Rudder Installation Instructions

Thank you for purchasing a rudder kit for your Bluefin kayak. We hope you'll love it! See full instructions at pakayak.com/rudder



Tools needed:

3/16 inch drill bit 1/8 inch drill bit 1/4 inch drill bit 3/8 inch wrench #2 Phillips screwdriver

Drill

Pliers

Rudder Kit

Contents:



Rudder blade



Rudder bracket



Gudgeon



"V" block (for Bluefin 14 only)



Rudder lift line -13 feet



lines - 72 inches lines - 57 inches each



2 rudder steering 2 rudder steering each



Bungee cord



28" cable ties



R clip



4 rudder grommets



4 #0.5 s-biners



2 #1 s-biners



#2 s-biner



Pad eye hook



2 cable guides



sheet metal flat head screws



2 #8 x 1/2 inch 2 #10 x 3/4 inch 2 #10-32 x 3/4 sheet metal truss head screws (4 for Bluefin 14)



inch oval head machine screws



Install Rudder Gudgeon:





Locate rudder gudgeon centered on flat area on the back of Section 6 and flush with top of part. Using 1/8 inch drill bit, drill one hole in center of slotted hole and install truss screw to attach gudgeon. Be sure gudgeon is flush at top of part. Drill second hole using gudgeon as guide and install second screw.

Install "V" block (for Bluefin 14 only):





Line up template with dotted line on center line between raised areas on Section 6 as shown and drill 1/8-inch pilot holes. Attach "V" block with truss head screws.

Install steering lines:









Using 1/4 inch drill bit, drill hole in center of steering line locations on Section 6 hull. Install rubber grommet in each hole.

Install rudder steering lines by threading the 57 inch long lines through grommets. Tie overhand knot in each end after threading through grommet. Repeat with second line on other side. Attach #.5 s-biner on end that's outside of the boat.





Using 1/4 inch drill bit, make 2 holes in bulkhead of section 4 as shown. Be sure holes are next to the upper 2 clamps. Install 2 grommets. Thread the lines through the grommets and tie overhand knot at the bulkhead end. Attach #.5 s-biners in each. Do not tie the other end yet, you will attach them to the foot pedals later.





Drill 1/8 inch hole 1/2 inch below the white nylon screw that is on the side of the mate section inside of Section 4 as shown. Thread steering lines through cable guide and install cable guide with #8 1/2 inch flat head screw. Repeat on other side.





Attach 1 zip tie to the foot pedal from underside as shown and keeping end to underside of foot pedal. Make loop snug but leave enough room to attach an s-biner as shown. Cut off excess zip tie with pliers. Repeat on other side.

Install rudder and lift lines:





Remove cotter pin and metal sleeve from rudder post and discard. Remove cotter pin from black plastic rudder axle and set aside to reuse.

Install the rudder lift line by sliding equal amounts of line through holes in rudder blade as shown. Be careful to slide lines through side of rudder blade as shown.









Thread line nearest to the third hole back through hole to lock line on rudder. Wind lines on each side of the rudder and install in rudder bracket as shown. Be sure blade is facing correct position and the lines are on opposite sides of the blade and running in opposite directions around hub.





Install rudder hub and cotter pin to connect rudder blade to rudder bracket. Make sure pins on rudder axle are engaged on holes on rudder bracket.







Lead each line through square holes in rudder bracket being sure to keep each line on its correct side.









Using the template included drill a 3/16 inch hole by cockpit rim as shown. Install 1 10-32 x 3/4 inch oval head machine screw with lock nut to attach the pad eye. Align pad eye parallel to cockpit rim, drill second hole with pad eye as guide and attach with second screw and lock nut.





Connect lift lines to bungee cord by folding end of lift line back 5 inches and tie overhand knot on each end leaving a loop.

Connect lines by tying bungee cord to each loop making line ends with double hitch knot as shown.

Set line length to foot pedals:





Assemble your boat. Let steering lines in Section 6 fall into Section 5 during assembly. Connect rudder to gudgeon using R clip. Put rudder blade in "V" and connect rudder lift lines to pad eye using #2 s-biner.

Connect steering lines on Section 6 to rudder with s-biners. Reach into hatch on Section 5 and connect steering lines with the s-biners.

Adjust foot pedals to proper length for you to use with your legs slightly bent and lock pedals in place. Attach 2 #1 s-biners to the zip ties that you installed on the foot pedals and tie steering lines tightly to s-biners being sure to keep rudder in center of "V".

Be sure to test rudder completely before trimming excess line. You may want to leave extra line to allow for adjustment in the future.

That's it, you are done. For information on how to pack the rudder-installed kayak into the bag, please go to www.pakayak.com/rudder.

Thank you!



For Bluefin 14 only:



"V" block drill locations

Cut the rectangle template above along dashed lines, line up dotted line on center line of boat, as shown.

Mate Surface

Drill location

2.5 inches up from seam line and 10.5 inches from mate surface edge

Seam Line

