

# Instructions for Desk Pen and Funnel Kit PKFUNSET (set) PKFUNPEN (pen only)

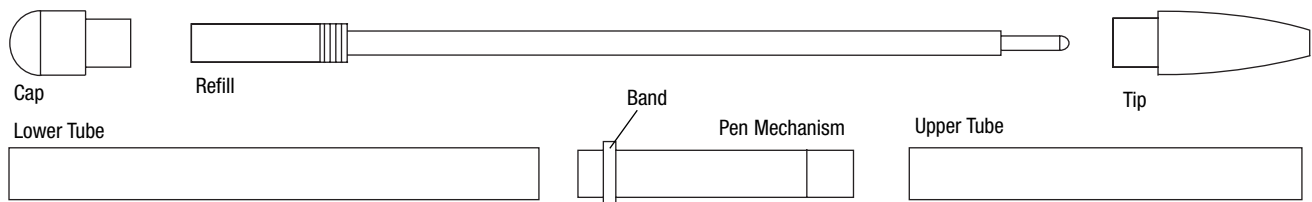
## Set Features

- Attractive design 2 pc. desk set
- Extra long desk pen
- Swivel tilted pen funnel
- Matched wood on desk pen, funnel, and funnel stand
- Uses "Cross" style, long-lasting refill
- Overall length:  
     Pen: 6"  
     Funnel with Base: 3 1/2" high

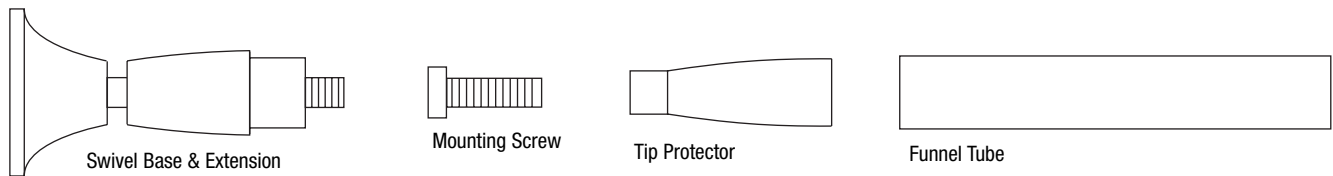
## Required Accessories

- 7mm long mandrel
- 7mm drill bit for pen (**PK7MM**)
- 10mm drill bit for funnel (**PK10-10**)
- 7mm barrel trimmer for pen
- 10mm barrel trimmer for funnel (**PKTRIMKIT**)
- 7mm bushings for pen (**PKM-BUSH3**)
- 10mm bushings for funnel (**PKPAR10-BU2**) (Use only 2 of 3 in set.)
- 1-3/8" Forstner Bit (**FB138**)
- 1-3/8" Expanding Collet Chuck (**CXC**)
- Drill Bits: 5/32" dia. & 5/16" dia.
- 2-part epoxy glue or insta cure glue (**PKGLUE2 or PKGLUE9**)

## Diagram A- Pen Parts



## Diagram B- Funnel Parts



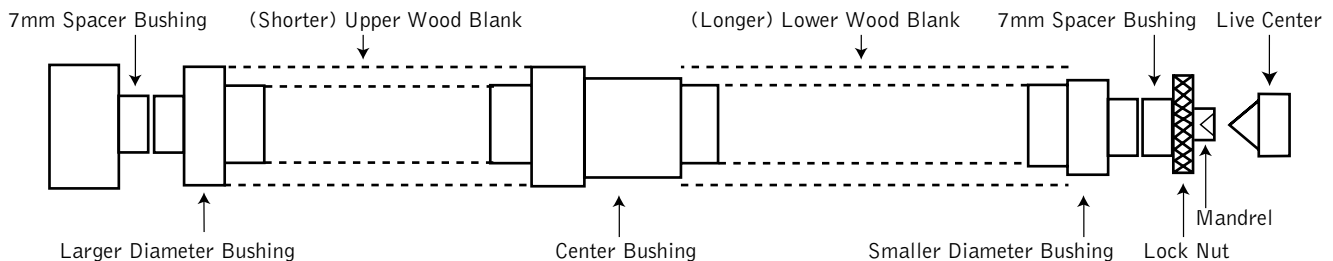
## Preparing Pen Blank for Turning

1. Cut the 1/2" to 5/8" square blanks to the length of the brass tubes (add 1/16" for squaring off).
2. Drill a 7mm center hole lengthwise through each blank.
3. Spread glue over the tubes and insert each tube into the proper blank using a twisting motion which spreads the glue evenly inside the blank.
4. Center each tube lengthwise in the blank.
5. When the glue dries, square the ends of the blanks. Use a 7mm barrel trimmer to trim the wood flush with the brass tubes.

## Preparing Funnel Blank for Turning

1. Cut the 5/8" square blank to the length of the brass tube (add 1/16" for squaring off).
2. Drill a 10mm center hole lengthwise through the blank.
3. Spread glue over the tube and insert it into the blank using a twisting motion which spreads the glue evenly inside the blank.
4. Center the tube lengthwise in the blank.
5. When the glue dries, square the end of the blank. Use a 10mm barrel trimmer to trim the wood flush with the brass tube.

## Diagram C Turning the Pen Blanks



## Turning the Pen Blank

Place 2-3, 7mm bushings on the mandrel. Place the lower blank onto the mandrel, follow with a 7mm bushing, and then the upper blank. Follow with an additional 7mm bushing to fill the space to the threads. Hand-tighten the threaded lock nut.

Bring the tailstock snug with the mandrel. **DO NOT OVERTIGHTEN** – it may damage the mandrel shaft. Lock into place. Tighten the lock nut to prevent the blanks from spinning. Turn the wood down flush with the bushings, using turning tools and abrasives. Finish the barrels with your choice of polish and wax.

### Turning the Funnel

Follow the pen directions but use 10mm bushings and 7mm bushings for spacers only. Use the bushing (larger diameter) and the upper cap bushing to turn the funnel. Take the wood down to the bushings. Finish the wood.

### Pen Assembly

1. Press tip into the lower tube
2. Press the pen mechanism, brass end first, into the opposite end of the barrel to the indentation line on the mechanism.
3. Insert the refill into the opening of the mechanism. Screw into the end. Check the extension of the refill.
4. Insert the band over the chrome end of the mechanism.
5. Insert the cap and press into the upper barrel.
6. Engage the 2 ends of the pen, advance the twist mechanism to an extended position. The pen is ready to use.

Diagram D- Pen Parts with Barrels

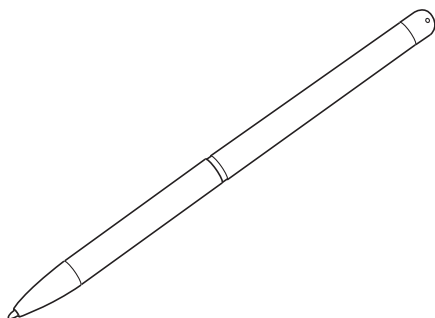
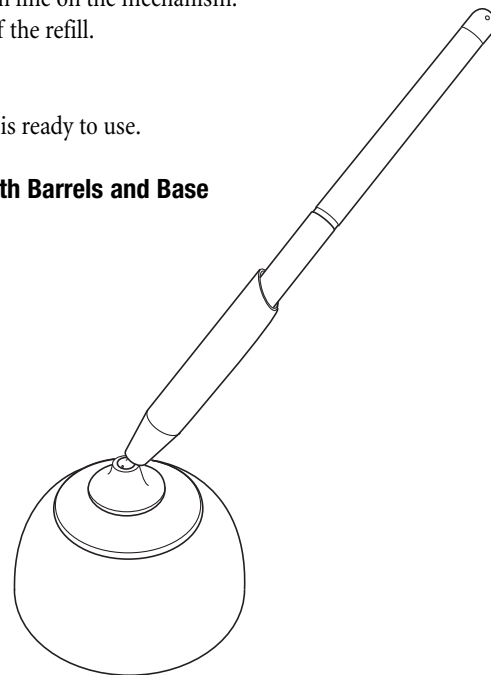


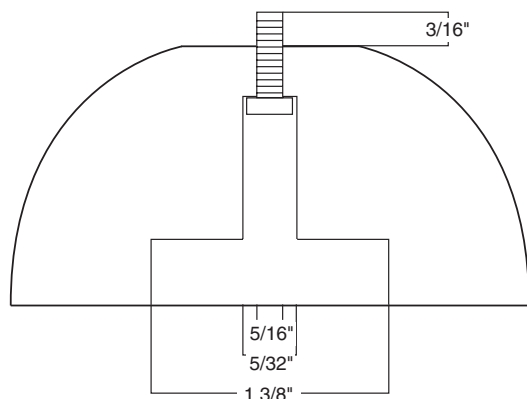
Diagram E- Funnel with Barrels and Base



### Turning the Base for the Funnel

Cut a blank about 2-1/2" to 3" square and 1 1/2" high. Mark the center of the blank and pencil a circle to the maximum diameter of the wood. Drill a 1 3/8" hole in the bottom end of the blank about 3/8" deep. Proceed with a 5/32" hole (from the same side) through the blank. You may want to use a band saw to cut around the circle you made to avoid turning the base with corners. Mount the blank on the expanding collet chuck, and mount on the lathe. Turn the wood to your choice of base design. Sand and finish the wood. Turn the base over, upper end down. Use a 5/16" drill bit. Drill from the base end. Redrill to extend the 5/32" hole to fit the head of the mounting screw. Drill and test the depth with the screw. The screw thread needs to extend 3/16" from the top of the base to hold the swivel. To avoid scratching your table, glue some felt to the bottom of the base.

Diagram F- Wooden Base



### Final Finishing and Assembly

- Unscrew the swivel extension out of the base.
- Screw on the tip protector (white plastic) over the extended threads.
- Press this assembly into the lower end of the funnel barrel.
- Use a disc of belt sander to form a 30° to 45° bevel at the opening of the funnel. Clean with steel wool or a fine abrasive. Touch up with polish.
- Reassemble on the swivel.
- Insert the mounting screw through the bottom of the wooden base. Engage the swivel base and screw tight.
- The funnel is ready to accept the desk pen.

