

Category: 5.3. Systems

Published: Thursday, 17 August 2023 23:58

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Finally some electrical systems work. I took on the job of installing the antenna's. There's a whole theory behind where and at what distance transponder antenna's have to be distanced from com antenna's. I read a couple of the online resources and decided to place the com antenna under the pilot seat, just behind the F704 bulkhead for ground clearance and best possible signal detection when on the ground. The transponder will be mounted behind the baggage compartment panel on the right side behind the passenger. I'm installing the transponder radio in a bay underneath the baggage floor in order to keep the antenna coax cable as short as possible.

You need to make a doubler on the inside of the fuselage to support the forces induced by the antenna's subject to airflow.

I used some 063 sheet to create a doubler plate. The sides will be bended up as flanges.



Here the doubler is cut out and pilot holes for rivets and centerpoint for the antenna coax connector are drilled



I used a straight perpendicular form to ensure the antenna is straight on the direction of airflow

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Drew a line on the right location and drilled through the fuselage floor #40.



In the next picture, the antenna is temporarily mated and installed



This is how it looks from the bottom of the fuselage



bottom view



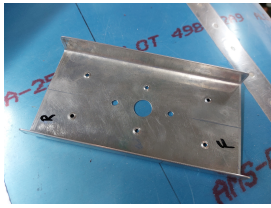
deburred and dimpled the doubler. I will not prime this part as the airframe makes up as ground for the antenna.

08/04/2023 - Install transponder antenna - 6h30

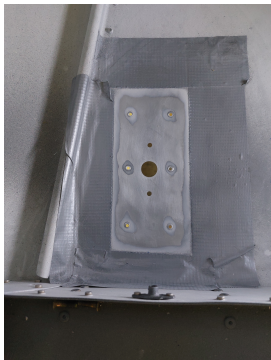
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I removed the primer underneath the doubler for good grounding contact.- I should have scuffed the paint away before dimpling, it would have made things easier but it worked out anyway.



Rivetted the doubler plate in place and rechecked the fit.

