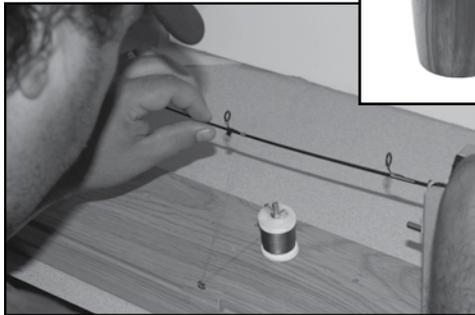
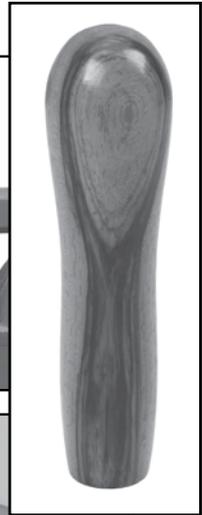
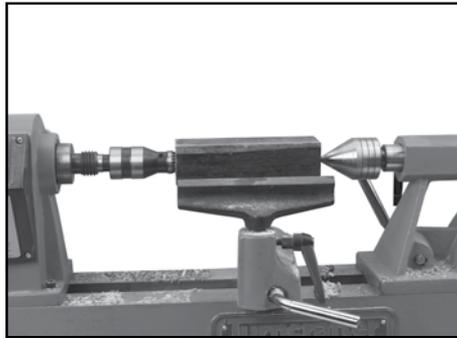
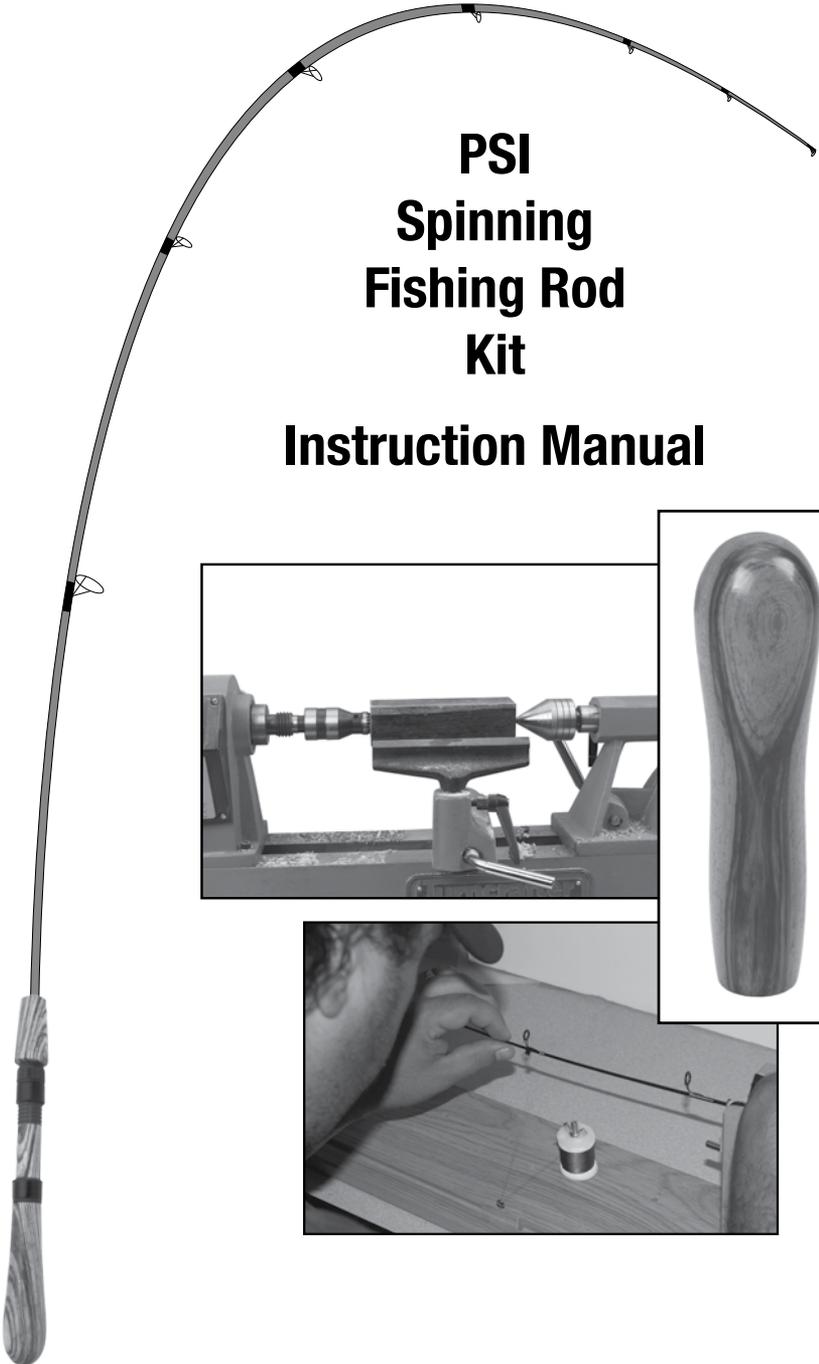


**PSI
Spinning
Fishing Rod
Kit**

Instruction Manual



Congratulations on your purchase of the PSI Custom Spinning Rod Kit

It is now possible to build your own hand crafted quality Spinning style fishing rod with custom wooden components. This project presumes you've purchased the PSI Rod Building Starter Kit (components listed below) and requires a Wood Lathe and certain lathe accessories. These instructions are specific to the PSI Spinning Rod. ***Please read entire instruction manual before beginning this project**

Starter Kit Components: (Refer to Illustration 1)

A- Batson Forecast® Rod Blanks - 2ea pcs totaling 6ft overall length

B- Reel Seat Skeleton - requires turning the reel seat insert to complete the reel seat

C1- 6 graduated sized line guides

C2- Tip Guide - fits onto the tip of the rod

D- 2 spools of Nylon Wrapping thread (100yds each) - decorates and secures the guides

E1 - 2 packets of Rod Finish - the final seal and finish over the Nylon thread wrap - **E2**- 4 epoxy glue brushes, **E3** - Hot glue secures the rod tip to the blank..

F- PSI Mid-Cure Epoxy 4-1/2oz - to assemble the handles and reel seat.

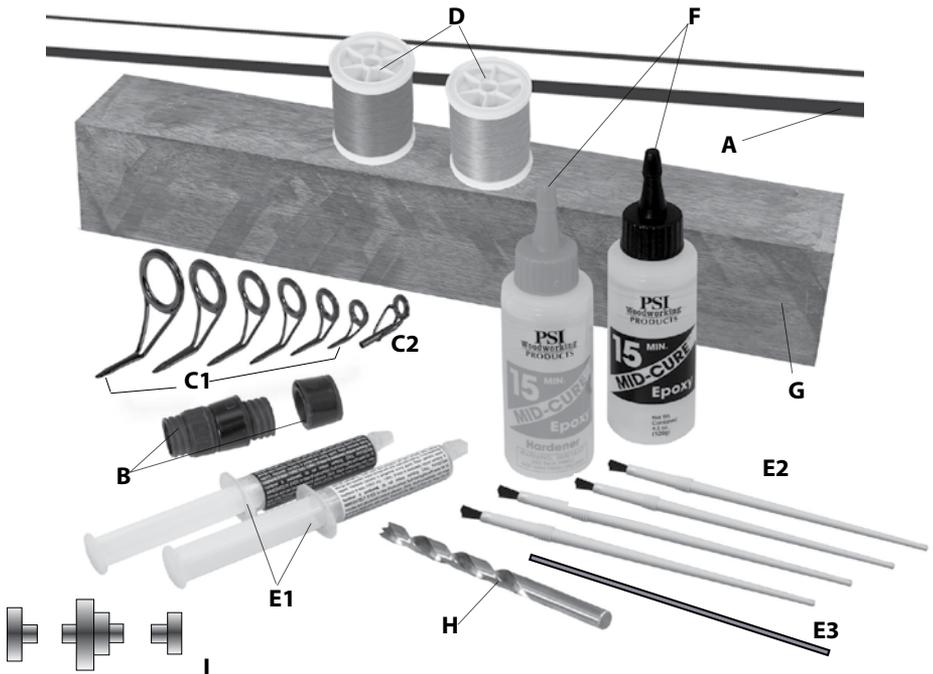
G- 1-1/2" x 1-1/2" x 12" Tropical exotic Wood Spindle blank.

H- 8 mm Drill Bit - drills the wood blank so they slide onto the rod blanks.

I - Bushings for sizing turned components.

Illustration 1

Starter Kit Components

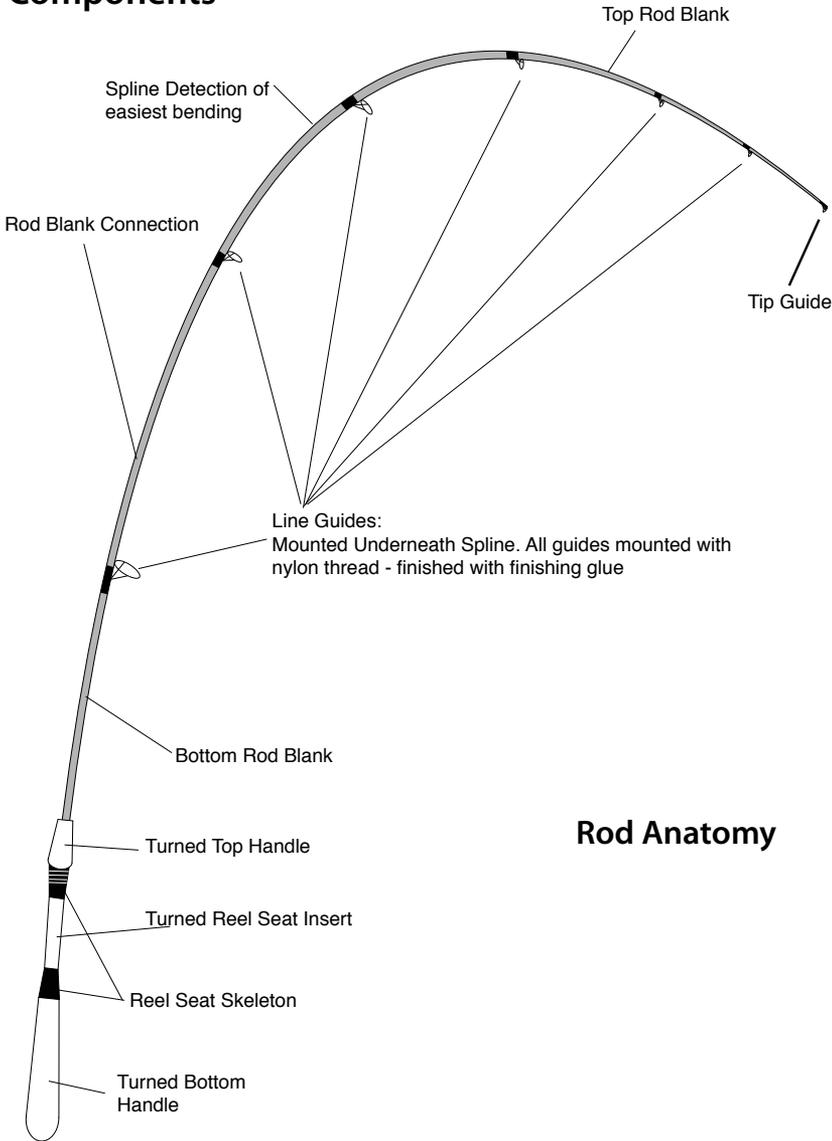


Batson™ Enterprises Limited Lifetime Warranty and Service Policy

Refer to the Warranty card that is included with your rod Blank.

This Warranty is serviced by Baston Enterprises directly. Do not contact PSI or Penn State Industries for issues regarding warranty service or replacements.

Illustration 2 Custom Spinning Rod Components



Step 1 - Splining

Splining (illustration 2) is finding the best bend on your rod. To determine where the spline is on your blank, lay the largest end of your rod blank on a smooth hard surface and bend it in an arc with the tip facing up. Roll the blank while bent, you can determine which way the blank bends the easiest. The spline is the upper side of the rod when bending downward. Mark the spline with line on a piece of masking tape on both rod sections.

Step 2 - Turning the Grips & Reel Seat Insert

Required Turning Accessories:

- Lathe with pen mandrel #PKM-FLC or similar.
- 60° live tailstock center #LCENTLT2 or similar.
- Lathe Spindle Gouge #LX320 or similar.
- Graduated Sand Paper 120 to 600 grit

- Mandrel Bushings #RKITBU (Supplied)
- 8mm Drill Bit #PKPARK-8MM (Supplied)
- Wood Blanks:
 Bottom Handle: 6" x 1-1/2" x 1-1/2" dia
 Reel Seat Insert: 4" x 7/8" x 7/8" dia
 Top Handle: 2-1/2" x 1-1/4" x 1-1/4" dia

Note: all pieces can be made from a single blank 12" x 1-1/2" x 1-1/2" (Supplied)

Preparing the Blanks for the bottom handle and reel seat insert:

- Select a spindle blank (1-1/2" x 1-1/2" x 12"). Cut into 3 sections: Top Handle (2"), Reel Seat Insert (3-5/8") and Bottom Handle (6 + "Long).
- Drill a 8mm hole through the center of the top handle and reel seat insert. For the bottom handle, drill a 3" deep hole.
- Test the holes with the rod. If too tight, ream out the hole with a round file or re-drill.

Turning the Blanks for the top handle and reel seat:

- Mount the bushings and wood for reel seat insert and top handle according to diagram 3-a.
- Turn the top handle blank down to match the bushings. Sand and finish the wood.
- Turn the reel seat insert as shown. Note that the bushings only indicate the tenon diameter - Measure the center section to 11/16". Make a gauge (from thin stock) as shown in diagram 3-c or use calipers for sizing the center section.
- For the bottom handle, mount the blank between centers (see diagram 3-b).
- Turn the wood to the desired profile. Part off handle at (P).
- Sand and finish the wood.

Diagram 3-a: Top Handle & Reel Seat Insert

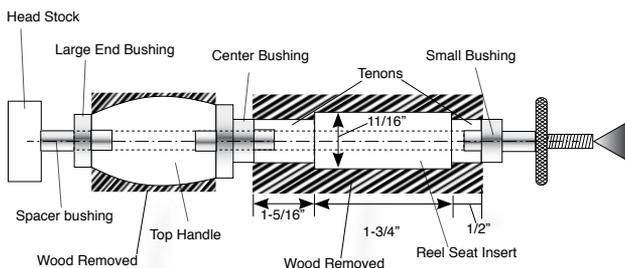


Diagram 3-c: Reel Seat Insert Sizing Gauge

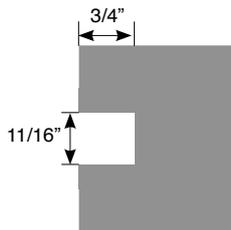


Diagram 3-b: Bottom Handle

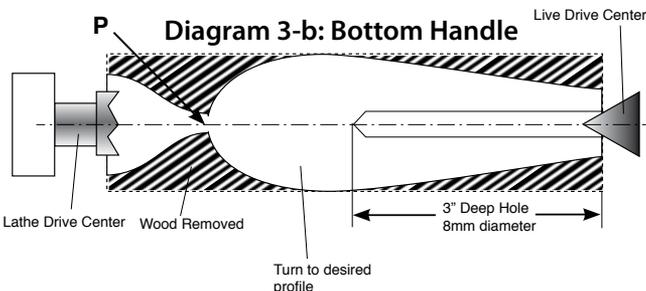
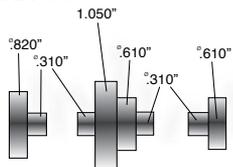


Diagram 3-d: Bushings #RKITBU



Step 3 - Handle & Reel Seat Assembly:

Dry assemble the Bottom handle (slide onto bottom), reel seat insert and top handle (slide on from top) on the rod as shown in diagram 4. If the holes are too small for the handles to fit, ream or re-drill the holes with the 8mm bit until the parts slide easily onto the rod. Note that the reel seat insert and top handle will assemble more easily because the rod is narrower at their position on the rod. Mark the location of the end of the top handle with the wax pencil and slide top handle & reel seat insert assembly off the rod.

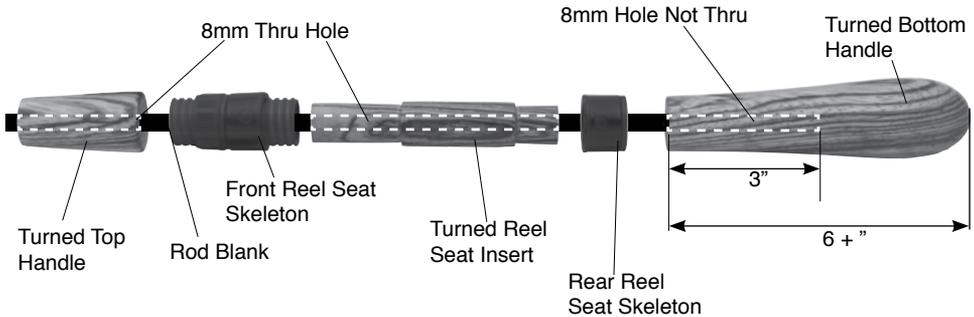
Mix equal parts of the 2 part Mid-Cure Epoxy on wax paper or silver foil. Apply glue along the rod up to the mark at the end of the top handle. Use a generous amount if the parts were very loose on the rod. Slide the reel seat assembly then the top handle down from the tip of the rod to seat firmly on the bottom handle. Rotate the components to spread the glue. Align the reel seat opposite the spline indicator to take best advantage of the rod bending properties. Apply a sufficient amount of epoxy along the end of the rod for the bottom handle*. Slide on the handle and rotate to spread the glue inside the hole.

*** NOTE:** The optimal temperature for gluing epoxy and rod finish is between 50° F and 74° F. If using a drill for finish drying - do not glue the bottom handle yet. It will be necessary to chuck the rod blank into the drill chuck to rotate for drying.

Melt the hot glue with a lighter and apply to the rod tip - slide on the tip guide and position the tip to align under the bottom of the spline.

Put aside for 1/2 hour to allow the glue to set-up.

Diagram 4: Handle and Reel Seat Assembly



Step 4 - Guide Spacing:

Follow the following guide spacing chart below. When measuring the rod, always start from the tip and make certain the sections are securely fastened. Space the guides from the tip going backwards. Mark each position with the white wax pencil.

Smallest to Largest Guides – distance from tip

- | | |
|-----------|----------|
| 1. 4.5" | 4. 22.5" |
| 2. 9.75" | 5. 31.0" |
| 3. 15.75" | 6. 40" |



Step 5 - Guide Wrapping:

Use sandpaper to smooth any rough edges of your guide feet. Cut 6 thin pieces of masking tape about 1/4" x 2" long. Position the 6 guides from smallest to largest. Start with the smallest guide positioned nearest the tip. **Guides will be positioned opposite (under) the spline with the foot away from the tip of the rod.** Position and tape each guide in sequence (smallest to largest) starting near the tip (See step 4, pg 5).

Position the guide ring over the your guide mark. Tape the foot as close to the rings as possible. (step 5-A below)

For easiest wrapping, use the Batson Forecast® Hand Rod Wrapper to position your rod for easy wrapping (Diagram 6 A). In the absence of the Wrapper, an accepted wrapping method for beginning rod builders is to brace the blank within a cardboard box with the top cut off with a "V" shaped notch cut into the left and right sides.



Diagram 6 A - Hand Wrapper:

Prepare two 6" lengths of extra thread. Refer to illustration 5-A through 5-E for wrapping and tying the steps below:

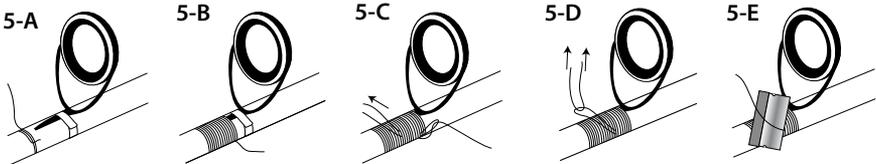
Step 5-A. Start the wrap at least 1/8" ahead of the guide foot by forming an X and winding the thread around the blank and over its own loose end.

Step 5-B. After about 6 turns, trim the free end close to the wrap. Continue winding around the rod up to the guide foot keeping tension on the thread.

Step 5-C. Double a 6" length of loose thread and lay the looped portion onto the rod with the loop extending towards the guide ring.

Step 5-D. Continue the wrap (over the loop) up to the guide foot. Holding the thread tight to the rod, cut the thread with about 4" from the end of the wrap. Insert the free end of the thread thru the loop. Pull the 6" loop - pulling the free end under and thru the wrap.

Step 5-E. The free end of the wrapping thread will now be sticking out of the wrap. Pull it tight and cut it close with a razor blade. Smooth the wrap with your fingernail.



IMPORTANT – Keep Thread Clean: Minimize the amount of hand contact with the thread once you start the wrapping process. This will reduce the possibility of contamination from skin oils. Use a Popsicle stick or the butt end of a razor blade and push the thread together to make sure there are no gaps in the thread. This will minimize any fraying of the thread and insure a clean and tight wrap. After all the guides are in place, you can sight down the rod and adjust the guide alignment by moving them slightly to the right or left. Use a lighter to remelt the glue on the rod tip to adjust the tip alignment if necessary. **The tip, six line guides, and the reel seat must align perfectly on the opposite side of the spline indicator.**

Wrap the Ferrule (the female end of the rod blank sections) the same as the guides. Wrap about 1/8" from the end. A properly wrapped ferrule adds strength and stability to the finished rod. You can wrap different colors in different places along the rod (i.e. by the top handle, by the tip guide, etc) for decorative effects.

Step 6 - Finishing:

Be sure your hands are clean before applying the finish. Any oils from your skin may cause the finish to not properly adhere and cause a blemish. Mix equal parts of Rod Finish (parts A and B about 3cc) on a piece of silver foil (or wax paper). Mix thoroughly (use stirring rod included) stir slowly to avoid bubbles. Let the mixed solution sit until solution is clear. Refer to glue kit instructions for more information.

Use a nylon brush to apply the first finish. Rotate the Rod (for best results use the Forcast™ Drying Machine Diagram 6-B - or you can also use a hand drill set at a about 30 rpm, Diagram 7). As the rod rotates, apply the Rod Finish to all of the threaded parts. Make certain you are turning the blank to insure complete application over the entire surface. Incomplete application may cause rusting of the guide or unraveling of the thread over time. This first coat will set into the thread. The finish is self-leveling and it needs to be turned a quarter turn approximately every five minutes until curing begins usually 15 minutes to 1.5 hours after the first application. If you fail to do this, the finish will drop to the low side of the rod. Use the drying machine or power drill to rotate automatically.

If desired apply a 2nd coat in a similar fashion with the second packet of Rod finish. Allow 24 hours for the finish to properly cure. The glue brushes will clean up with paint thinner.

Enjoy fishing with your hand made - custom built fishing rod !!

NOTE: *The optimal temperature for gluing epoxy and rod finish is between 50° F and 74° F.

Diagram 6-B: Drying Machine & Hand Wrapper

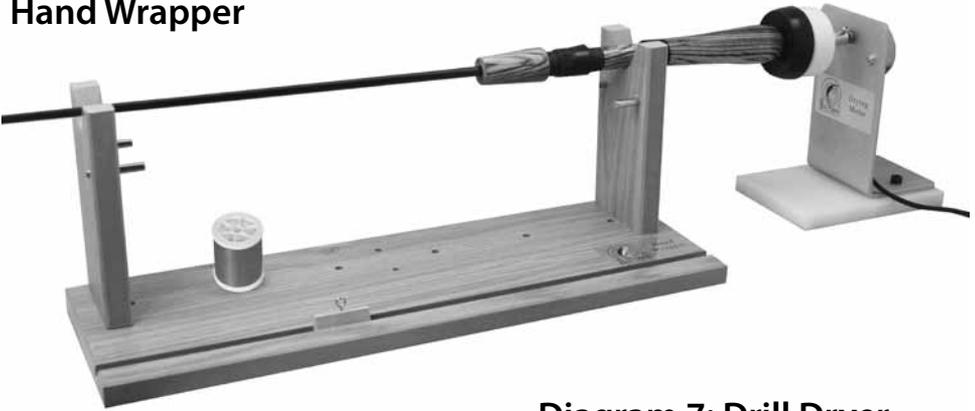
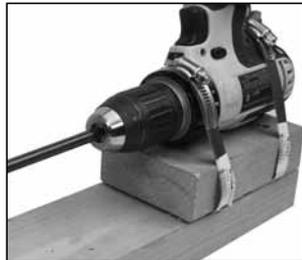


Diagram 7: Drill Dryer



NOTE: if using the drill dryer, remove the rod's bottom handle. Then chuck the end of the rod into the drill. After drying - use 2 part epoxy to glue to bottom handle onto the end of the rod.



