

### 10.11 Finishing

- 1) Chromate mating surfaces and rivet together the Rear Spar, three Hinge Backing Plates, and two Bearing Bases with 1/8" rivet (RV-1410). Do not rivet where Ribs will go.
- 2) Chromate and bolt the Wing Strut Fittings (W-110 and W-111) to the Main Spar as in Figure 10.11.1.

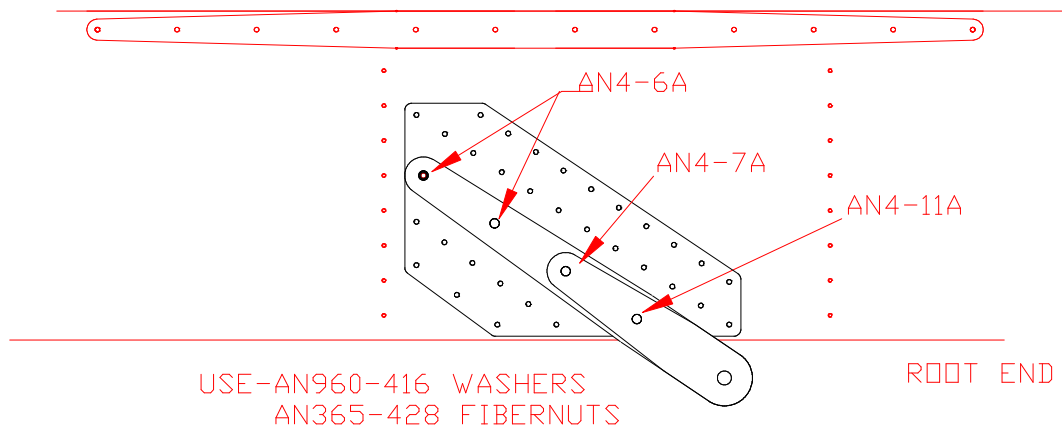


Figure 10.11.1

- 3) Chromate and rivet the Front Spar and Leading Edge Ribs and Main Ribs to Main Spar from Rib location #5 to the tip with 1/8" rivets (RV-1410). **NOTE:** When using Extended Tanks start at the #6 Rib location in this step and the next step.
- 4) Chromate and rivet the Rear Spar to the Main Rib from #5 location to the tip with 1/8" rivets (RV-1410).
- 5) (STEPS 5 TO 7 RELOCATED TO DIFFERENT PROCEDURE)
- 8) Wipe down with M.E.K. (Methyl Ethyl Keytone) or Acetone all mating areas of Gas Tank parts. Trim the excess off the Top and Bottom Tank Skins at this point, 3/8" from center of the hole to the outside edge. See Figure 10.11.3.

ROOT END

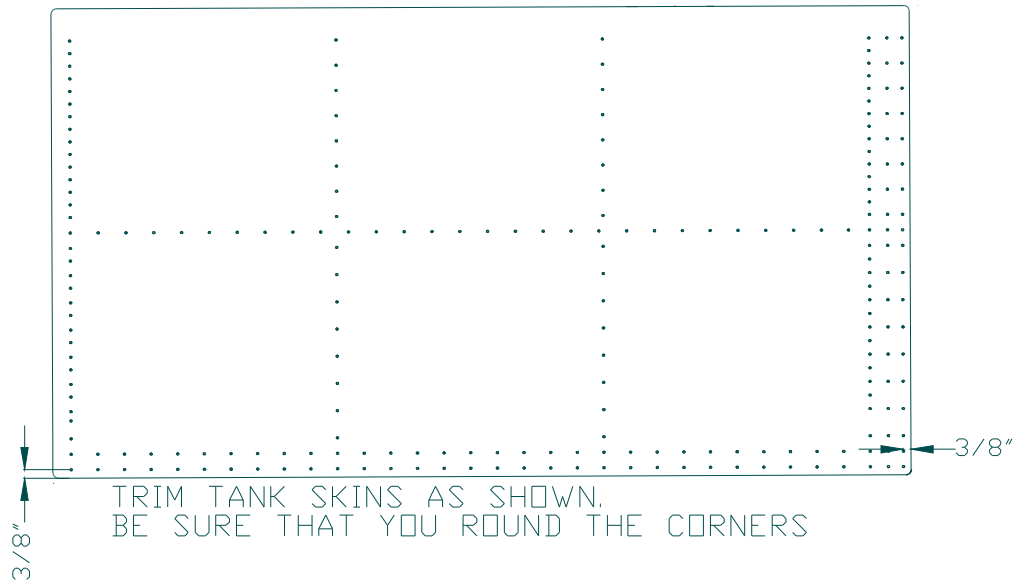


Figure 10.11.3

9) Scotchbrite all mating areas of Gas Tank parts. Wipe dust away with a **clean** cloth. **Do not use M.E.K. or Acetone after Scotchbriting.** Handle the parts as little as possible after cleaning to prevent the oil in your hands from transferring to the parts.

10) Mix up some Proseal.

**Note:** When using Proseal always cover **both** mating surfaces before fitting together and riveting. Always dip the rivet in Proseal before inserting in the hole.

11) Proseal and rivet the Fuel Outlets (W-159 and W-160) to the Tank Root Rib with 1/8" tank rivets (RR-6403).

12) Proseal and rivet the Corner Brackets made earlier to the Solid Tank Ribs with 1/8" tank rivets (RR-6403).

13) Proseal and rivet the Leading Edge Ribs and Main Ribs from #1 to #4 to the Main Spar with 1/8" tank rivets.

14) Chromate and rivet the Rear Spar to the Main Ribs #1 to #4.

15) Bolt on the two Rear Spar Fittings to the Rear Spar with six AN3-5A Bolts, AN960-10 Washers and AN365-1032 Nuts.

16) Proseal and rivet the three Gas Tank Bulk Heads in place with 1/8" tank rivets.

17) Chromate the Mating surfaces and rivet the Bottom Tank Skin and Bottom Skin together with 1/8" Rivets (RV-1410). Make sure the Tank Skin is on the outside.

18) Slide the angle made in earlier down the Tank Stringer to its approximate location.

- 19) Rivet the two Bottom Stringers to the Tank Skin and Bottom Skin. Where the one Stringer goes into the Tank area use Proseal and 1/8" tank rivets. For the rest use chromate and 1/8" Avex Rivets.
- 20) Proseal and rivet the Water Drain Outlet in place with 1/8" tank rivets.
- 21) Place the Wing upside down and level.
- 22) Chromate all mating surfaces except in the Tank area.
- 23) Proseal the Tank Area.
- 24) Cleco the Bottom Skin and Tank Skin in place.
- 25) Chromate and cleco securely the bottom of the Leading Edge in place. Use Proseal in the Tank Area.
- 26) Rivet the Tank area with 1/8" tank rivets. Use tank rivets in the Main Spar at the Tank location. Both top and bottom .
- 27) Do not rivet the Bottom Skin at this time as you only have so much time to finish the Tank area.
- 28) After riveting, clean up any excess Proseal on the outside of the Tank with a cloth dampened with M.E.K. or Acetone.
- 29) Turn the Wing over and ensure it is level.
- 30) Slide the angle on the Stringer in place on the Rib and rivet in place with tank rivets.
- 31) Inside the Tank, cover all Rivet ends with Proseal. A small stiff brush works well to do this.
- 32) Fillet all corners and edges with Proseal. Pay close attention to the corners where the Ribs, Bulkheads and Spars meet and where the Stringer goes through the #4 Solid Rib. Figure 10.11.4.

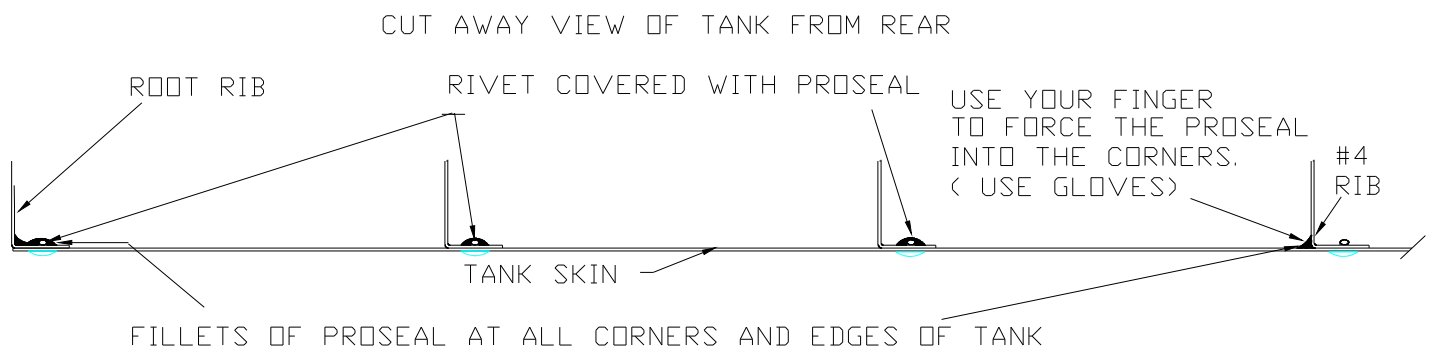


Figure 10.11.4

- 33) Let the wing sit for at least 24 hours.

34) Turn the wing over and rivet the Bottom Skin and bottom of the Leading Edge in place with 1/8"

Avex Rivets.

35) At the Root end of the Front Spar, it is necessary to use 1/8" Avex Rivets (RV-1414).

36) Turn the wing over and ensure it is level.