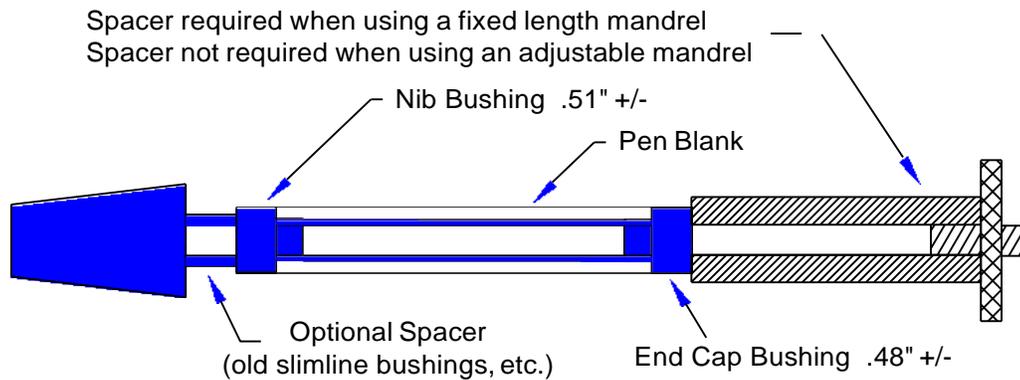


# Instructions for the Gran Torino Rollerball Pen

Revised October 29, 2015



Bushing: AZSB-1 or AZGT-1A  
 they are the same bushing  
 just different names  
 Drills needed: 10.5mm

Blank size: 3/4" x 3/4" x 3 1/2" long

1. Install the optional spacer then the tip or nib bushing (the one that is slightly larger), then the pen blank, cap bushing, (the smaller bushing), optional spacer, and thumb nut. Lightly tighten the brass thumb nut (do NOT over tighten). Carefully slide the tailstock forward with a 60° live center installed up to the concave center of the mandrel and secure. Do not over tighten or apply excessive forward thrust to the mandrel as damage may result to the mandrel! Do not over tighten the brass thumb nut as this can cause the mandrel to bend and cause your pen blanks to come out oval. A spacer may be installed to give you more room between the thumb nut and the last bushing.
2. Turn the barrel blank leaving the wood a little oversize. Sand the pen blank down to size and apply the finish of your choice.
3. Assembly:
  - A. Lay out the parts of this kit so that you know the order in which they will be assembled (see below).
  - B. Press fit the THREADED END CAP into one end of the brass tube. Slip the TRIM RING over the back end of the NIB COUPLER. Press fit the NIB COUPLER into the other end of the brass tube ( note the orientation of the trim ring). Be careful not to over-press the nib assembly because you will damage the trim ring.
  - C: Insert the ROLLERBALL REFILL into the pen assembly and screw the NIB into the COUPLER.

