





## AUSTIN-BALL Assembly Instructions

Cut all parts from balsa sheets, leaving paper pattern attached until just before using part. This keeps small thin parts from splitting, and there is no printing on parts when assembled.

I would recommend using a resin glue such as "Se-cur-it" or "Tite-bond" since they do not shrink while drying (which would warp these thin sections). Cover plans with wax paper or Handiwrap before using to prevent glue from sticking to plans.

Construct both upper and lower wings over same plan, follow directions for difference in center section construction. Both wings should have 1/2" dihedral each side plus 1/16" washout. Cover wing with tissue and water shrink (be sure tissue is cemented to blocks where struts attach), pin wings onto plans with blocking while drying to prevent warps and assure washout, drill holes in wing blocks where shown to receive struts. Assemble interplane and cabane struts with 1/32" sq. and 1/32 x 1/16 basswood as shown and spot glue Temporary Strut Jigs on to maintain alignment until wings are mounted. Leaving lower wing pinned to plans, glue on interplane struts and then upper wing, locating all struts in proper pockets. Let dry thoroughly.

Tail sections are constructed over plan using strip stock as noted. This type of construction is very light and strong if joints are accurately cut and cemented. Select the lightest wood available for these pieces. Trim outsides to smooth contour before covering, water shrink tissue, pinning parts to blocks to prevent warping while drying.

Construct two fuselage side over Side View (frames shown hatched for clarity) then assemble together over plan, cementing in cross pieces where indicate by black dot on side view. Glue 1/16 sq. braces onto top formers as shown, cement formers in place and cover top of fuselage with stiff paper pattern provided. Cover fuselage with tissue and water shrink.

Assemble wings and tail surfaces to fuselage checking for proper alignment. Make landing gear struts over side view and assemble to fuselage as shown. Wheels of balsa are provided; however, plastic and rubber wheels of vintage scale are available at your Hobby Dealers. Install wire skid.

Drill hole in nose block for thrust button (note downthrust) side thrust may be accomplished later with shims. Bend winding hook as shown, carve freewheeling notch in prop, assemble wire, prop, thrust button and noseblock as shown, then bend loop for rubber motor. Tie ends of rubber motor together (lubricate with castor oil, or rubber lube, except for knot) and install in plane with knot at rear. This motor should be stretch wound for best results.

After model is assembled, it should be painted with one coat of clear dope thinned out to 50% consistency (full strength dope will warp structures beyond control).

Plane must balance at point shown or slightly forward, add clay inside nose to achieve. Stalls or dives are corrected by bending elevator, glide turn is set by bending rudder, power turn is set by shimming side of nose block.

Check all surfaces carefully for warps before flying and remove unwanted ones over steaming kettle. Biplanes fly slowly, and should be launched either R.C.C. or with a gentle forward thrust.

