

## Balancing Dragon Workflow and Notes V2

This version makes the wings touch the body at the rotating joint.

Materials: Besides 1/8" inch masked wood, 3/8 inch diameter dowel . I used a soft wood dowel, probably bass wood.

### Workflow for dragon parts

1. (#1 black) Engrave eyes and nose
2. (#2 dk blue) Cut dowel hole left side and split lines and semicircle left side
3. (#3 dark green) Score dragon and wings outline
4. (#5 fluor green) Cut dragon body and wings

NB: template for notching 3/8 inch dowel should be removed from dragon drawing and printed separately. Operation order colors for the template and dragon are not compatible.

### Workflow for dowel notching

**NB Before printing the notched dowel, check the kerfing of the dowel notches to give a good fit to your actual wing thickness.**

1. (#1 black) Cut template rectangle
2. Ignore other operations. Open Glowforge lid. Remove rectangle cutout.  
Place dowel in rectangle with left end against left side of rectangle. Dowel length  $<0.8$ ,  $>0.6$  inch long.  
Tape in place with blue tape.
3. (#2 dk blue) Cut end notches. Focus 0.188 inches; 200/Full/2 passes Pro model
4. (#3 dk green) Cut center notch
5. (#5 fluor green) Cut center line
6. (#6 fluor blue) Cut end line

### Assembly Notes

Check fit of dowel in dowel hole left side of dragon body. My dowel was not round and required light sanding to get a tight fit. The fit should be tight but not too tight. You want to be able to rotate the wing pitch.

Glue the left wing (score side up, glue tab to right) into a dowel notch. When glue dries, this should fit into the left-side body hole.

When this glued wing has dried, insert dowel into the body hole so that the other dowel notch is far from the body as possible. Then glue the other wing, scored side up, into the dowel notch. Avoid getting glue on the round rotating surface of the dowel.

After glue dries, rotate dowel in body hole to be centered when second side of body is glued. Align and glue each part of the slit body parts against the dowel and whole body perimeter. Avoid getting glue too close to dowel surface so wing rotation will be possible.

For the balancing point, use a round toothpick about 0.6 inches long slid up into the dragon mouth. A pointed metal rod would provide less friction on a hard surface. Sharpened copper wire or paperclip snip maybe.