

# Rudder composite installation



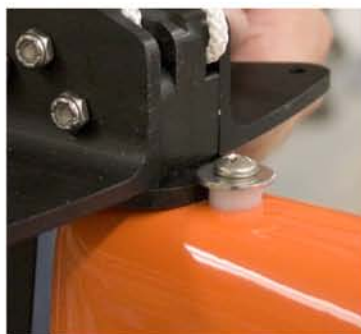
**1-Rudder Installation:**  
drill a hole with a 3/8 bit on the kayak stern.



**1.1-Install the rudder.**



**1.2-Place the plastic washer on the rudder; drill a hole with a 3/16 bit.**



**1.3-Install the plastic washer, the washer and the screw.**



**2- Drill 2 well-centered holes with a 13/64 bit (on the stern). Make threads with a 1/4-20 screwing die (optional);**



**2.1-Screw the brass fitting;**



**2.2-Drill 2 holes in the bulkhead with a 1/8 bit and refer to the seat to adjust the height of the holes;**



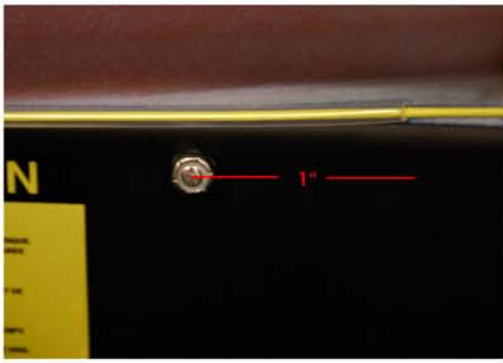
**2.3-Trim the nylon tubing 2 inches from one end using an angle cut. This will make it easier to feed the nylon tube through the holes;**



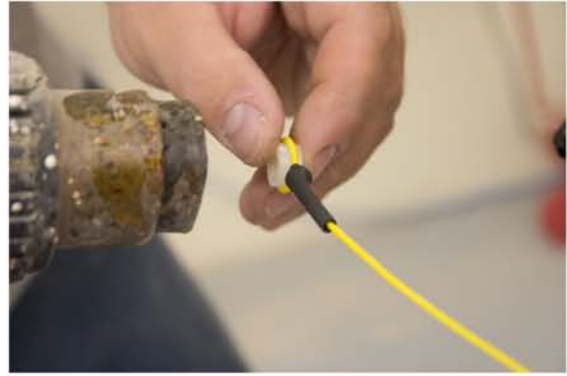
**2.4.1-Attach the nylon tubing with a thread to facilitate its exit;**



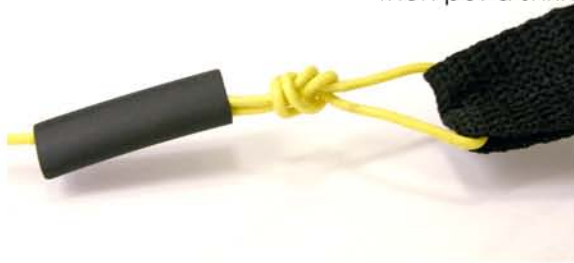
**2.5-From the inside of the kayak, pass the trimmed section inside the brass fitting. From the outside, pull on the tubing until the trimmed section is completely out of the boat. Cut the trimmed section, heat the end of the tubing with a lighter and use a star screwdriver to widen the opening. From the inside of the kayak, pull on the tubing to bring the widened section as close as possible to the brass fitting;**



**2.6-**Pass the surplus of tubing in the rear P-clip and then through the bulkhead all the way to the seat P-clip. Stretch the tubing to remove any slack. Allow the tubing to stick out 1 inch from the seat second front screw and cut.



**2.7-**Pass the Spectra rope through the tubing all the way to the opening closest to the rudder. Make a loop facing the delta holes, using the white washer, then put a shrink and heat.



**2.8-**Spectra rope installation: pass the Spectra rope through the strap buckle of the pedal, make a knot, put a shrink over the knot and heat.  
**Be careful with the Spectra rope because it is very sensitive to flame and direct heat.**

**2.8.1-**The strap buckle must be facing the slider end, in order for the rope to be the same length on both sides.



**2.9-**Attach the rope to the rudder with a 1/4 screw, white washer, washer and bolt.



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