PKGRINDTL Instructions
Pro-Grind Variable Length Peppermill with Stem

Required Accessories
- FB78 7/8" Forstner bit
- FB1-116 1-1/6" Forstner bit
- FB150 1-1/2" Forstner bit
- FB134 1-3/4" Forstner bit
- FEX 4" Forstner bit extender
- CJAM15 - 1-1/2" Jam Chuck (requires a drill chuck)

Required Wood
- Base blank - 4" (minimum) to 9" (maximum) length by 2-1/2" to 3" square depending on your design.
- Head blank - 2" min length by 2-1/2" to 3" sq depending on design.

Boring the Blanks (see Diagram A)
- Base blank - Locate the center of the blank and bore sequential holes:
  1. Bore a 1-3/4" hole to 3/4" deep
  2. Bore a 1-1/2" hole to 2-1/8" total depth
  3. Bore a 1-1/16" hole through (use drill bit extender)
- Head blank - Locate the center of the blank and bore a 7/8" hole to 1-1/4" deep
**Diagram C - Assembly**

- **Head Blank**
- **Knob Mechanism**
- **Remove Ribs**
- **Stem Cut to Length**
- **Base Blank**
- **Clip**
- **Grinding Mechanism**
- **Adjustment Knob**

**Turning the Blanks**

- **Base Blank** - Use a jam chuck to 1-1/2” diameter. Insert into the base blank and mount over the lathe.
  - Support opposite end using a large live center. (See Diagram B1)
  - Turn a profile, sand, and finish the wood.
- **Head Blank** - Make a jam chuck 7/8” diameter. (See Diagram B2)
  - Insert into head blank.
  - Mount over the lathe.
  - Support with live center.
  - Turn a profile and finish the wood.

**Assembly (see Diagram C)**

- **NOTE**: The mechanism is designed to fit in metric holes. In order to fit in standard holes, some modifications to the mechanisms are necessary.
  - Remove the 6 ribs over the surface of the grinding mechanism and the knob mechanism.
  - Remove the edge of the clips (if necessary).
  - Trim the stem to adjust to the length of the wooden base you have chosen.
  - Insert mechanisms prior to gluing to check fit, centering, and stem length.
  - Use glue carefully (avoid any moving parts) over surface of the grinding mechanism.
  - Insert and press the grinding mechanism firmly into the 1-1/2” hole in the base blank.
  - Glue over the outer surface of the knob mechanism. Insert and press into the head blank.
  - When glue dries, insert the head over the stem. The stem should penetrate the sleeve in the knob mechanism.
  - To adjust the coarseness of the grind, just twist the adjustment knob in or out.