EZ Launch®
Accessible Transfer System

Installation Instructions

Models 500900L, 500900R, 500901L, 500901R
500890, 500906L, 500906R

For questions about features, operation/performance, parts, accessories or service, call your local dealer or your nearest EZ Dock distributor at 1-800-654-8168 or +1-417-235-2223 for international customers.

Additional information regarding EZ Dock products and services can be found on the internet at www.ez-dock.com

The first dock of its kind...The last dock you will ever need.®

IMPORTANT! Assembly, Installation, Maintenance and Safety:

You should read these instructions thoroughly before assembling and installing your EZ Launch or EZ Dock System. Also reference EZ Dock Floating Dock Installation Manual and/or www.ez-dock.com for other installation details. Please adhere to all recommendations and cautionary suggestions appearing in this manual and always follow the instructions based on the needs of your installation and site requirements. Please save these instructions and refer to them as needed for future reference.

Tools and Requirements:

As with any assembly and installation, some tools are required to assemble and install your EZ Launch. You may not need every tool listed below for your particular installation, but the following tools are generally helpful in the installation process (for professional installation, call your local EZ Dock dealer):

- 1/2" drive ratchet
- socket set (especially 1/2", 9/16", 5/8", 11/16", 3/4", 15/16" sq. HD. or 19mm - 12pt)
- open-end, boxed-end wrench set (above mentioned sizes)
- screwdrivers (Phillips and standard)
- pliers
- adjustable wrenches
- hammer
- pry-bar (small and large)
- Allen wrenches
- power drill and bits
- rubber mallet
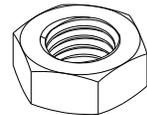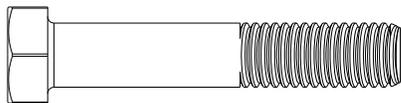- EZ Dock In-water Installation Tool (9000010)

Typical Hardware:

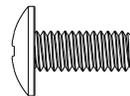|			
3/8-16 x 2 3/4 Bolt	3/8 Flat washer	3/8-16 Locknut	5/8-11 Nut
1/2-13 x 2 3/4 Bolt	1/2 Flat washer	1/2-13 Locknut	5/16-18 x 3/4 Screw
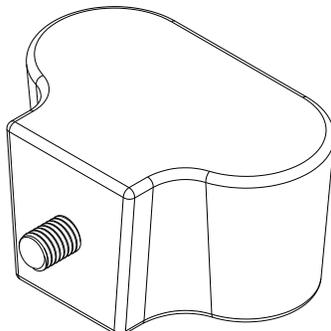
5/8-11 Flat head Screw
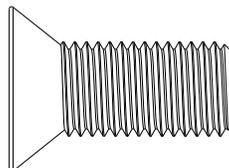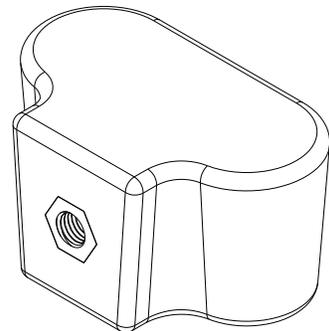
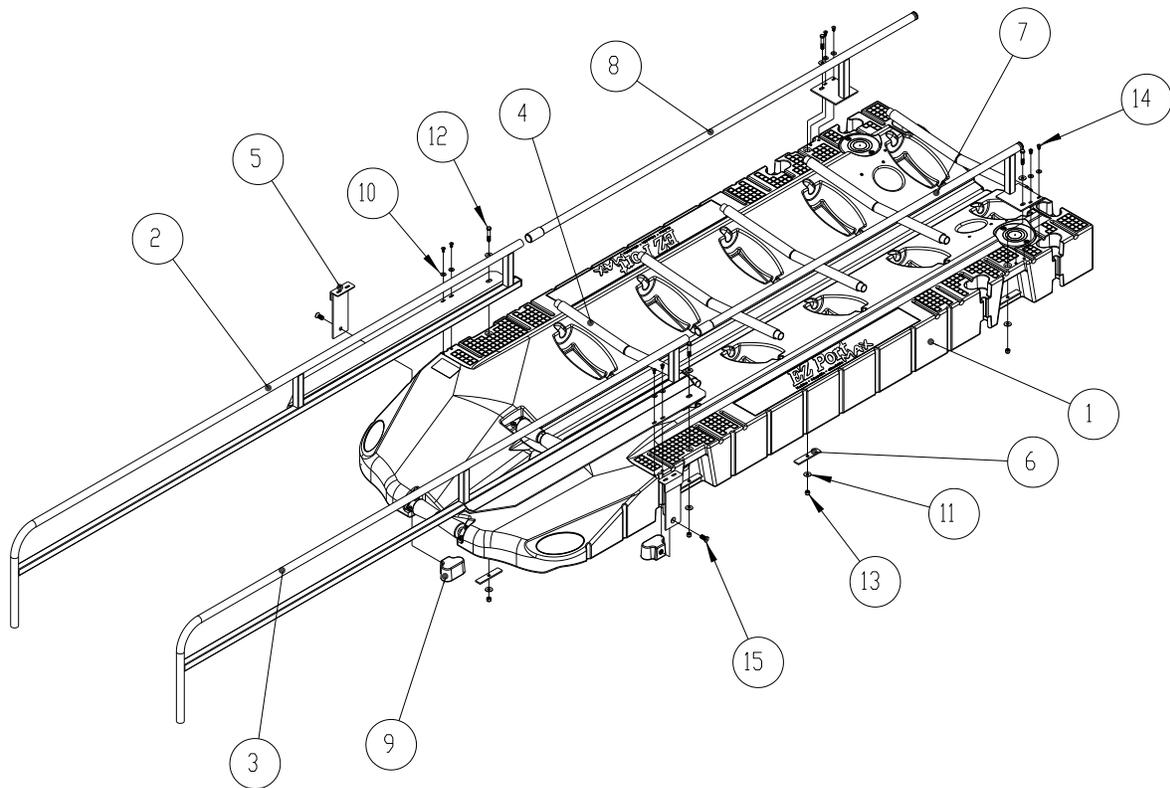Male Hardware Connector   Female Hardware Connector

EZ Launch Overview 500900L and 500900R

Note: All other EZ Dock installation and site planning information can be found at www.ez-dock.com or the EZ Dock Flotation Installation Manual.

Be sure to check and take inventory of all parts prior to beginning assembly.

Item Number	Quantity	Part Number	Description
15	2	80061	5/8-11x 2-1/2" HEX BOLT
14	8	80575SS	BOLT 5/16-18 X 3/4 TRUSS HD 18-8 SS
13	4	80120	1/2-13 LOCKNUT
12	4	104171	1/2-13 X 2 3/4 BOLT
11	8	82001	1/2" FLAT WASHER
10	8	80342	3/8" FLAT WASHER
9	2	S21141SS	HARDWARE CONNECTOR, FEMALE WITH NUT SS
8	1	S50902L	LONG LOWER RAIL 104" LEFT
7	1	S50901R	WALK THRU LOWER RAIL 85" RIGHT
6	4	S50912	BRACKET, FLAT UNDERMOUNT
5	2	S50906	L RAIL BRACKET
4	5	S50911	PVC SLEEVED ROLLER
3	1	S50903R	ENTRY LOWER RAIL—RIGHT
2	1	S50903L	ENTRY LOWER RAIL—LEFT
1	1	206030PW-xx	EZ PORT MAX ENTRY

Section 1: Roller Removal

- Existing rollers must be removed to allow EZ Launch rollers to be installed.
- Pry rollers out from top as shown in Figure 1. Use a large flat bladed screwdriver or pry bar.
- Install kayak rollers as shown in Figure 2. Use a rubber mallet to seat the aluminum pipe into the Port Max roller holders.
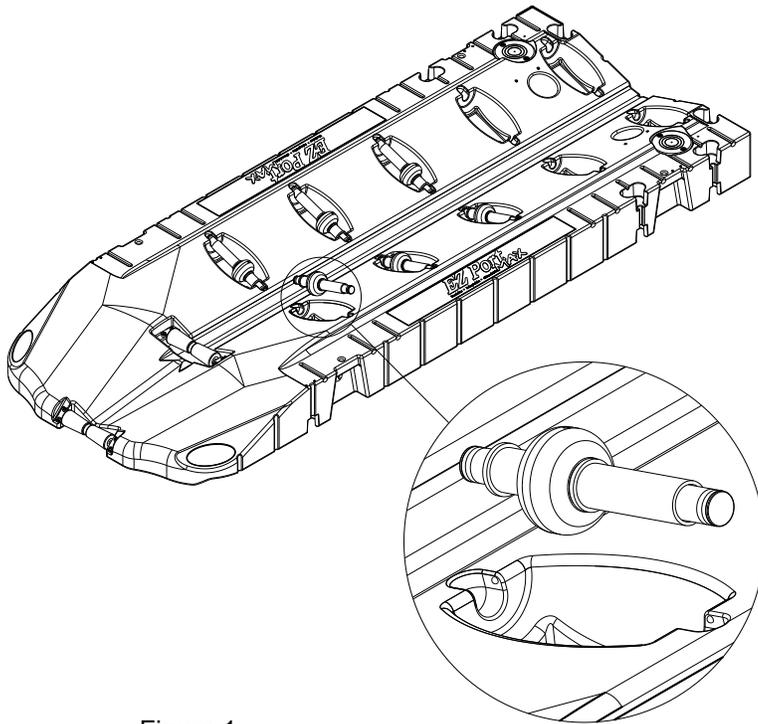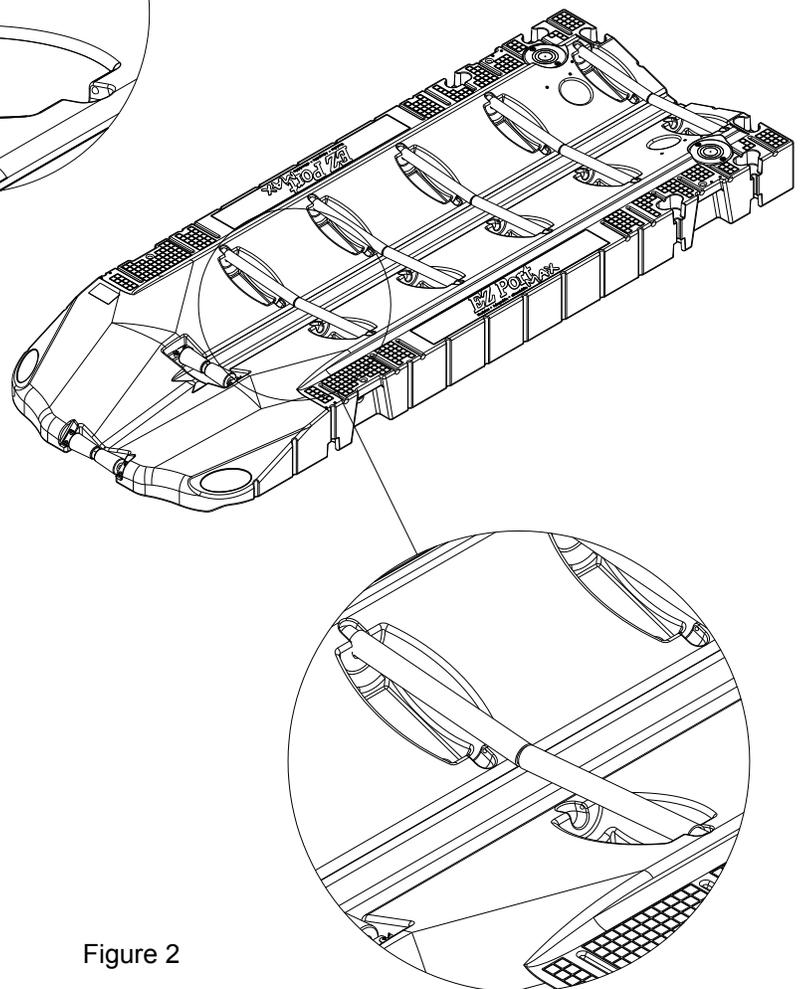
Figure 1

Figure 2

Section 2a: Entry Rail Installation

Note: There is a left (S50903L) and right (S50903R) entry rail. The bottom flanges face away from the center of the port. Installation of the right is shown. Installation of the left side uses the same hardware as the right.

- Position entry rail S50903R so that the holes in the rail line up with the hole and treaded inserts in the port.
- Place a 1/2" washer on a 1/2-13 x 2 3/4" hex head bolt and insert it through the large slotted hole on the rail assembly and larger hole in the port, see Figure 3.
- Next, place the rectangular reinforcing plate over the bolt, followed by a 1/2" Washer and 1/2" Lock-nut.
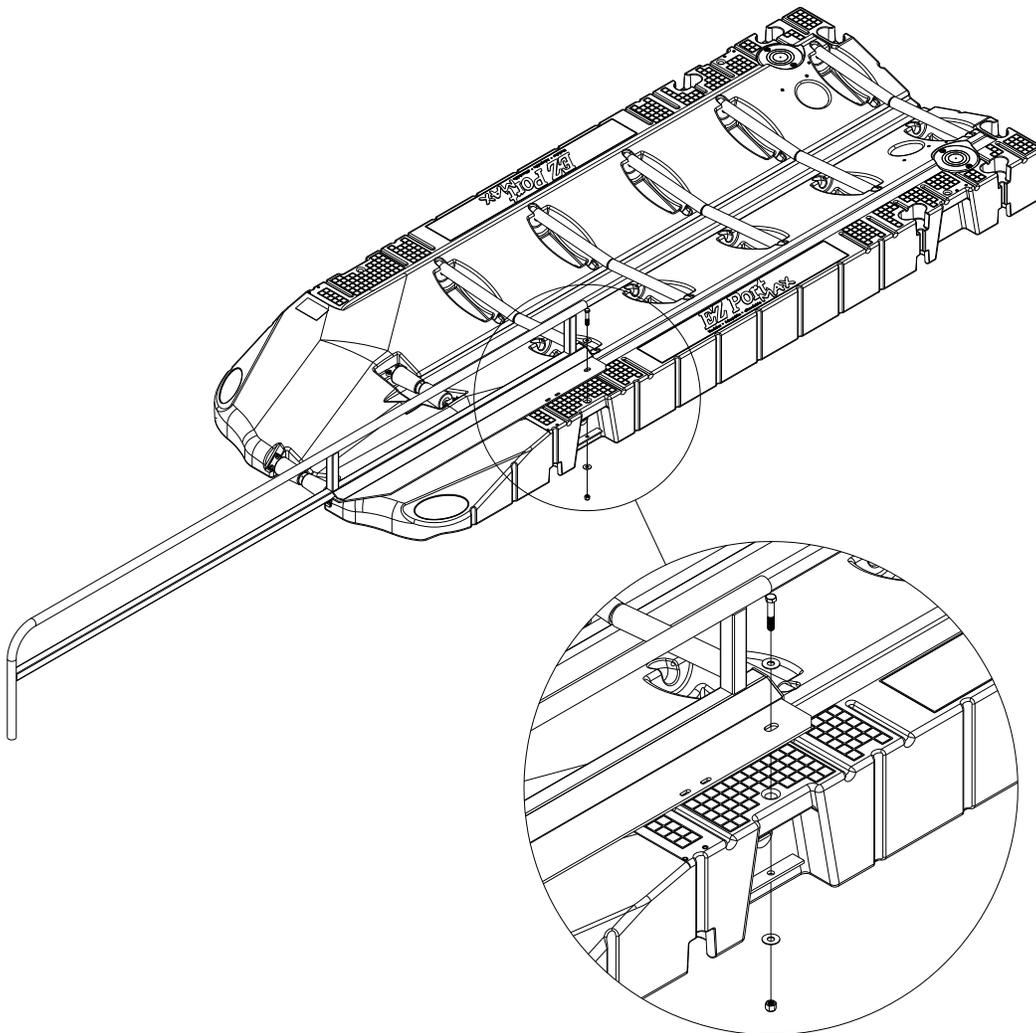- Do not fully tighten this bolt.

Figure 3

Note: This rail installation requires that the entry rail be supported on one end, while the bolt and nut are assembled. Ensure that the nut is sufficiently engaging the bolt before releasing the end support.

Section 2b: Support Bracket Installation

- Align the entry rail so that the threaded inserts in the port are accessible through the two slotted holes in the rail assembly.
- Assemble the female hardware connector to the support bracket S50906 with a 5/8" socket head screw. Leave assembly finger tight.
- Insert the female hardware connector into the lower pocket as shown in Figure 5.
- Rock support bracket over the entry rail flange. Using the 5/16 x 3/4" bolts attach the support and entry rail to the port.
- Securely tighten the female hardware connector in place with a 5/16" Allen wrench.

NOTE: For assembly of the 500906L and 500906R Barrier Handrails, see Section 4. If barrier hand-rails are to be used, go to section 4 for entry rail installation instructions.
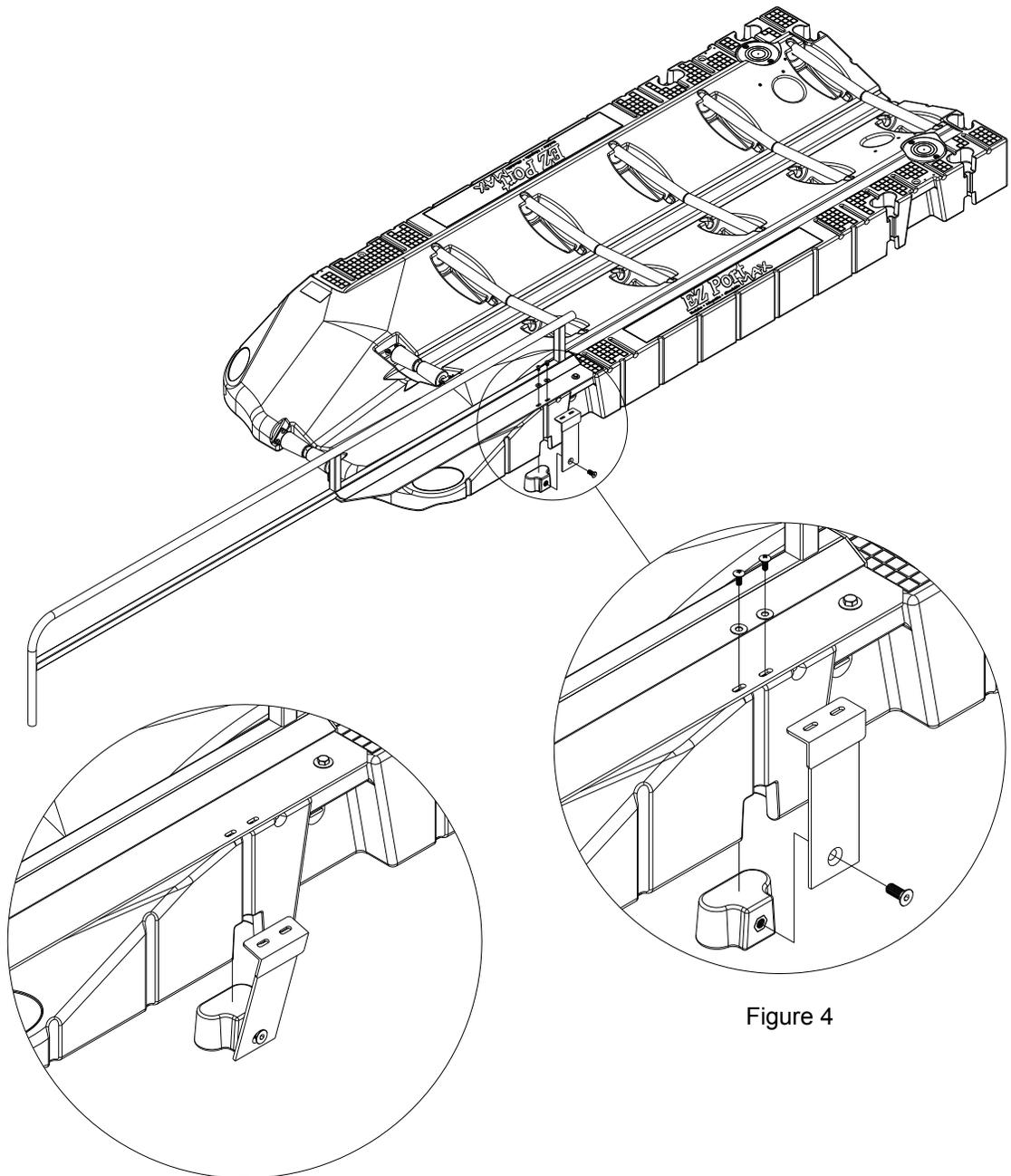
Figure 4

Figure 5

6

Section 2c: Front Rail Installation

Note: There are two front rails of different length. Installation of the shorter front rail S50901R is illustrated below. The shorter front rail allows access to the port. **The flange on the front rails always faces away from the center of port. (see Figure 7).** The front and rear handrail portions attached with a 5/16"-18– 1-3/4" hex head bolt. This hole in the rear handrail with need to drilled in the field after the handrails are attached to the port and leveled (see Figure 6).

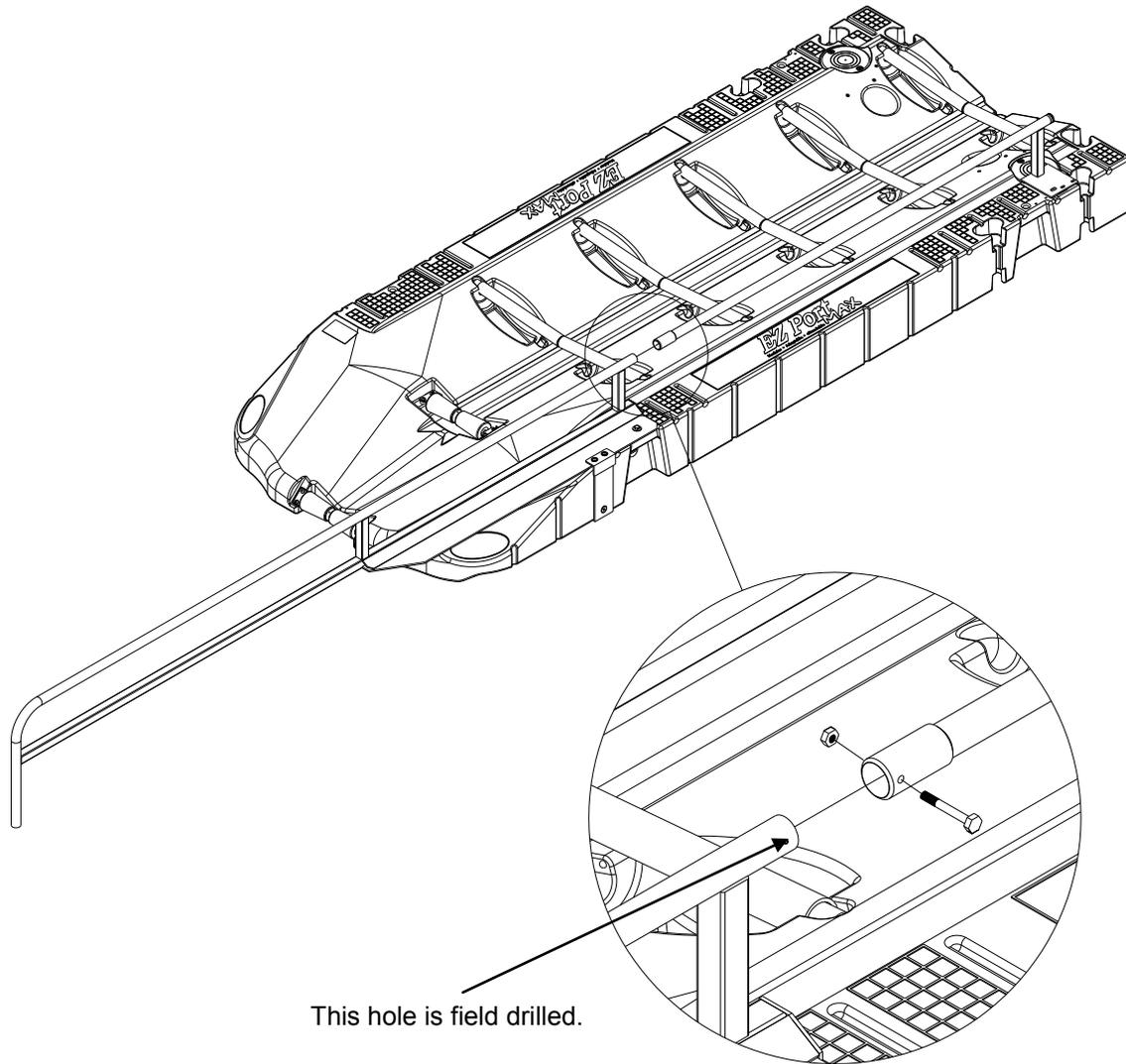- Align front rail S50901R to slip over entry rail S50903R. Slide into position as shown in Figure 6.

This hole is field drilled.

Figure 6

Section 2d: Front Rail Installation

- Position front rail S50901R so that the holes in the rail mounting plate line up with the holes and threaded inserts in the port.
- Align holes in mounting flange with holes and threaded inserts in port.
- Place a 1/2" washer on a 1/2-13 x 2 3/4" hex head bolt and insert it through the large slotted hole on the rail assembly and larger hole in the port. (Figure 6)
- Next, place the rectangular reinforcing plate S50912 over the bolt (on the bottom) followed by a 1/2" washer and 1/2" locknut. (see Figure 7)
- Install (2) 3/8" washers on (2) 5/16-18 x 3/4 truss head Phillips screws and finger tighten bracket in place.
- Do not tighten this bolt fully until after the installation in complete.

Note: Installation of the longer front rail S50902L
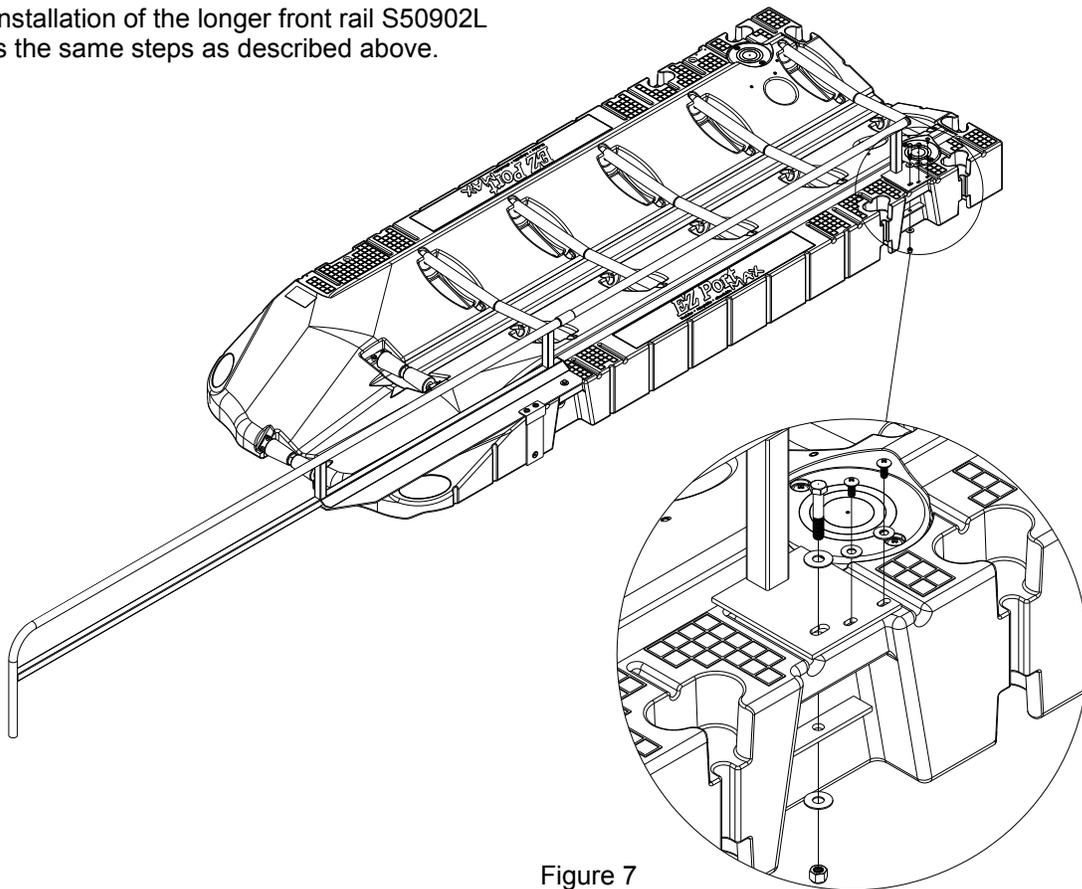requires the same steps as described above.

Figure 7

Section 2d: Rail Alignment and Final Assembly

- Align the front rail and entry rail together and make sure these rails are parallel to the port. It may be necessary to move them fore or aft to ensure that the slip joint between the two rails is engaged.
- Tighten the 5/16-18 Pan head Phillips screws with a Phillips screw driver.
- Tighten the hex head bolts and nuts with wrenches, socket drive set.
- Tighten female hardware connector flat head screw with Allen wrench.

EZ Launch Overview 500901L and 500901R

Note: All other EZ Dock installation and site planning information can be found at www.ez-dock.com or the EZ Dock Flotation Installation Manual.

Section 3: Front Rail Installation (for One-Way In)
(500901L shown)

- Position front rail S50901R so that the holes in the rail mounting plate line up with the holes and threaded inserts in the port.
- Align holes in mounting flange with holes and threaded inserts in port.
- Place a 1/2" washer on a 1/2-13 x 2 3/4" hex head bolt and insert it through the large slotted hole on the rail assembly and larger hole in the port. (Figure 8)
- Next, place the rectangular reinforcing plate S50912 over the bolt (on the bottom) followed by a 1/2" washer and 1/2" locknut. (see Figure 7)
- Install (2) 3/8" washers on (2) 5/16-18 x 3/4 truss head Phillips screws and finger tighten bracket in place.
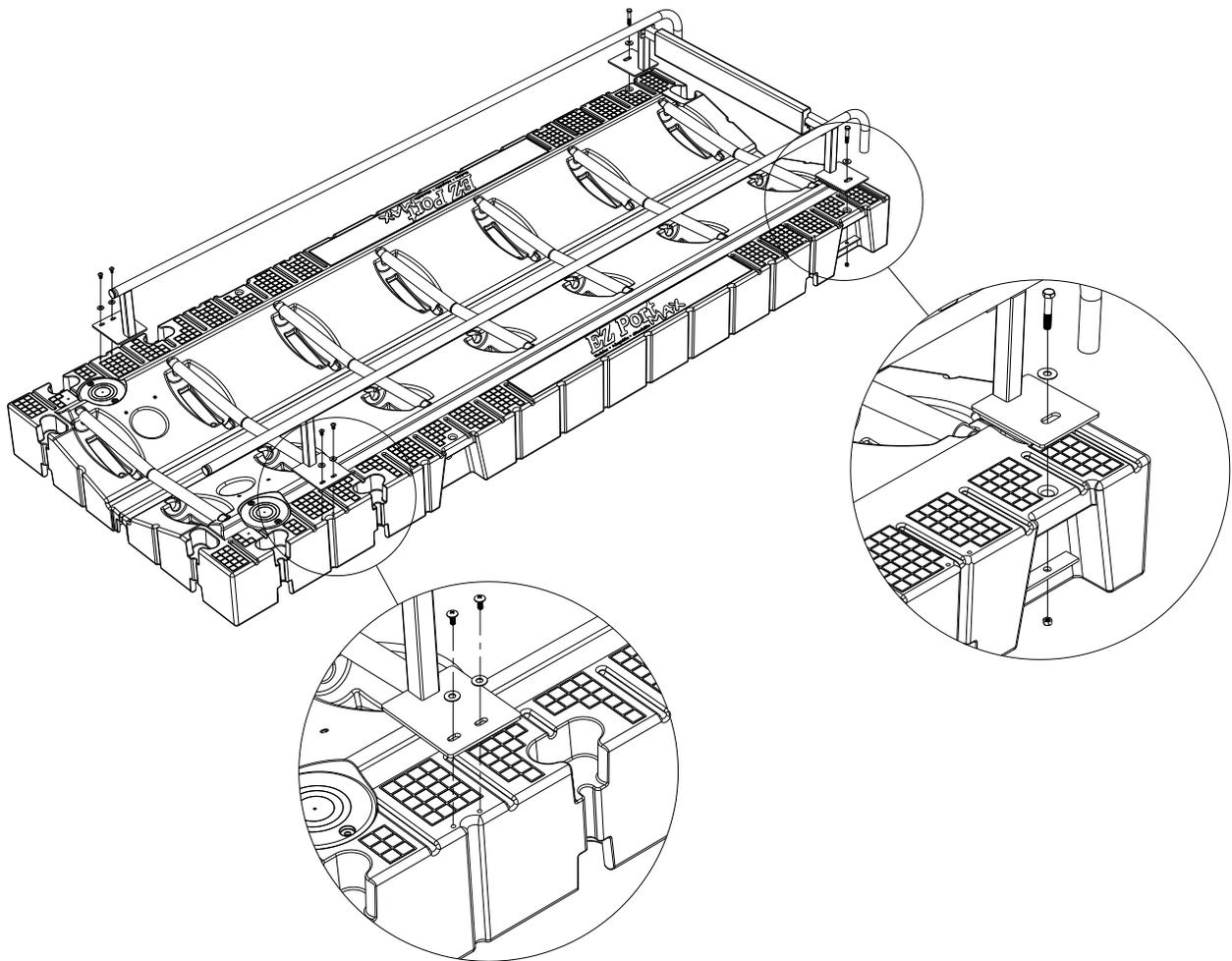- Do not tighten this bolt fully until after the installation in complete.

Figure 8

Section 4: Barrier Handrail Assembly Overview (Optional)

The barrier handrailing is available for use with the EZ Launch access rails. There is a left (500906L) and a right (500906R) rail. Right rail is shown in Figure 8.
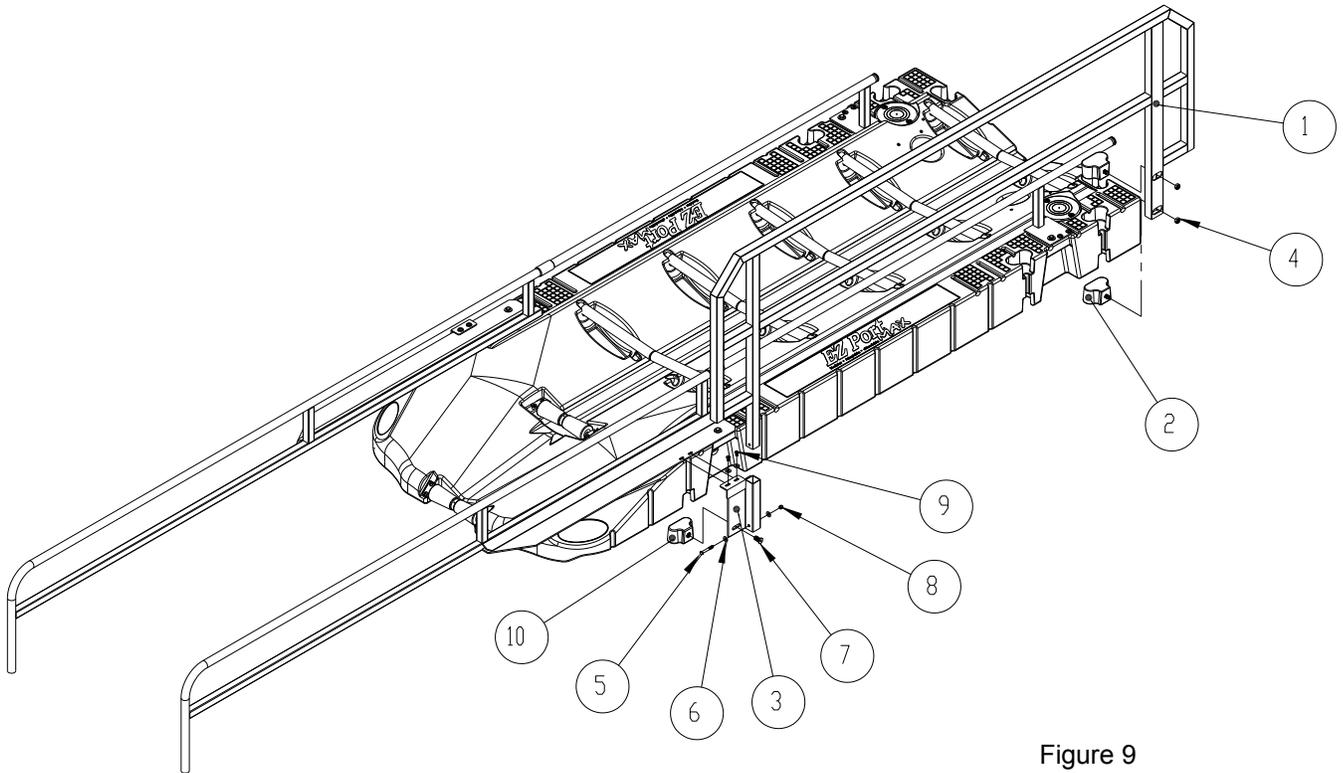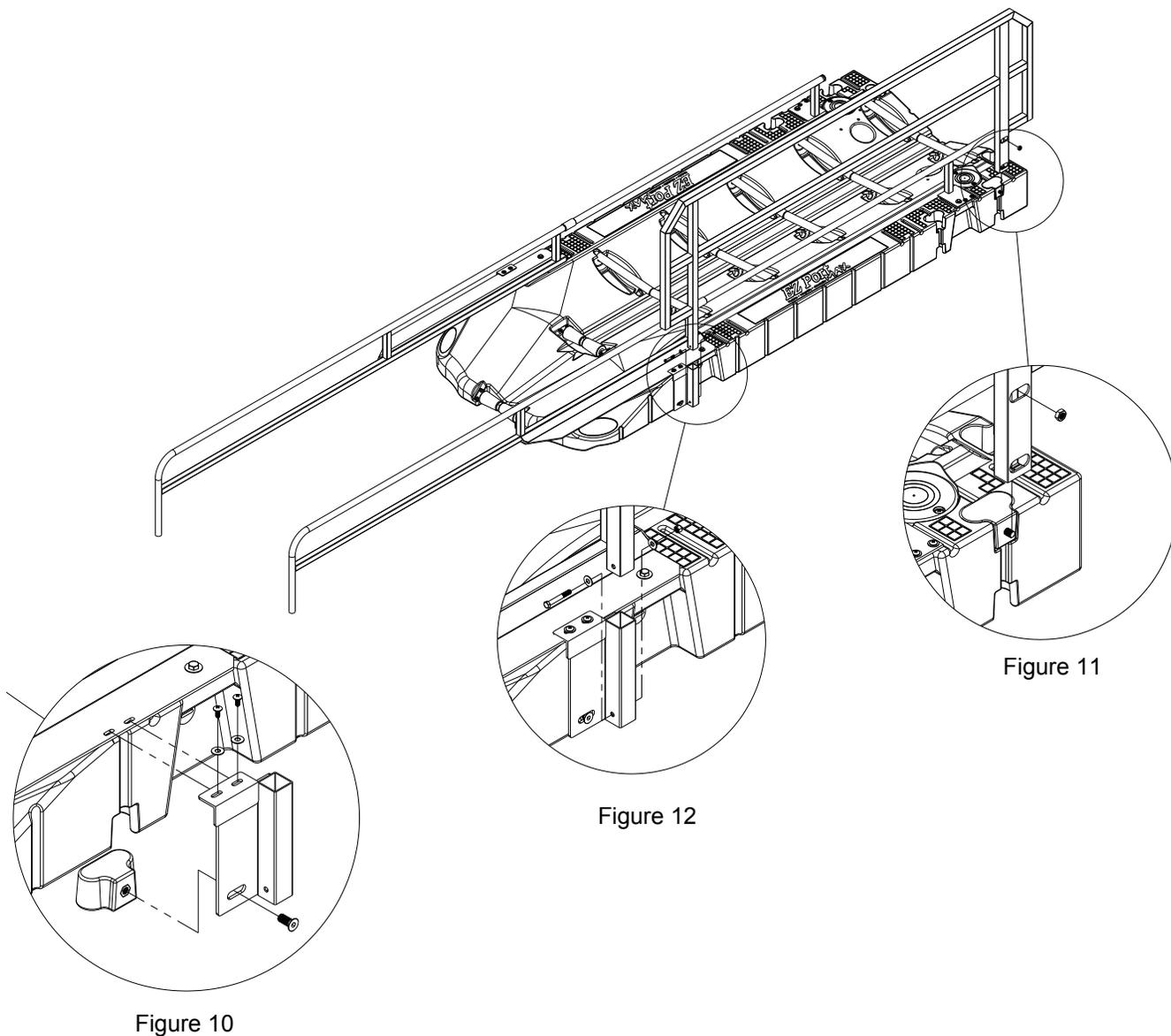
Figure 9

Item Number	Quantity	Part Number	Description
10	1	S21141SS	HARDWARE CONNECTOR, FEMALE WITH NUT SS
9	8	80575SS	BOLT 5/16-18 X 3/4 TRUSS HD 18-8 SS
8	1		3/8-16 LOCKNUT
7	2		5/8-11 FLAT HEAD SCREW
6	4		3/8" FLAT WASHER
5	1		3/8-16 X 2 3/4" BOLT
4	2	80850SS	NUT 5/8-11 LOCK, SELF LOCKING 18-8 SS
3	1	S50907R	BARRIER HANDRAILING RIGHT
2	2	S21140SS	CONNECTOR HARDWARE W/SS
1	1	S50904R	BARRIER HANDRAILING RIGHT

Section 4b: Barrier Handrail Installation

- Align handrail bracket over entry rail flange. Install (2) 3/8" washers on (2) 5/16-18 x 3/4 pan head Phillips screws and finger tighten bracket in place.
- Insert the female hardware connector in lower pocket as shown. (Figure 10)
- Secure female hardware connectors in place with a 5/8-11 socket head screw.
- Be sure to leave all fasteners finger tight.
- Drop a male hardware connector into the top pocket at the front of the EZ Launch as shown in Figure 11.
- Align vertical square tube on handrail with the vertical square tube on the handrail brackets as shown in Figure 12.
- Slide the handrail into the square tube on the handrail bracket.
- Insert the threaded part of the male hardware connector through the handrail and secure with 5/8-11 nut. Handrails may need to move fore or aft to align slots in handrail to male hardware connector. Leave finger tight.
- Install a 3/8" washer over a 3/8-16 x 2 3/4 bolt and insert into predrilled hole at bottom of handrail square tube, as shown in Figure 12.
- Install a 3/8" washer over bolt and secure with 3/8-16 locknut finger tight.

   Note: There is a left S50907L and a right S50907R handrail bracket. The illustration below shows a right handrail bracket. Be sure you have the correct one for your application. One way to tell if you have the correct part is to ensure that the vertical square tube on the handrail bracket faces away from the entry of the EZ Launch. (see Figure 10)

Figure 11

Figure 12

Figure 10

Section 4c: Bottom Male Hardware Connector Installation

- Install male hardware connector in bottom pocket and secure with 5/8-11 nut as shown in Figure 13.
- Handrails may have to be pulled inward at the top so that the threaded bolt of the male hardware connector will allow it to be seated fully in the pocket.
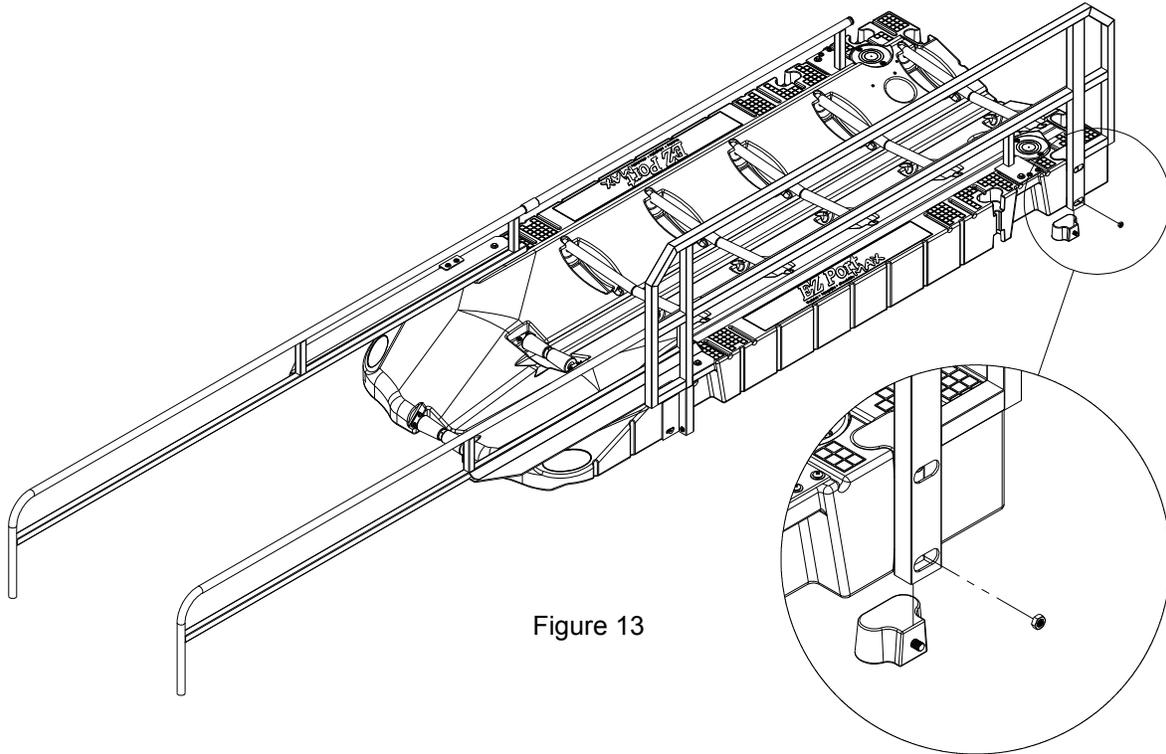
Figure 13

Section 4d: Handrail Final Assembly

- Tighten the hex head bolts and nuts with wrenches, socket drive set.
- Tighten male hardware connectors with socket drive set.

Section 5: Accessible Transfer System with Support Grab Rail Installation 500890

- Install Support Grab Rail by removing pipe covers on EZ Port MAX and securing the base of the support grab rail with four (4) bolts.
- Secure Transfer Bench with two (2) bolts into the tee-nuts on the EZ Dock dock section and two (2) lag bolts directly into EZ Dock couplers.
- After the transfer bench and support grab rail have been mounted the bench boards need to slid out to ensure that they are level and rest of the opposing bench tray support bar on the support grab handrail. The height of the bench can be adjusted (see figure 15) by loosening and sliding the bench unit up or down. Once the bench is in the desired position tighten the height adjustment nuts. The bench trays should slide out and rest on the grab support rail easily.
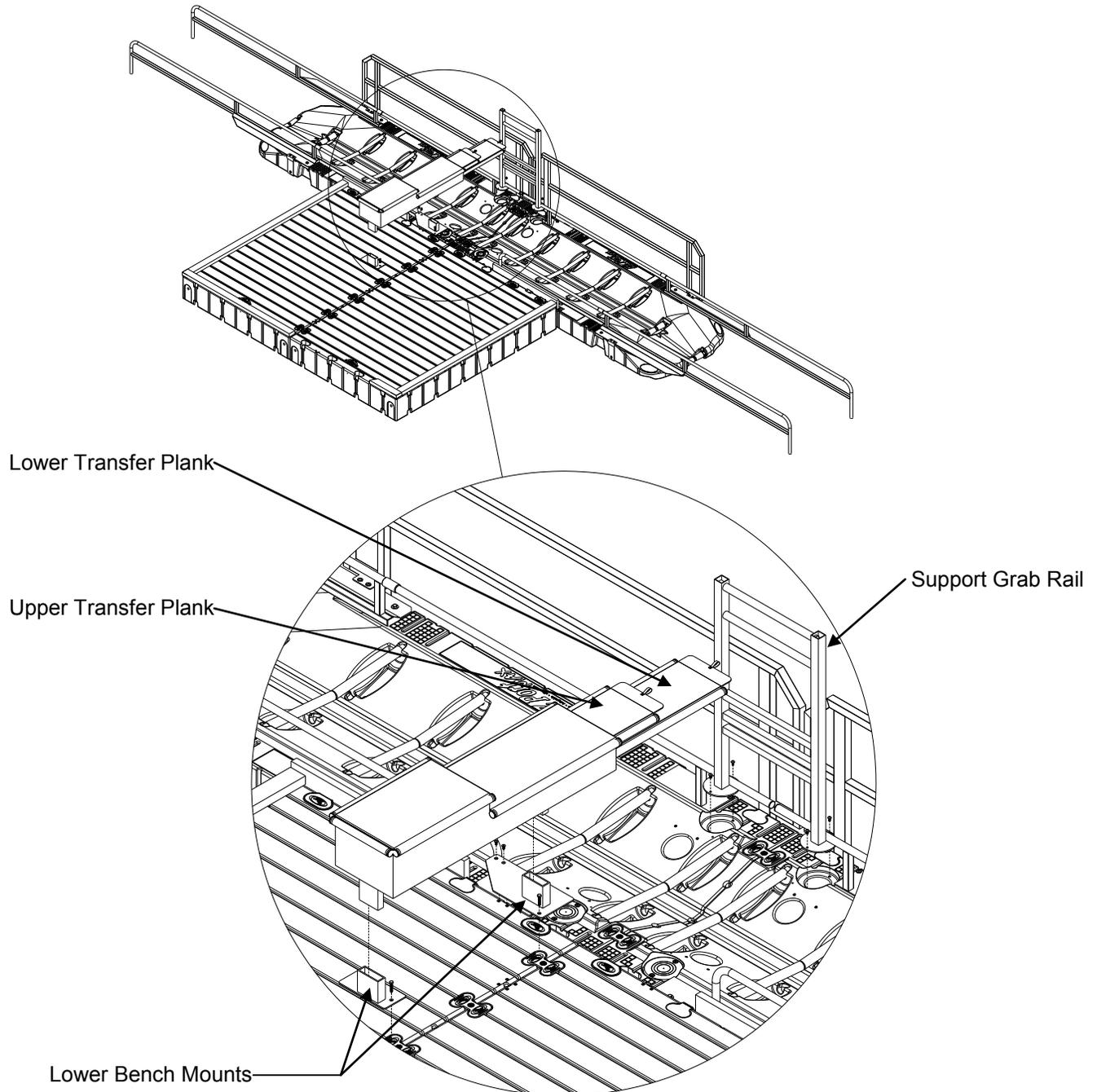
Lower Transfer Plank

Upper Transfer Plank

Support Grab Rail

Lower Bench Mounts

Figure 14

Section 5a: Accessible Transfer System Adjustments

The EZ Dock Accessible Transfer System has numerous way to adjust the height of the bench to satisfy virtually any application. The entire bench can adjust vertically by simply loosening two bolts (Figure 15). Figure 16 utilizes the upper transfer plank for taller freeboard watercrafts such as a canoe. Figure 17 utilizes the lower transfer plank for shorter freeboard watercrafts such as a kayak.
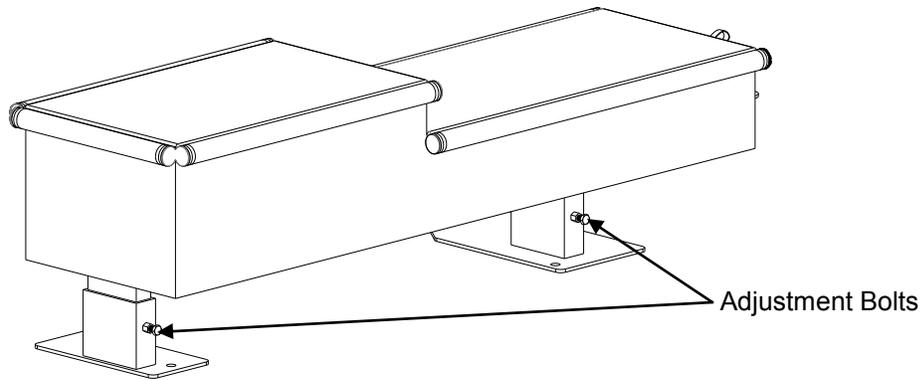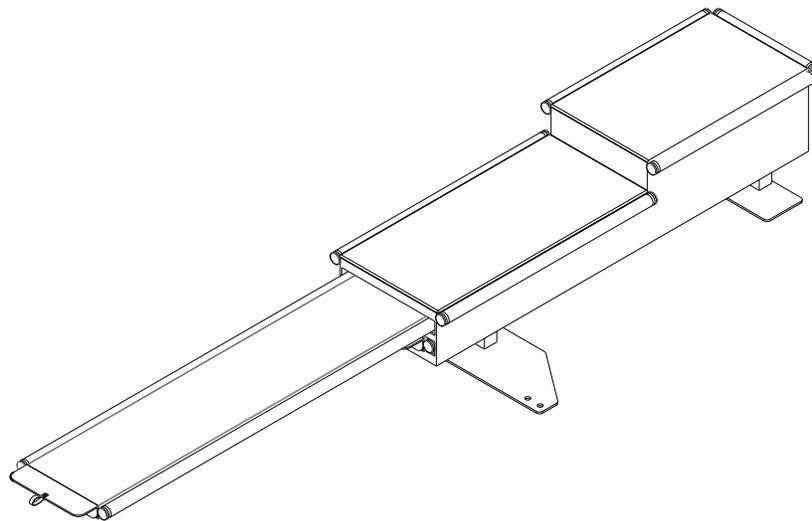
Adjustment Bolts

Figure 15

Figure 16
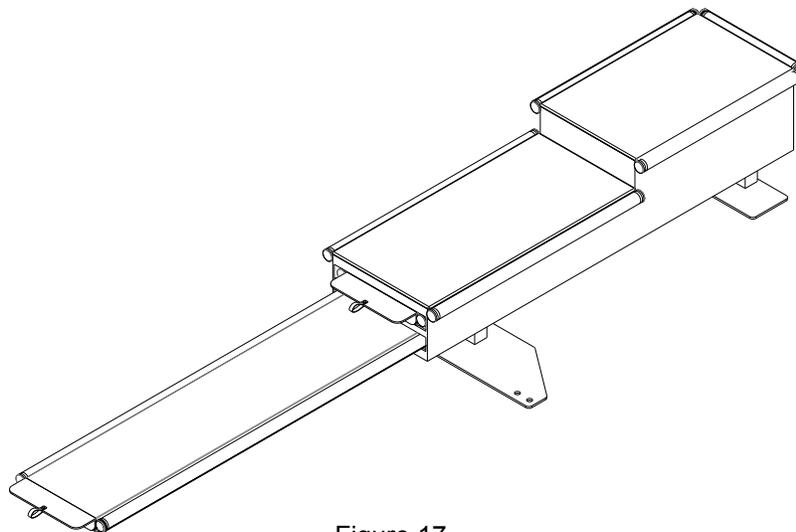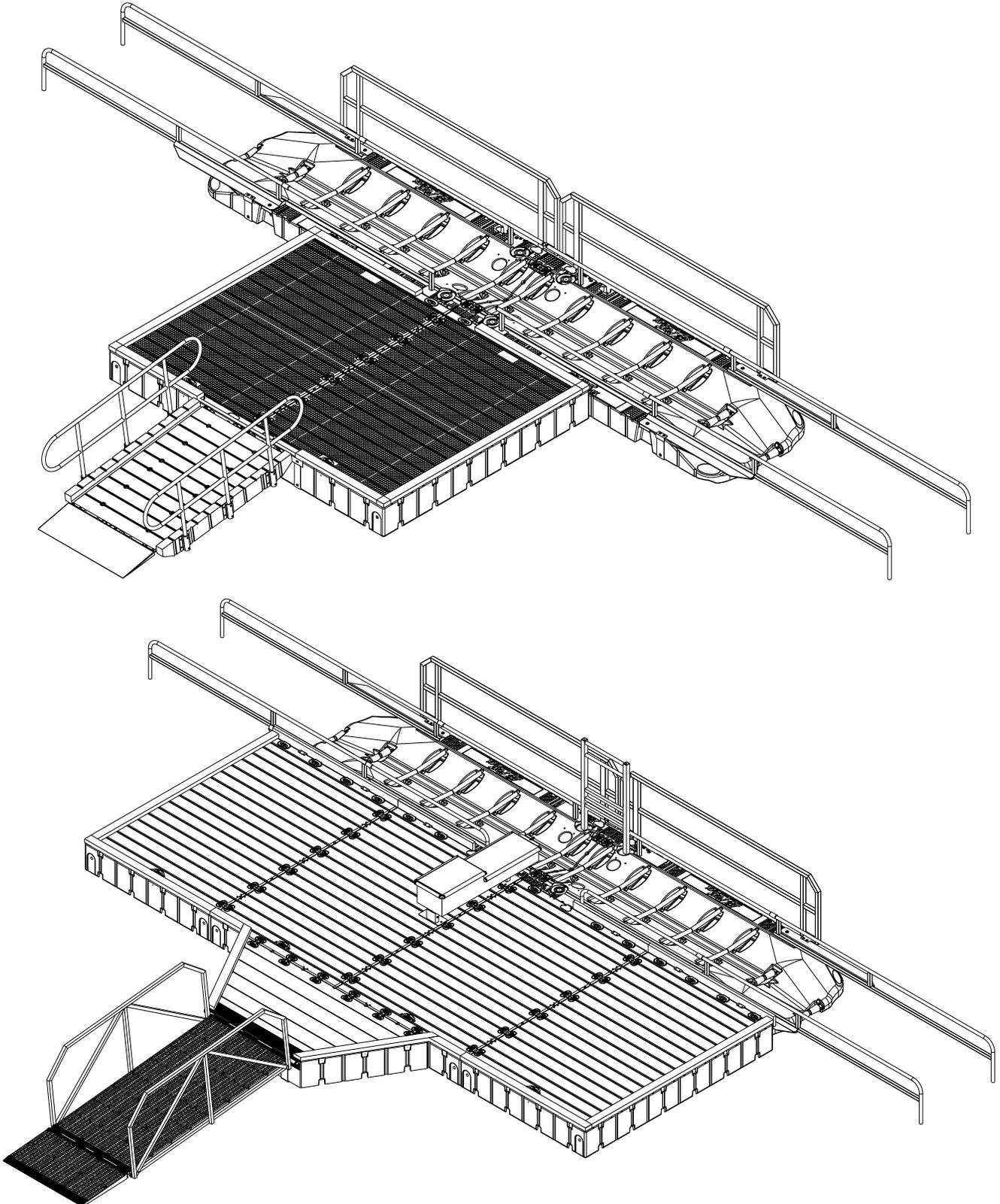
Figure 17

Section 6: Sample Installations

Reference the EZ Dock Floating Dock Installation Manual and/or www.ez-dock.com for other installation details and anchorage. Please adhere to all recommendations and cautionary suggestions appearing in these manuals and always follow the instructions based on the needs of your installation and site requirements.

Section 7: EZ Launch to EZ Dock Installation (100757SS)

Note: Typical installation of EZ Launch to EZ Dock yields a step down from the EZ Dock to the Port Launch as shown in Figure 14. The 100757SS kit includes two hinge bracket for connection points on two separate dock pockets. This kit attaches the EZ Launch to EZ Dock product. Refer to Port MAX owner's manual for in-line configuration assembly steps.

- Attach shorter hook to EZ Launch using a female hardware connector and 5/8-11 flat socket head screw as shown in Figure 19.
- Attach longer hook to adjacent pocket in EZ Dock using a female hardware connector and 5/8-11 flat socket head screw as shown in Figure 19.
- Align hinge tabs with the longer hook hinge tabs above the shorter hook hinge tabs then insert pin through hinge and secure in place using clips provided as shown in Figure 18.
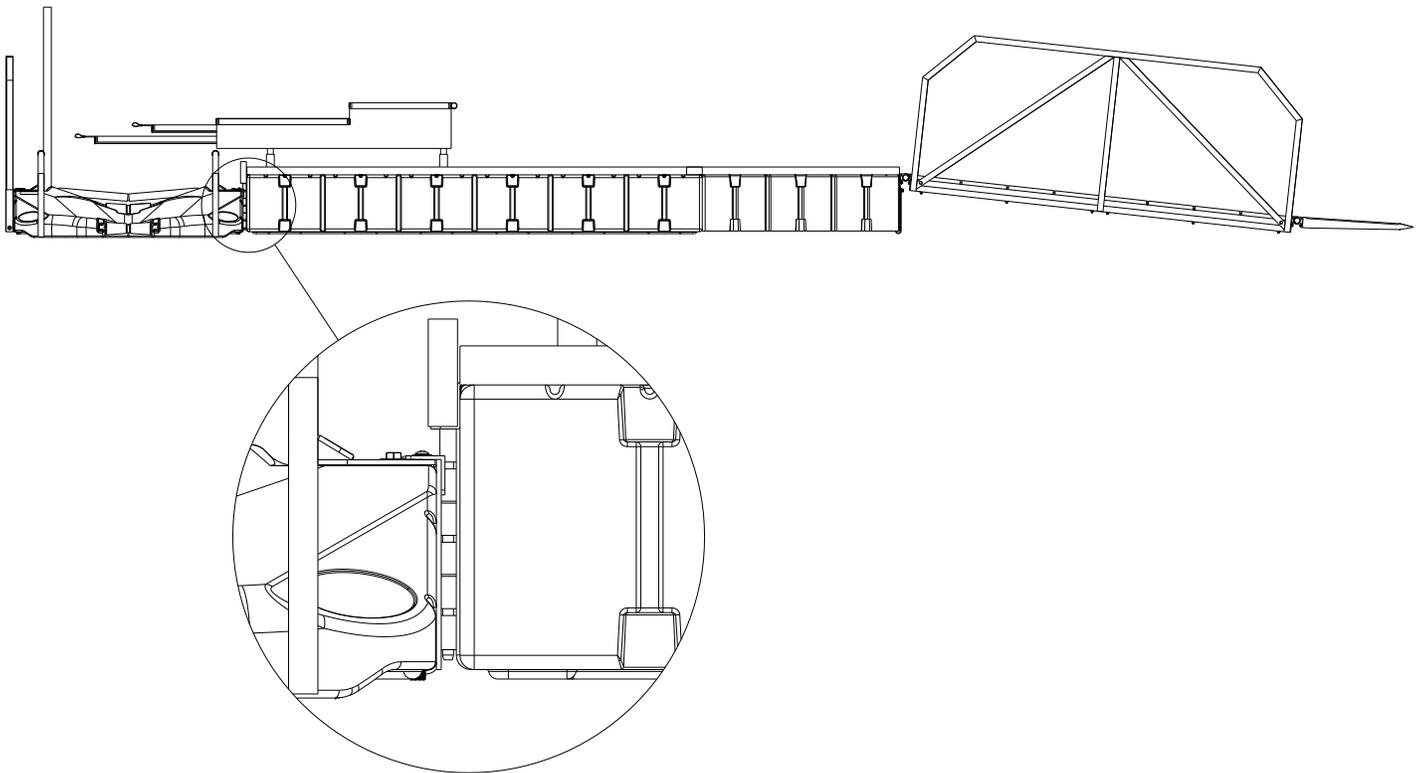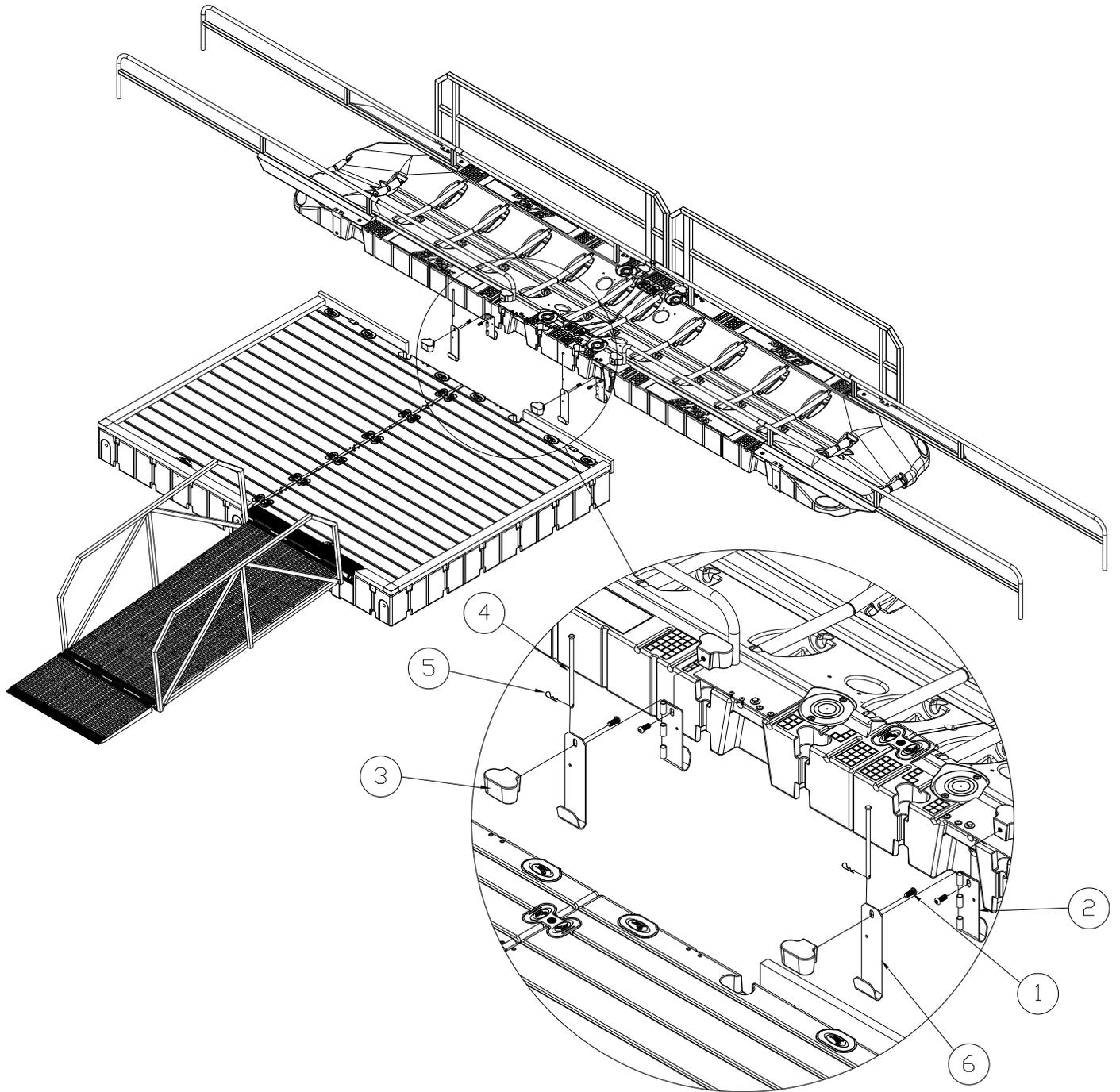
Figure 18

Figure 19

Item Number	Quantity	Part Number	Description
1	4	80583SS	BOLT, 5/8"-11 X 1-1/2" BUTTOM CAP 18-8SS
2	2	S10752SS	FLOATING PORT, HINGE TO PMAX VERTICAL SS
3	4	S21141SS	HARWARE CONNECTOR, FEMALE WITH NUT SS
4	2	S80968SS	HINGE PIN, SS FOR FLOATING DOCK AD 316SS
5	2	80011	CLIP HITCH PIN #11, E-Z DOCK SS
6	2	S10757SS	BKT, DOCK HINGE TO PMAX VERTICAL PIN SS

Section 8: EZ Launch to Ballasted EZ Dock Installation

Note: Typical installation of the EZ Launch to EZ Dock yields a step down from the EZ Dock to the EZ Launch as shown in Figure 14. Ballasting EZ Dock dock sections will allow for a flush walking surface with the EZ Launch, see Figure 20. The 100757SS kit includes two hinge bracket for connection points on two separate dock pockets. This kit attaches will attach the EZ Launch to a ballasted EZ Dock product. Refer to Port MAX owner's manual for in-line configuration assembly steps.

- Attach shorter hook to EZ Launch using a female hardware connector and 5/8-11 flat socket head screw as shown in Figure 21.
- Attach longer hook to adjacent pocket in EZ Dock using a female hardware connector and 5/8-11 flat socket head screw as shown in Figure 21.
- Align hinge tabs with the shorter hook hinge tabs above the longer hook hinge tabs then insert pin through hinge and secure in place using clips provided as shown in Figure 20.
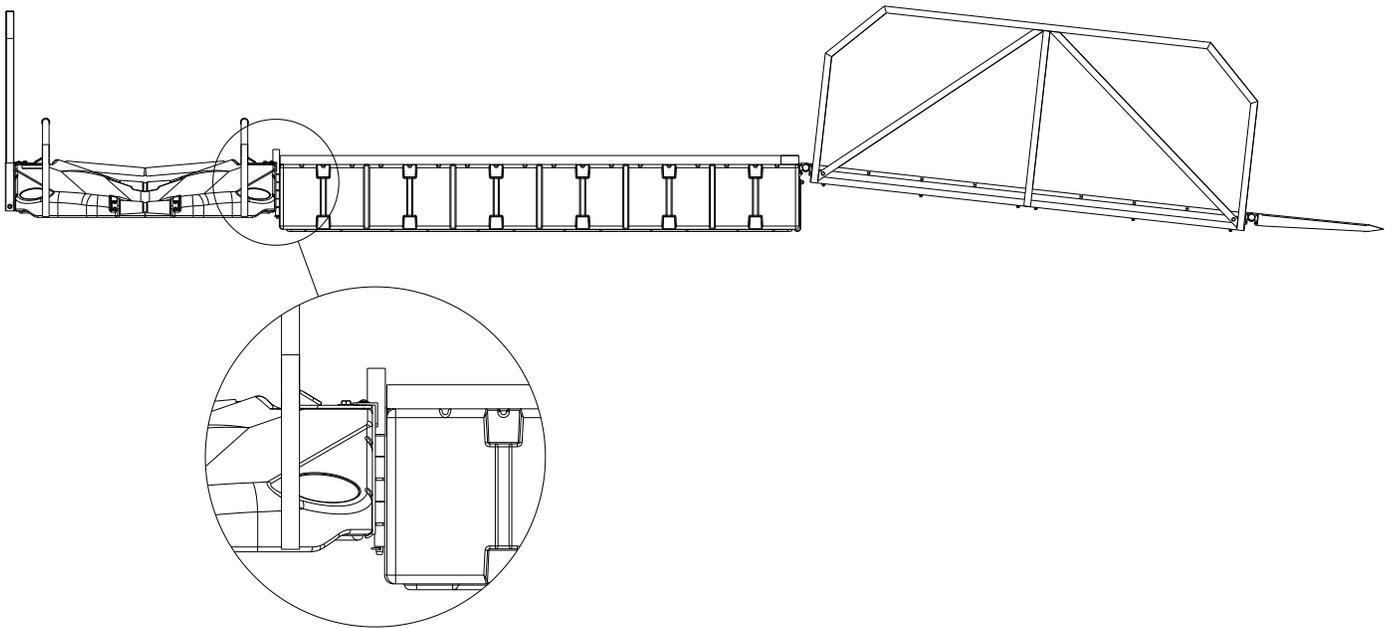
Figure 20

Ballasting EZ Dock

- Drill 1/2" hole in dock centered at the bottom of a coupler pocket, Figure 18. Placement of this hole should be placed in a pocket that will not be used in the installation. All unused pockets should be filled with a EZ Dock pocket filler (Part Number 201030)
- Tap with 1/2" NPT pipe tap.
- Use a transfer pump to pump water into dock through the drilled hole. Add enough water to achieve the freeboard height shown in Figure 16. Top of dock should be even with top of the EZ Launch. **Do not place any weight on either the dock or the port while measuring freeboard heights.**
- Close off filler hole by threading a 1/2" PVC hex head plug into it. Use silicone on the threads to ensure a water tight seal.
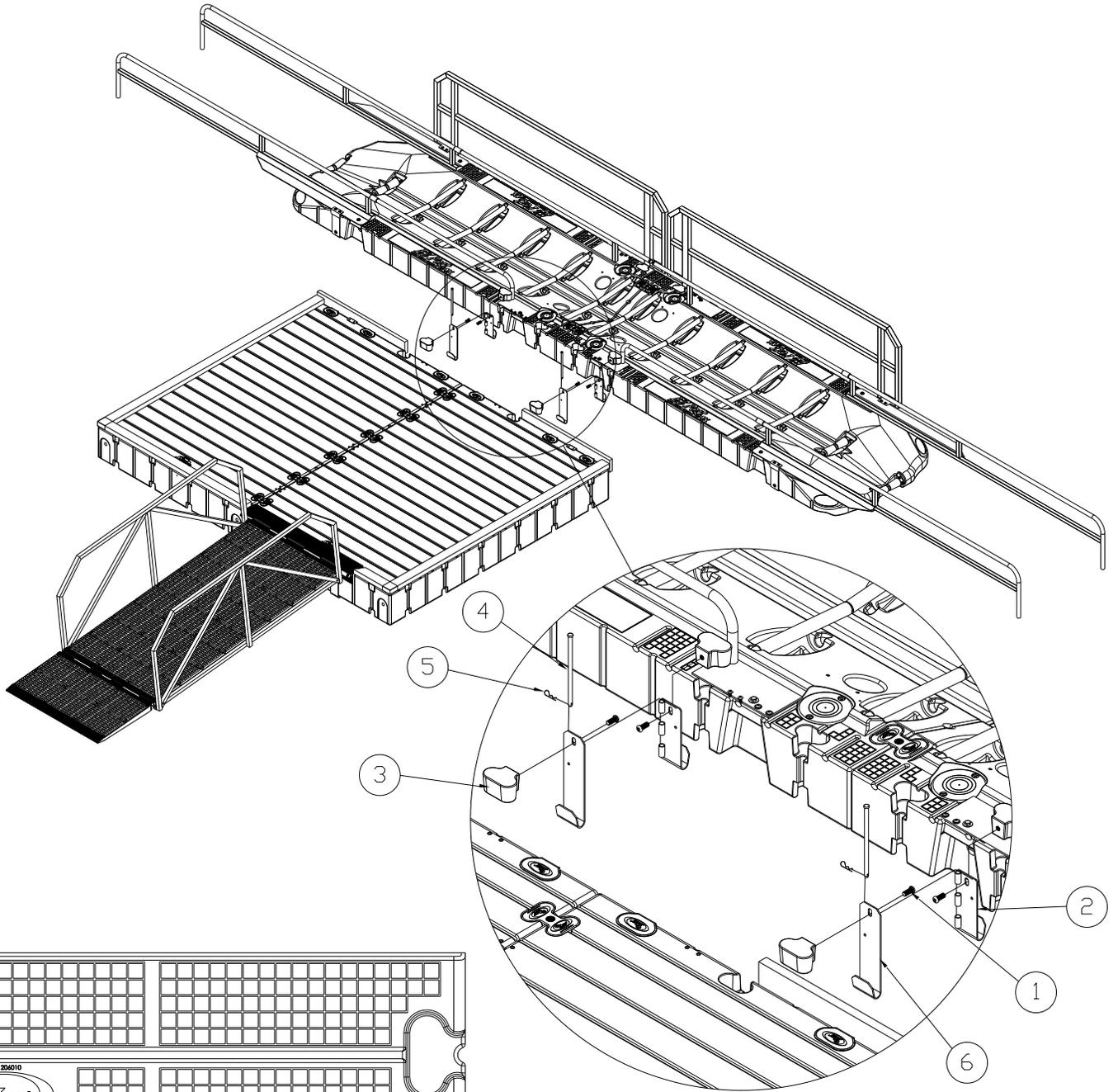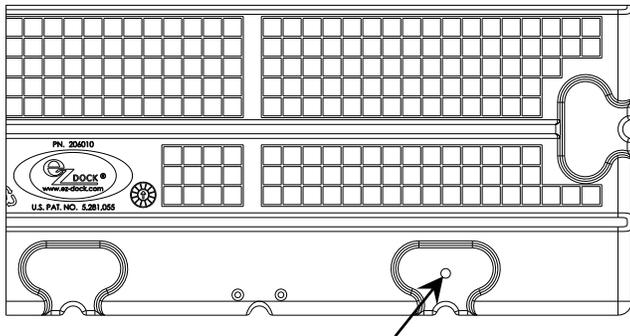
Figure 21

Drill and tap for 1/2" NPT

Figure 22

Item Number	Quantity	Part Number	Description
1	4	80583SS	BOLT, 5/8"-11 X 1-1/2" BUTTOM CAP 18-8SS
2	2	S10752SS	FLOATING PORT, HINGE TO PMAX VERTICAL SS
3	4	S21141SS	HARWARE CONNECTOR, FEMALE WITH NUT SS
4	2	S80968SS	HINGE PIN, SS FOR FLOATING DOCK AD 316SS
5	2	80011	CLIP HITCH PIN #11, E-Z DOCK SS
6	2	S10757SS	BKT, DOCK HINGE TO PMAX VERTICAL PIN SS

Section 9: EZ Launch to Floating Dock System (100751)

Note: Typical installation of an EZ Launch to another floating dock system yields a change in freeboard heights. The 100751(SS) kit includes two hinge bracket for connection points on two separate dock pockets. Use one or two 100751 kits to attach the EZ Launch to Floating Dock System. Refer to Port MAX owner's manual for more details.

The 100751 or 100751SS hinge kit is required when anchoring an EZ Launch.

- Measure the freeboard of the fascia of the floating dock where the connection will be made.
- Determine the best position for the hinge adapter plate. The plate can be above (Figure 23), perpendicular, or directly in front of the hinge adapter bracket, as shown in Figure 24.
- Do not place weight on the EZ Launch while measuring the hinge adapter plate location.
- When attaching to a wooden structure, use carriage bolts (not included) to attach the adapter plate. If attaching to a steel or aluminum structure, it may be necessary to first attach a 2" X 8" (5cm X 20cm) wooden fascia (not included).
- When attaching to a concrete floating dock, concrete anchor bolts (not included) may be required.
- When the adapter hinge plate is securely in place, float the EZ Launch into position and secure the hinge pins.
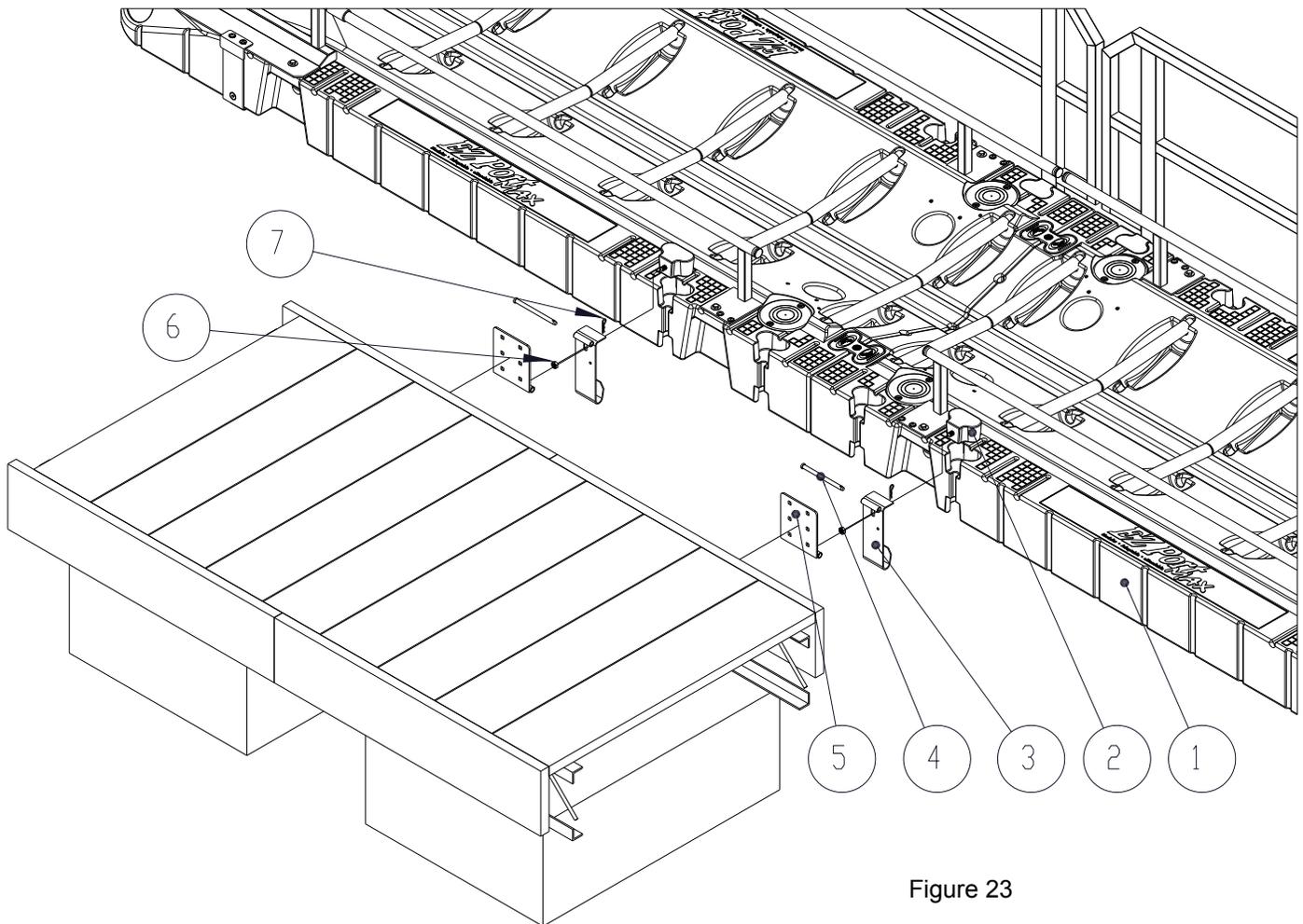
Figure 23

ITEM	QTY.	PART NO.	DESCRIPTION
1	1	206030PW-xx	EZ PORT LAUNCH
2	2	S21140SS	CONNECTOR HARDWARE W/SS
3	2	S10751	FLOATING DOCK ADAPTER, HINGE TO PORT MAX
4	2	S80968SS	HINGE PIN SS FOR FLOATING DOCK ADAPTER
5	2	S10712	HINGE DOCK ADAPTER PLATE—HOT DIP GALV
6	2	80580SS	NUT 5/8-11 LOCK, SELF LOCKING 18-8 SS
7	2	80011	CLIP HITCH PIN #11, EZ DOCK

The hinge dock adapter plate (Item 5) may be installed with the hinge point on the top as shown in (Figure 20). All other installation is the same as on previous page.
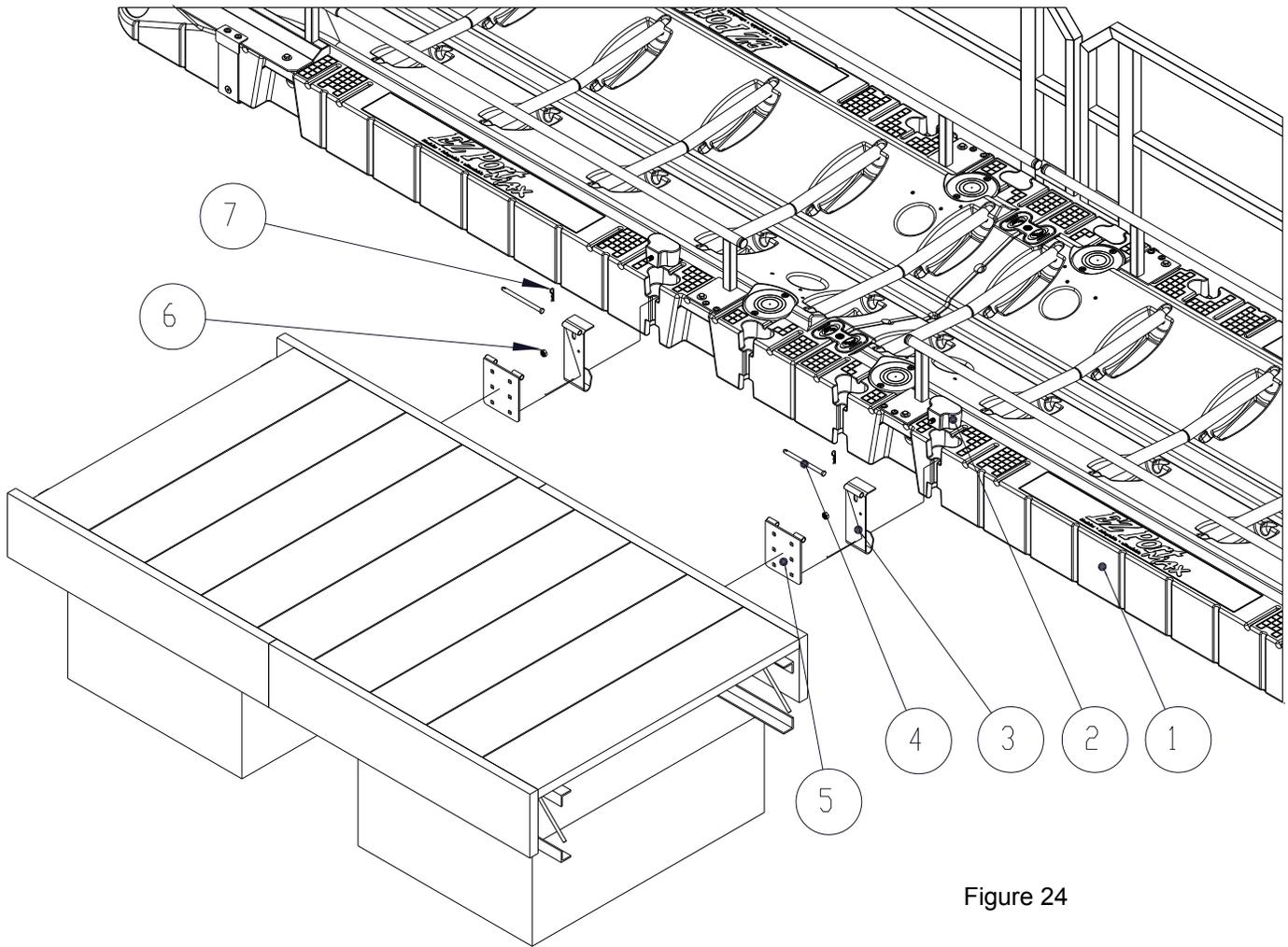

Figure 24

ITEM	QTY.	PART NO.	DESCRIPTION
1	1	206030PW-xx	EZ LAUNCH
2	2	S21140SS	CONNECTOR HARDWARE W/SS
3	2	S10751	FLOATING DOCK ADAPTER, HINGE TO PORT MAX
4	2	S80968SS	HINGE PIN SS FOR FLOATING DOCK ADAPTER
5	2	S10712	HINGE DOCK ADAPTER PLATE—HOT DIP GALV
6	2	80580SS	NUT 5/8-11 LOCK, SELF LOCKING 18-8 SS
7	2	80011	CLIP HITCH PIN #11, EZ DOCK

Caution:
The 100751hinge kits must be used only with non-EZ Dock floating dock structures. Damage will occur if attached to a fixed dock.

The first dock of its kind...The last dock you will ever need.[®]