

# WING ROOT RIBS AND MOUNTING TECHNIQUES FOR LOW WINGERS

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I seem to be attracted to building and designing low wingers. My preferred method of mounting the wing for this type of aircraft is to build a "saddle" as part of the lower structure of the fuselage. This allows the wing to be built in one piece, which I find helps achieve the same angles of attack for the right and left wing panels. The wing root ribs are then glued to the saddle. The problem with this technique is that if the ribs don't fit the saddle precisely, gluing the wing to the fuselage can induce warps that are difficult to remove because they evolve as a result of a twisted center section.

Some time ago, I began to use a very simple technique to ensure the root ribs fit perfectly into the saddle. In fact, it's so obvious, I wonder if I'm the only person to *not* have used it!

The idea is to cut one saddle and associated root rib in a coordinated and single step. (See the Sketch). Draw the saddle and root rib as a single unit on a piece of paper, take it to your local copy machine, and produce two copies. Transfer one of the copies to a sheet of balsa by placing the printed side down against the balsa and brush or rub acetone to the back side of the paper. (*Ed Note: Gluing the pattern to the balsa with rubber cement works also.*) Use a pencil to make a mark across the rib/saddle line so you can later associate which rib goes with a particular saddle. (See sketch).

