

Time to finally get started on the fuel lines. This one of those things that is more of an art form than actual working a part. Estimation of lengths, bending in the right spots and radiuses, making flared connection that are in the right length... Can not really say I enjoyed this part of the build. It's quit' frustrating if you restart some pieces 4 to 5 times and see your stock coil getting thinner and thinner.

Here is the first easy part. I got this one right at the first try. Measured a length of tube and made a 90° bend on it. You want to warm up the material a bit when you work in cold conditions (it's winter time in belgium as I write this). Then gently pull on the tube bender going very slowly and with even strength. That makes the nicest bend without deforming the inner diameter of the tube.



Before making the flare... make sure you sand the end really well. This is a place where you want to be anal about it. Sand it all the way down to 1200 grit smoothness and take care of the inner and outer burr.

The slightest burr or uneven surface can crack the tube while making the flare. Take care of it now and don't be sorry with a cracked flare after you finally got all those bends right. Also, don't forget to put the nut and sleeve on.



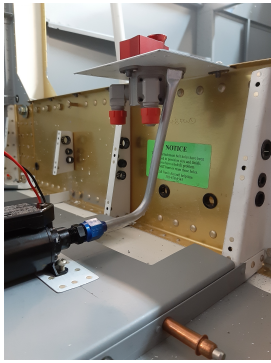
Here's one flare made and measuring for the correct length to go up to the fuel tank selectors. Always keep those protection caps on to avoid shafings or any debris entering your fuel lines or pump. Yes... this is a matter of life and dead.

30/12/2019 - Starting fuel lines - 2h30

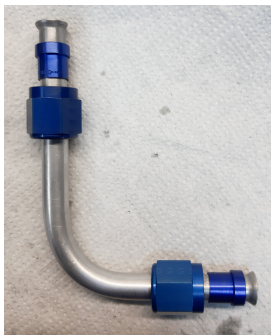
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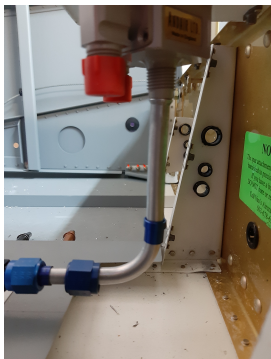
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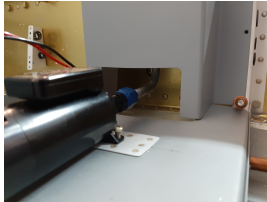
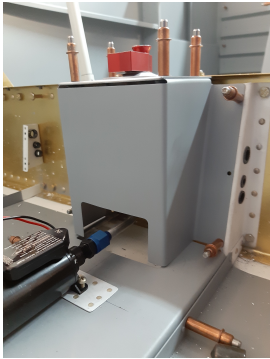
Here's a shot of the finished part. I don't have the fuel filter on the pump as I am using outboard gascolators that already have a fuel filter in there.



In this image, it looks like the nipple is not straight on but this because of the sag on the fuel tank selector plate. Once attached, it fits straight and very nicely



I temporarily installed the fuel tank selector cover and as you see there is plenty of room for the fuel line to pass without risk of chafing.



Next part is the inner part of the fuel line from the fuel tank selector to the outboard side of the cabin. I decided not to make 1 piece all the way to the gascolator.

It's very difficult to do if you also have to make an outboard bend to the gascolator so I had to decided to either use a 90° connection outboard, or have an AN515 straight joint fitting inside.

I choose the latter as it makes the bending a bit easier.

I started inboard with the 90° bend towards the fuel tank selector. Then estimated the bend needed to make the angle to follow the 704 bulkhead.



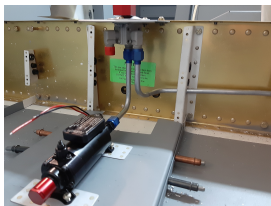
In this picture, I already installed it.

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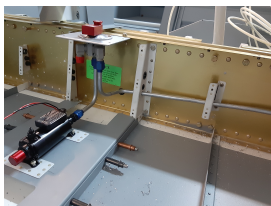
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I only figured out later that the small 704 support outboard can be unscrewed from the nutplates and had a hard time getting it through both supports.



Side view with inner line installed. Looks quite good.

