

How to assemble the wings.

Step # 1. How to attach RB2X ribs (bottom) and W5X flat sheet

Starting on the bottom of the wing frame, attach the W5X flat sheet and RB2X ribs to the inboard end of the wing frame. Use 1/8" x 1/4" Stainless steel rivets at the spar ends of W5X and 1/8" x 1/8" Aluminum * rivets through W5X into RB2X ribs. This gusset and ribs assembly provides a rigid attachment for the bottom fabric. Be sure to allow 1-1/2" of the spars to extend beyond the gusset to allow clearance for the fuselage to wing Junction. Rivet spacing approximately 2 - 3" intervals on ribs, 3/4" approx on spar.

(* Stainless Steel rivets can be used in place of aluminum if you wish.)

Step #2. How to attach RB1X ribs (top curved) and W5X flat sheet

Turn the wing over & install two RB1X curved ribs. The inboard rib must be set at 1-1/2" (on center) from inboard end of the spar . The W5X top flat sheet must be placed to allow an in-board overhang of 1/2" on the inboard RB1X rib (only 1" of spar to extend beyond the W5X).

Use 1/8" x 1/4" Stainless Steel rivets at spar locations and 1/8" x 1/8" Aluminum OR Stainless Steel rivets along the RB1X ribs.

Now add braces DFR-1 & DFR-2 as shown on photo #2 previous page.

Aluminum rivets work fine here.

Step #3. How to attach the remainder of RB1X ribs

Install the outermost RB1X rib using gussets W1X and 1/8" x 1/8" Stainless Steel rivets.

Install the remaining ribs at one foot intervals making sure they are all at the same height. 1/8" x 1/4" Stainless Steel rivets must be used on spars.

NOTE:

Use a string tied between inboard and outboard ribs to line up remaining ribs for equal height.

Step #4..How to attach W6X gusset

Install W6X (spar to tip fairing gusset). This gusset helps to eliminate the bump in the fabric when covering over the spar to tip junction.

Form the W6X gusset around the leading edge spar, trailing edge spar and wing tip bow. Attach with 1/8" Stainless short rivets.

Step #5. Clean up before covering the wings

File smooth any sharp edges on gussets and rivets. Lightly sand entire perimeter of wing and all ribs where fabric will touch. Clean with MEK or Acetone. Tape over any sharp edges and rivets etc. Use your newly acquired knowledge of the fabric covering procedure to attach the wing fabric.

Important:

Pre-install the ailerons BEFORE you cover both the wings and ailerons with fabric.

Mark each aileron hinge with its appropriate position for future reference when re-assembling.

Use cleco's to attach hinges and ailerons to rear spar.. Do not rivet at this time.

If you cannot use cleco's, use two alum rivets per hinge side and drill out after final positioning.