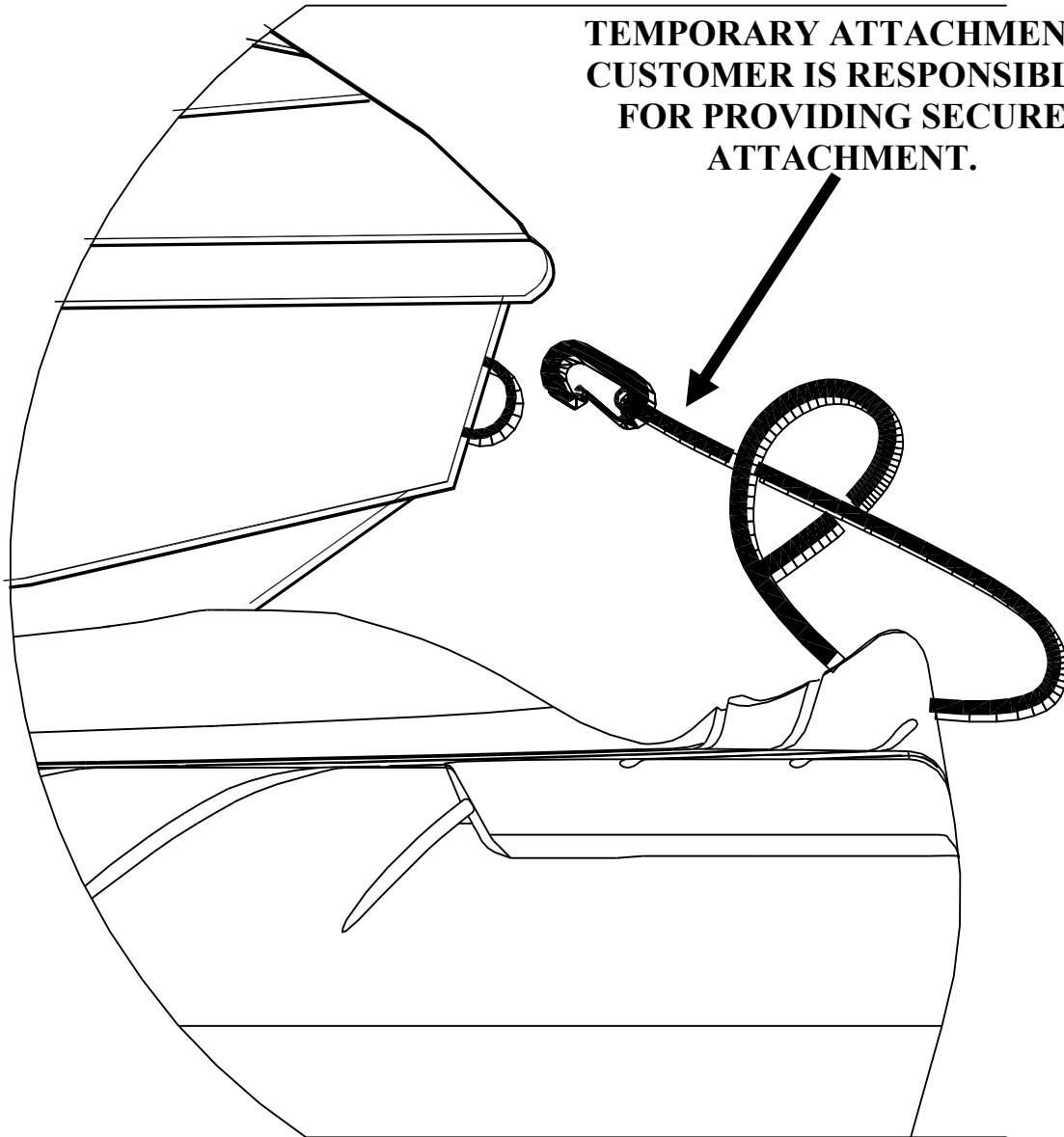


Strap Hook Installation

Fig R.

NOTE:

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



Operating Instructions

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

1. Approach HP PRO at idle speed only.
2. Position bow of PWC up against Keel Guide.
3. Apply necessary throttle to drive upon the platform until the bow of PWC rests on the bow bumper of HP PRO.
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 front of the HP PRO. Grasp the front of the PWC while lifting up and pushing back at the same time. After the launch is initiated, board the PWC and apply rocking motion.
-

Trouble Shooting

CONDITION:	I can't get my PWC to stay on the HP PRO when I pull on to the platform
CAUSE:	A.) You are coming in to fast B.) The PWC's weight is to far to the rear of the craft.
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.) Take out the front set (end that supports bow) of in-line wheels to increase friction. This can be especially necessary when supporting a large heavy PWC like the Sea-Doo GTX Supercharged 4-Tech. If this does not help try taking off another set of wheels.

Parts List

Parts Box - Rigid Mooring (6918121)	Part #	Qty.
Nut - Hex - 3/8" Galv	2090107	8
Nut - Hex - 1/2" Galv	2090111	4
Nut - Hex - 1/2" Locking	2090121	4
Nut - Hex - 1/2" Plated	2090122	2
Washer - FW - 3/8"	2090206	8
Washer - FW - 1/2"	2090209	4
Bolt Carr - 1/2" x 1 1/2"	2090310	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	8
Bracket - Upper - Mooring	4150180	2
Bracket - Lower - Mooring	4150185	2
Extended Hinge Mooring Plate	4150170	2

Kit# 4150305/4150315 (Blue/Tan) HP Pro Platform Only - No Mooring	Part #	Qty.
HP Pro - Main Body	200122/200123	1
Bow Bumper	4150081	1
In-Line Axle	4150025	10
In-Line Wheel	4150022	10
Axle Spacer	2090241	20
Screw	4150008	28
Bow Roller Axle	4150016	2
Bow Roller Retainer	4150007	4
Bow Roller	4150017	2

Kit# 4150365/4150323 (Blue/Tan) W/ Floating Dock Rigid Mooring	Part #	Qty.
HP Pro Assembly	4150305/4150315	1
Parts Box - Common	6918102	1
Parts Box - Ridged Mooring	6918121	1

Kit Box - Universal Dock (6918110)	Part #	Qty.
Connecting Link - Fixed Dock	4150060	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	4
Reinforcing Back Plate	3151200	2
Parts List	2006000	1
Mooring Pipe	3151300	2
Dock Bracket - Fixed	4150160	2

Kit # 4150220/4150221 (Blue/Tan) w/ Universal Dock Std. Mooring	Part #	Qty.
HP Pro Assembly	4150305/4150315	1
Parts Box - Common	6918102	1
Universal Dock Bracket	6918110	1

Connecting Kit (6918175)	Part #	Qty.
Washer - 1/2" - FW - SS	2090208	2
Connector Stainless Bolt	4150010	2
Connector Top Plug	4150030	2
Connector Bottom Plug	4150035	2
Connecting Link	4150055	3
Parts List	2006200	1

Parts Box - Common (6918102)	Part #	Qty.
Connector Plug Top	4150030	2
Connector Plug Bottom	4150035	2
Strap Hook	4150085	1
Installation Manual	2003265	1
Connector Stainless Bolt	4150011	2
Stainless Steel Flat Washer	2090208	2

