

PROJECT PEN KITS

Eggoscope Kit

Code: 502544



Drill Bit Size:
13/16"

Minimum Blank Size:
50 mm x 50 mm x 57 mm

PREPARING THE BLANKS, HINTS & TIPS

1. Cut a blank, approximately 50mm square by 57mm long. It is important the blank is 57mm long, in order for the mechanism to fit correctly.
2. Mark the centre on the end of the blank.
3. Using a 13/16" sawtooth, forstner cutter or drill bit, drill a hole lengthwise through the blank.

Tips/Hints

- Excessive pressure may cause the drill bit to wander and/or split the blank. Slow the feed rate and back the drill bit out repeatedly for chip removal.

TURNING THE BLANK, HINTS & TIPS

1. Mount the bushings and blank onto a pen mandrel according to the diagram.
2. Secure the bushings and blank onto the mandrel.
3. Slide the tailstock with a live centre into place against the mandrel and lock in position. This is for support; only slight pressure is required.
4. Using sharp tools, turn the blank down to a profile of your choice.
5. The outside diameter of the 'egg' after turning ideally should be between 45mm and 48mm.
6. Using successively finer abrasives gradually sand and polish the 'egg'.
7. Finish the 'egg' with your preferred choice of polish.

Tips/Hints

- Don't be afraid to sharpen frequently especially when turning acrylics.



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ASSEMBLY, HINTS & TIPS

Layout parts according to diagram A

Installing the lens in the Viewing Cap

1. Position the Viewing Cap with the eye-hole facing down.
2. Drop the Lens into the recess inside the cap with the convex side down, flat side up.
3. Place the Retaining Spring on top of the Lens. The Retaining Spring sits inside a recess behind the Lens. Use the eraser tip on a pencil to hold one side and use a thin blunt instrument (another pencil for example) to push the Spring down into the recess to secure the Lens in place.

Assembling the Image End

4. Position the End Cap with the open threaded end facing up.
5. Peel the protective paper off one of the Retaining Dust Covers and position it to seat on the bottom of the End Cap.
6. Insert the Spacing Sleeve into the End Cap so that it seats firmly on the Retaining Dust Cover. Press firmly to force the Spacing Sleeve to seat completely on the Retaining Dust Cover.

7. Insert the Gems. The Gems should occupy no more than 1/2 of the space in the image end cavity. A variety of gems are provided to allow for a selection that pleases the user.

Note: Putting too many gems (i.e. all provided) into the cavity may cause the objects to jam in the cavity and not tumble freely. If they do not tumble after final assembly, remove selected gems to allow for the remaining gems to tumble freely.

8. Remove the protective paper from the Remaining Dust Cover and position it on top of the Spacing Sleeve to completely enclose the Gems in the image cavity.

Installing the Mirrors

9. Mark the eyepiece edge of the Mirrors with a black marker pen.

Note: The three pieces of Mirror are marked with a black "X" or a line on one side. This indicates the back side of the Mirror and should be placed away from the center when assembling these pieces.

10. Place the three mirrors inside the Threaded Brass Tube one-by one forming an equilateral triangle

Note: As usual, when handling cut glass, use caution not to cut your fingers or chip the glass.

Note: The mirrors should fit snugly inside the tube. If the mirrors slide freely inside the tube wrap a piece of self-adhesive tape around so they fit snugly.

Final Assembly

11. Screw the Threaded Brass Tube (with mirrors inside) into the End Cap (with Gems and Dust Covers installed). The tube will bottom on the top Dust Cover to secure all of the components inside.
12. Insert the Threaded Brass Tube and End Cap assembly into the 13/16" hole in the 'egg'. Screw the assembled Viewing Cap (with Lens and Retaining Spring) onto the other end of the tube. Note: Be careful to position the end cap with the eyehole down so that the Lens does not fall out. Tighten securely. The Threaded Brass Tube will be secured between the Lens inside the Viewing Cap and the Dust Cover in the End Cap.

Enjoy the view!

DIAGRAM A

