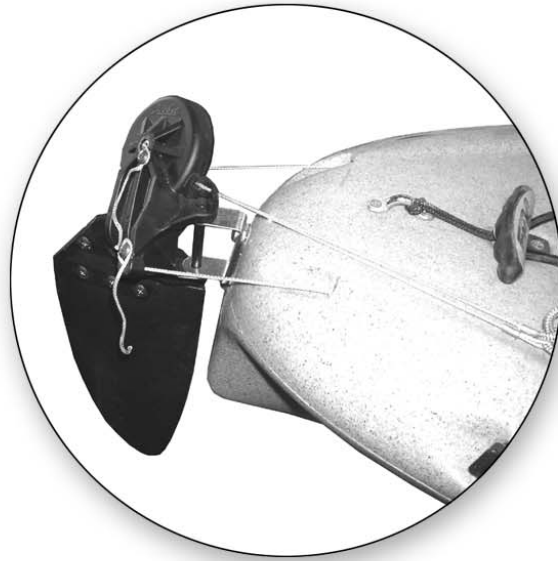


HOBIE QUEST



Rudder Kit Assembly Instructions



Rudder System

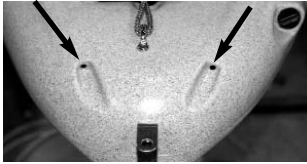
The Hobie Quest is designed for the addition of an optional rudder system. Rudder systems in boats like this allow you to adjust the steering trim of your boat when paddling in high wind or strong current conditions. Use the following instructions to install your new rudder kit.

Rudder Kit Contents

1. (1) Twist-n-stow rudder with lines
2. (1) Mounting Bracket
3. (2) Long Steering Line Assemblies
4. (2) Short Steering Line Tubes
5. (2) 6" PVC Connecting Tubes
6. (1) Drill Bit
7. (1) Jam Cleat
8. (1) Bag of Screws, Nuts, and a Well Nut
9. (1) Pedal Assembly
10. (2) Plastic Hooks
11. (1) Packet of Loctite®
12. (1) Padeye

Drilling the Steering Line Holes

We have supplied with this kit the proper drill bit size that is needed to install all the steering lines. You will need to drill 4 holes (2 in the cockpit and 2 at the stern of the boat - see picture below for reference). There are drill dimples located at each location to help you get the drill bit centered in the proper location.



Stern Holes



Forward Holes

Installing the Steering Lines

1. In your kit there are 2 long pieces of tubing with the line running through them. Push the line coming out of the end of the tube with out a plastic fitting into one of the holes you drilled in the stern of the boat.



2. Once you feed in the line up to the hard tubing, push the hard tubing into the hole and feed it all the way in. Give a firm push to get the end with the plastic fitting up against the kayak.



3. Open the 8" center hatch and reach inside the hull for the line and tube you just installed. Pull the line up to the hatch so that can see it. Slide the line through clear PVC connector tubing.



4. Take the end of the line back inside the hull and feed it through the forward hole you drilled.



Take that end and feed it into the end without the plastic fitting. In order to get the end of the line through the tube you need to twist and push the line at the same time to work it through. If you are having difficulty with this step, try running a piece of thread through the short tube and tie it to the end of the steering line. Then pull the thread and it should pull the steering line with it. Once you get the line through, tie a knot on the end so it doesn't accidentally get pulled back through the tube. Continue to feed the short piece of the stiff tubing into the hole until the plastic cap is flush with the kayak surface.



5. The clear tubing you installed in step 3 is designed to connect the two pieces of the small hard tubing. This makes the entire steering system watertight. Slide one end of the clear tube over the short steering tube, and slide the other end over the long steering line tube. For a secure fit, the tube should slide over 2" of the other tubes.



Installing the Rudder-Bracket

There are two molded-in inserts at the stern of the boat that are intended for mounting the rudder bracket. If your boat has seen some use prior to installing the bracket, be sure to wash out the holes in the inserts to remove any sand that may have collected in the threads.

1. Orient the bracket on the back of the boat with the longer bend of the bracket at the top.

2. Place a couple drops of Loctite ® onto the 1/2" machine screw threads, then thread them in until the bracket is tight against the hull.



Installing the Rudder Lift Cleat

A cleat needs to be installed that holds the line when the rudder is in the up position.

1. On the right-rear paddle holder, you will notice a flat spot on top with 2 holes. Place the cleat on this flat as shown below.



2. Using a screwdriver, thread in the 3/4" sheet metal screws until the bracket is tight against the hull. **Do not overtighten the screws!**

Mounting Your Rudder and Attaching the Steering Lines

1. Locate the holes on the rudder over the holes on the steel bracket that is attached to the stern. Pass the plastic pin through all of the parts to lock the rudder onto the boat. Make sure that the pin is all the way in.



2. Take the left side steering line and pass it through the hole in the bolt which holds the rudder together. Once the end comes through the top, tie a small knot at the end of the line to prevent it from falling back through the hole.



3. Take the right side steering line and pass it through the hole on the right side steering arm. As you did with the left steering line, tie a small knot at the end of the line to prevent it from falling back through the hole.



4. To fasten the steering lines, wrap the ends of the lines around the screws and tighten them down to clamp on the line.

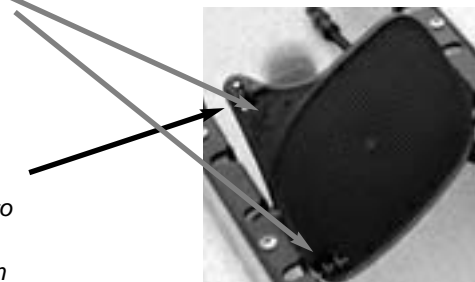


Installing the Steering Pedals

Important Note: Earlier models of the Quest have slightly different design elements for accepting this rudder package. See the pictures and descriptions below to find out which instructions you need to reference.

If you have two pulleys on the pedals...go to the current model pedal installation instructions below

If you have one pulley at the top of the pedal...go to the older model pedal installation instructions on the following page.



Current Model Pedal Installation Instructions

1. Run the lines that are coming out of the side of the cockpit through the pulley at the top of the pedal, down the back of the pedal, and through the pulley at the bottom of the pedal. Do this to the pedals on both sides of the kayak.



2. There is a screw that is threaded into a brass insert on the forward wall of the foot wells. Back the screw a few threads so that there is a small gap between the head of the screw and the kayak. Take the end of the steering line, pull it under the screw head and wrap it around the screw a couple of times. Do not tighten down the screw yet...there are a couple things that you need to look at.

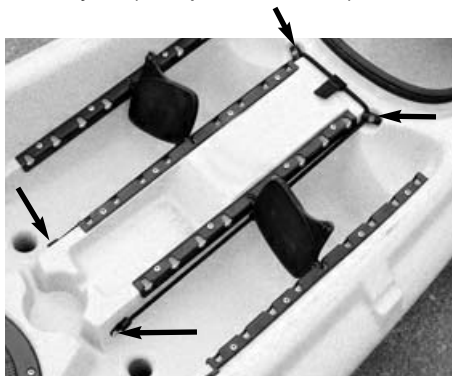


By pulling on each of the steering lines, you will notice that the rudder will turn left and right. Balance the pull on each line so that the rudder is centered. Also, the pedals should be tilting slightly forward, or to whatever is most comfortable for you. Once you have everything set just right, tighten down the screw on the footwell to hold the line in place. Now get inside the kayak to see if it is comfortable for you. The steering system can be fine tuned to fit all kayakers. Proceed to the section on **Up/Down Control Line Installation**.

Older Model Pedal Installation Instructions

The difference between older and current models of the Quest is the pedal design. New pedals are included with this kit for you to install.

1. Remove the old pedal assembly from your kayak by unscrewing all screws holding the pedal to the kayak (see picture below).



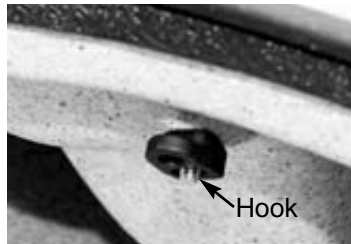
2. Install the new pedals to the locking tracks in the kayak. Make sure the the pullies on the pedal are facing forward and are located closest to the outer walls of the cockpit.



3. Install the ends of the pedal Bungee cord with the 1/2" Sheet Metal Screws.



4. Once the ends of the Bungee cord are attached, stretch the cord forward and install the "two holed fittings." You will want to make sure that the hole in the kayak is big enough for the screw. If the hole needs to be bigger, use the drill bit provided in this kit. Install the screw through the two holed fitting and through the boat. Use the Bungee hook as a nut for the screw to thread into (this hook also functions as an anchor to tie a lanyard to.)



5. Place the pedal in the forward-most position and adjust the angle so that the pedal is vertical. Using a marker, place an "X" on the kayak just in front of the bottom pulley on the pedals. This will be your center location to drill a hole for the attachment of the steering line. **If there is a brass insert in this location, you do not need to drill a hole.**



6. Insert the screw through the hole and place the washer and nut on the other side. Leave the screw a little loose so that you can run the steering line underneath the screw head. **If a brass inserts is located in this position, use the screw installed in the insert instead of the longer screw, nut and washer.**



6. Run the lines that are coming out of the side of the cockpit through the pulley at the top of the pedal, down the back of the pedal, and through the pulley at the bottom of the pedal. Do this to the pedals on both sides of the kayak.



By pulling on each of the steering lines, you will notice that the rudder will turn left and right. Balance the pull on each line so that the rudder is centered. Also, the pedals should be tilting slightly forward, or to whatever is most comfortable for you. Once you have everything set just right, tighten down the screw and nut on the footwell to hold the line in place. Now get inside the kayak to see if it is comfortable for you. The steering system can be fine tuned to fit all kayakers. Proceed to the section on ***Using the Rudder on the water.***

Up/ Down Control Line Installation

1. Drill a 3/8" hole on the right side of the boat approximately 25" from the stern. The hole should be located right in the groove of the sides and in line with a two-holed fitting that the rear cargo bungee passes through.



2. Press the well nut into the hole and thread the two holed fitting to the nut. As you keep threaded in the screw, the well nut expands and tightens around the 3/8" hole. It takes roughly 25-30 revolutions of the screw to completely tighten down. ***Make sure that the lines coming from the rudder are not twisted around each other before tightening down.***



3. Pull the Bungee cord section of the line forward so that it makes the lines straight without twisting around each other. Stretch the cord a little to remove any slack in the system and place the padeye over the Bungee to hold it to the hull. Use the two holes in the padeye as a guide to mark two holes for fastening. Drill a 3/16" hole in these two spots. ***The padeye should be located in a spot so that it doesn't interfere with the paddle when it is in the holder.***



4. Through bolt the padeye in this location by reaching in through the hatch and using the nuts and washers.

Rudder Up/ Down Operation

1. The Quest rudder system follows the same operation as most traditional kayak rudders. Simply pull on the rear most knot to make the rudder go through an up or down operation.



2. Jam the line into the cleat to hold the rudder in up or down position.



Using the Rudder on the Water

Once all your steering lines are trimmed, you are ready for the water. The rudder operation is very simple. By rolling the right pedal forward, you turn right. Rolling the left pedal forward will make you turn left. It typically requires very little turn in the rudder to help you maintain a straight course in a strong crosswind or current.

If it feels like your steering is somewhat loose, you probably need to re-tension your steering lines at the forward attachment points.