

Assembling the fuselage

Carefully cut out both 2 mm balsa printed fuselage-sides F1.

Using HOBBYPOXY's Formula 1 epoxy-glue, glue one 1.5 mm plywood F2 fuselage doubler on each F1 fuselage-side. CAREFUL : make sure you make one LEFT en one RIGHT fuselage-side !

On each fuselage-side, perform following tasks :

- glue into place the F3 wing-saddle. This saddle is made out of a piece of 2 mm balsa
- glue into place the 3 X 8 mm balsa F4 vertical fuselage-spacers
- glue into place the 3 X 8 mm balsa F5 stabilizer saddle
- glue into the 8 X 8 mm triangular balsa reinforcement-spars F6.

Lay out the right fuselage side flat upon the building board, and glue into place main former F7 and rear former F8 ; both formers are made of 3 mm die-cut plywood. Make sure these two formers are perpendicular to the fuselage-side by means of a triangle. Leave aside to dry thoroughly.

Glue the left fuselage side to the above assembly, make sure again that formers F7 and F9 are also perpendicular to the left fuselage side.

Using rubber bands to bring the two fuselage-sides together, glue firewall-former F9 into place between the two sides. Hold the assembly together and again check that all components of the fuselage are correctly aligned.

Glue into place the 5 mm balsa windshield F10.

Place the fuselage assembly over the plan view, then cut and glue into place the 3 X 8 mm balsa F11 horizontal fuselage-spacers. Check that both fuselage-sides are perpendicular to the building board, and that the whole fuselage-assembly is correctly aligned.

Glue into place the 3 mm die-cut plywood undercarriage platform F12.

Glue into place the bottom fuselage planking, which is made of several 1.5 mm balsa F13 pieces, with the wood-grain running perpendicular to the fuselage center-line.

Cut out and glue into place the 1.5 mm balsa F14 pieces : these will make up the fuselage top planking and the grain running across the fuselage will make the fuselage more rigid.

Trim and shape the 5 mm balsa F15 tank-hatch. Drill out the two 3 mm holes for the hatch hold-down screws F16 into the fuselage sides.

Give the entire fuselage-assembly a good sanding.

Drill out the holes for the wing hold down dowels F18 and for the undercarriage hold-down dowels F19.

Bolt the nylon engine-mount F20 into place as well as the F21 nose-gear strut using the F22 screw-washer-nut sets and the nylon undercarriage clamps F24.

Install the main gear F23 and bolt it into place using the F24 clamps.

Slip the F25 wheels into place.

Assembling the fin and the stabilizer

Assemble the fin R1 and the rudder R2 using the nylon hinges R4 supplied in the kit.

Glue on each side of the fin R1 the triangular reinforcing pieces made out of 8 mm triangular balsa stock.

Bolt the R5 control-horn into place.

Assemble and glue together, flat on the building board, stabilizer S1 and stabilizer tips S2.

Still working upon the plan, assemble both elevators S3 together by means of the S4

Joining dowel.

Install the R4 nylon hinges as well as the R5 elevator horn.

Glue the fin onto the center-line of the stabilizer and check the fin is perfectly perpendicular to the stab.

Now glue the entire fin/stabilizer assembly to the rear of the fuselage and check for proper alignment.

Assembling the wing

Pin down upon the plan the lower leading-edge planking W1, the center-section bottom planking W2 and the lower trailing-edge W3. All three items are 1.5 mm balsa.

Glue the 6 mm sq. balsa bottom spar W4 onto the lower trailing edge.

Cut to size and lay in place the 1.5 X 6 mm lower cap-strips W5.

Glue into place the W6 wing-ribs.

Glue into place the 1.5 mm plywood dihedral-braces W7.

Glue into place the center-ribs W8.

Glue into place the upper spar W9 (6 mm sq. balsa).

Glue into place the 6 mm sq. balsa leading-edge spar W10.

Glue into place the 1.5 X 30 mm upper trailing-edge W11.

Glue into place the 1.5 X 70 mm upper center-section sheeting W13.

Glue into place the wing-tip gusset W14.

Join part (a) and (b) of each wing-tip sheeting together (W15) and this two-part assembly into place.

Cut to size and glue into place the upper W16 cap-strips (1.5 X 6 mm balsa).

When thoroughly dry, lift off the wing-assembly from the building board and glue into place the 1.5 mm die-cut balsa lower wing-tip sheeting W17.

Give the entire wing a complete sanding.

Glue into place the 1.5 mm plywood wing-reinforcing plate W18.

Join the two wing-halves together by laying one wing-half flat on the building board and raising the other wing-half 80 mm at the wing-tip (see plan sketch) so as to obtain the correct 8° dihedral setting.

PACKING LIST

Nr.	Description	Qty	Material used
F1	Fuselage side	2	printed 2 mm balsa
F2	Fuselage-doubler	2	die-cut 1.5 mm plywood
F3	Wing-saddle	2	printed 2 mm balsa
F4	Vertical fuselage spacer	6	8 X 3 mm balsa
F5	Stabilizer saddle	2	8 X 3 mm balsa
F6	Triangular fuselage reinforcement		8 X 8 mm triangular stock
F7	Main former	1	Die-cut 3 mm plywood
F8	Rear former	1	die-cut 3 mm plywood
F9	Firewall former	1	die-cut 3 mm plywood
F10	Wind-shield	1	balsa 80 X 35 X 5 mm
F11	Horizontal fuselage spacer	6	8 X 3 mm balsa
F12	Undercarriage platform	1	die-cut 3 mm plywood
F13	Bottom planking		1.5 mm balsa
F14	Top planking		1.5 mm balsa
F15	Tank hatch	1	80 X 80 X 5 mm balsa
F16	Hatch hold-down screws	2	10 mm long wood-screw
F17	----		
F18	Wing hold-down dowel	2	100 X 6 mm dowel
F19	Undercarriage hold-down dowel	2	100 X 6 mm dowel
F20	Engine-mount	1	.19 size nylon engine mount
F21	Nose-wheel strut	1	pre-formed piano-wire
F22	Set of M3 bolt, nut and washer	5	
F23	Main landing gear	1	pre-formed piano-wire
F24	Undercarriage clamps	4	injection moulded nylon
F25	50 mm dia (2") wheel	3	PVC
R1	Fin	1	band-sawn 5 mm balsa
R2	Rudder	1	band-sawn 5 mm balsa
R3	Fin reinforcement	2	8 X 8 mm triangular stock
R4	Hinge	6	injection-moulded nylon
R5	Control-horn	2	injection-moulded nylon
S1	Stabilizer	1	band-sawn 5 mm balsa
S2	Stabilizer wing-tip	2	band-sawn 5 mm balsa
S3	Elevator	2	band-sawn 5 mm balsa
S4	Elevator-joiner	1	100 X 6 mm dowel
W1	Lower leading-edge sheeting	2	balsa 600 X 70 X 1.5 mm
W2	Lower center-section sheeting	4	balsa 105 X 70 X 1.5 mm
W3	Lower trailing-edge sheeting	2	balsa 580 X 30 X 1.5 mm
W4	Lower spar	2	balsa 600 X 6 X 6 mm
W5	Lower cap-strips	16	balsa 6 X 1.5 mm
W6	Wing-rib	18	die-cut 1.5 mm balsa
W7	Dihedral brace	4	die-cut 1.5 mm plywood
W8	Center-rib	4	die-cut 1.5 mm balsa
W9	Upper spar	2	balsa 600 X 6 X 6 mm
W10	Leading-edge spar	2	balsa 600 X 6 X 6 mm
W11	Top trailing-edge sheeting	2	580 X 30 X 1.5 mm balsa
W12	Top leading-edge sheeting	2	600 X 70 X 1.5 mm balsa
W13	Upper center-section sheeting	4	105 X 70 X 1.5 mm balsa
W14	Wing-tip gusset	2	1.5 mm die-cut balsa
W15	Wing-tip sheeting	2	1.5 mm die-cut balsa
W16	Top cap-strips	14	6 X 1.5 mm balsa
W17	Lower wing-tip sheeting	2	1.5 mm die-cut balsa
W18	Trailing-edge reinforcement plate	2	1.5 mm die-cut plywood