

Assembly Manual

XXLite Wing

Parts provided:

- wing
- 2x2mm square brass rod
- 1mm steel hinge axle
- 1.2mm steel wire
- control horn x 2
- control horn tool

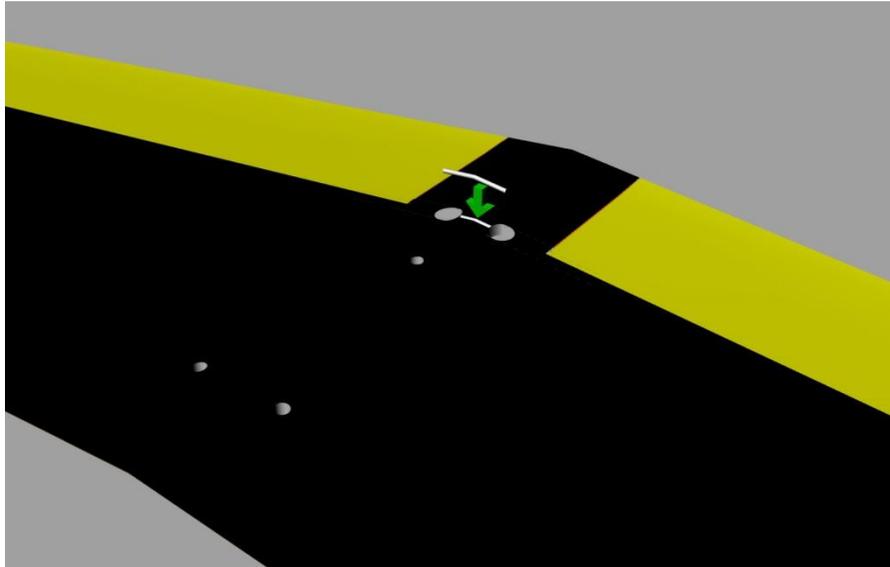
Optional:

- standard wing blade
- T-blade

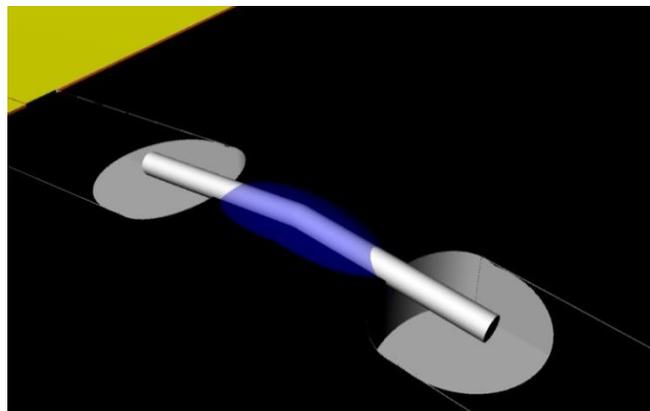
Steps:

1. Clean and/or roughen the center portion of the hinge-axle for better bonding.

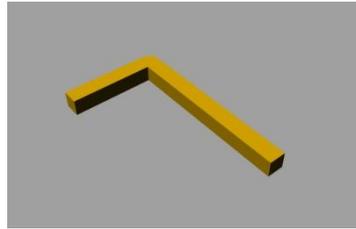
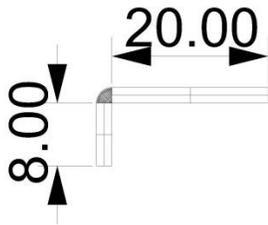
Insert the axle in the groove as shown on the picture (green arrow).



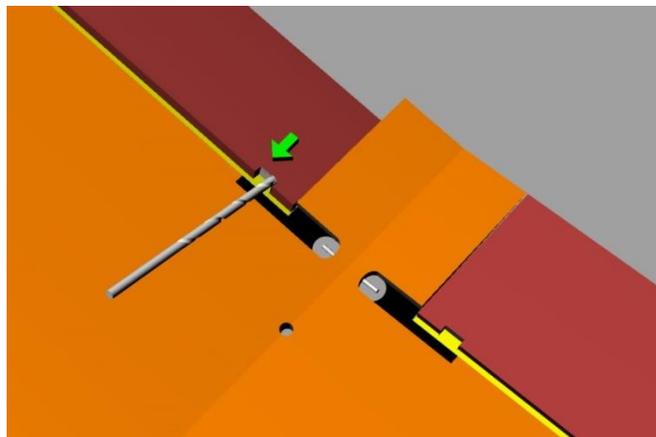
2. Once in place glue it using epoxy or CA + filler, be generous with glue.
Optional: apply a small patch of fiberglass or carbon over the center of the axle.



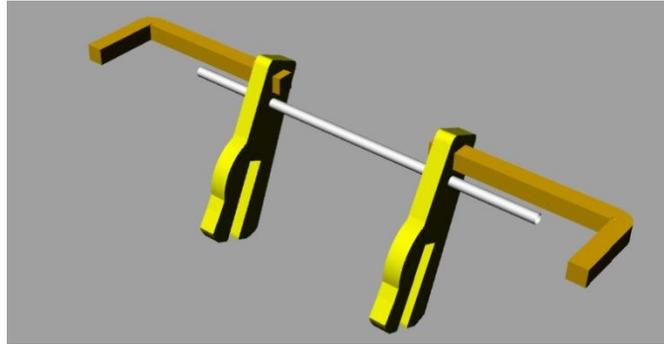
3. Take the 2x2mm square brass rod and cut it to size , 1 end needs to be 20mm long measured from the inside of the corner , the other end 8 mm. soften the edges, make 2 pieces.



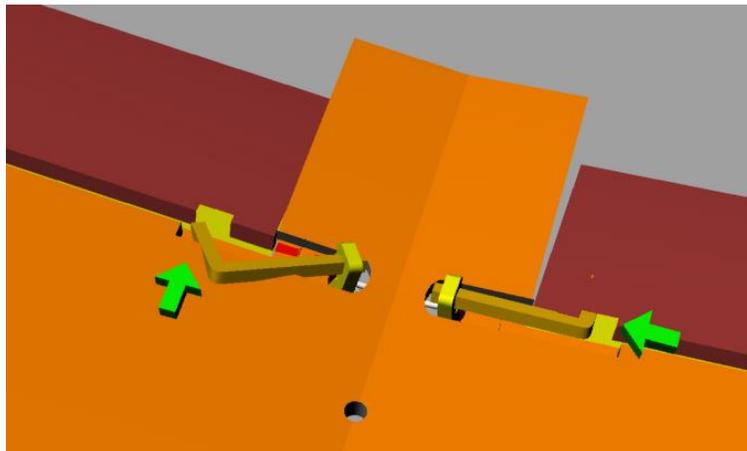
4. The wing comes already pre-finished by CNC as follows, the holes through the wing for the control horns are cut, excess material is removed in order to allow the brass L-pieces and control horns to move freely while the ailerons deflect (remove the rohacell all the way to the bottom skin on the machined areas.) There's also a mark cut into the aileron (green arrow) where the foam in the ailerons needs to be removed for the brass L-pieces. These marks are 8mm wide, remove the foam 8mm deep , 8mm wide into the aileron. Use a small drill to remove the foam.



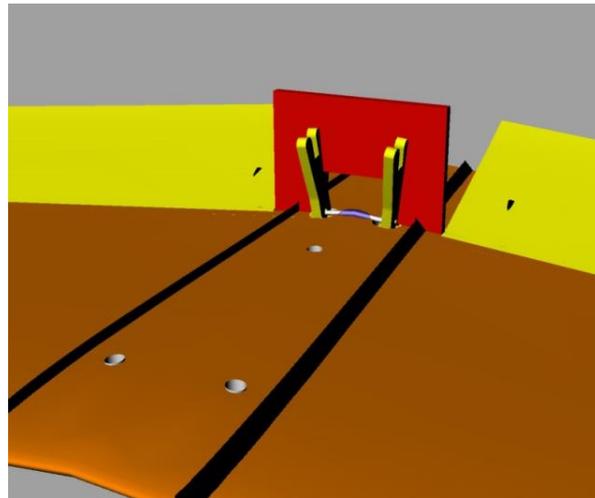
5. Take the control horns and slide them over the brass I-pieces you need to make a left and a right one , the bulges on the control horns need to point to the TE of the wing .



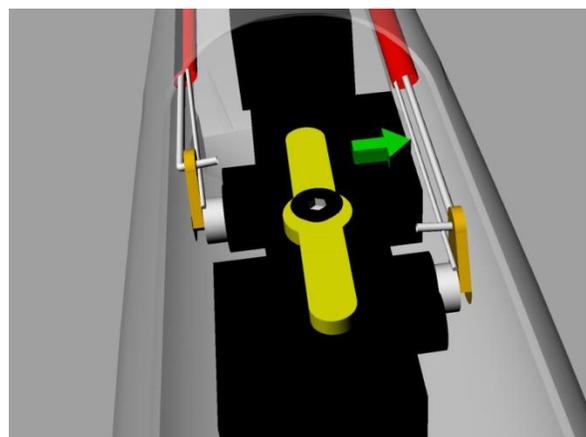
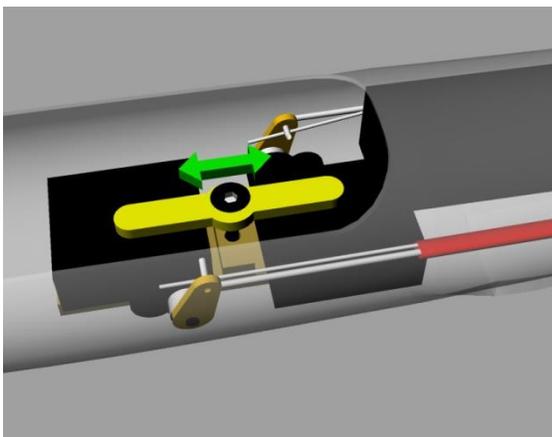
6. Insert the brass I-pieces into the slots in the ailerons then slide them over the hinge axle glued on the wing.



7. Flip over the wing and install the alignment tool (in red) like shown below. This will keep the horns in position. Flip the wing over again and glue the horns to the brass I-pieces with a tiny drip of CA & glue the brass I-pieces into the ailerons, use a drip of CA to fixate them then fill out the hole with epoxy. Put the wing with the LE up to glue it, this way the epoxy will not run into the hingeline.



8. Mount the wing on the fuselage, make sure the fork on the control horns are fitted over the dowel pins on the pushrods, now loosen the top plate on the servos and move the servo fore or after till the ailerons have zero deflection.



The bolted down top plate is not enough to keep the servos in place , they need to be glued.

Before gluing them set you endpoints to max and measure how much deflection you get , it should be at least 12mm up and 20mm down if you get more up and less down tilt the servo horn further , if you get more down and less up put the servo horn more straight up.

glue the top plate to the servos(wrapped in tape) , once this is cured unhook the pushrods take out both servos attached to the top plate and put a little glue(epoxy) on the servo tray , bolt down the servos again and let it cure .

Not much glue is needed on the bottom plate , just a little to prevent the servos from rotating , if they would need replacement cut the tape around the top plate , take the top plate off (with pieces of tape attached) now you can fairly easy take out a servo if you used only little glue on the bottom plate.

Done!