#### Manager Rollerball/Fountain Pen Kits Assembly Instructions

## **Required Accessories:**

- 7mm Pen Mandrel
- 3-piece Bushing Set
- 27/64" Drill Bit
- Universal Barrel Trimmer or sander
- Sandpaper/Finish
- Glue (Thick CA or Epoxy)

### Preparing the Blank

- Prepare a master blank of at least 3/4" square.
- Cut two sections to the length of each tube. (Add 1/16" for trimming) Mark the centre of each blank.
- Drill a centred hole lengthwise through each blank.
- Upper blank (shorter tube)—drill a 27/64" hole through.
- Lower blank (longer tube)—drill a 27/64" hole through.
- Glue each tube in the proper blank. Spread the glue over each tube. Insert the tube into the blank with a twisting motion to spread the glue evenly inside. Centre each tube lengthwise inside the blank.
- When glue dries, square the ends of each blank.

## Turning the Blank

- Mount the bushings and blanks according the diagram
- 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 centre point into the mandrel dimple, lock in place.
- Hand tighten the quill adjustment to firm up the mandrel. (DO NOT overtighten, it could damage the mandrel.
- 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 the sandpaper grits.
- Finish the barrel with your choice of polish. Allow sufficient time for the polish to cure.

# Assembly

NOTE: Line up the components according to the diagram.

- Press the cap/clip assembly to one end of the upper tube (shorter tube).
- Press the centre band into the opposite end of the upper tube.
- Press the cap the end of the lower tube.
- Press the nib coupler into the opposite end of the lower tube.
- **Fountain**---Attach the ink converter to the back of the fountain nib, then thread the fountain nib into the nib coupler.
- Rollerball--- Insert the spring then the ink refill into the lower tube. Thread the rollerball nib into the nib coupler.



Ink converter

Refill

Cap/Clip Assembl

Rollerball nib