18/01/2020 - Outer fuel lines (contnd) - 5h

Category: 3.12. Systems
Published: Saturday, 08 February 2020 02:58
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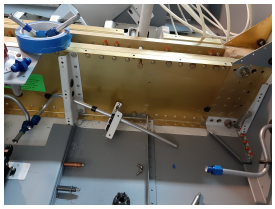
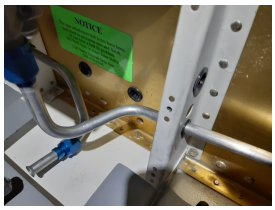
I finished fabricating the other side outer fuel line and finally got my delivery from aircraft spruce that contains my AN union fittings. So decided to make the final flares on the inner tube line and join both together.
I started panicking a bit as I didn't find a way to get the flaring tool to fit on the already installed inner fuel line until I realised that you can actually still take off the F-782-L and R cover support ribs. They are attached with jus AN515-8R8 screws in nutplates and come off easily. It's been ages since I installed these and completly forgot about that.
Screwed them off and now you can easily turn the fuel line.
Make sure all your bushings are on and all the nuts and sleeves are on in the right order before you make the flare.

Also, don't do what I did in this picture below. You can see that I took out the snap bushing out of the F-783-L center cover support rib and I had a horrible time trying to get it back in with the fuel line already running through. Once the flare is on, you can't remove the line anymore so it has to go in while the fuel line is already going through. In some way these basterds don't want to go in when the thight fit line is alreayd in there. I ended up tring several things such as pinpoints pushing the tabs in, heating, nothing worked. Finally I gently cut bit of the plastic lip at an angle and finally got it through with quite a bit of force applied. Do yourself a favour, keep the bushing in.



I took this shot when it was back in. It still sits thight and won't come loose but it costed me 3 hours of my life.



Here's the pilot side join. Nice fit.

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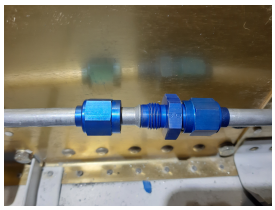
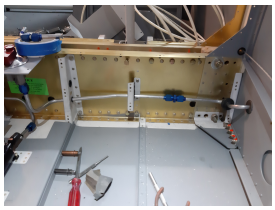
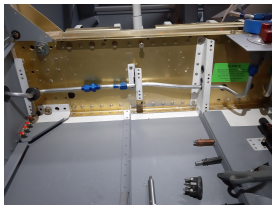


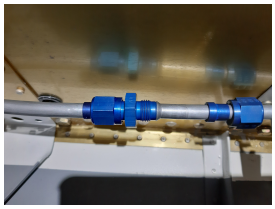
And a shot showing the whole pilot side line.



Then did the same with the passenger side.

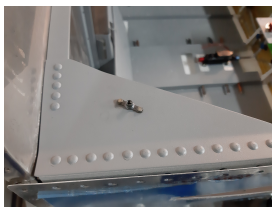


Another nice and thight fit here.



As I had some time left, I wanted to start putting the air vent line back in and realised I still had to install the nutplates on the forward fuselage gussets.

The #19 hole was already there so I just had to use the nutplate jig to drill two #40 holes and countersink them from the bottom.



Pulled out the pneumatic squeezer and set the rivets. Here's a bottom view of the nutplate and a nice view on the upper left engine mount.

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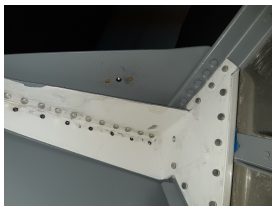
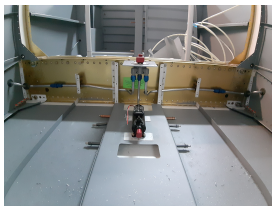
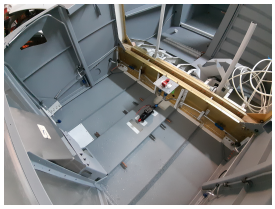


Overall view so far



And another one with the fuel air vent lines in place.



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