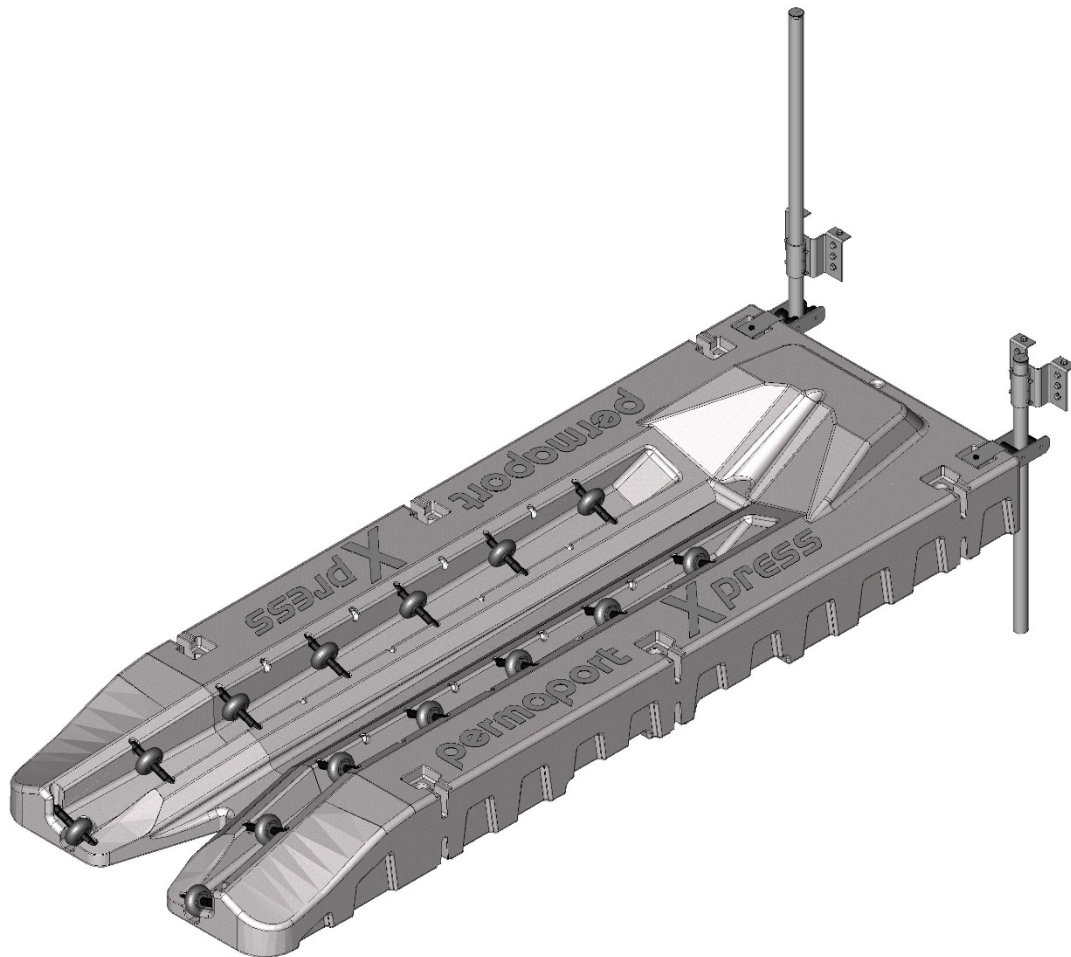




# PERMAPORT® Xpress

## ASSEMBLY, INSTALLATION AND MAINTENANCE INSTRUCTIONS





It is important that these instructions are adhered to in their entirety. Please read the instructions fully before starting installation or assembly.

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## Safety Instructions (Installation)

- Many of the parts of the Permaport *Xpress* are heavy; do not lift any parts that are beyond your capability, use additional help to maneuver parts into position.
- When working near the water it may be advisable to tie a line to any parts that are liable to sink until they are attached. These should be attached to inanimate secure objects only.
- Installation to the dock requires holes to be drilled and possibly wood to be cut; these operations should only be carried out by competent persons.
- Water and electricity do not mix well, do not use corded power tools, hand tools are preferable or battery powered. Battery powered tools up to 20v are safe but will be damaged if submerged.
- If you have any doubt about installing the *Xpress* consult the dock specialist that supplied the unit.

## Safety Instructions (Use)

- The *Xpress* has Heavy Duty Steel attachments for long life and durability. These components are heavy and extend below the water line of the *Xpress*. It is inadvisable to swim near, under or from the *Xpress* due to the possibility of entrapment or injury from protruding parts.
- Entry onto the *Xpress* is designed to be a low speed operation; it is advisable that the Watercraft be brought to a complete standstill in line with the *Xpress* with the bow keel touching and centered between the first set of rollers. A small amount of throttle is all that is required in order to propel the watercraft onto the *Xpress*. Do not vacate the watercraft until it is fully stationary and the engine is turned off. **WARNING:** Over throttling the watercraft upon entry can result in impacting the dock or sliding too far forward on the *Xpress*.
- Do not load or unload the watercraft onto the *Xpress* with passengers other than the driver.
- Ensure that there are no obstructions or persons in the water near the *Xpress* or on the *Xpress* when loading or unloading the watercraft.



- Stop the engine as soon as the Watercraft is on the *Xpress*; do not allow engine to run while out of the water. Do not start the engine while the watercraft is on the *Xpress*. Refer to Watercraft owner's manual for further details.

## Mounting Hardware

The Permaport® *Xpress* is best mounted at the front; side mounting is possible but is not optimal.

The standard hardware is suitable for both side and front mounting the *Xpress* to both fixed and floating docks. In the case of extremely rough water or unusual conditions there may be additional or alternative parts required. The rough water adapter is expected to be available in March 2021.

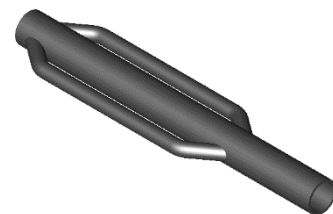
It is advisable that this port be installed by a professional dock builder. Failure to mount the port in accordance with the manufacturer's instructions will invalidate the warranty.

## Tools required

The *Xpress* port has been designed to be installed with the minimum amount of assembly and requiring only basic tools.

*Note: It is essential that any electrical tools used outdoors be protected by adequate GFCI protection. We recommend that only hand or battery operated tools be used in close proximity to water.*

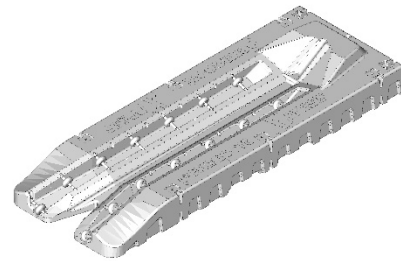
- 3/4" Wrench or Long Reach Socket and Ratchet Drive (Preferred)
- Drill and 5/16" Drill Bit
- Wrench or Socket and Ratchet Drive to suit selected dock hardware.
- For a fixed dock installation the vertical support poles need to be driven into the lake bed, it is recommended that at least a manual fence post driver be utilized for this purpose.



## Xpress Parts List

Ensure that all of the parts are available before starting assembly.

- *Xpress* Hull Including 14 Fitted Rollers and 6 Void Fillers.



- Two *Xpress* Brackets.



- Two Contoured Rollers



- Two Straight Rollers



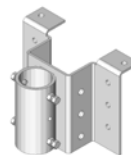
- Four 6" x 1/2" Stainless Steel Bolts



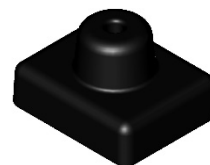
- Eight 1 1/2" x 1/2" Stainless Steel Bolts

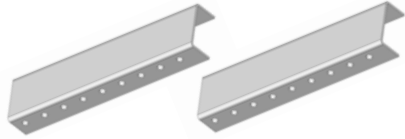







- Two Dock Brackets



- Four Shock Absorbing Inserts



- 2 Stainless steel Channels 
- Two ½” x 14” Stainless Steel Bolts 
- Ten ½” Brass Lock Nuts 
- Twenty Six ½” Stainless Steel Washers 
- Two Raised Washers and Plastic Caps 
- Two Pipe caps 
- One Lanyard
- One *Xpress Step™ (some models only)*

## Other Parts Required (Not Included)

- 2” Diameter Schedule 40 Galvanized Pipe (Length to suit).
- Due to variances in dock design and materials used, screws for attaching the dock hardware to the dock are not supplied.

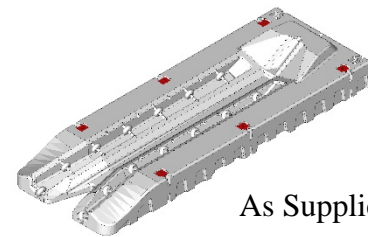
## Basic Assembly Applicable to all Applications

*It is recommended that the basic mounting kit be applied to the Xpress away from the water to avoid the possibility of loss of components.*

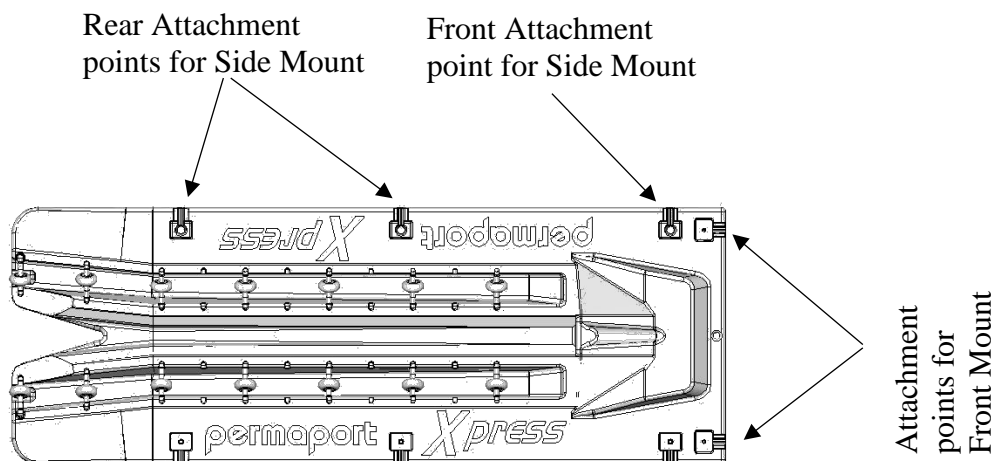
*It is essential that all threads are coated with an anti-seize compound prior to assembly; failure to do so will complicate any future disassembly that may be required and will invalidate the warranty.*

There are large rectangular mounting holes placed along the edges of the Xpress. Select the holes to be used. For a front mount, use the two on the front edge. For a side mount, select two holes on the side edge, the front hole and either one of the two rear holes, although it is preferable to use the rear most position if possible.

The Permaport® Xpress is supplied in a front mount configuration with void fillers in the side holes. To use for a side mount, remove the void fillers from the side mounting holes and re-position them in the front holes. To remove the fillers, use a screwdriver to pop off the black caps and remove the bolt using a 9/16" socket and a 9/16" wrench. Replace them in the front positions using the same assembly as used in the side holes.

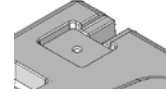


As Supplied





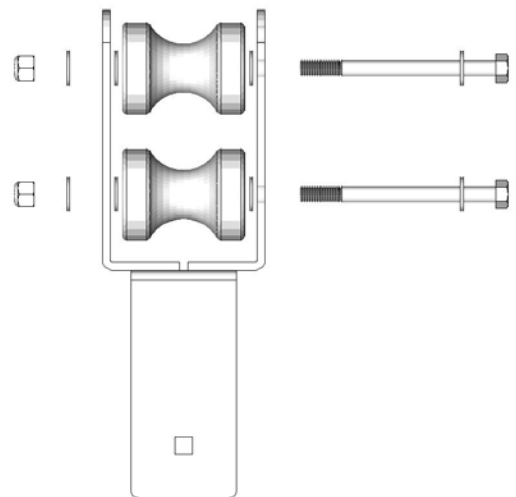
Place a shock absorbing insert in both the top and bottom rectangular recesses on the selected holes. These are a tight fit, so use a mallet to tap into place home, if necessary.



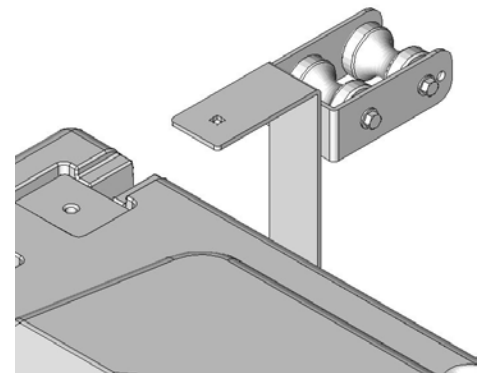
## Bracket Preparation and Installation

**Note: If installation is for a floating dock front mount, do not attach the rollers.**

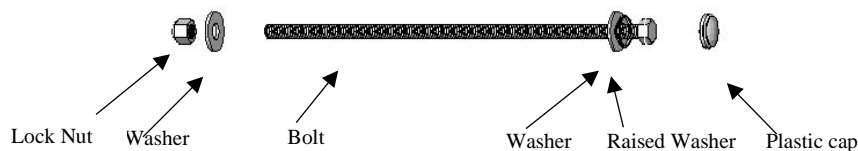
Assemble the two brackets as shown, ensuring that there is a pair of contoured rollers on one bracket and a pair of straight rollers on the other. Place a washer as shown between the bracket and the rollers as well as under the bolt head and the locknut (4 washers per axle). Tighten the locknut securely but do not distort the bracket to the point where the rollers bind. Do not mix rollers on one bracket.



Install the brackets by sliding over the inserts



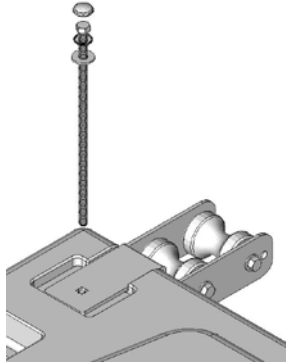
Assemble the 14" long Stainless-steel bolt as shown. Do not attach the plastic cap.







Insert a 14" long x 1/2" stainless steel bolt through the assembly and attach the 1/2" Brass Lock nut and washer on the bottom.

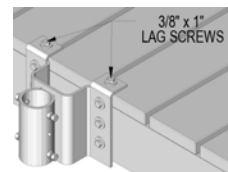


Tighten the nuts using a 3/4" wrench or Long Reach Socket. Do not over tighten the nuts, they need to be snug without causing undue compression of the Xpress. Finally, snap the plastic caps over the bolt heads onto the contoured washers.

There are two different types of rollers, on a front mount application the position is unimportant. On a side mount application, it is important that the straight rollers are in the rear position.

## Attaching the Dock Hardware

*It may be necessary to remove part of the dock planking in order to adequately fix the brackets on this assembly. Lag screws should not be used except in the position shown; these must be 3/8" x 1" lag screws. It is critical that bolts and washers are used to mount this assembly. The Xpress should not be attached to dock stringers that are less than 2" x 6" or in a decayed or damaged condition. Take care not to drill through the floats or cables under the dock.*



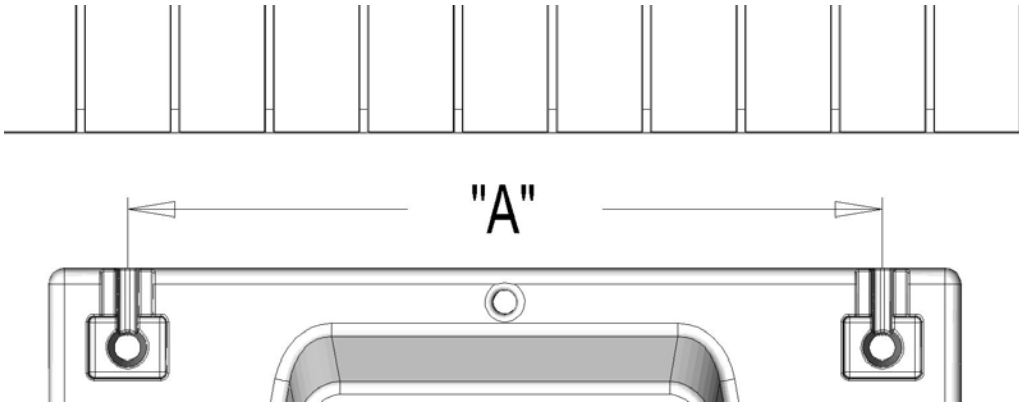
It is recommended that the dock brackets are installed using only the top mounting holes until it is certain that the brackets and the mounting hardware line up with the Xpress. However, do not attach the Xpress to the bracket until all of the mounting screws are attached

**When Mounting to a Fixed Dock it is essential that the water level is not able to come to within 15" of the top of the dock. If there is a possibility this may occur the installation needs to be adapted to accommodate this situation.**



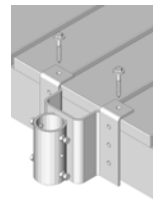
## **Front Mount**

Note: The dimension shown below as “A: is nominally 47 ½” but due to manufacturing tolerances may be slightly different, check the dimension and use the actual dimension for installation.

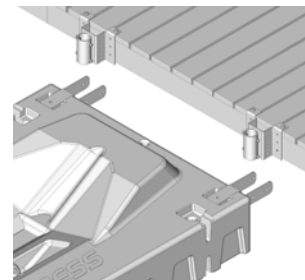


Determine the position that the *Xpress* is to be attached and mark a line on the stringer representing the center of the *Xpress*. Mark a line half of dimension “A” from the center line to both the right and the left-hand sides; these are the center lines of each of the Dock Brackets. Alternatively, mark one line 5” from the edge of where the *Xpress* is to be positioned and then a second line Dim “A” from the first.

Position the Dock Bracket so the center of the tube lines up with the line drawn on the dock, ensure that the bracket is firmly against the stringer, and attach to the dock using screws or bolts in the top two holes. (Note: If necessary, chamfer the top front edge of the dock).



Repeat for the other Dock Bracket, float the *Xpress* up to the dock and ensure that the *Xpress* brackets line up with the dock brackets.

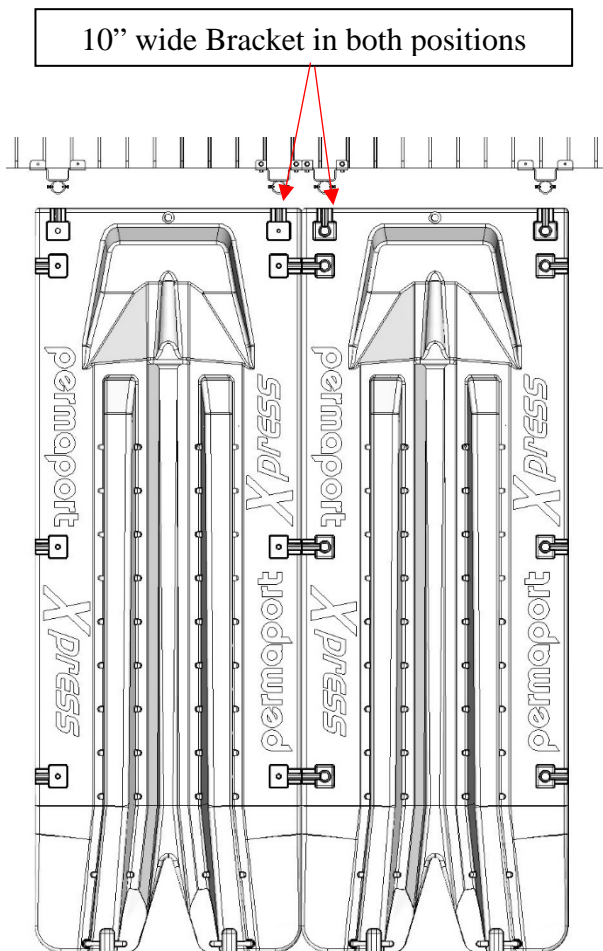
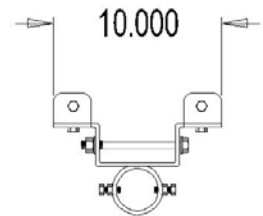


## Installing two Permaport® Xpress ports side by side Without Permaport Walk between.

When installing a pair of Permaport® Xpress ports we recommend either joining them directly side by side to one another or installing them with a significant gap between them to avoid entrapment of anyone in the water.

When joining them side by side, additional consideration must be made for the selection of the dock Brackets.

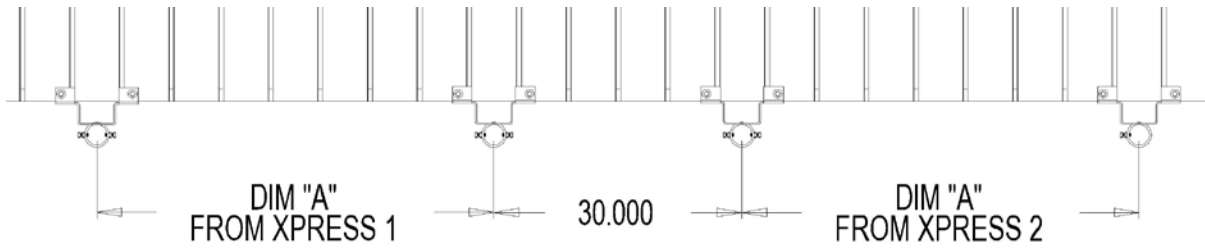
There may be two different widths of dock bracket in the Hardware kit, 12" wide and 10" wide. When joining ports side by side, the narrow brackets (10" wide) have to go in the center of the pair. (If your kit has two narrow brackets they can be used universally). The center Brackets must be attached to the dock with no space between them





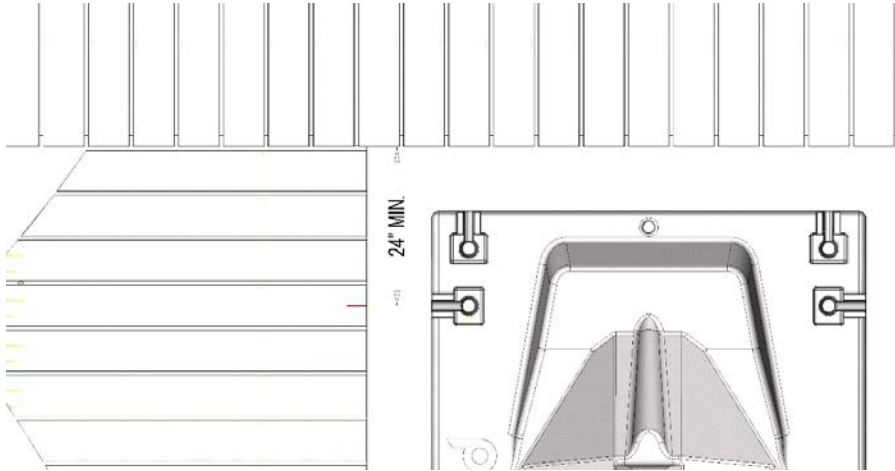
## Installing two Permaport® Xpress ports side by side With Xpress Walk between.

If an Xpress Walk is being installed between two Xpress Ports then a space needs to be left between the Dock hardware to allow for the Xpress Walk. This gap needs to be 30" as illustrated below.



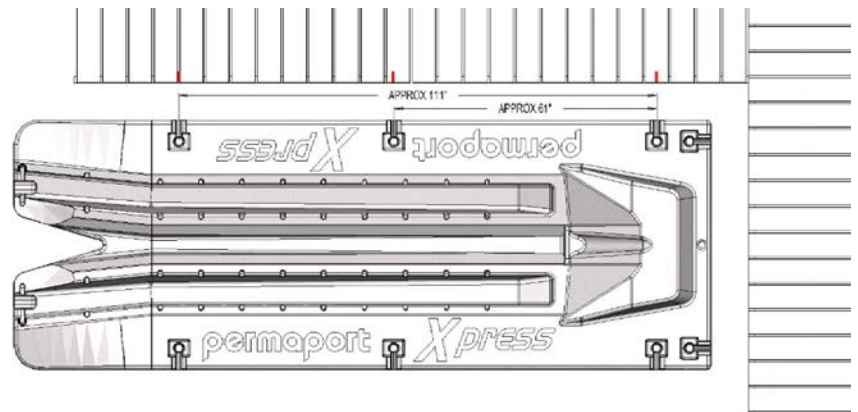
## Side Mount

Determine the position that the *Xpress* is to be attached and mark a line on the stringer representing the center of the forward attachment point. This MUST be a minimum of 24” from any adjoining dock at the front.



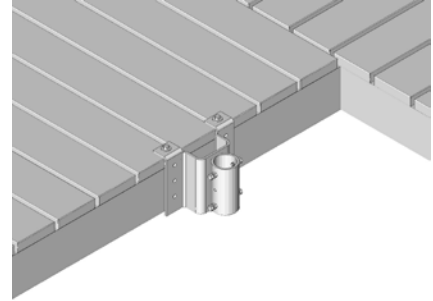
There are two options for the rear attachment, the one toward the rear is the preferential position but the position in the center of the *Xpress* is acceptable if the dock configuration makes it necessary to use that position.

After deciding on the second position to be used, it is necessary to take an actual dimension from the *Xpress* in order to determine the exact position for installing the dock brackets. Measure the exact dimension between the centers of the holes. Having determined that dimension, mark a line on the dock as shown. Do not use the approximate dimensions.

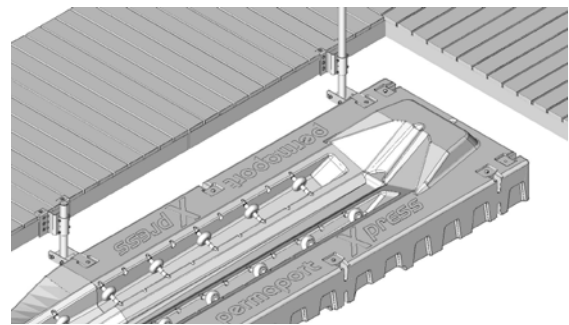




Position the forward most dock Bracket so the center of the tube lines up with the line drawn on the dock, ensure that the bracket is firmly against the stringer, and attach to the dock using screws or bolts in the top two holes, (Note: If necessary, chamfer the top front edge of the dock).



Repeat for the other dock Bracket, float the Xpress up to the dock, and ensure that the Xpress brackets line up with the dock brackets.





## Attaching to a Fixed Dock

These instructions are applicable to both side and front mount fixed dock installations.

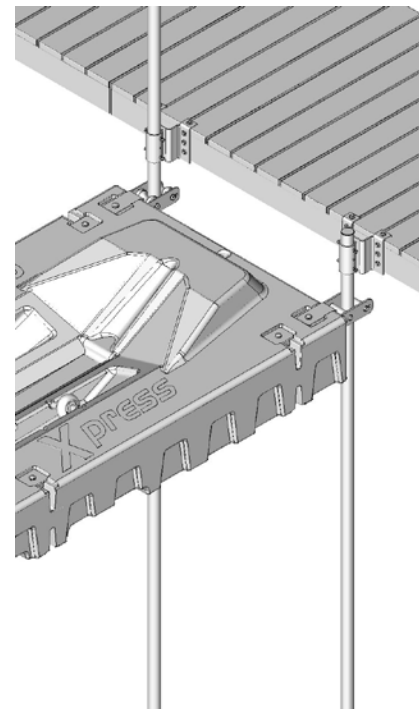
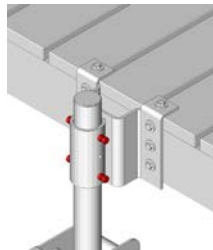
*This System Must Not Be Used if There is a Possibility of the Water Level Rising to Within 15” of the Bottom of the Pipe Brackets. In this case, contact your supplier for alternative instructions.*

*It is essential that the poles on the fixed dock are both Parallel and Upright. If the poles are not parallel then the Xpress could bind as the water rises and falls, which could cause damage or loss to the Xpress, the watercraft or injury to persons.*

It will be necessary to use 2 lengths of 2” schedule 40 Galvanized Pipe that are at least 24” longer than the water depth when measured from the top of the Dock.

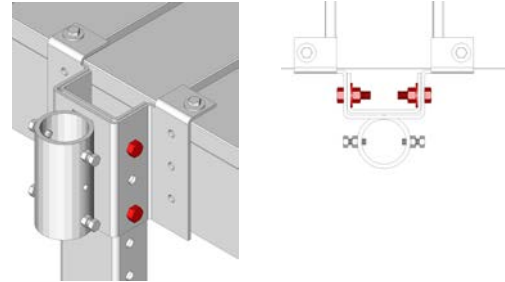
After installing the Dock Brackets, position the Xpress under the Dock Brackets as shown and slide the two lengths of pipe through the dock bracket and the Xpress brackets ensuring they are upright and parallel. Drive the pipes in to the lake bed to anchor them. It may be preferable but not essential to leave the Pipes long enough to form a handle to assist in accessing the Xpress. Two pipe caps are supplied in the kit for this option.

Tighten the locking screws on the Dock Brackets. Drill a 5/16” hole through the pipe using the holes in the bracket as a guide.

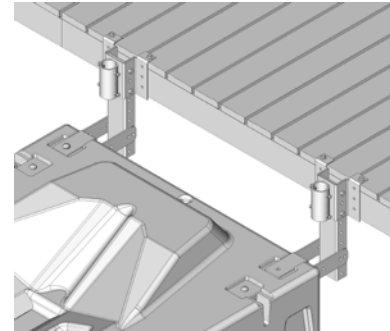


## Attaching to a Floating Dock (Front Mount Only)

There are two C channels in the hardware kit, attach both of these to the dock Bracket as shown using four ½” x 1 ½” bolts, washers and brass locknuts.

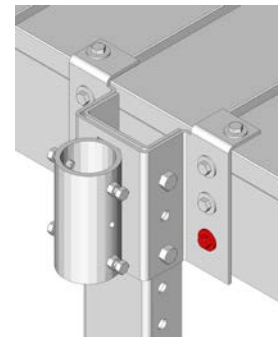


Move the *Xpress* into position, ensure that the *Xpress* brackets are able to wrap around the channels as shown.

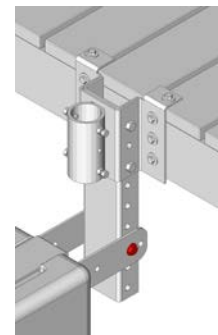


Do not attach the Channels at this point, through bolt all of the positions on the front of the brackets as shown.

Individual dock conditions may make it difficult to bolt in all six positions, however, it is essential that the bolt marked in red is used.



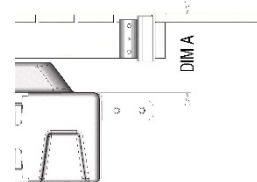
Finally, move the *Xpress* into position on the Dock and line the brackets up with the channel. Do not have any load on the *Xpress* while doing this. Bolt through the nearest hole in the channel and through the second hole back on the permaport bracket. If necessary, push down slightly on the *Xpress* in order to line up the holes. Do not tighten the bolts to such an extent that they cause binding between the bracket and the channel.



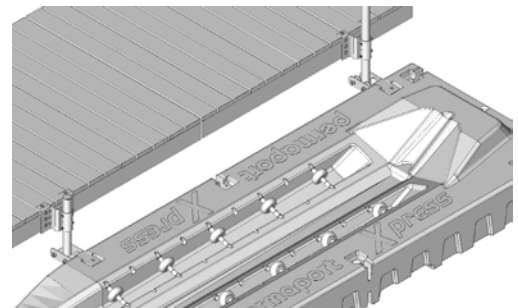


## Attaching to a Floating Dock (side mount)

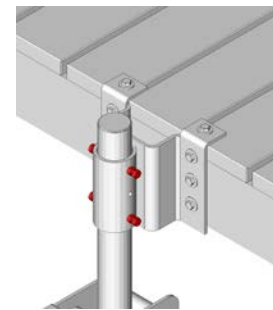
It will be necessary to use two lengths of 2" schedule 40 Galvanized Pipe. Measure the distance between the top of the dock and the top of the *Xpress* (Dim A). You will need two pieces of 2" diameter, schedule 40 galvanized pipe that is at least 36" longer than that dimension. If you want to leave the pipe above the dock to act as a handle to assist in accessing the *Xpress*, that needs to be added to the length of the pipe.



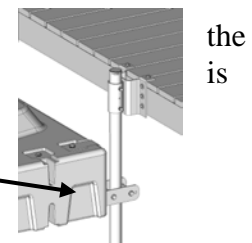
Position the *Xpress* under the Dock Brackets as shown and slide the two lengths of pipe through the Dock Bracket and the *Xpress* brackets ensuring that they protrude at least 20" below the *Xpress* bottom face.



Tighten the locking screws on the Dock Brackets. Drill a 5/16" hole through the pipe using the center holes in the bracket as a guide. (Hint, drill two separate holes, one from each side). Fasten with 4" x 1/4" bolt and nut.



Note: On some floating dock installations where the free board is low, *Xpress* bracket may come close to the dock bracket; in that instance, it is permissible to install the *Xpress* Brackets reversed as shown





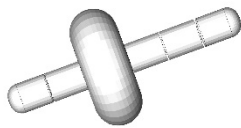
## Adjusting the Rollers

*Note: all of the component parts of the wheel axle assembly will sink in water; use care when removing the assembly.*

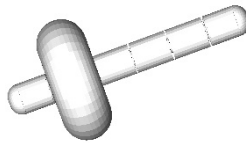
As supplied, the rollers are positioned such that they will accommodate the majority of Personal Watercraft (PWC's) on the market. However, it may be necessary to change the position for use with certain PWC's where the rollers interfere with the contours of the hull.

The two entry rollers are not changeable and are tighter than the rest of the rollers; do not remove these rollers unless it is for service replacement, in which case they will need to be replaced in the same configuration.

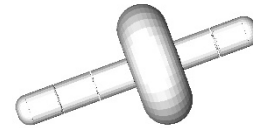
The rollers can be reconfigured to one of three positions on each axle and placed into any of the positions on the *Xpress* port.



As Supplied



Lowest Position

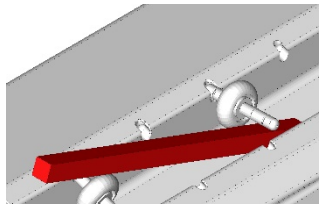
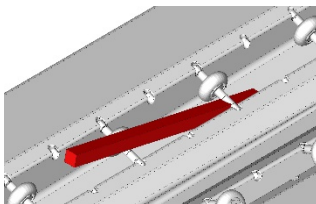


Highest Position

## Removal of Wheels

To remove a wheel assembly use a lever such as a 2" x 2" piece of wood. Ensure that there are no sharp parts that may puncture the body of the *Xpress*.

Insert the end under the axle as shown and gently but firmly apply upward pressure until the whole assembly comes free from the main body.





## Re-Assembly of Wheels

Slide one end of the assembly into a recess and then using a protective piece of wood or plastic drive the other end into the opposing recess using a mallet as shown. Do not apply lubrication as an aid to insertion.

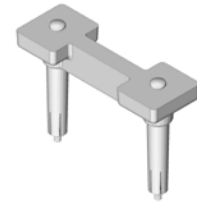


## Joining Two Permaport® Xpress ports Side by Side

It is only possible to join two Permaport® Xpress's together when front mounted.

If two Permaport® Xpress ports are to be mounted side by side it will be necessary to use a Joiner Kit, available from your dealership.

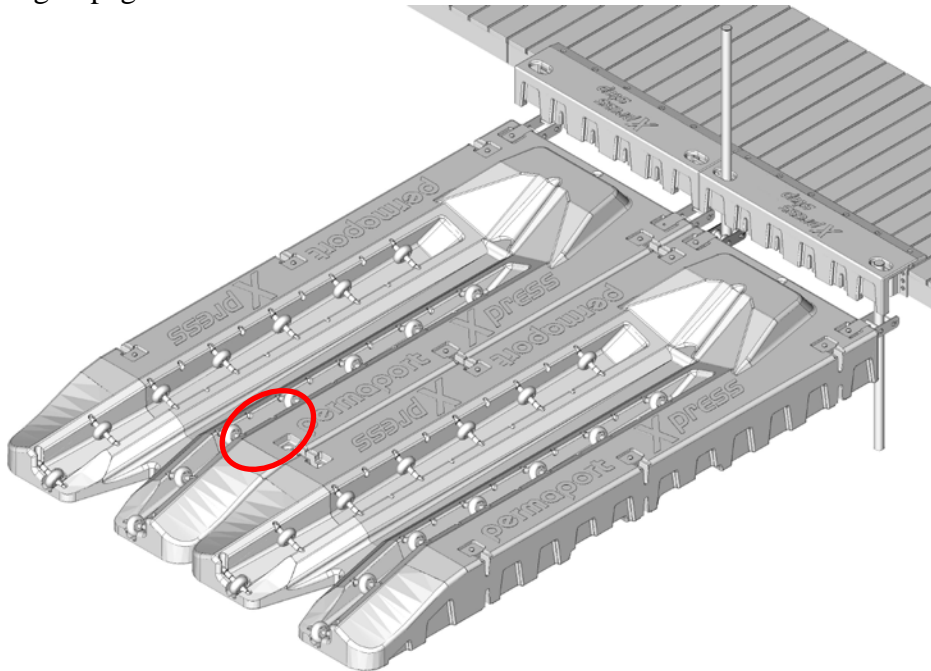
The joiner Kit is supplied pre-assembled



### Joiner Kit Installation

In order to join two Permaport® Xpress's together, you will need 1 joiner Kit.

Mount both Permaport® Xpress ports to the dock independent of each other using the hardware provided (see page 11 for requirements). Ensure that the correct brackets are in use according to page 11.

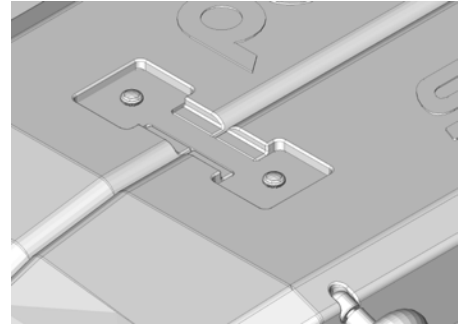


Remove the fillers in the rear positions shown above using a 9/16" socket.

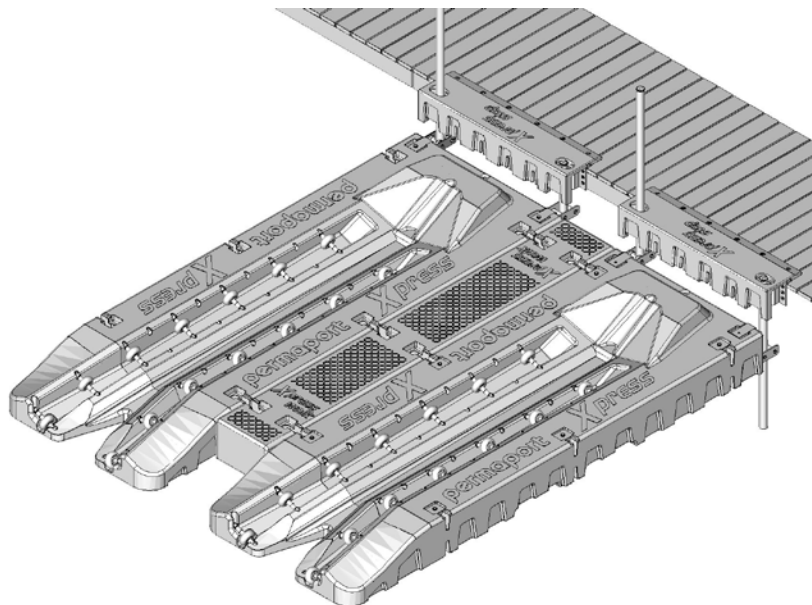
Prior to assembly carry out an inspection on the joiner as follows: -

*When the parts are assembled during manufacture, grease is applied to the threads inside the joiner to ensure free movement, the bolt should be able to freely turn in the captive nut inside the joiner assembly, ensure this is the case prior to assembly, the nut must remain stationary. Do not turn the screw counter clockwise to the point where the nut emerges from the bottom of the assembly.*

Insert a joiner in both Permaport® Xpress's as shown, ensure that the joiner is fully seated, use a mallet to drive home if necessary. Tighten the bolt using a ¾" socket, do not over tighten, 30 ft. Lbs. of torque is adequate (Moderate force on a 12" socket ratchet). Do not use an impact wrench to tighten. Repeat on the second bolt. Add the two Bolt head caps



It is also possible to join two Permaport® Xpress's together using an Xpress walk between them, details for this are contained in the Xpress walk instructions.

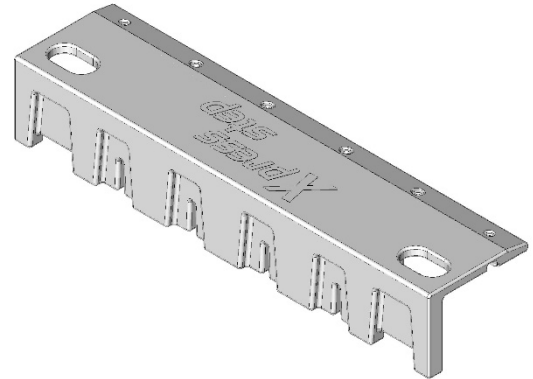




## **Xpress Step**

### **For Ease of Installation, Do Not Install the Step Until All Other Installation Is Complete.**

The *Xpress* Step™ is designed to make the complete installation more aesthetically pleasing as well affording a degree of additional protection when boarding or disembarking the Jet Ski by covering the hardware used to mount the port to the dock. It is recommended that one or more of the vertical poles from the installation be long enough to create a handle to assist boarding and disembarking; oval apertures are molded in the step to facilitate this feature.



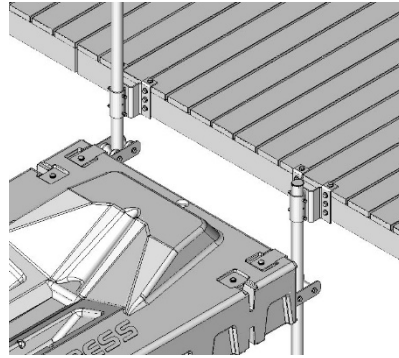
Attachment fasteners are not provided with the step because of the various materials and dock designs that are in use. The illustrations show a step being mounted to a wooden dock using lag bolts. It may be necessary to use different fasteners depending on the individual dock.

The dock should be sound and flat, especially where the step is to be mounted. If the dock material is compromised in any way, adequate methods of attachment need to be employed, for instance through bolting with plates on the back of the dock material.

Note: If you are installing other accessories, although not critical, it may be useful to leave the step installation until finished.

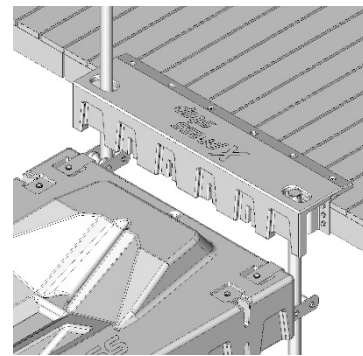
### **Installation**

Install the Port using the methods described on the instructions accompanying the port for either front or side mount.



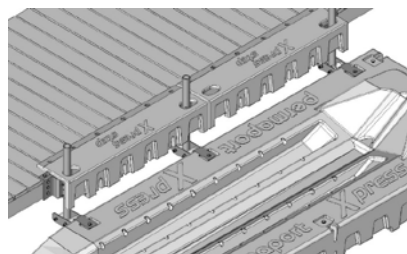
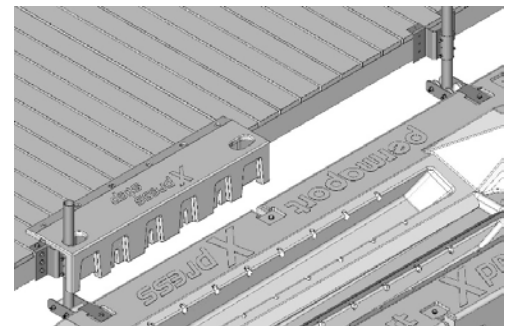
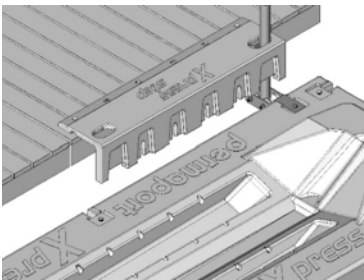
### Possible configurations

#### Front Mounted Permaport® Xpress



#### Side Mounted Permaport® Xpress

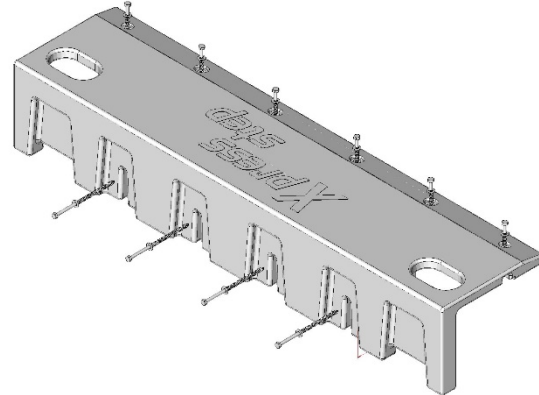
The step can be mounted on either the front or the rear side positions, or with the addition of a second step they may be installed in both positions.





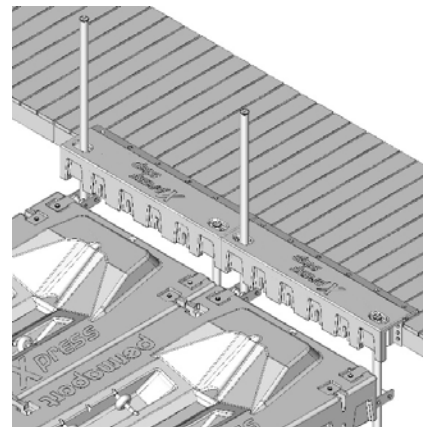
## Installation Instructions

Simply place the step over the top of the hardware in the desired position and attach using appropriate bolts or screws. If using screws, use 3/8" diameter x 9" long screws in the front 4 positions and 3/8" x 2 1/2" screws in the top 6 positions. If using bolts, use 3/8" diameter and size the length of the bolts to suit the deck it is being installed on.



## Using the step with a side by side installation

The step may be used with side by side installations, please ensure that the *Xpress port* have been installed accordance with the *Xpress* instructions regarding the bracket widths for side by side installations. Simply place both steps over the hardware and bolt down in accordance with the instructions given in section regarding front mounting.



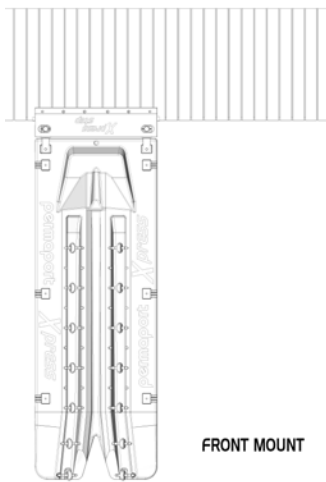
in  
the



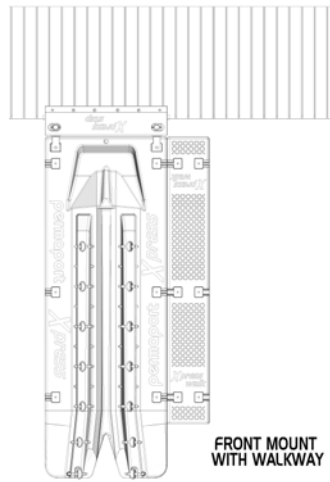
## *Xpress Walk*

The *Xpress Walk*<sup>™</sup> enables ease of access without unduly widening the port since it can be added to just the most convenient side. It can be added to both sides, forming a 98" wide port, ideal for children or those with limited mobility.

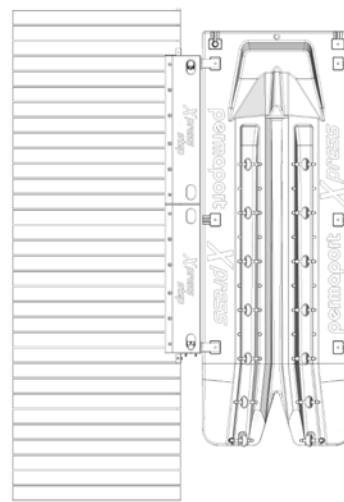
It can also be added between two *Xpress* ports to enable ease of access, and when combined with the *Xpress Step*<sup>™</sup> it forms a versatile modular system.



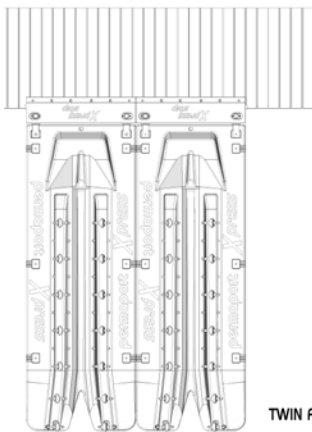
**FRONT MOUNT**



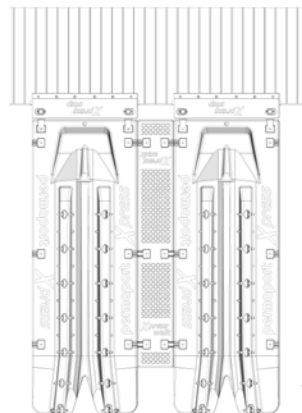
**FRONT MOUNT WITH WALKWAY**



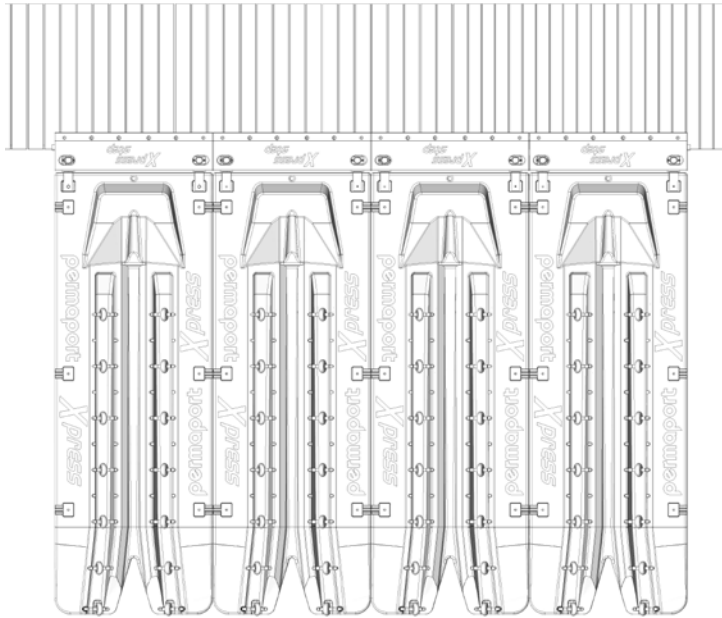
**SIDE MOUNT WITH TWIN STEPS**



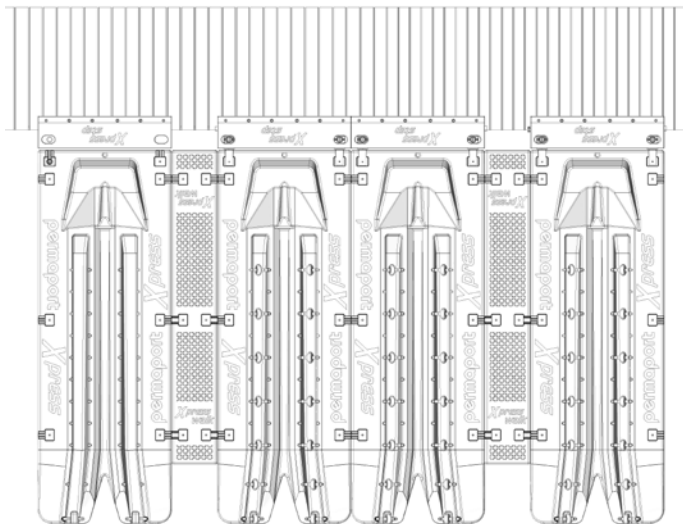
**TWIN FRONT MOUNT**



**TWIN FRONT MOUNT WITH WALKWAY**



**MULTIPLE FRONT MOUNT  
(MARINA APPLICATION)**



**MULTIPLE FRONT MOUNT  
WITH WALKWAYS**