

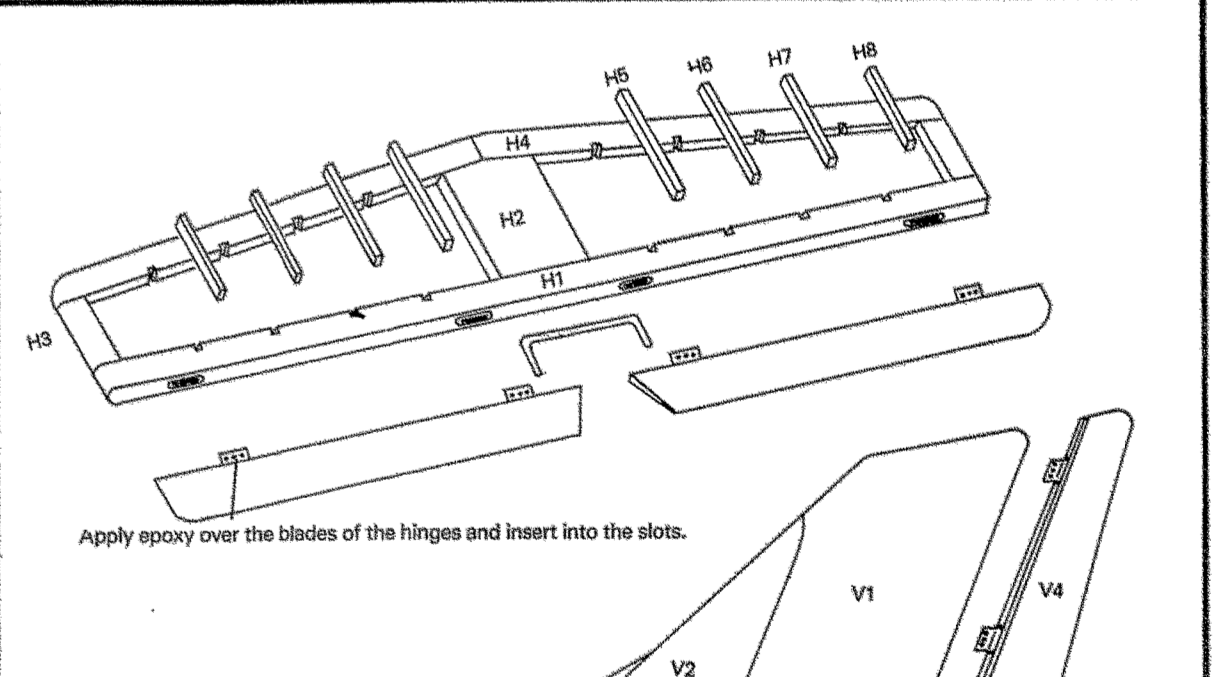
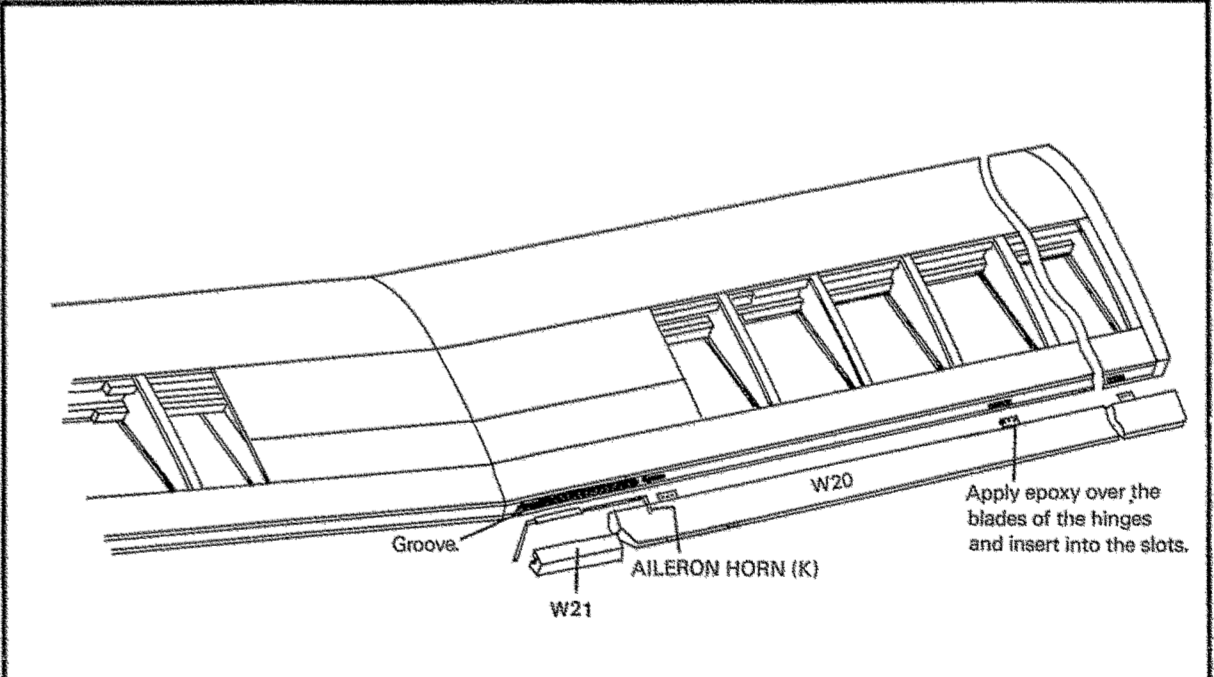
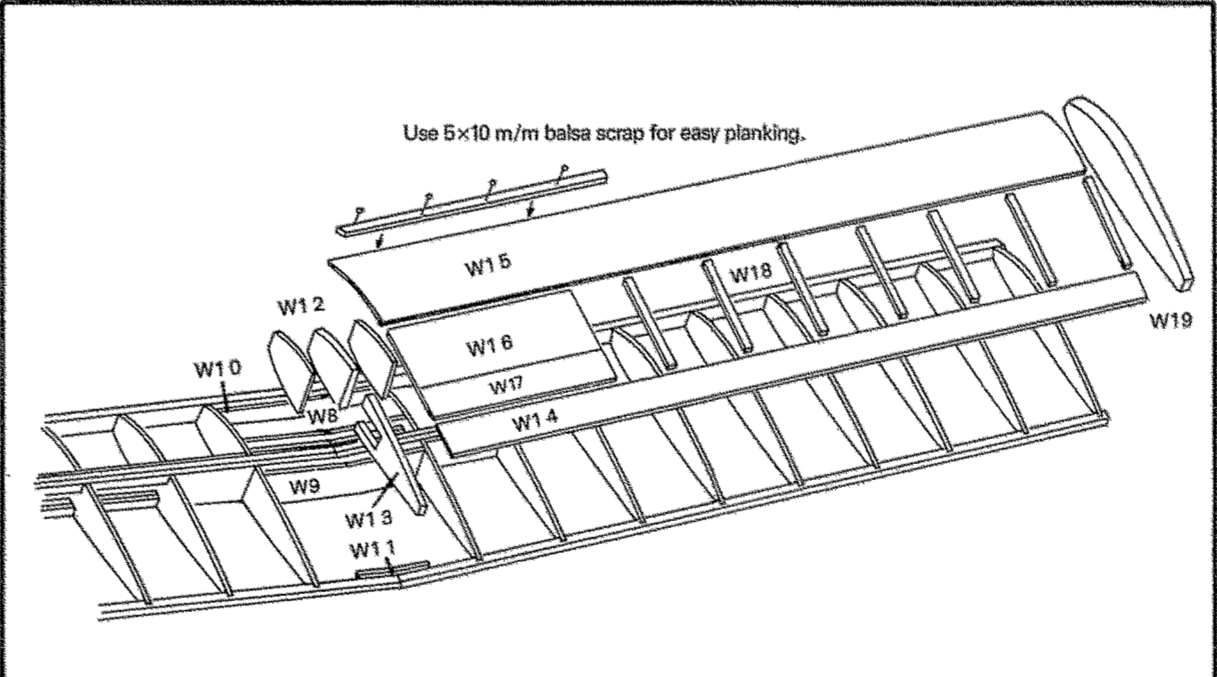
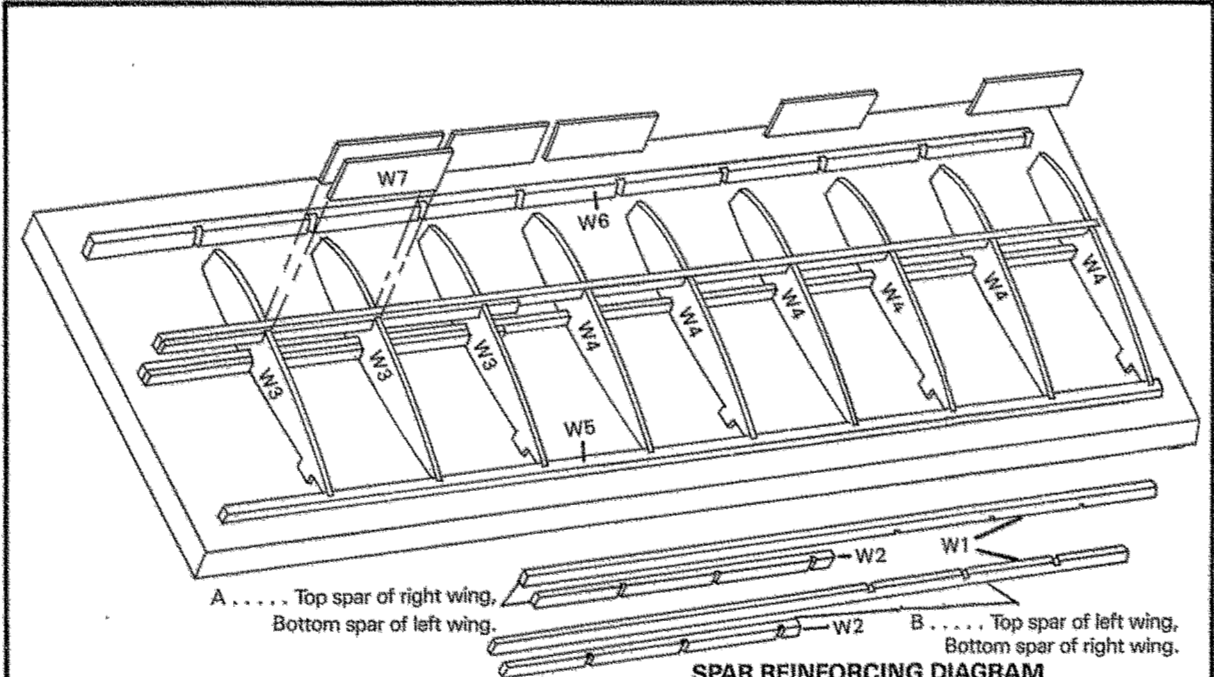
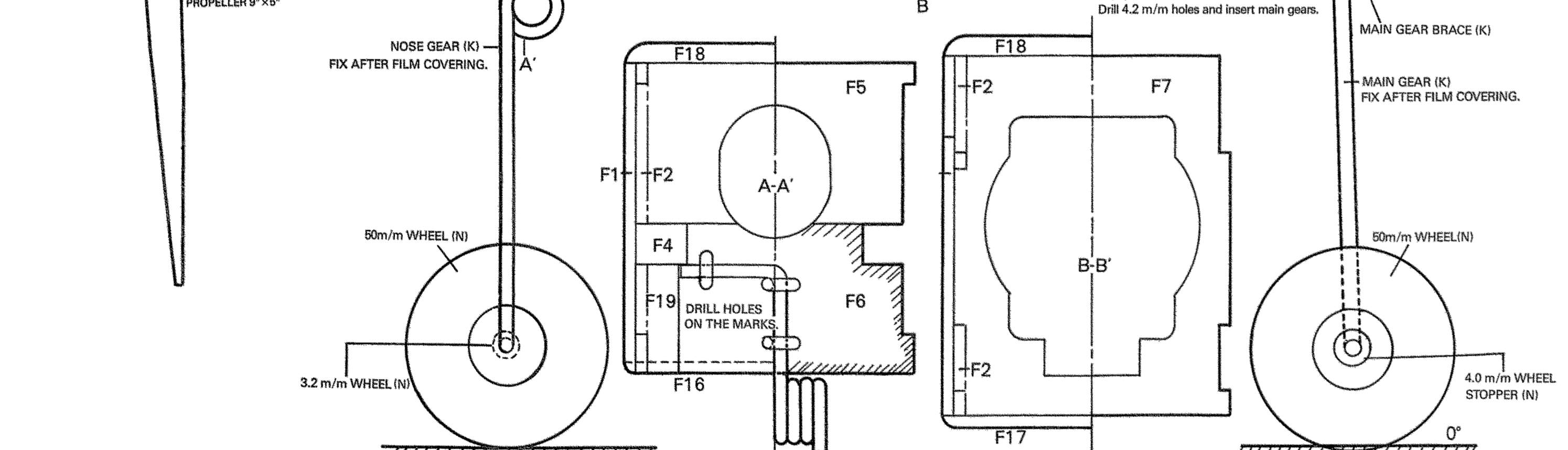
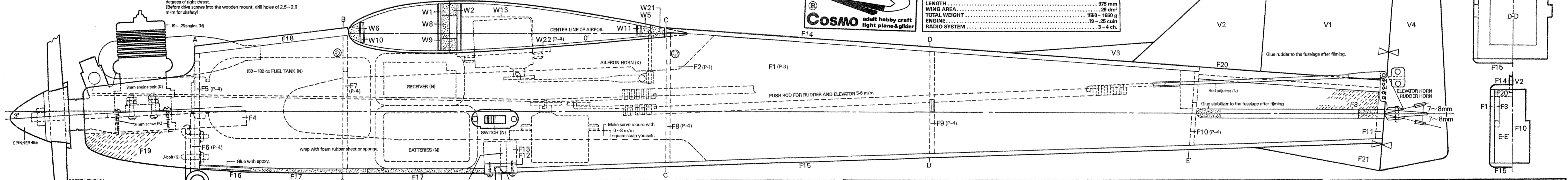
INSTALLATION OF ENGINE
 Fasten engine beds with bolts, spring washers, and double nuts. (Fasten one nut tightly and do same procedure for another one to the same bolt).
 Screw up engine plus bush tightly to the engine mounts with 2° degrees of plus thrust. (Before drive screws into the wooden mount, drill holes of 2.5-2.8 mm for shafts).

On the ground, center line of the wing is horizontal to the earth. Repeating take-off and landing, main gears lose elasticity and whole the airplane becomes nose-up. This may cause bounce landing. Check frequently parking attitude and adjust to be accurately horizontal by bending main gears inward.

Edit by Hisat. COSMO 25 SR

Cosmo adult hobby craft light plane & glider

WING SPAN	1280 mm
LENGTH	975 mm
WING AREA	29 dm ²
TOTAL WEIGHT	1500 - 1650 g
ENGINE	19 - 25 c.u.m
RADIO SYSTEM	3 - 4 ch.



WOODEN PARTS

Wing	W	122	Engine bed, Bolts, Nuts	1 set	Rudder, Elevator horns	2 ea
Fuselage	F	121	Nose gear, J-bolts, Nuts	1 set	Dowels	2 ea
Stabilizer	H	18	Main gears, Clear lacquer, Screws	1 set	Decals	1 ea
Rudder	V	14	Aileron horn	1 set	Instruction sheet	1 ea

METAL PLASTIC PARTS

F18	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F19	F20	F21
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FURNISHED PARTS

P-1	3 m/m Plywood 1 Sheet (1/8")
P-2	3 m/m Balsa 2 Sheets (1/8")
P-3	3 m/m Balsa 2 Sheets (1/8")
P-4	3 m/m Plywood 1 Sheet (1/8")
P-5	2 m/m Balsa 2 Sheet (1/4")
P-6	2 m/m Balsa 1 Sheet (1/4")

CONSTRUCTION MANUAL FOR R/C MODEL COSMO 25 SR

Tools, Accessories, and others not furnished in this kit.

It is recommended to check with your local dealer or hobby shop.

MECHANICAL PARTS

- Nylon hinges ("S" Type) 13 ea
- Rod adjuster 4 ea
- 5x5/60 m/m Wood stick 2 ea
- 50 m/m Wheel 3 ea
- 32 m/m Wheel stopper 1 ea
- 40 m/m Wheel stopper 2 ea
- 8" or 8" Propeller 1 ea
- Spline, #45 m/m 1 ea
- 150-180 cc Fuel tank 1 ea
- 19-25 C.u.m. Engine 1 ea
- 3-4 Channel R/C System 1 set

TOOLS

- Modeler's knife, Screw drivers (+, -) Sand paper (Grit #100 1 ea, Grit #150 1 ea) Coarse saw, Balsa cutter, Long nose pliers, Small electric iron, Drill bits (2.5 m/m, 4.2 m/m), Hair drier, Pins, Ripper

MATERIALS

- Glue for wood working 1 ea
- Cyanoacrylate adhesive 20g
- Epoxy bond 1 ea
- Film for covering 1 set

BEFORE STARTING

- You will need only wooden parts and plan in earlier steps of construction and in order to avoid missing or confusion, it is necessary to secure other parts and accessories apart from your work place.
- Alphabets and Numbers are printed on the wooden parts and these are representing.
- Parts of Fuselage: H: Parts of Stabilizer and elevator V: Parts of Rudder
- Numbers: Sequence of construction K: Furnished in the kit N: Not furnished in the kit
- (Example) F2 (P1): Fuselage part, construction sequence second, in die-cut panel P1.
- All wooden parts are suggested to be segregated by the letters W, F, H and V.
- You can choose the starting construction anything from wing, Fuselage, Stabilizer and Rudder and it is recommended to begin two or three jobs at one because you have some time to work on another parts while glued parts dry.
- Sequences in this plan will help you to save time and effort.

WING CONSTRUCTION I (RIGHT HALF)

- Cement spar Double W2 to spar W1 as shown. Make sure one left side and one right side.
- Platform ribs W3, W4 will help you to fabricate wing structures on a flat worktable and a half of W3, W4 platform ribs.
- Snap these platform ribs into bottom spar alternately with normal ribs.
- Assembly is going on from bottom spar and ribs, top spar, trailing edge W5, leading edge W6, Joiner W7 in sequence and glue completely.
- You can do the same procedure on the left wing half.
- Cut off platform of rib after glued parts are dried.

WING CONSTRUCTION II

- Glue dihedral gauge W8 into the clearance between top and bottom spars to check distortion and glue again to joiner W5, W10 and W11 in positions.
- NOTE: one of W8 is position marked for center rib place and this marked one should be glue in front.
- Glue center rib piece W12, W13 and reinforcement W12 in sequence. Double by gluing two W12 and W13 for center rib.
- Cover wing planks W14, W15, W16, W17 and W18 in sequence. Cement W16 and W17 together before planing.
- Soak balsa in water to be smoothly bent for curved surface of wing.
- You can easily plank wing by planing up some balsa scrap as shown.
- Cut off the notches and excesses of planks for connecting wing tip W19 and trim W19 as shown.

WING CONSTRUCTION III

- Glue dihedral gauge W8 into the clearance between top and bottom spars to check distortion and glue again to joiner W5, W10 and W11 in positions.
- NOTE: one of W8 is position marked for center rib place and this marked one should be glue in front.
- Glue center rib piece W12, W13 and reinforcement W12 in sequence. Double by gluing two W12 and W13 for center rib.
- Cover wing planks W14, W15, W16, W17 and W18 in sequence. Cement W16 and W17 together before planing.
- Soak balsa in water to be smoothly bent for curved surface of wing.
- You can easily plank wing by planing up some balsa scrap as shown.
- Cut off the notches and excesses of planks for connecting wing tip W19 and trim W19 as shown.

STABILIZER CONSTRUCTION

- Cement H2, H3 and H4 to H1 in sequence and snap ribs H5, H6, H7 and H8 into positions as shown.
- Glue connecting wires with epoxy in the elevator H8 through wire holes drilled in advance and cut off the excess of the elevator.
- Connect elevator H8 to trailing edge H1 with hinges. Making slots and gluing procedure is same as that of main wing.
- Trim leading edge, trailing edge and wing tips into streamlined shape.

FUSELAGE CONSTRUCTION I

- Glue doubler F2 and F3 to the sidepanel F1, make sure one left side and one right side.
- Glue engine mounts F4 into the groove of doubler F2 with epoxy and cut off notches on another parts while glued parts dry.
- Trim holes for dowels with a drill or a round file.

FUSELAGE CONSTRUCTION II

- Cement doubler F8 on former F5 and drill 3 holes of 3 m/m marked on F8. Insert J-bolts through holes and fasten nuts with washers loosely.
- Glue former F5-F11 and sidepanels.
- CAUTION: Former F5, F6, F7 should be right angled with side panels and for this, epoxy glue is recommended.
- Draw center line from hatch F18 through hatch F10 for setting rudder platform F20. Make sure platform F20 straight with center line and glue with epoxy.
- Cut off and trim all notches with knife, plane and sandpaper.
- Cut off tail former in order to plug the stabilizer in after sanding.

FILM COVERING

Cover film over the whole surface.

It is recommended to cover units with single color and apply decal for selection because overlapping of films may cause troublesome bubbles.

Refer to the plan to install the Engine.

Use 150-180 cc Fuel tank and connect silicon rubber tube for fueling.

Connect the pushrods for aileron, elevator, rudder and engine as shown in the plan to get the instructed angles.

Install switch on the left side of the fuselage and wrap the receiver and batteries with foam rubber sheets or sponge before shipping.

Lead out the antenna wire of receiver from the left side of the fuselage and tie to the top of the rudder.

Install propeller, spinner and wheels.

Fasten wing to the fuselage with rubber bands.

Check balance and adjust with weights.

Test the smooth operation of the hinges.

You've got your own airplane at last and we will bless you the good flight.

To success the virgin flight, check with other modelers in your area and consult the hobby dealers.

MECHANISM INSTALLATION

Instruction sheet is based on the 4-channel R/C system. It is recommended to fix one of the rudder or the aileron.

Make servo beds according to your system for yourself.

Make sure rudder horn and elevator horn in positions exactly.

Glue aileron servo bed on the bottom of the wing after removing films as shown. You will have to make servo bed for yourself for unlifting servo.

Refer to the plan to install the Engine.

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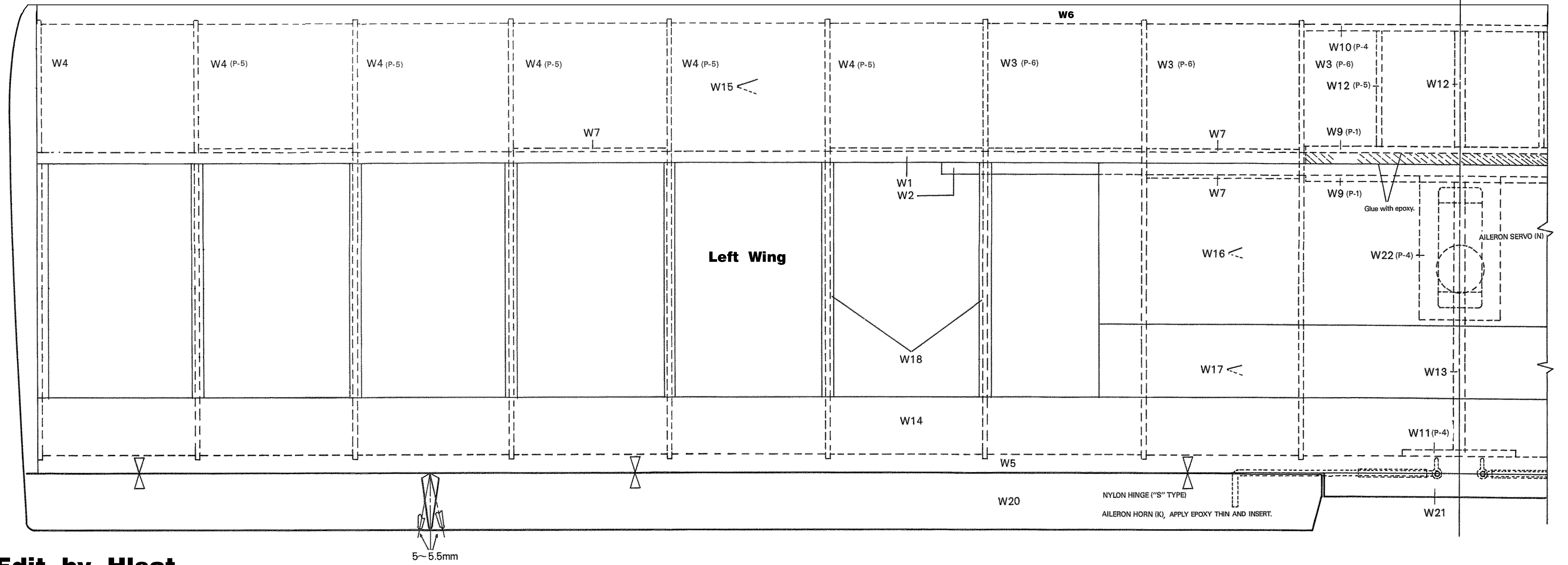
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Edit by Hlsat.