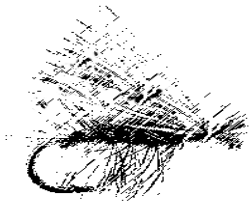
The Hook & Hackle Company

Roll Your Own and Tie One On!

Introductory

Fly Rod Building Instructions



BUILDING YOUR OWN CUSTOM ROD

To put it succinctly, "it ain't that hard!" It just isn't.

Our thought is this: If you're already fly fishing, then building your own rod is easy. For your first project, you'll need 6-8 hours of time total over 2-3 days. That's it! Oh, and you'll need to have a little patience too!

Before you start, you need to make sure you have the following items that are not included in this kit. They are:

- tape measure
- single edge razor blade or nail clippers
- 6" square aluminum foil
- denatured alcohol
- medium grit sandpaper
- plastic stirs or sticks
- small rattail file
- pencil, felt tip pen or crayon
- a couple of clean rags
- matches

You may be asking yourself, "can I get some other really cool and expensive stuff too?" Rod wrappers, drying motor, glue mixers and so on. The answer is yes . . . but not right now. We want your first rod building experience to be quick, clean, inexpensive, fuss free and most important of all, FUN! Read these instructions in their entirety before you actually begin construction!!

Here are the 6 basic steps for building your first rod:

1. Finding the spine (locating soft and stiff side of the blank)
2. Installing the grips and reel seat
3. Guide spacing
4. Guide wrapping
5. Finishing

Step 1 - Finding the Spine

This step confuses most beginners. Simply put, all blanks are tubular and hollow and due to the way they're manufactured, they have a stiff side called a spine which should be located in order to properly position the guides and reel seat. All you really need to do is put the butt section (of each part) on the tip of your shoe and lightly – did I say "lightly?" – press down on the tip until the blank finds a natural curve. Mark the convex, or outside, curve of the blank to help you align guides. You can place a piece of masking tape on the butt and tip of each section to aid this process. Simply put the mark on the tape.

Congratulations! You've found the spine and it wasn't that difficult at all. That's all there is to it! We'll discuss where the guides go in relation to the spine a little later in Step 4.

Step 2 - Installing Grips and Reel Seat

Our kits include a "preformed" grip, but it still must be reamed to fit snugly on the butt section of the blank above the reel seat. Pay attention to the taper of the blank when reaming, noting that the diameter decreases as you proceed "up" the blank. Some folks lightly sand the section to which the grip will be epoxied for better adhesion, but be careful not to damage the blank.

Now you install the reel seat. The first step is to install masking tape to be used as shims. Wrap approximately two thirds of the area to be covered by the reel seat, leaving 1/8-1/4" gaps between tape wraps. At this point, you may also apply masking tape to all wooden, threaded and hooded parts of the seat to keep these parts free of excess epoxy during the gluing process.

Before applying the epoxy, preassemble the grip and entire reel seat on the blank without epoxy Pay attention to how the hoods (parts that hold the reel in the seat) and any inlets line up. After the epoxy cures, it'll be difficult, if not impossible, to make adjustments.

With all parts laid out for assembly, mix the two-part epoxies in a small disposable cup or on aluminum foil with a small plastic stick. <u>You only</u>

have 10-20 minutes to work with the epoxy! Start by applying epoxy to the part of the blank to which the grip will be attached. Be careful to make sure the application of epoxy starts "below" the area where the top of the grip will permanently sit. Rotate the grip as you are moving it into location.

Next, apply more epoxy to the 'shimmed' section of the butt. Apply the epoxy over the masking tape and slide the reel seat up from the bottom of the blank. Gently rotate the reel seat into position. Note: if the reel seat sections are not preassembled, you may wish to epoxy these pieces prior to final attachment to the blank.

Step 3 - Guide Spacing

Below, you'll find the proper spacing of the guides. Note that all guide spacings are measured beginning from the tip section and that you'll need to assemble the blank prior to measuring for correct placement of guides. Also, different length rods have differing measurements and number of guides, so be certain to follow the chart applying to your particular blank. All spacing figures are measured in inches without tip top attached. Be sure to attach the tip top first!

Fly Rod 6'6" 4pc 7 Guides Plus Tip Top
Distance from Tip:
4 - 9 - 15 - 21 - 28 - 35.5 - 45
Guide Size: 2 x #1/0, 2 x #1, 2 x #2, 8mm stripper

Fly Rod 7'6" 4pc 8 Guides Plus Tip Top
Distance from Tip:
4.5 - 9.5 - 15.75 - 22.50 - 30 - 38.5 - 48.5 - 59
Guide Size: 3 x #1, 2 x #2, 2 x #3 10mm stripper

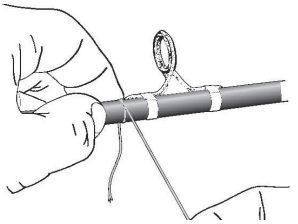
Fly Rods 9' 4-6 weight 4pc 10 Guides Plus Tip Top
Distance from Tip:
4 - 9 - 15.25 - 21.75 - 29 - 36.5 - 44.75 - 54 - 64.50 - 76
Guide Size: 3 x #1, 3 x #2, 2 x #2, 10mm & 12mm strippers

Fly Rods 9' 8 weight 4pc 10 Guides Plus Tip
Distance from Tip:
4 - 9 - 15.25 - 21.75 - 29 - 36.5 - 44.75 - 54 - 64.50 - 76

Guide Size: 4 x #3, 4 x #4, 2 x #2, 12mm & 16mm strippers

Step 4 - Guide Wrapping

Smooth any rough edges found on the guide feet to prevent damage to the blank and to smooth the area over which the thread is wound. You may do so with a small file or other grinding tool. Most of the guides we sell will be "pre-ground," but it is still good practice to check.



It is common for fly rod builders to place the guides on the "outside" or convex side of the blank. That's usually what I do, but know that this matter continues to be one of the great controversies among custom builders. (Some of the best known manufacturers that I've spoken with do just the opposite!)

For double foot snake guides, place tape securely on one foot to hold the guide in place while you begin wrapping the other foot. (Some folks tape both and leave room for wrapping, but I find this cumbersome. Know that you will be able to make adjustments to "perfectly" line up the guides after the wraps are finished as long as your first windings are generally in a straight line.

I start by putting my thread spool into a ceramic mug positioned about 18" in front of my work area, and then run the thread through a hard back book. You can adjust the tension on the thread by running it through lower sections of the book. We want the tension to be firm enough to securely hold the guide in place, and produce a nice smooth wrap. Too tight a wrap will stiffen the rod and should be avoided. You may wish to make a stand to hold the blank horizontally while you wrap. A simple method of doing this is to cut "V" notches into the sides of a medium sized box (i.e. - shoe box) and lay the blank across.

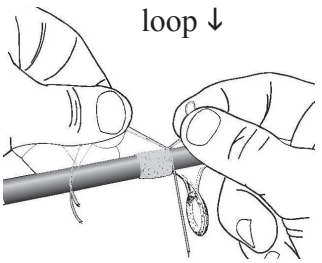
IMPORTANT:

- Before you start the wrap, cut a couple of 6" sections of thread that we'll need later!
- You can practice doing a wrap on a pen or pencil until you become reasonably confident.
- Maintain constant tension between the blank for secure, consistent and good looking results.

Now we've come to the fun part! Position the thread to start about 3/16" from the guide foot. Then, to begin your wrap, pull the thread over the blank. As you pull the tag end around, keep rotating the blank and cross over the thread itself. It is best to wrap toward the center of the guide and the tag end of the thread should be facing toward the center of the guide. After about 5-6 turns, the thread should be fully secured and you can trim the tag end. At first it may feel awkward, but after a bit of practice, you'll get the hang of it. Eventually, you guide the thread with one hand and turn the blank with the other. For a clean look, be careful not to overlap the thread.

As you practice, you'll find that gaps can be smoothed out with the rounded end of your razor blade or clippers. I usually use my fingers, but make sure they're clean to avoid getting oil from your skin onto the thread as it may affect the finish. When you're about 3/16" away from the point at which the guide foot meets the vetical part of the guide, stop and proceed to next part.

Remember those 6" pieces of thread I told you to set aside earlier? Take one and form a single loop, and place it opposite the guide with the loop facing in the direction you're wrapping. Now continue your wrap over the loop up to the point where the vertical part of the guide foot starts. While holding the thread in place with one hand, cut the thread, being certain to have a few inches of tag end.

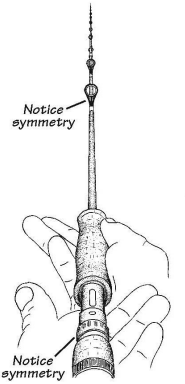


Grab the tag end you just cut and put it through the loop you just made. Pull the end of the loop and it will draw the tag end underneath the wrap and then out. This will secure your wrap and give it a smooth appearance. Trim the thread with a razor blade or clipper, as closely as you can without cutting into the wrap itself. For a professional look, you can burnish loose ends and fuzzies with a match, but be careful as the thread will easily burn. Try this on your practice wraps first!

In addition to wrapping the guides, you can use the above method for wrapping ferrules, hookkeepers and trim. Note that wrapping the female

part of the ferrule will add strength and stability to your finished rod. Wrap the ferrule to within 1/8" of the end. A 1/2" wrap on the ferrule will be fine, but you can add a bit more for heavier weight rods.

When you have completed your wrapping, you can carefully adjust the guide alignment. If you hold the rod up and look down the guides, you probably notice that they are not in a perfect straight line. Not to worry! You can move them a bit to the left or right in order to create better alighnment. Don't put too much pressure on the guide or the the wrap will unravel.



Step 5 - Finishing

Start by mixing EQUAL amounts of parts A & B of the finish. Use a small plastic cup and plastic stir to combine the separate parts. These should be stirred *slowly*, to avoid air bubbles, for approximately 2 minutes. Pour the mixture on a small section of tin foil in order to extend the amount of 'working time' with the finish before it begins to thicken.

Apply the finish with the brushes included in the kit, being careful to keep oils from your fingers away from the thread, which can cause 'blotchiness.'

While continuously turning the blank with one hand, apply finish to thread. We suggest that you overlap the finish onto the blank by 1/8" to provide a good seal. A careful application is the best insurance for good guide and thread adherance to the blank. If the finish becomes too thick, stop and mix a new batch.

IMPORTANT - Continue to turn the rod 1/2 turn about every 15 minutes, for 2 hours. This will create a more even finish for the self-leveling formula. Applying a second coat, after the first application has had at least 6-8 hours to dry, will create a sure bond and a nice thick look to the finish.

<u>24 Hour Cure Time</u>: Although the finish will 'set' in just a few hours, it will take 24 hours for the finish to cure properly. And after the wait,

there is only one thing left to do:

GO FISHIN!

Warranty Info: most of the rod blanks we sell are covered by a LIFETIME limited warranty. Please refer to the manufacturer for more infomation. or call us for assistance.

For more information on fly fishing, fly tying and rod building, visit www.hookhack.com or contact us directly: Phone: 1-412-476-8620 Fax: 1-412-476-8639 Toll Free: 1-800-552-8342. E-mail: ron@hookhack.com.

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Rod building drawings courtesy of Flex Coat