

# PILOT SEAT AND HARNESS

1. Locate the following parts –

**#84** – threading needle, 1 each

**#88** – lacing cord, 1 each

**#119** – aluminum seat, 1 each

**#120** – plywood, pilot seat bottom, 1 each

**#121** – wood screw, 3 each

**#293** – fabric seat back covering, 1 each

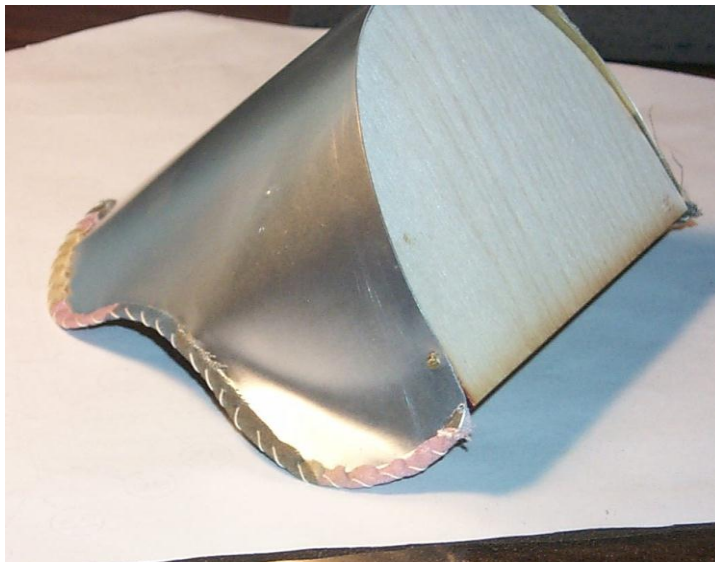
2. Using pliers; slightly bend the edges of the aluminum back **#119**. Lay the fabric covering **#293** over the aluminum back **#119**. Using the lacing cord **#88** and threading needle **#84**, sew the fabric covering **#293** to the aluminum back **#119**. The proper sewing method is to start at the bottom corner of the aluminum back **#119** working your way around. Keep the lacing cord **#88** tight. See photo below –



3. The wood screws, **#121** secure the aluminum seat back, **#119** to the pilot seat bottom, **#120**. Notice that a small line has been marked in the center of the curve in the seat bottom **#120**; this indicates the center of the seat bottom. Place the seat bottom **#120** on a flat surface, insert one of the wood screws **#121** through the center hole in the aluminum back **#119**, then screw it to the center of the seat bottom **#120**. Carefully, bend/wrap the aluminum back **#119** around the seat bottom **#120**. Add the two remaining wood screws **#121**. See photo below –



4. Bend the front edges of the aluminum seat **#119**; this will allow the pilot easy entry and exit. Do not over bend the front edges of the aluminum seat **#119**; it should have a noticeable slant. Reference the photo below –



8. Locate the following parts –

**#31** – dowel, 1 each

**#294** – canvas seat bottom, 1 each

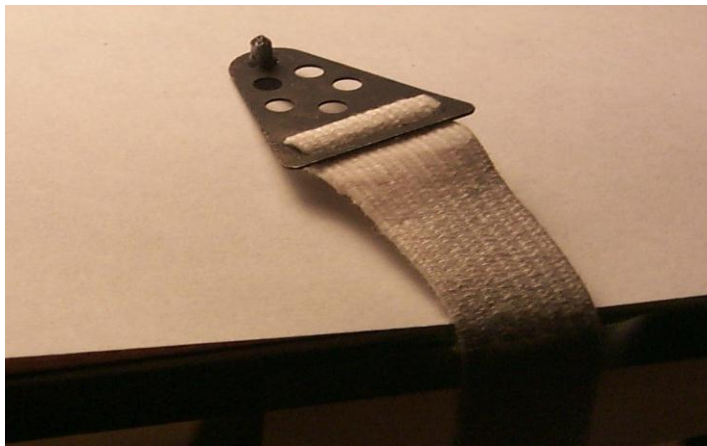
9. Position the canvas seat bottom **#294** on top of the pilot seat bottom **#120**. The canvas should be glue to the surface and wrapped around the front of the seat bottom **#120**. See photo below –



10. The plan shows the location and structure of the pilot seat framing. Assemble the two-triangle pilot seat frame, **#31** now. Once satisfied glue these pieces together and install into the fuselage frame. Test fit your pilot to get the proper location. His shoulders should
11. Locate the following parts -
  - #10**, hair pin – 1 piece
  - #114**, seatbelt plates – 4 pieces
  - #117**, seatbelt adjusters – 4 pieces
  - #118**, harness – 1 piece
  - #712**, nail – 1 piece
12. The seatbelt plates and adjusters should painted black. This is easily done with Polyurethane gloss black paint, which can be found at Wal-Mart or Home Depot. At this time paint seatbelt parts **#114** and **#117**.
13. Cut two 6” pieces from the seatbelt strap material **#118**. Insert one end of these 6” strap pieces through the bottom slot of a seatbelt plate **#114**. The strap will come out of the top slot wrapping the seatbelt strap **#118** back onto itself. Use thin glue or sew the seatbelt strap **#118** to it-self. Insert the other end into one of the slots on the seatbelt adjuster **#117** then out of the other slot. **Do not** glue adjuster **#117** in place. Repeat this step one more time making two side belts. See photo below –



14. Cut the nail **#712** to 3/16" length; file the nail end flat. Insert the nail **#712** into the top hole of one of the side seatbelt plates **#114**. Glue in place. See photo below –



15. Cut two 10" pieces from the seatbelt strap material **#118**. Insert one end of these 10" strap pieces through the bottom slot of a seatbelt plate **#114**. The strap will come out of the top slot wrapping the seatbelt strap **#118** back onto itself. Use thin glue or sew the seatbelt strap **#118** to it-self. Insert the other end into one of the slots on the seatbelt adjuster **#117** then out of the other slot. **Do not** glue adjuster **#117** in place. Repeat this step one more time making two rear belts. This step is similar to step 13.
16. Wrap the 6" side strap around one of the side pilot seat frames. Carefully, glue the side strap **#118** back onto itself, **not** gluing it to the pilot seat frame **#31**. The seatbelt should slide up and down. Repeat for the other side. See photo below –





17. Wrap the two 10" rear straps around the rear support **#31**. Carefully, glue the rear strap **#118** back onto itself, **not** gluing it to the support **#31**. See photo below –



18. Install the finished pilot seat into the pilot frame **#31**. The next step adds the horizontal strap that ties the two 10" pieces together and crosses the pilot's chest. The horizontal strap will keep the seatbelts in place over the shoulders. Add your pilot to the seat and determine where the horizontal strap needs to be. Take the remaining piece of seatbelt webbing **#118** and cut it down the middle making two half pieces. (The horizontal strap is half the width of the normal seatbelts) Now cut one of the half pieces to length and glue or sew it joining the two rear seatbelts. See photo below –



19. All the seat belt plates will mount together. You can tie the hair pin **#10** to some left over chord **#88** and then secure the hair pin **#10** over the nail **#712**.