

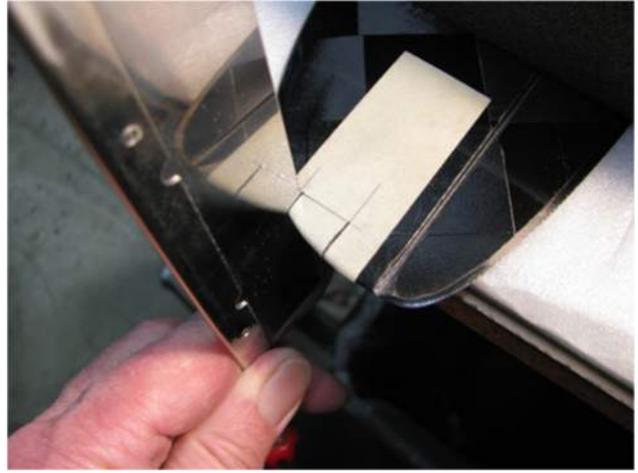
CR T-Blade Installation Guide.



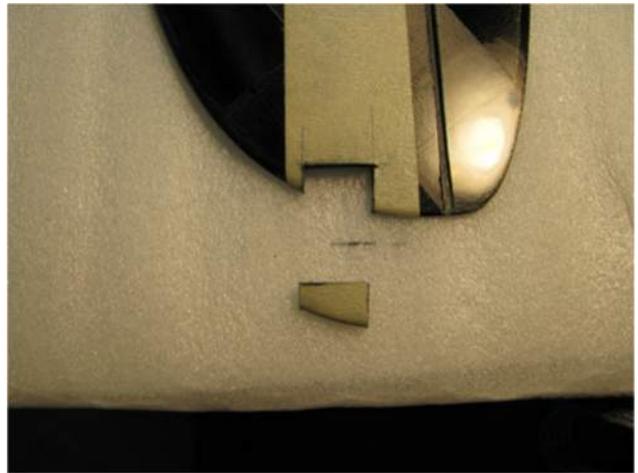
Step 1: Measure thickness of blade tongue.



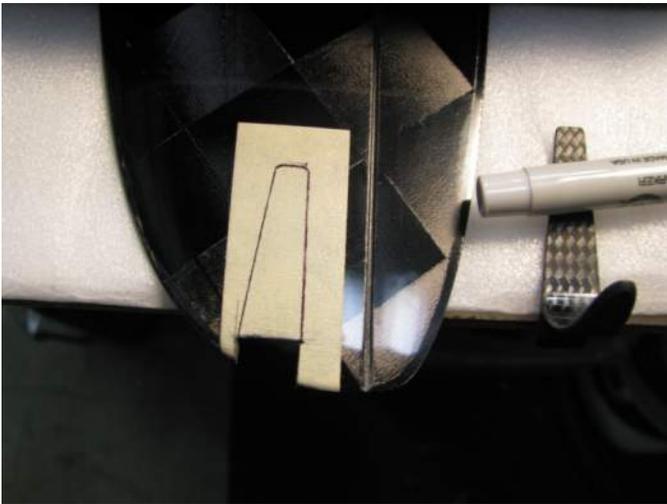
Step 2: Measure the thickness of your wing tip to determine the furthest point aft that the tongue will fit within the wing. Remember to add .012" to .016" to the external wing thickness measurement to allow for wing skin thickness.



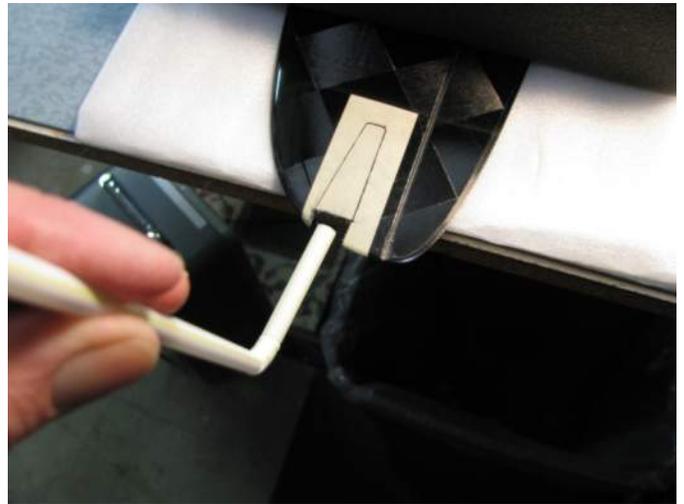
Step 3: Lay out to cut a notch for inseting the blade. The aft line should be 3/8" deep and parallel to the hinge line. The notch should match the width of the blade. Use a thin fine-tooth x-acto saw for these cuts. Draw the saw backwards to make the cuts so the teeth don't chip the thin wing skins.



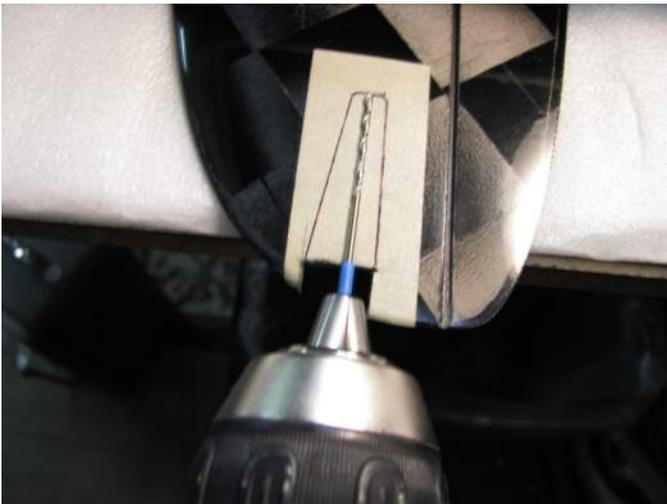
Step 4: Use a thin Dremel cut-off disk or a straight Edge and #11 knife blade to make the right-angle end cut. Save the cut-out piece for step #11



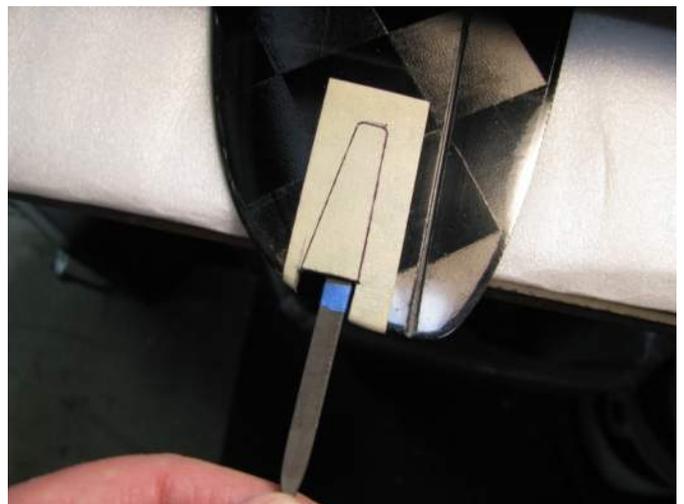
Step 5: Lay the blade on top of the wing and trace the tongue outline onto the masking tape.



Step 7: Use a straw to blow out the loose foam particles and dust as you work through steps #6 and #8. Do not use compressed air as excessive pressure will risk delaminating the wing skins from the core.



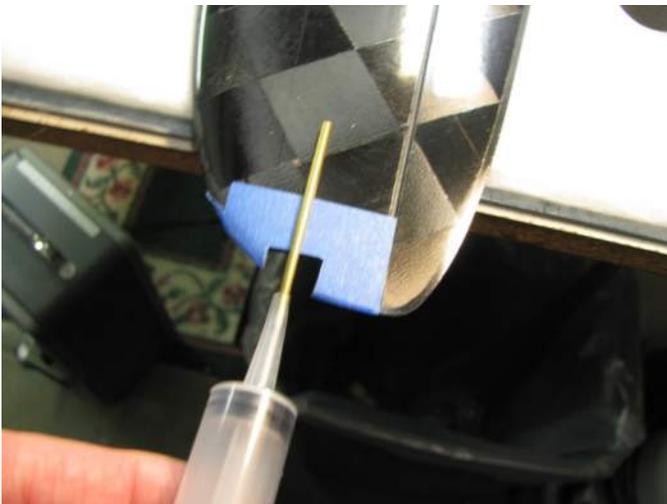
Step 6: Mark a 1/16" diameter drill bit for depth of cut by wrapping with masking tape. Use the bit in a drill to remove the foam within the outlined area. Try not to remove foam beyond this area to minimize the amount of adhesive needed to secure the blade in the wing.



Step 8: Use a thin file marked for depth of cut to scrape any remaining foam from the inside face of the wing skins. This ensures the best possible bond between blade tongue and wing skins.



Step 9: Dry test fit the blade into the recess to make sure that it seats full depth and without obstruction.

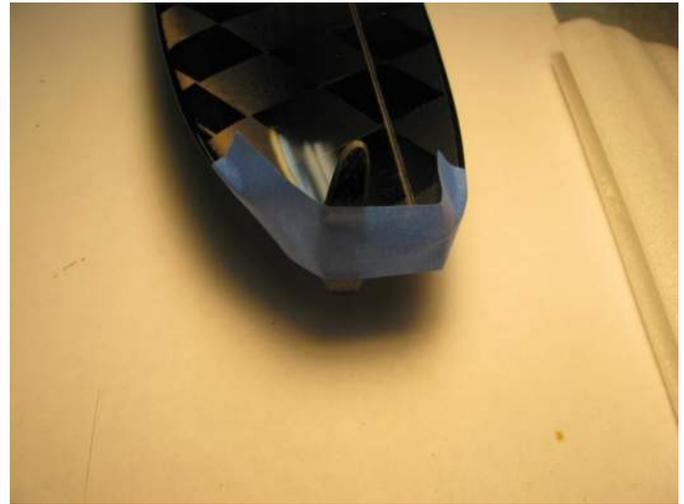


Step 10: Use a hypodermic with a large needle or with a 1/16" length of brass tube fitted for injecting the cavity with adhesive.

A good laminating epoxy thickened with fumed glass or Colloidal Silica to the point that it is not runny but can still be injected will provide the best bond. Small amounts of Micro Balloons can be added but know that this will weaken the cured epoxy and bond.

Fill the cavity completely, starting with the tube fully inserted and drawn out as the cavity fills.

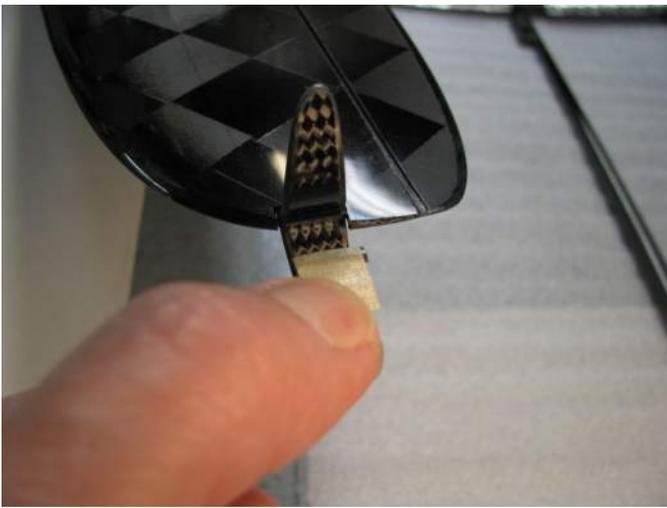
Prior to this step, prep your work area with paper towels and a bottle of Denatured Alcohol for clean-up.



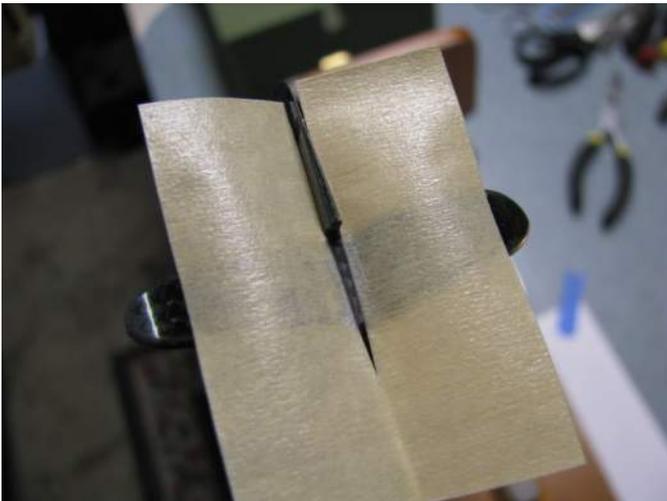
Step 11: Slowly insert the blade tongue into the epoxy filled cavity. Wipe off the excess resin as it gets pushed out of the opening. Once fully inserted, try not to let the blade drift back out as this can draw air pockets back into the bond. Use a strip of tape to hold the blade in place until cured. Make a final inspection and clean up any remaining surface resin. Check occasionally to make sure new resin hasn't found a way out.



Blade inserted and cured.



Step 11: It is recommended that the wing notch piece be saved and cut-down to fair back into the wing tip. Wrap tape around the piece leaving an excess tab of tape to hold onto. Measure the depth of the notch and cut the filler piece a little oversize. Use a sanding block to carefully trim for a good fit.



Step 12: Mask the center of the blade and sand the area where the in-fill piece will make contact. Remove the tape after sanding.



Step 13: Position the in-fill and glue in place with your favorite thin super glue. Due to the material lost from the saw cuts, the in-fill won't be as wide as the slot it is filling. We recommend butting it to the rear face of the slot to maximize glue contact area.

Congratulations, Installation is now complete!

These photos were taken during the build of my Flitz-2 but should apply to any wing thick enough to accept the blade tongue and does not have a molded in hard-point in the wing.

Wishing you happy flying and lots of lift!
Craig Robinson