Choose your stock
Select a wood or acrylic blank measuring approximately 1 1/2" x 1 1/2" x 6". Be sure the blank is long enough that there’s enough material for cutting the handle off the lathe.

Drill the blank
There are three ways to drill the hole needed for the threaded insert. All require that the end of the blank be square to the other faces.

1. At a drill press: Draw diagonal, corner-to-corner lines on the end of the blank to locate the center. Using a handscrew clamp or drill press vise to hold the blank perpendicular to the table, drill a 1/2" hole for hardwoods or 7/16" hole for softwoods at least 1 1/2" deep at the center mark.

2. On the lathe: Install a four-jaw chuck in the headstock and a lathe drill chuck in the tailstock. Secure your turning blank in the four-jaw chuck and a 1/2" bit for hardwoods or 7/16" bit for softwoods in the drill chuck; turn on the lathe and slowly advance the tailstock to drill the 1 1/2" deep hole for the insert.

3. With a handheld drill: Mark the center on the end of the blank and clamp the blank in a vise. Use a 1/2" bit for hardwoods or 7/16" bit for softwoods to drill a 1 1/2" deep hole at that mark, taking care to keep it as square as possible to the end.

Install the threaded insert
If you drilled a larger hole in your stock to reduce the risk of splitting, you might need to apply a small amount of epoxy or thick CA glue to the insert. Be careful not to get any glue on the interior of the insert. Put a small piece of tape on the bottom of the insert to prevent glue from coming up into the threads.

If you’re using acrylics for your handle, we have found that heating the insert before installing is very effective.

1. At a drill press: Install the 1" Shoulder Mandrel with 5/16"-18 Threads (43469, sold separately) in the drill press and thread the insert on the mandrel. Use a handscrew clamp or drill press vise to hold the blank perpendicular to the table, with the hole directly under the mandrel. Lubricate the threads on the insert with beeswax, screw lube or soap. Manually turn the drill press chuck to drive the insert into the stock. DO NOT TURN ON THE DRILL PRESS.

2. On the lathe: Install a lathe drill chuck in the headstock. Secure the 1" Shoulder Mandrel with 5/16"-18 Threads (43469, sold separately) in the drill chuck, and thread the insert on the mandrel. Lubricate the external threads with beeswax, screw lube or soap. Bring the blank to the mandrel and, taking care to keep it parallel, slowly turn the drill chuck to drive the insert into the stock. DO NOT TURN ON THE LATHE.

3. By hand: Lubricate the external threads of the insert with beeswax, screw lube or soap. Position the insert at the opening of the hole and use a 8mm hex wrench to turn it to install it in the blank. Try to keep it as square to the blank as possible.

Turn the handle and assemble
1. Mount a lathe drill chuck in the headstock and install the 1" Shoulder Mandrel with 5/16"-18 Threads (43469, sold separately).

2. Thread the turning blank (with insert installed) all the way on the mandrel. Install a live center in the tailstock and bring the live center up to the blank to support it during turning.

3. Rough the blank into a cylinder.

4. Turn the blank to the desired profile. Note that the 1" shoulder of the mandrel is sized to match the diameter of the Bottle Opener hardware.

5. Sand the workpiece through 600 grit or higher, as desired.

6. Reduce the diameter on the waste side and remove by parting it off completely with a parting tool or, with the lathe stopped, cut away the waste with a small handsaw.

7. Sand the end of the workpiece.

8. Apply the desired finish.

9. Install the Bottle Opener hardware by threading it into the finished handle.

Note: The handle can be removed later for easy washing of the hardware.