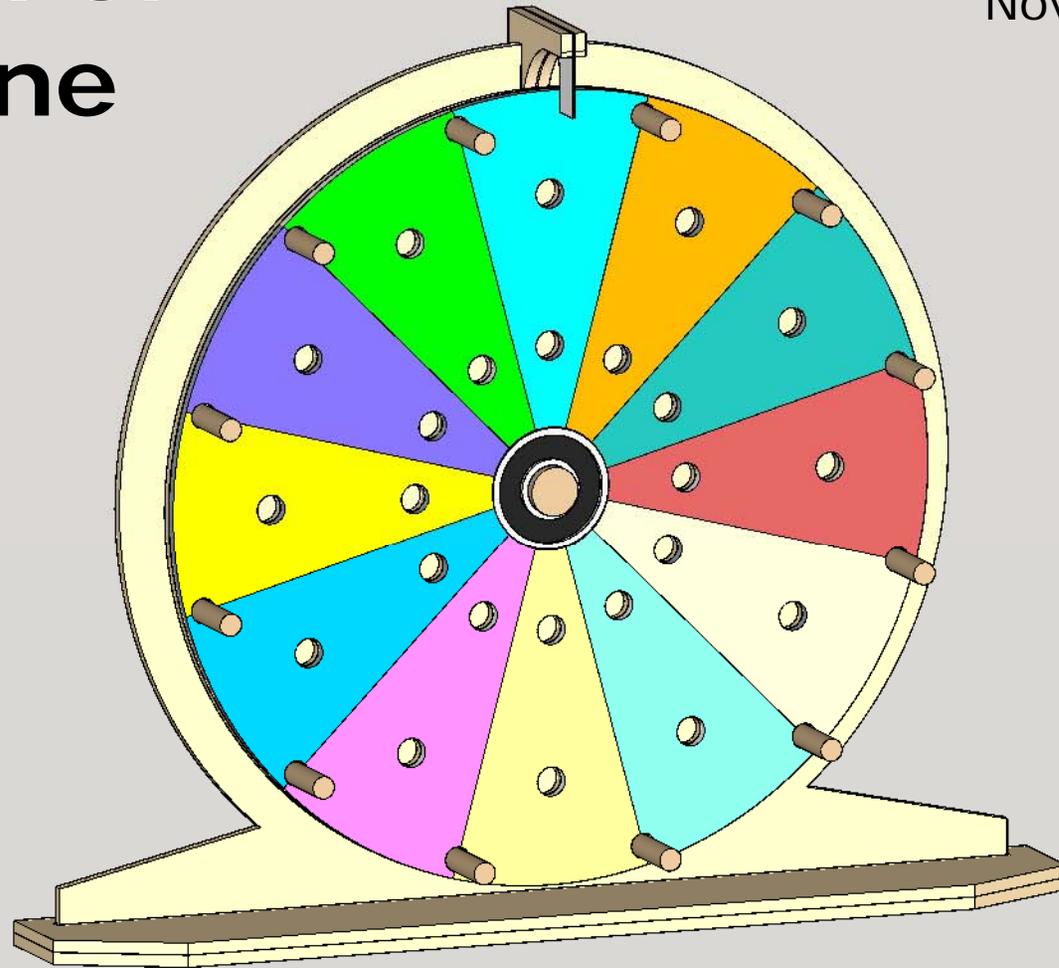


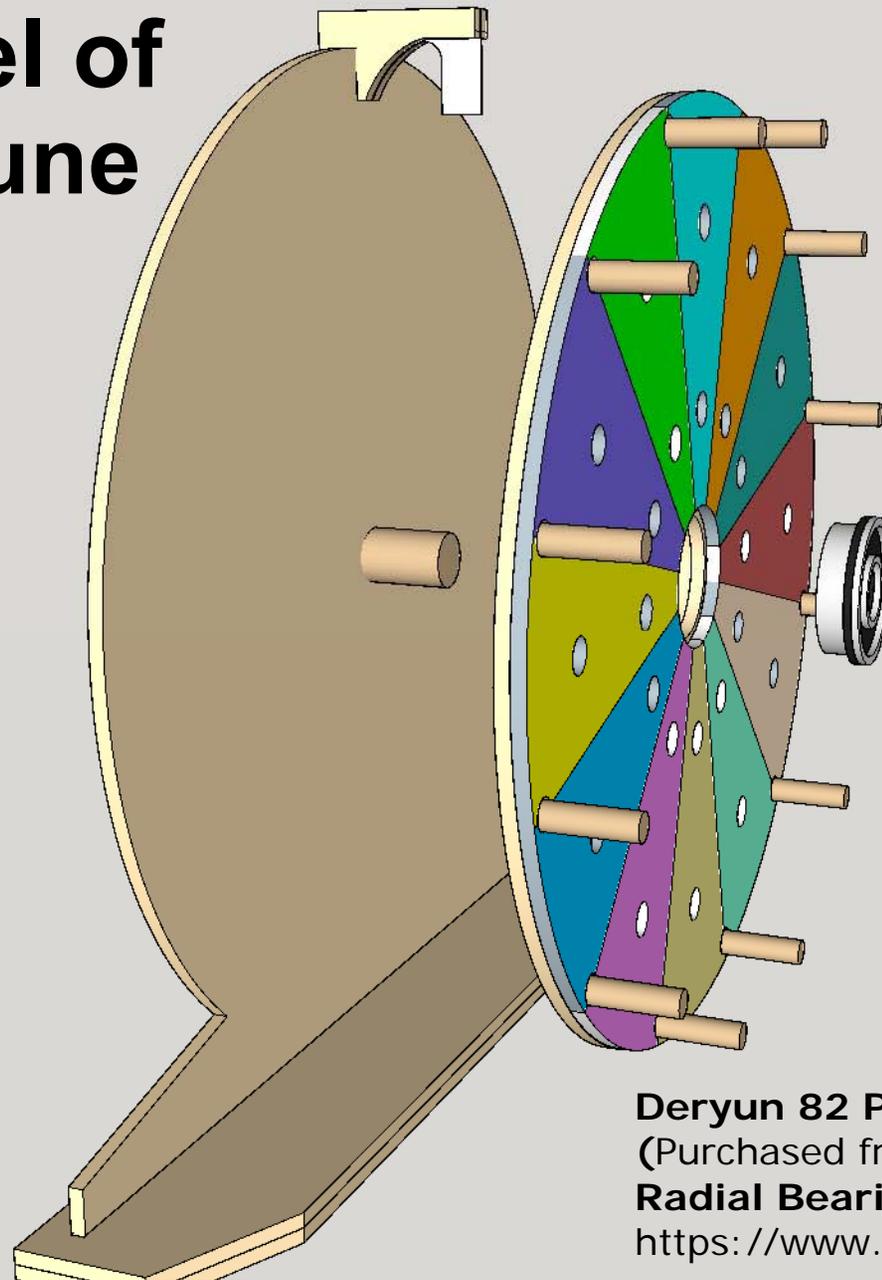
# Wheel of Fortune

Version 1.0  
Nov-18-2018



*A Glowforge project by Greg St. George*

# Wheel of Fortune



**Deryun 82 Pack 8x3mm Magnets**  
(Purchased from Amazon.com)  
**Radial Bearing for 1/2" Shaft**  
<https://www.mcmaster.com/6384k361>

## Construction Notes:

I designed this around a radial bearing I had on hand. The wheel would probably work just as well with a cheap skate bearing, but I didn't have one of those. The part number is 6384K361 from McMaster-Carr (<https://www.mcmaster.com/>).

Other than that, I bought some 8mm x 3mm magnets from Amazon.com. The holes for the magnets (all 48 of them) are sized for a *really tight fit*. Tight, as in you'll need a hammer to insert them. Make sure you use a small block of wood or something to protect the magnet as you tap them into place. The item is "Deryun 82 Pack 8X3mm Magnets" from Amazon.com.

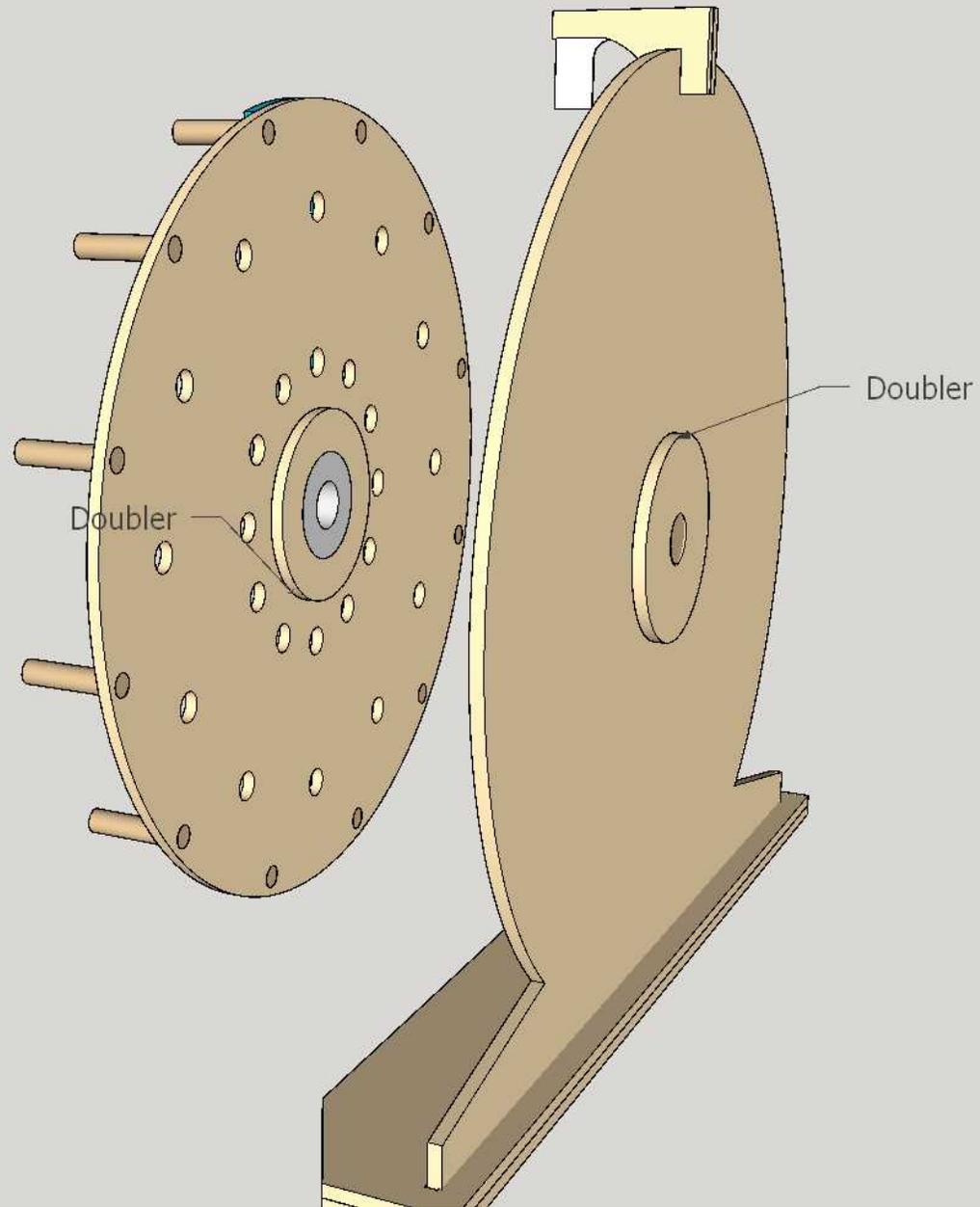
Very important is to make sure you have consistent polarity of the magnets. They all need to have the same pole oriented up (or down) in order for the "pie slices" to attach to any position. The pie slices all need to have their south poles facing down if the magnets in the wheel have their north poles facing up. Or vice versa. Be careful, it's very easy to get it wrong.

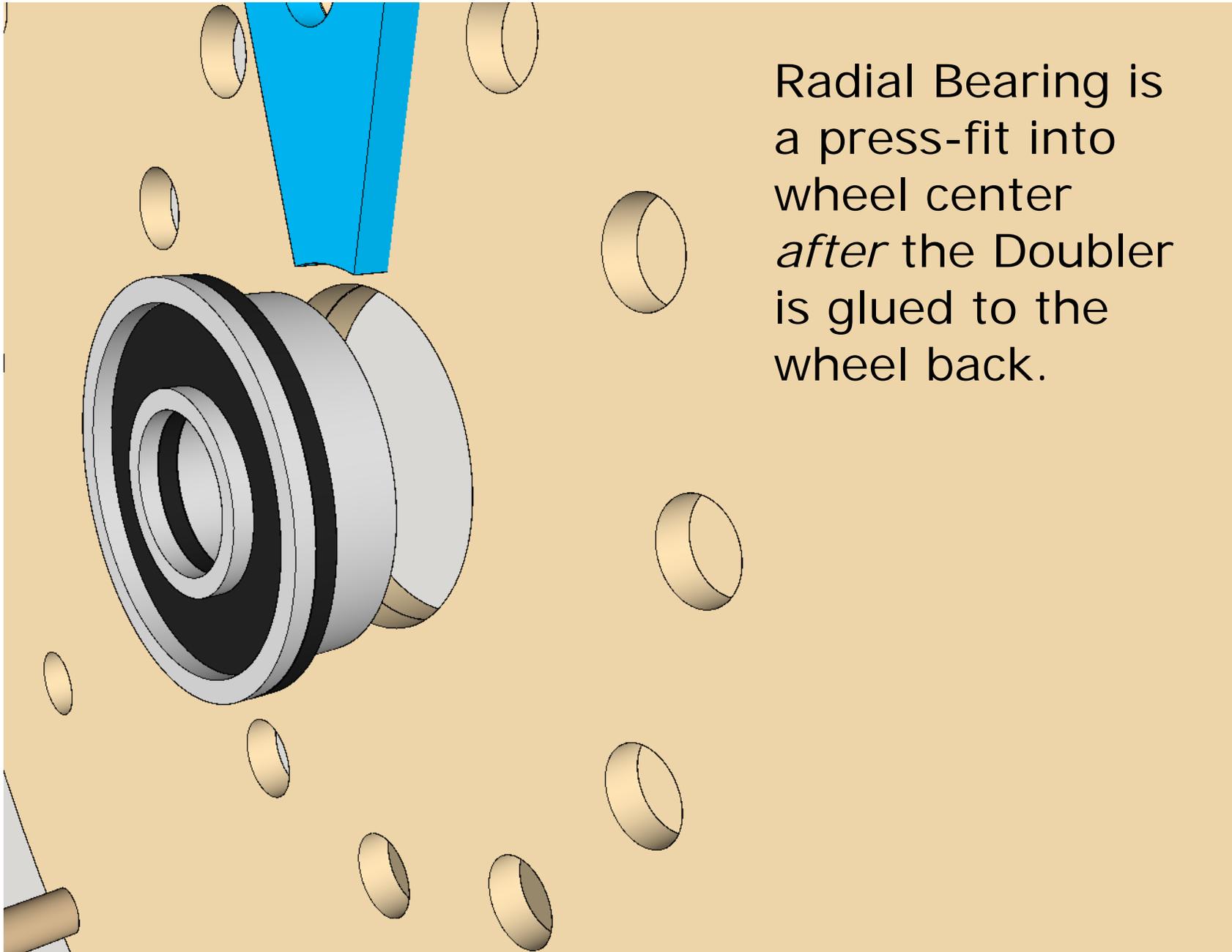
Other than that, I'm still working through the "flapper" material issue. I've been using .015 styrene, but that seems to be kind of brittle and develops a crack after a while. I'm thinking that maybe the plastic from a milk jug would be more elastic, but haven't fully solved this. It's not a big deal if it cracks since you can just pull the flapper assembly off the top and insert a new middle piece, but I'd like a bit more longevity.

Anyway, hope you enjoy the project and it's a successful build. Please share your theme or any derivative designs in the forums. I'd really enjoy seeing how they come out.

Best regards,  
Greg St. George

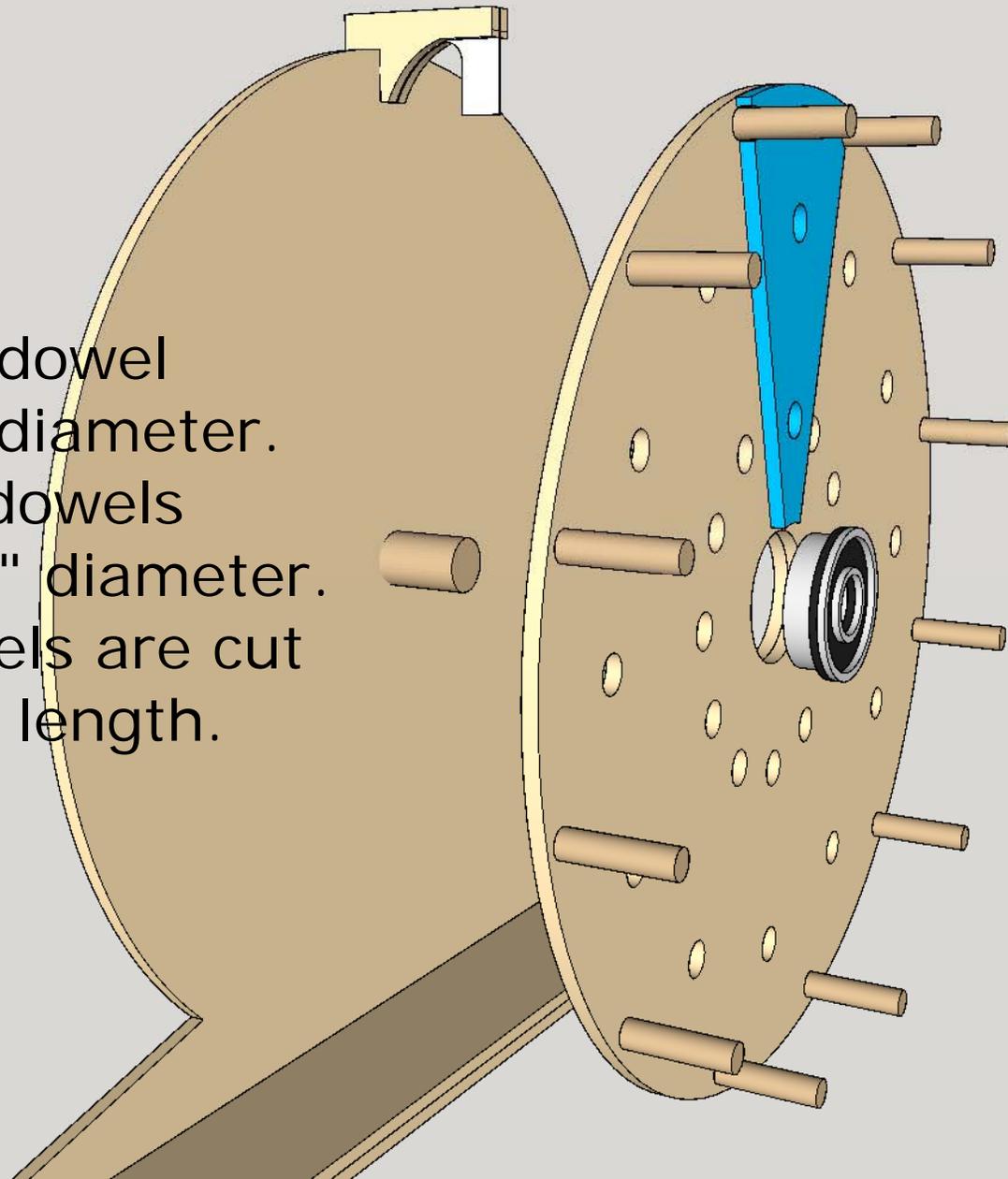
Doublers are glued to the back of the wheel and the frame.



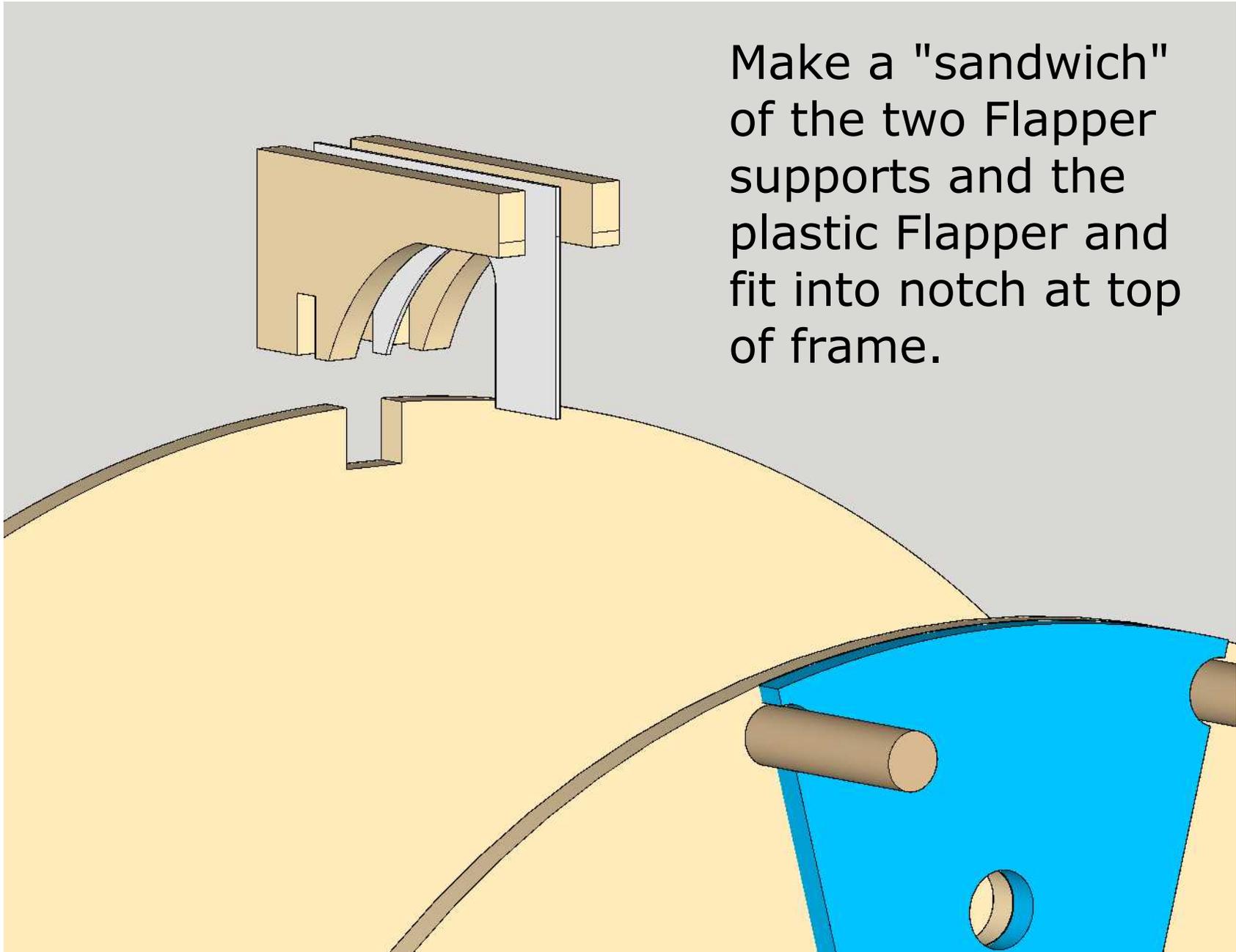


Radial Bearing is  
a press-fit into  
wheel center  
*after* the Doubler  
is glued to the  
wheel back.

Center dowel  
is 1/2" diameter.  
Wheel dowels  
are 1/4" diameter.  
All dowels are cut  
to 1" in length.



Make a "sandwich" of the two Flapper supports and the plastic Flapper and fit into notch at top of frame.



The easiest way to remove a slice is to put your thumb on the top of the dowel and lift a corner with the tip of your finger.

