

The Golf Ball Ring Box

***By
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Honestly this demo should be titled “How Not to Lose Your Golf Ball” or “Golf Balls Are Not Only for Golf.” I am far from a creative person and cannot take credit for this idea. This demo is based on a YouTube video “Golf Ball Ring Box” by the Denton Turners, <https://www.youtube.com/watch?v=-hFOF98ozT8>. This is my interpretation of the video.

Safety: As Norm said “Be sure to read, understand and follow all the safety rules that come with your power tools. Knowing how to use your power tools properly will greatly reduce the risk of personal injury. And remember this. There is no more important rule than to wear these ... safety glasses.”

When I turn, I wear a 3M full face shield with a built in respirator. The shield is impact resistant and the respirator keeps the dust out of my nose.



Part 1: The Golf Ball Jamb Chuck

Tools:

- Bowl Gouge
- Beal Tap and Drill Bit
- Spindle gouge or a round carbide tool
- 5/8 drill bit
- 2" forstner bit

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Step 1:

To make the chuck, I glue up 4 or 5 pieces of $\frac{3}{4}$ or $\frac{4}{4}$ maple 4 inches square.



Step 2:

Mark the center of the blank. Using a 2 inch forstner bit drill a hole about $\frac{3}{16}$ inch deep



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Step 3:

Mount the blank in a chuck and expand the jaws in the hole drilled in Step 2. Engage the tailstock for safety.

**Step 4:**

Using a bowl gouge, round the blank and flatten the face.

Step 5: Drill and tap the blank using the Beall tap to fit your spindle.



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Step 6:

Screw the blank on the spindle and clean up the face.

Step 7:

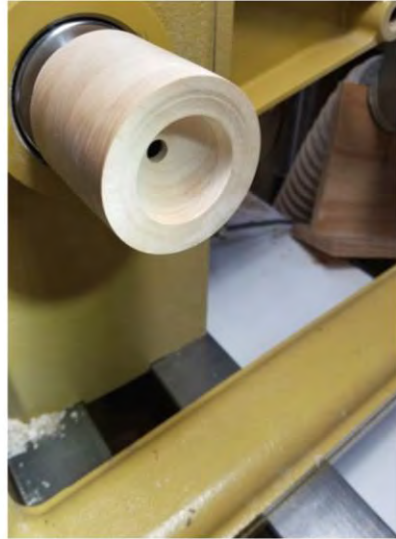
Drill a 1/2 inch hole all the way through the blank. The hole should be slightly larger than the diameter of the knockout bar for your lathe.



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Step 8:

Measure the diameter of your golf ball. Surprisingly, not all golf balls are the same diameter. Using a spindle gouge, bowl gouge or round carbide tool carefully dish out the face of the blank until the golf ball fits tightly into the hole. Your chuck is ready to use.



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Part 2: Hollowing out the Golf Ball

Note about golf balls: The two-piece modern ball is formed by surrounding a spherical molded core made of rubber or synthetic rubber with a hard covering. The core is then placed in an injection mold. Hot plastic, either surlyn or urethane, is injected and forms a hard, dimpled coating around the core.

Golf balls have a tendency to off-gas when you cut into them. Please be sure to work with them in a well ventilated area and that you wear a respirator.

Golf balls are like a box a chocolate. You never know what you're going to get until you open it up. The inside of the balls can vary in color and depending on the ball they can be multiple layers of several colors.

Tools:

- 1 inch forstner bit
- ½ inch spindle gouge or a round carbide tool
- Golf ball jamb chuck
- Mallet

Step 1:

Mount a golf ball in the jamb chuck. Orient ball in such a way that the name or logo will display how you want it. Tap the ball in with a mallet to secure it.



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Step 2:

Slow down the lathe and drill a 1 inch hole $\frac{1}{2}$ inch deep

**Step 3:**

Using a spindle gouge or a round carbide tool hollow out the inside of the ball to a depth of $1 \frac{1}{16}$ to $1 \frac{1}{8}$ inch deep.

**Step 4:**

Reverse the ball in the chuck. You may need the knockout bar to pop the ball out of the chuck

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Step 5:

Slightly dish out the bottom of the ball a bit.
This provides a base for the ball to stand on.

**Step 6:**

No sanding or finishing required. All done.



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Part 3: Turn the Lid

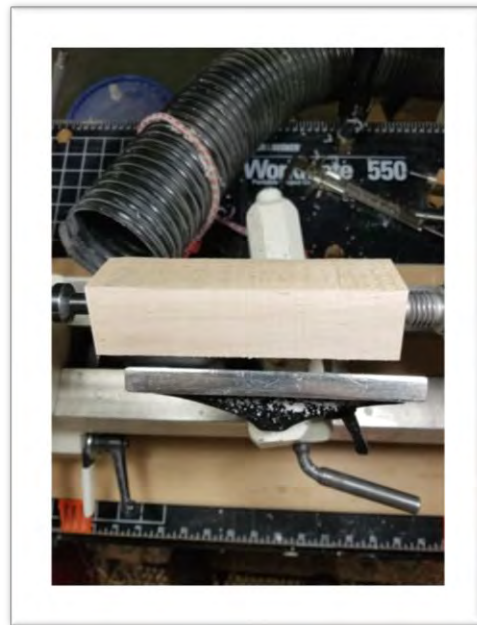
Turning the lid is much like turning a lid for any box. Since the golf ball is flexible a suction fit is easily attainable.

Tools:

- Spindle-roughing gouge
- ½ inch spindle gouge
- 3/8 inch detail gouge
- Parting tool
- A skew if you dare
- Veneer Calipers

Step 1:

Mount a 1 ½ inch square blank 4 to 6 inches long between centers and turn it round.



Step 2:

Turn a tennon on the end if the blank

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Step 3:

Mount the tenon side of the blank into a chuck and engage the tailstock.

**Step 4:**

Using a pair of Veneer Calipers measure the diameter of the opening in the golf ball and transfer it to the end of the blank.

Step 5:

Turn a small tenon on the blank that will fit into the golf ball. You want a suction fit.



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Step 6:

Dish out the inside of the lid and decorate, if desired.



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Step 7:

Shape the rest of the lid. You can get creative here.

**Step 8:**

Sand the lid to 400 grit

Step 9:

You can finish the lid anyway you want. I tend to paint the top with black acrylic paint.

