ph: 250-374-3908
info@kayakcradle.com
www.docksidecradle.com

DOCK-SIDE
KAYAK CRADLE

Instructions for Cradle Assembly --Reference # _____

1. See the website under Assembly for photographs of most steps of this procedure. Please read and follow closely the instructions below in assembling your cradle.

2. Your supplies should include:

a. six 3 inch long ss ¼ inch bolts with ss self-locking nuts and ss washers (2.5 inches from the bottom of the washer to the end of the bolt). These are for fastening the 2x4's to the ribs.

b. six 2 inch long ss ¼ inch bolts with ss self-locking nuts (1.5 inches from the bottom of the head to the end of the bolt). These are for fastening the pegs on the railing to the outside arms of the ribs.

c. six 3/8 inch lag bolts (two or three inches long) for fastening the cradle to the dock. Two are inserted through the holes in each of the three pieces of flat bar and then fastened to the side of the dock.

d. an aluminum railing with welded pegs and two drilled holes in each peg for fastening the railing to the outside arms of the ribs.

e. three iron pins, two with holes for cotter pins and one with a larger hole for a padlock. These are for converting the one inch pipe welded to the top of the inside arms and to the pieces of flat bar into hinges. The combination for the padlock, if included, is _____.

f. three aluminum ribs containing inside and outside support arms and designed with pieces of one inch aluminum pipe on the inside arms for hinging to the dock and with holes drilled in the bottoms for the attachment of the 2x4's. Note the length of the arms on each rib differs. Sort them by the length of the arms as they must be placed in the right order on the cradle, as explained below.

g. three pieces of aluminum flat bar with two pieces of one inch aluminum pipe welded to the top for the hinges. Two of the pieces of flat bar are six inches long and one is 12 inches long. These are each drilled with two holes for 3/8 inch ss lag bolts (included) to be used for fastening the cradle to the dock. The longer piece of flat bar contains a sticker with our advertising information.

h. sixteen feet of rope to be looped around the second outside support arm and the railing, tied off and used to lower the cradle into the water and to rotate it out of the water onto the top of the dock. The sixteen feet of rope is reduced to an eight foot length after it is looped and tied.

i. a five foot dowel fitted with a hook for retrieving the rope from the water while standing on the dock.

j. five handles to be attached to the top of the 2x6 on the cradle-side of your dock using the ten ¼" by one inch long ss lag bolts (two in each handle) that are included in the package containing the handles . These handles are to assist you (along with the railing) in moving your kayak into and out of the cradle .

3. Buy two 12 foot long cedar 2x4's smooth on both sides. Treat them with Thompson's Water Seal or a similar product.

4. If the cradle is to be attached to the right side of the dock (as you face the water) the railing should be laid so that the first two pegs on the right as you face the railing are at the right end and at three feet from the right end. The third peg is at the opposite end of the railing (on your left as you face the railing) eight feet from the first peg and five feet from the second peg. The rib with the shortest arms is placed first (at the right end of the railing as you face it), the one with the second longest arms is placed second (three feet from the first rib) and the rib with the longest arms is placed third (eight feet from the first rib and five feet from the second rib). Insert the pegs on the railing into the outside arms of the three ribs. (The outside arms have no one inch aluminum pipe welded to the top of the arm. The inside arms have pieces of pipe welded to their top.) The rib with the longest arms will be in the deepest water and the rib with the shortest arms will be in the shallowest water. This provides a cradle that slopes down into the deeper water and is attached to the right side of the dock.

If the cradle is to be attached to the left side of the dock (as you face the water) the rib with the shortest arms is placed first (at the left end of the railing as you face it), the one with the second longest arms is placed second (three feet from the first rib) and the rib with the longest arms is placed third (eight feet from the first rib and five feet from the second rib). Insert the pegs on the railings into the outside arms of the three ribs. (The outside arms have no one inch pipe welded to the top of the arm. The inside arms have pieces of pipe welded to their top.) The rib with the longest arms will be in the deepest water and the rib with the shortest arms will be in the shallowest water. This provides a cradle that slopes down into the deeper water and is attached to the left side of the dock.

5. Insert the two inch ss bolts through the two holes drilled in each of the pegs on the railing and each of the outside arms. Two 7/16th inch wrenches are needed to fasten the railing to the outside arms -one to keep the heads from turning and one to tighten the self-locking nuts.

6. Clamp the ribs to the bottom of the 2x4's (with the ribs and railing turned upside down). A garage floor provides the necessary space. Cardboard on the working area prevents scratching the cradle on a

concrete floor. Note the 2x4's are beneath the ribs when they are turned upside down. The holes in the bottoms of the ribs should be centered on the 2x4's. The first and third ribs are each placed two feet from the ends of the 2x4's. In other words, the 2x4's extend two feet beyond the cradle at each end.

7. Using a 1/4 inch spade bit drill a hole in the 2x4's drilling from the bottom of the ribs (with the cradle turned upside down), using the holes in the ribs as a guide, and with the 2x4's clamped to the ribs so that the drilled holes go through the center of the 2x4's and the 2x4's extend two feet beyond the cradle at each end. Stop drilling as soon as the point of the bit pokes through the 2x4's. The small hole from the point of the bit can then be used for drilling the countersink hole. Do not drill all the way through the 2x4's as this will make it more difficult to drill the countersink hole. Using a 3/4 inch spade bit (centered on the first hole drilled in the 2x4's) drill a countersink hole in the top side of the 2x4's deep enough that the bolt heads with washers will not touch the kayak when using the cradle. Fasten the 2x4's to the ribs using the 3 inch ss bolts with ss washers and ss self-locking nuts. Two 7/16 inch wrenches are needed-- one to keep the heads from turning and one to tighten the self-locking nuts.

8. Connect the hinges to the cradle placing the iron pins through the two inch long pieces of one inch pipe-- one welded to the top of the inside support arms and two to each of the pieces of flat bar. The twelve inch piece of flat bar containing the sticker is best placed (for greatest exposure of the advertising) at the rib with the longest arm (ie furthest from the shore --closest to the outside water). The two pieces of pipe on each piece of flat bar straddle the one piece of pipe on each of the inside arms of the three ribs. Insert the iron pins through the three pieces of one inch pipe that make up each hinge. Place the cotter keys in two of the iron pins (the ones with smaller holes) and the padlock in the iron pin with the larger hole. The combination for the padlock, if included, is _____..

9. Place the cradle upside down on the dock with the pieces of flat bar hanging where they are to be attached to the side of the dock. Pre-drill holes with a 9/32 inch bit for the 3/8 inch lag bolts using the holes in the flat bar as a guide and then fasten the flat bar to the dock. The 3/8th inch lag bolts can be tightened using a 9/16th inch wrench on the heads.

10. Drill two holes in each of the five handles using a ¼ inch metal bit and attach them to the top of the 2x6 along the cradle-side of your dock (in spaced sequence) using the ss ¼ inch by one inch long lag bolts (included). These are to assist you (along with the railing) in moving your kayak into and out of the cradle. They can be tightened on the dock using a 7/16th inch wrench on the heads.

11. The cradle is now ready for use. You need only rotate it into the water. Loop the 16 feet of rope around the second outside support arm and the railing, tie it off and use the eight feet of looped rope to gently lower the cradle into the water. Throw the rope out of the way into the water so that it will not interfere with the use of the cradle. Use the dowel with the hook to retrieve the rope (while standing on the dock) from the water (when you are finished using the cradle, and want to rotate it up onto the dock out of rough water).

12. Enjoy your kayaking! The cradle will take away the fear of capsizing when getting into or out of your kayak!!