

# **Musger Mg-19B**

**1/6**

## **Build instructions**



<b>Specifications</b>	
Wing Span	115.5 in / 2933mm
Wing Area	57sq dm
Flying weight	2.0kg-2.1g
Fuselage length	135cm
Scale	1 / 6

<b>Requires</b>
RC transmitter with at least 7 channels
Spoiler: 9g servos(ES08/DS395)*2
Aileron: 9g servos(ES08/DS395)*2
Rudder&Elevator: 17g Servo(ES3004/AS82MG)*2



## Tony Ray's AeroModel

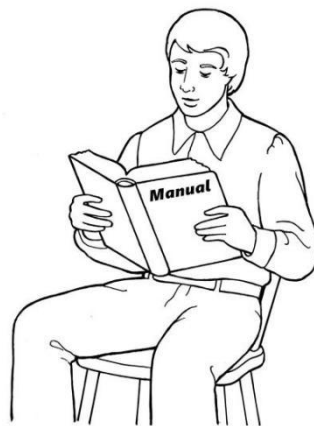
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# **BEFORE YOU BEGIN**

## **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



<b>Sheet Wood Inventory</b>		
Item:	Mark	Quantity
2.0mm Plywood	A series:A1-A9	9
2.0mm Paulownia	A series:A10-A20	11
2.0mm Pine wood	A series:A21	1
3.0mm Plywood	B series:B1	1
3.0mm Paulownia	B series:B2-B3	2
3.0mm Balsa	B series:B4	1
1.5mm Balsa	C series:C1-C20	20
1.5mm Paulowniaa	C series:C21-C24	4
1.5mm Plywood	C series:C25	1
1.0mm Balsa	D series:D1	1
1.0mm Plywood	D series:D2-D3	2
5.0mm Balsa	E series:E1	1
2.0mm Balsa	F series:F1-F12	12
Aileron covering sheet	AL3	2

<b>Wood Strips Inventory*</b>	
3*3mm Balsa	6
6*6mm Balsa	4
2*6mm Pine	8
2*8mm Pine	12

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<b>Hardware*</b>	
<i>1. Hardware in Strips bag</i>	
PVC Tube (Outer diameter: 3mm, Inner diameter: 2mm)	2m
Steel push rod(Diameter1.2mm )	2+2
<i>2. Hardware in plastic bag</i>	
Laser cut Pvc sheet	1
Paper hinge	3
Leather strips	6
Rubber band	2
PU wheels	1
<i>3. Hardware in plastic box</i>	
M2 ball joint connector	4
M2 Steel push rod (Thread at both ends Length:25mm)	2
Steel wire adapter	2
Plastic collet	2
Rudder horn	4
M3*25 Screws	3
M3 Four Claws Nut	6
M2 Screw nut(black version)	4
M2 Screw nut	20
M2*20 Screws	4
M2*10 Screws	20
M2*8 Screws (Spacer Version)	16
Copper hinge	4
M1*3 Screws	40
Metal hook	2
M3 Flat end set screws	2
<i>5. Vacuum Formed Canopy</i>	
Canopy	2

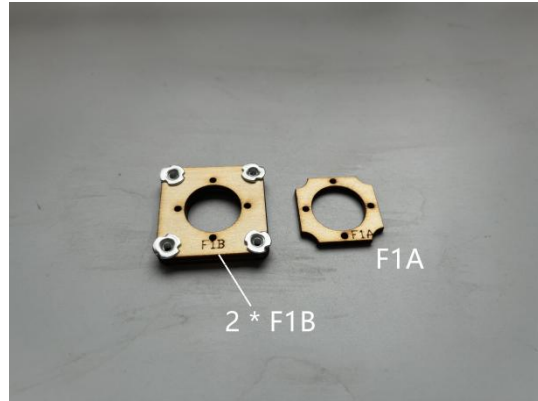
<b>Paper parts</b>	
1:1 drawings	2

# ASSEMBLY-Fuselage I

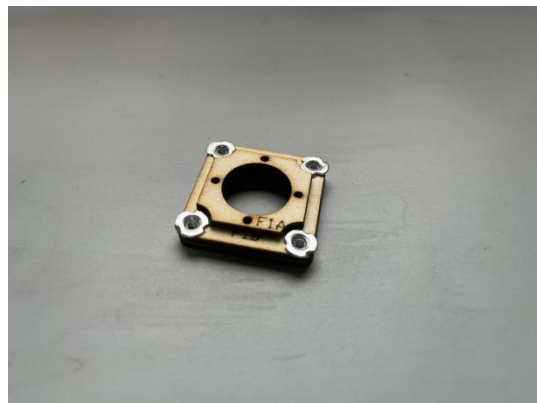
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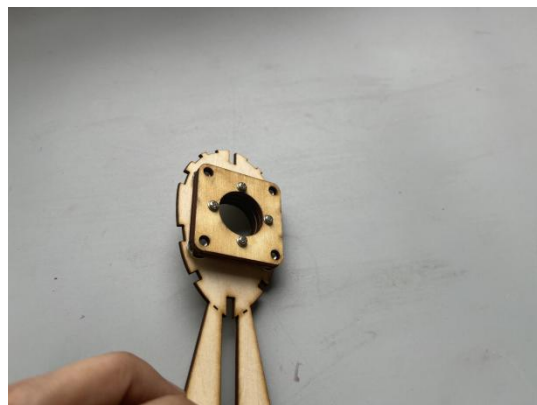
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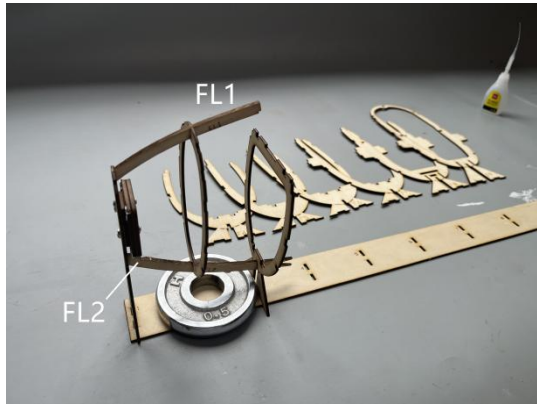
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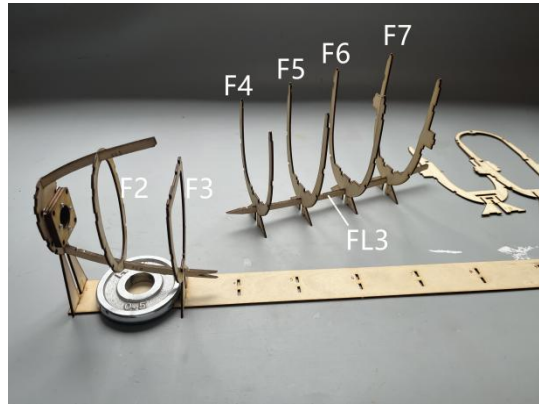
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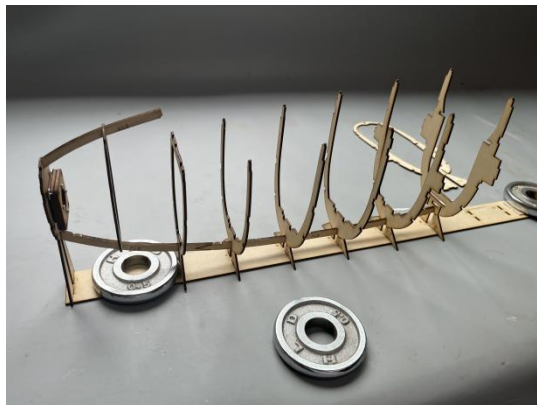
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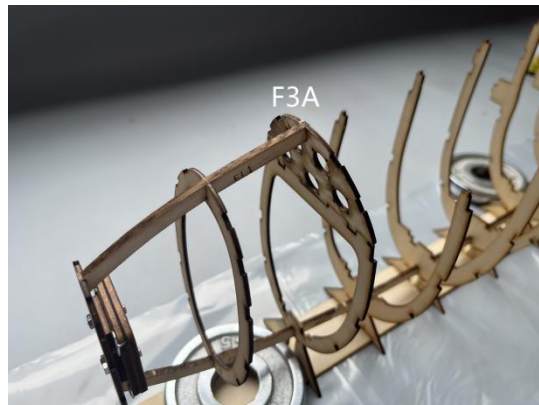
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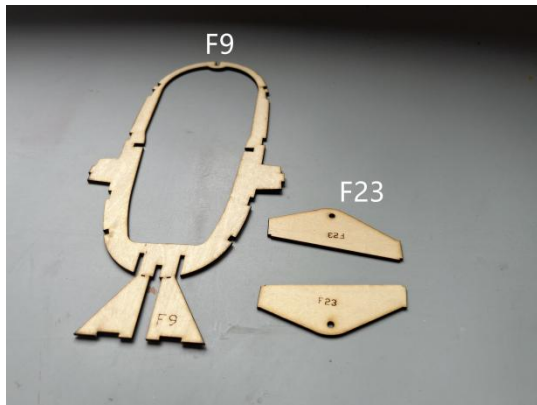
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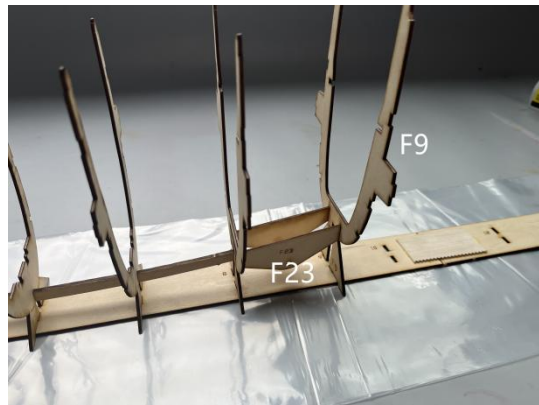
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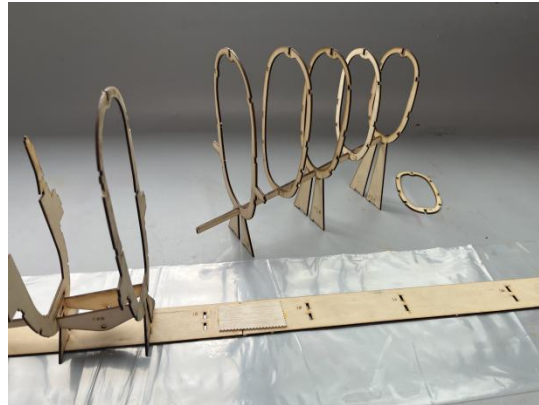
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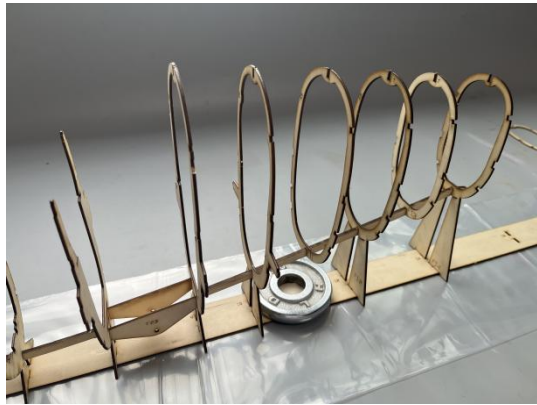
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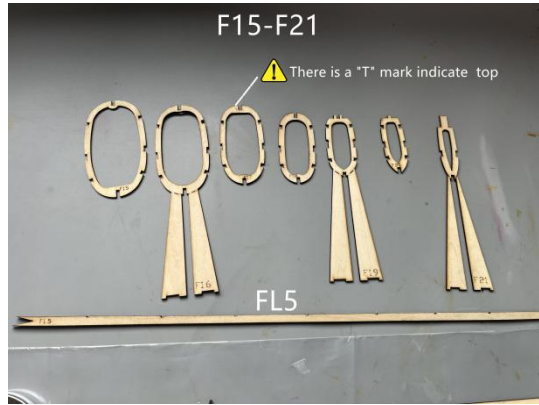
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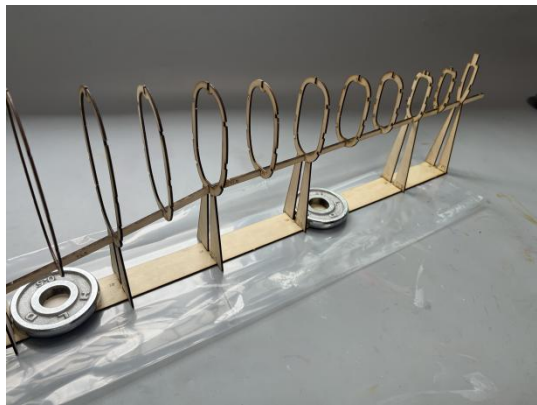
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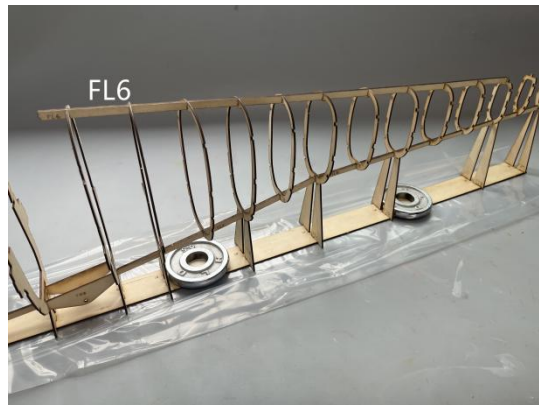
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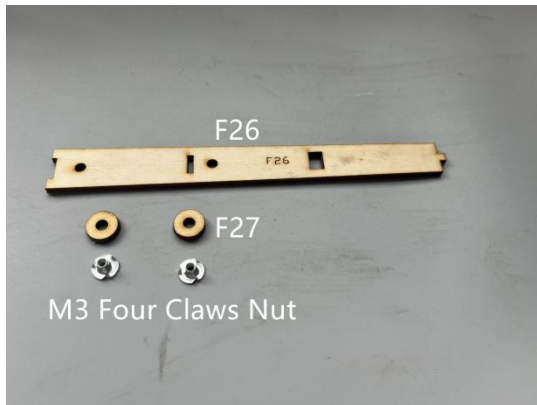
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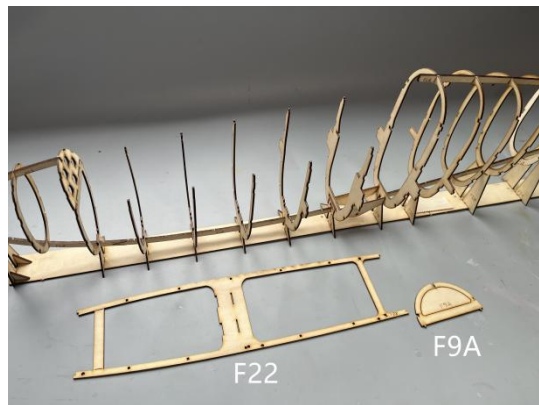
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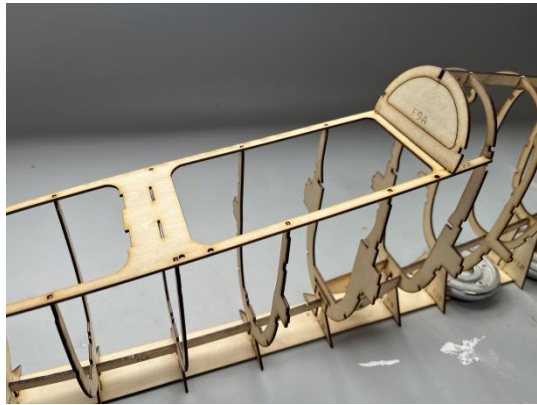


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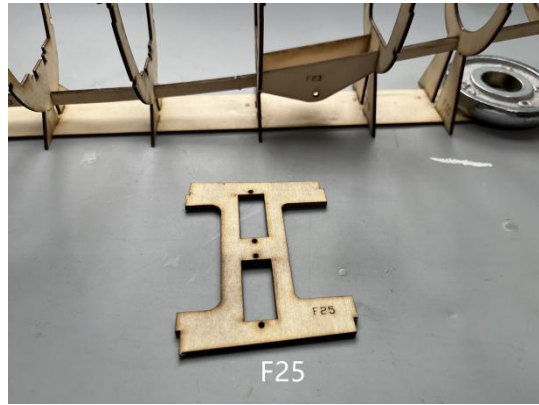




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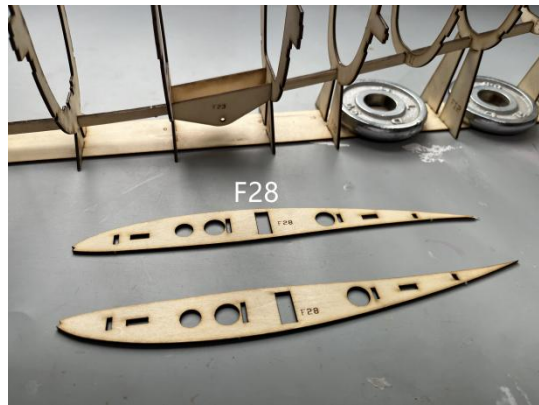
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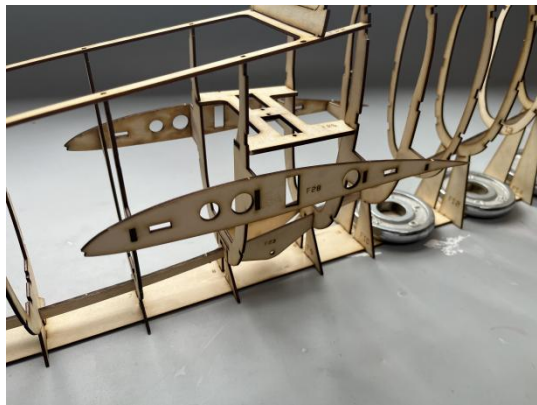
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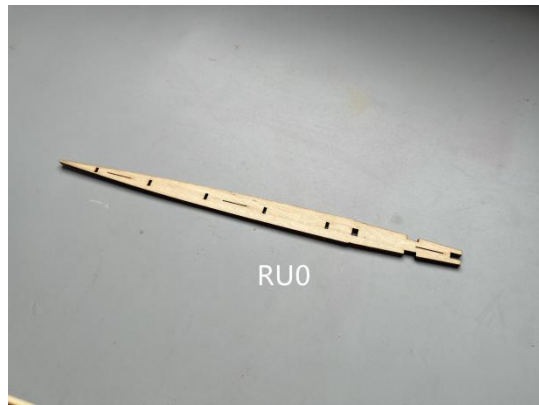
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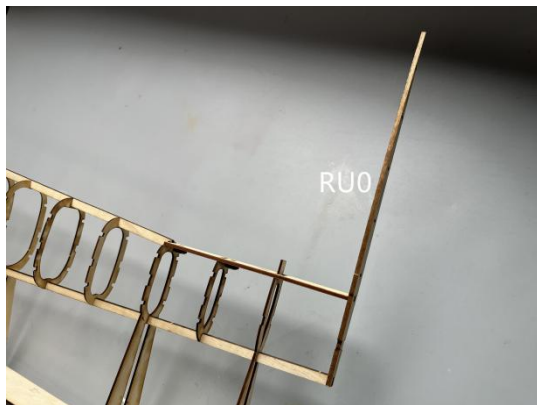
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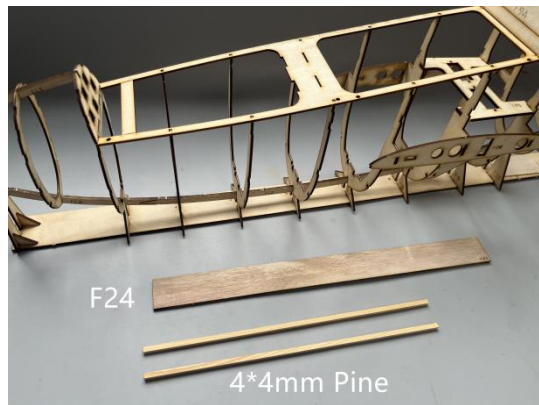
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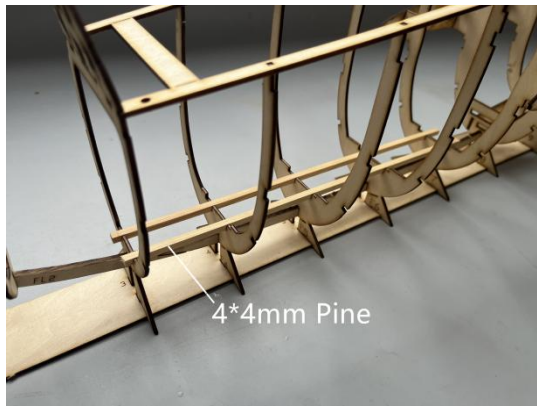
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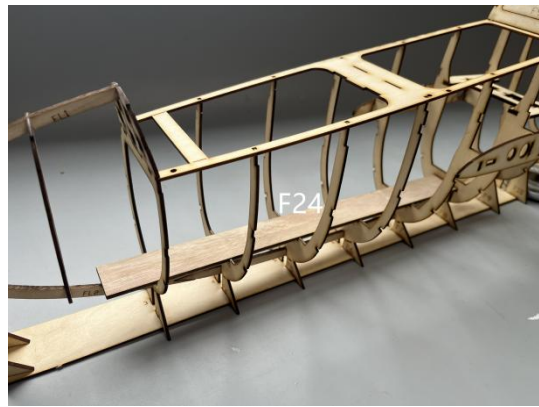
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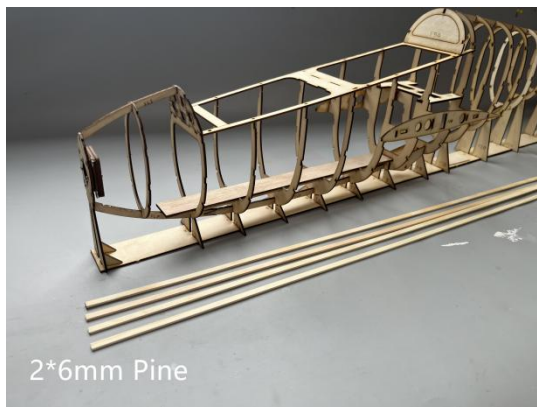
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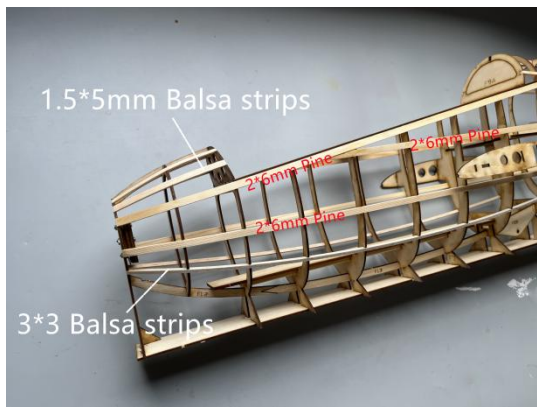
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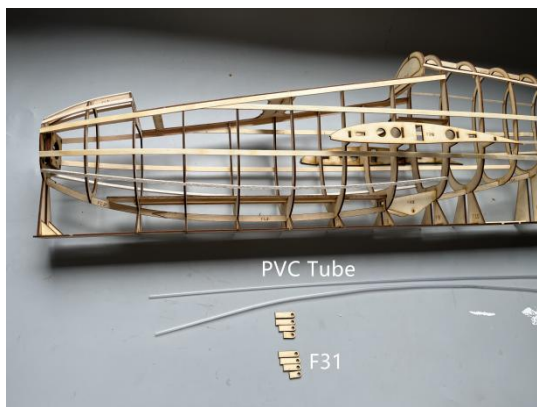
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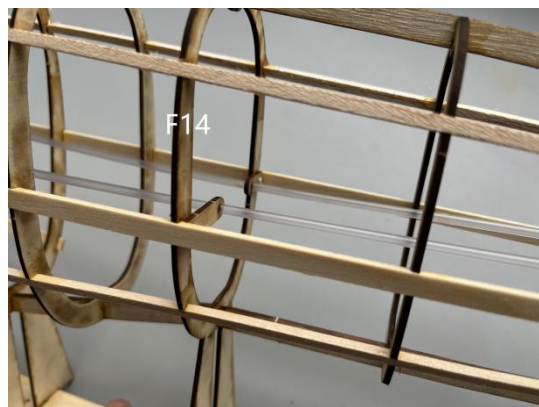
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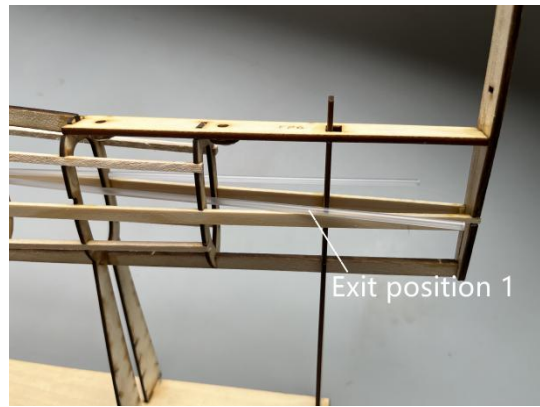
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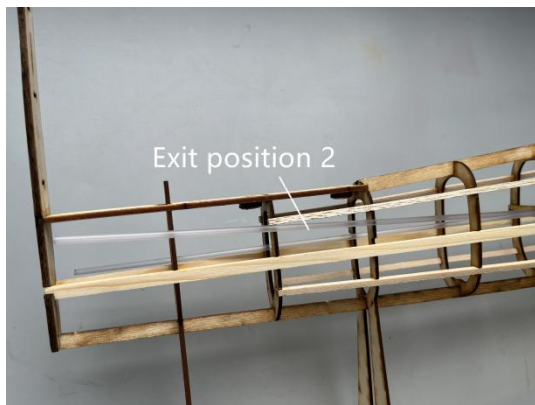
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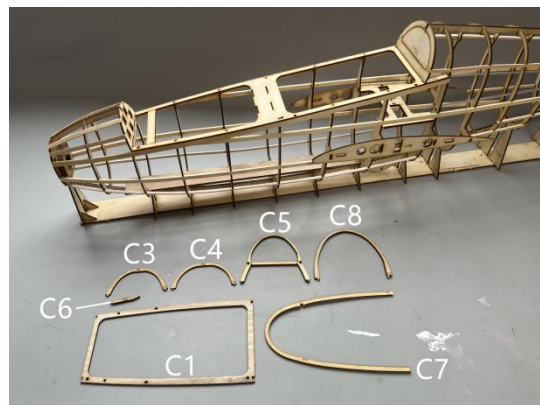
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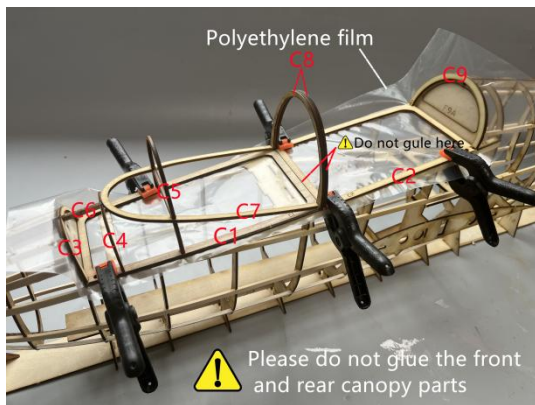
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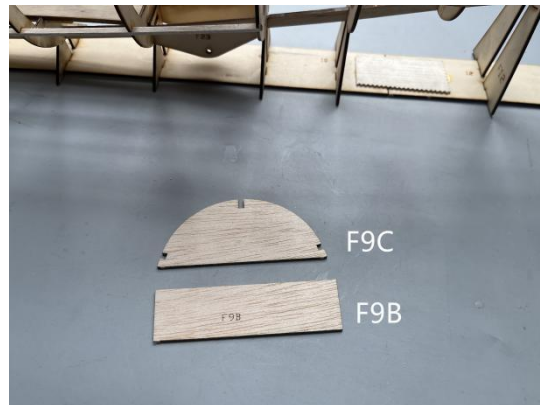
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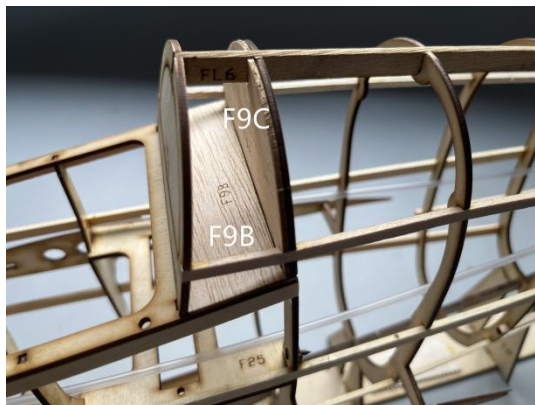
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Step44



Step45

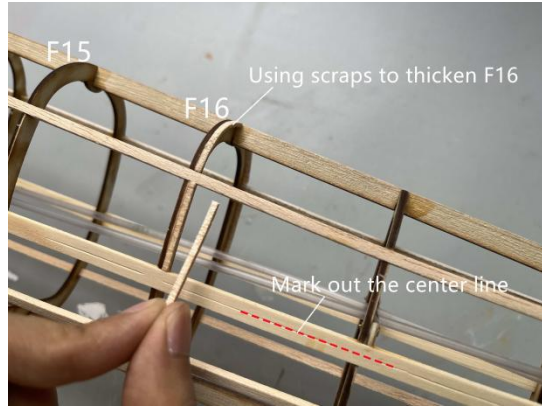


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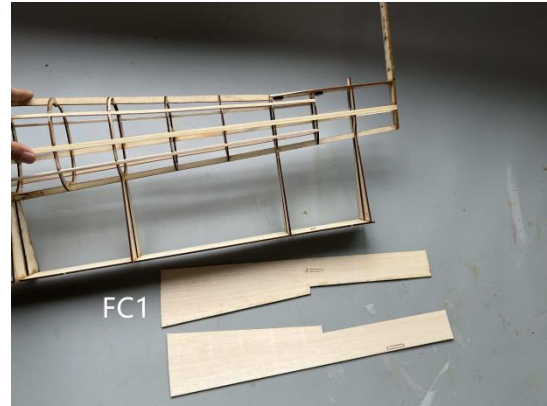


# ASSEMBLY-Fuselage II

Step1



Step2



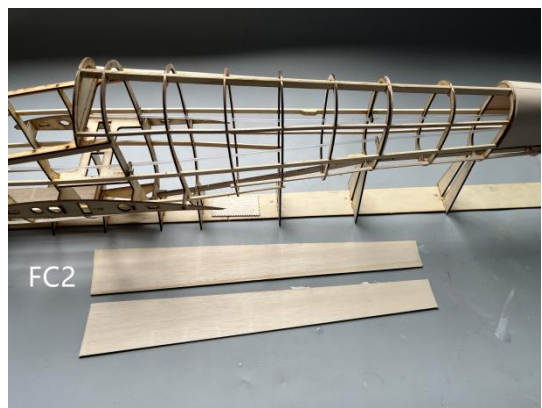
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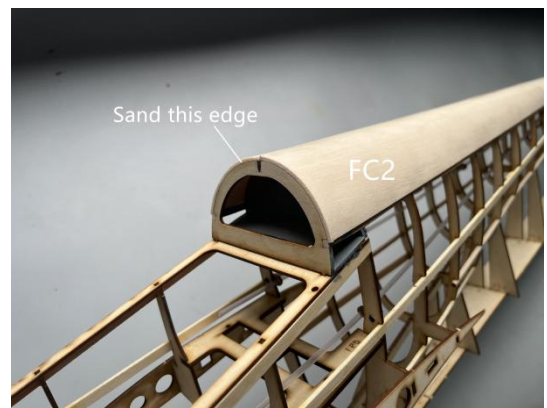
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Step5



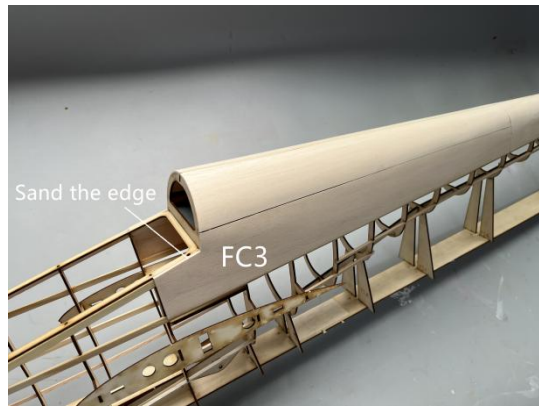
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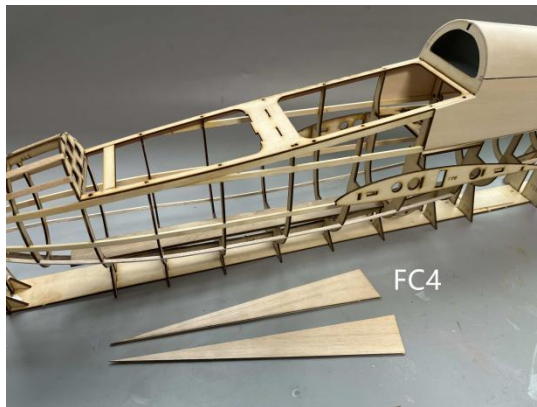
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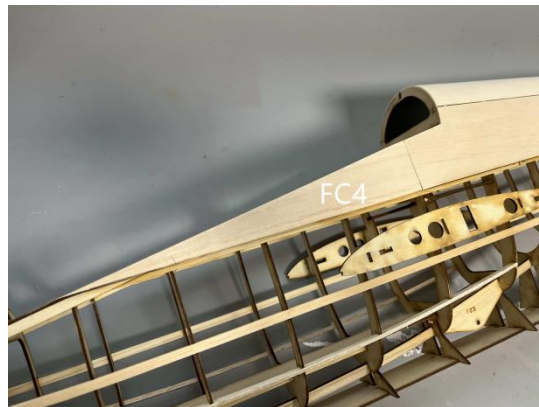
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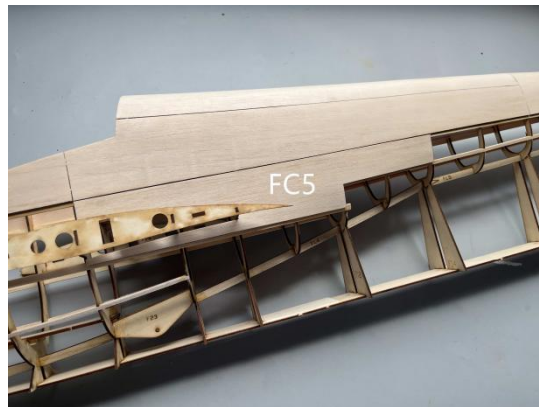
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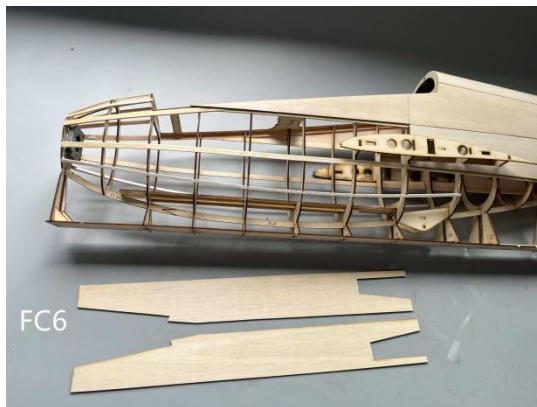
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Step12



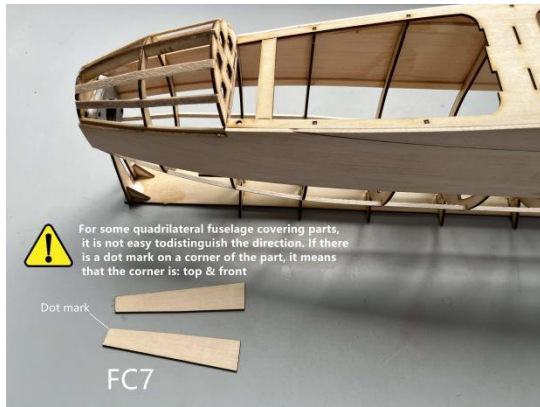
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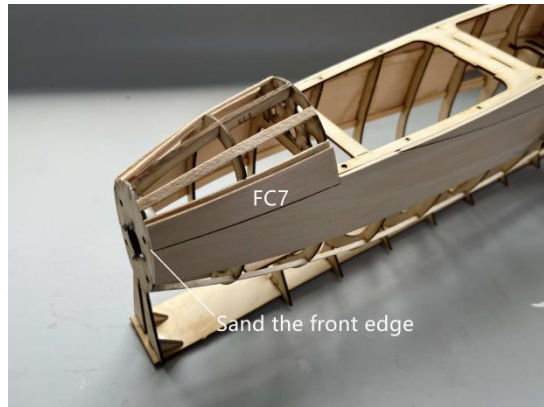
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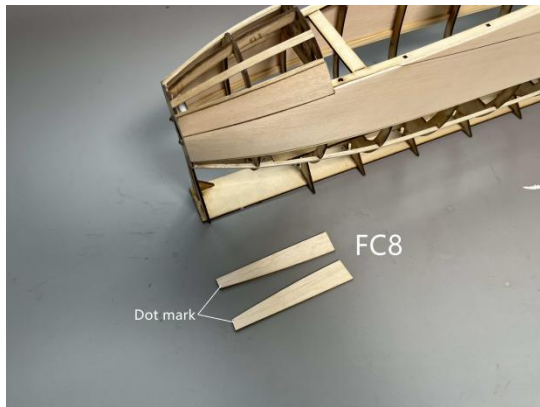
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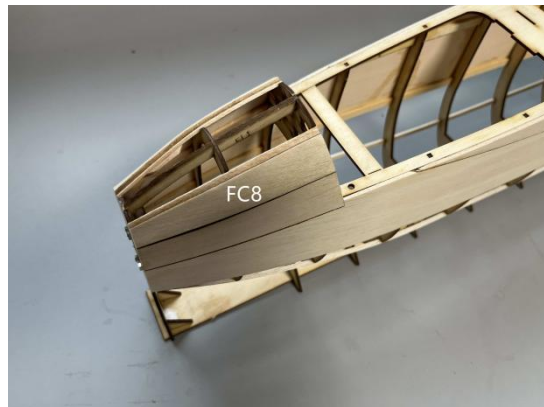
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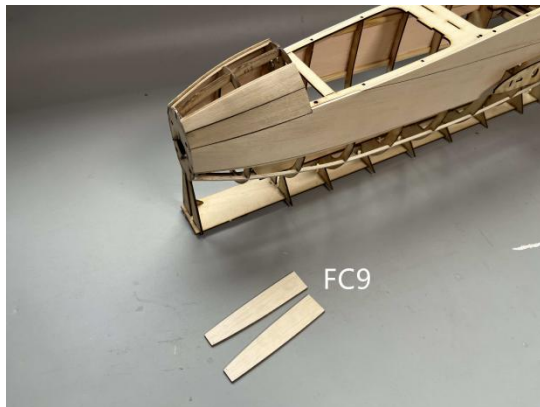
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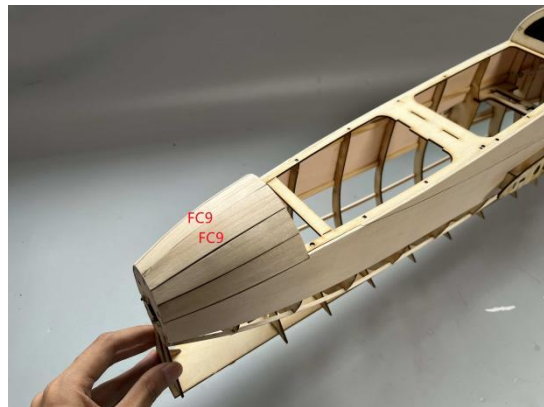
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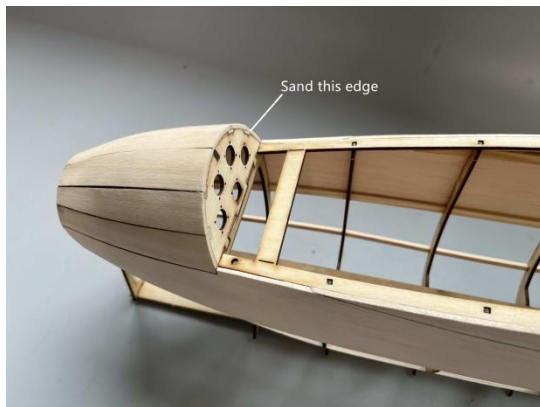
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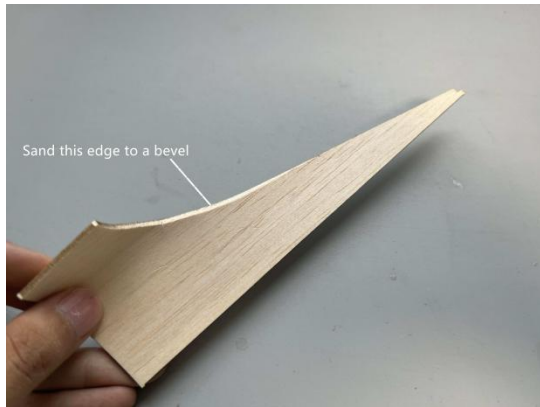
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Step22



Step23



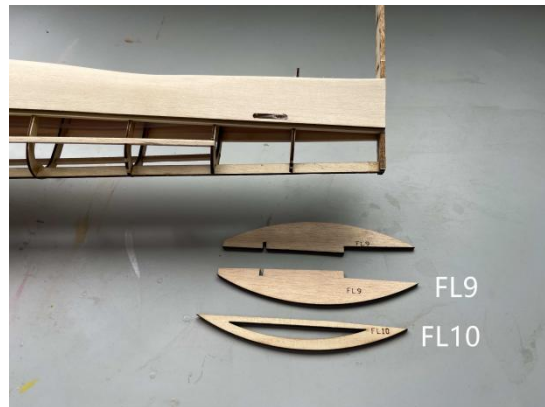
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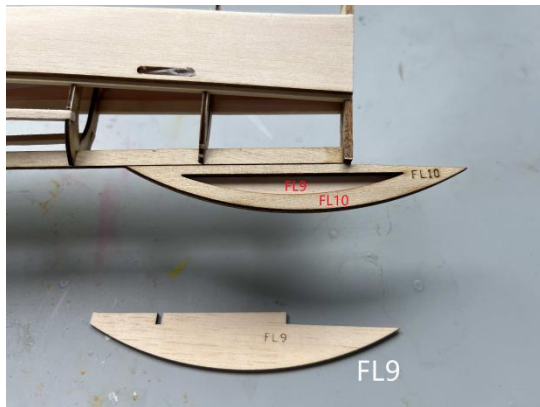
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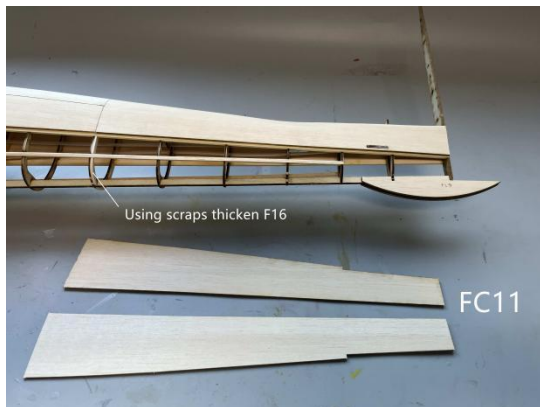
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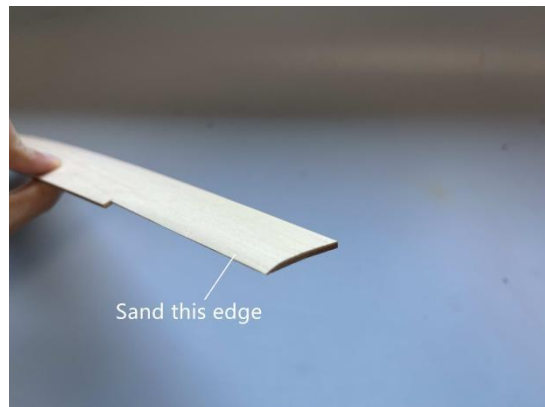
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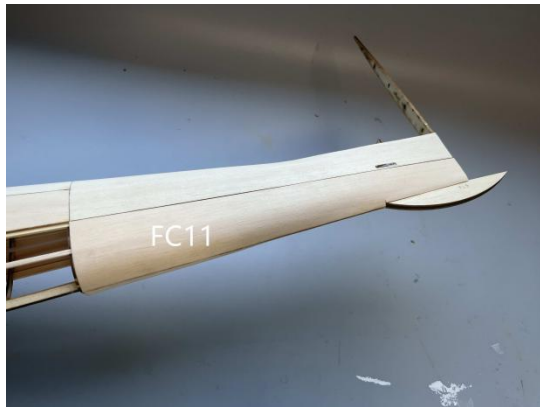
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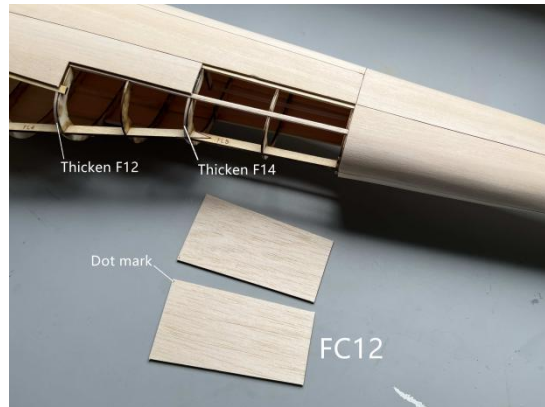
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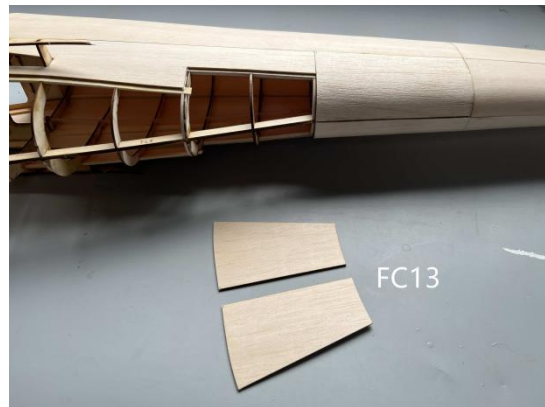
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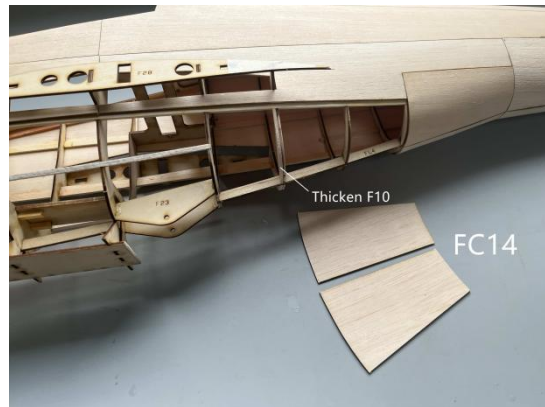
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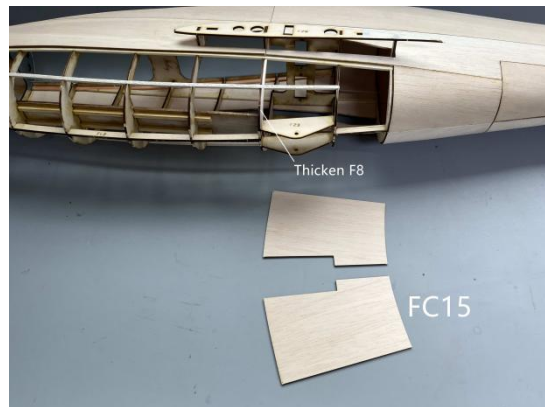
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Step37



Step38





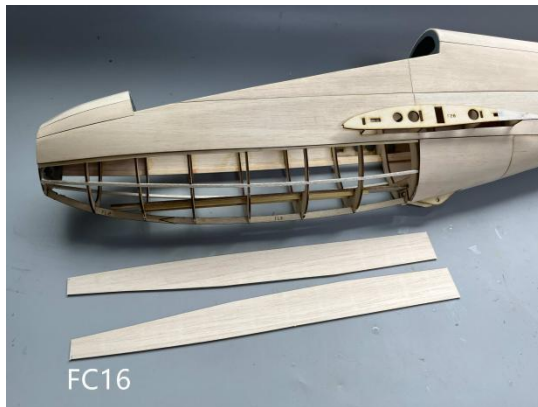
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Step40



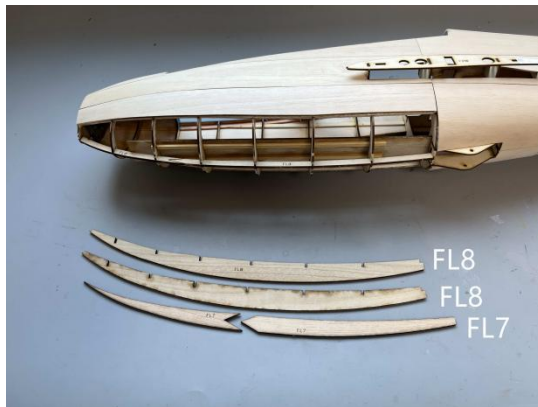
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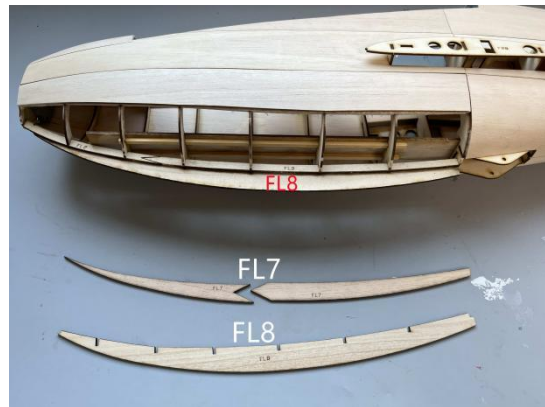
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Step43



Step44



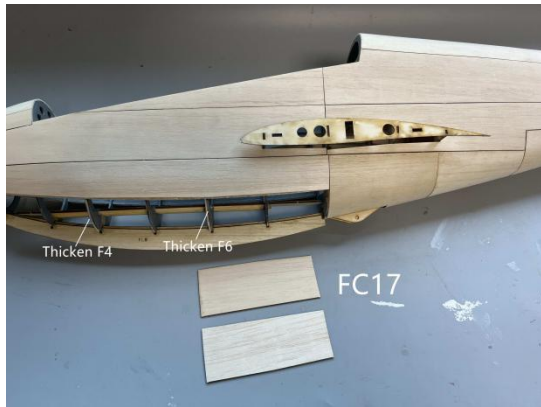
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Step46



Step47



Step48



Step49



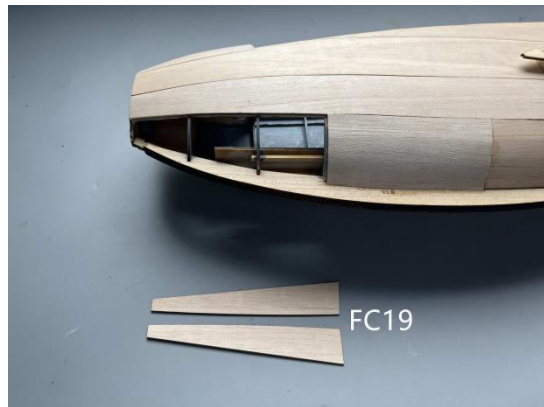
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Step51



Step52



Step53



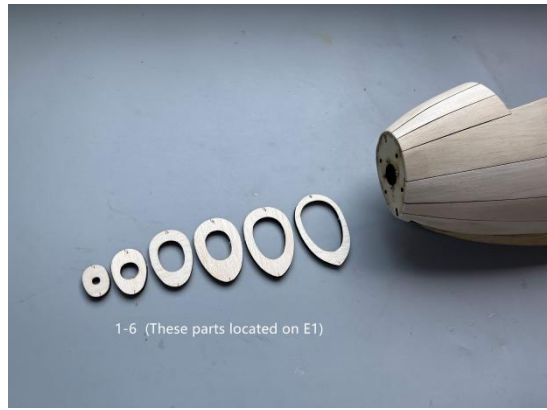
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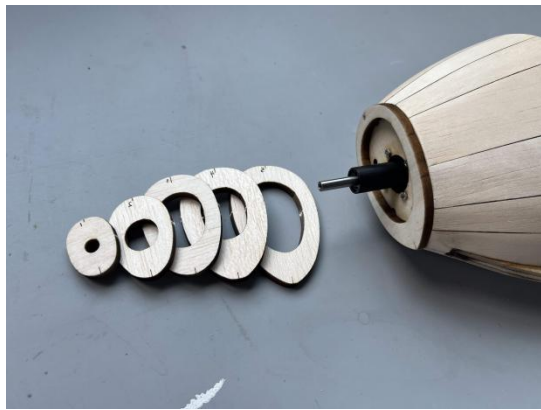
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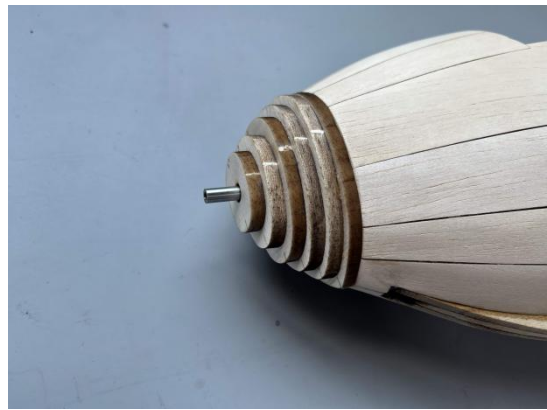
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Step57



Step58



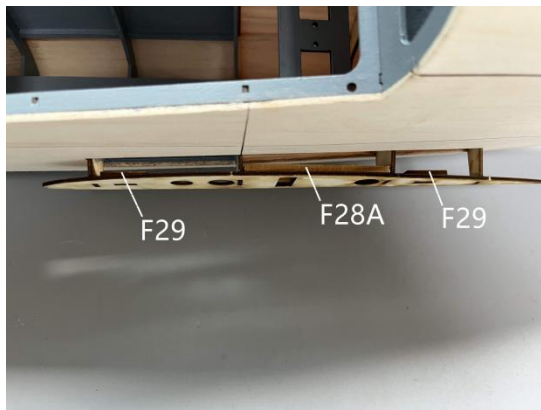
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Step60



Step61



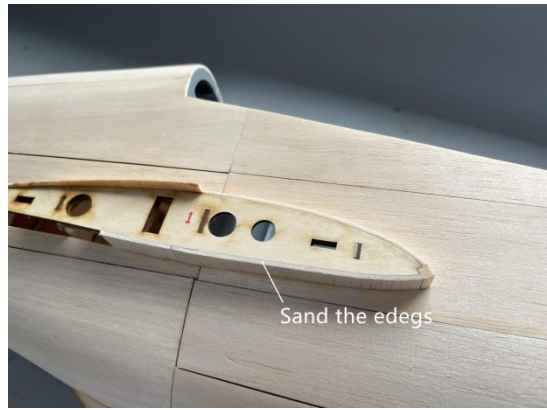
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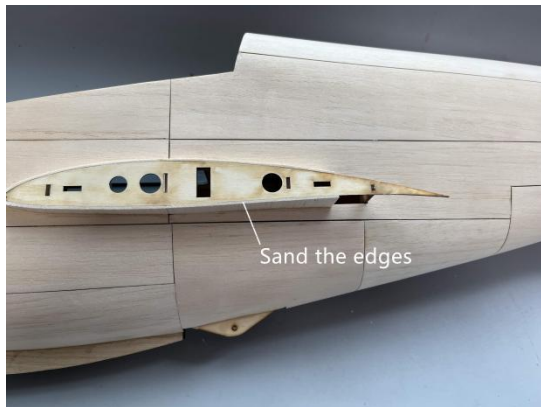
Step63



Step64



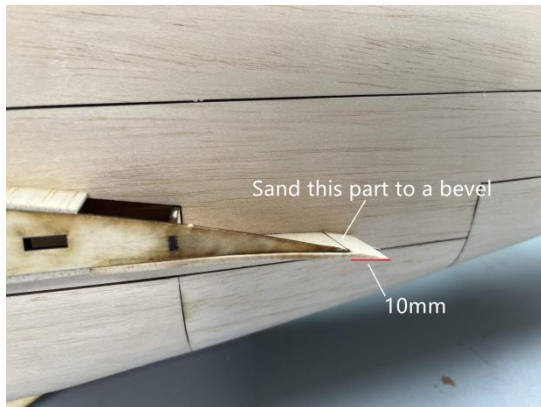
Step65



Step66



Step67



Step68



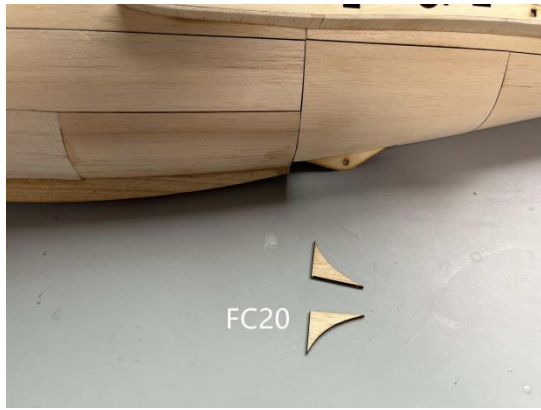
Step69



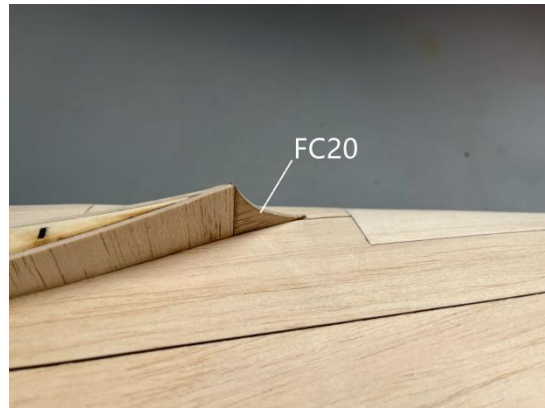
Step70



Step71



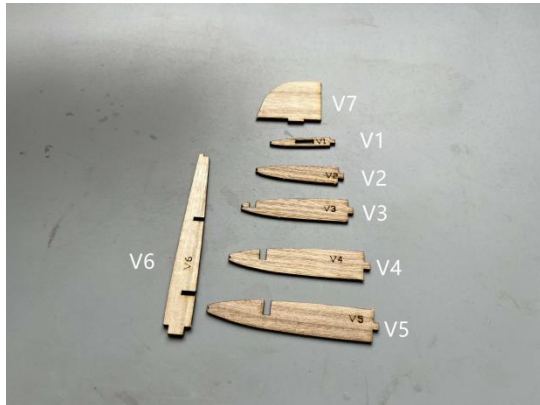
Step72



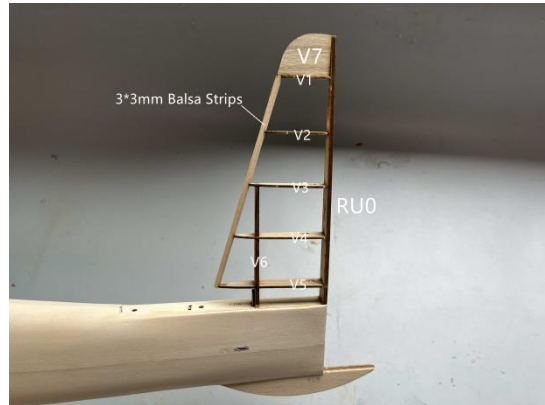
**Builder's note:**

# ASSEMBLY-Vertical & Horizontal Tail

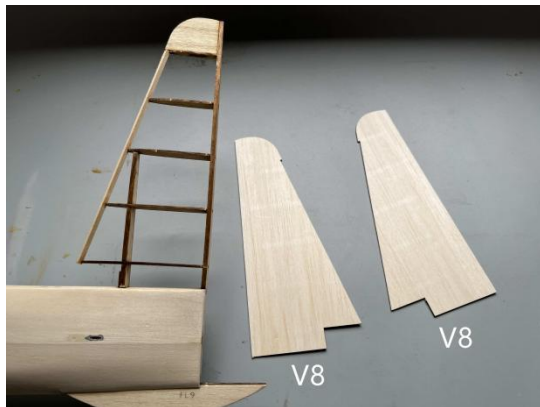
Step1



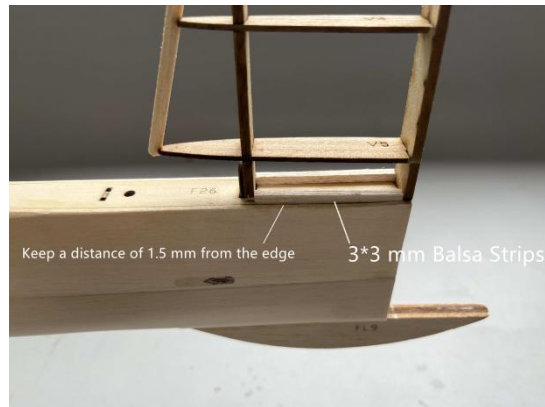
Step2



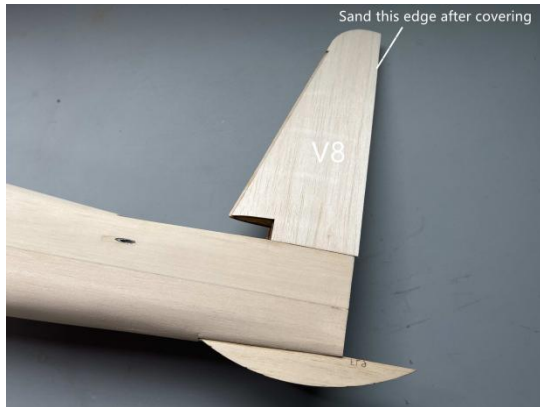
Step3



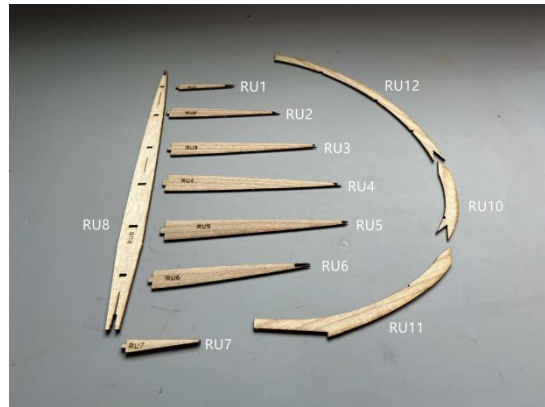
Step4



Step5



Step6



Step7



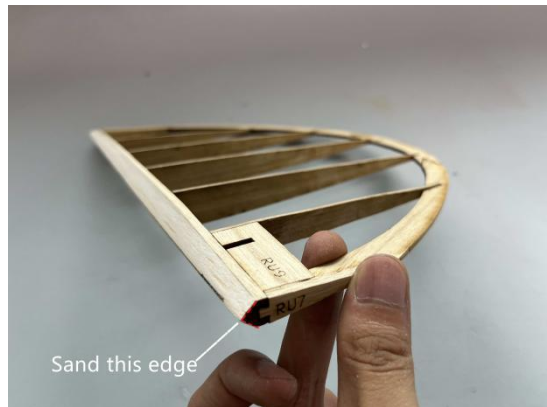
Step8



Step9



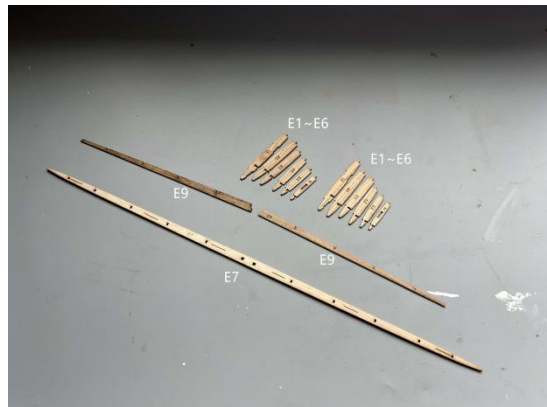
Step10



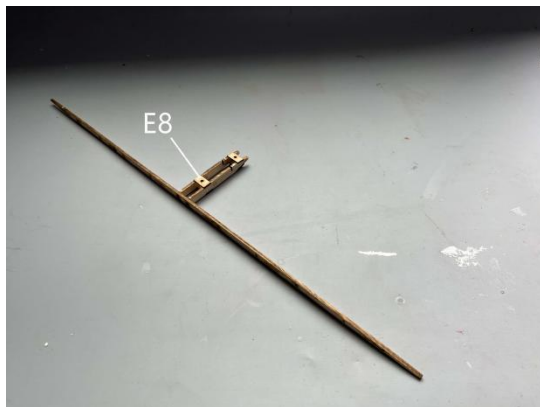
Step11



Step12



Step13



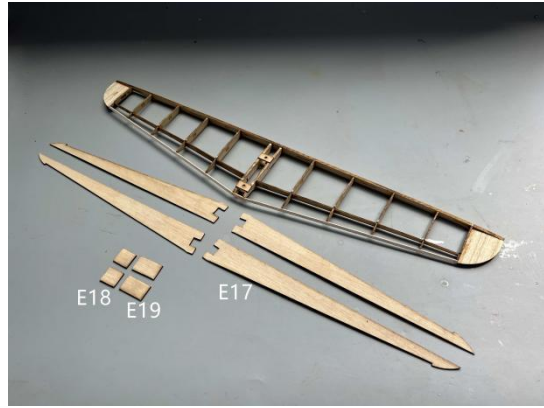
Step14



Step15



Step16



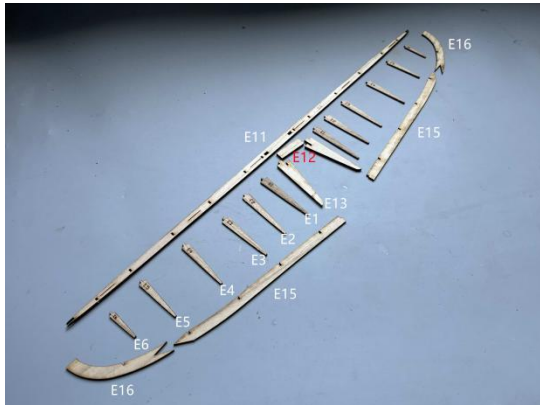
Step17



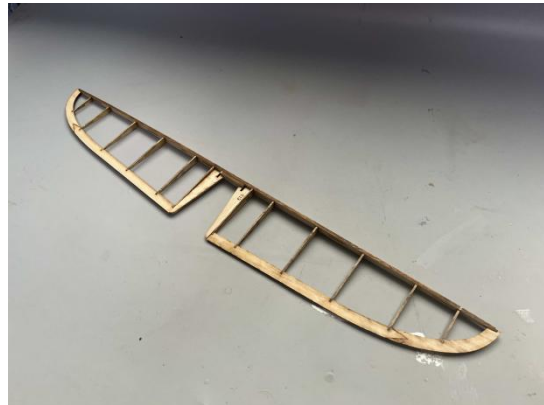
Step18



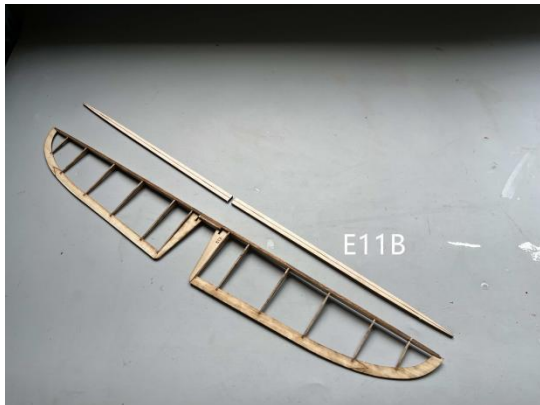
Step19



Step20



Step21



Step22

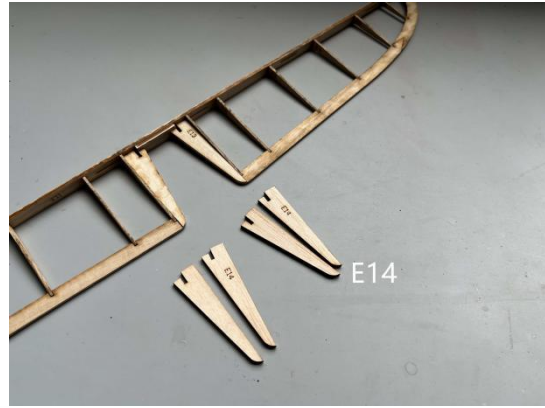




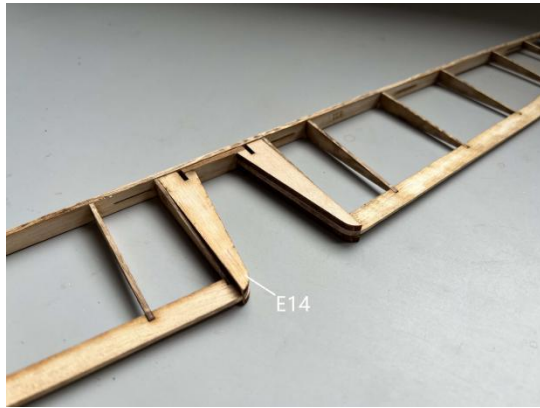
Step23



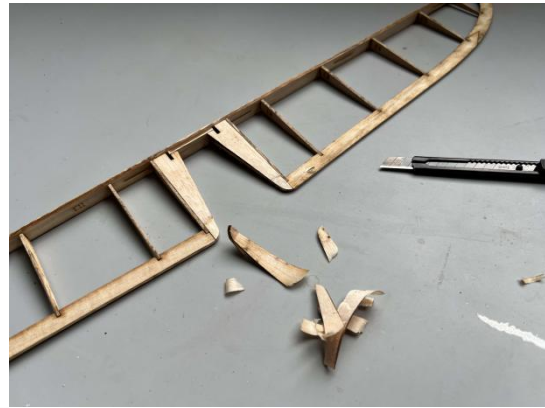
Step24



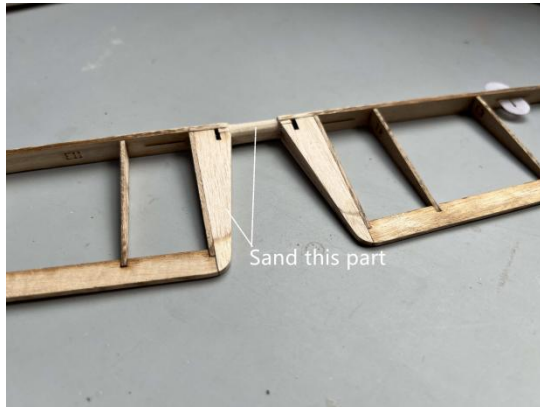
Step25



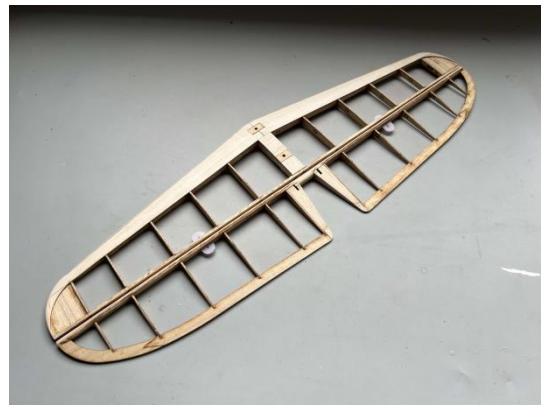
Step26



Step27



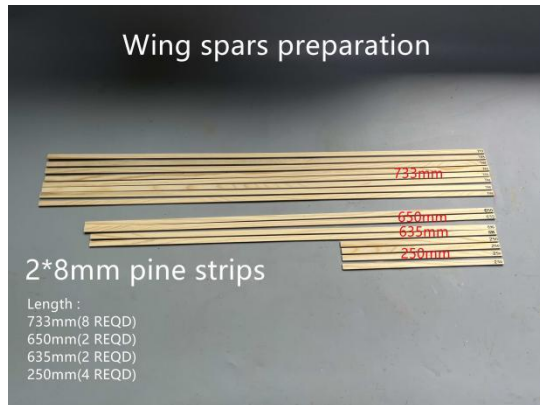
Step28



**Builder's note:**

# ASSEMBLY-Wing Structure

Step1



Step2



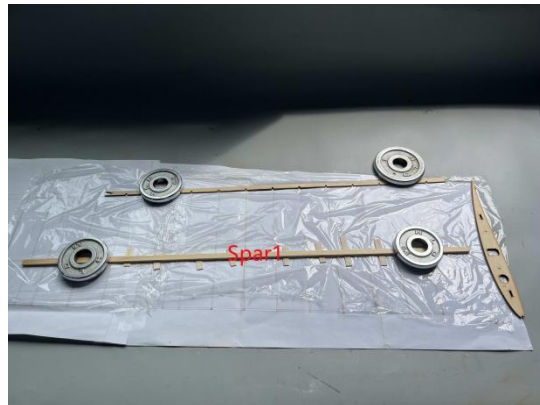
Step3



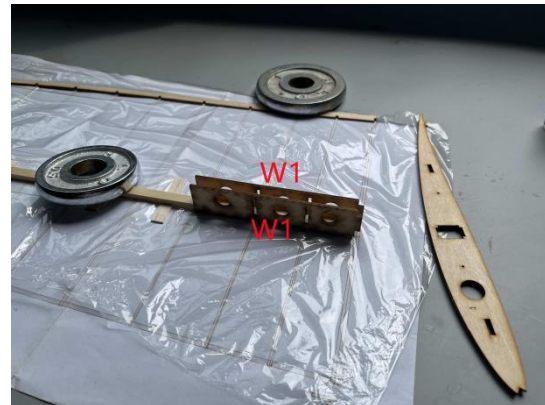
Step4



Step5



Step6



Step7



Step8



Step9



Step10



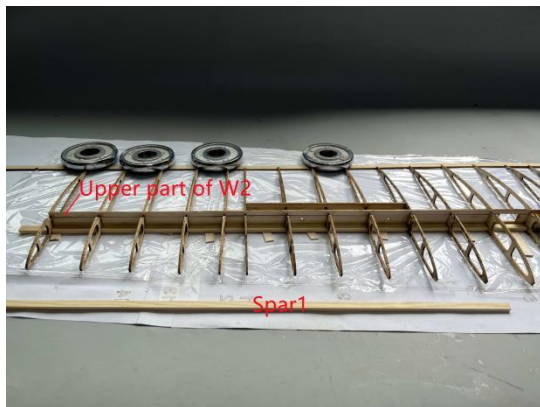
Step11



Step12



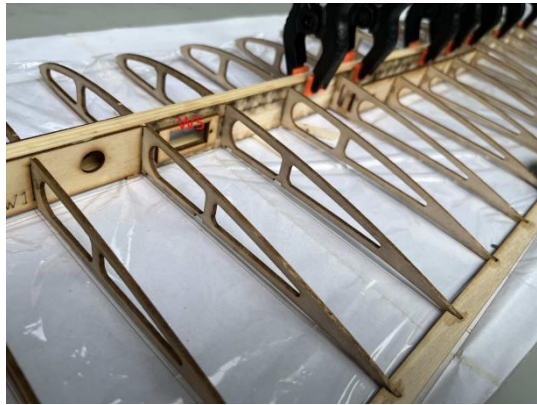
Step13



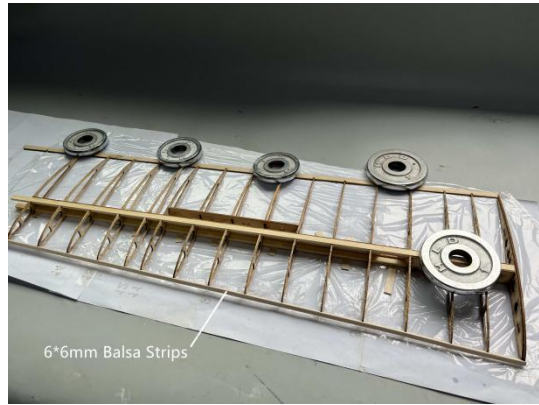
Step14



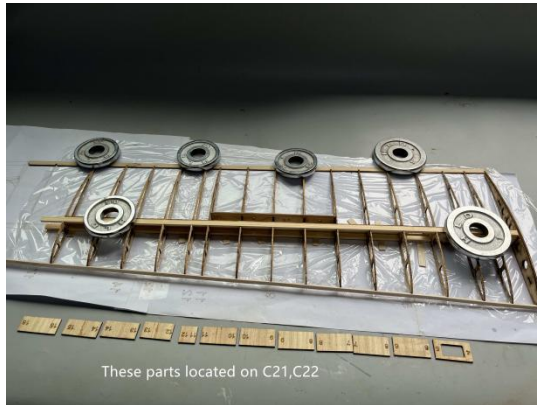
Step15



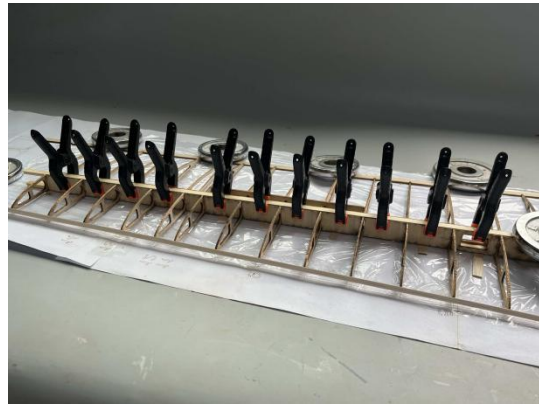
Step16



Step17



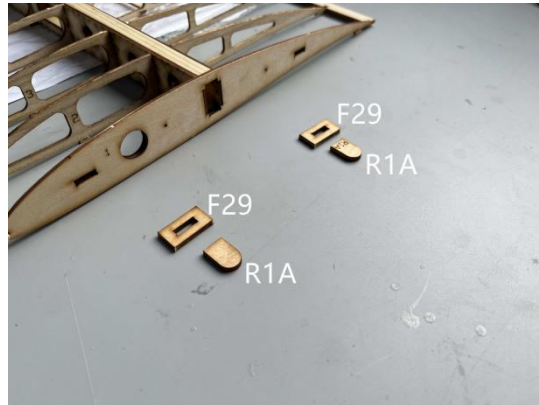
Step18



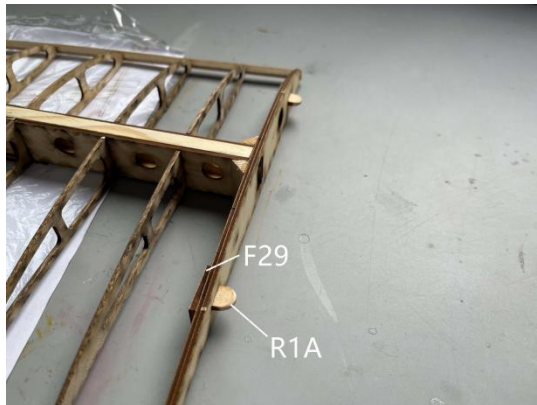
Step19



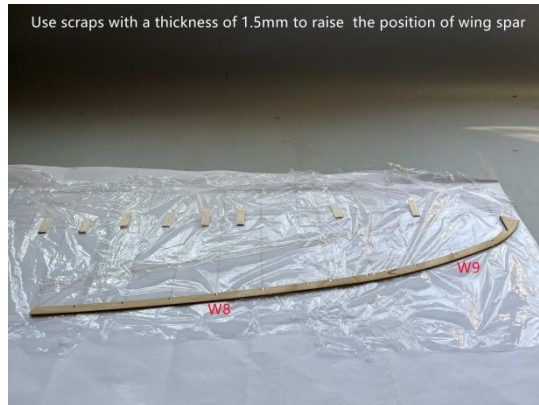
Step20



Step21



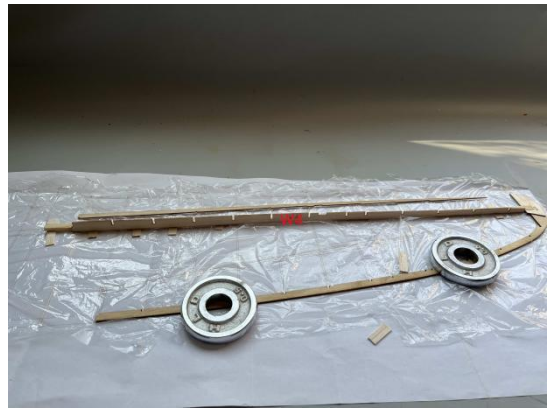
Step22



Step23



Step24



Step25



Step26



Step27



Step28



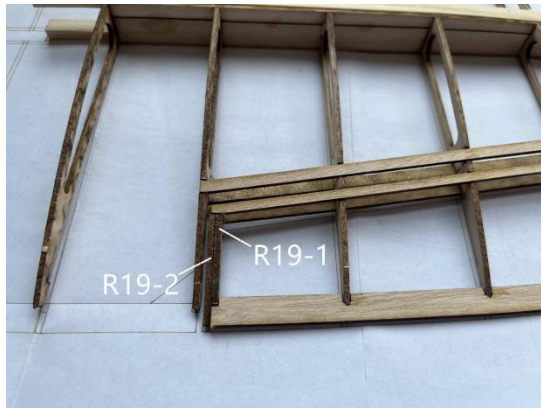
Step29



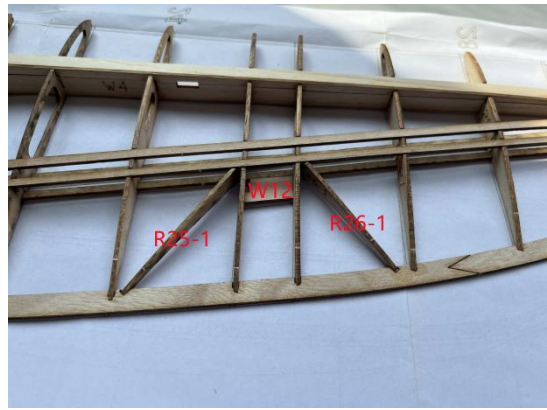
Step30



Step31



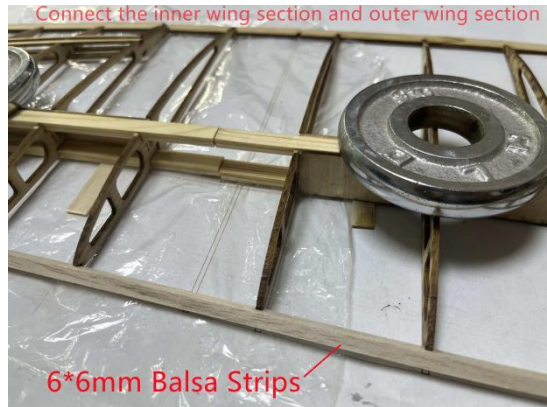
Step32



Step33



Step34



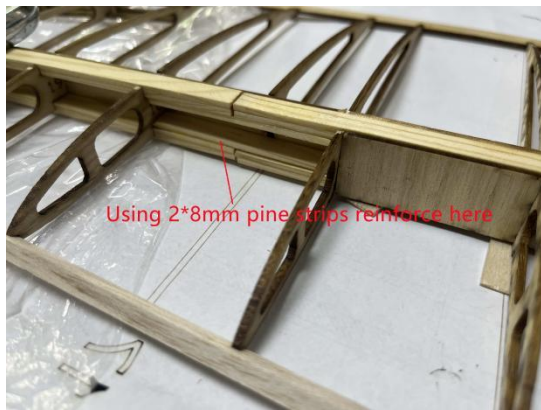
Step35



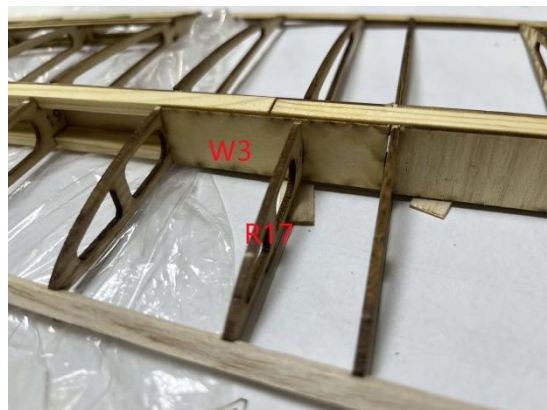
Step36



Step37



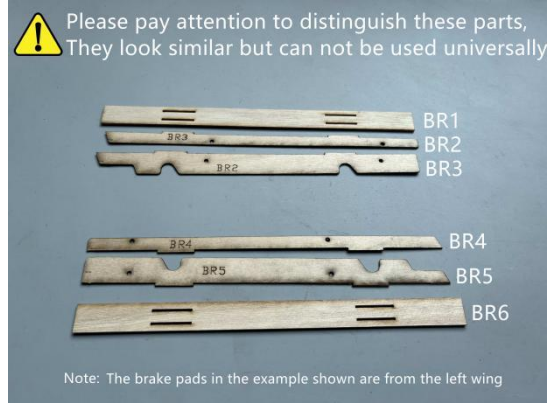
Step38



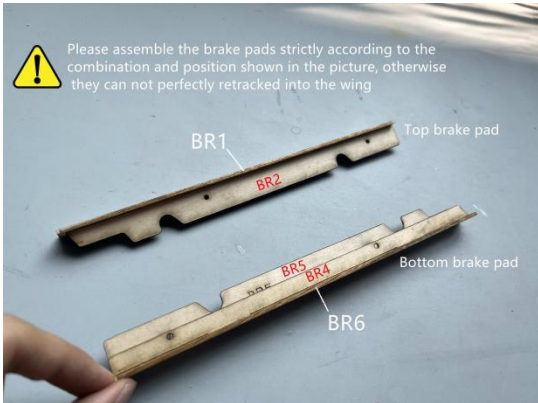
Step39



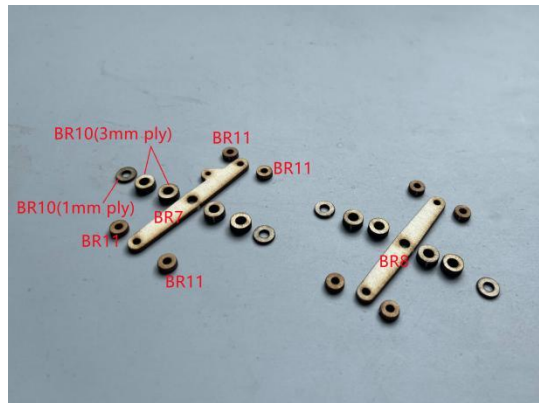
Step40



Step41



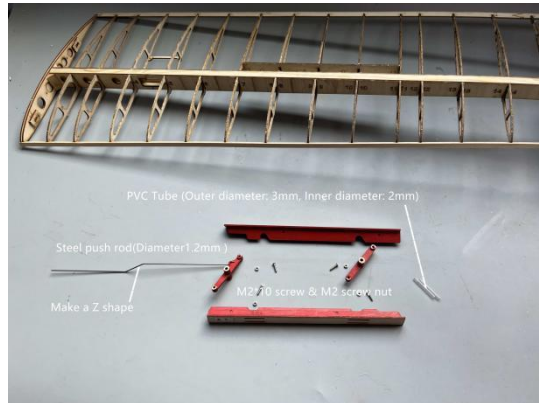
Step42



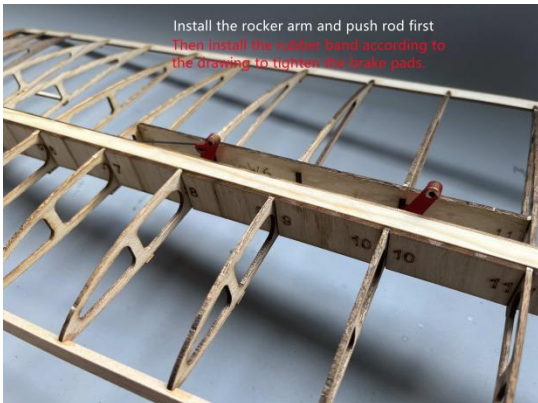
Step43



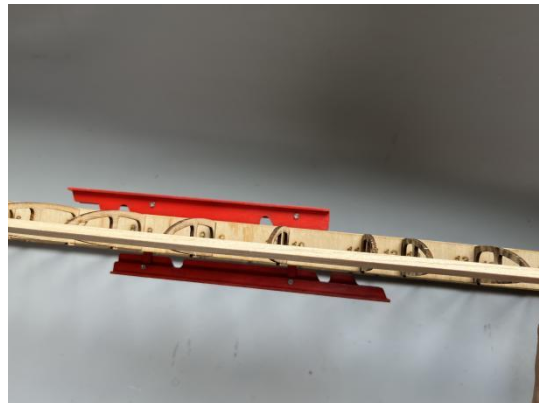
Step44



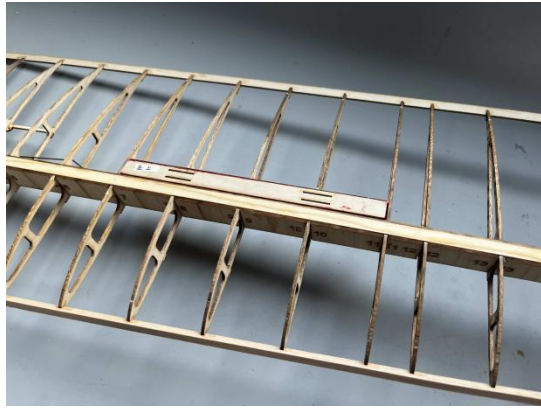
Step45



Step46



Step47



Step48



Step49

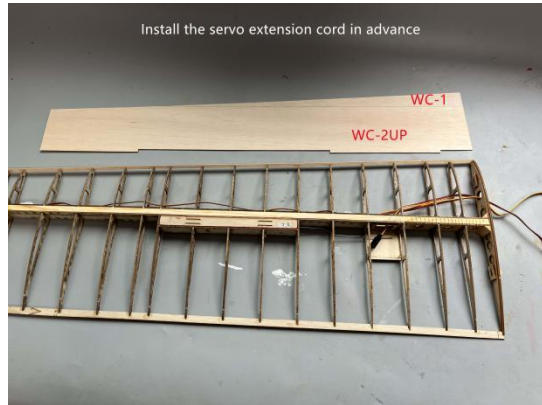


**Builder's note:**

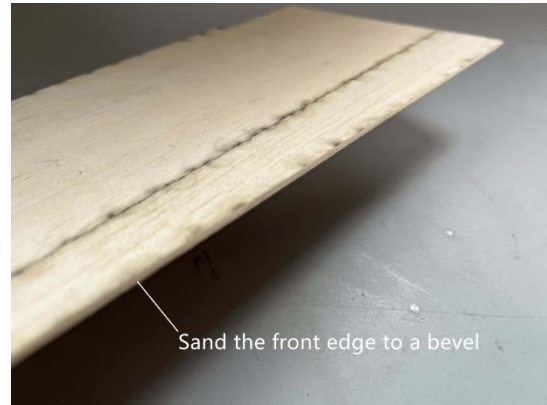


# ASSEMBLY-Wing Covering

Step1



Step2



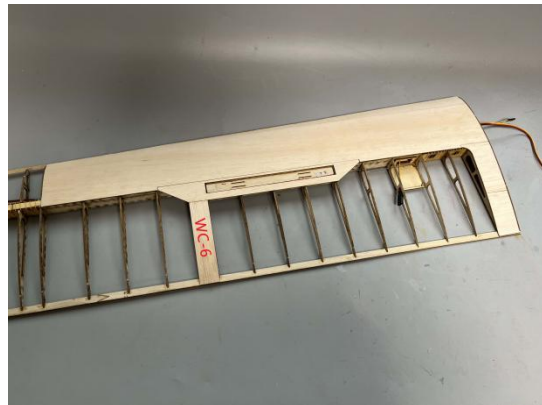
Step3



Step4



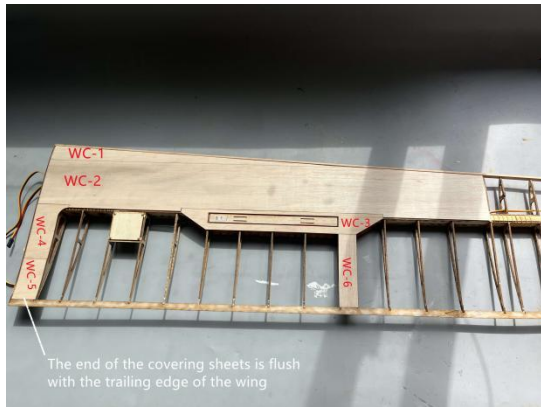
Step5



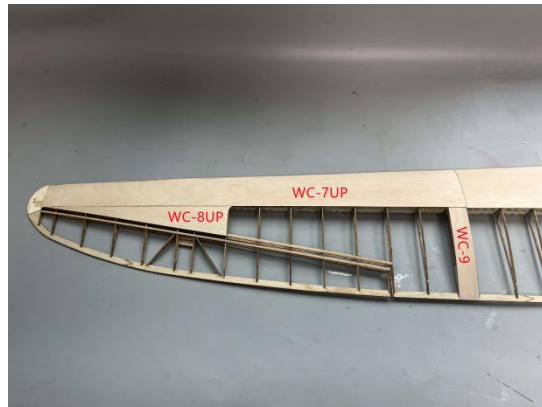
Step6



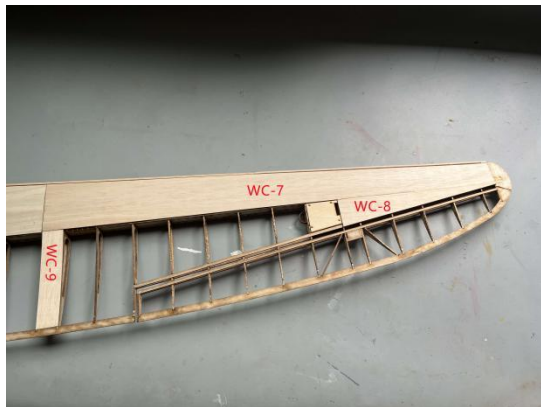
Step7



Step8



Step9



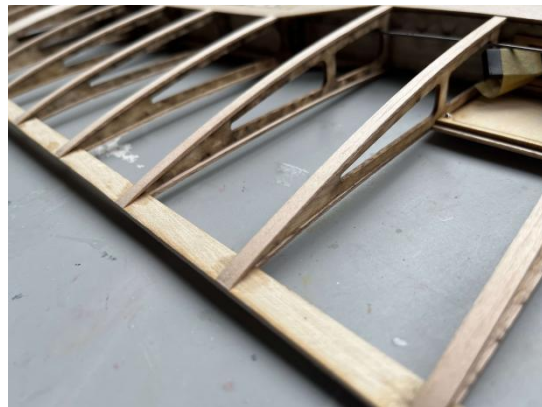
Step10



Step11



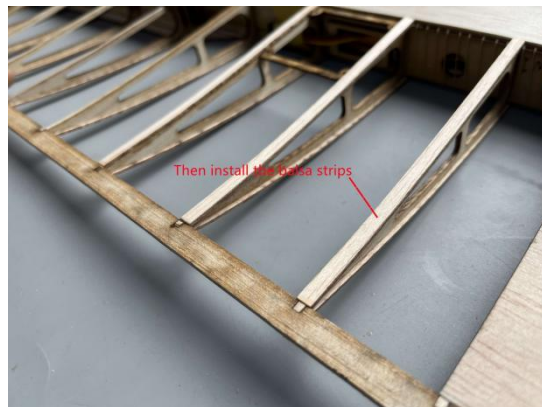
Step12



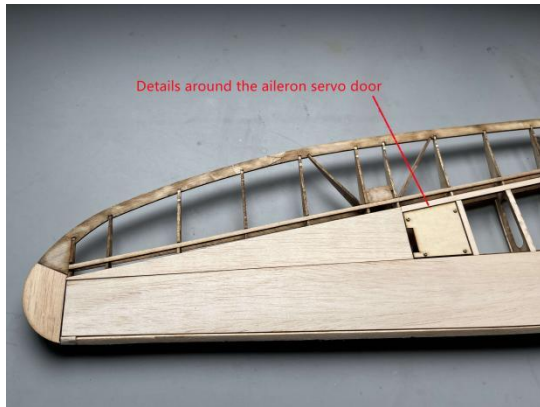
Step13



Step14



Step15



Step16



Step17



Step18



Step19



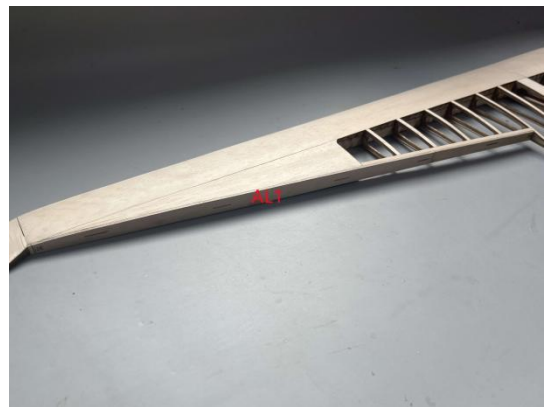
Step20



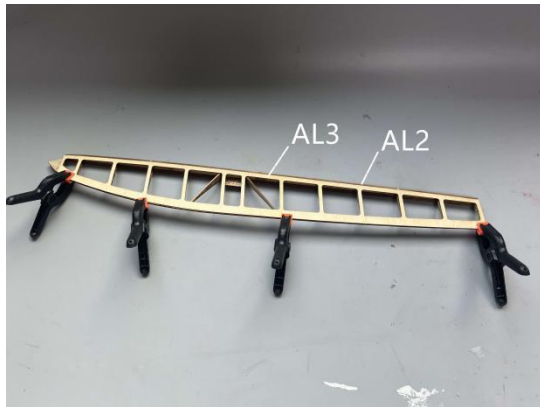
Step21



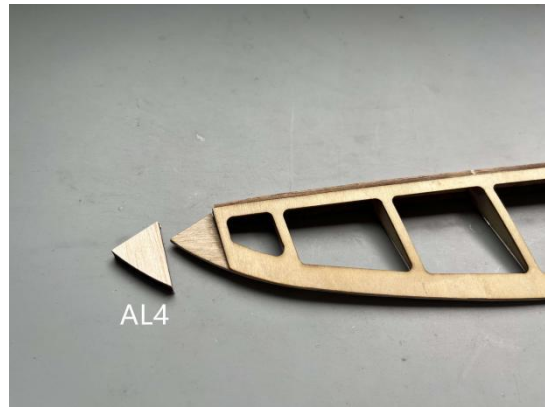
Step22



Step23



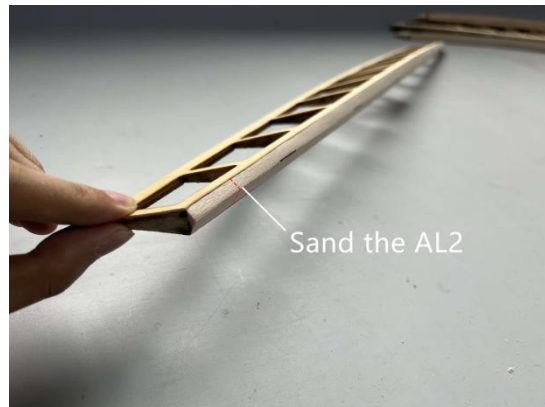
Step24



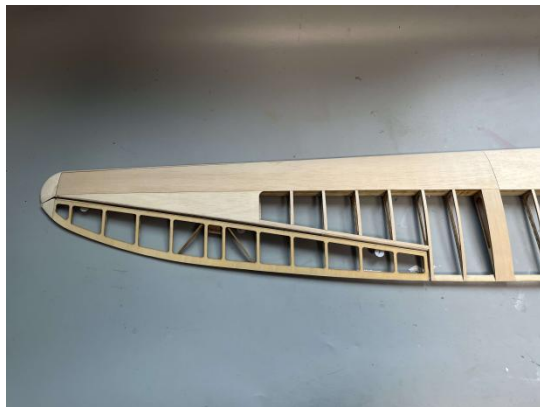
Step25



Step26



Step27



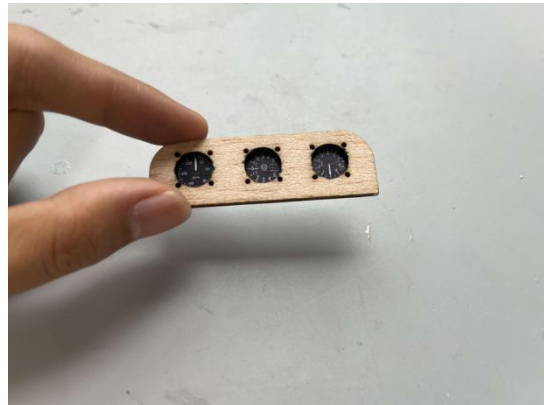
**Builder's note:**

# ASSEMBLY-Seats And Details

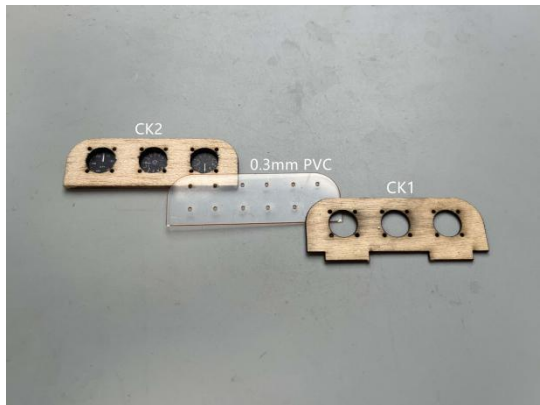
Step1



Step2



Step3



Step4



Step5



Step6



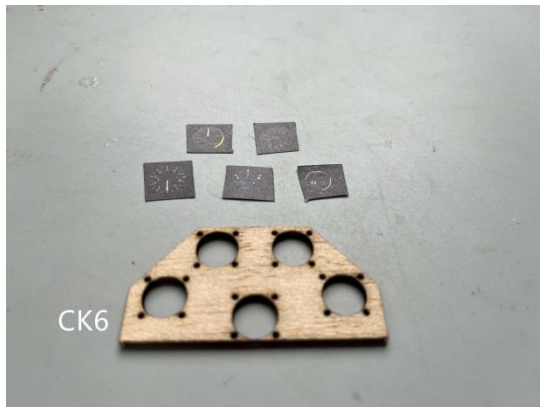
Step7



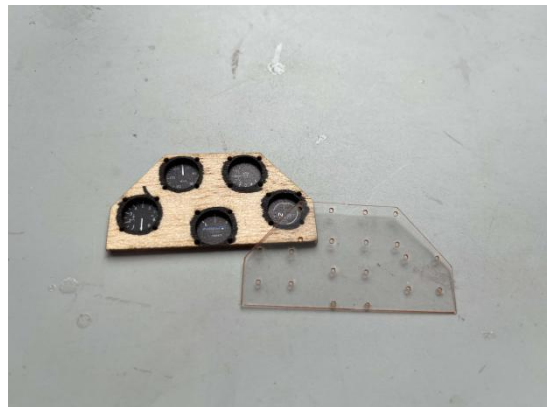
Step8



Step9



Step10



Step11



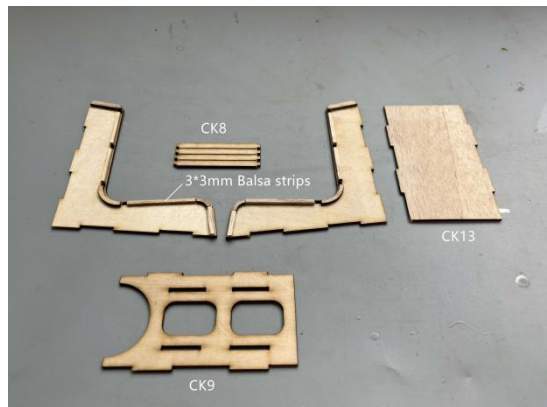
Step12



Step13



Step14



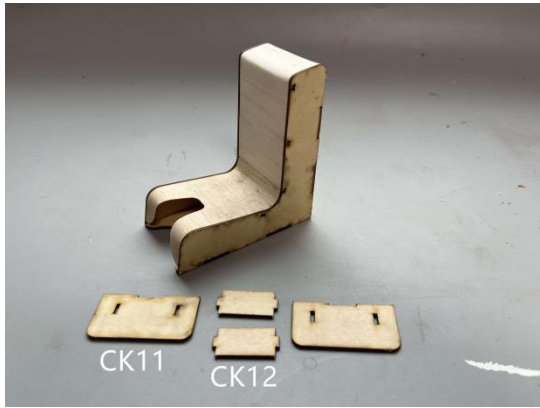
Step15



Step16



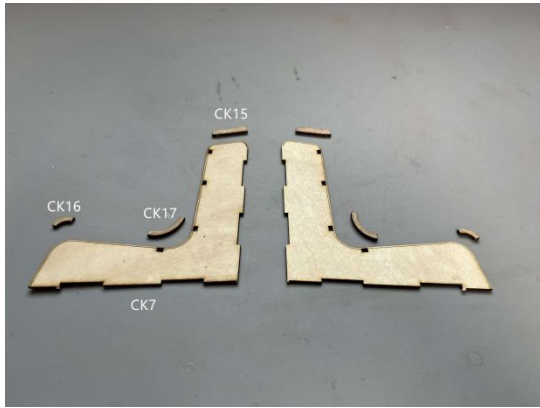
Step17



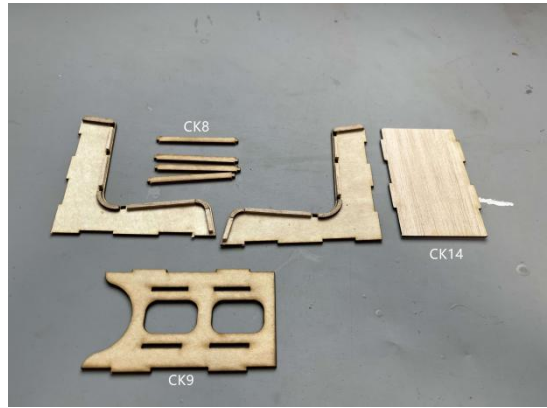
Step18



Step19



Step20



Step21



Step22



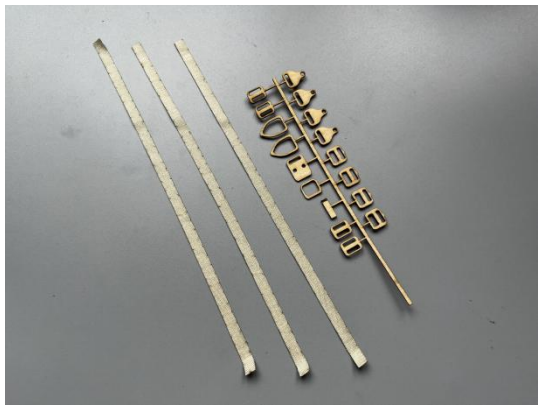
Step23



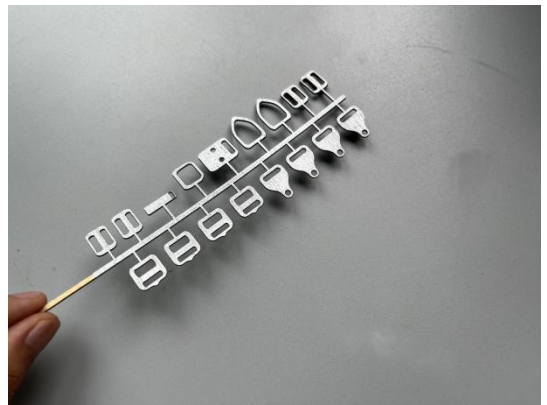
Step24



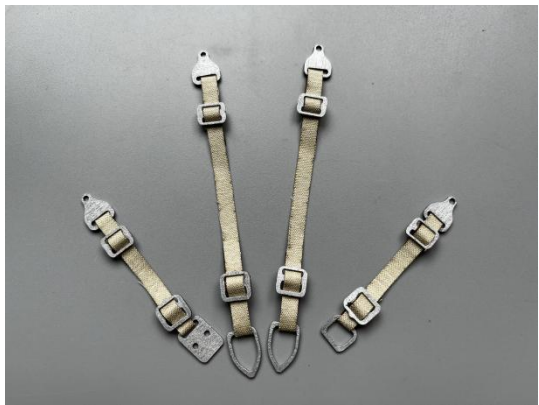
Step25



Step26



Step27



Step28



Step29



**Builder's note:**



# **ASSEMBLY-Electronics**

**(Reference example is motored version)**

Step1



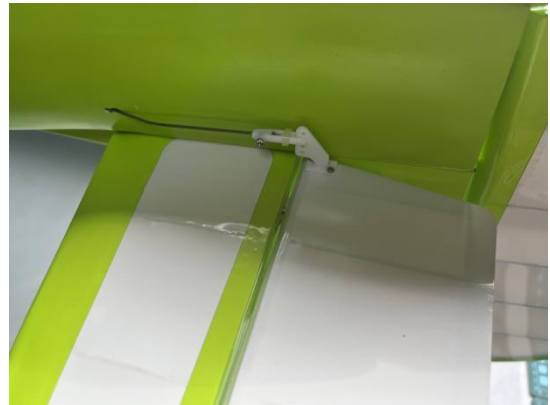
Step2



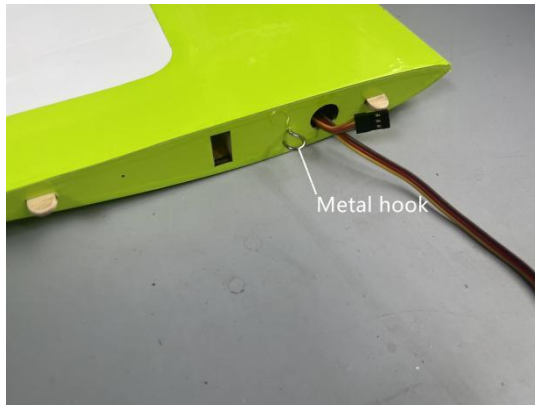
Step3



Step4



Step5



Step6



Step7



**Builder's note:**

## **BEFORE YOU FLY**

**1. CG: 85-90mm from the leading edge**



**2. Horizontal stabilizer mounting angle:**



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

**Thank you!**



**Tony Ray's AeroModel**