



PATRIOT JACK DOCK ASSEMBLY INSTRUCTIONS

Congratulations on your new Patriot Dock purchase! This manual contains instructions to assemble basic dock configurations for use along a typical residential shoreline. Please read through entire instruction manual before starting.

Please visit www.patriotdocks.com for step-by-step video instructions and more detailed information!



General Guidelines:

- * Wear protective gloves and appropriate safety glasses when assembling the Patriot Dock.
- * Failure to assemble the dock according to the manufacturer's instructions may cause damage to the product and will void the warranty.
- * **The maximum unsupported span for Patriot Aluminum Dock Frames is 16 feet, in the water or while in storage.** The dock is designed to carry a maximum of 500 pounds over any 4 ft x 4 ft part of the deck and a maximum of 1000 pounds between supports spaced 16 feet apart. Always support outside corners and use additional supports in high traffic areas or where greater loads are expected. **Please see the recommended support locations depicted below.**
- * Never push or pull the aluminum dock with a winch, ATV or vehicle.
- * Always remove decking panels and raise pipes not supported by wheels when pulling the frame in or out of the water.
- * Docks are not to be left in freezing water.
- * All dock surfaces can be slippery when wet. Please use caution when stepping or walking on any dock surface.
- * Never leave the lake end of the dock unsupported. Always support corners of the Patio platform.
- * Roll-in kits should be installed at the very end of the dock for best stability. Additional posts may be required if roll-in kits are installed at locations other than what is recommended.
- * Always assemble the dock frame so there is a 4 ft. Truss End Rail (PN 10803) every 4 feet and at both ends of the dock. Patio sections must be closed on both ends using the 4 ft. Truss End Rail.
- * Install flat Transition Plates when connecting two 8 ft. frame assemblies (bottom only). Transition Plates are not required at joints with support legs.
- * Patriot docks are modular allowing for the flexibility to add length or change the configuration as desired. Additional parts may be required for certain configurations.

Tools Required: M14, M15 and M19 metric size or 9/16", 5/8" and 3/4" SAE size wrenches or ratchet w/ sockets, Rubber Mallet

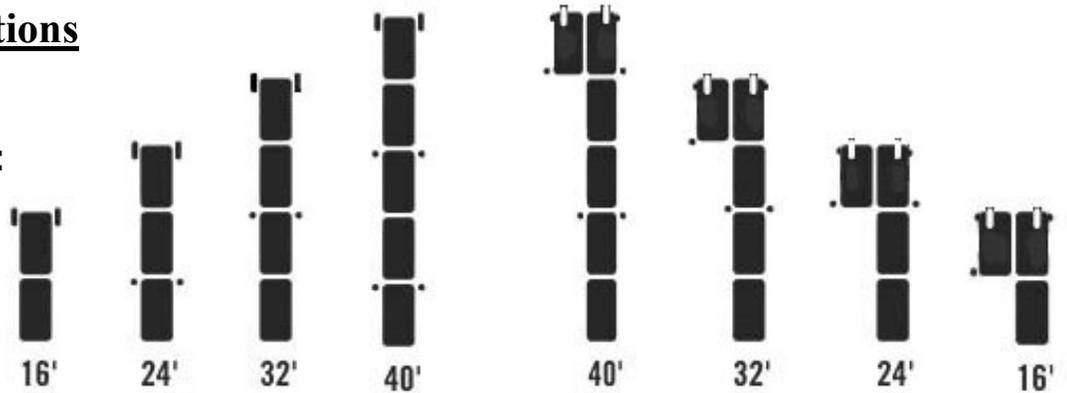
Recommended Tools: Cordless Impact wrench / drill with above socket sizes, work gloves, safety glasses

Support Locations

Standard Jack Lengths:

< 16' = 24" Jack

24'+ = 48" Jack



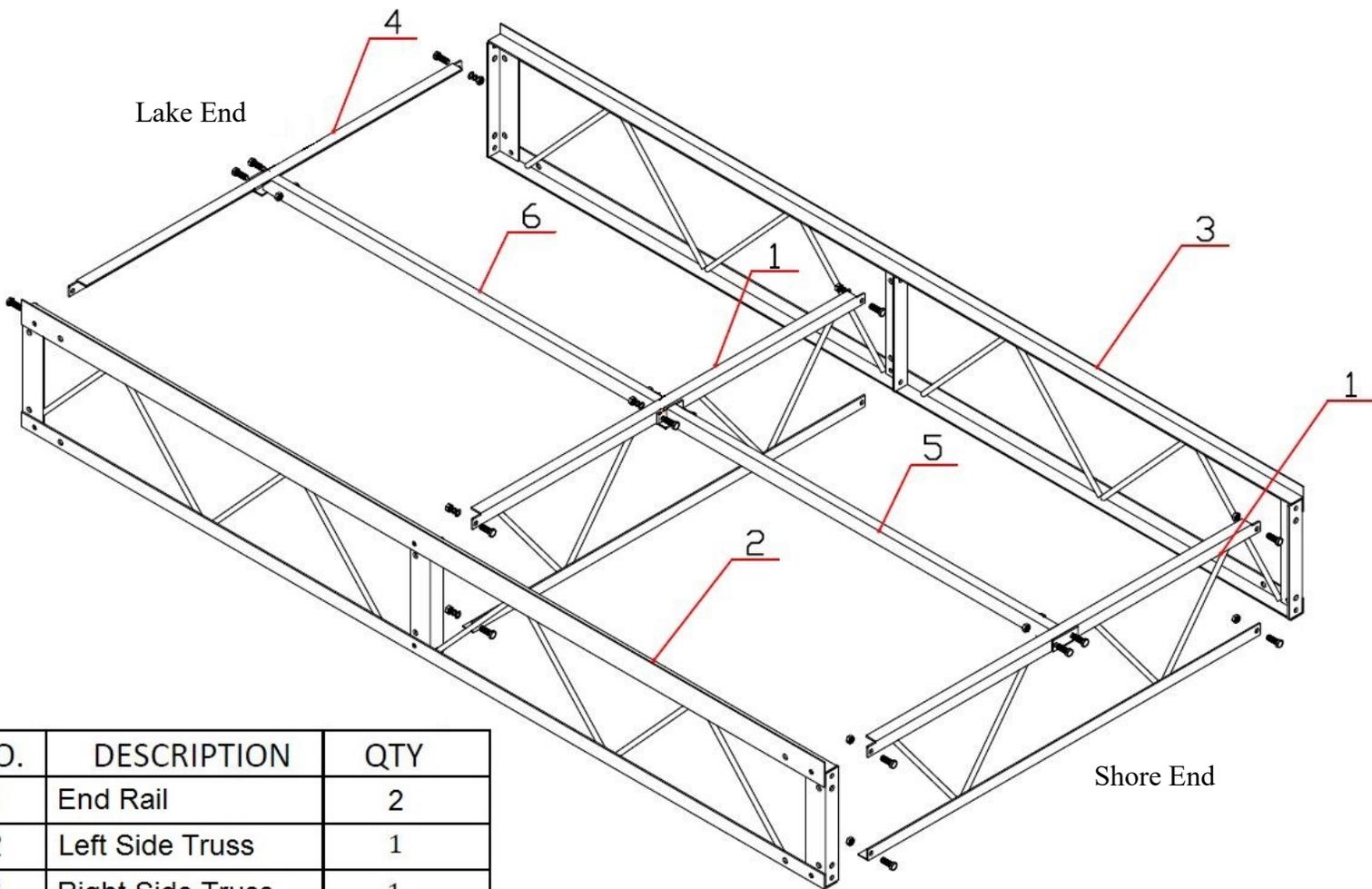
Parts List

PN10800 Aluminum Frame 4'x8'

1. (2) 4' Truss End Rail
2. (1) Left Side Rail
3. (1) Right Side Rail
4. (1) Connecting Rail
5. (1) Short SHORE END Center Support Tube (47")
6. (1) Long LAKE END Center Support Tube (48")
7. (1) 8' Diagonal Brace (8'x 1"x 1" angle) (not shown)
8. (1) Transition plate (17.5"x 1.5" flat bar) (not shown)

Assembly Hardware

- A. (20) M10 x \approx 35mm Flanged Bolt
- B. (2) M10 x \approx 40mm Flanged Bolt
- C. (22) M10 Flanged Nut



NO.	DESCRIPTION	QTY
1	End Rail	2
2	Left Side Truss	1
3	Right Side Truss	1
4	Connecting Rail	1
5	Short Center Tube	1
6	Long Center Tube	1

Patriot Dock Assembly

Helpful Hints for Patriot Dock Assembly:

1. Visit www.patriotdocks.com for step-by-step photo and video instructions under the Instructions and FAQ sections.
2. Each frame section is NOT built individually. Each additional section is attached and built off of the previous section.
3. Do not tighten any bolts until the frame or frames are fully assembled.
4. The 4 ft. Truss End Rail and Connecting Rail (Items 3 and 4) always fit **inside the vertical angles** of the 8' Side Rails.
5. Use the shorter M10 flanged bolts (Item A) for all joints **except** the center of the Connecting Rail (Item 4), where the two 3/8" –16 X 1.50" bolts are used (Item B).

Frame Assembly Steps (diagrams on page 4 and 5):

- Layout all the 4 x 8 ft frame components on level ground. Orient the components so the Short Center Support Tube (Item 5) is on the shore end of the frame and the Long Center Support Tube (Item 6) is on the lake end of the frame. See drawings for reference.
- Starting with the shore end of the frame, loosely bolt the 4 ft Truss End Rail (Item 1) to the Left and Right Side Rails (Item 2 and 3) using the M10 flanged bolt and nut. **Note: The lip on the side rails face upward. Notice the orientation of the center vertical angle on the Side Rails, this determines Left and Right sides.**
- Bolt the second 4 ft Truss End Rail (Item 1) at the center of the two Side Rails.
- Bolt the Short Center Support Tube between the two End Rails on the shore end of the frame. **Do not install the M10 nuts until after the next step.**
- Bolt the Long Center Support Tube between the middle 4' Truss End Rail (Item 1) and Connecting Rail (Item 4) using the M10 flanged long bolts. **Wait to install M10 nuts until after next frame section has been joined to the first.**
- Connect the next 4 x 8 ft frame by fitting the two Side Rails and 4 ft Truss End Rail into the bolts from the previous step and install the M10 nuts to fasten the joint. See drawings on next page.
- Finish attaching the remaining 4 x 8 ft frames by repeating steps above. Repeat until the entire straight frame is assembled.
- Lastly, install the loose 4 ft Truss End Rail (Item 1) to the lake end of the straight length of dock frames (shown in red on next page). Tighten all bolted connections throughout the dock assembly.
- Rotate dock frame on its side or prop up frame on blocks to install Transition Plates (Item 8) and 8 ft Diagonal Braces (Item 7) in the holes on the bottom of the assembled frames. The Transition Plates strengthen the connection between 4 x 8 ft frame connections. The Diagonal Braces are installed under each 8 ft frame, alternating directions on each frame. The braces will form a Z type pattern under the frame to control sway.
- If your dock has a Patio or "L" configuration, preassemble the 4 x 8 ft frame and connect to the straight dock section using six M10 flanged bolts and nuts.

Jack Supports:

Mount drop leg/base or wheel axle to each Screw Jack. (see pg. 7 for illustrations)
Bolt Screw Jack to frame using (4) 3/8" x 1" bolt/nuts. See page 6 for mounting location.

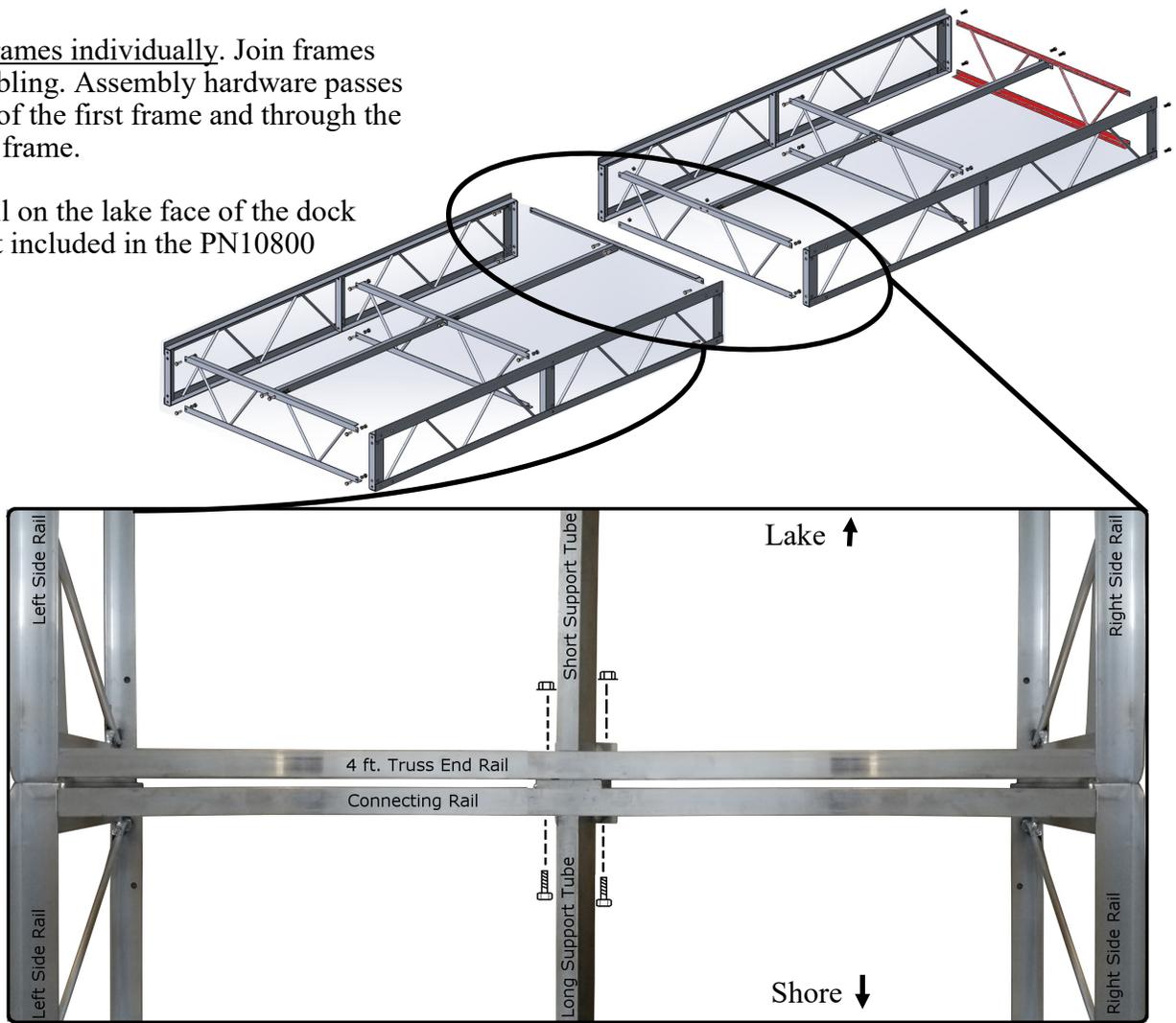
Note: Each 8' frame section has (6) Screw Jack mounting locations.

Jack Support Guide		24" Jack	48" Jack
Shortest height only Jack (inches)		24"	41"
Tallest height only Jack (inches)		42"	59"
*Each jack requires a drop leg or axle/wheel			
Shortest height with Drop Leg (inches)		28"	45"
Tallest height with Drop Leg (inches)		58"	75"
Optimal water depth with drop leg (inches)		12-46"	29-63"
Shortest height with axle/wheel (inches)		36"	53"
Tallest height with axle/wheel (inches)		54"	71"
Optimal water depth with axle/wheel (inches)		12-42"	39-59"

*Jacks bolt to a 12 inch tall frame. Dock frames should be kept 1-4" above water level. Consider wave action.

DO NOT assemble frames individually. Join frames together while assembling. Assembly hardware passes through the lake end of the first frame and through the shore end of the next frame.

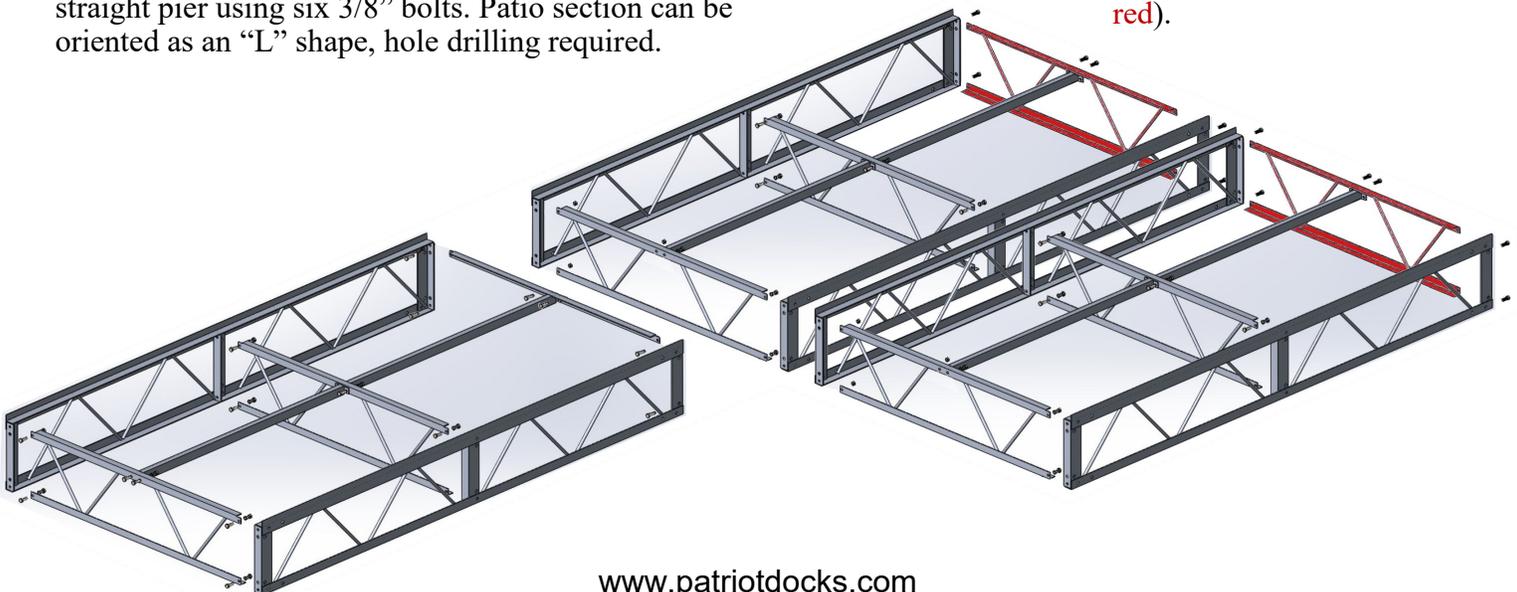
The 4' Truss End Rail on the lake face of the dock (marked in red) is not included in the PN10800 Frame Assembly.



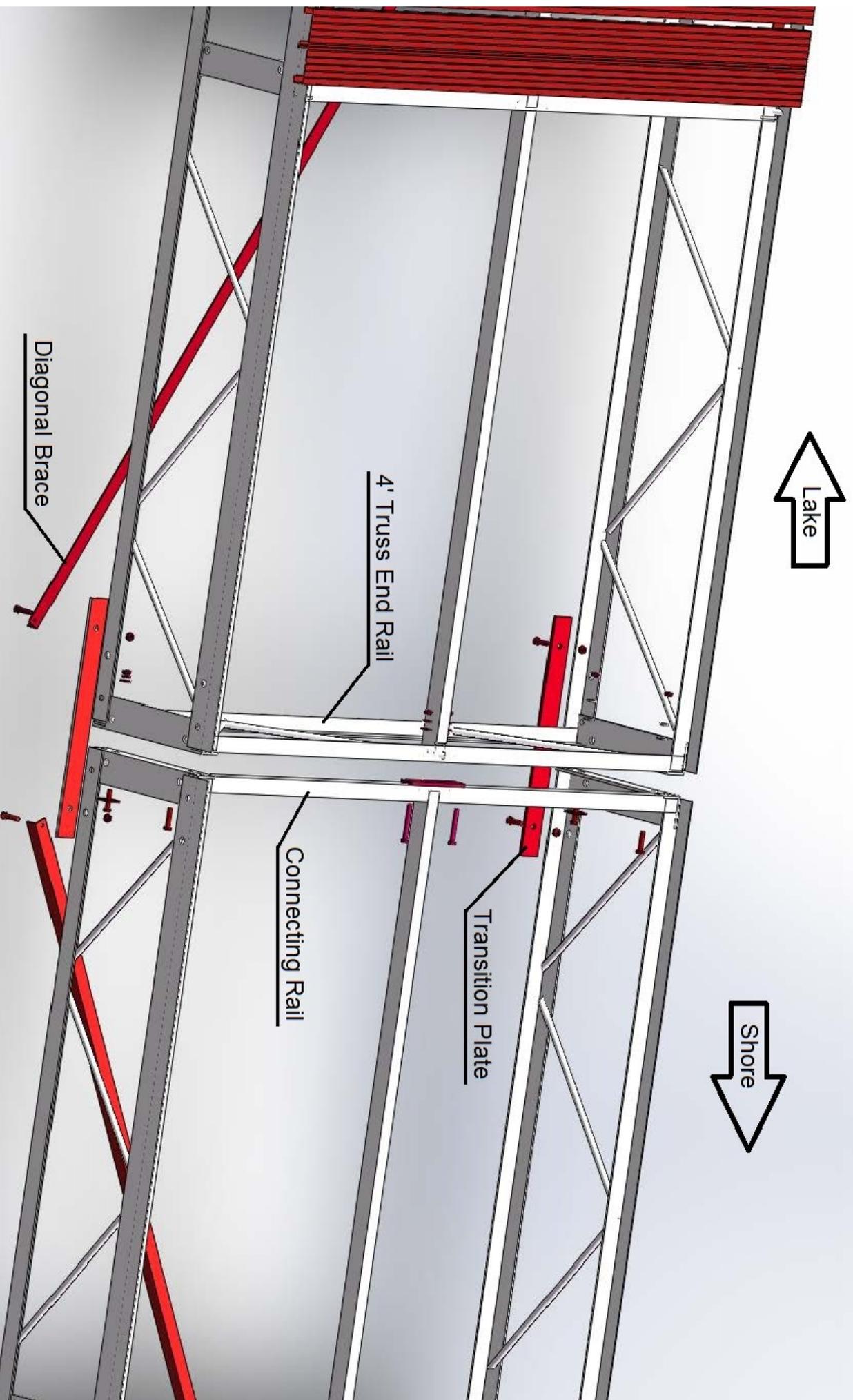
ABOVE: Top view of two frames being joined together. **Assembly bolts pass through all aluminum components being joined together.** See diagram on next page for further joint details, including Diagonal Brace and Transition Plate installation.

After straight run of pier is assembled, patio sections can be added. Assemble patio section completely. Bolt parallel to straight pier using six 3/8" bolts. Patio section can be oriented as an "L" shape, hole drilling required.

Terminal ends of completed pier are always finished with a 4' Truss End Rail (shown in red).



The Diagonal Braces and Transition Plates share the same mounting holes and assembly bolts. The Diagonal Braces should alternate direction on each frame, creating a zig-zag pattern.



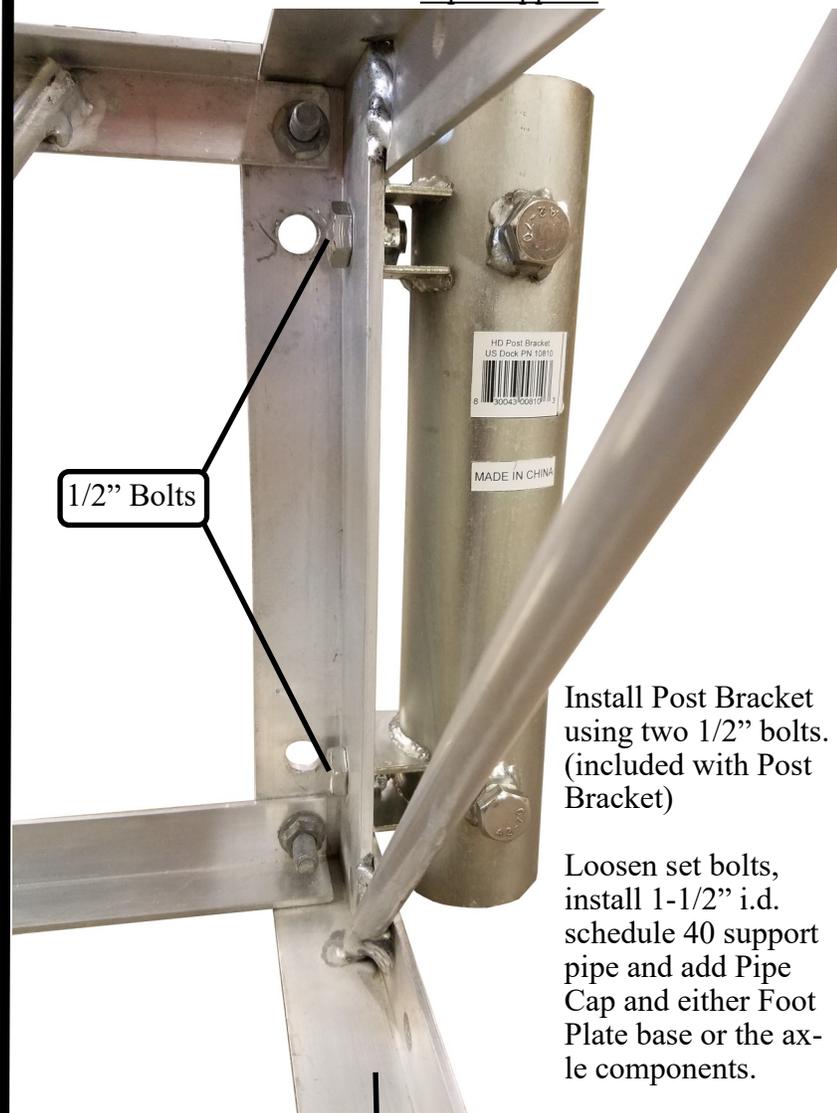
Jack Supports



Install Aluminum Jack using four 3/8" bolts. Add Drop Leg or Axle attachment.

Install optional fender to the Jack using two of the alternate mounting holes.

Pipe Supports

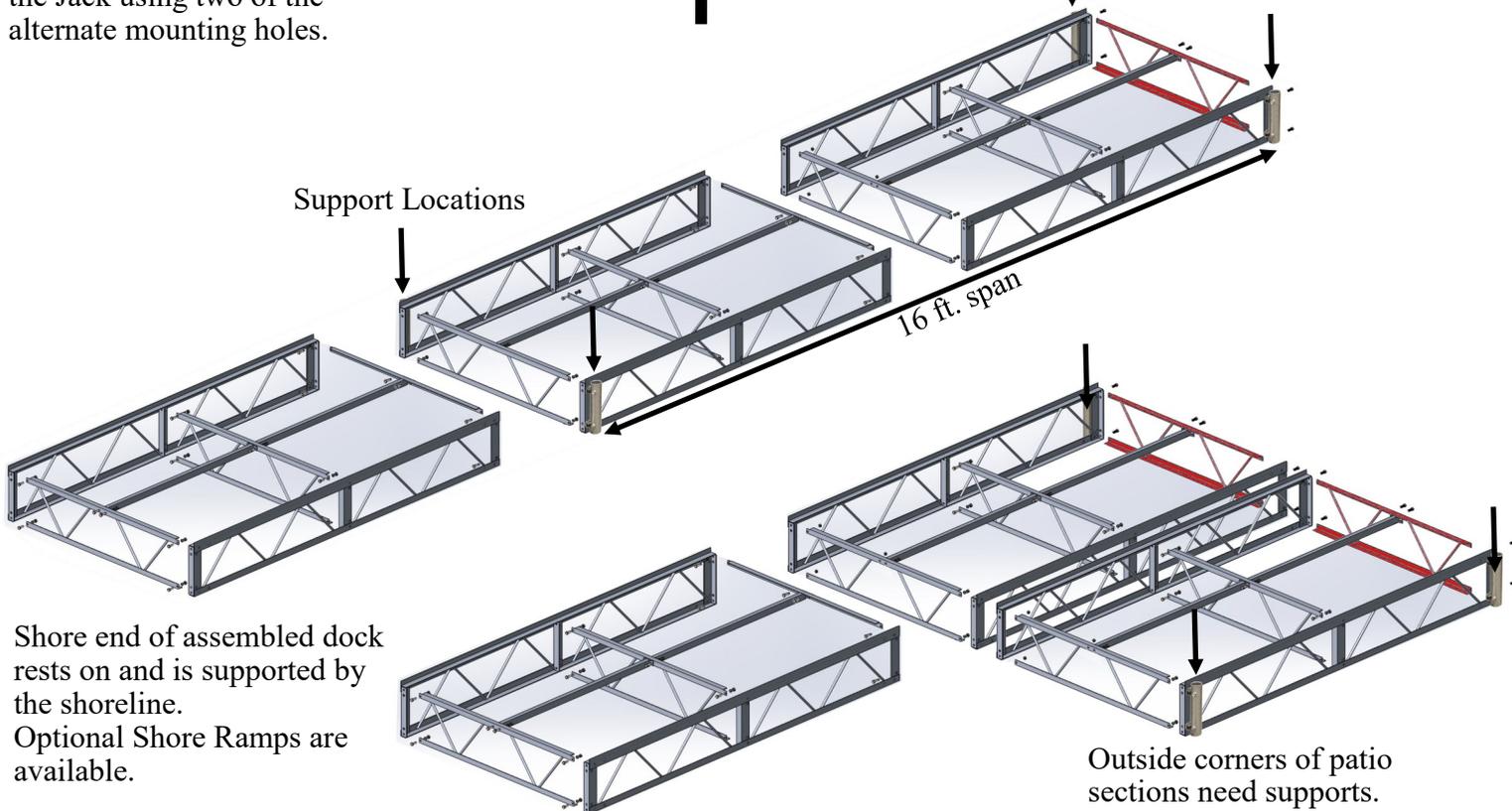


1/2" Bolts

Install Post Bracket using two 1/2" bolts. (included with Post Bracket)

Loosen set bolts, install 1-1/2" i.d. schedule 40 support pipe and add Pipe Cap and either Foot Plate base or the axle components.

Support Locations



Shore end of assembled dock rests on and is supported by the shoreline. Optional Shore Ramps are available.

Outside corners of patio sections need supports.

Stationary and Rolling Supports

NOTE: There must be no more than a 16 ft. span between supports!



- For stationary Screw Jack supports, assemble the Drop Leg base by inserting vertical tube into the flat base and secure using M12 bolt/nut. Insert vertical tube into Screw Jack opening, set height and install M12 bolt/nut.
- To install the Jack Axle attachment, slide Jack Axle over traveling tube of the Screw Jack and install M12 bolt. Install wheel onto Jack Axle, use washers on both side of wheel, secure in place with Hitch Pin.

NOTE: Drop Leg components are not used in conjunction with the Jack Axle attachment.

- For Bumper attachment, install on mounted Screw Jack using (2) 3/8" x 3" Plastic bolt/nut. Mount bolts in diagonally-opposite corners.

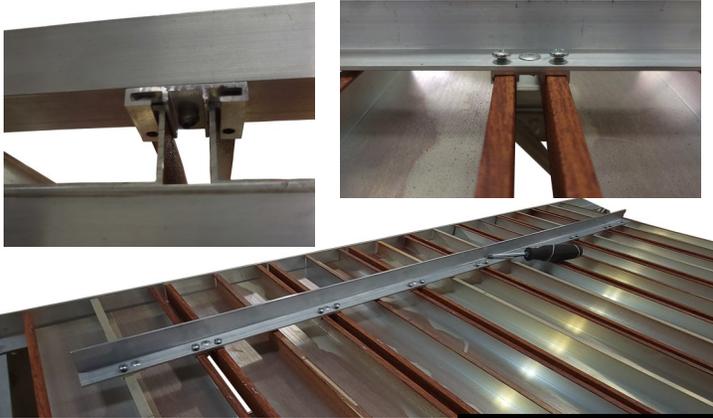
Wheels are orientated outward on 4 ft. wide docks.

Wheels are orientated inward on 8 ft. wide docks.



Decking Installation

Lastly, after the dock has been assembled completely, installed in the water and leveled throughout, then the pier is ready for the decking to be installed. The most efficient way to set the decking in place is to start at the shore end of the dock and set each panel in place, working towards the lake end. Removal is the opposite of installation.

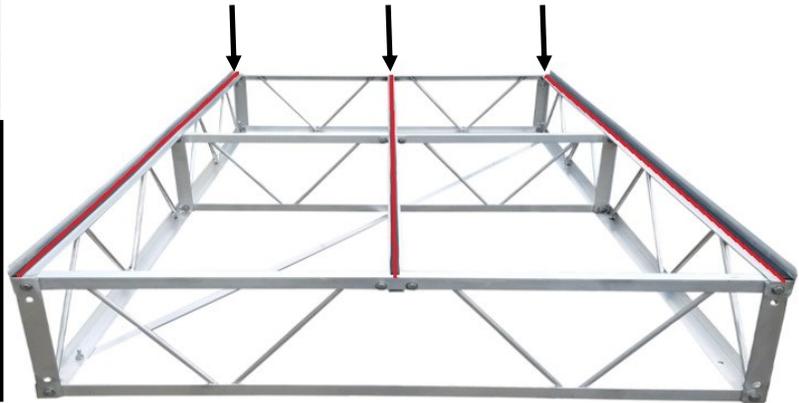


When installing Aluminum Deck Panels, first apply the adhesive backed Rubber or Cork Insulator to the aluminum frames. The Insulator is installed down the length of the 8' Side Rails and down the length of the Center Support Tubes. **(Only used with Aluminum Decking)** The Rubber Insulator is not to be installed in the direction of the 4 ft. width, only lengthwise.

To assemble the **aluminum deck panel**, lay out the deck boards, slide stinger onto boards. Position stringer approx. 12" from edge. Repeat with other stringer on opposite side. Ensure board ends are flush. Tighten set screws to secure panel.

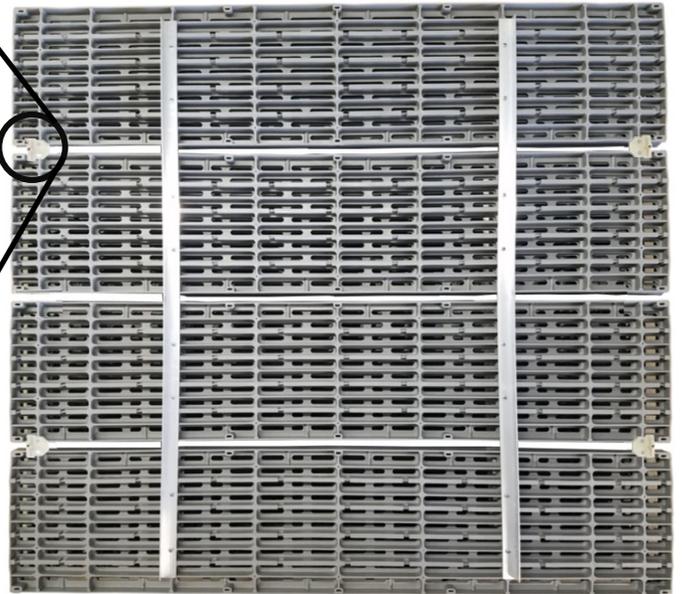
PN1086: Aluminum Deck Lockers can be installed on the panel to secure the decking to the frame.

Sold Separately



To assemble the **poly deck panel**, lay out deck boards. Align stringer with pre drilled hole on bottom side of poly board. Roughly 11-3/4" from edge. Secure with included screw.

PN10867: Deck Locker - Use the optional Deck Locker to secure the 4x4' poly deck panel onto the dock frame.



The Cedar Deck Panel is simply set in place. The cedar panels are sold untreated and can be installed as is. To extend the service life of the cedar deck, a water repellant sealant can be applied (for best results, do not use colored stain).

The Cedar Decking does not utilize a deck locker mechanism but it is recommended that the panels be secured to the frame in some capacity. (zip-ties are commonly used)