

Minimoa mo2a _{1/6}

Build instructions



Specifications	
Wing Span	112 in / 2844mm
Wing Area	54.8 sq dm
Flying weight	1.8kg-1.9kg
Fuselage length	1218mm
Scale	1 / 6

Requires
RC transmitter with at least 7 channels
Air-brake: 9g servos(ES08/DS395)*2
Flaps:9g servos(ES08/DS395)*2
Aileron: 17g Servo(ES3004/AS82MG)*2
Rudder&Elevator: 17g Servo(ES3004/AS82MG)*2



Tony Ray's AeroModel

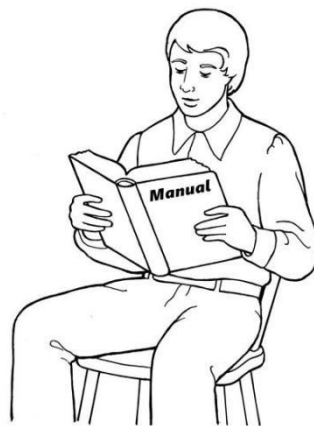
INDEX

BEFORE YOU BEGIN-----	P.3
KIT INVENTORY-----	P.4~P.5
ASSEMBLY-Fuselage I-----	P.6~P.10
ASSEMBLY-Fuselage II-----	P.11~P.19
ASSEMBLY-Canopy-----	P.20~P.21
ASSEMBLY-Vertical & Horizontal Tail-----	P.22~P.26
ASSEMBLY-Centre Wing Section-----	P.27~P.30
ASSEMBLY-Outer Wing Section-----	P.31~P.34
ASSEMBLY-Wing Covering-----	P.35~P.37
ASSEMBLY-Seats And Details-----	P.38~P.40
ASSEMBLY-Eletronics-----	P.40~P.43
BEFORE YOU FLY-----	P.40~P.45

BEFORE YOU BEGIN

Attentions and Tips

1. Read through the manual before you begin, so you will have an overall idea of what to do.
2. Check all parts. If you find any serious defects or missing parts, please contact your local dealer.
3. Please build your kit in strict accordance with the sequence of the user manual.
4. Pre-Sanding: Before removing any parts from the laser-cut plywood sheet, use a sanding block loaded with 250 - 400 grit sandpaper and lightly sand the back side of the sheet. Which can significantly reduce burn marks of the wood and make the parts match better
5. Before building the model part on drawings, It is recommended to cover a layer of kitchen cling film (polyethylene film) on the drawing. This way can prevent parts from sticking to the drawing and causing damage.
6. Parts Assembly: This product's tabs and notches interlock like a 3D puzzle. We strongly suggest that when fitting parts, you "dry fit" (use no glue) the parts together first. It is advised to work 1 - 2 steps ahead in the instructions, using this dry-fit technique. This allows the opportunity to inspect the fit and location of assembled components, and shows the benefits of our construction technique. As each successive part is added, it contributes to pulling the entire assembly square. Once you arrive at the end of a major assembly sequence, square your work on a flat work surface, and bond the dry-fit joints with glue. Using the dry-fit process, you'll be able to recover from a minor build mistake, and will ultimately end up with a square and true assembly.
7. This is a precision laser-cut kit. Our lasers cut to within 0.2mm in accuracy. Yet the wood stock supplied to us by the mill may vary in thickness by up to 0.2-0.3mm. This variance in the wood stock can cause some tabs and notches to fit very tightly. With this in mind, consider lightly sanding or lightly pinching a tight-fitting tab, rather than forcing the parts together. You may break some parts in assembly, but please don't worry, after the final covering work, it will not affect the strength and appearance of your model. You will end up with a circle and true airframe.



KIT INVENTORY



Sheet Wood Inventory		
Item:	Mark	Quantity
1.5mm Balsa	A series:A1-A26	25
1.5mm Paulownia	A series:A27-A28	2
1.5mm Plywood	A series:A29	1
2.0mm balsa	B series:B1-B10	10
2.0mm Paulownia	B series:B11-B12	2
2.0mm Plywood	B series:B13-B20	8
3.0mm Plywood	C series:C1	1
3.0mm Balsa	C series:C2-C3	2
3.0mm Pine wood	C series:C4-C5	2
5.0mm Balsa	D series:D1	1
1.0mm Balsa	E series:E1-E4	4
1.0mm Plywood	E series:E5-E7	3

Wood Strips Inventory*	
3*3mm Balsa	10
6*6mm Balsa	4
2*8mm Pine	6

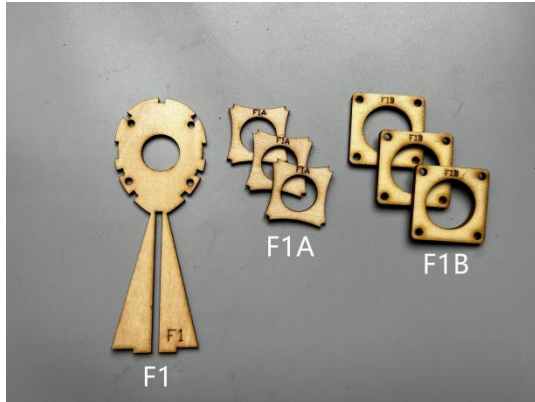
TonyRay Aero Model Co.,Ltd

Hardware*	
<i>1. Hardware in Strips bag</i>	
PVC Tube (Outer diameter: 12mm, Inner diameter: 10mm)	1m
PVC Tube (Outer diameter: 3mm, Inner diameter: 2mm)	2m
Steel push rod(Diameter1.2mm)	4
<i>2. Hardware in plastic bag</i>	
Laser cut Pvc sheet	1
Paper hinge	2
Leather strips	6
<i>3. Hardware in plastic box</i>	
M2 ball joint connector	4
M2 Steel push rod (Thread at both ends Length:25mm)	3
M2 Nylon rocker head	1
Steel wire adapter	4
Plastic collet	4
Rudder horn	3
Plastic Hinge	6
M3*25 Screws	2
M3 Four Claws Nut	2
M2 Screw nut(black version)	20
M2 Screw nut	16
M2*10 Screws	36
M2*8 Screws (Spacer Version)	24
Copper hinge	4
M1*3 Screws	40
<i>4. Aluminum parts</i>	
Aluminum Tube (Outer diameter: 10mm, Inner diameter: 6mm)	4
<i>5. Vacuum Formed Canopy</i>	
Canopy	1

Paper parts	
1:1 drawings	2

ASSEMBLY-Fuselage I

Step1



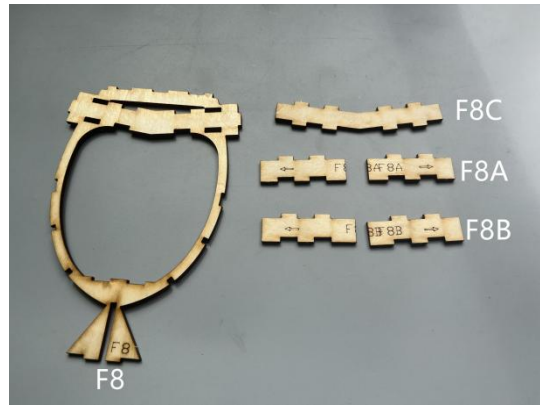
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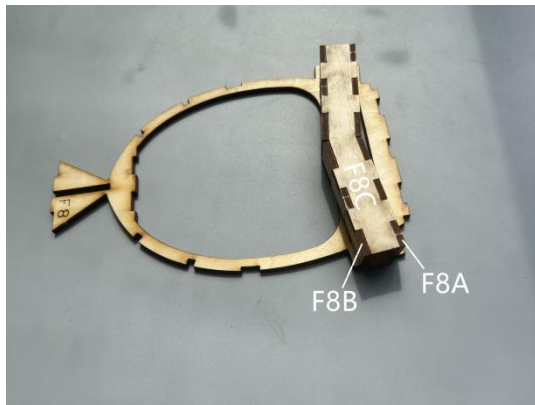
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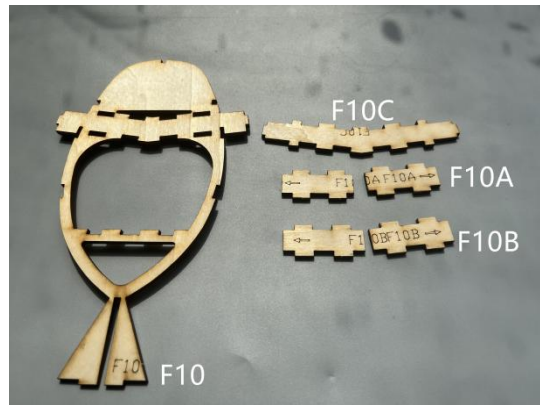
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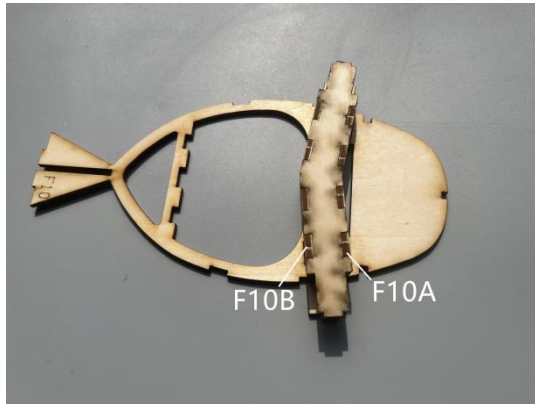
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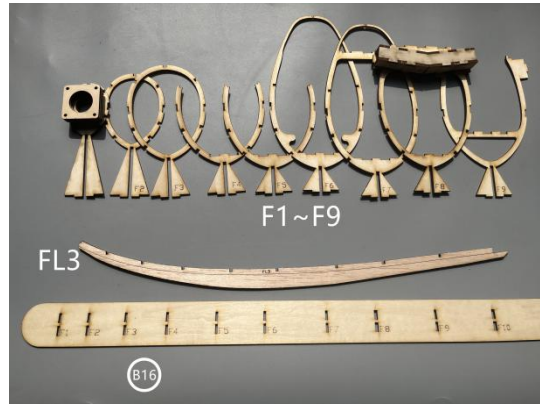
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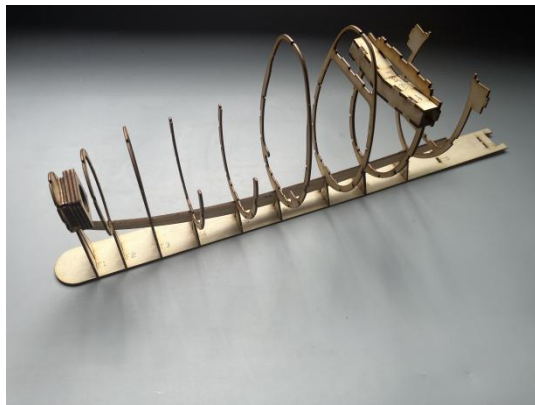
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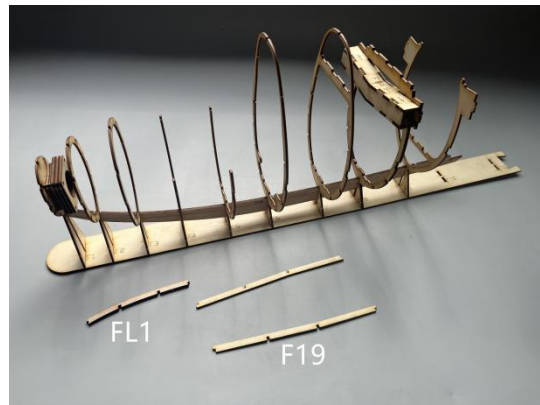
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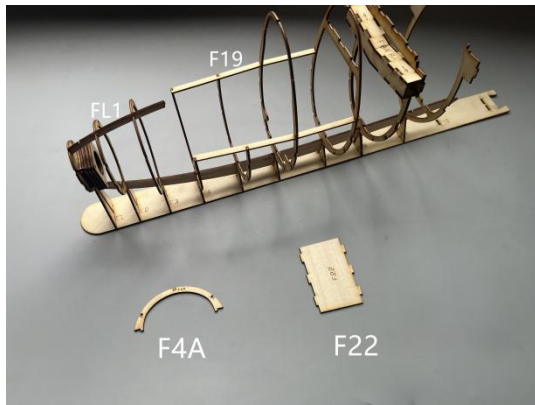
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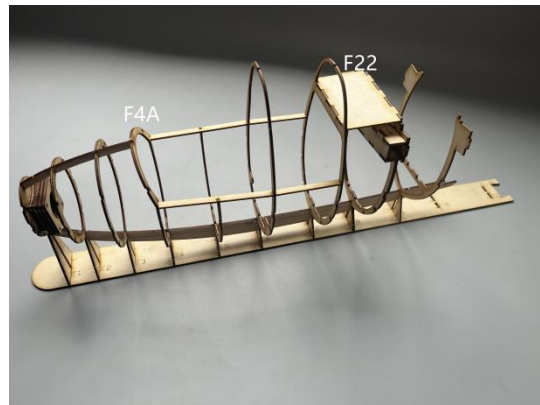
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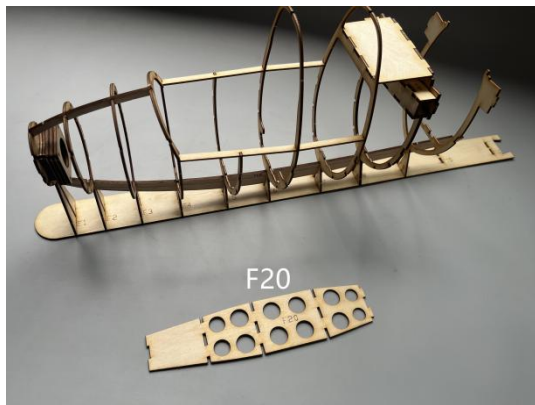
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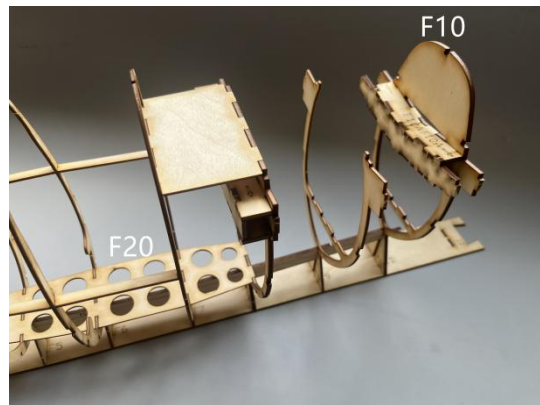
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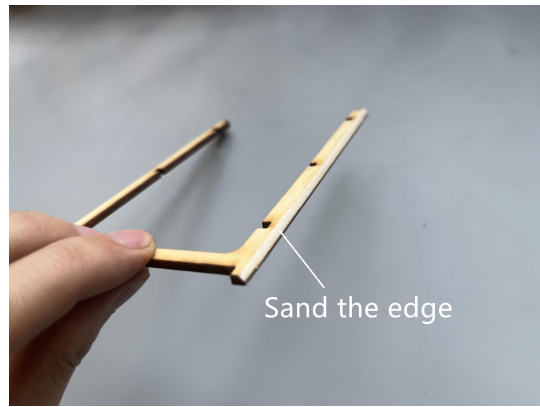
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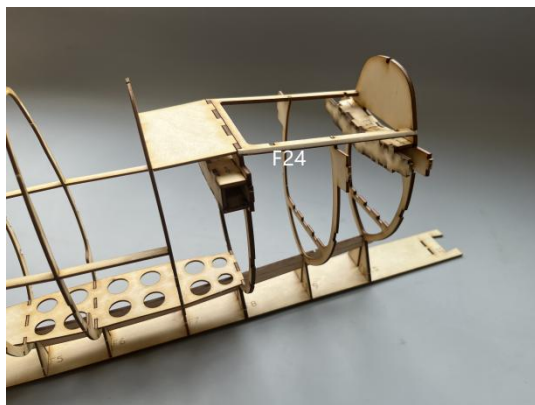
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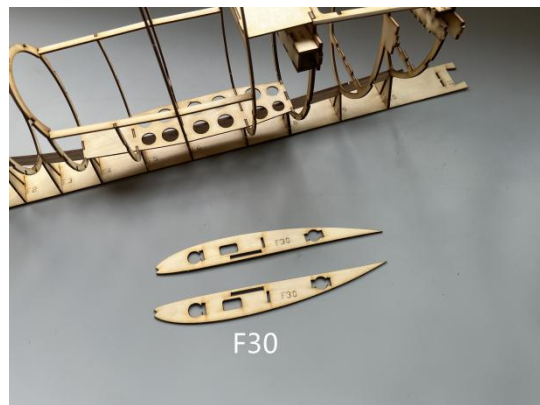
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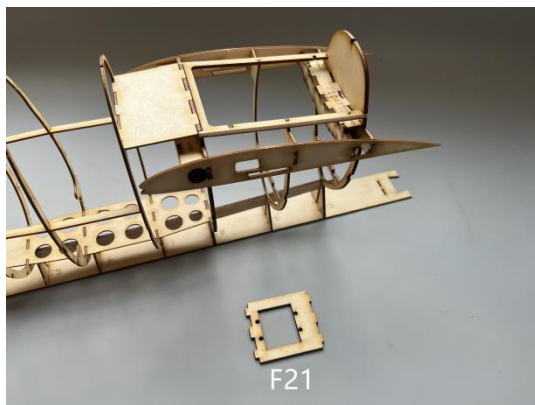
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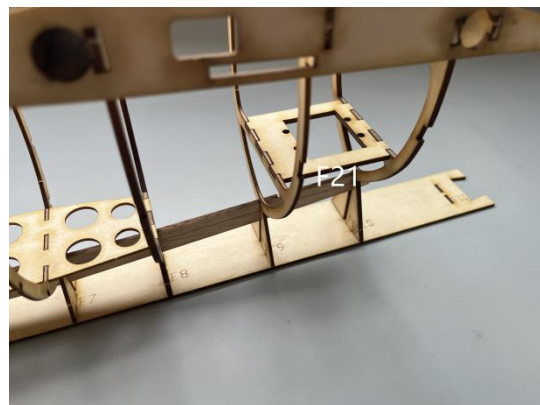
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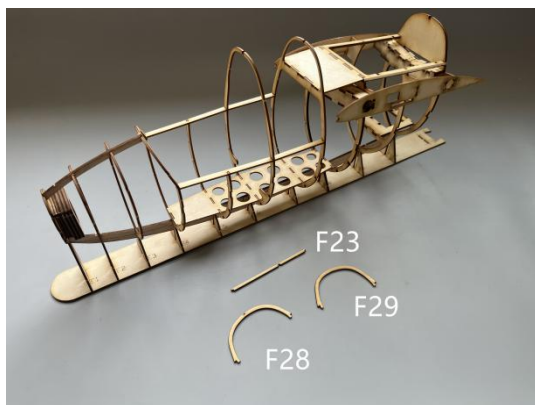
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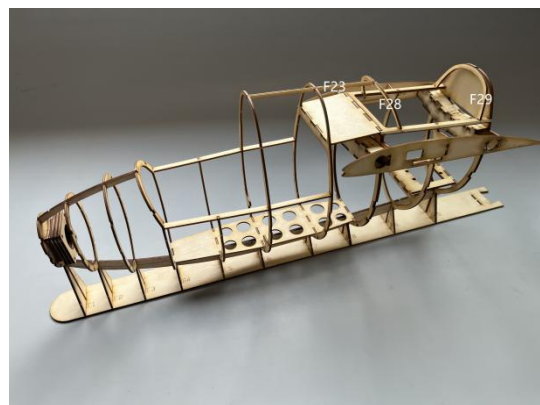
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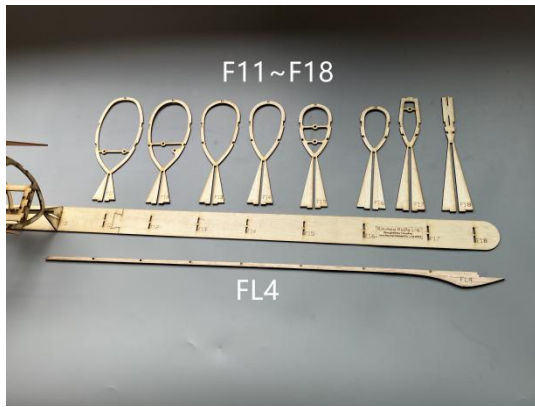
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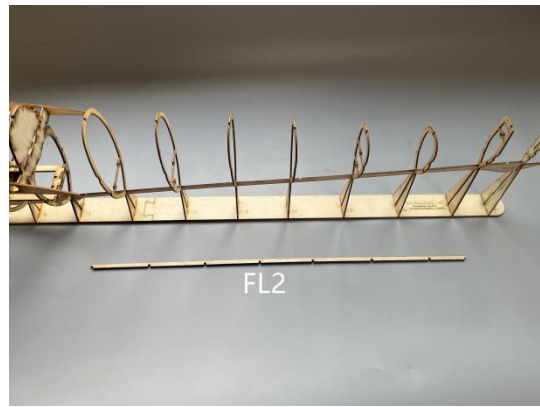
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Step23



Step24



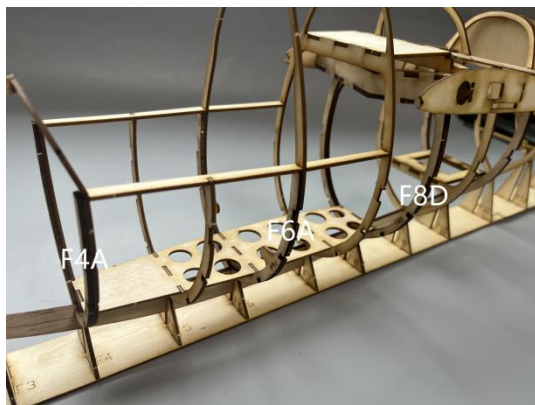
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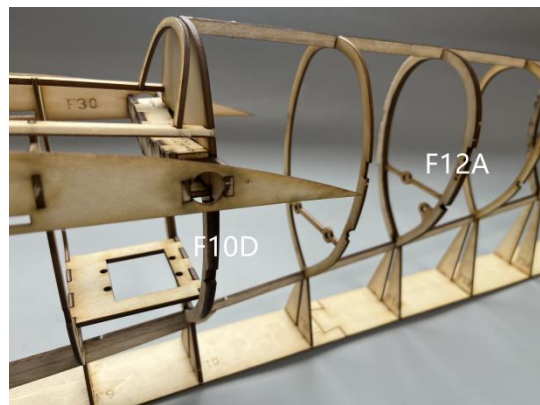
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Step28



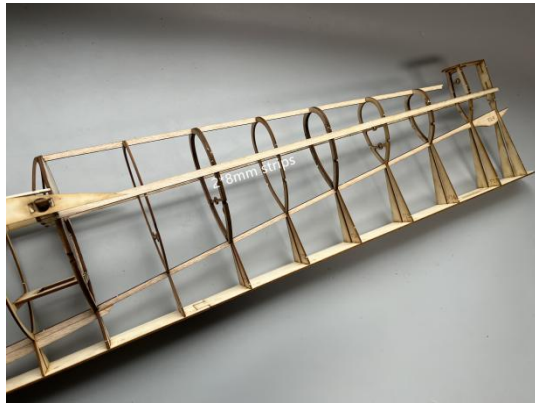
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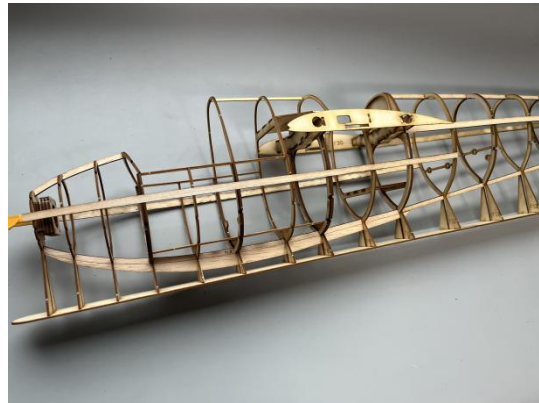
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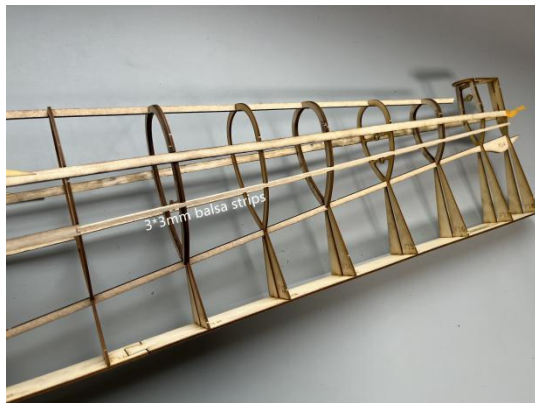
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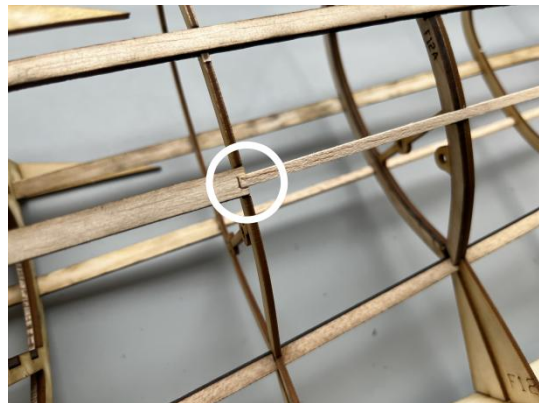
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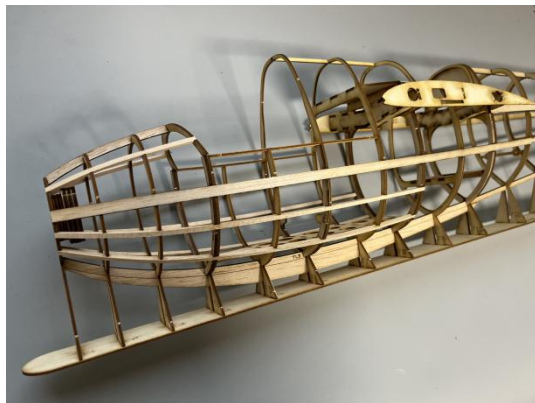
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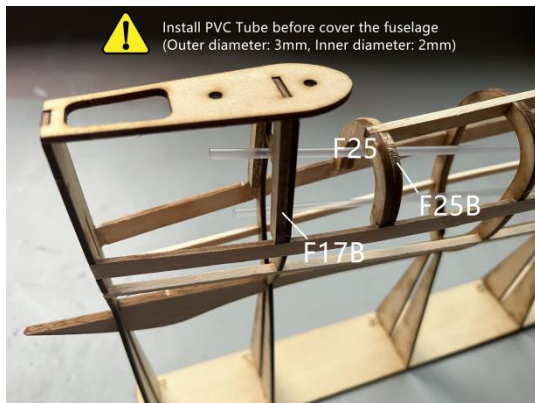
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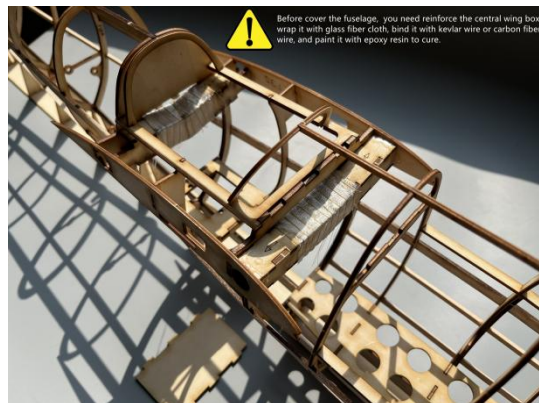
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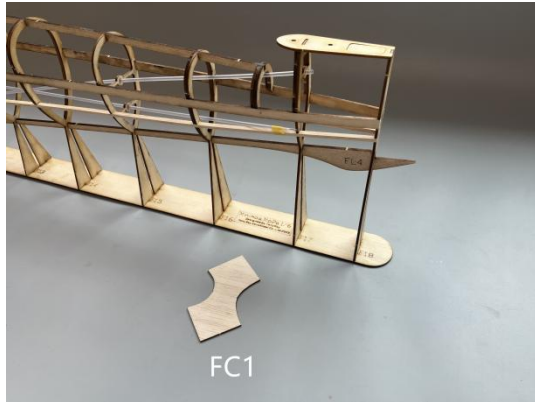


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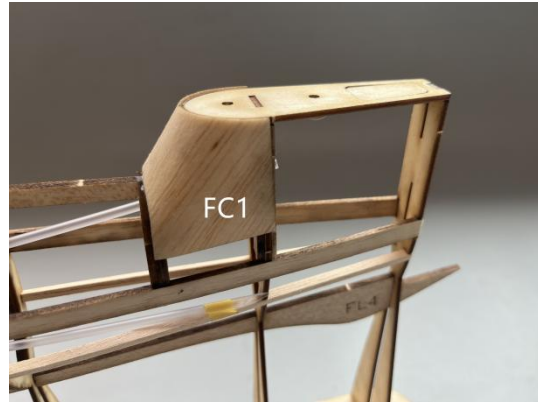


ASSEMBLY-Fuselage II

Step1



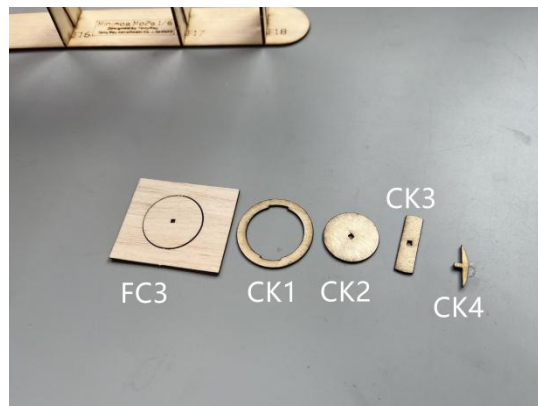
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Step3



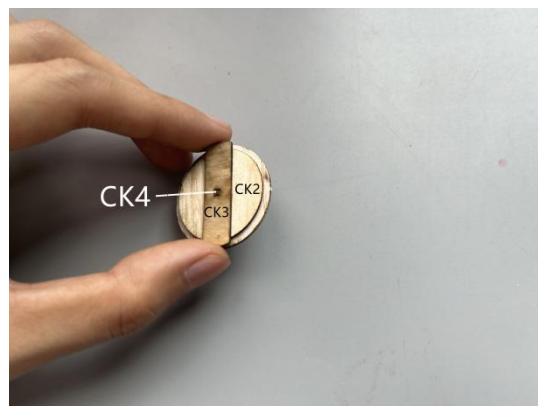
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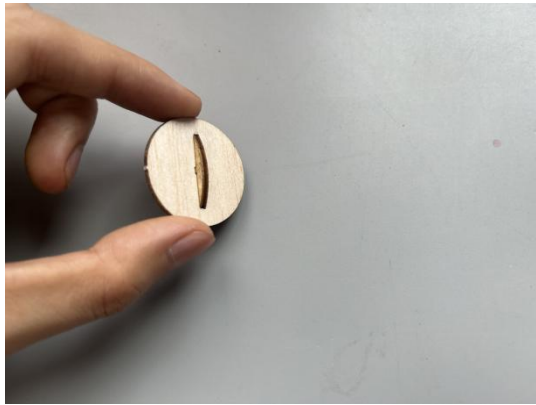
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Step6



Step7



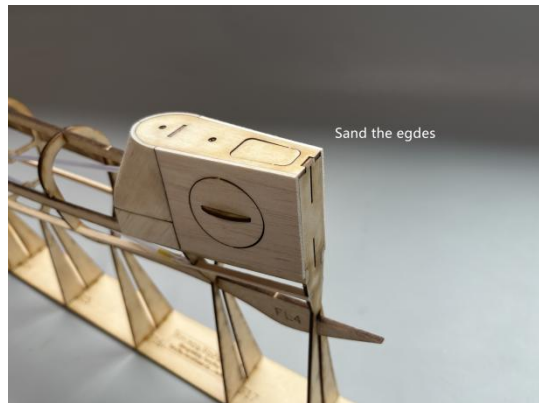
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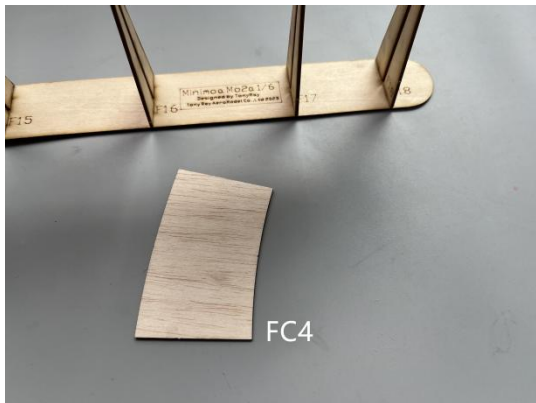
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Step10



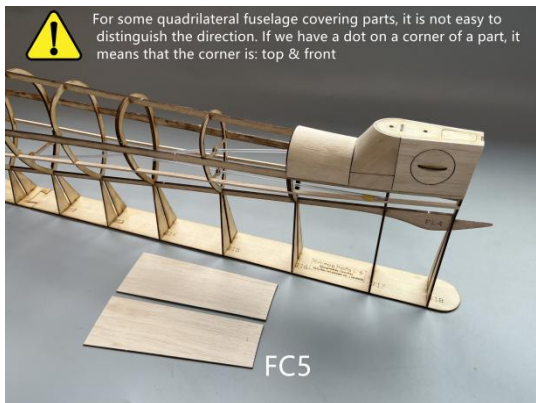
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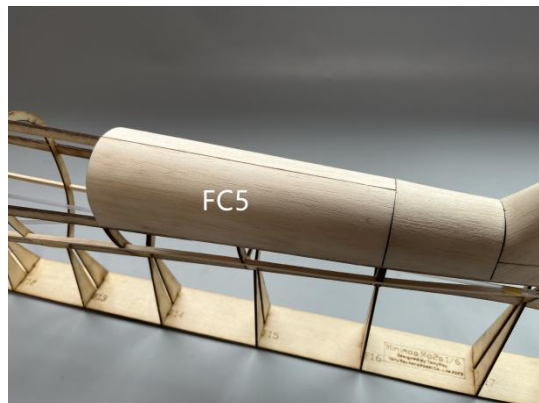
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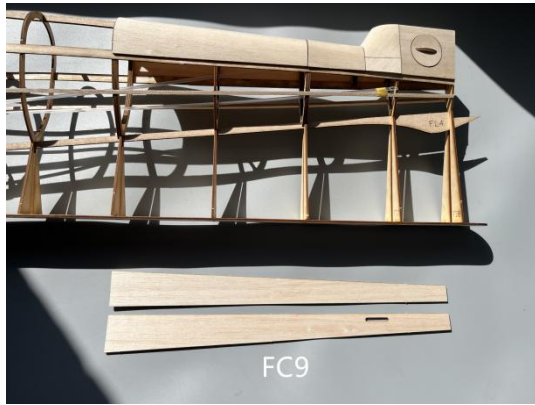
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Step14



Step15



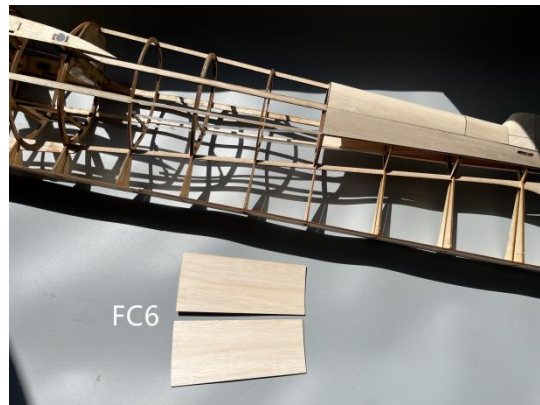
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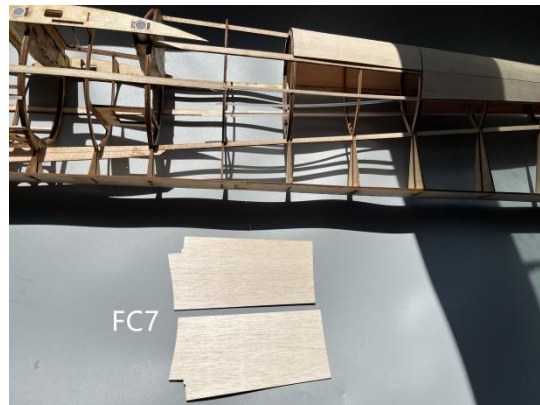
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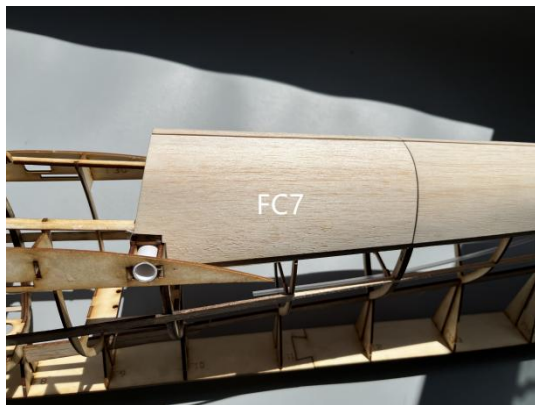
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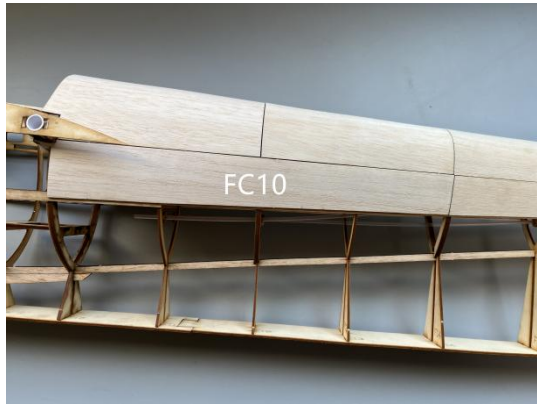
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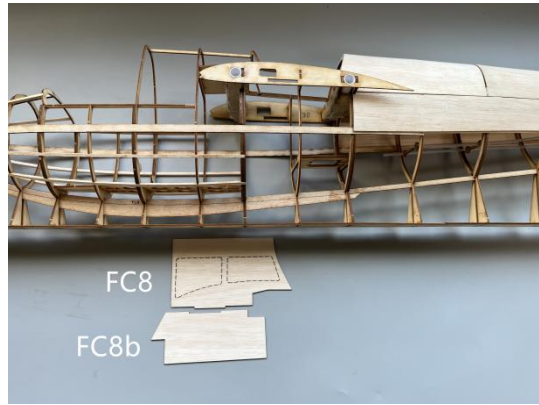
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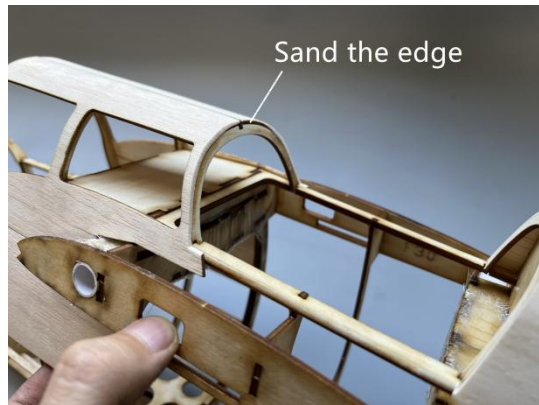
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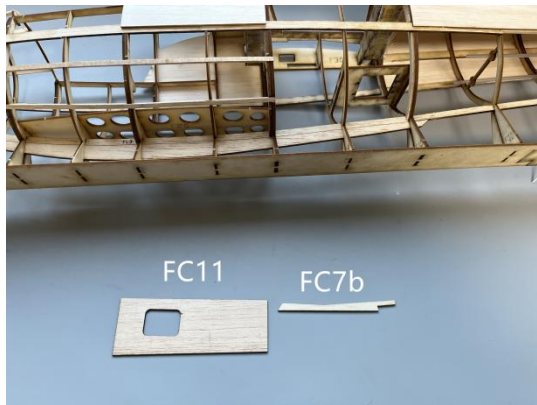
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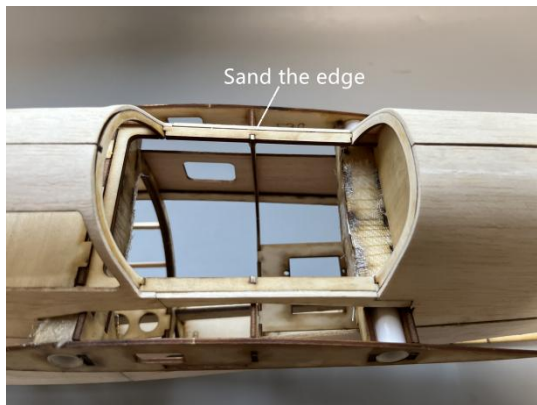
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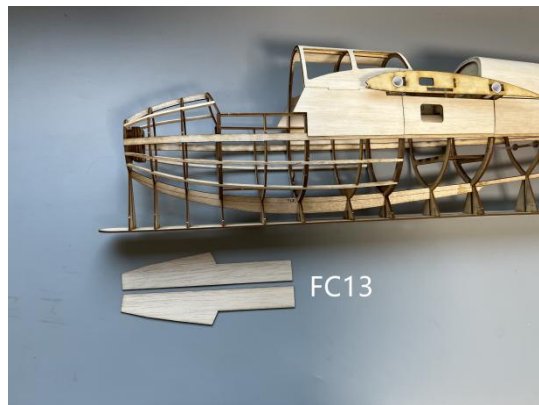
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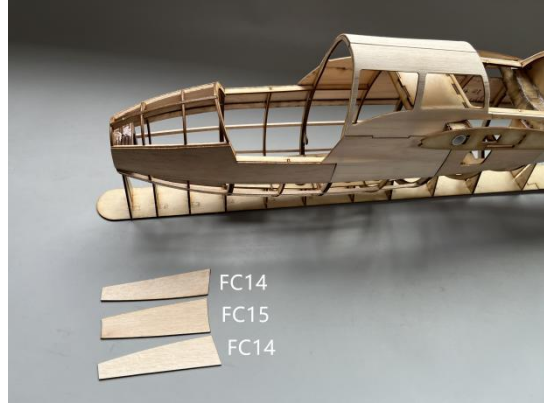
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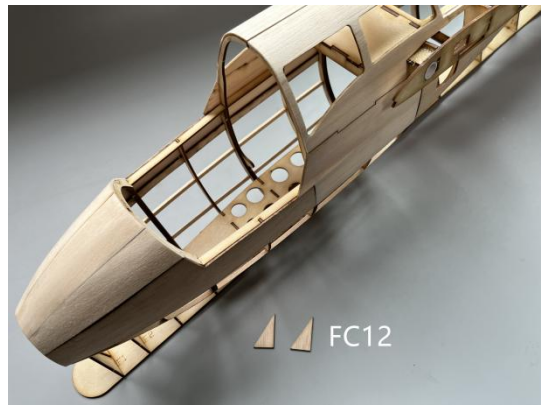
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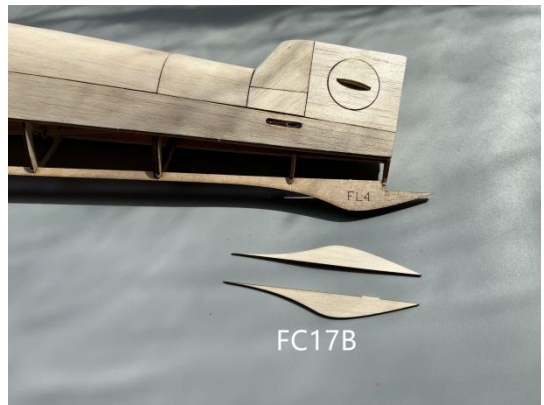
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Step35



Step36



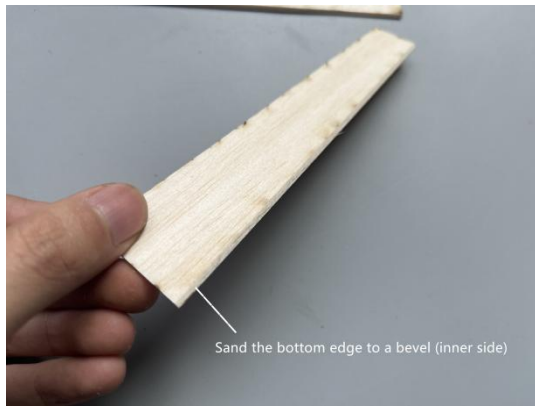
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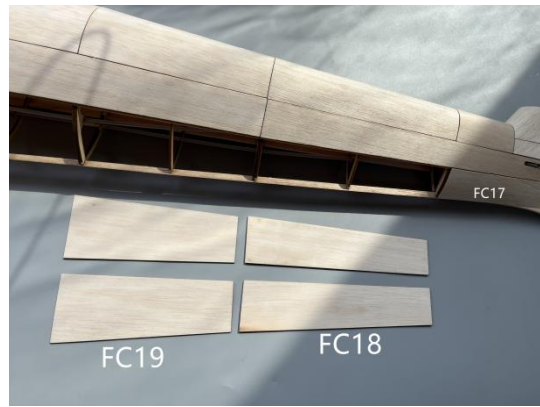
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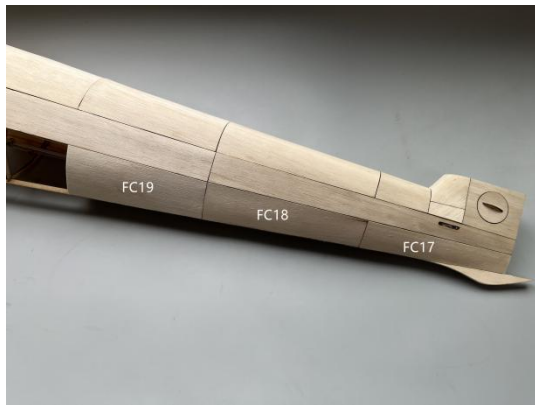
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Step40



Step41



Step42



Step43



Step44



Step45



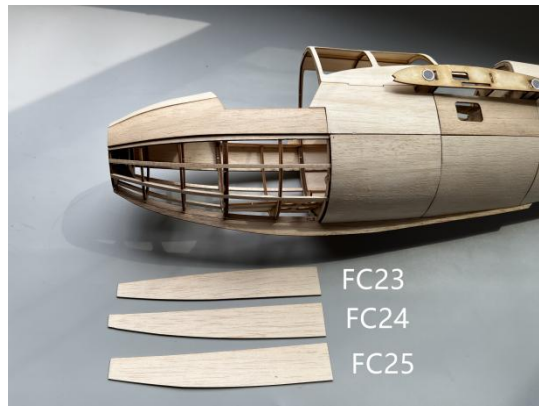
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Step47



Step48



Step49



Step50



Step51



Step52



Step53



Step54



Step55



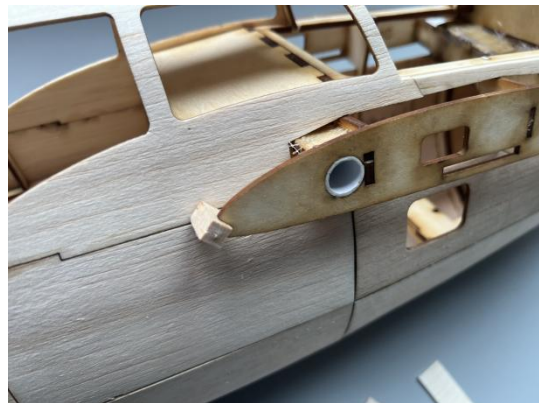
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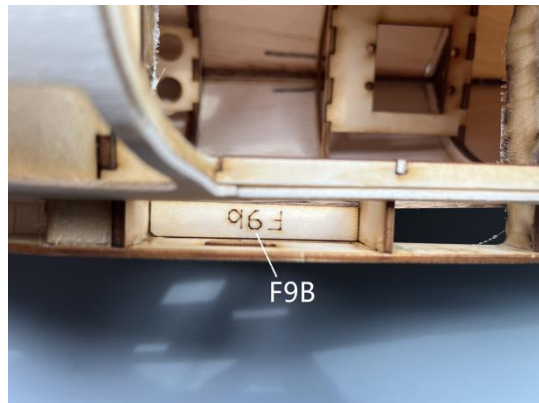
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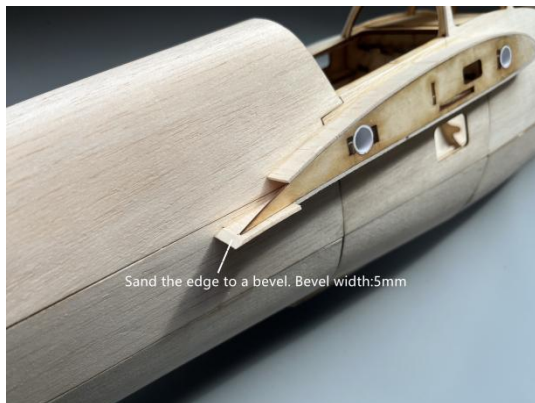
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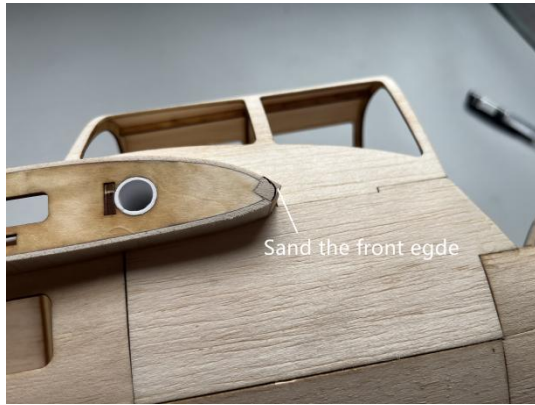
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Step62



Step63



Step64



Step65



Step66



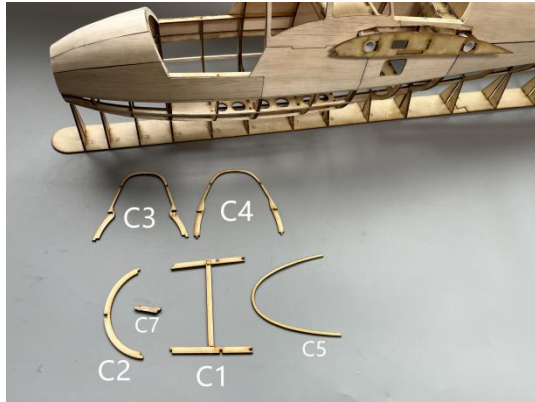
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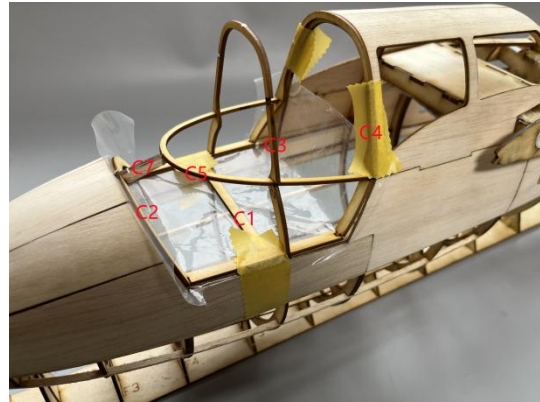
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ASSEMBLY-Canopy

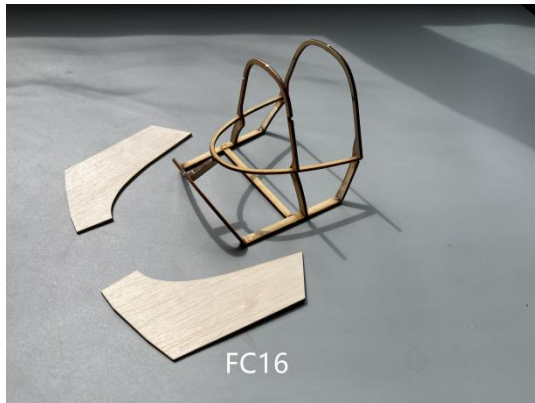
Step1



Step2



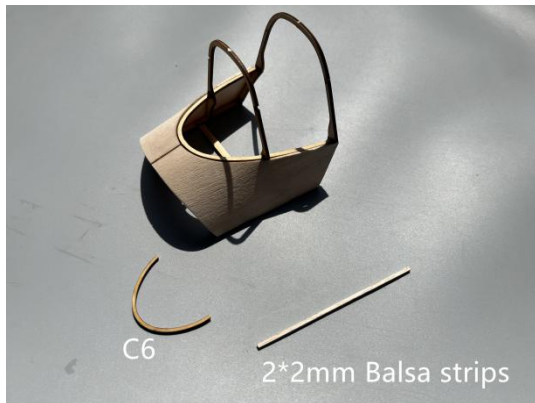
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Step4



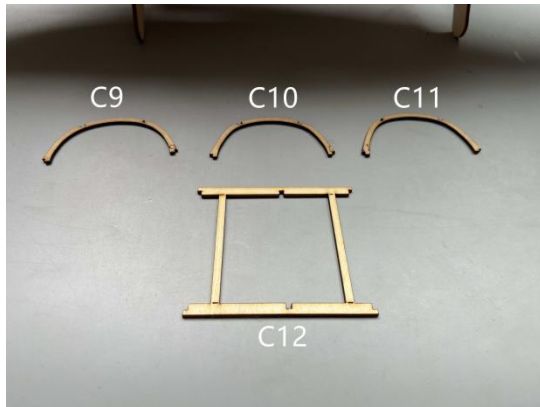
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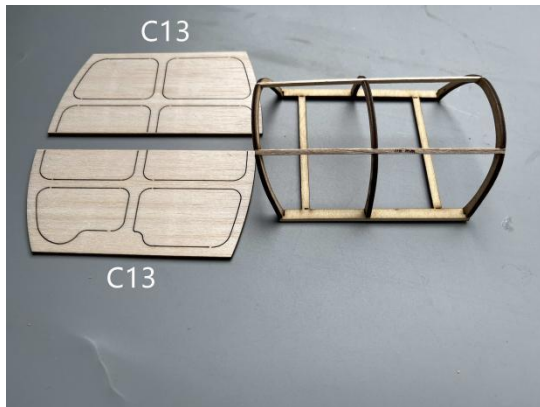
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Step8



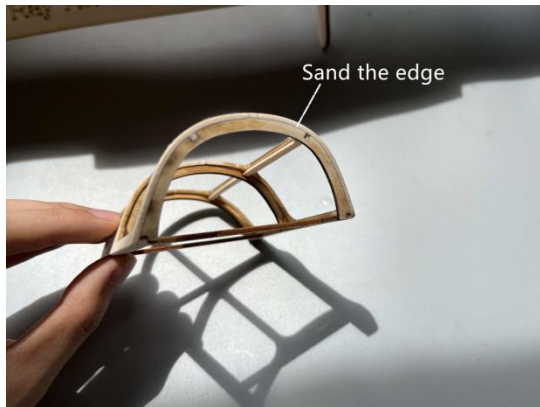
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Step10



Step11



Step12



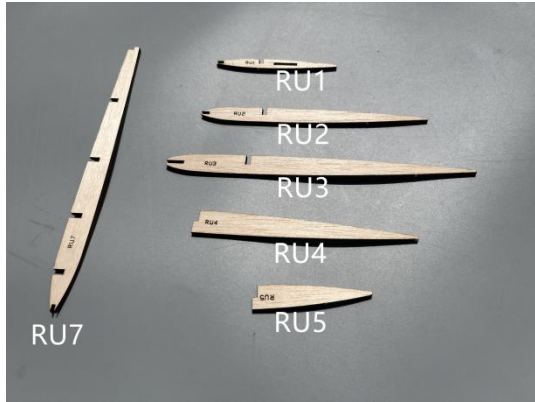
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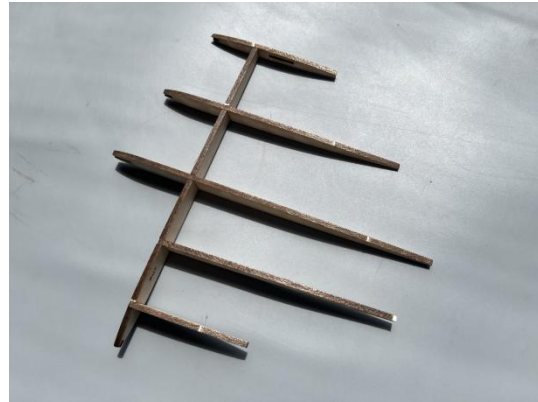
Builder's note:

ASSEMBLY-Vertical & Horizontal Tail

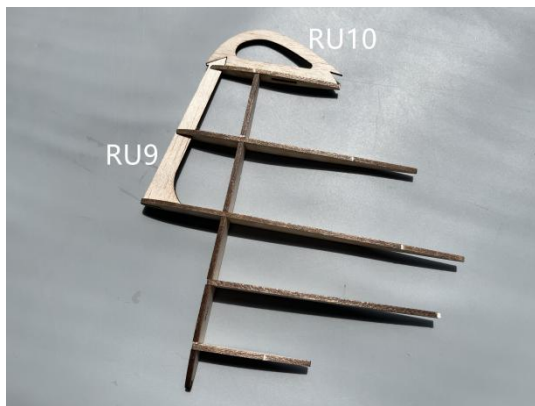
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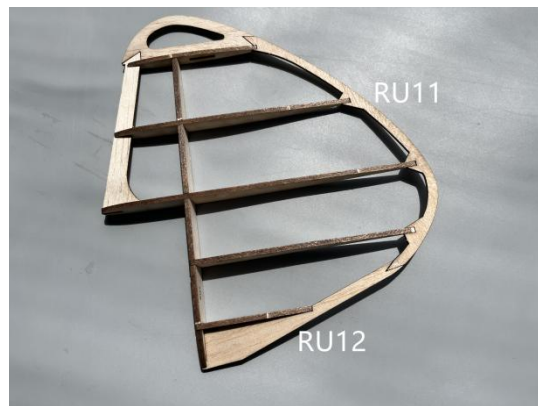
Step2



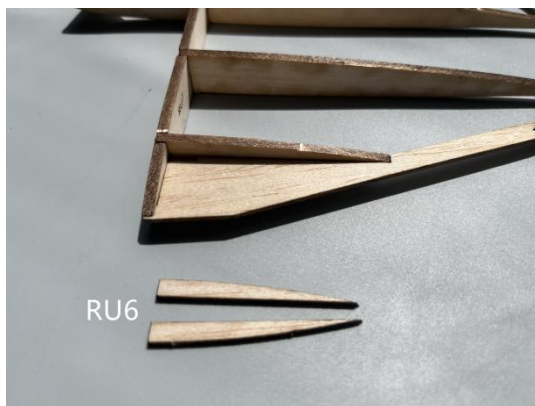
Step3



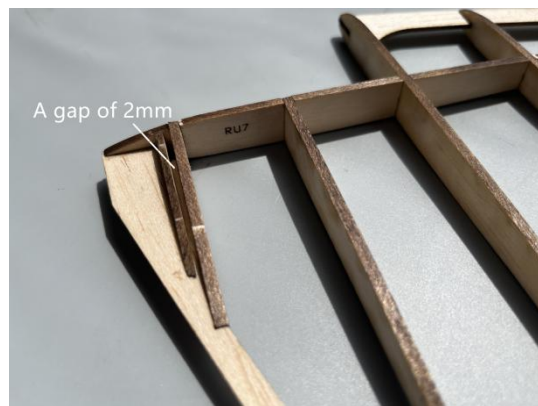
Step4



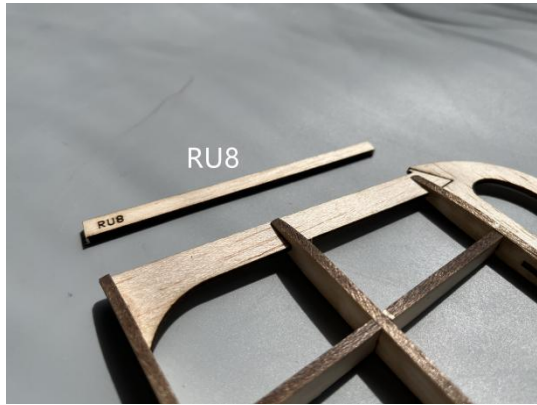
Step5



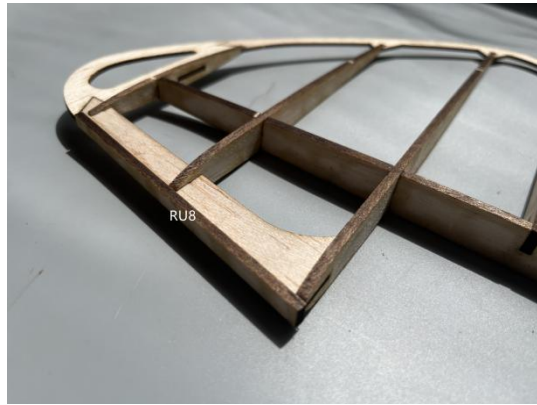
Step6



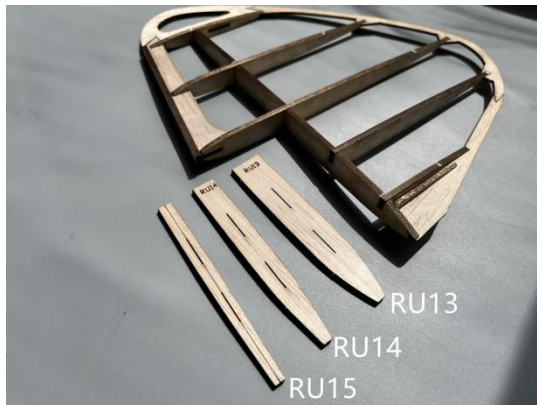
Step7



Step8



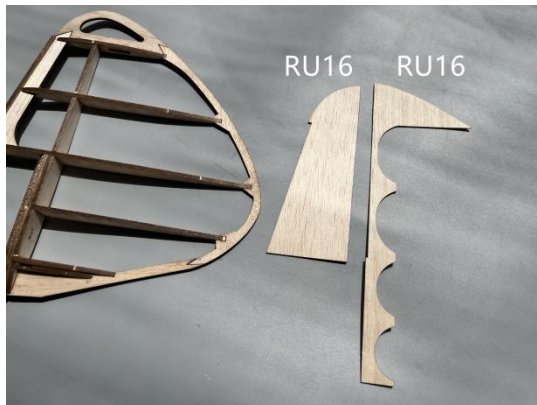
Step9



Step10



Step11



Step12



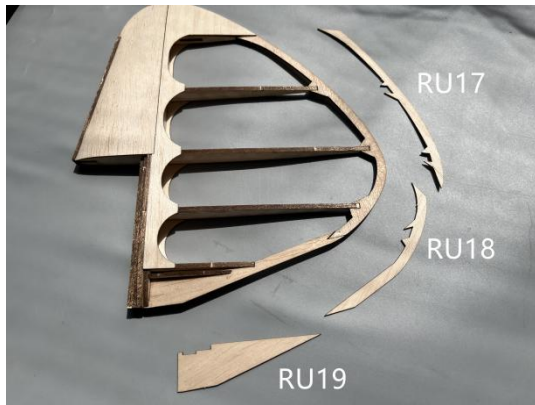
Step13



Step14



Step15



Step16



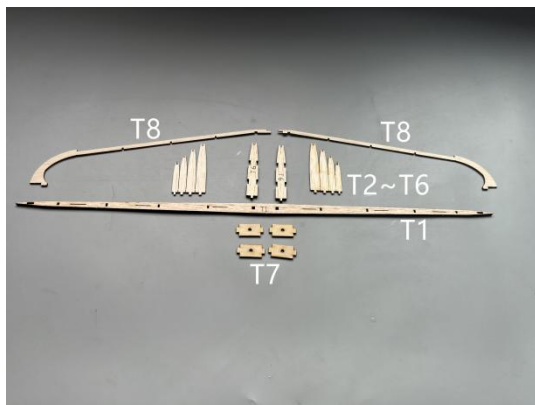
Step17



Step18



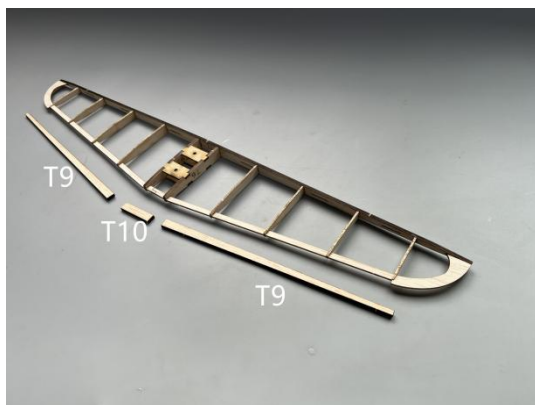
Step19



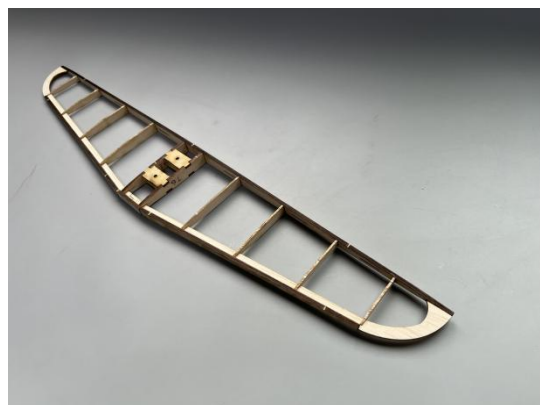
Step20



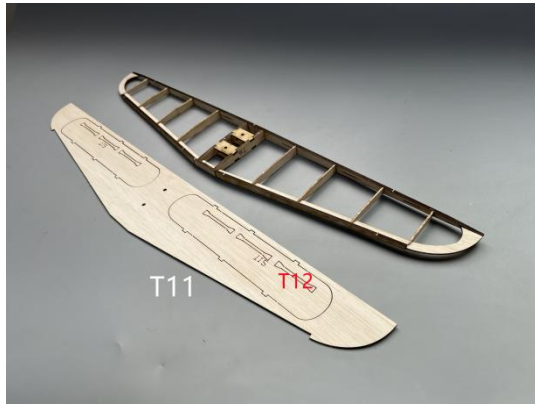
Step21



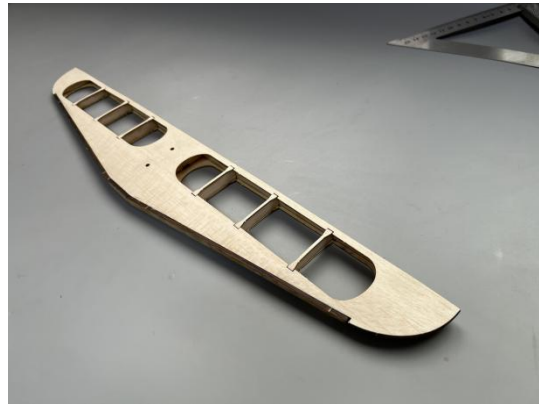
Step22



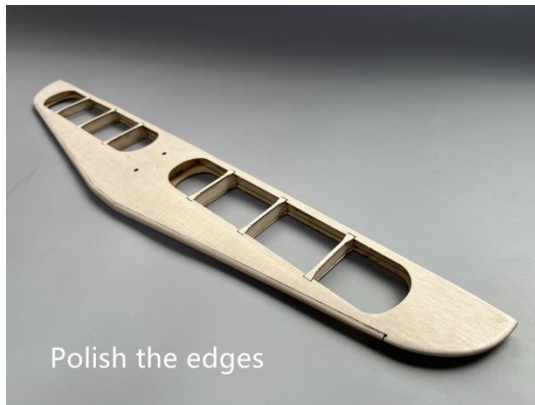
Step23



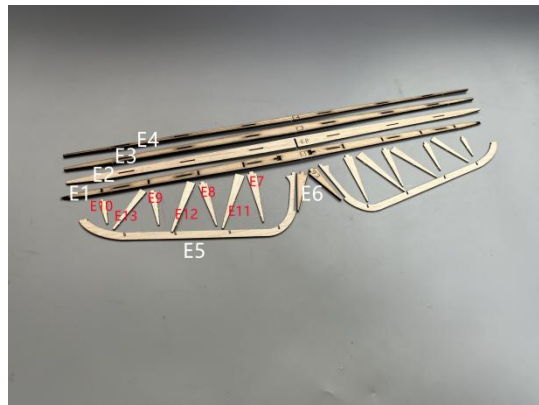
Step24



Step25



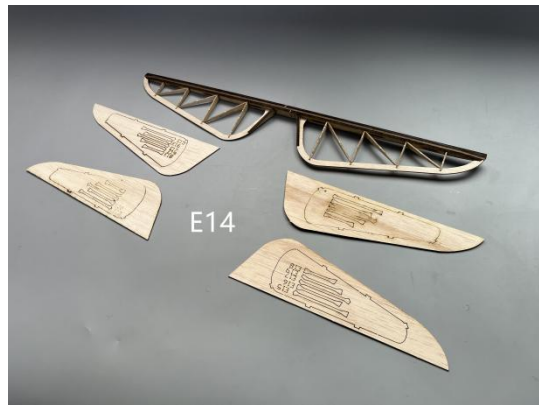
Step26



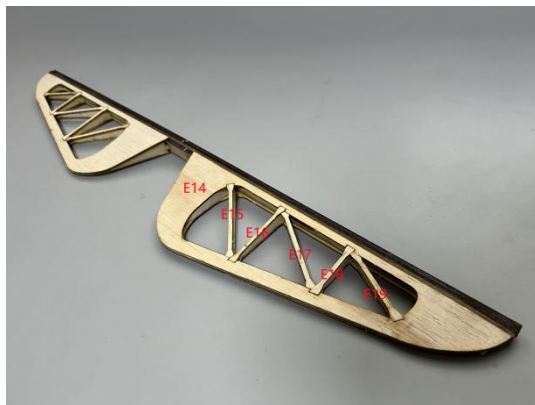
Step27



Step28



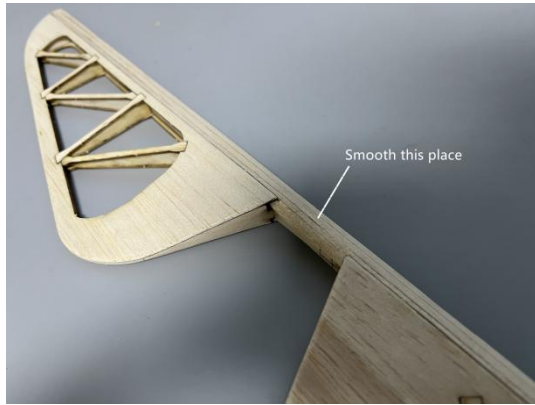
Step29



Step30



Step31



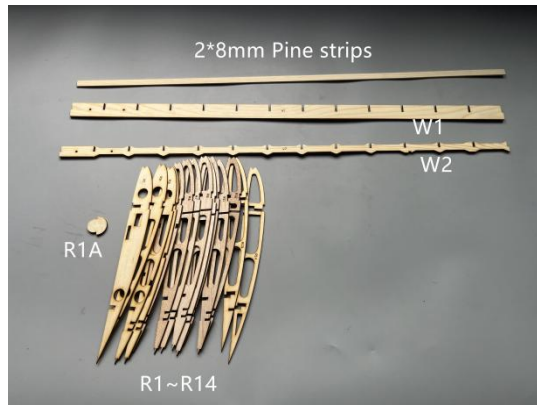
Step32



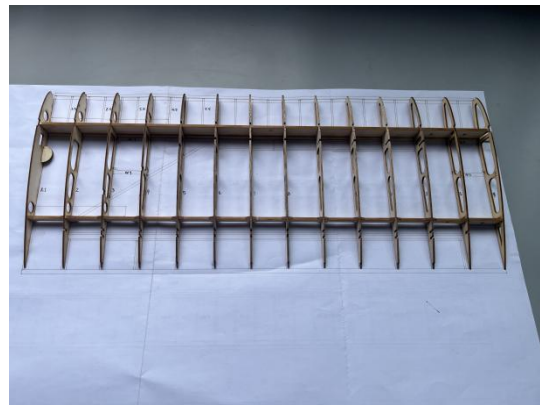
Builder's note:

ASSEMBLY-Center Wing Section

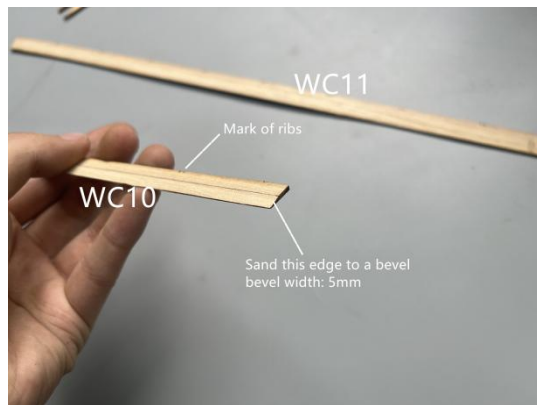
Step1



Step2



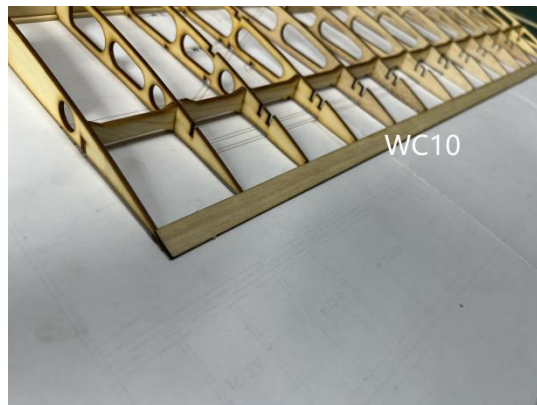
Step3



Step4



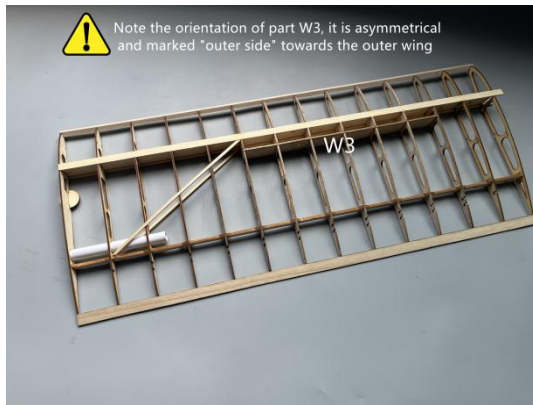
Step5



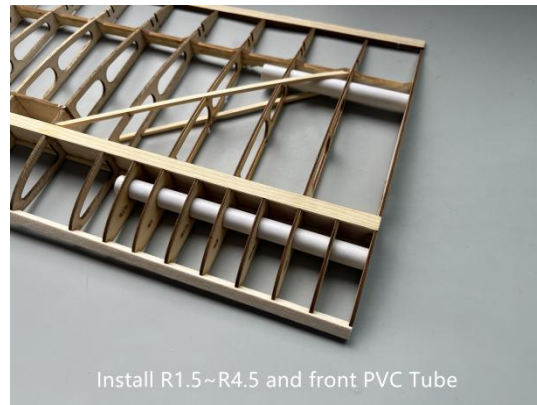
Step6



Step7



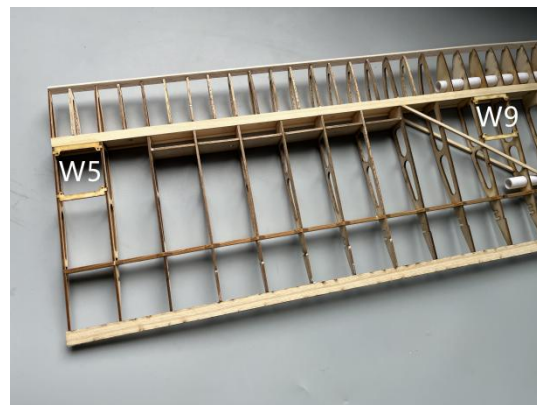
Step8



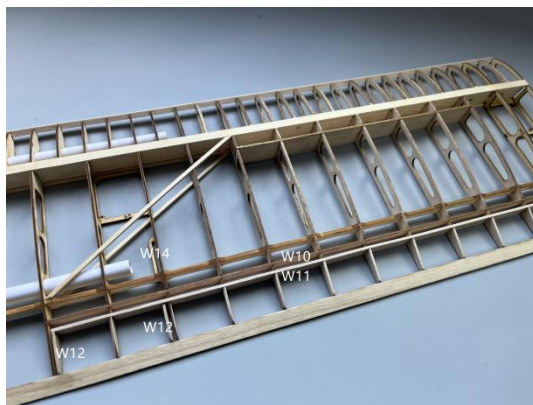
Step9



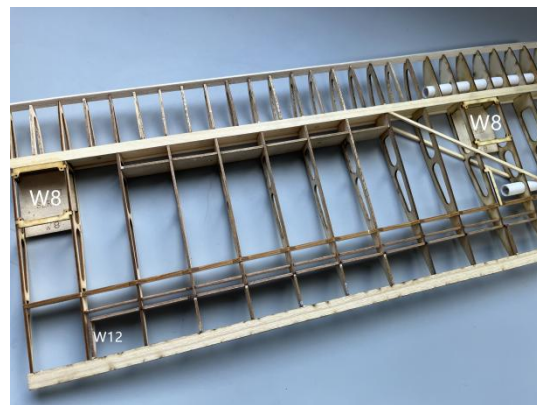
Step10



Step11



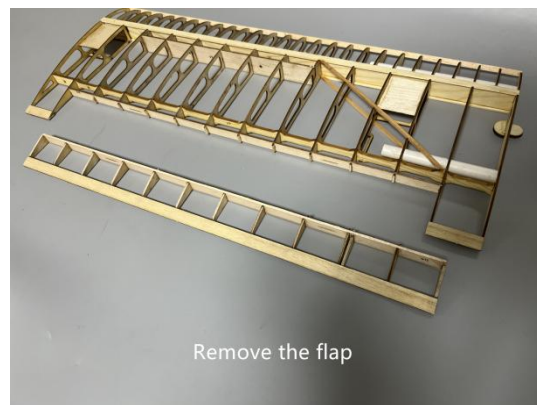
Step12



Step13



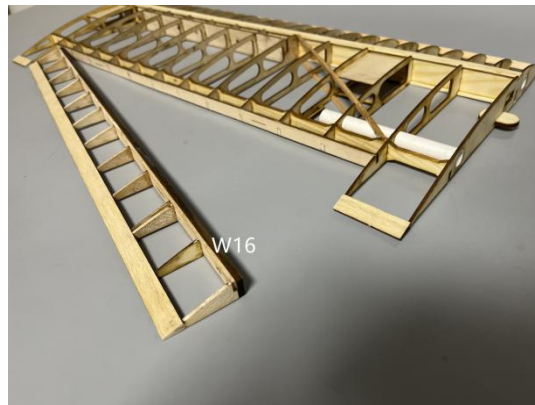
Step14



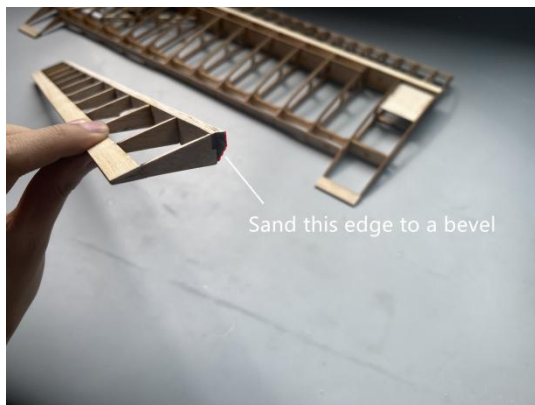
Step15



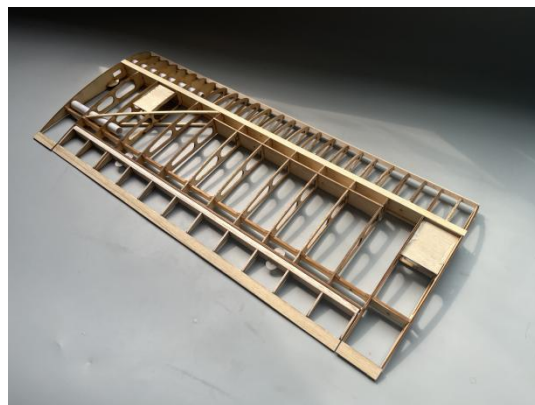
Step16



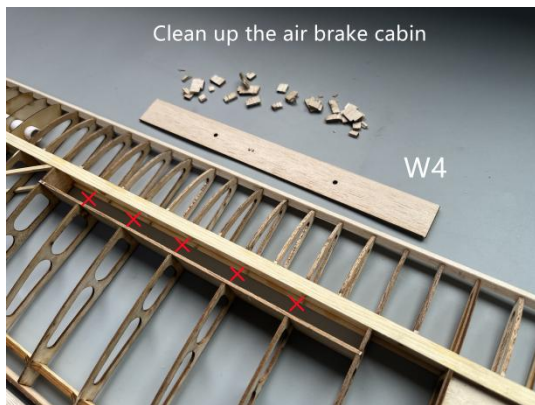
Step17



Step18



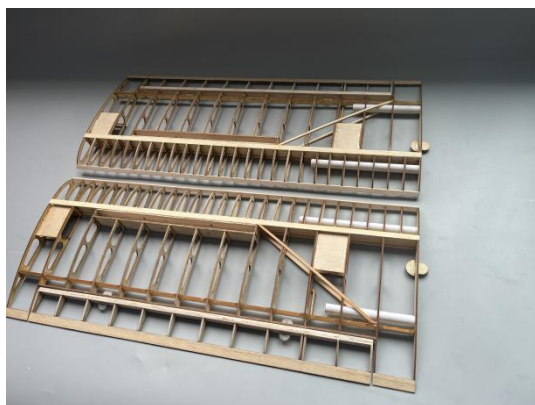
Step19



Step20



Step21



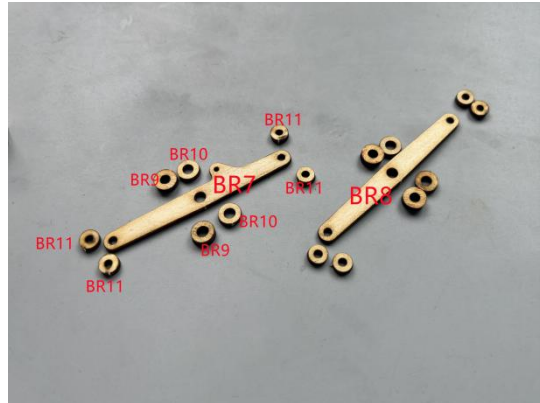
Step22



Step23



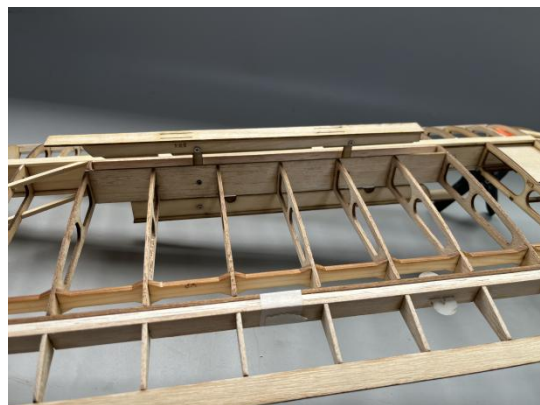
Step24



Step25



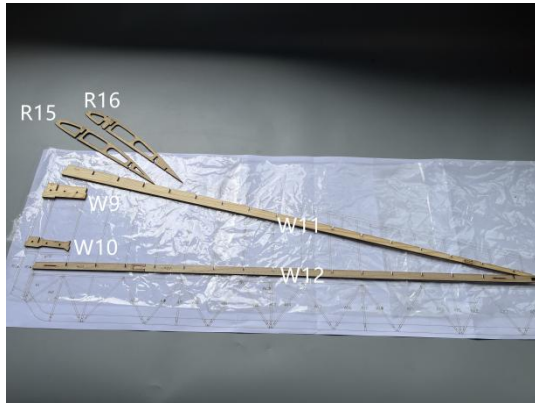
Step26



Builder's note:

ASSEMBLY-Outer Wing Section

Step1



Step2



Step3



Step4



Step5



Step6



Step7



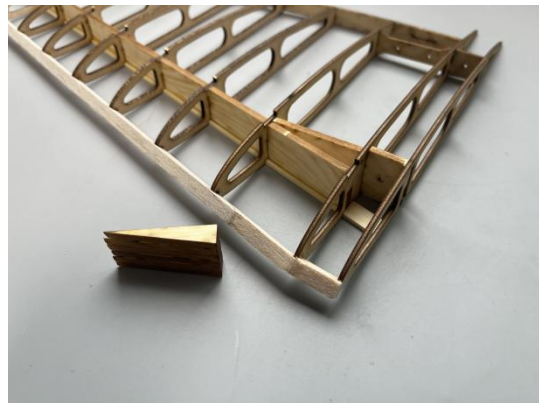
Step8



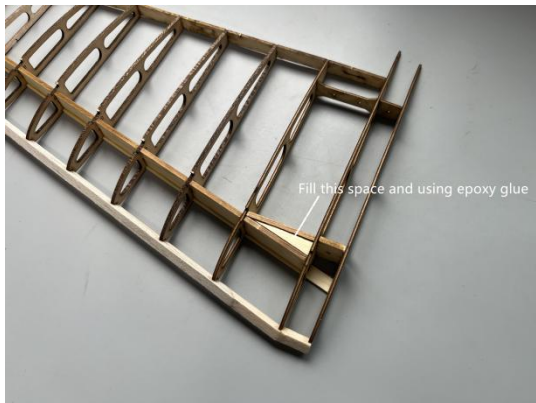
Step9



Step10



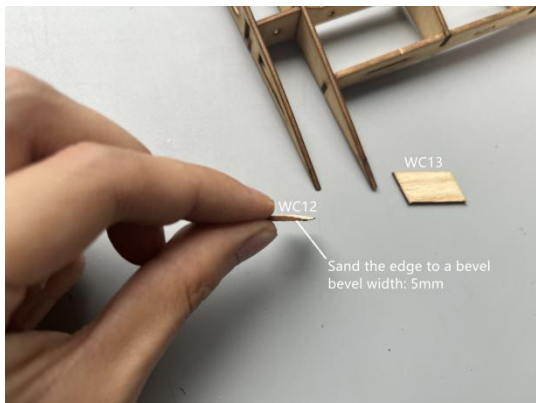
Step11



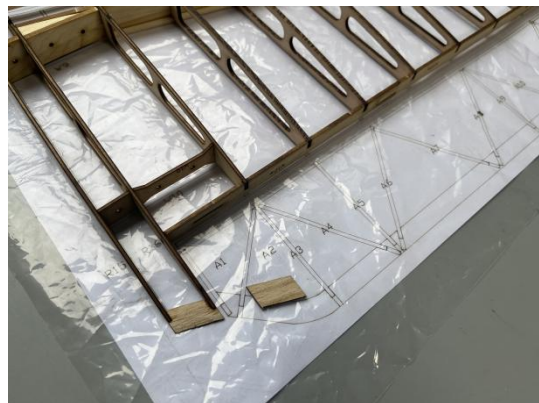
Step12



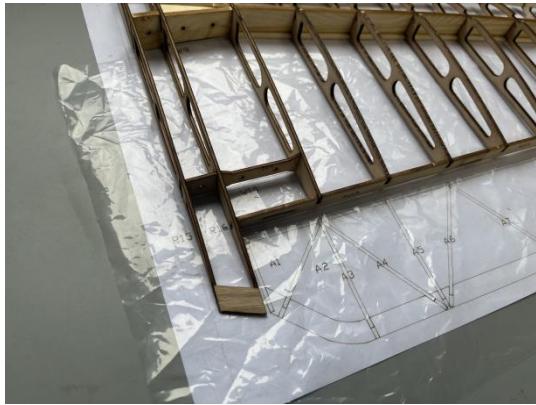
Step13



Step14



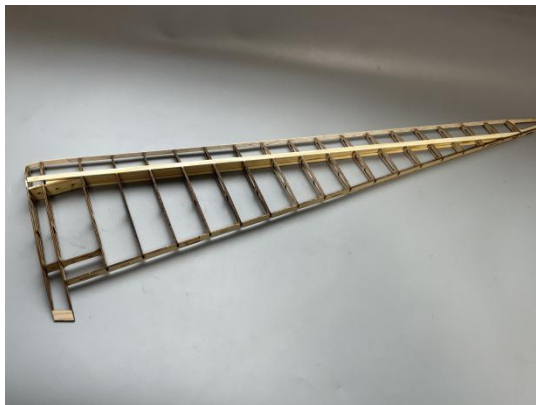
Step15



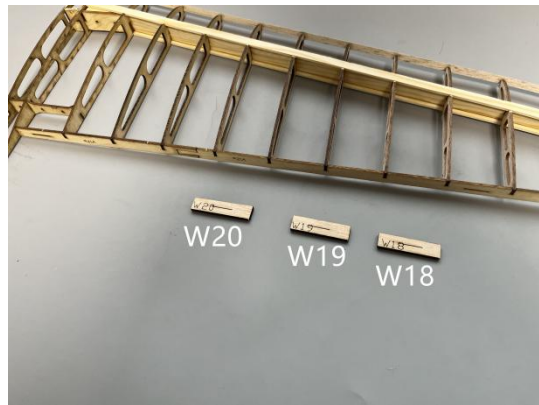
Step16



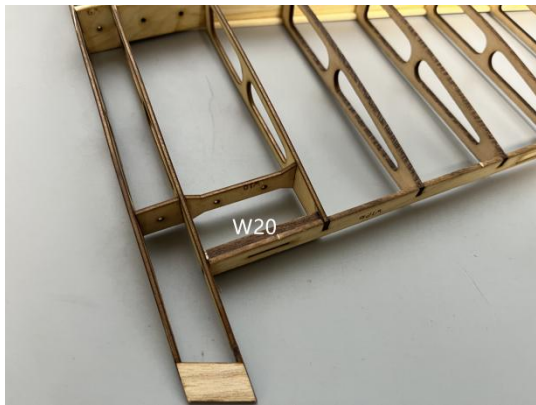
Step17



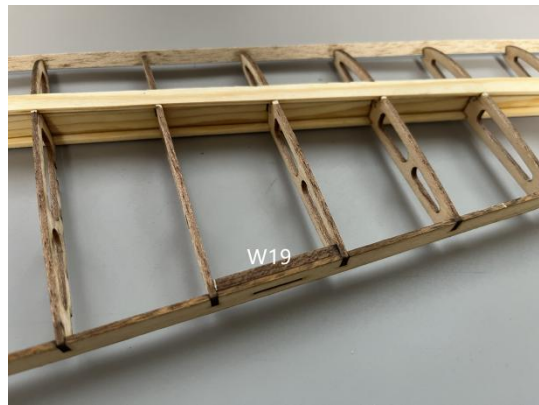
Step18



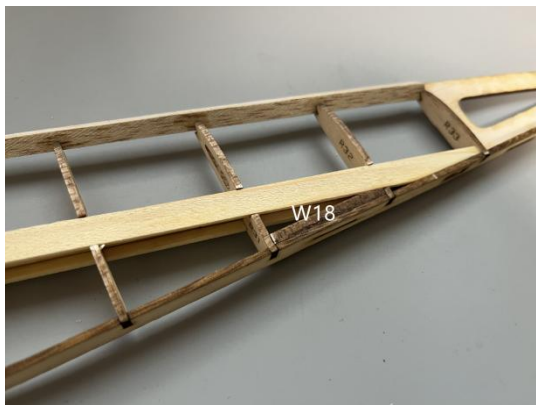
Step19



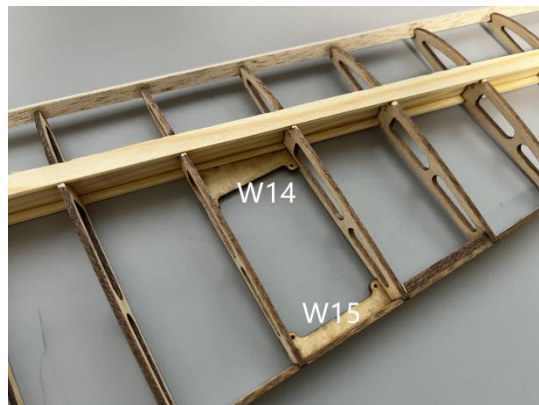
Step20



Step21



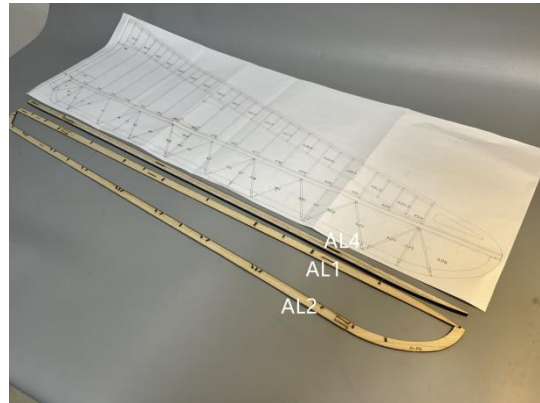
Step22



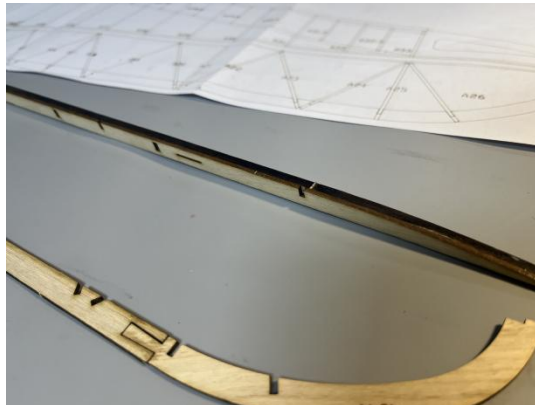
Step23



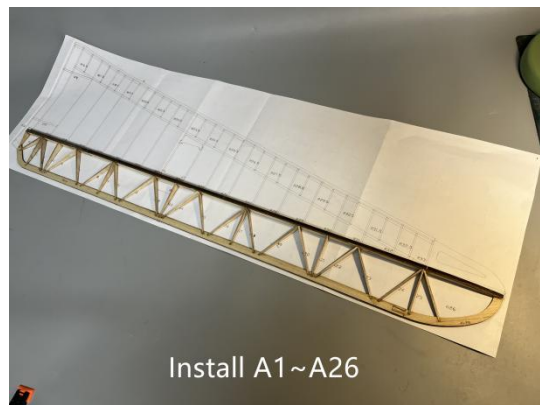
Step24



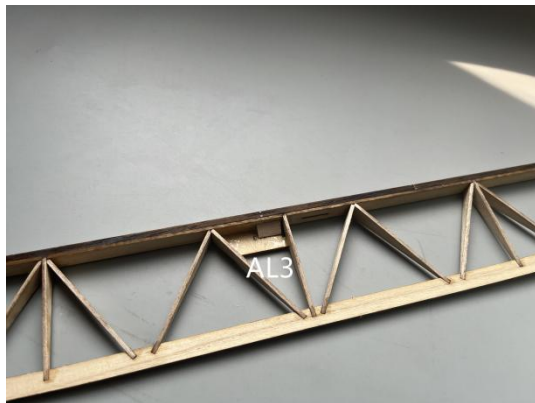
Step25



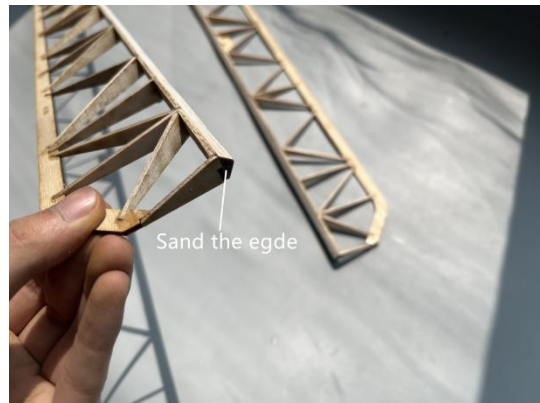
Step26



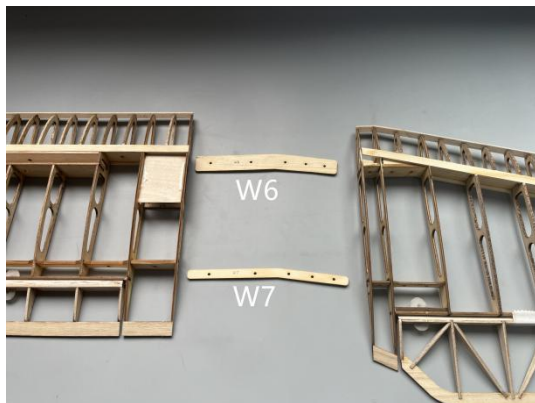
Step27



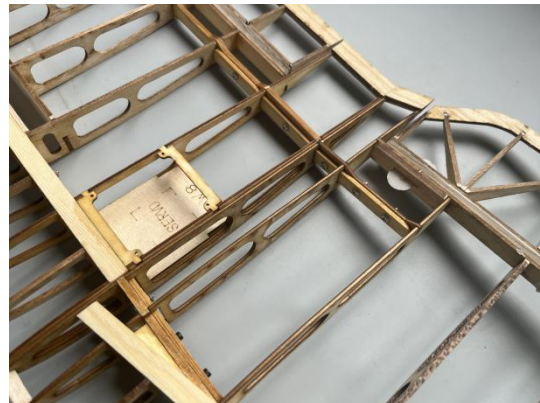
Step28



Step29



Step30

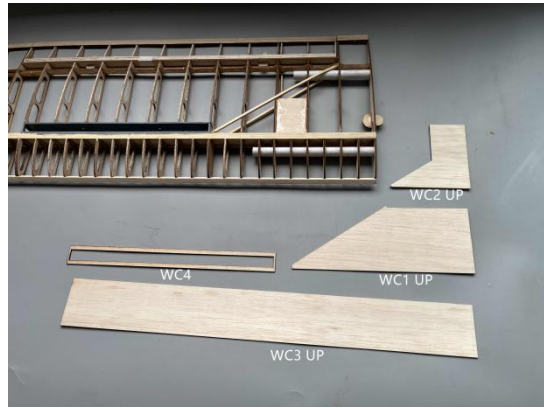


ASSEMBLY-Wing Covering

Step1



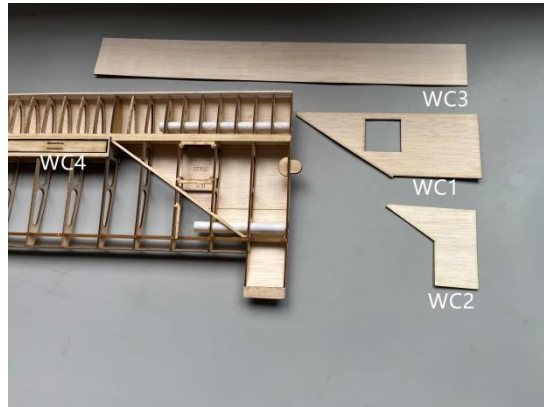
Step2



Step3



Step4



Step5



Step6



Step7



Step8



Step9



Step10



Step11



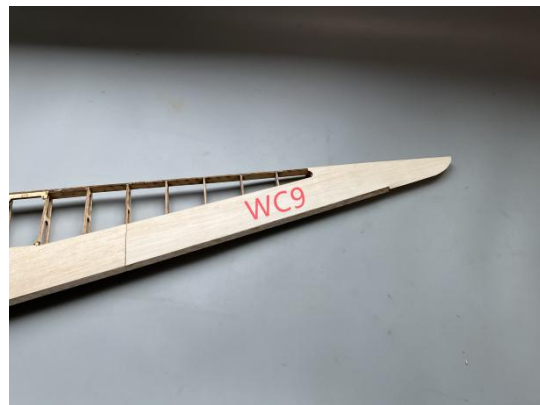
Step12



Step13



Step14



Step15



Step16



Step17



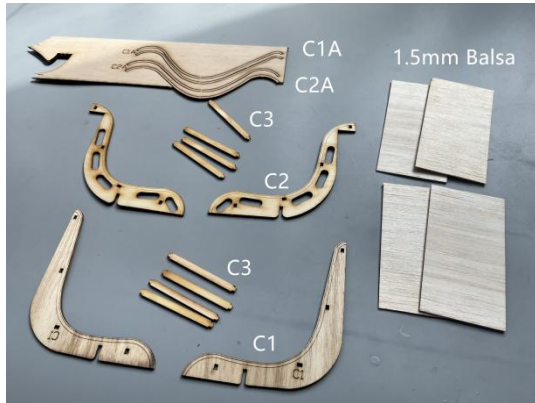
Step18



Builder's note:

ASSEMBLY-Seats And Details

Step1



Step2



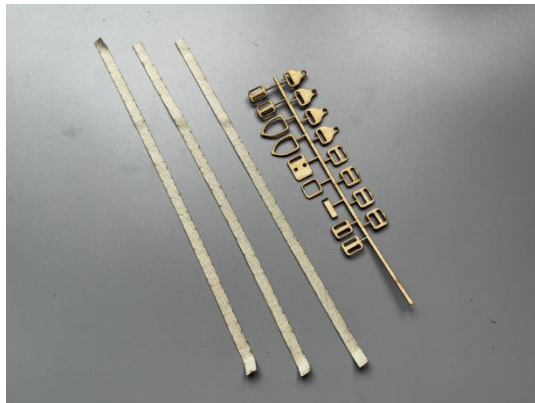
Step3



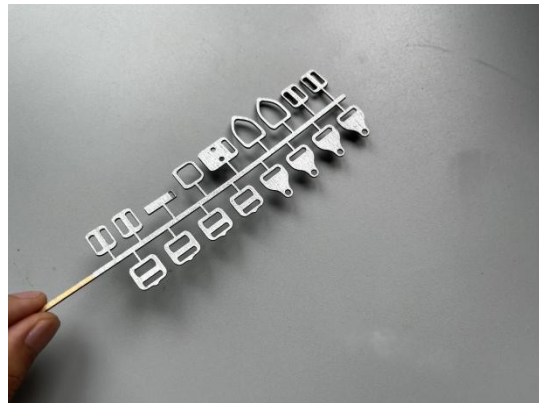
Step4



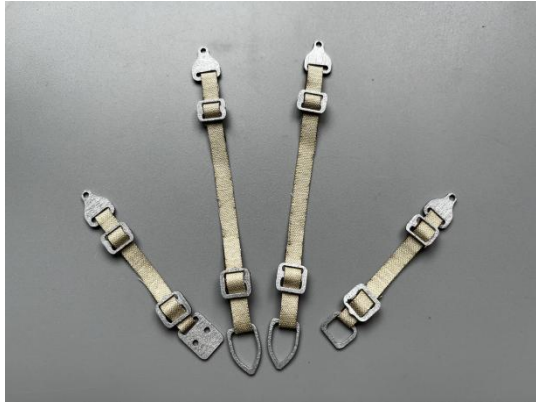
Step5



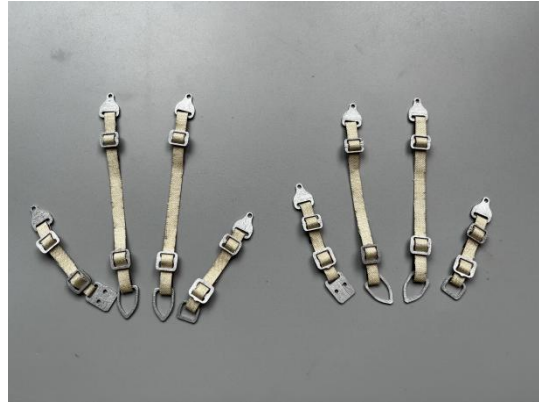
Step6



Step7



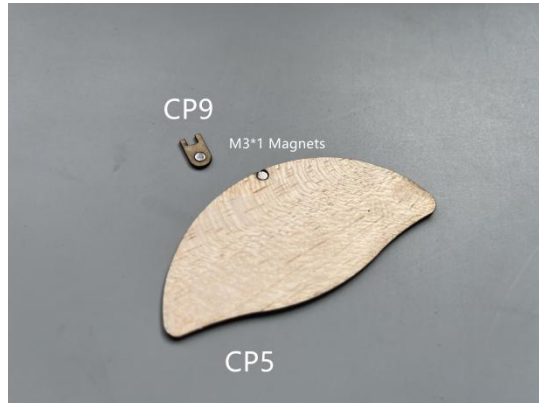
Step8



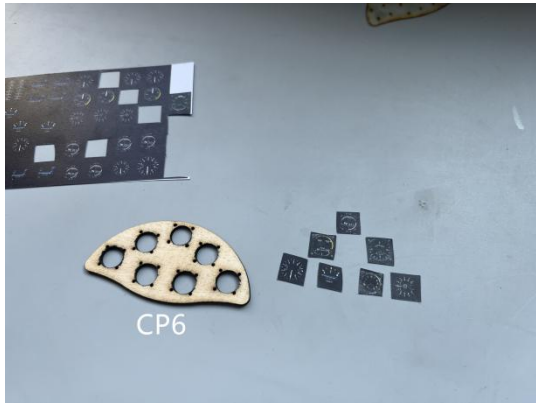
Step9



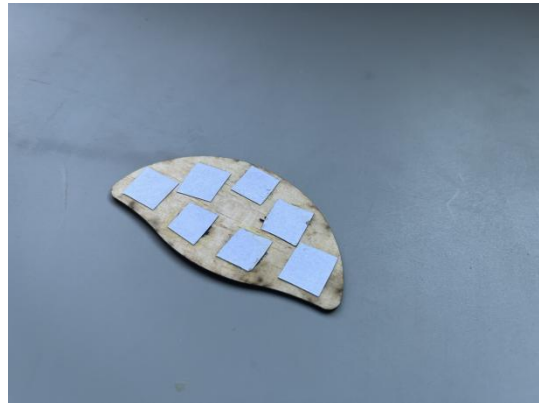
Step10



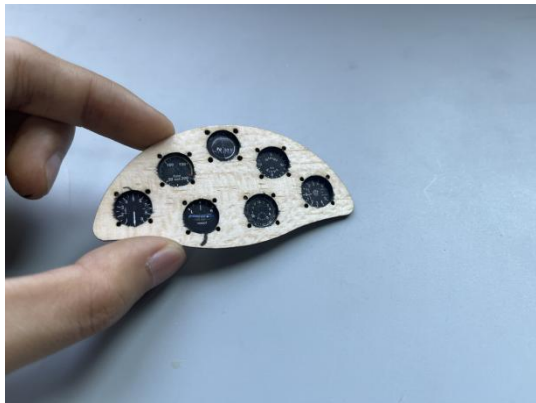
Step11



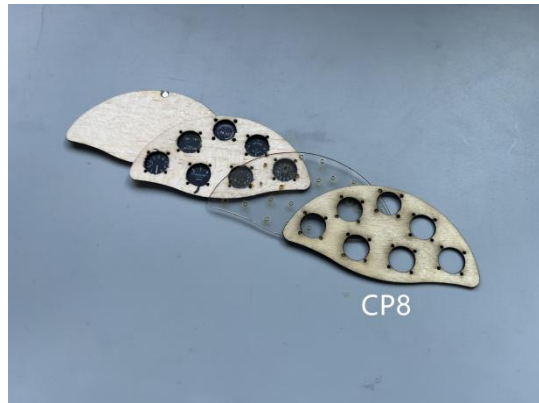
Step12



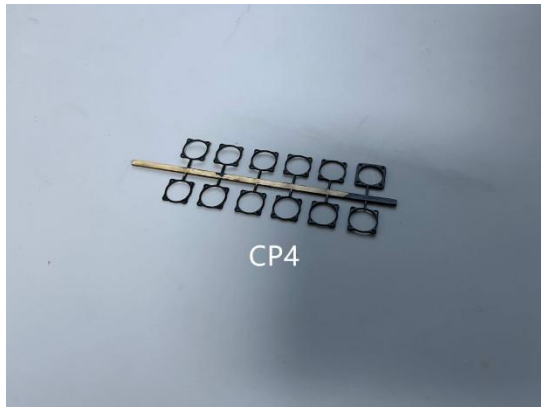
Step13



Step14



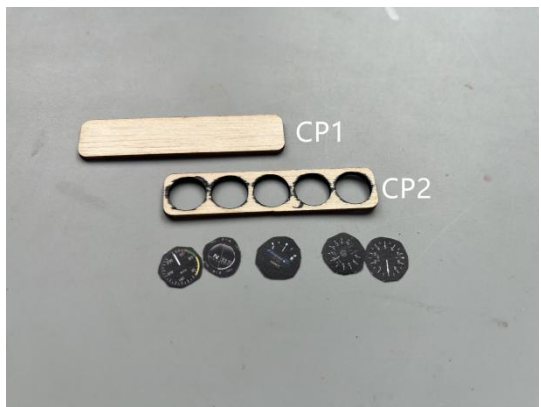
Step15



Step16



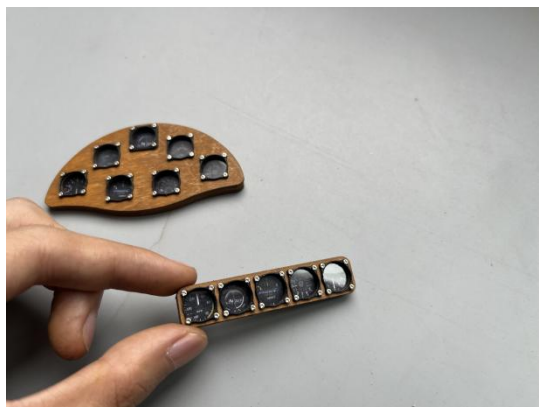
Step17



Step18



Step19



Step20

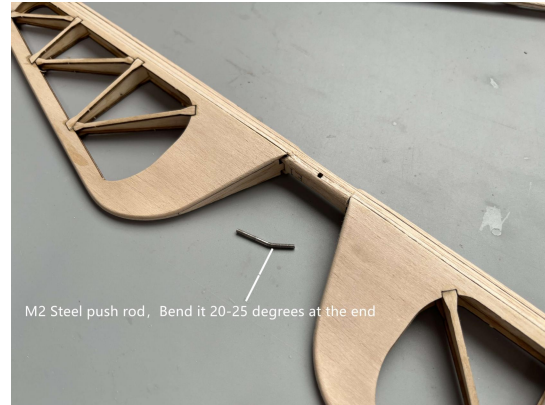


Builder's note:

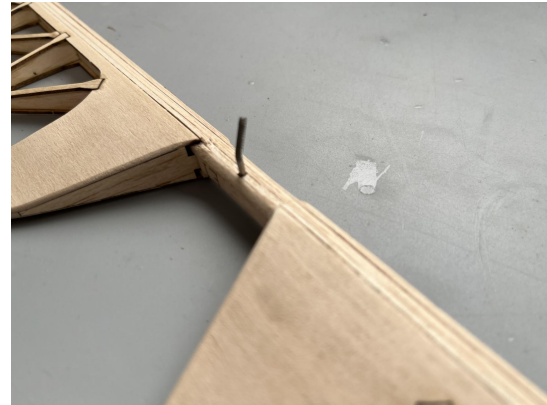
ASSEMBLY-Electronics

(Reference example is motored version)

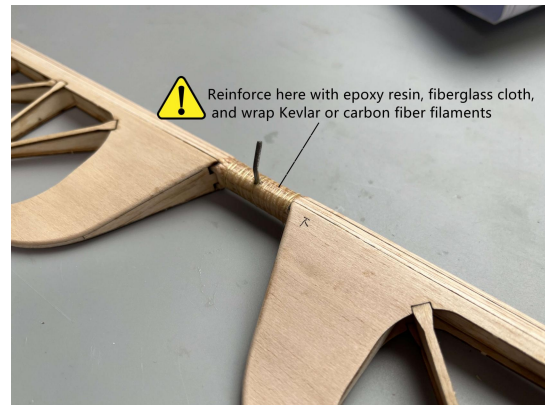
Step1



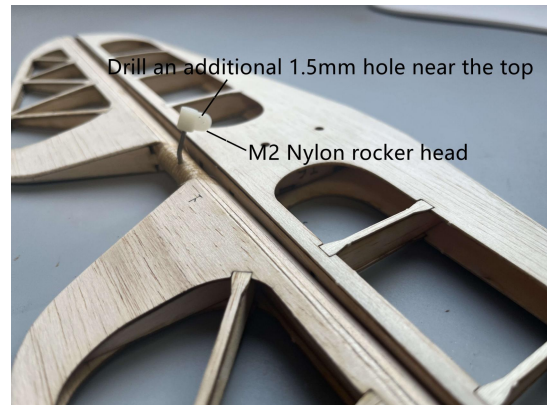
Step2



Step3



Step4



Step5



Step6



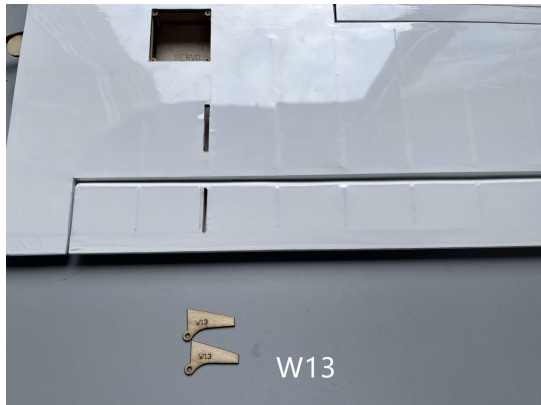
Step7



Step8



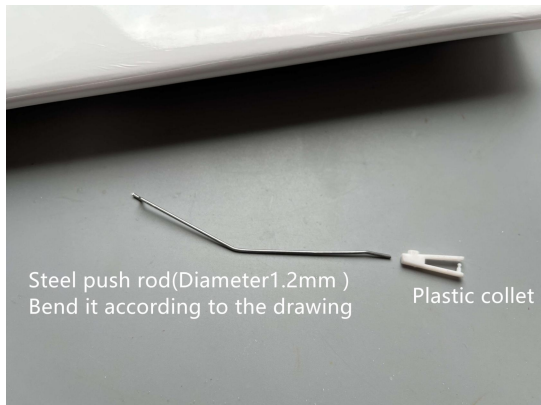
Step9



Step10



Step11

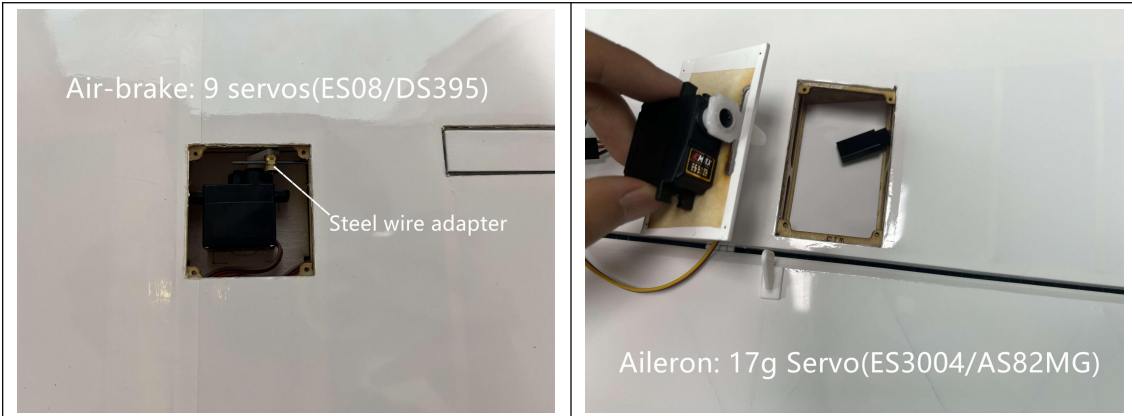


Step12

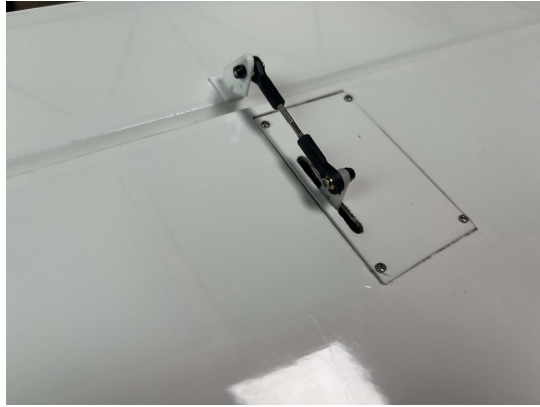


Step13

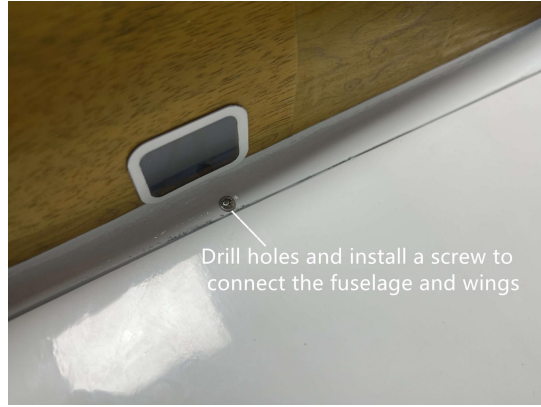
Step14



Step15



Step16



Builder's note:

BEFORE YOU FLY

1. CG:

 CG: 80-85mm from the leading edge



2. Horizontal stabilizer mounting angle:

Horizontal stabilizer mounting adjustment:
Add 0.5-1mm spacers to the rear screw position



3.Control Travel	
ELEVATOR	$\pm 15^\circ$
RUDDER	$\pm 15^\circ$
AILERON	$+30^\circ -10^\circ$

Thank you!



Tony Ray's AeroModel