# FIDGET ROLLERBALL PEN KIT

#### Kit Features

- Ball-Bearing Spinning End Cap
- Clean Design and Maximum Creative Space
- Easy to Turn
- Addictive
- Posting Cap
- Minimal Parts--easy to assemble
- Available in multiple finishes
- Overall Length: 5-5/16"

#### **Required Accessories**

- 7mm Pen Mandrel
- Drill Bit: #PK-38BP for Wood, #PKEXEC-38 for Plastic
- Bushing Set(2pc): #PKFIDBU
- 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: 3/4" x 3/4" x 3-1/4"L



# **Preparing the Blank:**

- Cut blank 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 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" trim sleeveon 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 assembly and the operation of the mechanism. Use a barrel trimmer to clean the inside of the tube.

#### **DIAGRAM B / TURNING THE BLANK**

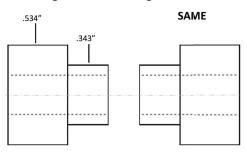


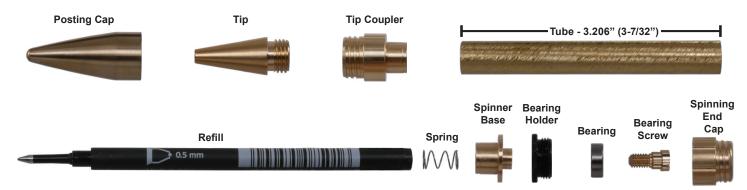
#### **Turning the Blank:**

- Mount the bushings and blanks according to diagram B.
- When using Mandrel Saver, there is no need for extra spacer bushings or the knurled nut. Slide and lock tailstock directly against bushings and tighten quill until blank and bushings are secure.
- To Used Knurled Nut setup (right), add spacer bushings unitl past the threads on the end of the Mandrel Shaft.
- 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 and hand tighten the quill adjustment with wheel to steady the mandrel. Do not over-tighten, it could damage mandrel shaft.
- 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.

# Add spacer bushings past the threads Live Center

Diagram C / Bushing #PKFIDBU



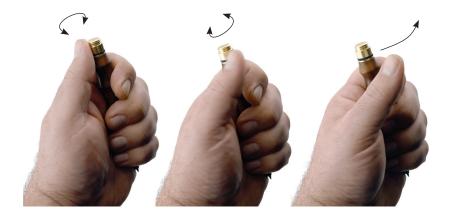


### A. Assembly:

- · Press Tip Coupler into either end of Barrel.
- Press Spinner Base into opposite, open end of Barrel.
- Drop Spring into opening in Tip Coupler.
- Insert Refill, flat side first through the opening in Tip Coupler.
- Thread Tip over Refill into Tip Coupler.
- Place Bearing Holder onto Spinner Base with wide opening facing out.
- Place Bearing inside the wide opening of Bearing Holder.
- Thread Screw through the Bearing into Spinner Base. Tighten the screw with flathead screwdriver.
- Hold the Knurled flange on Bearing Holder and thread the Spinning Cap onto it, over the Bearing and Screw to seat securely on the flange of the bearing holder.
- The Posting Cap can be posted by threading onto the Spin Cap when writing and over the Tip when pen is not in use.
- Flick the ridged side of the Spinning cap to start it spinning. Spinner can be used with or without Posting Cap
- posted.
- To Change Refill simply unscrew the Tip and replace.

#### **B.** To SPin:

Flick your thumb on spinning end cap



# C. Challenge:

Spin the spinning cap counter clockwise (easier with left hand) and try to have the posting cap self-thread onto the spinning end cap.



