

Today and yesterday, I continued measuring all distances on mating the wings and making small adjustments.

I could not get the forward sweep of the wings better as my rear spar was somehow blocked by something before the spar even touched the fuselage skin.

After a lot of trial and error and many times removing the wing again, I found out what caused this problem.

In the image below, we are looking behind the rear spar. This is the forward side (the photo is taken from the back facing forward).

When you look in the little mirror, you see the top corner of the fuselage fork F-605C (bar doubler) primed in white.

Next to it is the W-710 inboard rib. As you can see, the flange of the wing rib is touching the F-605C and prevents it from moving more inboard.



Here is a close up shot showing the obstruction problem. You can also see that the wing comes in at an angle and that only the top part of the flange touches the F-605C.

The solution to this is easy, remove the wing, and remove a little bit of the material of the F-605C only on the top side so that the wing can slide in further.



Here is a picture of the wing removed again and in black marked on the F-605 where I need to remove a bit of material.

Category: 2.9. Wing mating

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After some iterations, I got the distance to be good. I also had to remove a little bit on the bend of the rear spar where it touches the AN470 universal head rivet. Now the wing slides all the way in and the sweep is good.

Then next step is to determine the center point on the F-705-B center bar. This is where the hole should be drilled in ideal conditions. (just to have a reference point for now.

You estimate more or less where the rear spar sits inside the fork. I made a cardboard template when the wing was removed showing the contours of the spar. Then inserted the wing and positioned the cardboard over the rear spar.

Now you can draw some lines on the fork. (the left vertical line shows where the spar sits on the inside, the rear spar came out lower than the fork so no need for a horizontal line in the bottom). Then connect the corners to find the centerpoint. This is the point where edge distance will be ideal.



I had some time left and mounted the empennage to the plane.

