

# Archery Twist Pen Kit

## Kit Features:

- Pyramid Style Bow Clip
- Stylized Bodkin Tip and Upper Barrel "Quiver" design.
- Easy to Turn with Straight Tubes
- Minimal Parts--easy to assemble
- Available in multiple finishes
- Overall Length: 5-25/32"

## Required Accessories:

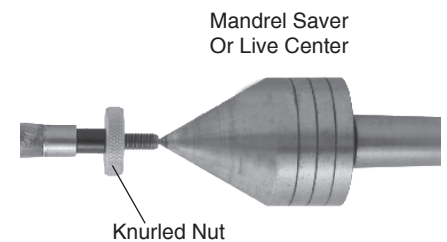
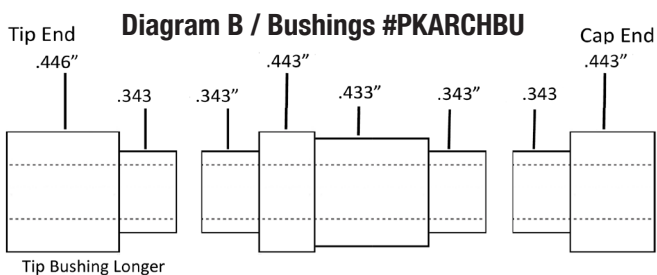
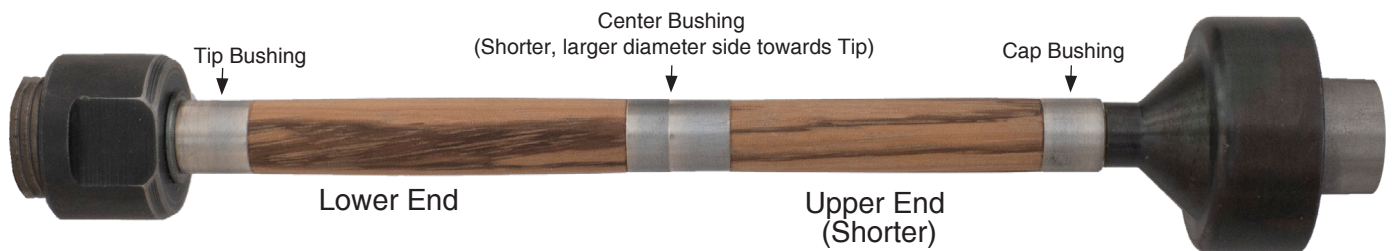
- 7mm Pen Mandrel
- Drill Bit: #PK-38BP for Wood, #PKEXEC-38 for Plastic
- Bushing Set( 3pc): #PKARCHBU
- Barrel Trimming: #PKTRIM38 or 3/8" sleeve from PKTRIMSET.
- Live Tailstock or Mandrel Saver
- 2 part Epoxy or Thick CA (Cyanoacrylate) Glue
- Pen Blank Minimum Size: 5/8" x 5/8" x 4-5/16"L

## Preparing the Blank:

- Cut blanks to the length of the tubes, adding 1/16" to each for squaring off.
- Drill 3/8" hole lengthwise through the blank.
- Spread glue over tube, insert the tube into the blank with a twisting motion to spread the glue evenly inside.
- Center the tube lengthwise inside the blank.
- When the glue is dry, square the ends of the blanks, making sure the trimmed ends are 90° to the tube. Use a 3/8" barrel trimmer, or a pen blank squaring jig with a 3/8" sleeve on a disc sander. Take the excess material down flush to the ends of the tubes. Do not trim past the end of the tube since this may interfere with the operation of the mechanism and assembly. Use a barrel trimmer to clean the inside of the tube.



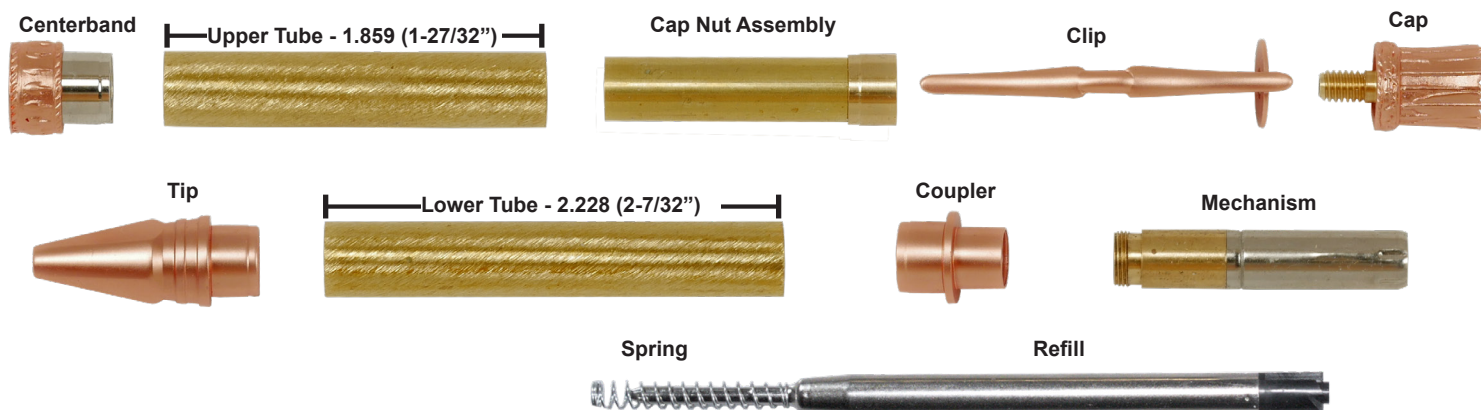
## DIAGRAM A / TURNING THE BLANKS



## Turning the Blank

- Mount the bushings and blanks according to diagram A.
- If not using Mandrel Saver, extra spacer bushings will have to be added past the start of the mandrel threads. Thread on the knurled nut and hand tighten to hold all components in place.
- Slide the Tailstock up snugly against the Mandrel shaft, inserting the live center point into the Mandrel dimple. Lock Tailstock.
- Hand tighten the quill adjustment on the tailstock to steady the mandrel. Do not over tighten, it could damage mandrel shaft.
- When using Mandrel Saver, there is no need for extra spacer bushings or the knurled nut. Slide tailstock directly against pen bushings and tighten until blank and bushings are secure.
- Using sharp tools, turn the blank down close to the bushing diameter. Turn the barrel straight or to a profile of your choice.
- Sand the blank down to be flush with the bushings, gradually increasing sandpaper grits.
- Finish the barrel using your choice of polish. Allow sufficient time for polish to cure—refer to manufacturer's polish instructions.

## DIAGRAM C / PARTS LAYOUT



## Assembly

- Press Cap Nut assembly, tube side first, into either end of Upper Barrel.
- Press Center band into open, opposite end of Upper Barrel.
- Thread Cap through Clip and into Cap Nut Assembly
- Press Tip into either end of Lower Barrel.
- Press Coupler into opposite, open end of Lower Barrel.
- Slide Spring -narrow side first- onto Refill shaft.
- Insert Refill into the Lower Barrel through the Coupler.
- Thread Mechanism over back of Refill and into Coupler.
- Slide Upper Barrel over the back of the Mechanism.
- Twist the two halves clockwise and counter-clockwise to extend and retract Refill.
- To replace Refill, unthread the upper barrel (with mechanism) from Coupler. Remember to switch Spring to new Refill.

