**The Wonky Mushroom**

**Tools:**
Faceshield,
Carbide Square Head Tool
Carbide Pointy Detail Tool
Carbide Round Pt Detail Tool

¾" or 1" Roughing Gouge
3/8" Spindle Gouge
½" Bowl Gouge
Narrow Parting Tool
8" X 8" Black Contrast Cardboard Piece

Dremel Detail Sander with Small Spindle Head
Sandpaper * 60 – 320 Grit
Walnut/Danish Oil Finish

**Considerations Before Starting**

- Pick branches to highlight visual interest
- Wood variety & type, plus shape
    - (Is the branch straight, bent, crooked, crotch?)
    - Fruit, hardwood/softwood, color, condition (Spalted?) heartwood color vs. rest of inner wood color, bark, etc.
- Wet vs. Dry Branch
    - Wet is easier to turn and may crack after drying adding interest/realism to shroom
        - Bark may/may not stay on
    - Dry – Dustier, Need sharper tools, shroom will hold final shape
        - Normally, if bark is on, usually stays on
        - Dry spalted wood more difficult to turn due to brittleness
- Best Tools (Based on MY EXPERIENCE ONLY); Carbide vs. Traditional
    - Personally, I use a combination of both, but better turners could probably use traditional tools to do anything I'm suggesting herein
    - Carbide – Work better to define cutouts and to preserve bark
    - Traditional – Work better to remove wood cleanly & quickly, plus reduce final sanding

## The Process

### ***Stage One – Button and Upper Stem***

1. Once you have branch of choice, find centers on both ends. Even if the branch is curved, is a crotch, or is multi-crooked
2. Decide which part of branch will be the “Button” and mount to the HEADSTOCK with a multi-point drive center then bring up tailstock and tighten into branch
    a. Lathe Speed 1300 – 1500 RPM

3. Cut Tenon on TAILSTOCK END with square carbide tool. Make sure tenon will be thick/deep enough to hold mushroom for offset turning. Define dovetail angle with carbide pointy point detail tool if needed

4. Determine desired length of stem and cut sharp edges using carbide pointy point detail tool to establish limits of underside of button and bottom of stem. *NOTE: Bottom of stem will be approximately 1/8” from tenon. Need to leave gap between bottom of stem and tenon to maintain secure backwall needed for “Wonk” offset in chuck*

5. Using the roughing gouge, remove material between bottom of button and bottom of stem. *Should be approximately 3X+ finished thickness of stem. I.E., if you are hoping for a 3/8” thick stem, the starting width across the stem should be approximately 1” thick

6. Determine shape of button; i.e., tall, short, triangular, round, etc. Using ½” bowl gouge start to shape button head taking care not to finish button completely and to maintain some type of connection to headstock. Otherwise, there will be nothing to turn the mushroom in the chuck

7. Once you’ve got your button shape, and once you’ve gotten the top of the button “Rough Cut”, you can turn your attention to the underside of the button. Depending on button type identified in 6) above, determine how deep the underside should be. Working with any of the following tools; 3/8” spindle gouge, pointy point carbide

detail tool, or the round tip carbide detail tool, cut underside of button to match top, leaving the stem at whatever width you had determined you wanted for the stem from 5) above.

8. Taper stem by “Section” increasing width of stem +/- 25 – 50% per section. Additional width allows for “Offset” material removal. Section length can be whatever you want it to be.

9. Once you are satisfied with top of button, underside of button, and stem width, you can remove mushroom from the lathe

***Stage Two - Offset***

10. Mount corresponding chuck to match mushroom tenon dimension into headstock and fasten mushroom tenon into headstock accordingly. Tighten securely bringing up tailstock to hold in place. *NOTE: Tailstock does not need to be very tight as it won’t be in place for long*

11. Finish shaping button top and then remove excess material by cutting off with pointy point carbide detail tool. Move tailstock out of the way

12. Sheer scrape top of mushroom to get as smooth as you can before sanding. Double check underside of button to see if any more work is needed there. If so, finish that. *Most of the time, this is not needed*

13. Sand button top, button underside, and top part of stem to 320 grit while spinning on lathe

    Speed between 500 – 600 RPM

14. Loosen chuck to allow mushroom tenon to be retightened on an angle. *NOTE: Maintain no less than 2 threads of chuck onto tenon to be sure mushroom doesn't "Launch" from the lathe*

15. Place black contrast cardboard below mushroom

16. Test offset spin in lathe to make sure it's secure in the chuck and to verify placement of cardboard contrast
    Speed 1100 – 1200 RPM

17. Cut MIDDLE section of stem using offset rotation while looking "Through" vibration/turn of mushroom. *NOTE: Using ½" bowl gouge, cut from the lower point towards the middle of the cut, then cut from the upper point towards the middle of the cut.* Cut until the offset stem appears to be close to the same width as the upper stem

18. Once satisfied with that section of stem, stop

19. Loosen chuck to allow mushroom tenon to be retightened on the OPPOSITE angle of the first offset. *NOTE: Maintain no less than 2 threads of chuck onto tenon to be sure mushroom doesn't "Launch" from the lathe*

20. Place black contrast cardboard below mushroom

21. Test offset spin in lathe to make sure it's secure in the chuck and to verify placement of cardboard contrast
    Speed 1100 – 1200 RPM

22. Cut LOWER section of stem using offset rotation while looking "Through" vibration/turn of mushroom. NOTE: Using ½" bowl gouge, cut from the lower point towards the middle of the cut, then cut from the upper point towards the middle of the cut. Cut until the offset stem appears to be close to the same width as the MIDDLE stem

23. Once satisfied with that section of stem, stop

## ***Stage Three – Transition & Finish***

24. Loosen chuck to allow mushroom tenon to be retightened on the chuck flat against the backwall

25. Remove black contrast cardboard

26. Using ½" bowl gouge again, cut "Offset Transition" onto lower part of stem maintaining approximately 1" from bottom of stem to where you will part off mushroom from lathe. This lower "Foot" on bottom stem of mushroom is what allows the mushroom to stand up

27. Determine where you want to part off the stem base and then start that cut. *NOTE: Do NOT go more than about 1/8" into stem cutoff location, but leave in-tact to allow for some minor "Details" to be sanded/smoothed away*

28. Using the Dremel Detail Sander, smooth out the stem removing tool markings, chatter, or unnatural grooves from stem

29. Once satisfied with stem, sand as required using 60 – 320 grit as desired for finished mushroom

30. Part off stem

31. Check mushroom for "Stand Ability". If not quite right, drag base of mushroom across sanding board to flatten out. Check again for "Stand Ability". Mushrooms should stand on their own

32. Apply Finish of Choice to seal up pores and preserve wood

33. Display individually, or in groups, as desired