

# SPACE COAST WOODTURNERS

Interactive Remote Demo - July 8th, 2020

## *Turning a Piston Box* by Tod Raines



[Click here to see replay on YouTube.](#)

Note: This replay video on YouTube is for Space Coast Woodturner members only. Do not share this link outside of your club.

**Piston box** – from AAW Journal June 2015 (by Walt Wager)  
Modified version of instructions by Tod Raines



- Turn to cylinder – min 1 $\frac{3}{4}$ " x 7"
- Turn tenon and mount in chuck
- Re-true and face off end; mark center of end for forstner bit
- Drill 1 1/8" hole 2 – 2.25" deep
- Use 1 1/4" forstner to mark end
- Mark depth on outside; add 3/4" for top
- Turn inner cylinder outer diameter to size – 1 1/4"; sand as desired
- Part off the inner cylinder

- True up end and mark center for drilling
- Drill 1 ¼" hole to 1/16" deeper than inner cylinder; sand inside of outer cylinder as desired
- Jam chuck the inner cylinder in the outer cylinder (use paper towel for tight fit if necessary)
- Shape the outer profile as desired; also shape the end of the inner cylinder
- Sand as desired and then part off the box.
- Create a jam chuck for the outer cylinder and shape the end as desired; sand as desired
- Create a short jam chuck for the inner cylinder then use CA glue to glue the inner cylinder to the jam chuck and then part off the enclosed inner cylinder; sand as needed
- Use a sanding drum to create the opening in the inner cylinder (I used a lathe driven 1" dowel with wrapped sanding strip paper); finish sand the opening by hand
- Add magnets if desired
- Finish and/or decorate as desired (note as finish could be applied with still on the lathe)



Contact Tod Raines at [tod@woodturningtoolstore.com](mailto:tod@woodturningtoolstore.com) for any questions.



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