**Solo Dock Installation Instructions**

*Please read entire instructions for helpful tips before beginning installation.*

*Please watch the longer Installation and Removal video at www.SoloDock.com.*

Thank you very much for your recent purchase of Solo Dock. Solo Dock is a modular dock in which you can change the layout or add more dock sections on any section of the dock at any time. Solo Dock is made only from aluminum parts and stainless steel hardware. This dock should last you a lifetime.

**Tools Available From Solo Dock:**

* “T” handle wrench (for loosening & tightening leg locks)
* Leveling winches (allows dock

to move freely for leveling)

* 6’ aluminum ruler (measuring water depth & post length)
* Solo Wheeler Dock Mover
* Removal Winch Tripod

**Tools You Will Need To Supply:**

* 2′ bubble level (leveling side to side and front to back) with bubble visible from the top. Bonus if it floats!
* Rope for the Removal Winch End Bracket to lower

the sections into the water.

* 9/16” wrench
* Pipe cutter: Master Plumber 745122 5/8 To 2-1/8-Inch Large Pipe Tube Cutter
* ¼” Drill Bit for Screw Leg Pipe
* 15/16” Socket and cordless drill adapter for Screw Leg
* File for burrs from the Sand Auger Wrench if you use Sand Auger Posts
* 7/16” wrench and socket for the footpad bolts and lock nuts.

After you have gathered the tools required to assemble the different components, you are ready to begin.

**Starter Bracket** Securely mounting the starter bracket is very important to give the rest of the dock a solid anchor. The posts need to be pounded into a solid base or cemented in to secure the bracket plumb and level. The starter bracket can be mounted into or onto many different surfaces – wood, ground, rocks etc.). As an alternative, a Side Mount Hinge can also be lag-bolted to stairs or the face of a deck or retaining wall on shore.

Using the “T” handle wrench and 2′ level, set starter hinge, tighten down leg locks so starter hinge is 18″ above the water (to top of the starter hinge or whatever your desired height above the water for the remaining sections. Pound posts into solid soil or sand.

**Alternative Side Mount Hinge As Starter**

A Side Mount Hinge can also be mounted to a sea wall, stairs or deck as an alternative to the Starter Bracket.

Install the top of the Side Mount Hinge level with the top of the sea wall or deck. Drill holes in the Side Mount Hinge where needed to attach to the deck or sea wall. The Hinge is hollow, so drill a larger hole in the outer part of the extrusion so that the head of the bolt is recessed in the Hinge. This will allow the first section, when installed, to rest flat against the Side Mount Hinge.

The Side Mount Hinge can also be used in the same way to attach Solo Dock sections to the end or sides of an existing dock.

**Dock sections** (4’x6’) all dock sections will install in the same manner without entering the water. Use the “T” handle wrench, tape measure and the leveling winches. First, determine the water depth every 6′ from shore and add 3’ to determine post length. When installing, take the water depth and add 18″ (or more) to determine the dock height above the water. (If the deep water stabilization kit is being used, it should be installed prior to the next step.) Stand the dock section on end with the leg lock holes upright. Loosen the bolts that tighten the leg locks, but don’t loosen too much that the bolts come all the way out. Bolt the posts to the footpads if they aren’t already. Slide legs through leg locks in dock to your determined length (measure from foot pad to bottom of the dock) then pull down on the part of the dock pipe extending above the dock surface while tightening leg locks with the “T” handle wrench. This will help the posts install strait below the dock and will make it easier to level.

The Solo Dock section can be carried by one or two people.

When you get to the end of the dock, stand the section on end with the posts and footpads upright. Carefully lift or slide the section toward the hinge on the section you are standing on. Carefully slide past and outside of the right post, keeping the section tight up to the post to prevent the section from sliding off until the hinges are aligned. Then slide the section to the left until the new dock section is aligned with the section you are standing on. Gently push the bottom of the section straight forward until the hinge “falls in” and is secured. Be sure the section is still aligned with the section you are standing on. Gently kick the bottom of the section you are installing to be sure the hinges are locked together.

When you are in less than about 3’ of water, take the bracket off of the removal winch, attach a rope and slowly lower the section into the water. When installing in deeper water you can simply let the section fall after the hinges are aligned. If you let the section fall in shallow water, the footpads can bounce off the sand and if one footpad hits the lake bottom before the other, this could cause the hinge to become partially disconnected.

If dock section is not level and is too high or low by more than 2″, winch or pull the section back up with the removal winch or the bracket and rope. Adjust the post heights with the section in the up position (without removing dock section from the hinge). This will insure that the posts are positioned straight down into the lake under the dock section and will make it easier to raise, lower or level the dock. Lower the dock section back into the water and finish leveling with the leveling winches. Put the 2 leveling winches onto the top of the dock posts and hook the winch bracket under the dock section. Tighten the winches, loosen leg lock bolts, level dock on the 4’ and 6’ sides of the dock. Re-tighten the leg lock bolts. Loosen and remove the leveling winches.

Do not install decorative post covers until the entire dock is installed. This will make it easier to carry and install the rest of the dock sections.

Continue dock section installation in the same manner for the remaining dock sections. After the dock is installed, the 3′ powder coated decorative post covers will slide over the dock posts, giving the dock a nice, clean, universal look. If the dock pipes extend more than 34” above the top of the dock, cut the dock pipe off with a pipe cutter or saw at 34” or less, so the post covers rest on the dock section when installed.

**Installing an L, T, H or Deck**

To install an L, T, H or deck (and Solo Dock Stairs) on your Solo Dock, first install a Side Mount Hinge on the side of the dock section.

When installing a deck area off the side of the main dock, install the Side Mount Hinge approximately 3/8” from the end of the main dock section. When installing two Side Mount Hinges next to each other off the side of the main dock, leave a ½” – ¾” gap between the two Side Mount Hinges. Install the dock sections tightly next to each other so there is no gap between the dock sections.

Install 2 bolts through the bottom of the Side Mount Hinge and also through the retainer bracket. Attach the retainer bracket on the back of the dock section’s side tube. Tighten the bolts and nuts. When tight, wiggle the retainer bracket to be sure it is secure. Then simply install a Solo Dock section like the others were installed.

To install 2 Solo Dock sections next to each other to make a larger deck, attach 2 Side Mount Hinges next to each other (they can bridge across 2 sections). Use Half Footpads (available from Solo Dock) on the two posts that will be right next to each other (one on each section), with the flat part of the Half Footpads positioned correctly. Tip the first deck section in and level. Then tip the second section in while leaving a ½” gap between the sides of the two sections. Level the second section by adjusting the posts, and then push the section tight to the first section. Since the dock sections will butt up against each other, you will need to raise the end of the second section a few inches to gain access to the leg lock bolts.

When installing L, H, T or deck sections, we recommend that you install the dock at a level where you are confident it will be comfortably above the high water level for the season. The reason is that you will be covering up the access holes for the leg locks on some of the dock sections. So if you want to raise or lower the dock, you will need to remove the dock sections installed at a 90 degree angle to the main portion of the dock to give you access to the leg lock bolts on the main dock sections.

**Raising, Lowering, Leveling the Dock**

Solo Dock sections can be raised or lowered a few inches at a time. Since the sections fit securely together when installed, do not attempt to raise or lower individual sections more than 2-3 inches at a time. Damage to the dock or leveling winches could occur. When raising or lowering the dock, the winches should turn somewhat easily, and the dock should slide up or down on the posts somewhat easily.

\*\*\*If the dock posts extend more than 18-24” above the dock surface, cut them off before installing the Leveling Winches. This will enable the Leveling Winches to pull the dock section up, and will avoid the tops of long dock posts pulling over instead.

If the dock section doesn’t move easily, the dock may be binding somewhere. If the dock is binding, there are a few things you can do.

* Adjust both sides of the dock evenly and at the same time using leveling winches on both posts.
* Loosen the Leg Lock Bolts and then step away from the end of the section to take some weight off the end of the section being leveled.
* Check that the leg lock bolts are still loose now that the section has been moved.
* Inspect the dock posts under the dock to see if they are straight. Look on the top of the dock section to see if there is a small gap between the dock post and the leg lock. If there is a larger gap on one side of the Leg Lock, you can gently pull on the post or push on the Leveling Winch to alleviate the binding pressure .

**Installing the Side Mount Post Brackets**

Solo Dock does not recommend tying boats to the dock as the dock is normally installed because a boat should be tied to posts that are secured into the lake bottom.

As a result, we have developed Side Mount Post Brackets that allow you to auger posts into the lake bottom.

The Side Mount Post Brackets are built from Solo Dock Side Mount Brackets and Solo Dock Leg Locks that are welded together and powder coated.

If the Sand Auger is not already inserted into the dock pipe and bolted, insert the sand auger shaft into one end of the post. (Tap gently with a hammer if needed, but do not use excessive force or the cast iron sand auger will break due to its somewhat brittle cast iron construction.) Drill a 1/4” hole through the post and Sand Auger shaft. Insert the bolt through the auger shaft and pipe, install and tighten the nut.

Next, loosen the leg lock bolts on the Side Mount Post Bracket. Insert the top of the dock pipe through the bottom of the Leg Lock on the Side Mount Post Bracket. Slide the pipe 3/4 of the way through the bracket and tighten the Leg Lock bolts.

Next, hang the bracket on the side of the dock and install 2 Solo Dock Retainer Brackets with the supplied stainless steel bolts and nuts. Tighten the nuts. Wiggle the brackets to be sure they are installed securely.

Now loosen the Leg Lock Bolts and drop the post and Sand Auger to the bottom of the lake. Use the Auger wrench to turn the post into the lake bottom. After securing the post in the lake bottom, tighten the Leg Lock bolts on the Side Mount Post Bracket.

To remove in Fall, reverse this process and remove the Side Mount Post Brackets before removing the Solo Dock section.

**\*\*\*Important Note About**

**Mooring Your Boat**

Only you as a dock owner can determine the correct number of posts and installation depths needed to adequately secure your boat. Dock owners can best use their experience and neighbors’ recommendations to determine if mooring points are adequate. Due to conditions such as lake bottom composition (muck, sand, rock), wind, waves, boat size, etc., customers responsible for adequately securing their boats. Solo Dock will supply posts and brackets but will not determine if the mooring steps or Solo Dock parts are adequate. Solo Dock is not liable for damage to the dock or boats resulting from storms, waves or inadequate mooring.

**Installing Deep Water Bracing Pipes**

Depending on how firm your lake bottom is, you may want to install a Solo Dock Deep Water Bracing Pipe to firm up your dock, particularly when the water depth at the end of your dock exceeds 5’. If your dock is sitting on solid rock or a very soft lake bottom, you may benefit from a Deep Water Bracing Pipe in shallower water depths.

The pipe is installed on the last section facing the middle of the lake, and you can add to other sections as needed. It is easy to install after the dock section is installed and leveled, without getting into the water.

Take the Deepwater Bracing Pipe to the end of the dock. Support one end of the Bracing Pipe by, for example, hanging it on the right dock post with a bungee cord. Open the clamp on the other end of the Bracing pipe and install it on the left dock post below the decking. Turn the clamp handle clockwise and close it around the dock pipe so the clamp is snug but not tight. Take the bungee cord off the right side of the clamp and push the left clamp down the dock post until it hits the footpad. Secure the other clamp tightly to the right dock post. In Fall, you can remove the entire dock section with the Deepwater Bracing Pipe still attached. **A video is available through a link on our web site to your Youtube channel.**

**Removing a Solo Dock**

When removing dock sections, use the dock removal tripod winch.

If you have a deck, L or T on the end of your dock, you will need to remove those sections first. Set the removal winch sideways on the dock section that faces the middle of the lake. Slide the clamp on the rear leg of the removal winch over the side of the dock section it is resting on. Extend the winch strap and hook the removal winch bracket on the end of the dock section to be removed. Winch the dock section up and carefully carry back to shore.

To remove dock sections on the straight portion of your dock, set the leveling winch on the dock section behind the section to be removed. Hook the removal winch bracket over the end of the section being removed. Position the rear of the removal winch tripod just behind the next set of dock posts back toward shore. Rotate the C-shaped brackets over the sides of the dock section. Then winch the dock section so it is standing on end. Remove the winch bracket. Lift the section out of the hinge and onto the dock section you are standing on. Carry back to shore.

If the footpads are sunk into a soft lake bottom, tighten the winch until it is tight but do not force it. Then use a hoe or rake to stir the mud directly above the footpads. Turn the winch handle another click or two if you can. Give the sections some time (with pressure on the strap) to let loose. You may need to turn the winch a click or two again after a few minutes. The dock may slowly rise on its own, or eventually you may be able to easily turn the winch handle and raise the section.

If dock posts are left in the section until next spring’s installation, the dock installs faster because the legs are already set to the previous year’s water depth.

To stack the dock sections neatly on shore, remove the posts but keep the footpads installed on the posts. Before removing the posts, mark each post with a section number and an L or R for the left or right side of the section. Determine the L and R side of the dock by imagining you are standing on the dock section facing the middle of the lake when the section is installed.

Measure the distance from the top of each footpad to the bottom of the dock section and write these measurements down for each section’s L and R posts. Then use a sharpie and mark the post right under the dock section. Then loosen the leg lock bolts and remove the posts. Stack the sections and posts separately.

**Ramp**

The ramp installs on the shore side of the Starter Bracket by first removing the top bolt on each side holding the Leg Lock to the Starter Bracket. Then slide the ramp into place and insert the bolts through the ramp brackets, through the Leg Locks and into the tapped holes in the Starter Bracket.

**Dock Chairs**

To install the dock chairs, select the posts you want to mount them on. Cut those dock pipes off to about 12” so they will fit under the chair. Slide the dual Leg Lock bracket over the dock post and slide it down to the dock surface. Tighten the bolts on that side of the bracket and install supplied white vinyl caps on the dock post. Slide the chair post into the Leg Lock on the other side of the dual Leg Lock bracket. Slide the post down to the dock surface and tighten the Leg Lock bracket bolts. If you want the chairs to sit more upright vs leaning back, loosen the two small set screws under the chair and use a rubber mallet to push the large spring forward. Tighten the set screws.

**Side Mount Table**

To install the Side Mount Table, install the Side Mount Post Bracket (that has a 24” post installed in it) anywhere on the 6’ side of the dock. Install the 3” bolts and retainer brackets. Then open the Leg Lock screwed to the bottom of the table and slide the Leg Lock over the post. Then simply tighten the Leg Lock bolts.

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