

# PICHLER

**FOKKER D.VII**  
LASER CUT KIT  
**BUILDING INSTRUCTION**



## CATALOG

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## INTRODUCTION

THE FOKKER D.VII WAS A GERMAN WORLD WAR I FIGHTER AIRCRAFT DESIGNED BY REINHOLD PLATZ OF THE FOKKER-FLUGZEUGWERKE. GERMANY PRODUCED AROUND 3,300 D.VII AIRCRAFT IN THE SECOND HALF OF 1918. IN SERVICE WITH THE LUFTSTREITKRÄFTE, THE D.VII QUICKLY PROVED ITSELF TO BE A FORMIDABLE AIRCRAFT. THE ARMISTICE ENDING THE WAR SPECIFICALLY REQUIRED, AS THE FOURTH CLAUSE OF THE "CLAUSES RELATING TO THE WESTERN FRONT", THAT GERMANY WAS REQUIRED TO SURRENDER ALL D.VIIS TO THE ALLIES.[1] SURVIVING AIRCRAFT SAW MUCH SERVICE WITH MANY COUNTRIES IN THE YEARS AFTER WORLD WAR I.



## PRODUCTLIST

|                                                    |                                   |
|----------------------------------------------------|-----------------------------------|
| <b>Plywood sheets pack*1</b>                       | <b>1:1 installation drawing*1</b> |
| <b>Batten sets</b>                                 | <b>Operation instruction*1</b>    |
| <b>Laser-cutting steel parts for connection *1</b> | <b>Accessories bag*1</b>          |
| <b>PVC scale part*3</b>                            | <b>Steel tube set*1</b>           |
| <b>Carbon tube+PVC tube*2</b>                      | <b>Acrylic wing support set*1</b> |
| <b>Undercarriage set with wheel shafts</b>         | <b>Push rods with conduits</b>    |

**Available Accessories : 3D print 1/4 dummy gun/dummy engine, 1/4 vintage wheels**

## KIT FEATURES

- **Scheme-based on Fokker D.VII.**
- **Extremely lightweight, state-of-the-art all-wood construction**
- **Complete hardware pack. Comes with PVC scale parts.**
- **Full-scale simulation metallic structure.**
- **Extensive clear drawings and full-page colour instructions with hundreds of pictures .**
- **Only adhesives and coverings are required to complete the airframe .**
- **3D print 1/4 dummy guns/engine and 1/4 vintage wheels are available for it.**

## GENERAL INFORMATION

### **BE SURE TO READ THE SAFETY INSTRUCTIONS CAREFULLY BEFORE OPERATING YOUR MODEL.**

- Always follow the procedures and settings recommended in the instructions.
- If you are using remote-controlled model aircraft, helicopters, cars or ships for the first time, we recommend that you ask an experienced model pilot for help.
- Remote-controlled models are not toys in the usual sense and may only be used and operated by young people under 14 years of age under the supervision of adults.
- Their construction and operation requires technical understanding, careful craftsmanship and safety-conscious behaviour.
- Mistakes or negligence during construction, flying or driving can result in considerable damage to property or personal injury.
- Since the manufacturer and seller have no influence on the proper construction/assembly and operation of the models, these risks are expressly pointed out and any liability is excluded.
- Propellers on aircraft and all moving parts in general pose a constant risk of injury. Avoid touching such parts at all costs.
- Note that motors and controllers can reach high temperatures during operation. Avoid touching such parts at all costs.
- Never stay in the danger area of rotating parts with electric motors with connected drive battery.
- Overcharging or incorrect charging can cause the batteries to explode. Make sure the polarity is correct.
- Protect your equipment and Models from dust, dirt and moisture. Do not expose the equipment to excessive heat, cold or vibration.
- Always check your equipment for damage and replace defects with original spare parts.
- Do not use equipment that has been damaged or got wet due to a fall, even if it is dry again!
- Do not make any changes to the remote control which are not described in these instructions.
- Before the first flight, check the wing symmetry, tail unit and fuselage. All parts of the model should have the same spacing from the left and right wing or tail plane to the centre of the fuselage or the same angle.

### **ATTENTION, DANGER OF INJURY!**

- Always keep a safe distance from your model aircraft.
- Never fly over spectators, other pilots or yourself.
- Always perform flight figures in a direction away from the pilot or spectators.
- Never endanger people or animals.
- Never fly near power lines or residential areas.
- Do not operate your model near locks or public shipping.
- Do not operate your model on public roads, motorways, paths and squares, etc., but only in approved locations.
- Do not operate the model in thunderstorms.
- Before each flight, check your remote control system for sufficient function and range.
- After flying, remove all batteries from the model.

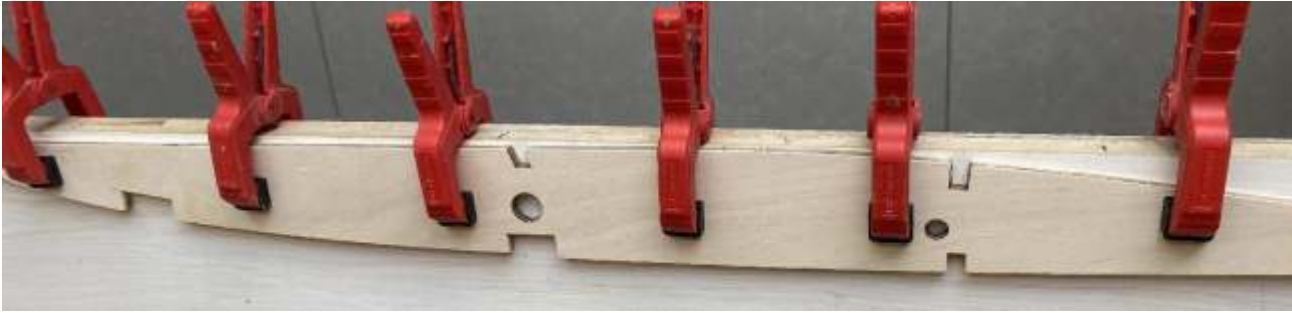
Do not „aim“ the transmitter antenna at the model during operation. In this direction, the transmitter has the lowest radiation. The best position of the antenna is to the side of the model.

Use of devices with image and/or sound recording function:

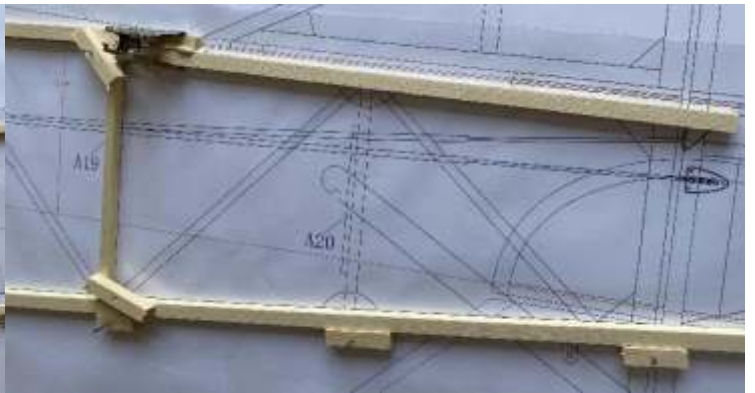
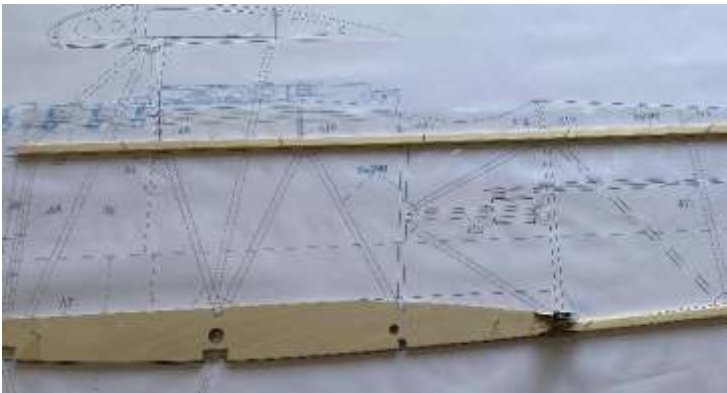
# BUILDING INSTRUCTION

## 1 FUSELAGE FRAME ASSEMBLY

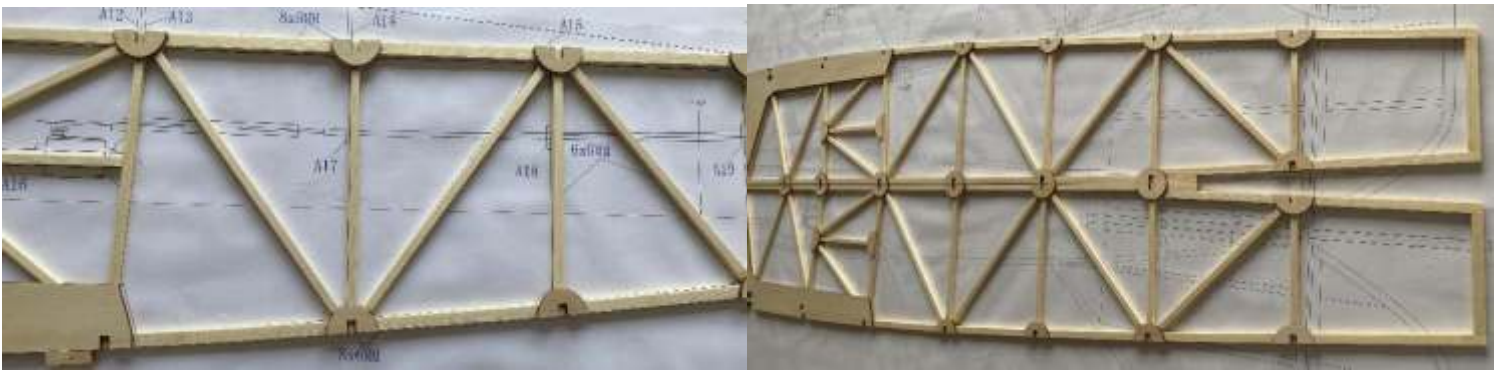
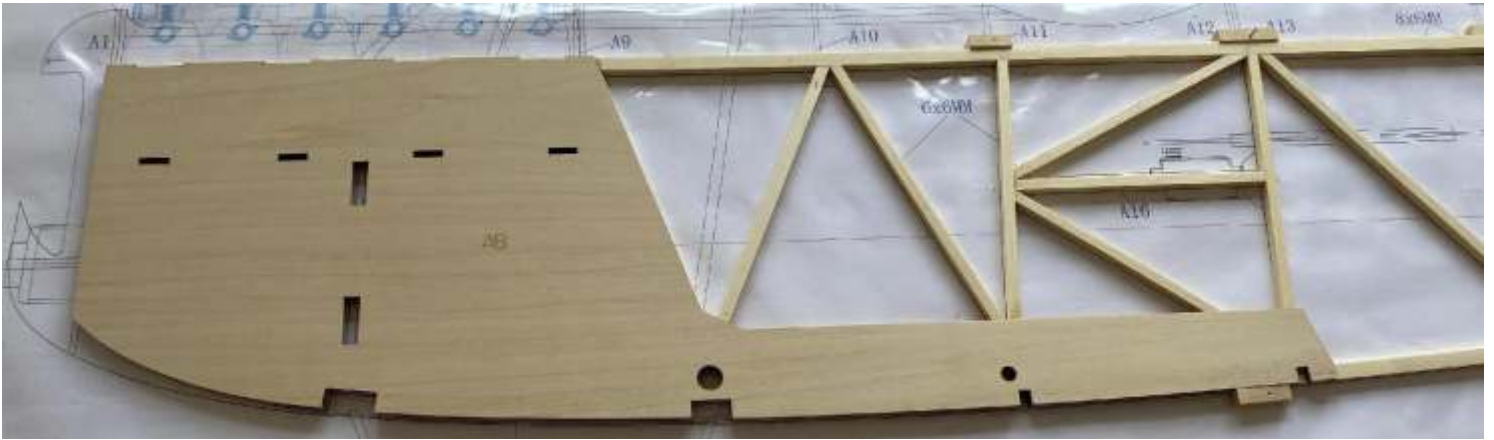
1) Glue two A7 plywood pieces into one.



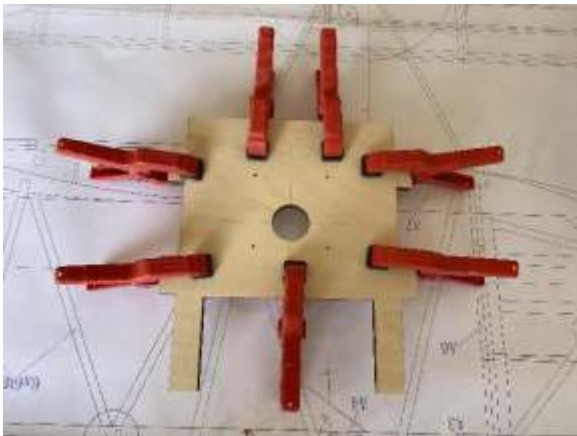
2) Fixed the plywood on the drawing, and glue the pine sticks according to the drawing.



3) Glue plywood pieces and reinforcing pieces.

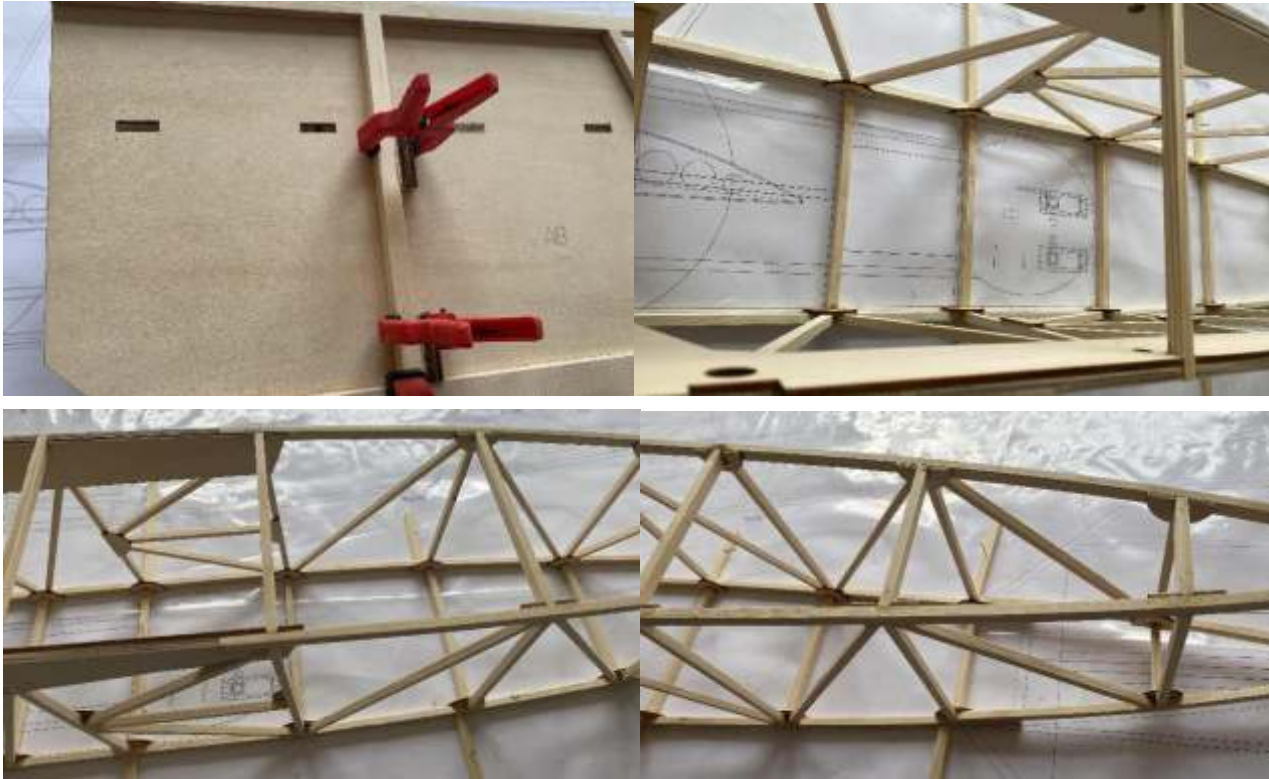


4) Glue the two A6 together.



5) Combine the A5,A6 and two side plates, and glue the crossgirder, pay attention to keep the side plates vertical. (For different power system:A5 should be installed in the front position---

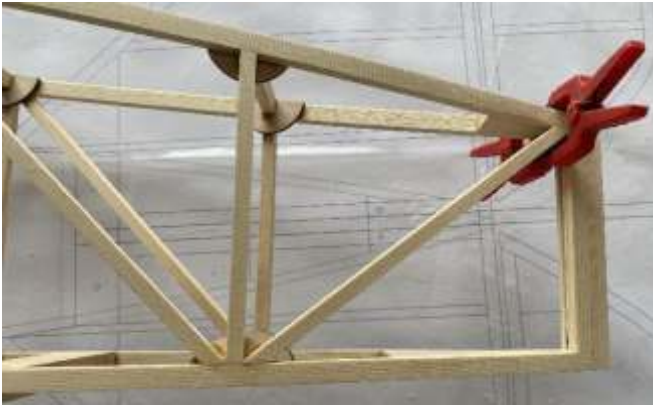
EP.Install A5 the rear position---GP)



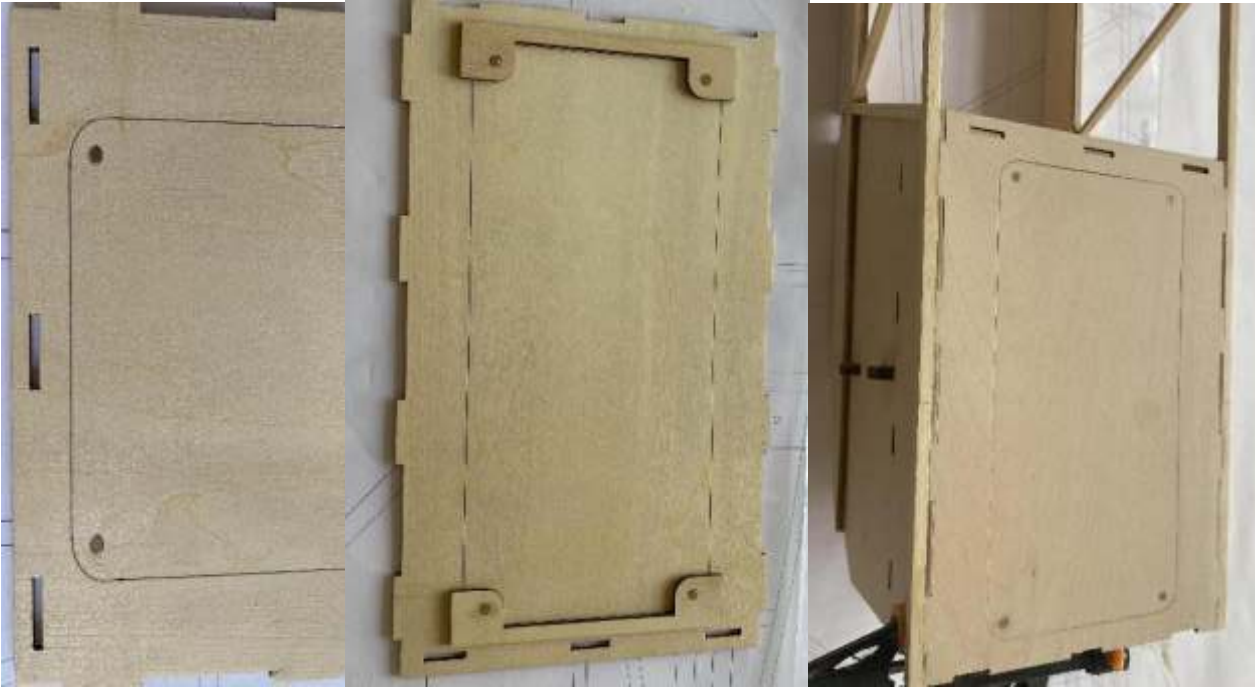
6) 8MM pine blocks are used to strengthen the tail structure



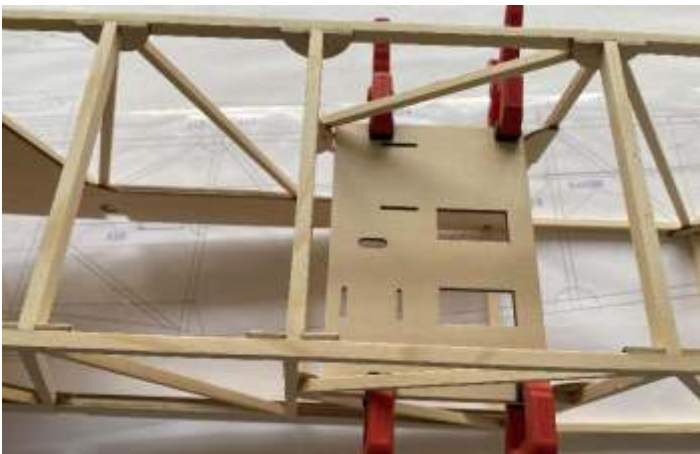
7) Glue 6X6MM pine strips as the tail diagonal supports.



8) Install magnets on the cover of the cabin(batteries room of EP) and glue it to the fuselage.



9) Glue the servo mount to the fuselage.



10) Glue the undercarriage mounts to the fuselage.





11) Glue the bulkheads to the fuselage according to the drawing.



12) Glue 6X6MM balsa sticks on the fuselage cover and polished them ,in order to increase contact areas and help the cover to keep flat.



13) Glue the cover on the rear of the fuselage.



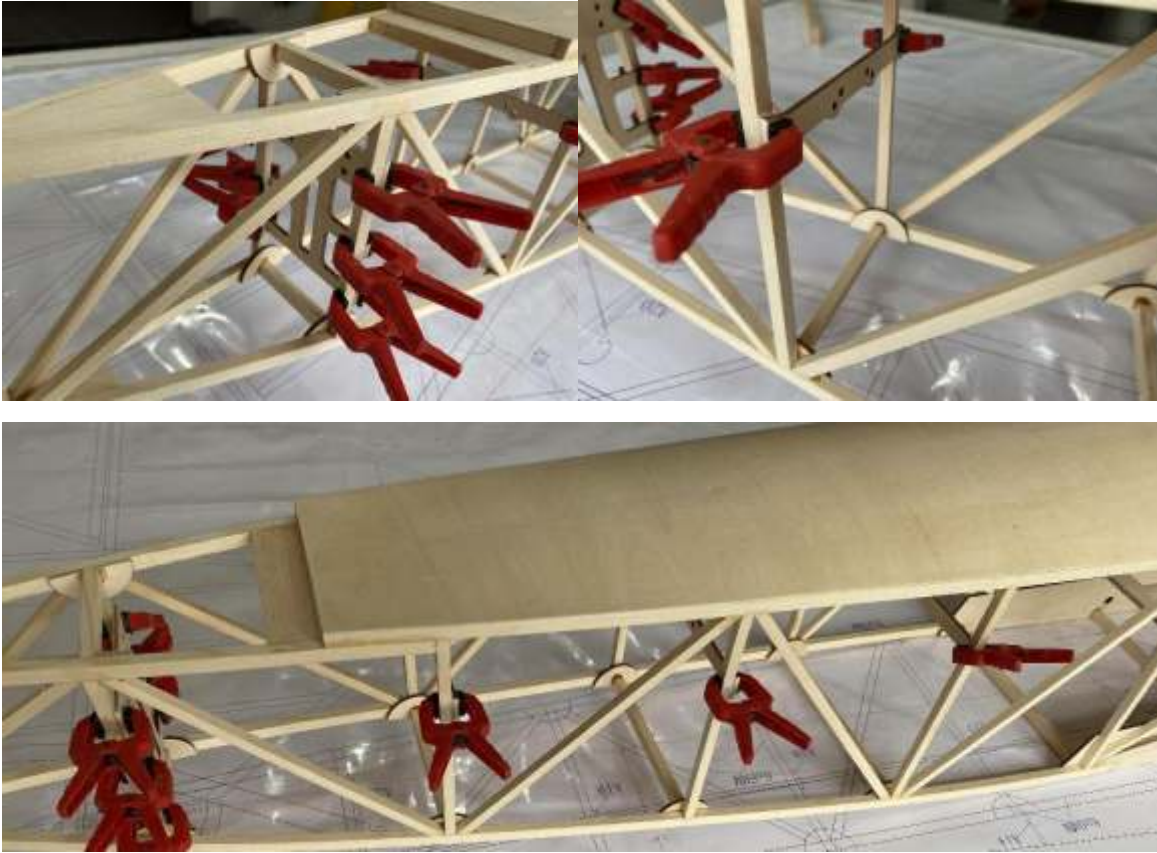
14) Glue balsa sticks on the front of the fuselage and polish them.



15) Front fuselage cover.



16) Glue the push rod fixing plate to the fuselage.



17) Glue balsa blocks and A1 to the nose, then polish and trim. EP version: the baffle on A1 no need to be cut off. GP version: cut the baffle on A1 in order to get better heat dissipation.



18) Glue balsa sticks on the undercarriage mounts in order to increase the contact areas.



19) The cover of lower fuselage.



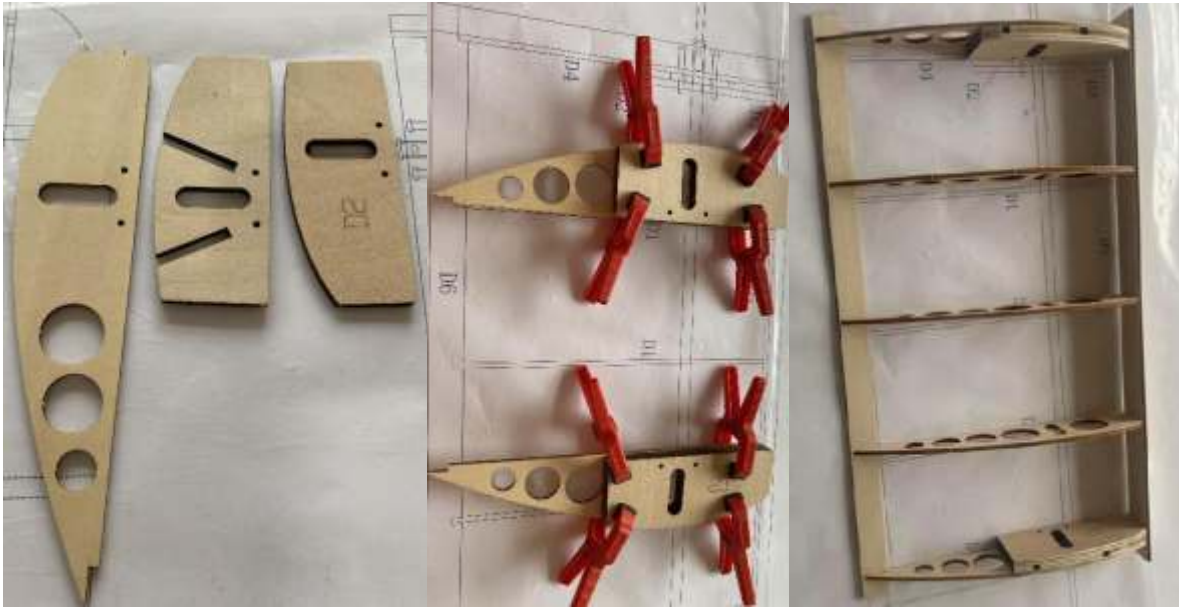
20) Reinforce the joint position with plywood and stick the conduit.



21) The pine block is attached to the nose to secure the cowling.



22) Glue the undercarriage seat in accordance with the drawing orders,combine and glue.



23) Glue the cover, then glue balsa blocks on the leading edge and polish them.



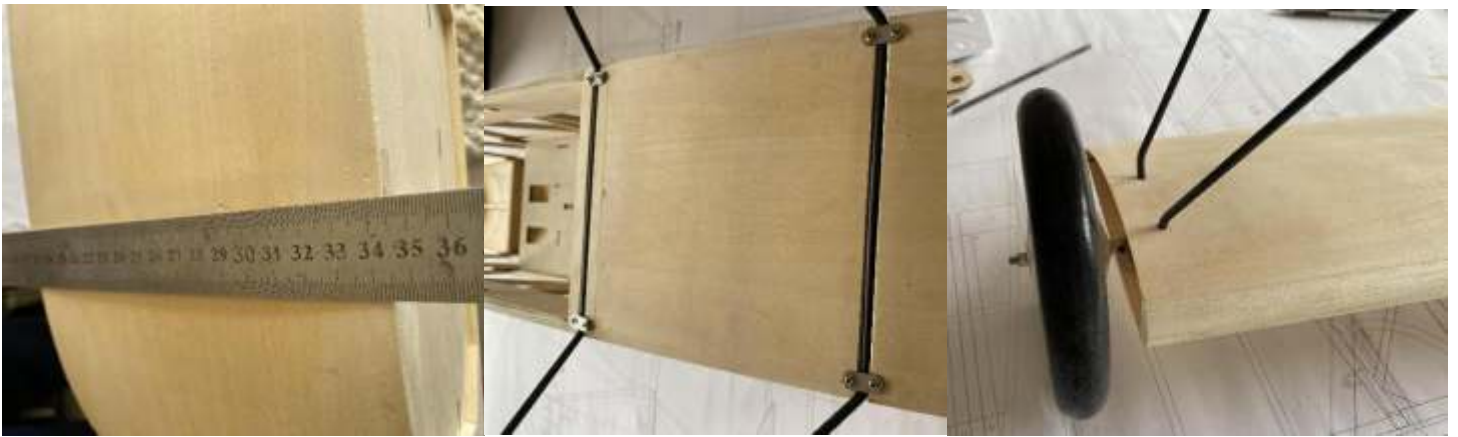
24) Use a sharp object to locate the mounting holes and expand it to 4MM.



25) Mount undercarriage wires and wheel shafts.



26) Mark the position of the undercarriage on the fuselage, slot it, and then attach the undercarriage to the fuselage with fasteners.



27) Make tail skid with 8MM pine stick. Fix with fasteners on the tail. The rubber bands are used for absorb shock.



28) Make elevator rod with 8MM round wooden stick and steel wires.



## 2 WINGS ASSEMBLY

- 1) Assemble the lower wing ribs according to the part number.



- 2) Glue 6X6MM balsa on the wing SPAR, and glue the trailing edge plywood.



- 3) Glue the casing tube and leading edge plywood.



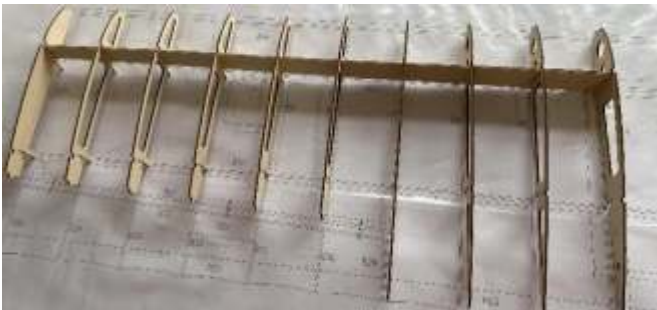
**4) Glue the upper and lower cover and polish them.**



**5) Strengthen C1 with 8MM balsa sheet to prevent the film/cover from pulling and deformation.**



**6) Assemble the lower ribs according to the part number.**



**7) Glue front and rear edge plywood and wing beam balsa sticks.**





8) Glue the upper and lower cover (2mm balsa sheets).



9) Assemble aileron servo mount according to the drawings, and stick to the wing ribs.



10) Glue the wing tip plywood and strengthen it with balsa wood.



11) Strengthen the ribs with 8mm balsa sheet.



12) Assemble aileron parts according to the drawings, glue 8MM balsa wood on the leading edge of aileron and polish to be the V-shape.



13) Install the metal fittings(used for wing support,marked on full size plan) to the ribs,strengthen it with balsa wood.



14) Assemble the middle wing ribs, insert and glue the PVC conduit, and insert the carbon tube (Prevent the pipe from being squeezed)



15) Attach the wing beam (6\*6mm balsa stick).



16) Glue balsa blocks (cut from 8mm balsa sheet) and polish the rear.



17) Glue the cover (2mm balsa sheet) and leading edge (cut from 8\*8mm balsa sheet) and polish.



18) Glue 8X25 pine sticks on the sides of the bottom ,then install metal connectors. Round holes should be drilled in the pine to facilitate the servo wires to pass through.



19) 8pcs of 6mm steel tubes are needed to be flattened and trimmed.



20) Mount the wings fixture to the fuselage, assemble the middle wing, and temporarily secure it with clamps.



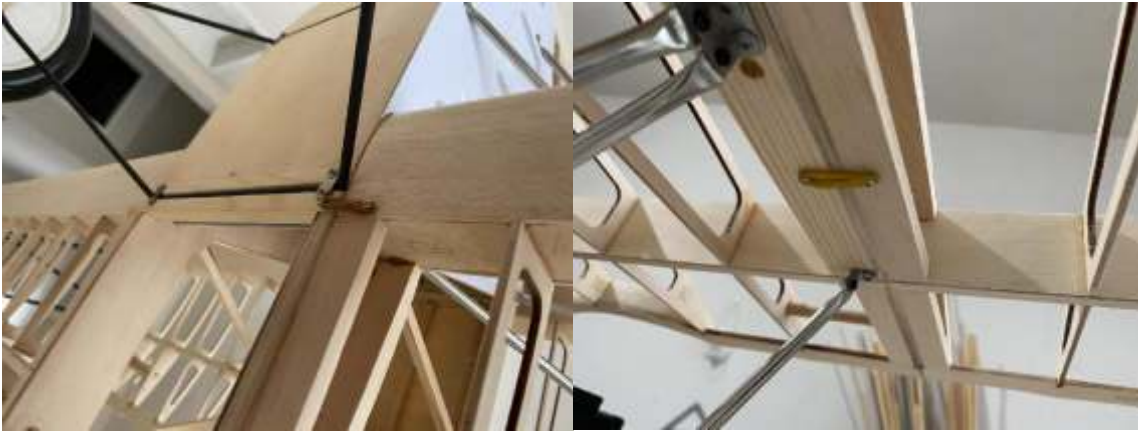
21) Fix the steel tube struts to the fuselage.( Fixed the struts on the upper wing first, so that the mounting position of struts on the fuselage can be adjusted in order to keep the upper wing and lower wing parallel,keep the wings from twisting.)



22) Install the wing supports.



**23) Use self-tapping screws and rubber bands to secure the wings for safety**



### **3 TAIL ASSEMBLY DETAILS**

**1) Glue the horizontal tail fin according to the 1:1 plan.**



**2) Glue balsa wood blocks on the tail for reinforcement.**



3) Elevator.



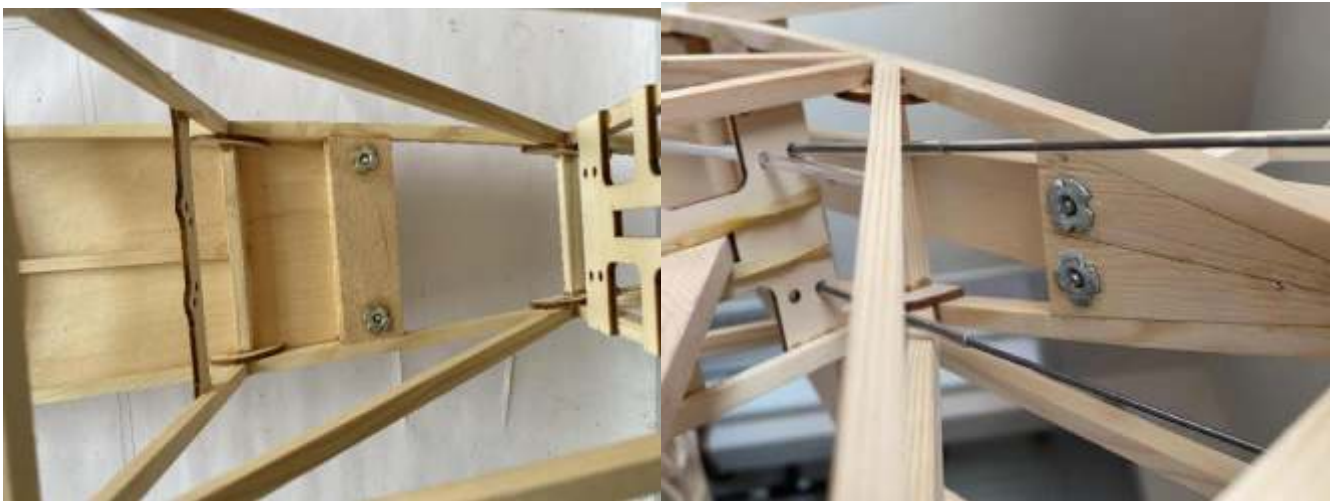
4) Vertical stabilizer .



5) Rudder.

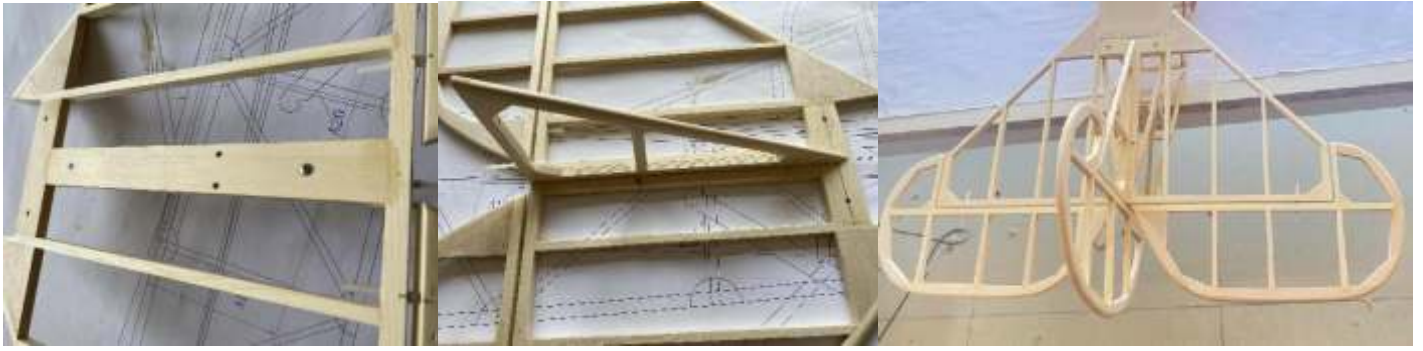


6) Pre-install the horizontal stabilizer onto the fuselage, drill a 3MM hole in the pine block, and install nuts at the corresponding hole position on the fuselage to fix the horizontal stabilizer.



7) Secure the vertical tail using self-tapping screws.





**4 FINISHED**

