

10.13 Pro Sealing the Tanks

- 1) Proseal and rivet the Fuel Filler Neck (4808-5) to the inside of the Top Tank Skin where you put the hole earlier, using 1/8" RR-6403 Tank rivets.
- 2) Make sure that the Fuel Sight fittings and the bottom fuel fitting are plugged. Test the Bottom Tank Skin for leaks by putting some gas into the tank and let it sit for awhile. If there are any leaks they should show. To seal them take some Proseal and mix a little MEK in it to thin it out and then just brush it around the whole inside of the tank. Let the Tank sit over night.
- 3) Cleco the Top Skin and Stringers to the wing.
- 4) Proseal the two Main Rib Brackets you made previously. Rivet them in place using 1/8" tank rivets.
- 5) Using the Stringers as a guide, slide the Stringer Brackets onto the end of the Stringers. Proseal them well and rivet them to the Ribs the same as you did the bottom ones earlier. Use 1/8" tank rivets.
- 6) Remove the Top Wing Skin, leaving the three Stringers that are in the Fuel Tank area still on the Wing.
- 7) Proseal the Stringers, Main Ribs, Main Spar Tank Bulkheads and the Top Tank Skin. Use lots of Proseal.
- 8) Cleco the Top Tank Skin to the Ribs, Main Spar, Stringers and Bulkheads. Using 1/8" tank rivets, rivet the Top Tank Skin in place. Let the Wing sit for 72 hours to ensure proper drying of the Proseal.
- 9) Test the tank for leaks. This is done by putting a thin latex glove over the Filler Neck and attaching it tightly so as it will not leak. Ensure that the two side bottom fittings and the one underneath the Bottom Skin are plugged. In the top corner sight fitting put in an air line. Blow the glove up so it is expanded. **DO NOT EXCEED 3 PSI.** Let the Wing sit over night. If the Glove has gone down you more than likely have a leak. If there was a sudden temperature change, do the test again during the day since the temperature should basically stay the same. If the glove does not go down at this time then you know it is sealed and you are done with the test. If it is still leaking fill the Tank with air again, take a brush dipped in soap and water and run it along the seams. You should see bubbles where the air is leaking out. To seal the leaks you can do the same as you did for the Bottom Tank or you can get some Sloshing Compound and slosh your tank.
- 10) Chromate the Top Wing Skin, the Stringers, Rear Spar, Main Ribs and Main Spar. Cleco together.
- 11) Using 1/8" Avex Rivets, starting in the middle of the Wing, rivet the Top Wing Skin. **Make sure that you use 1/8" (RV 4412) Countersunk Rivets in the tip of the Wing .**