

GOLF BALL CATCH TOP

Designed by: Earl Rennie

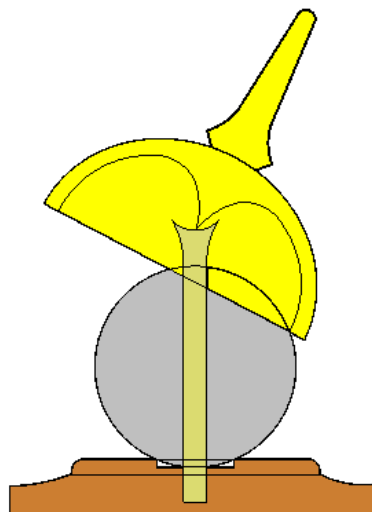
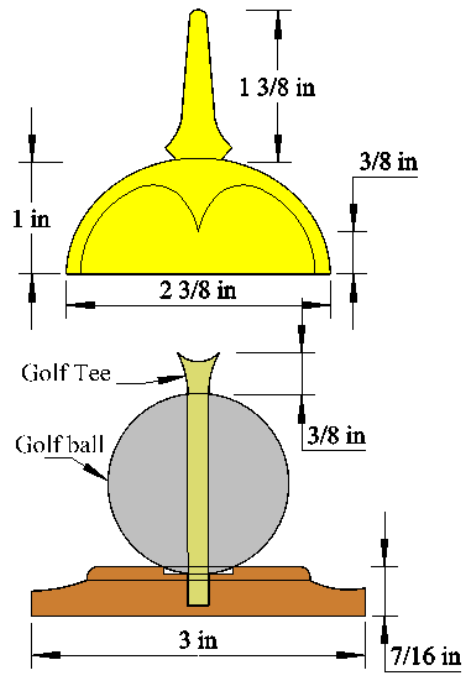
01/05/2024



GOLF BALL CATCH TOP

Designed by: Earl Rennie

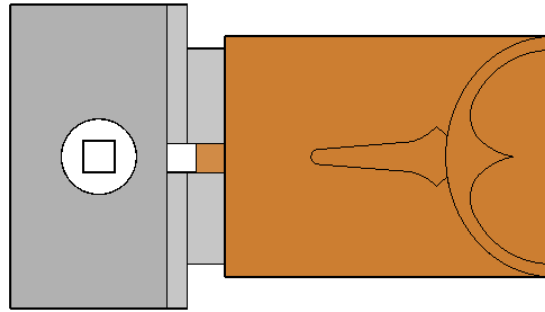
01/05/2024



This is suggested measurements; however, you can control the size by the percentage you use when printing.

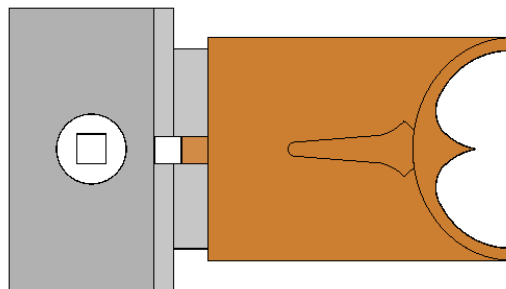
If you are not using the above measurements, you should use your calipers to measure and transfer the new dimensions to your work piece.

TURNING THE SPIN TOP



Mount stock, and round to desired diameter.

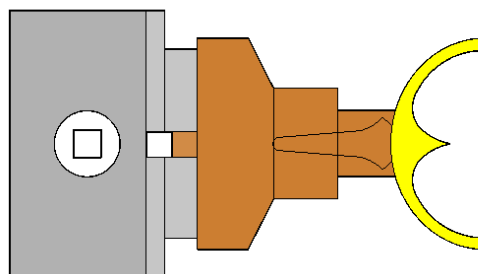
I use 3 1/4" x 4" blank.



Shape inside of top using your favorite tools.

Pay close attention to the point.

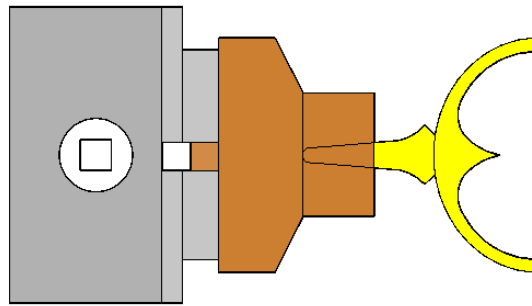
I use 5/8" bowl gouge, 3/8" negative scraper, and 1/4" negative rake scraper.



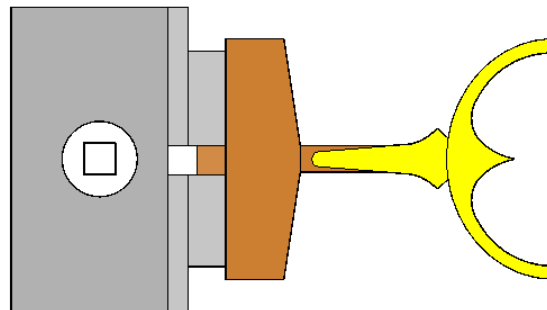
Note: At this point it is good to support the point, but not required.

Hog out the wood behind the bowl of the top in steps to maintain stability.
The first step should be slightly larger than the major diameter of the stim.

Shape outside of top.



Turn the first part of stim to shape and size.
Remember-- a thin stim makes for a faster spin.

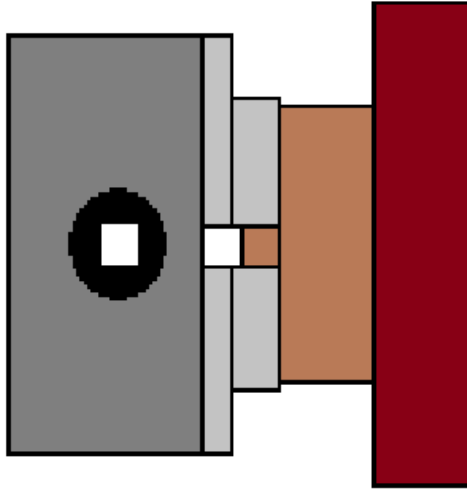


Remove excess wood, finish turning the stim, and carefully part it off.

NOTE:

A badan, wide parting tool, and $\frac{3}{8}$ " spindle/detail gouge works well for turning the stim.

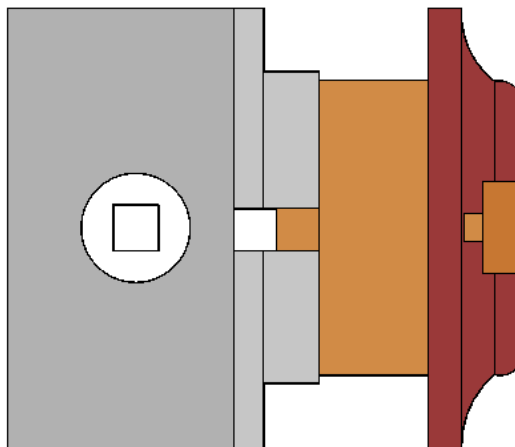
TURNING THE BASE



Make glue block to fit chuck of choice.

Attach glue block to chuck and true up face.

Attach base blank. (hot melt glue or double-sided tape works well)



Turn to desired profile and sand.

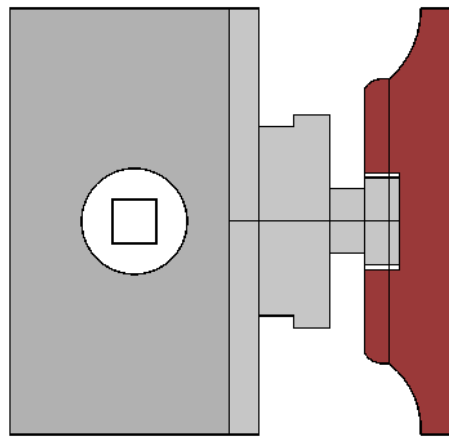
Drill mortise ($\frac{3}{4}$ " works for me) to fit your smallest chuck jaws, and a smaller mortise to accommodate the tee. Do not drill the hole too deep you still half to shape the bottom.

Remove base from glue block. (denatured alcohol helps in this endeavor)

If you have a chuck with small enough jaws, you can simply reverse chuck the base.

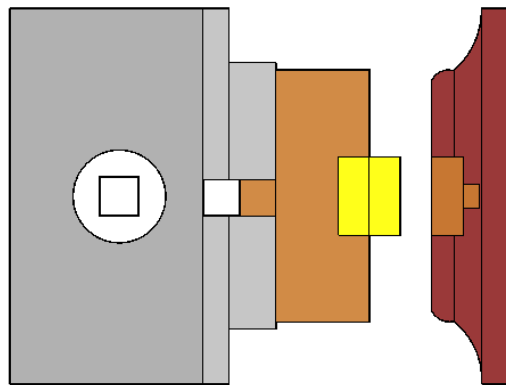
Pressing with tail stock aids in reducing wobble when securing in base. Use a small piece of scrap wood between live center point and base to prevent punching a hole.

Turn the bottom of base adding slight concave curve.

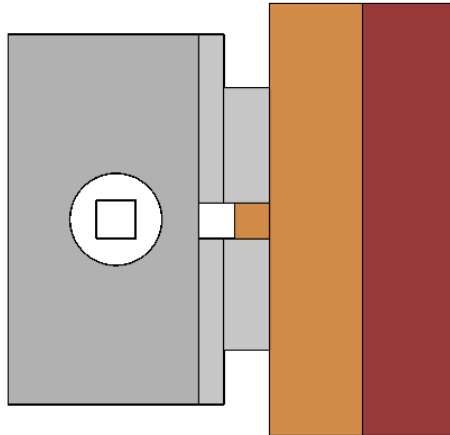


If you chuck jaws are not small enough, you can drill the glue block, turn a small plug to insert into the hole to use for alignment of the base. Attach base to glue block and finish base.

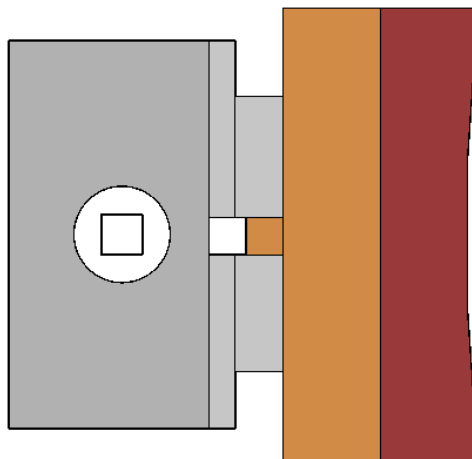
Use live center for added support for a long as possible.



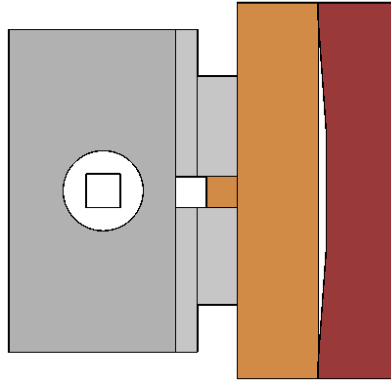
Or use the third method.



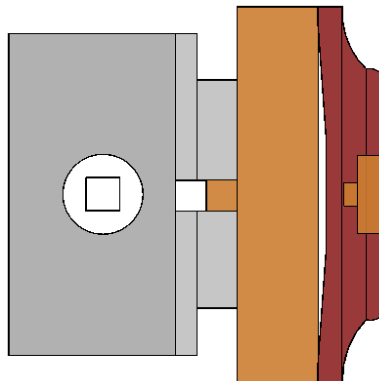
Using a glue block attach the base blank.



Turn a slight concave in the bottom. Leave a narrow flat on the outside edge of blank.



Remove the base blank, reverse, and reattach.



Drill a shallow $\frac{5}{8}$ " diameter mortis for the
golf ball seat (test ball for fit), and a smaller mortis for the tee.

Use the live center to help keep bottom in place, and
use a light touch when turning.

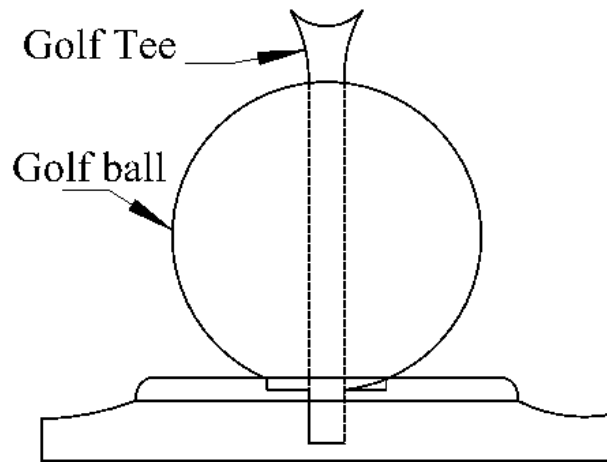
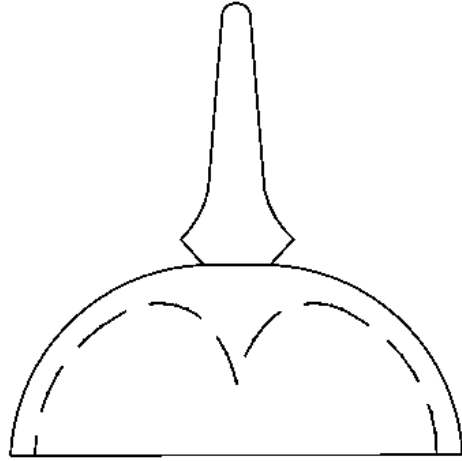
Turn to desired shape, remove, and finish..

Proceed with making Catch Top

01. Having sized drawing to your preference, take measurements directly from drawing with your dividers. SANDING IS YOUR ENEMY. Easy to get out of round, and out of balance.
02. Round billet to a diameter slightly more than the major diameters.
03. Hollow the inside, and shape the point. Turn the point (accuracy is important). Use whatever tools you are comfortable with. I prefer a $\frac{5}{8}$ " bowl gouge for roughing out and finishing with $\frac{3}{8}$ " negative rake scraper. (An $\frac{1}{4}$ " negative rake is also handy) The scraper works well for shaping the point. The point must be sharp and true. If you hold a golf tee to the point while the lathe is running you can verify how true you are. If you feel any movement in the tee the tip needs more work. Once the point is perfect DO NOT go back or sand it. Apply finish as desired.
04. Shape the outside of the dome, being careful not to cut through, however, do not leave too much material in the top of the dome. It will make the top harder to spin. If you have a support bearing for the tail stock it is good to support the point while turning the outside.

NOTE: Hogging out the wood for the stim is easily done with a parting tool, and/or a badan.

Once close to desired diameter use a $\frac{3}{8}$ " spindle/detail gouge works well.
05. Shape the stim is your choice, however, thinner stims impart a faster spin.
06. Chuck the golf ball in the lathe, verify the diameter of the tee, and drill a hole all the way through. My tees are a little smaller than $\frac{1}{4}$ " diameter.
07. Chuck the golf tee, true up, and deepen the (concave) cup a little. Make sure there is no dimple in the center of the cup. True up the outside of the cup. You may want to use some sandpaper to reduce the diameter of the golf tee stim so it will fit easily the hole in the ball. Apply finish to the top of the tee.
08. Function test by dry fitting before glueing up. I use thick super glue to attach the ball and stim to the base.



Actual Size