American Beauty Twist Pen Kit

Kit Features:
• Cap Proudly Displays the American Flag
• Long Barrel Encourages Creativity
• Easy to Turn With Straight Tube
• Minimal Parts--easy to assemble
• Available in multiple finishes
• Overall Length: 5-9/32”
• USES REFILL: #PKPARK-R5

Required Accessories:
• 7mm Pen Mandrel
• Drill Bit: #PKEXEC-38
• Bushing Set( 2 pc):  #PKABBU
• Barrel Trimming set:  #PKTRIM38  or 3/8” sleeve from #PKTRIMSET.
• Live Tailstock or Mandrel Saver
• 2 part Epoxy or Thick CA (Cyanoacrylate) Glue
• Pen Blank Minimum Size: 3/4” x 3/4” x 3-1/16”

Preparing the Blank:
• Cut blank to the to the length of the tube, adding 1/16” 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 blank, 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.
Assembly

- Layout parts according to diagram A
- Use the pressing block (see below for details) to press the cap into either end of the barrel*.
- Slide Spring onto Refill, narrow end first -- spring should grip refill shaft.
- Insert refill into the open end of Front End Assembly
- Thread Mechanism onto open end of Front End Assembly, over Refill.
- Insert Front End into open end of Barrel, push in by hand until it is fully seated and Cap Assembly is gripping Mechanism.
- To extend and retract pen tip, twist the tip clockwise and counterclockwise.
- To change the refill, remove front end assembly from Barrel and unscrew mechanism.

Turning the Blank

- Mount the bushings and blanks according to diagram B.
- 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 the mandrel shaft.
- When using Mandrel Saver, there is no need for extra spacer bushings or the knurled nut. Slide tailstock directly against 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 the polish to cure—refer to polish instructions.

Diagram C / Bushings #PKABBU

- Take a scrap block of wood (about 1/2” x 3/4” x 3/4”).
- Drill a hole through the center of the piece (13/32” preferred - can be 7/16”).
- Cut a slot (approx 3/16” wide) from one edge to the hole.

*Pressing Block

- Drill a hole through the center of the piece (13/32” preferred - can be 7/16”).
- Cut a slot (approx 3/16” wide) from one edge to the hole.
- Press against upper bead.