## ITEM #PKGEMPEN & #PKGEMPCL

# **GEMINI PEN AND PENCIL KITS**

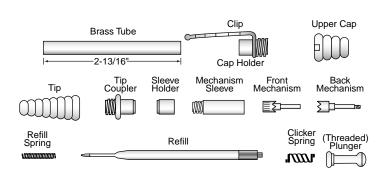
#### **KIT FEATURES**

- 24 karat gold plated brass parts with epoxy coating
- Contemporary design components
- Both writing instruments are constructed for easy one hand click operation.
- Both products are similarly designed to match as a pen and pencil set.
- Pen uses a Parker® style ball point refill #PK-PARKR5
- Pencil mechanism uses 0.7 mm lead.
- Overall length (each) 5-5/8"

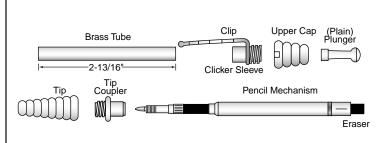
#### **REQUIRED ACCESSORIES**

- 7 mm, long mandrel
- 2 piece bushing set #PKGEMBU
- 3/8" drill bit #PKEXEC-3/8
- Universal pen blank squaring jig #PKSQUARE (optional)
- 2 part epoxy glue, polyurethane glue or insta cure (cyanoacrylate) glue

## **Diagram A - Gemini Pen Parts List**



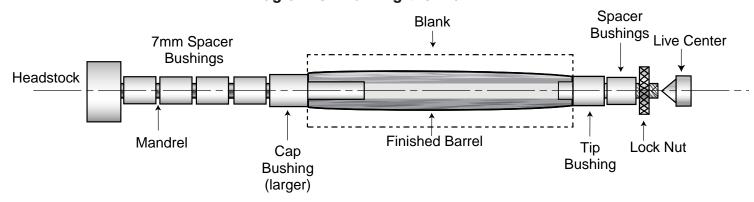
### **Diagram B - Gemini Pencil Parts List**



#### PREPARING THE BLANK

- Cut 3/4" to 5/8" square blanks to the length of the brass tube (add 1/16" for squaring off).
- Drill a 3/8" center hole lengthwise through the blank.
- Spread the glue over the tube. Insert the tube into the blank with a twisting motion to spread the glue evenly inside. Center the tube lengthwise in the blank.
- When glue dries square the ends of the blank. Use a universal pen blank squaring jig or a belt/disc sander to square the ends. Take the wood down flush to the brass tube.

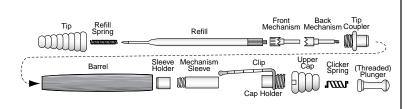
#### **Diagram C - Turning the Blank**



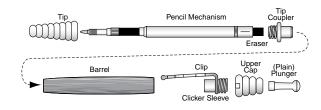
#### **TURNING THE BLANK**

- Place three or four standard 7mm bushings onto the mandrel, followed by the cap bushing wide end first, then the wood blank and lastly the tip bushing (shorter) narrow end first. Use additional spacer bushings to fill the space on the shaft up to the threads.
- Thread on the lock nut and hand tighten to hold all items in place.
- Slide the tail stock snug to the mandrel shaft, (do not over tighten, it could damage the mandrel). Lock in place.
- Turn the wood down, flush with the bushings using lathe tools and gradual higher grits of sandpaper.
- Sand the wood and finish with friction polish or use PSI clear hi-gloss project finish #HGPF off the lathe for a brilliant finish.

## **Diagram D - Gemini Pen Assembly**



## **Diagram E - Gemini Pencil Assembly**



#### **ASSEMBLY TIPS**

- Line up finished parts according to Diagram D or E.
- To press parts in, use a pen press or a vice with covered jaws. Press parts slowly to avoid scratching and damaging the gold plated parts.

#### **ASSEMBLY - PEN**

- Insert the tip coupler into the narrow end of the barrel and press in place.
- Insert the sleeve holder into the opening at the opposite side, recessed end in first. Use the cap bushing's long end extension to push the sleeve holder inside. Push it to the shoulder of the bushing.
- Insert the mechanism sleeve, threaded end first, into the tube. Thread into the sleeve holder inside.
- Press the cap holder/clip assembly over the extended mechanism sleeve and into the barrel.
- Place the upper cap over the thread of the cap holder. Screw it
  on until it meets the clip. Align the slot with the clip (to avoid
  scratching the wood, use paper under the ball). Push the clip
  up towards the slot while screwing the cap onto the thread. Do
  this until the entire cap covers the clip in the slot.
- Mount the front mechanism stem into the back mechanism.
   Insert into this assembly into the barrel opening at the tip (threaded end in first). Push in with the back end of the refill.
   When thread is exposed through the opposite end, insert the clicker spring and thread the plunger inside the upper cap.
- Leave the refill inside. Slide the refill spring over the exposed end. Position the tip and thread over the refill.
- The pen is ready to operate by clicking on the plunger to extend or retract the refill tip.

#### **ASSEMBLY - PENCIL**

- Insert the tip coupler into the narrow end of the barrel and press in place.
- Insert the clip/clicker sleeve assembly into the opposite end of the barrel and press in place.
- Place the upper cap over the thread. Align the slot over the clip (to avoid scratching the wood, use paper under the ball).
   Push the clip up towards the slot while threading the cap over until the entire cap covers the wire clip in the slot.
- Insert the pencil mechanism into the tip coupler, and screw in.
- Slide tip with pencil mechanism into the tip coupler end of the barrel, eraser end first, and screw in place.
- Push the plunger snug over the eraser end onto the pencil mechanism.
- The pencil is now ready to operate. Repeatedly push gently on the plunger until the lead advances through the tip.
- If the lead is showing through, but it will not advance further, pull the tip of the lead out. A small broken piece will come out – continue plunging for another lead tip to follow.
- To add additional lead, pull the plunger and the eraser out.
   Drop a new 0.7 mm lead (available at office supply outlets) in the opening, replace the eraser. With a few clicks, the lead will appear and will continue to feed.

## **Diagram F - Bushing Set #PKGEMBU**

