



INSTALLING THE DRIFTER™ RUDDER

In the kit:

(300163)	6 machine screws
(300036)	4 self-tapping screws
(300162)	6 well nuts
(300073)	13" shock cord
(300169)	2 handles (unassembled)
(300048)	1 strap eye
(300168)	2 rail assemblies
(300167)	1 rudder assembly (includes cotter pin & retraction line)
(300099)	1 clam cleat
(300097)	4 grommets
(300153)	2 lengths of tubing
(300084)	2 steering lines

You will need:

Phillips screwdriver
drill
3/8" drill bit
small block of wood
soapy water
Exacto knife/scissors
hammer

Please read the instructions thoroughly before installing the Drifter rudder. If you have questions, do not hesitate to contact Ocean Kayak (800-8-KAYAKS, 360-366-4003, service@oceankayak.com) or your nearest Ocean Kayak dealer for more information.

NOTE: A 6" screw-in hatch must be installed to attach the Drifter rudder. Because it is a tight fit inside the Drifter, cut the hole for the 6" hatch BEFORE installing the hatch itself. This will allow you extra room to reach inside the kayak. You may need an assistant with small hands or a tool to help you reach inside the Drifter to install tubing. Once the rudder system is completely attached, you may finish installing the 6" screw-in hatch.

Instructions

Drill tubing holes



- There are a total of 4 tubing holes through which the steering lines will run. You will find 2 notches at the rear of the foot well ledge, and 2 notches at the stern of the kayak. Use a 3/8" bit to drill straight into the center of the vertical surface of these notches.
- After the holes are drilled, use an Exacto knife to clean off any burrs. Place a rubber grommet into each of these holes.

Install tubing

Lubricate the tubing with soapy water and cut the ends of the tubing at an angle to make it easier to run through the grommets.

- Locate the grommets rear tubing holes. Begin feeding the tubing through the grommets and into the hull of the kayak. You may want to tilt the kayak onto the side you're working on to make sure the tubing is routed outside the scuppers.
- After pushing most of the tubing inside the kayak, reach in through the 6" hatch opening and route the tubing through the front grommets holes. (One on each tube on each side.) This is where the installation is tight—an assistant with small hands may be helpful.
- Make sure there is no slack in the tubing then trim it at both ends, leaving about 1 1/2" extending past each grommet.

Feed the steering lines

- Straighten each steering line and trim frayed ends. Beginning at the stern, gently feed one end of each steering line into the tubing until it emerges at the other end. If the line bunches, pull it out, straighten it, and re-insert it. Make sure there are several inches at either end to tie to the rudder and rail assemblies.

Install the steering rails



- Place a rail assembly on the ledge just above the foot wells so that the loop on the adjustment strap faces stern. Don't rest the assemblies against the surface you drilled—leave 2 or 3 inches for the tubing and steering line.
- Mark every other hole on the rail assembly—you will drill 3 holes here using a 3/8" bit.
- Insert a well nut into each of the drilled holes, then line up the rail assembly over the well nuts. Use machine screws to secure the rail assembly. Do not over tighten the screws, but make sure they are set deeply enough to allow free movement of the foot pedal within the track.

- Pull the foot pedal all the way back toward the stern. Use a bowline knot to tie the steering line to the adjustment strap. Do not adjust the foot pedals at this time.
- Repeat this process on the other side, making sure the rail assemblies line up with each other.

Attach the rudder assembly

- Locate the silver peg on the rudder assembly. Remove the cotter pin from the bottom. Set the peg into the nylon bushing inside the rudder mount. (Make sure to unwind any retraction line so it doesn't get caught.)
- Once the rudder assembly is mounted, re-insert the cotter pin. This will secure the assembly.

Attach the steering lines to the rudder



- Keeping even tension on the steering line, (you may want help with this) secure it to the rudder housing. Make sure the housing is straight as you tie the steering line. Trim excess line with scissors.

Secure the rudder retraction line



This is the trickiest part of the rudder installation. You may need to make tension adjustments so the rudder is neither too tight nor too loose for proper deployment and retraction. Keep the rudder assembly straight as you perform this installation—you may want help.

- Install the strap eye on the right side of the kayak where it is most comfortable for your hand to reach. Use 2 self-tapping screws to secure the strap eye.

- The rudder retraction line came installed on your rudder assembly. Tie one end of the line into one of the holes on the bottom half of an unassembled handle. Tie one end of the shock cord in the other hole of that same handle.
- Run the loose end of the shock cord through the strap eye. Tie the free end of the shock cord into the bottom portion of the other unassembled handle. Tie the remaining end of the retraction line into that handle as well.
- Snap the tops onto each of the handles. By pulling the handles, the shock cord will run back and forth through the strap eye to raise or lower the rudder blade.
- Install the clam cleat on the right side of the kayak, near the seat well, using the last 2 self-tapping screws. Install the clam cleat with the “C” facing forward. Place the retraction line in the cleat to secure the rudder blade in the upright position.

You may now sit inside the kayak to adjust the foot pedals using the adjustment strap. Check the steering lines and retraction lines (shorten if necessary) to ensure proper tension.

Using the rudder

To deploy the rudder, pull back on one handle. To retract the rudder, pull back on the other handle. To steer in a straight line, keep even pressure on the foot pedals. To trim left, press the left pedal. To trim right, press the right pedal. You may need to adjust the foot pedals, steering lines, or retraction lines for your comfort.

The rudder blade is operated by a cam that will bring the blade down very quickly and firmly. This will not damage your kayak.

Always keep the rudder up when launching or transporting your kayak to avoid damaging the blade or surrounding elements.