



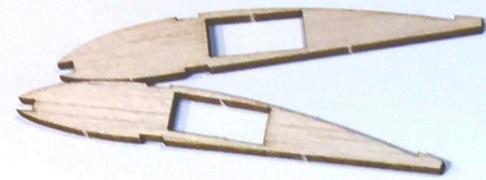
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Semi Symmetrical Wing Assembly

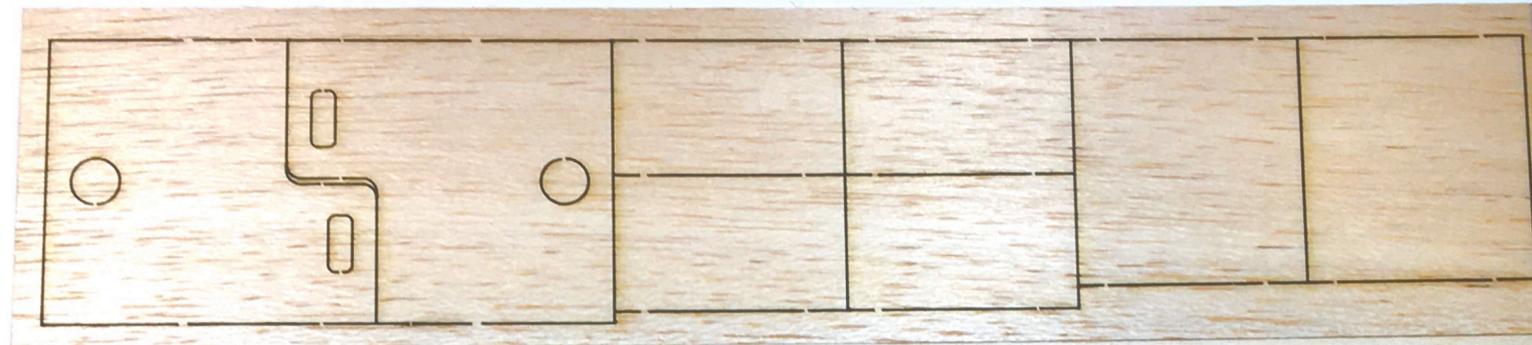
Servo Ribs



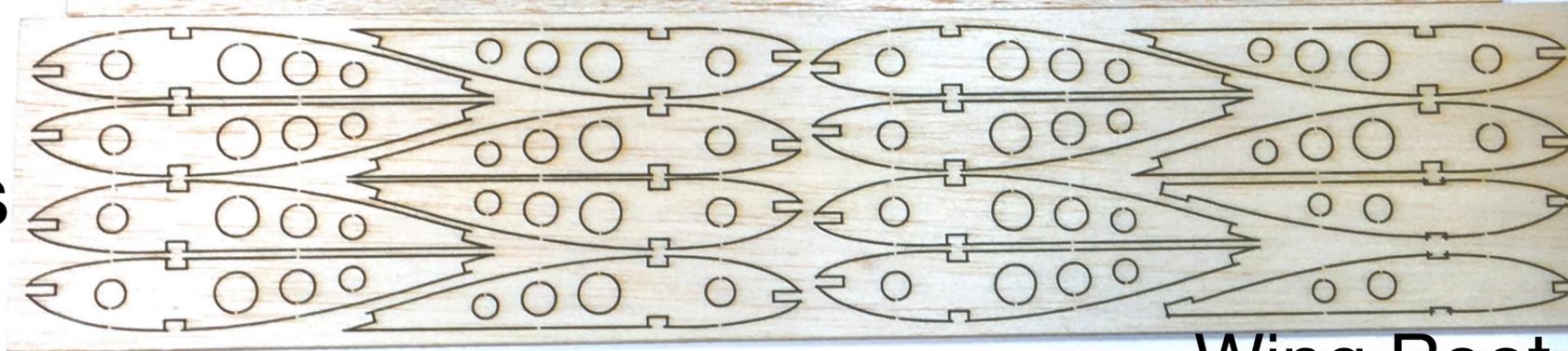
Wing Tips



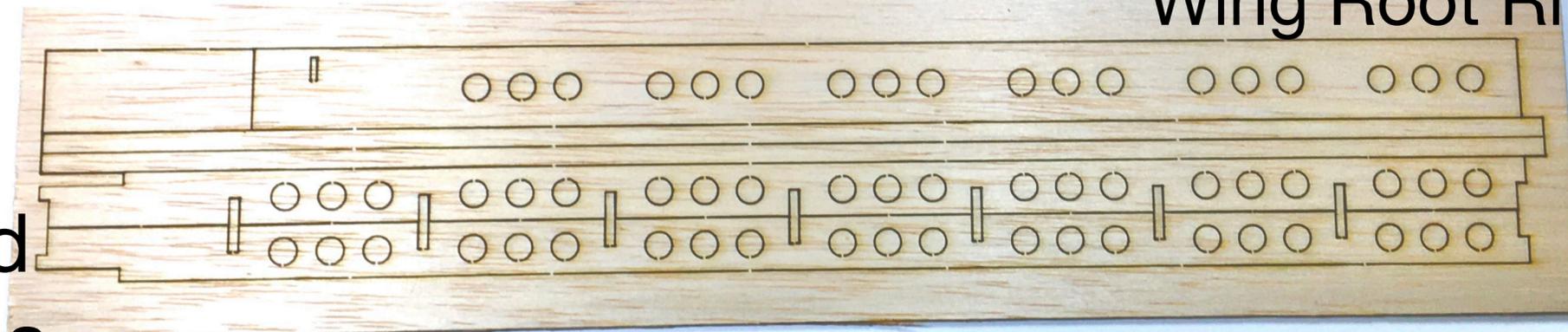
Wing Root Panels



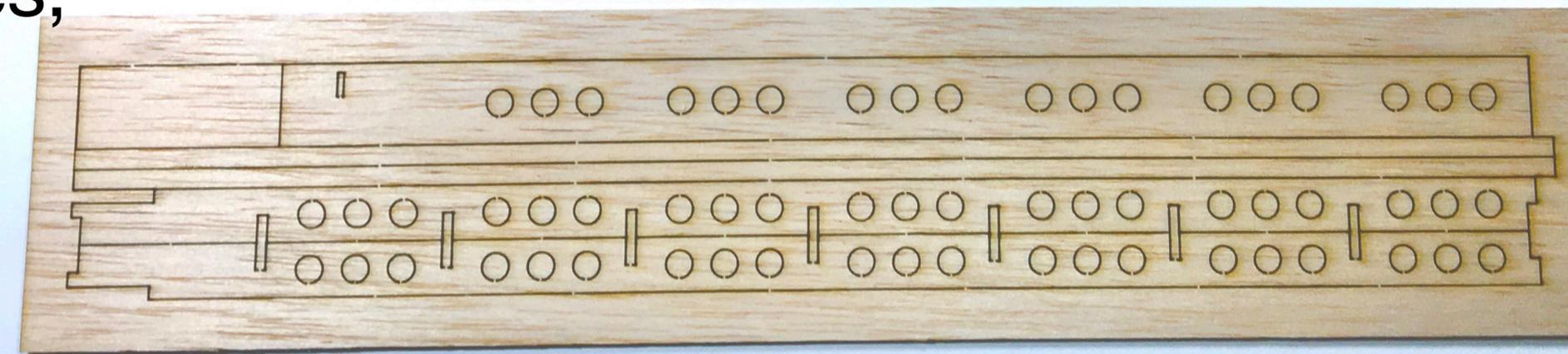
Wing Ribs



Wing Root Ribs



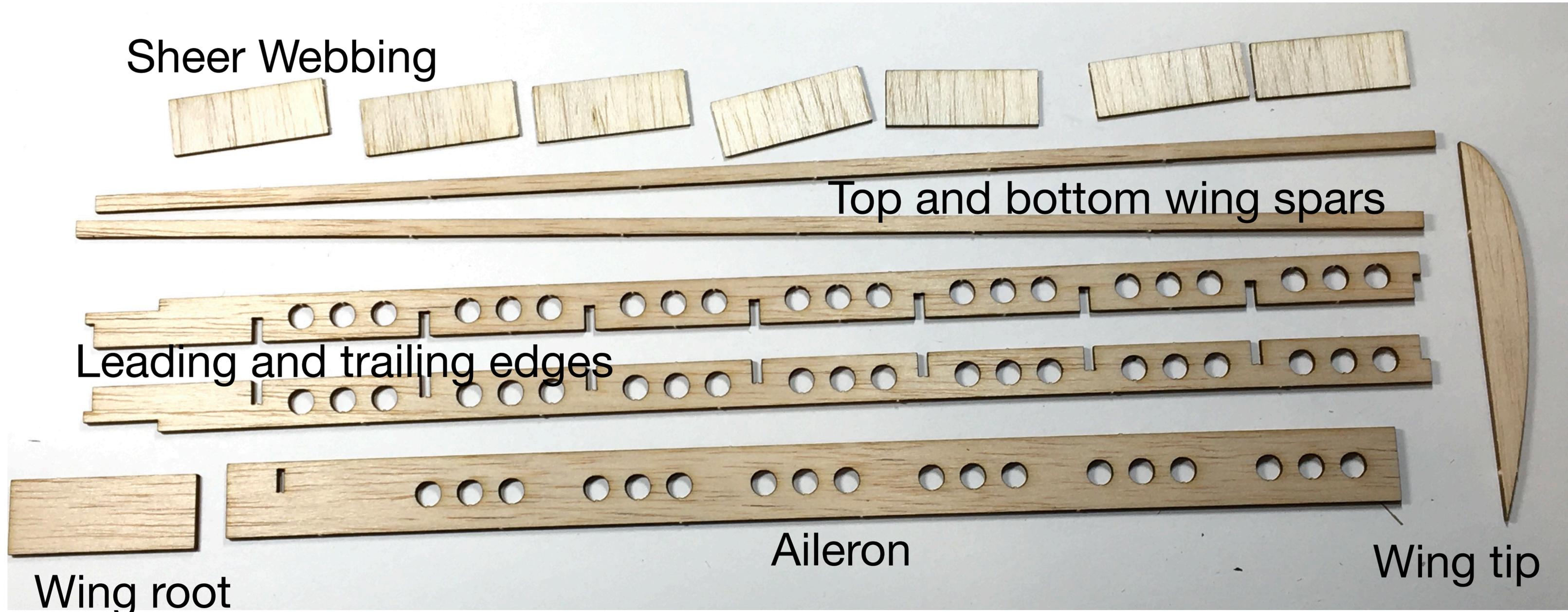
Leading and Trailing Edges, Spars and Ailerons



Sheer Webbing



Wing components



Sheer Webbing

Top and bottom wing spars

Leading and trailing edges

Aileron

Wing tip

Wing root
trailing edge
extension

Displayed in right wing orientation

Wing ribs

One per wing

Wing Root Rib



One per wing

Servo Rib



Seven per wing

Main Ribs



Pro tip: Dry fit your servos in this opening a number of times before assembly making sure that it will go in easily. This can be improved by removing the paper and glue from the servo surfaces.

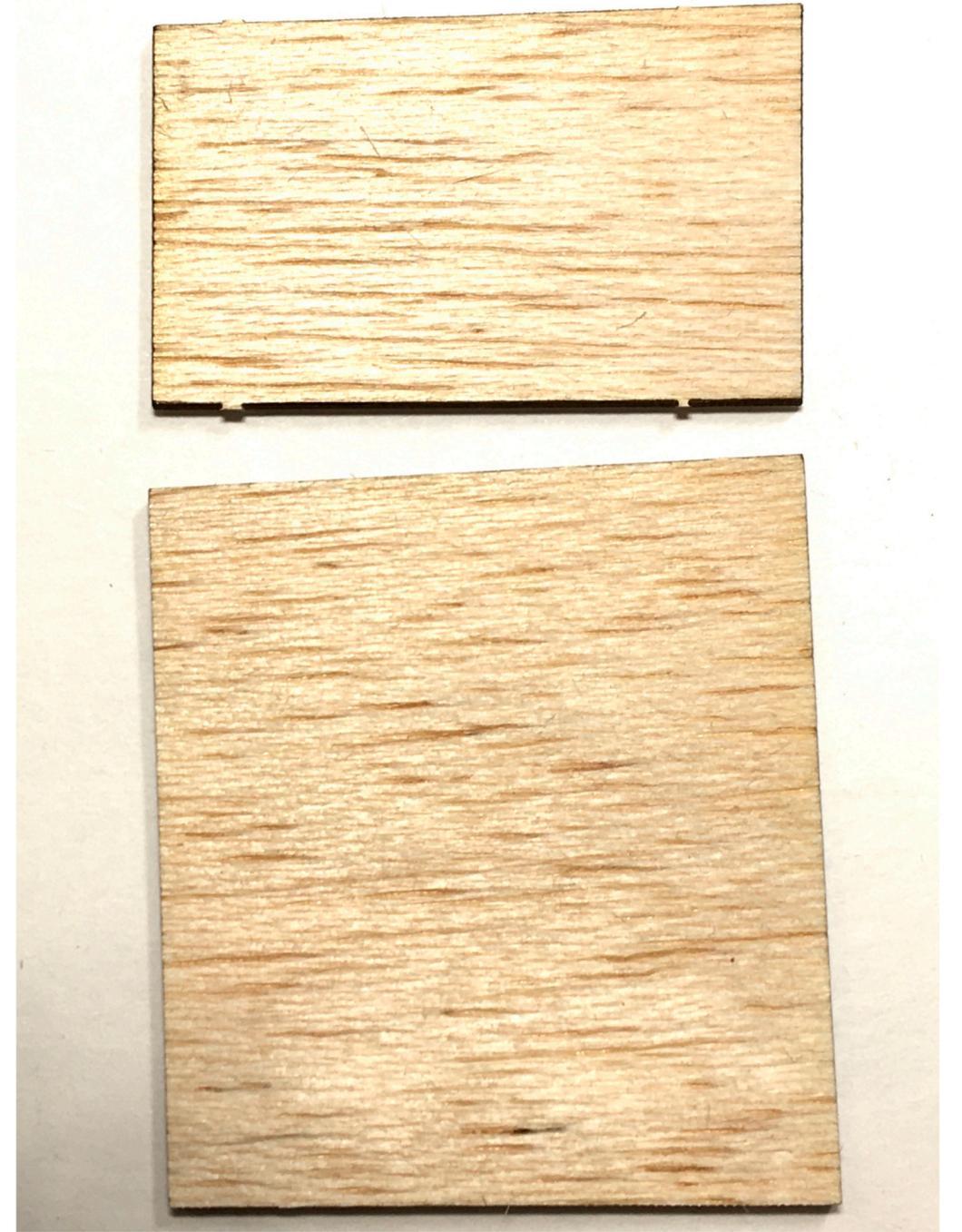
Wing dihedral wing joiners



Wing root panels



Servo



Top

Right Wing

Wing Root Web

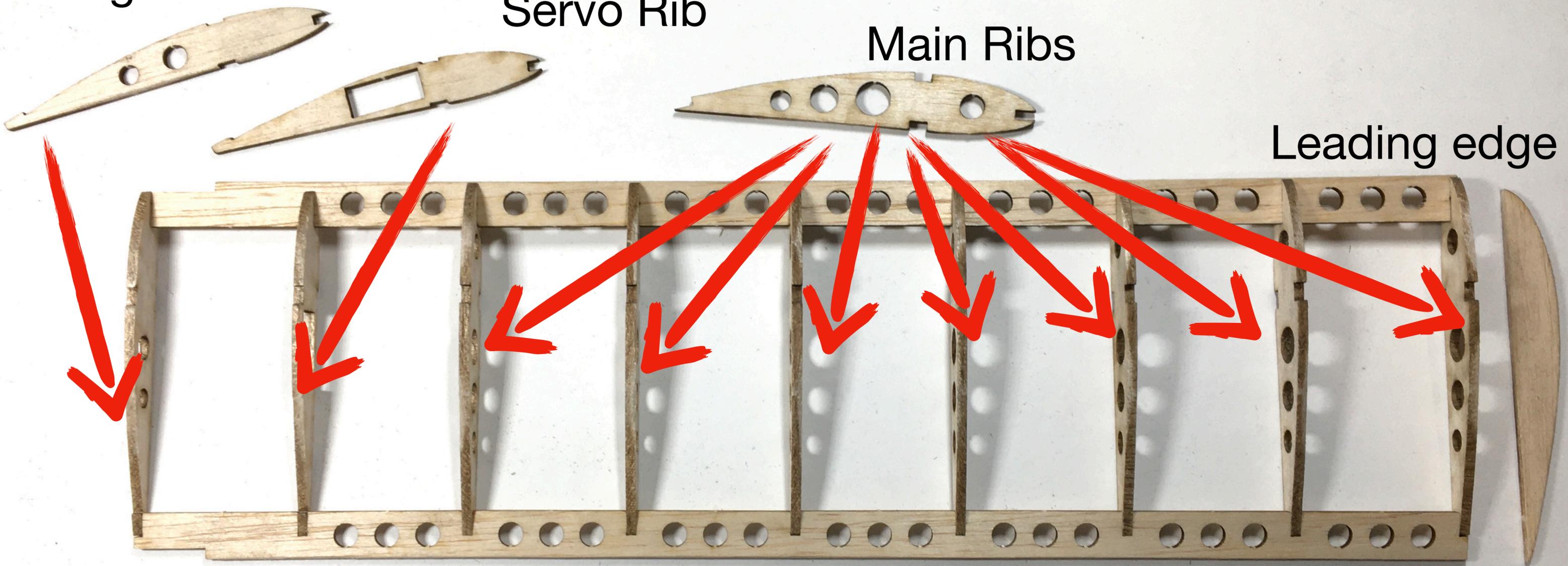
Servo Rib

Main Ribs

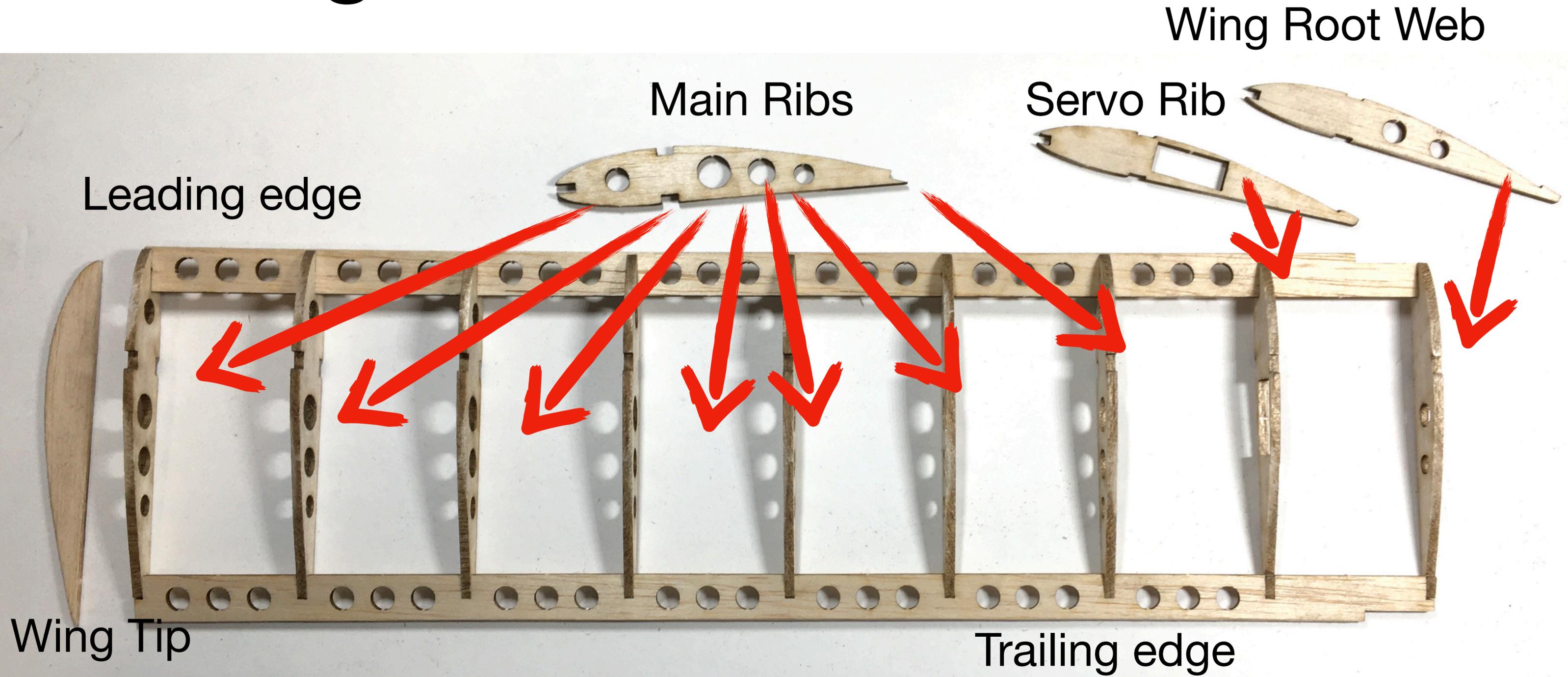
Leading edge

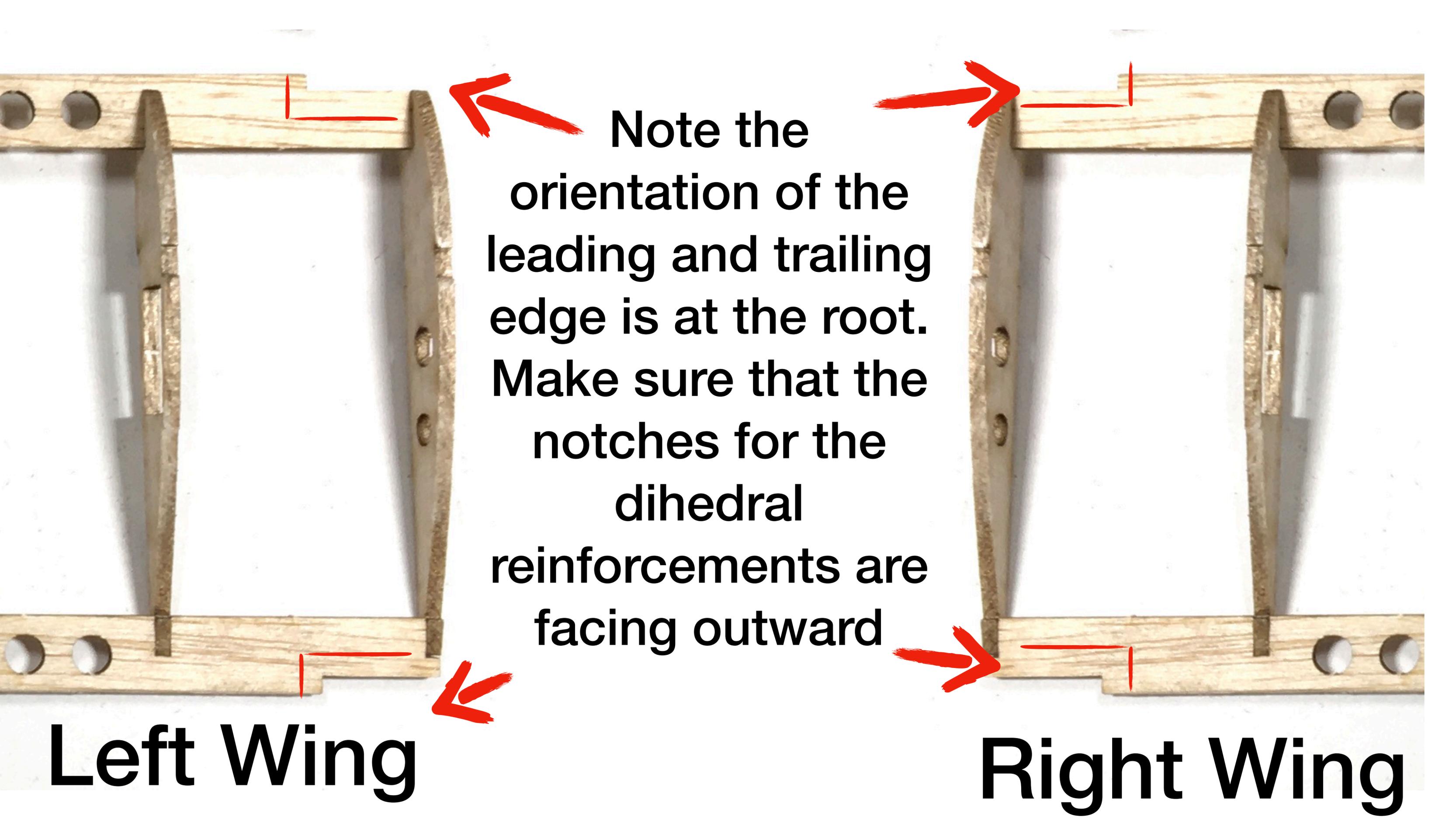
Trailing edge

Wing Tip



Left Wing





Note the orientation of the leading and trailing edge is at the root. Make sure that the notches for the dihedral reinforcements are facing outward

Left Wing

Right Wing

Pro tip

Sand off all the laser cutter nibs prior to assembly. Especially for those components which will impact the covering. It makes your model look smoother!

Other pro tip. Nail files are very convenient to use for this procedure

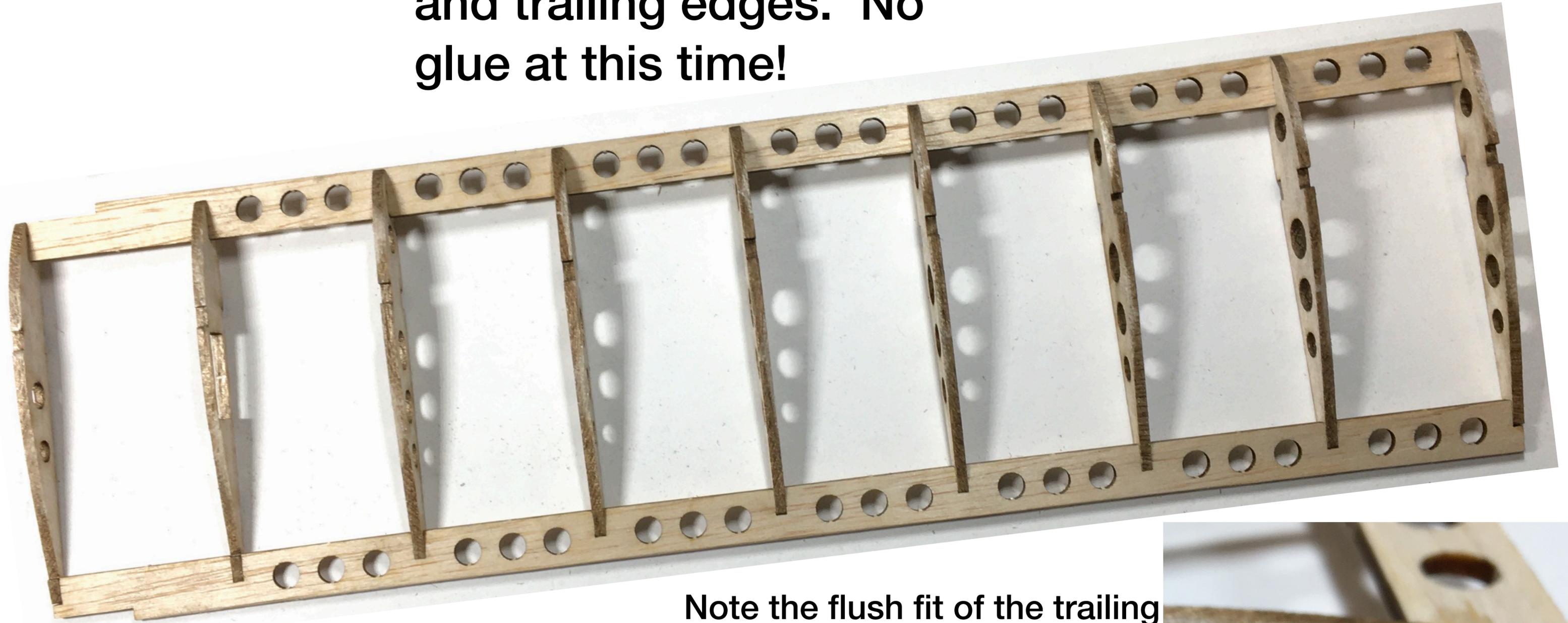
Another pro tip. Do not use your wife's nail file!



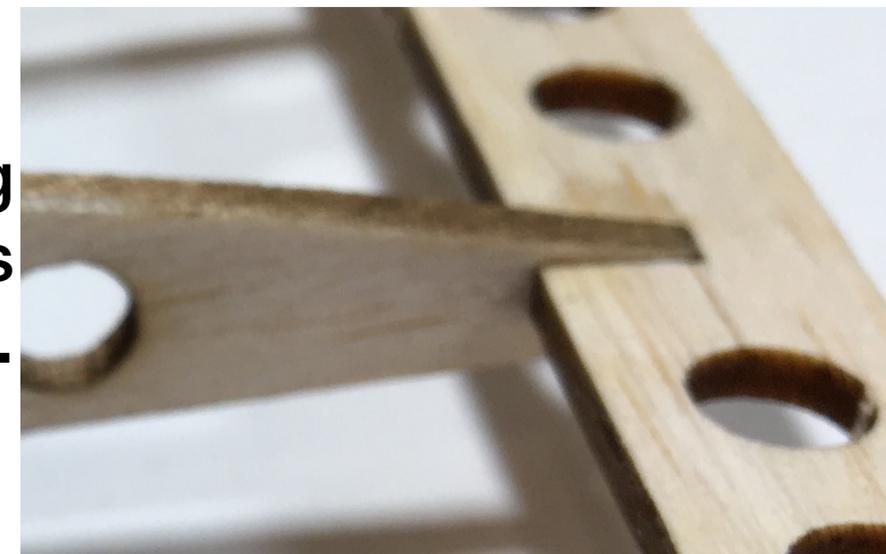
Step one

Dry fit ribs to leading and trailing edges. No glue at this time!

Pro tip. Dry fit each slot alone first to make sure fit is easier!



Note the flush fit of the trailing edge to the ribs which follows the contour of the top of the rib.

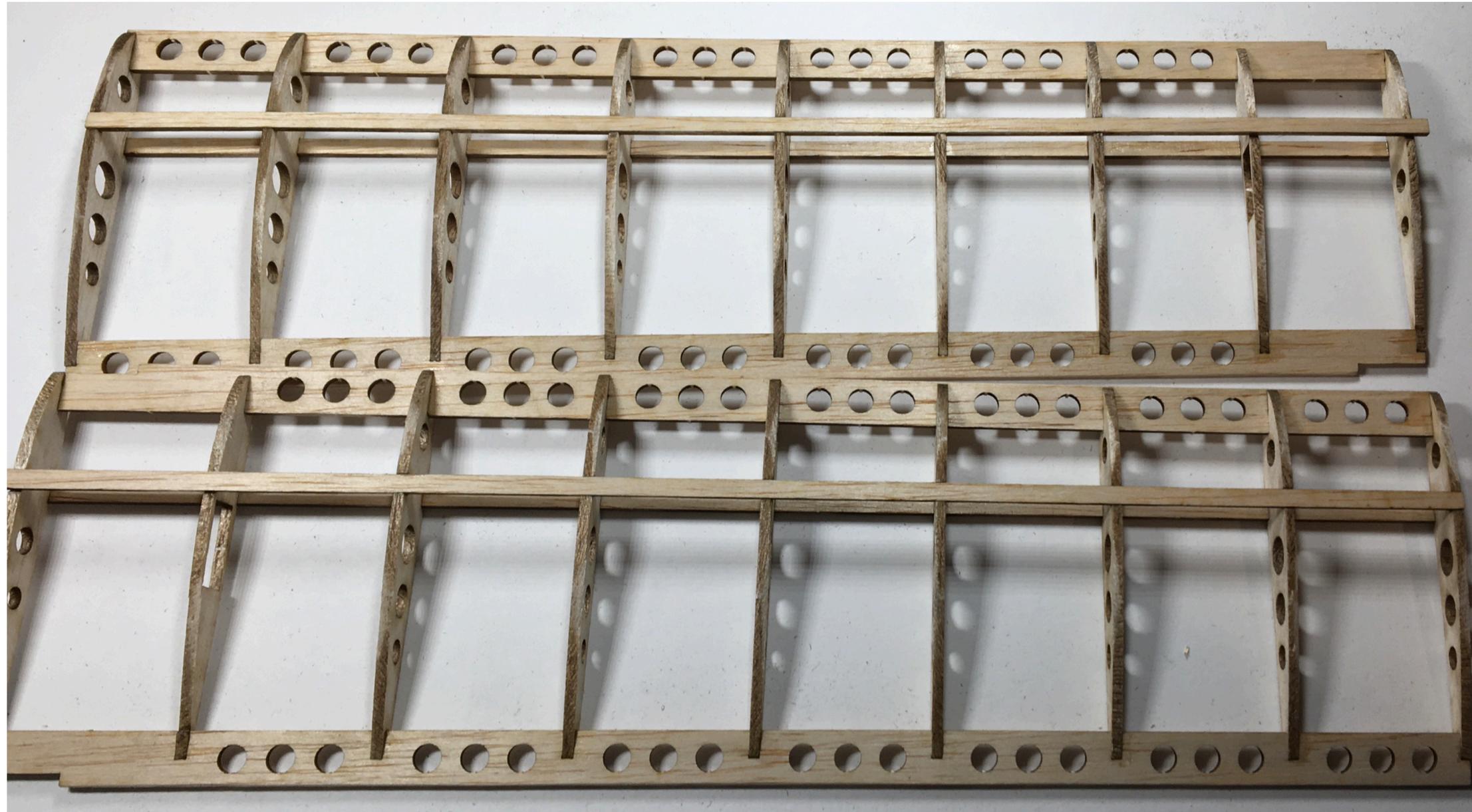


Right wing assembly displayed!

Step two

Next add top and bottom spars. DRY FIT!

Pro tip. I do both wings at the same time. This assures that I have all components in the right orientation.



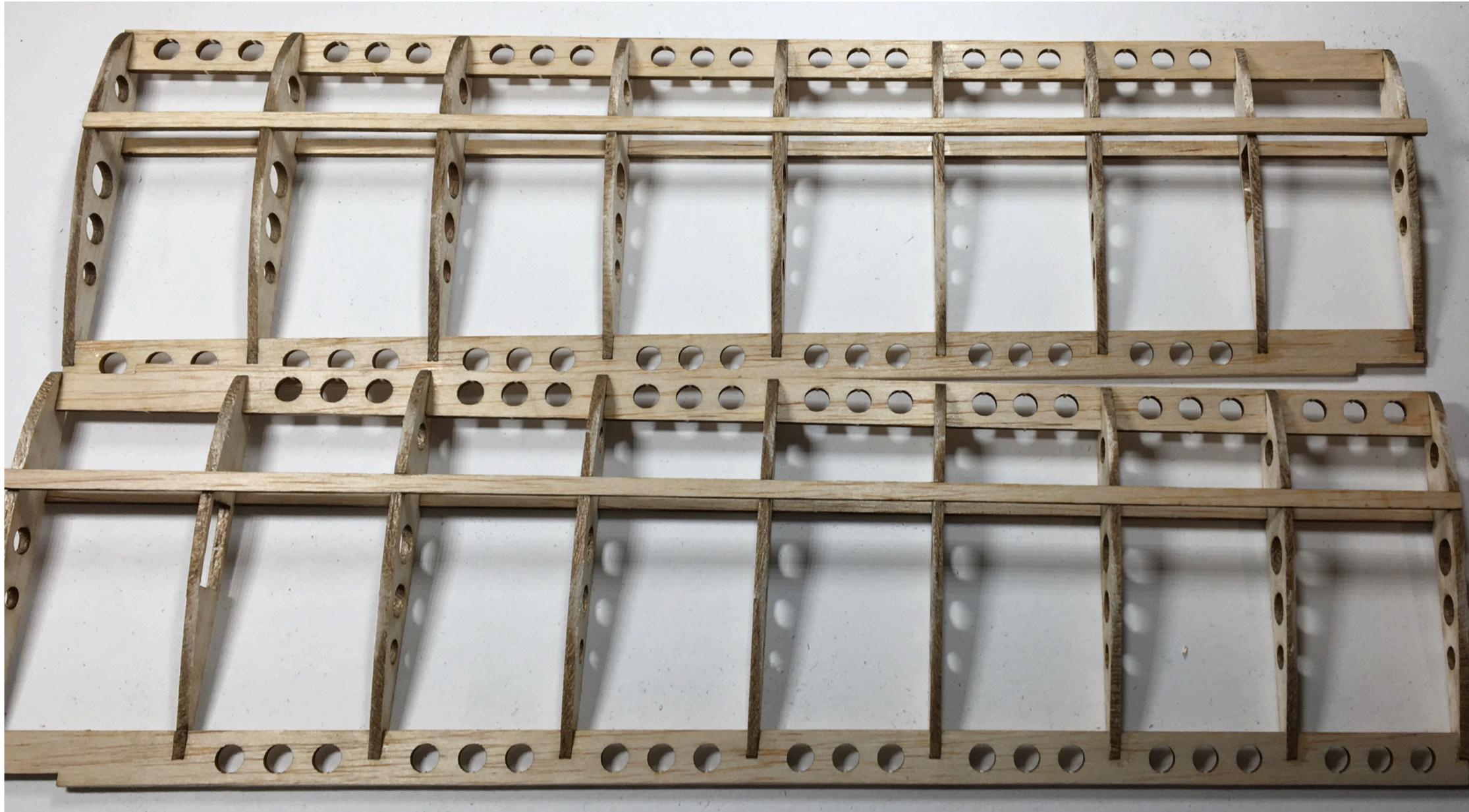
The top and bottom spars are longer than the wing length. I always have the excess towards the wing root that I trim at the end of the assembly



Step three

After you're assured of the orientation and alignment of all components start gluing

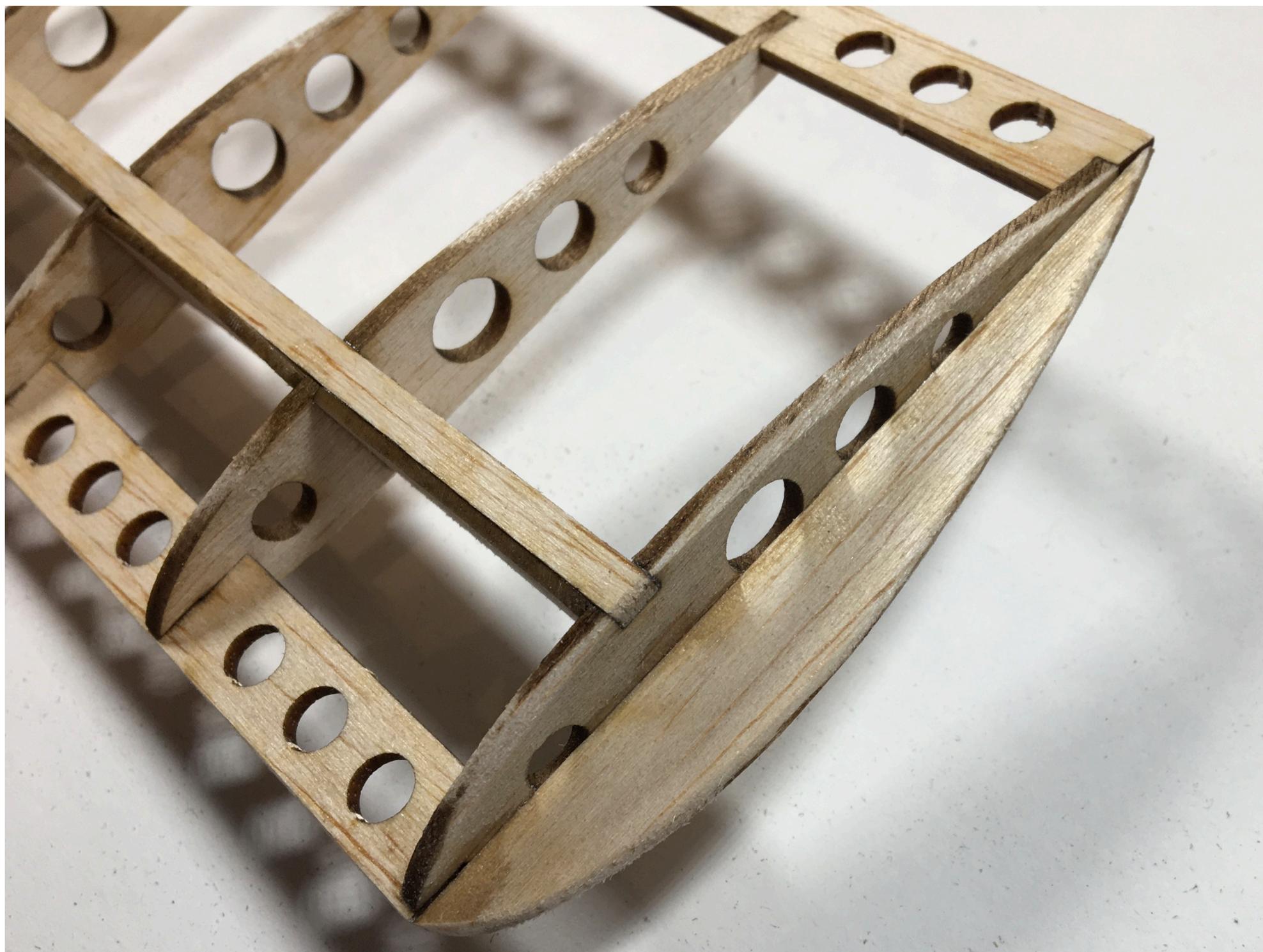
Pro tip: use thin CA with a capillary tip



1. Always check alignment
2. Start with the leading edge. Then the trailing edge.
3. Always check alignment.
4. Finish with the top and bottom wing spars.

Step four

Add the wingtips.

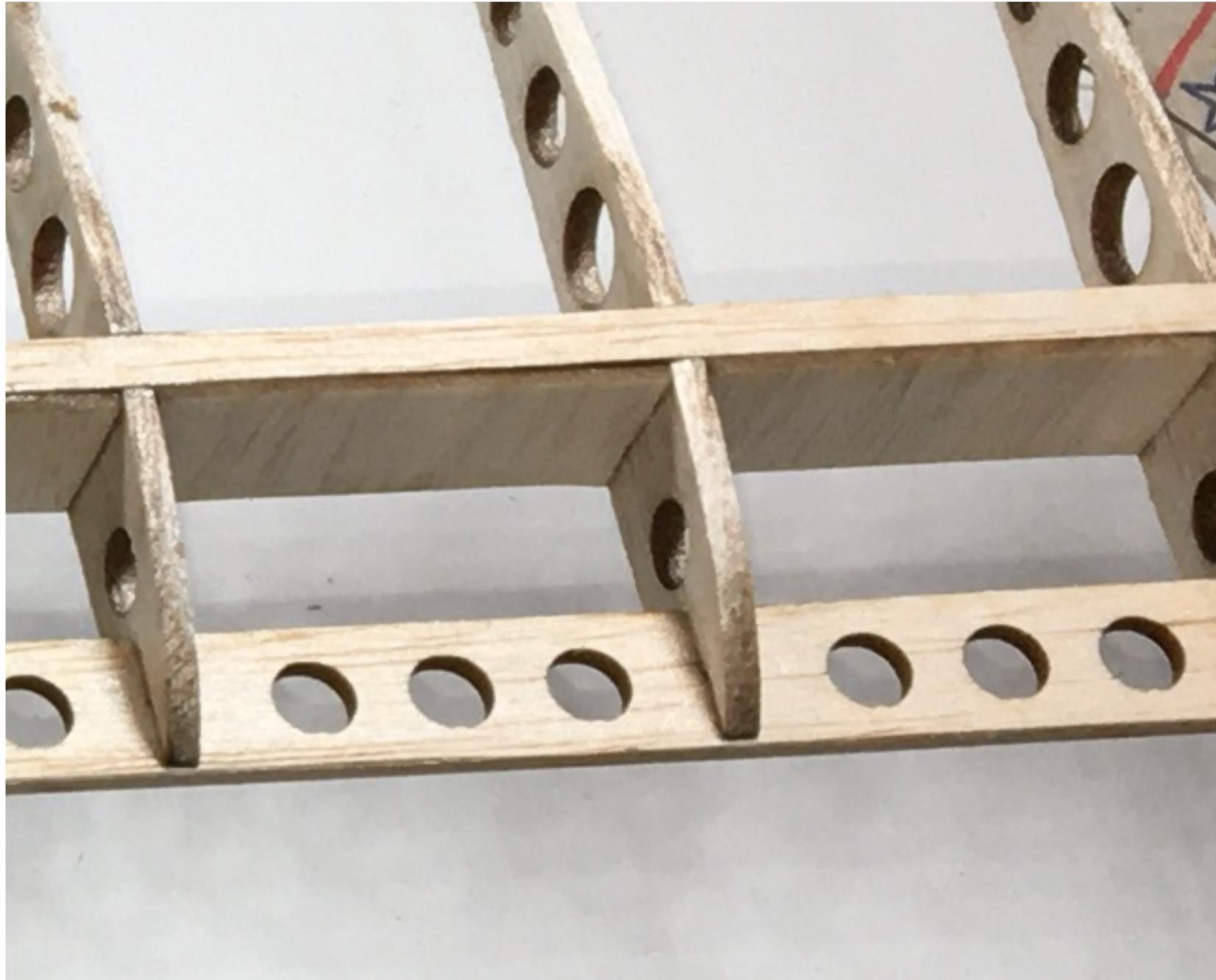


1. The wingtip should align with the leading edge being coplanar with a semi-symmetrical wing assembly.
2. The trailing edge of the wingtip will align to the END trailing edge.
3. I first tack this tip very lightly at the leading edge with a small drop of CA glue.
4. Checking alignment I will then tack the trailing edge in place.
5. When satisfied with alignment I glue the wing tip completely against the end rib.

Pro tip: Note that I eased over the edges of the rib and wingtip prior to this assembly so that I have a smoother fit of covering material.

Step five

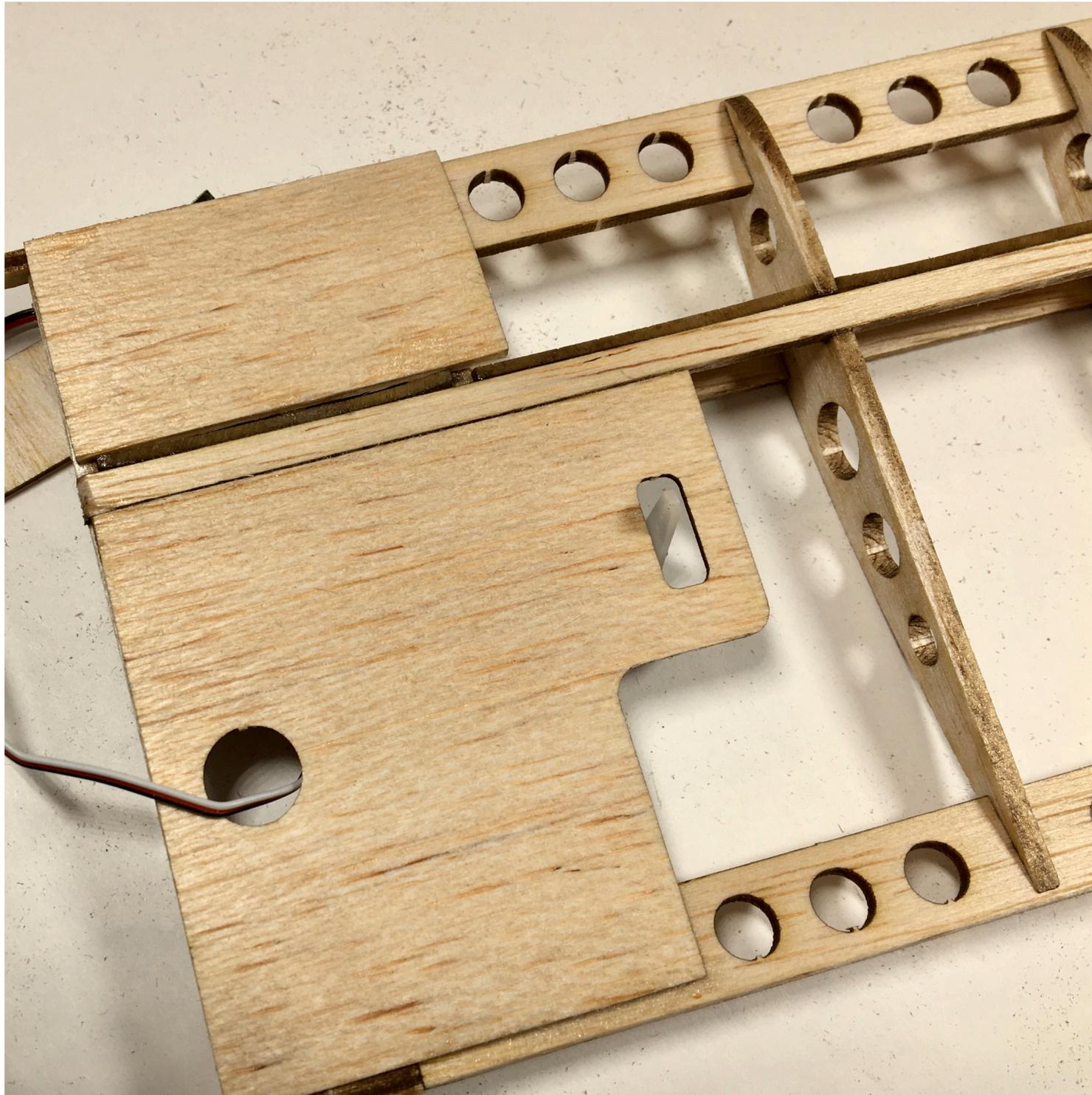
Add sheer webbing



1. This sheer webbing panels are placed in front of the wing spars towards the leading edge.
2. There are 8 panels
3. Dry fit all sheer webbing first.
4. Trim by sanding if necessary.
5. Then glue it in place.
6. *The webbing between the wing root and the servo ribs need to carefully aligned so that they don't interfere with the covering panels!*

Step six

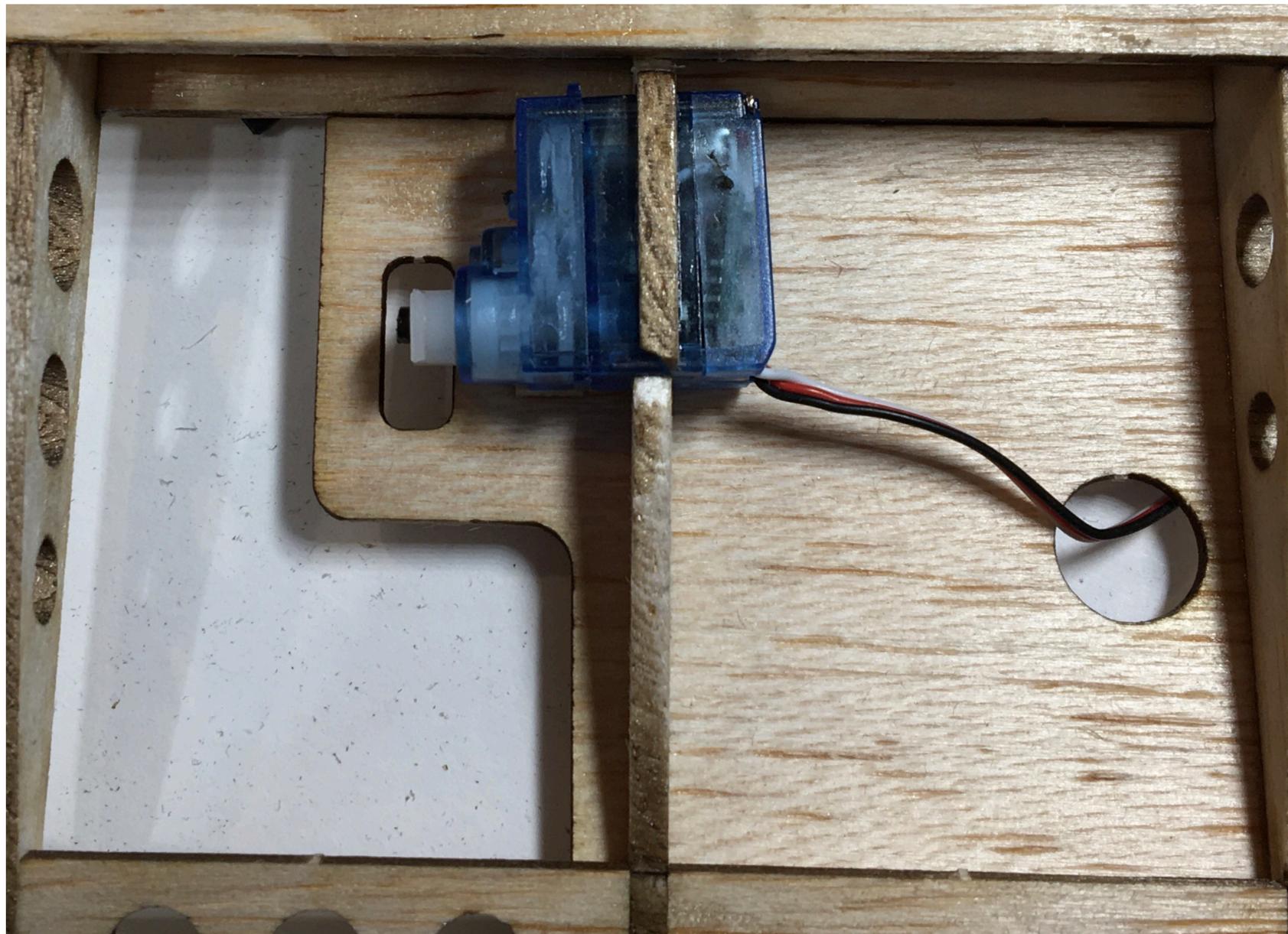
Wing root panels



1. First dry fit the wing root panels at the base of the wing.
2. Make sure that they fit flush to the wing spar.
3. PRO TIP You can make the wing panels more pliable by spraying a little Windex on the surface. It will make the curvature easier.
4. PRO TIP Using painters masking tape tape everything in place until the Windex dries, and you have a nice curved dry panel.
5. After this is completed you can glue in place.

Step seven

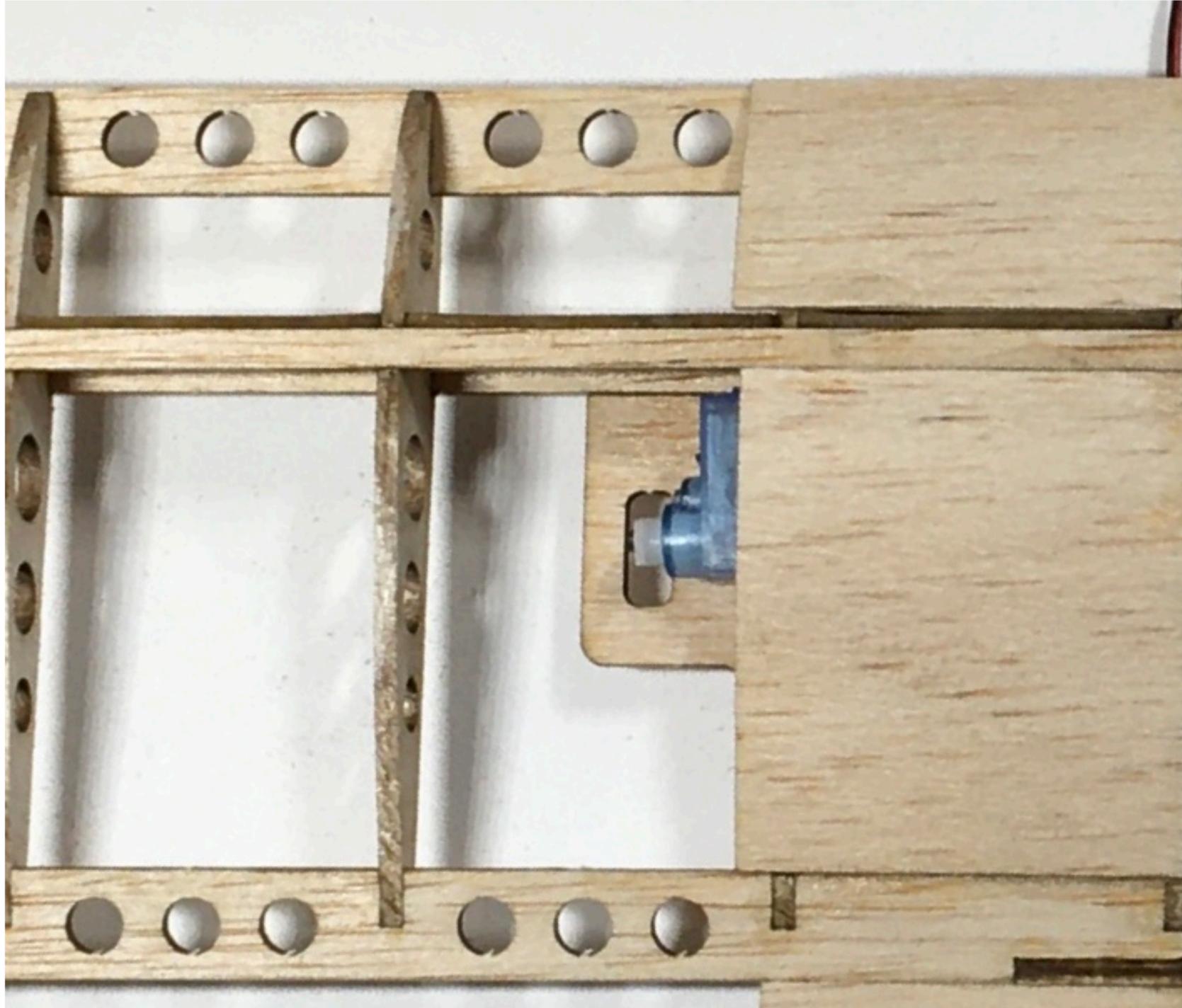
Insert servos



1. Insert the servo and glue in place.
2. Some prefer to use hot glue.
3. If you're in a hot climate hot glue can soften. I prefer to use CA.
4. Someone note that I broke the top of the rib. I saved the material as a spacer. I'm not worried because this is going to be covered by the top panel.

Step eight

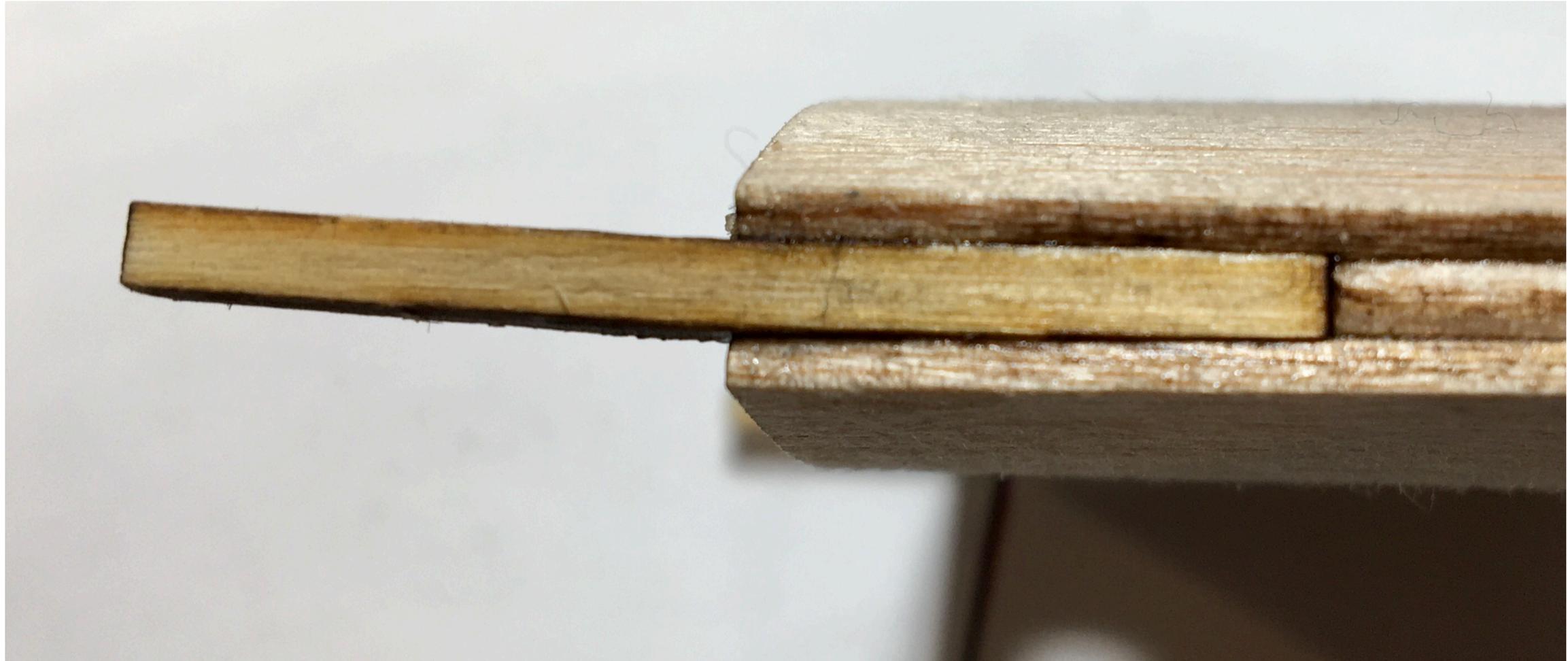
Add top wing covering



1. First dry fit the wing root panels at the base of the wing.
2. Make sure that they fit flush to the wing spar.
3. **PRO TIP** You can make the wing panels more pliable by spraying a little Windex on the surface. It will make the curvature easier.
4. **PRO TIP** Using painters masking tape tape everything in place until the Windex dries, and you have a nice curved dry panel.
5. After this is completed you can glue in place.

Step nine

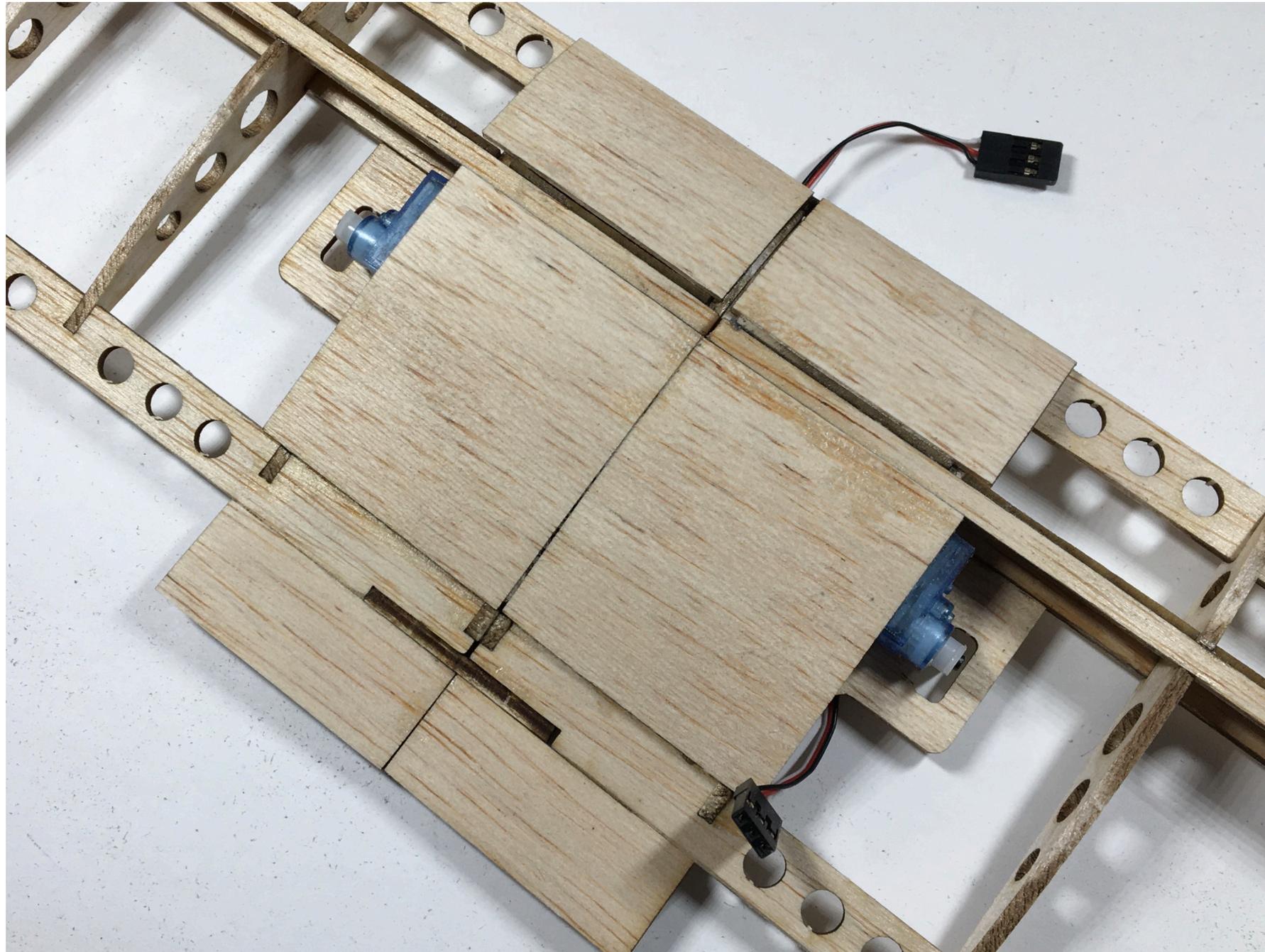
Add dihedral wing joiners



1. Glue into place. Make sure that the top and bottom panels fit tightly to this joiner.

Step ten

Join wings together add wing root trailing edge extensions

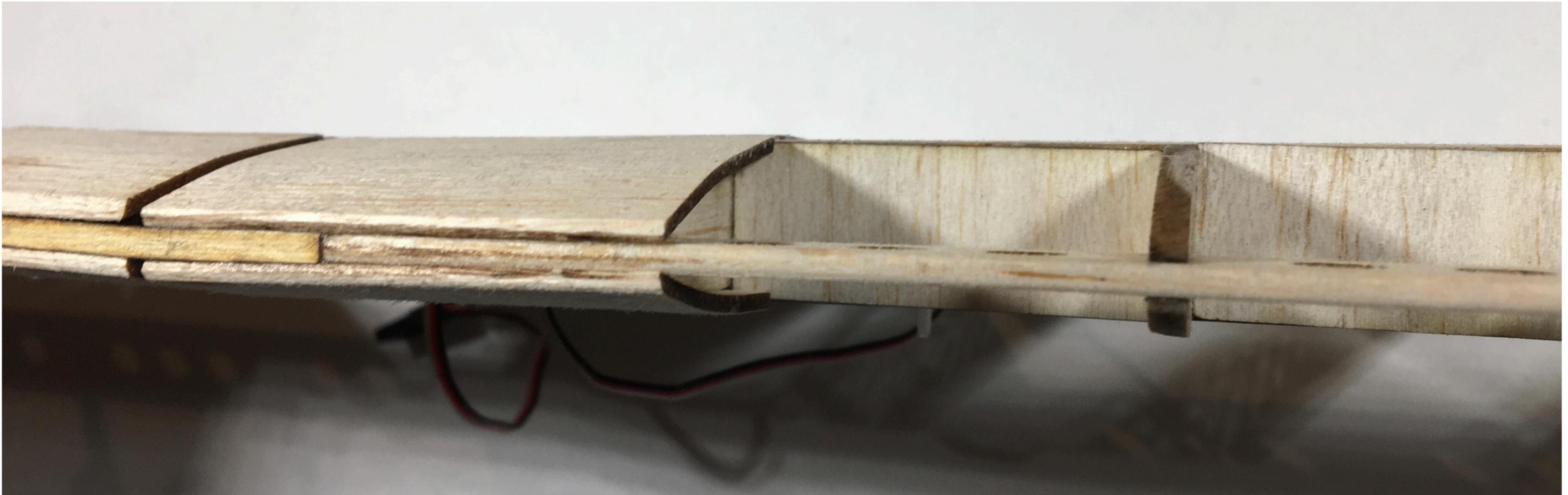


1. Alignment
2. Alignment
3. Alignment
4. Tack Glue
5. Check alignment
6. Glue

Step ten

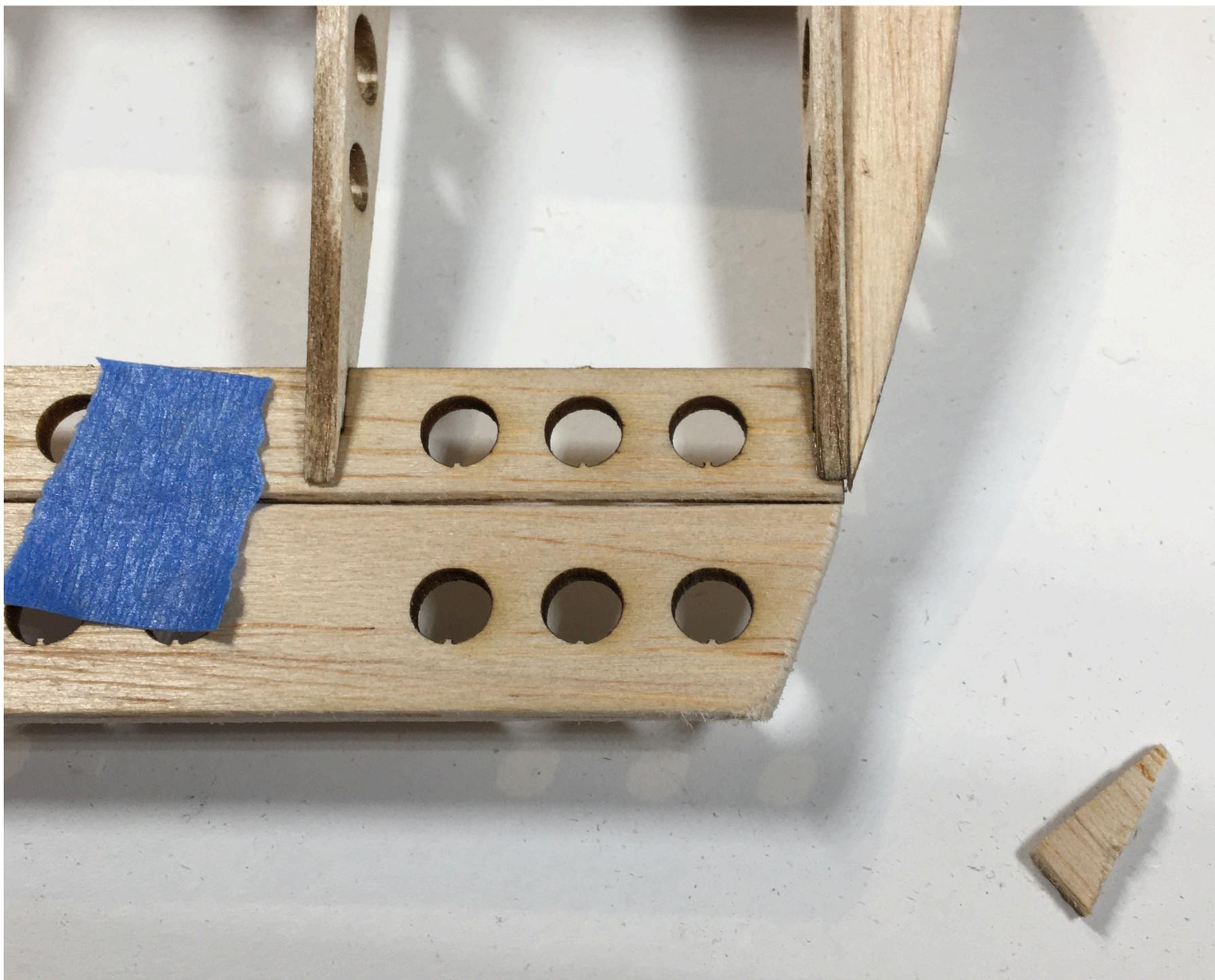
Finishing

1. Round over leading and trailing edges using your wife's nail file
2. Replace your wife's nail file to her make-up kit



Step ten

Finishing continued optional



1. Trim the trailing edge of your aileron to match the contour of the wingtip if your model does not extend the wingtip extension to the trailing of the aileron.



Congratulations