

DFS Kranich

Build instructions



<i>Specifications</i>	
Wing Span	60 in / 1498mm
Wing Area	16.2 sq dm
Flying weight	320g-350g
Fuselage length	645mm
Scale	1 / 12

<i>Requires</i>
RC transmitter with at least 3 channels
5g mini servos*4



Tony Ray's AeroModel

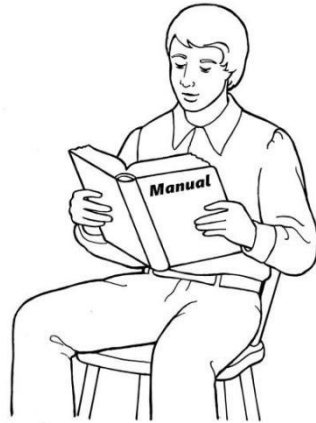
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BEFORE YOU BEGIN

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

<i>Sheet Wood Inventory</i>	
1.5mm Balsa	2
1mm balsa	16
2.5mm balsa	1
1mm Plywood	3
1.5mm Plywood	1

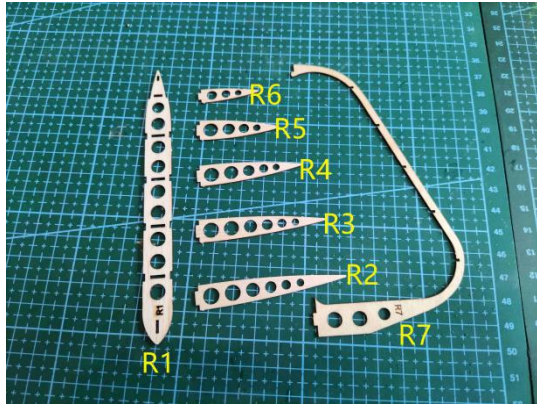
<i>Hardware parts</i>	
Blister PVC canopy(Front)	1
Blister PVC canopy(Behind)	1
PVC Tube (Outer diameter: 6mm, Inner diameter: 4mm)	1
Carbon Tube (Outer diameter: 4mm, Inner diameter: 3mm)	1
Plastic Hinges	6
Mini paper hinges	8
M2*20 Screws	2
M1.6*5 Screws	8
M1.78*8 Screws	2
Steel push rod (diameter: 0.8mm)	2
Steel cable (diameter: 0.3mm)	1
Steel wire adapter	2
Copper tube	10
Heat shrinkable tube	2

<i>Paper parts</i>	
1:1 drawings	1

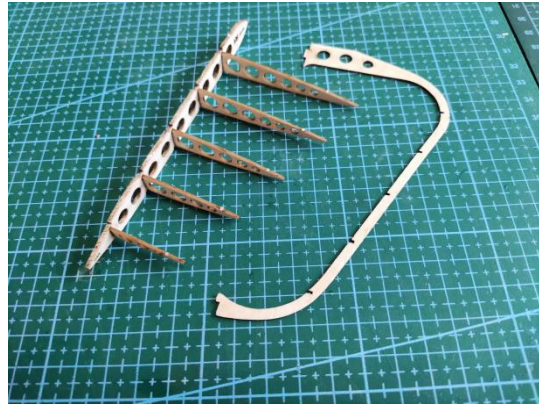
Build instructions

Part1.Rudder

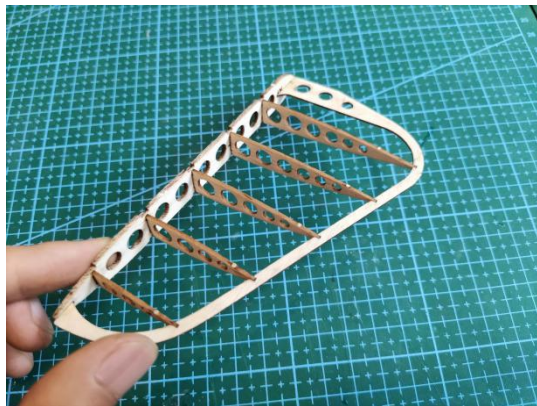
Step 1



Step 2



Step 3



Step 4



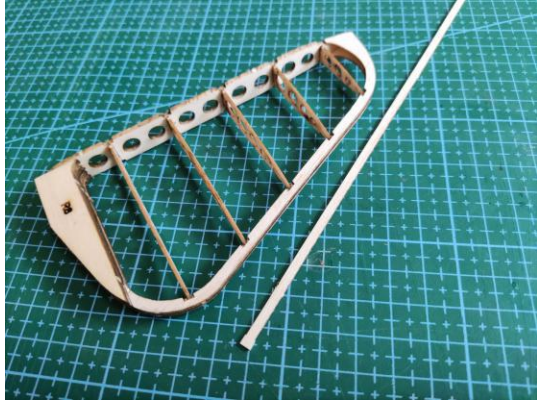
Step 5



Step 6



Step 7



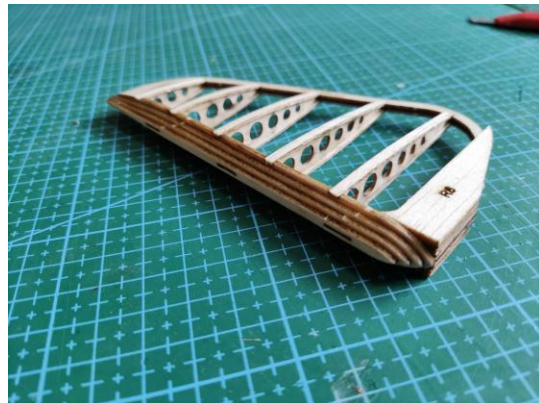
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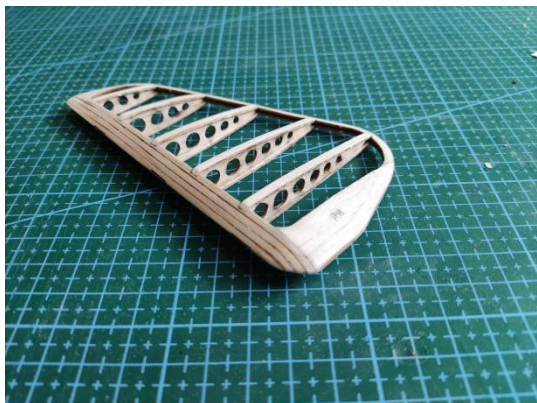
Step 9



Step 10



Step 11

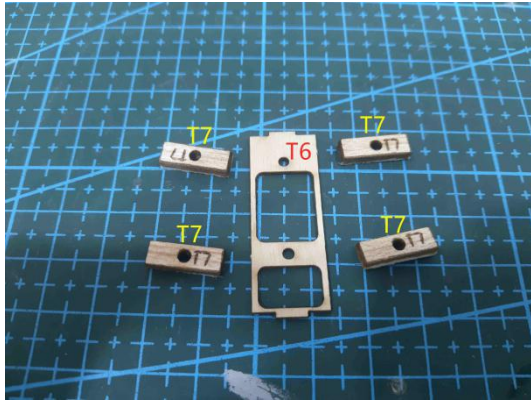


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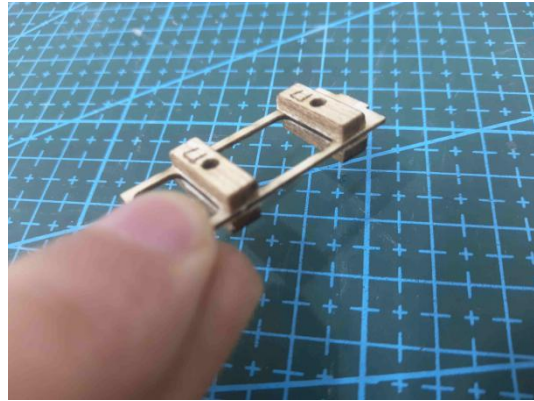


Part2.Horizontal tail

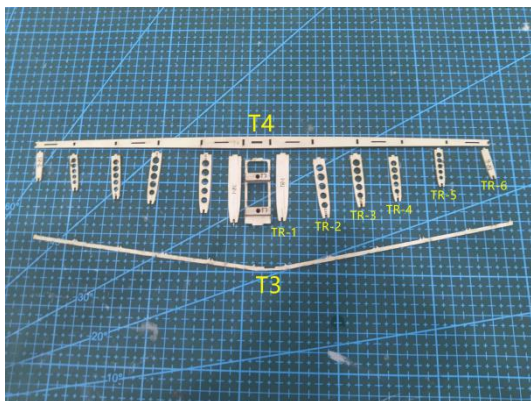
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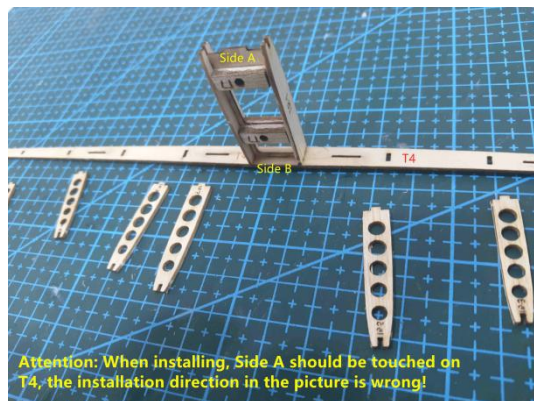
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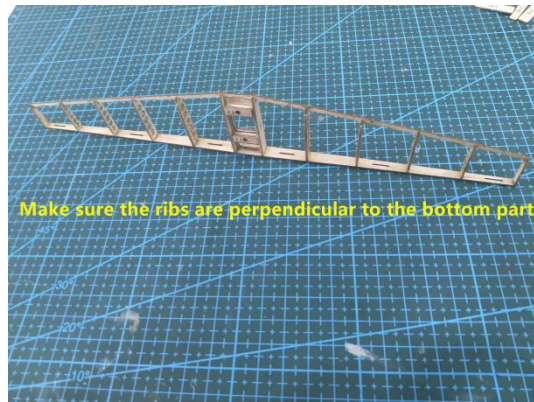
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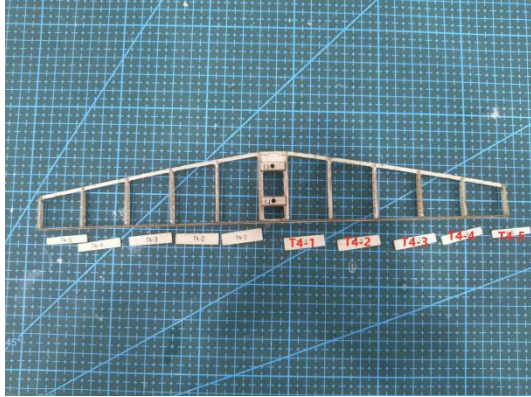
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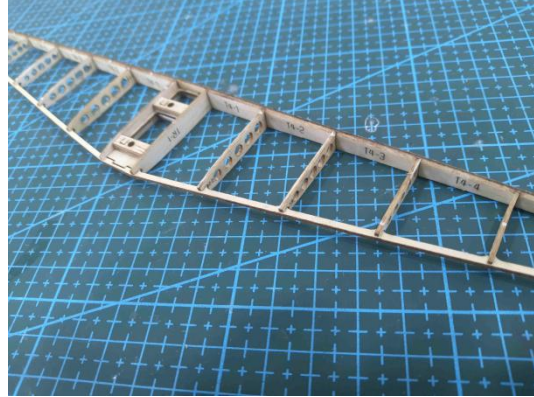
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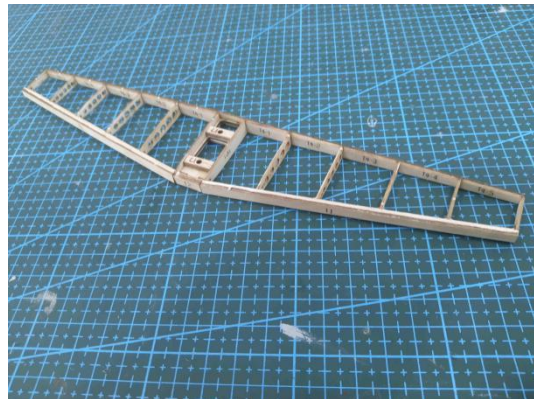
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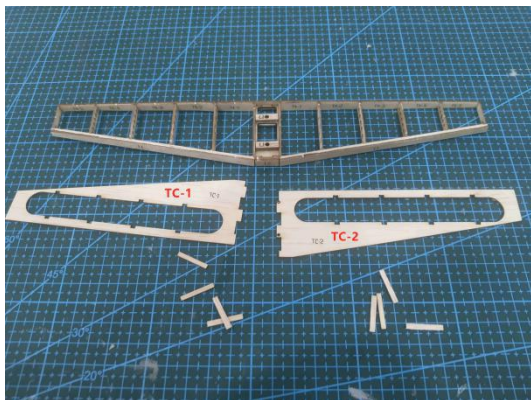
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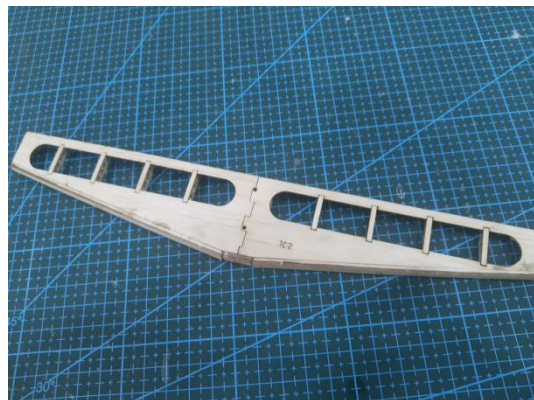
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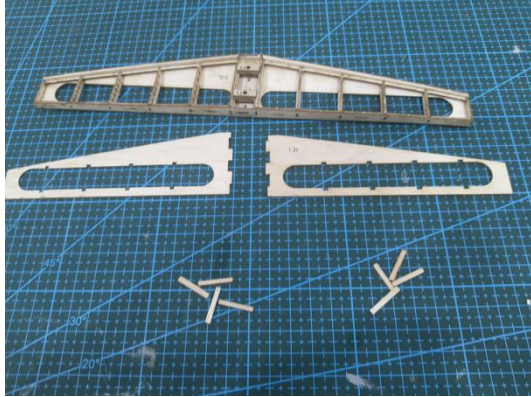
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Step 12



Step 13



Step 14



Step 15



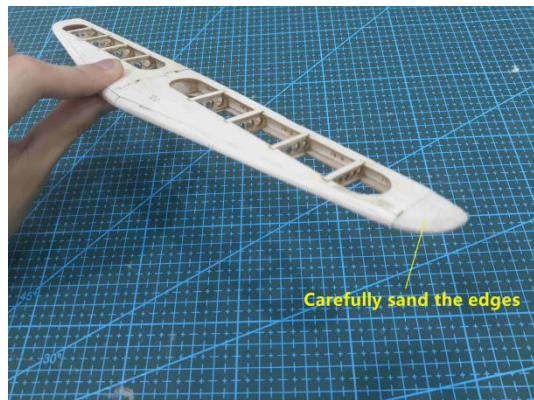
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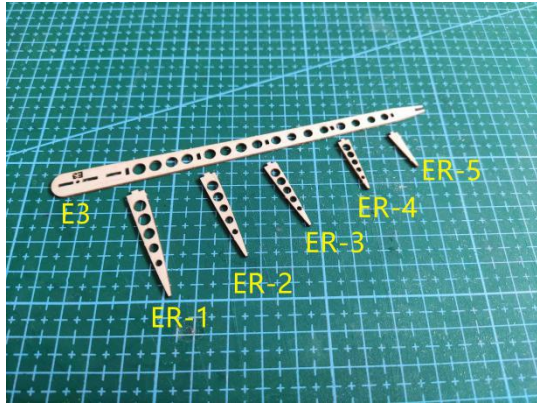
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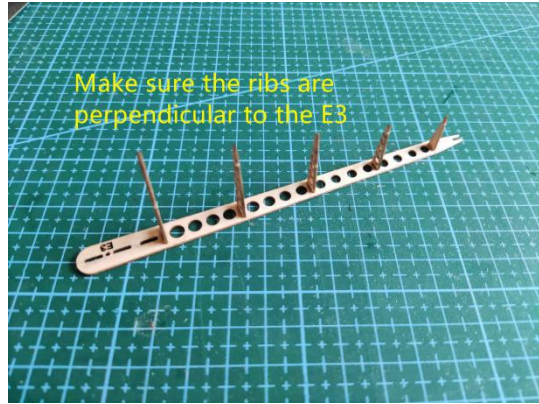
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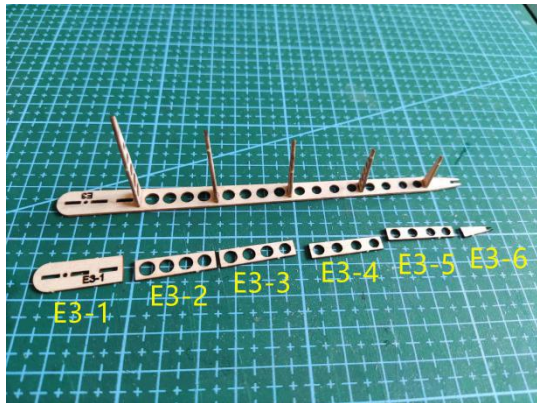
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Step 20



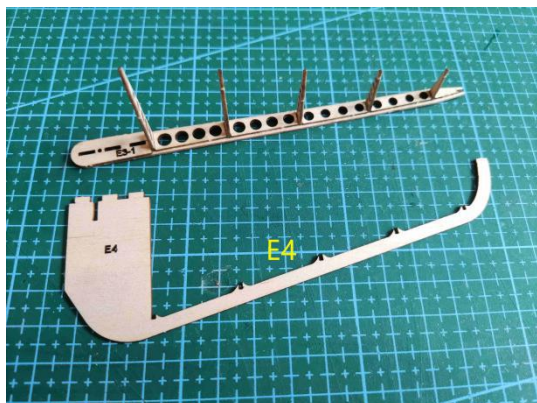
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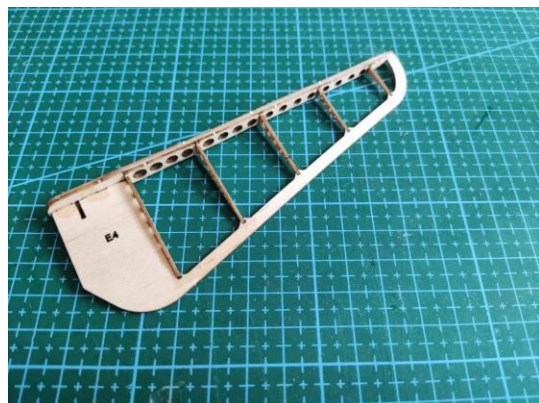
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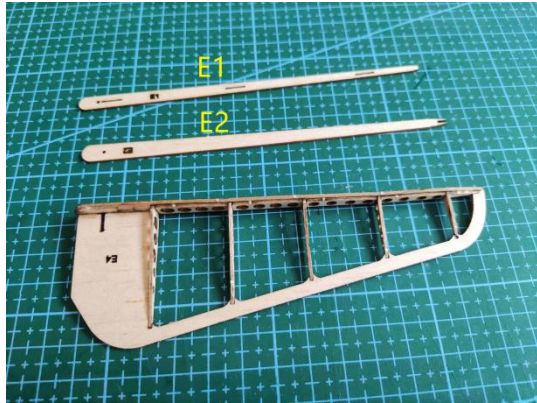
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Step 24



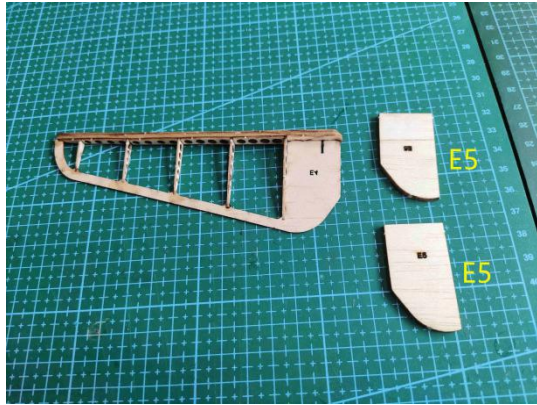
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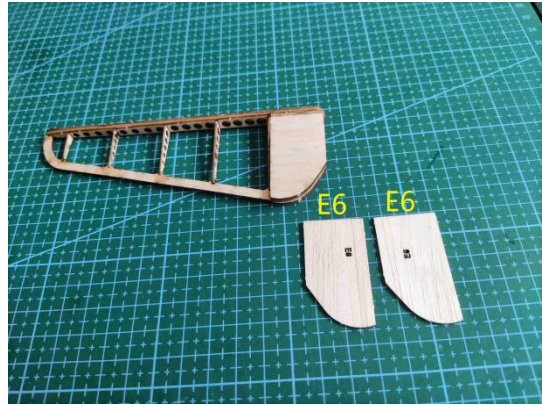
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Step 27



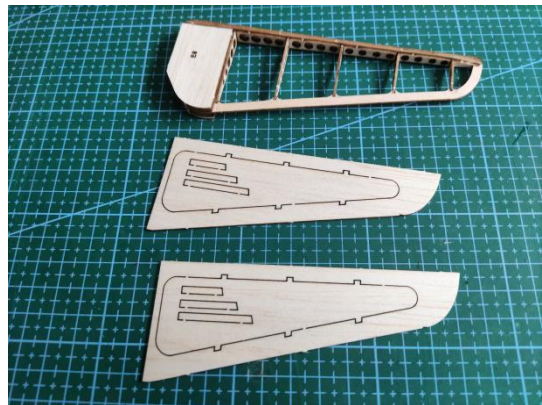
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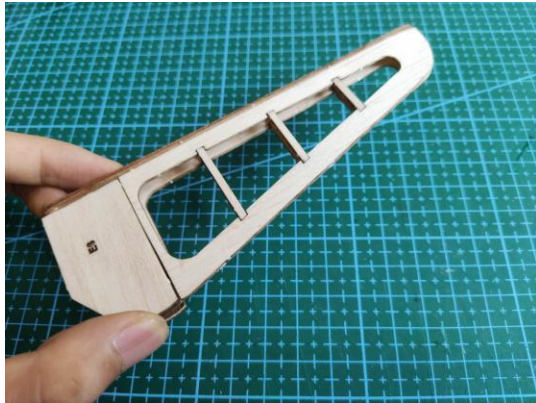
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Step 30



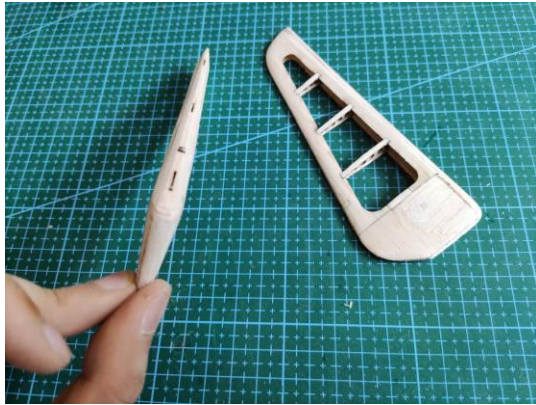
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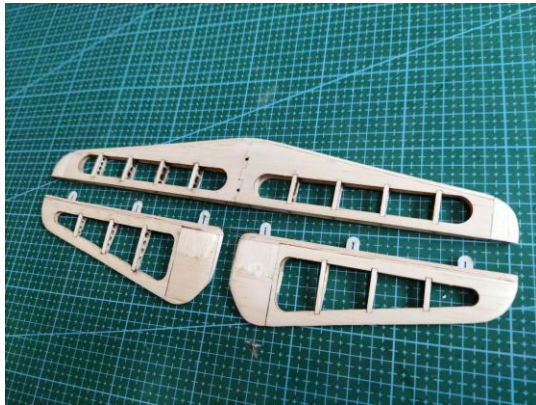
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Step 34



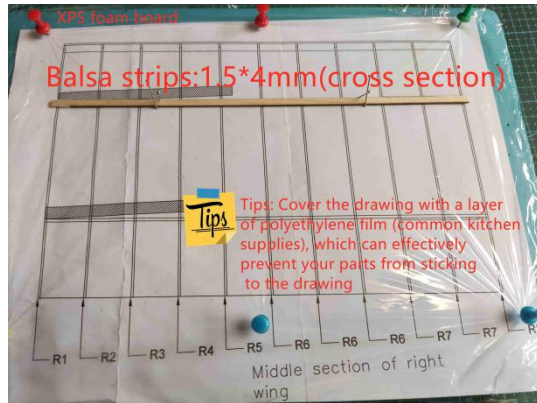
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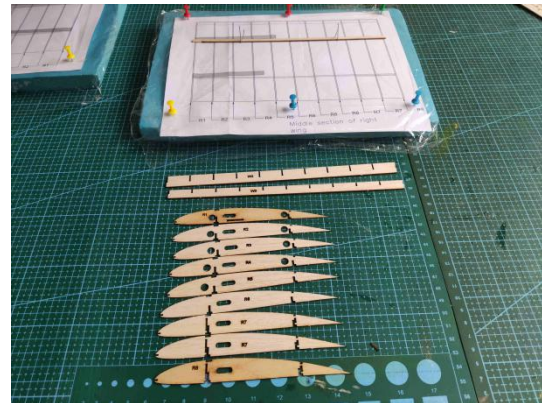
Builder's note:

Part3.Centre wing section

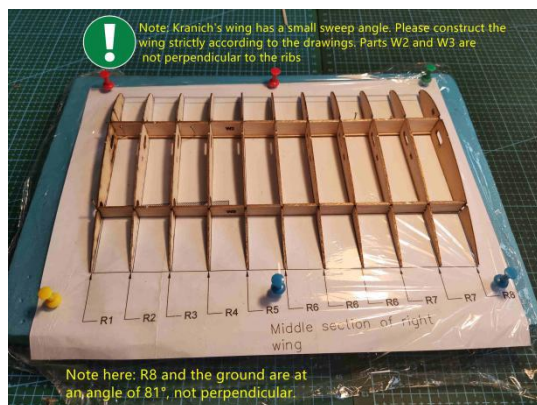
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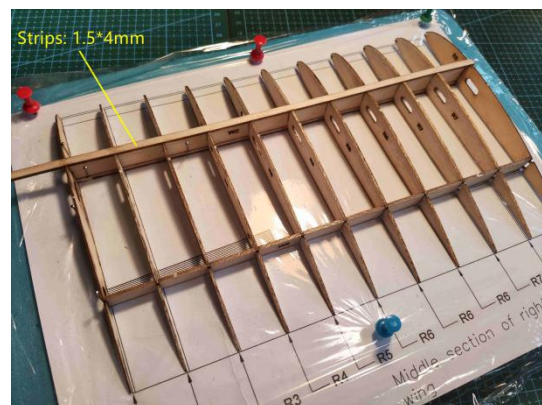
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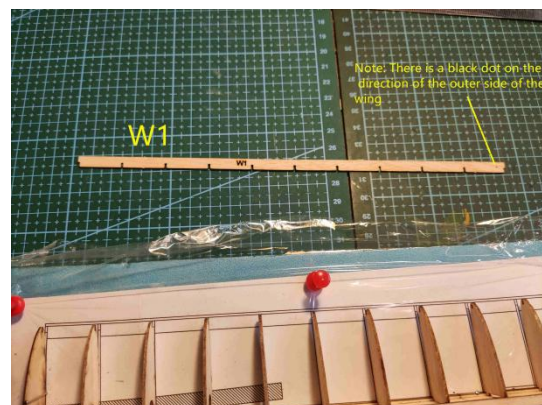
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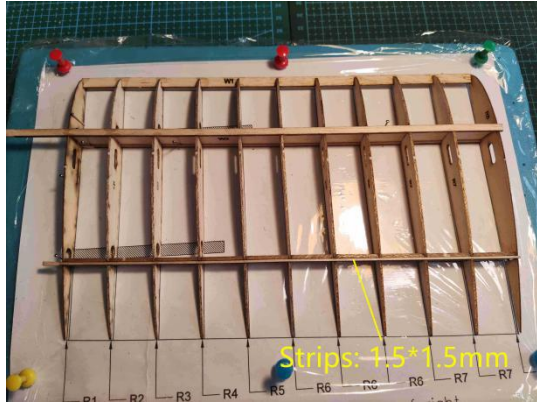
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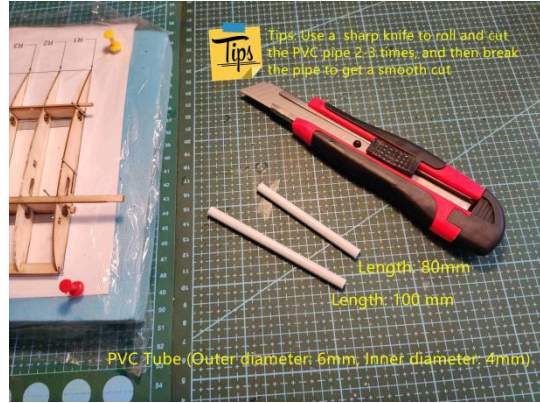
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Step7



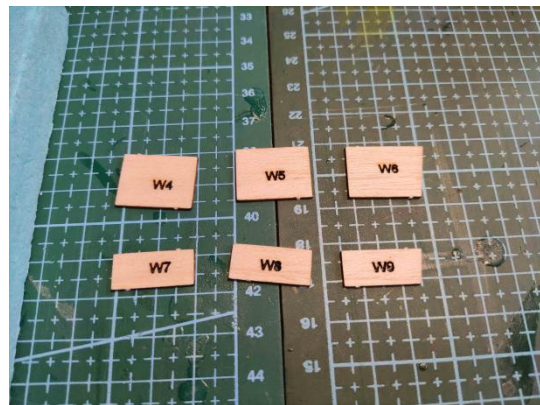
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Step9



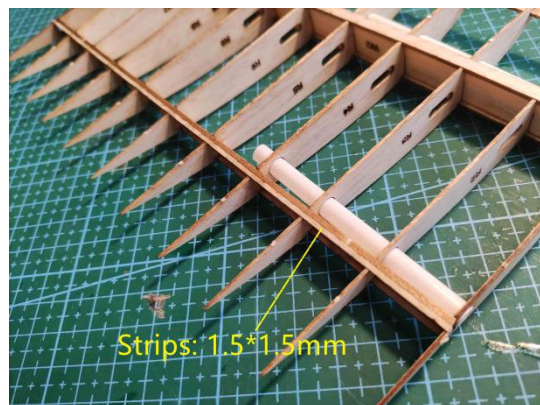
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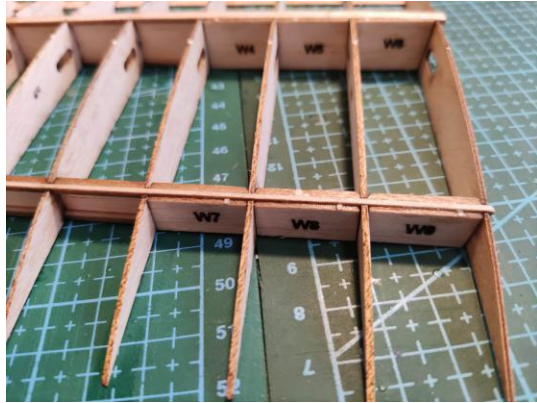
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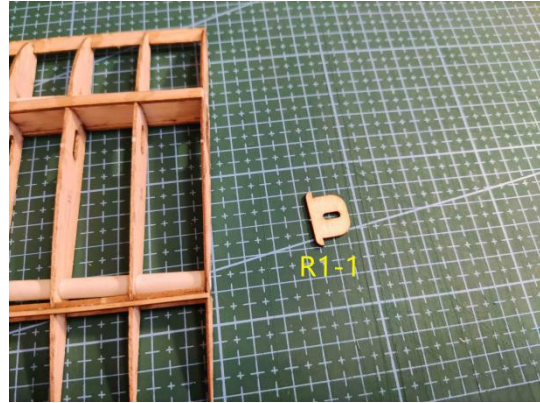
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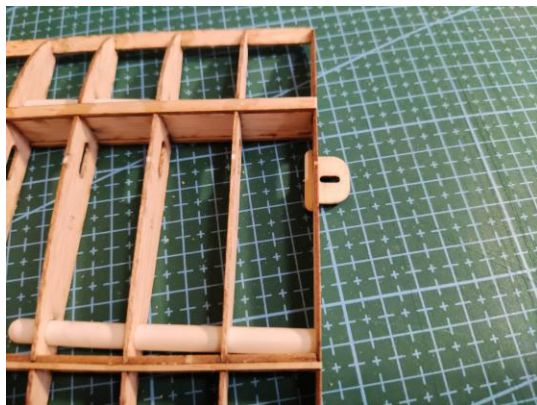
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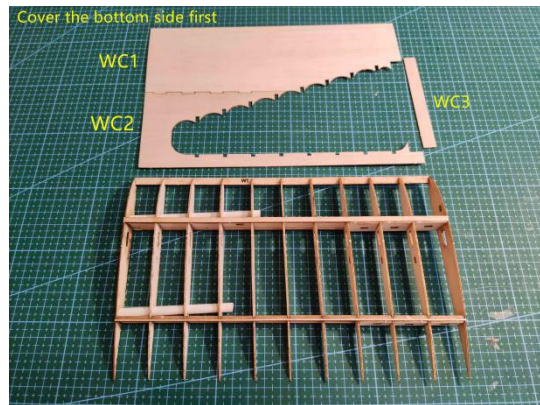
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Step15



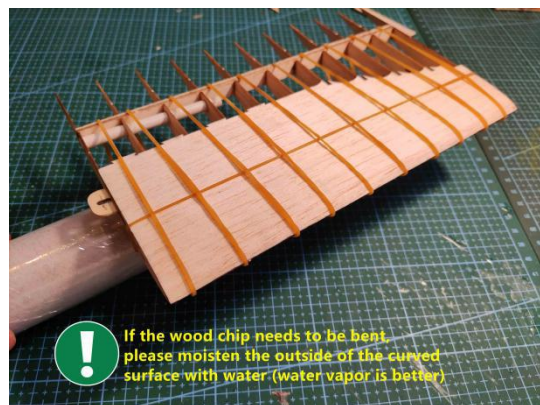
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Step17



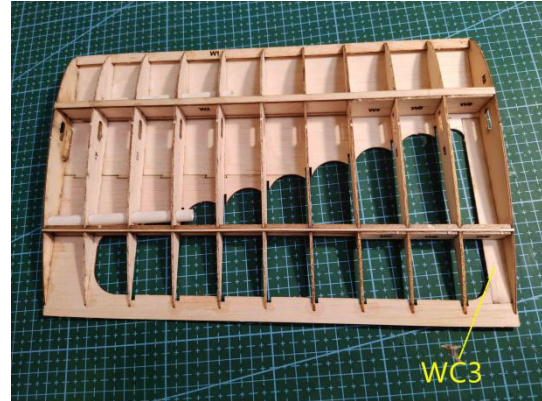
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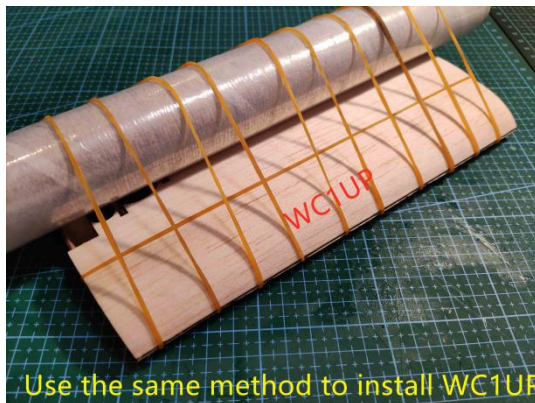
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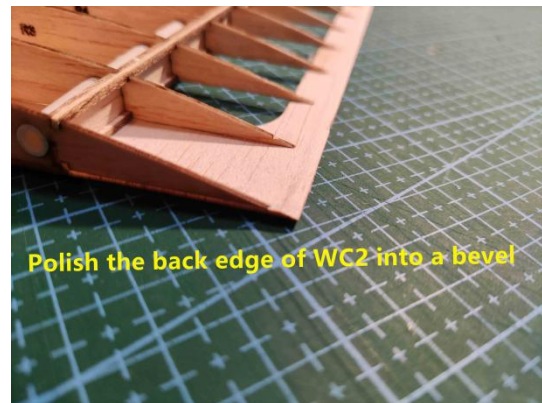
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Step21



Step22



Step23



Step24



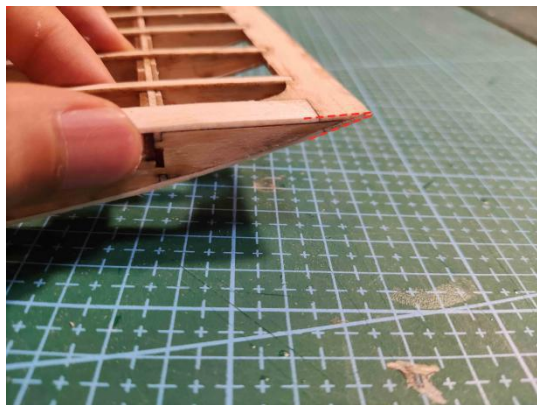
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Step26



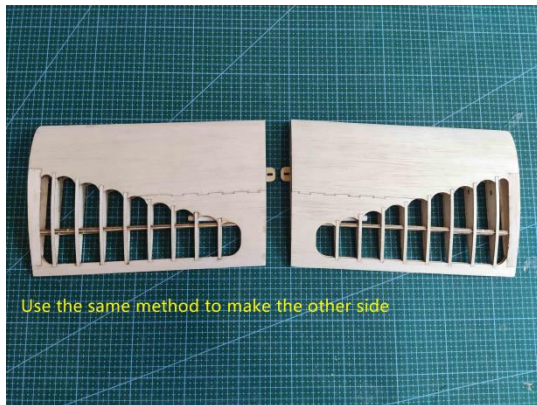
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Step28



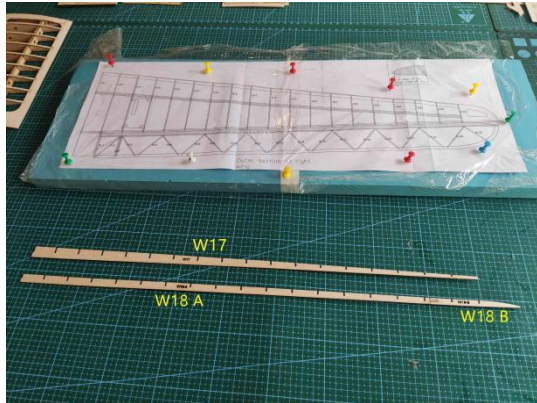
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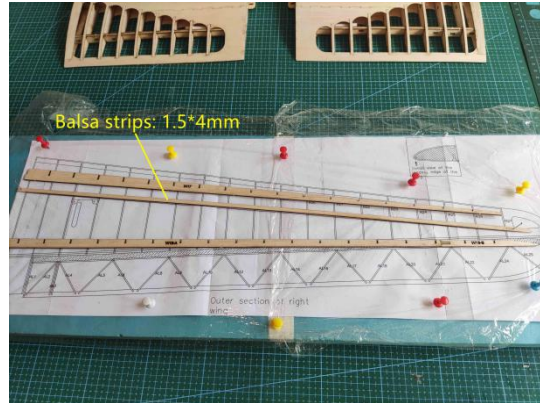
Builder's note:

Part4.Outer Wing Section

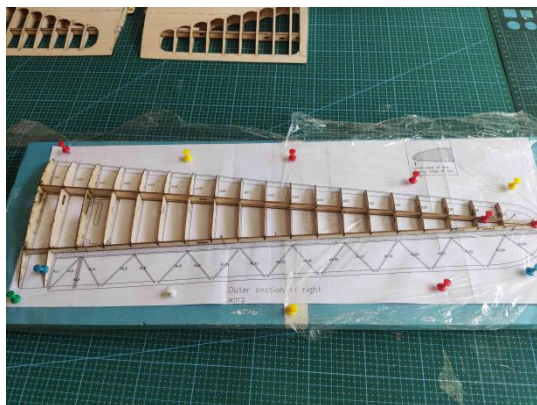
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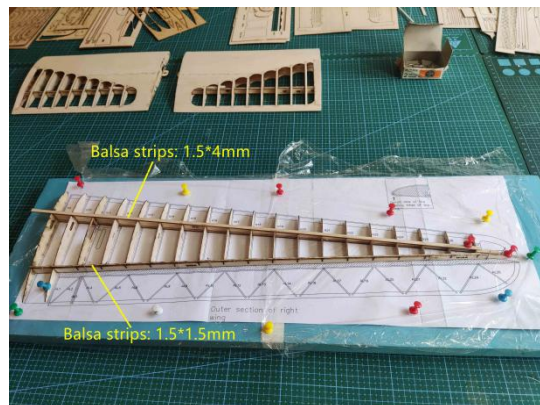
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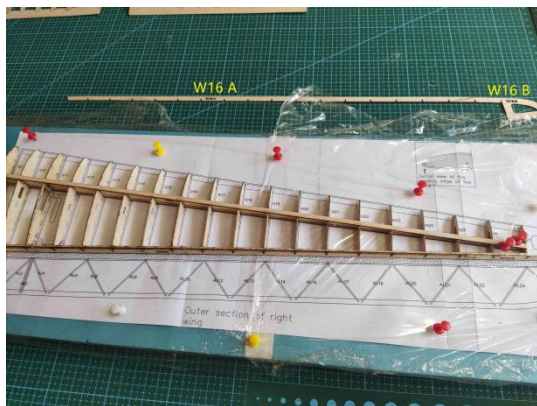
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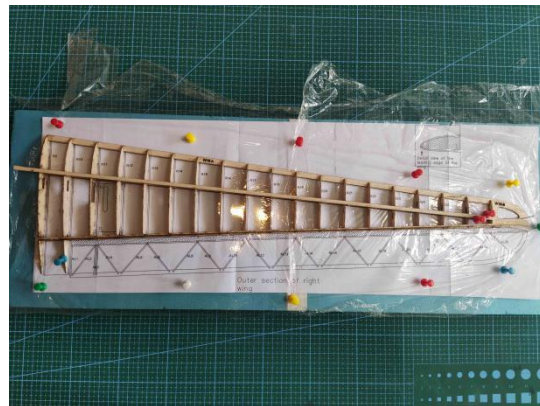
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Step5



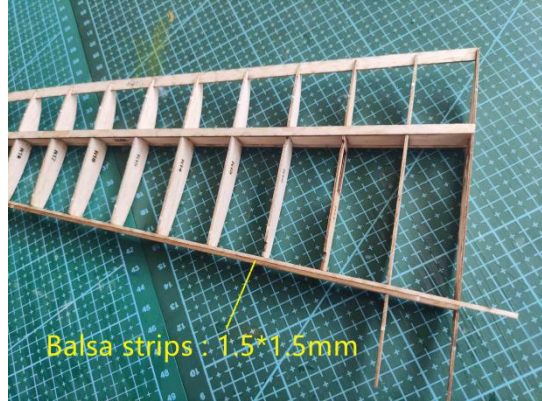
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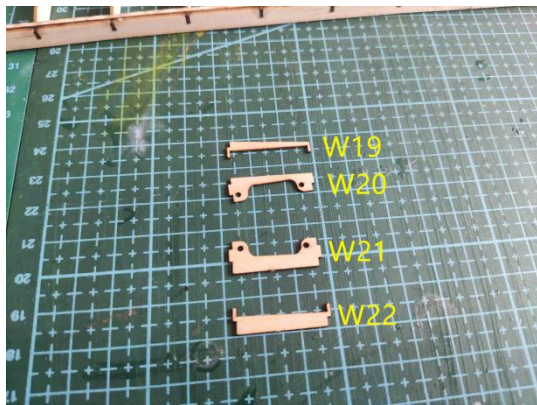
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Step8



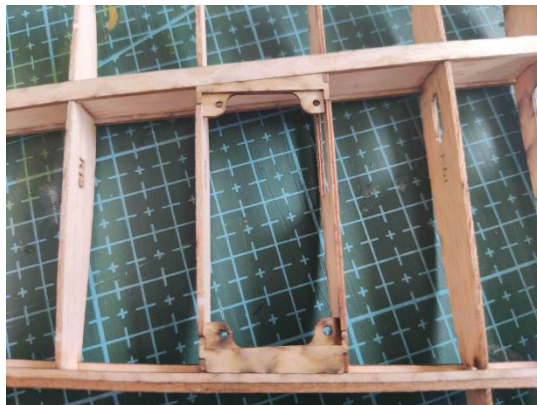
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Step10



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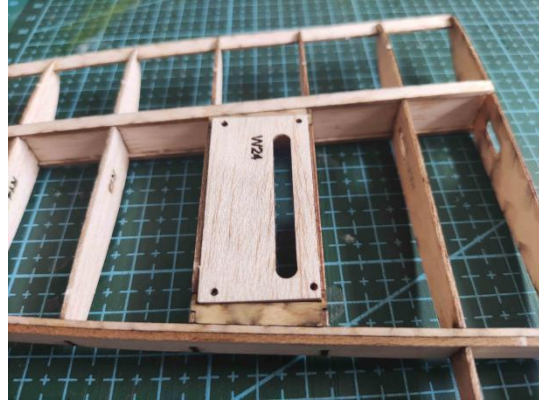
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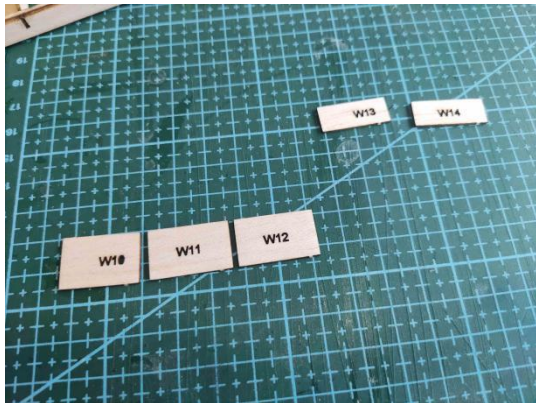
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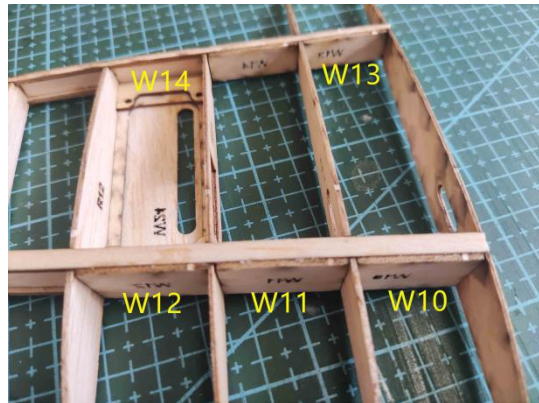
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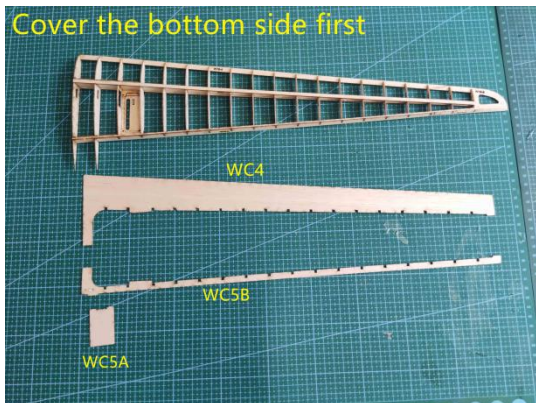
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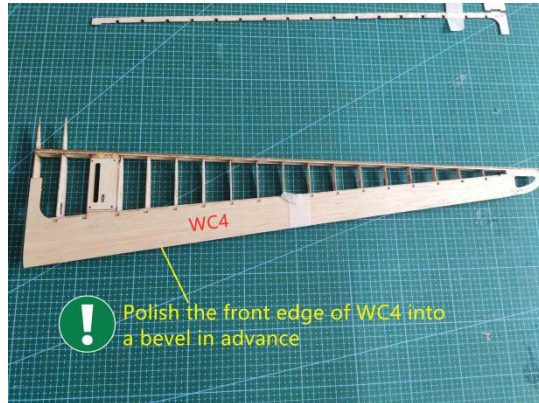
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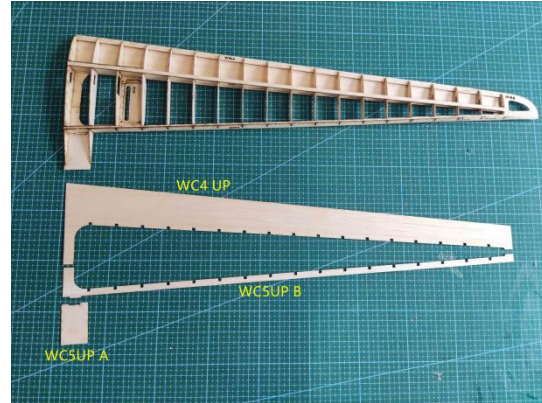
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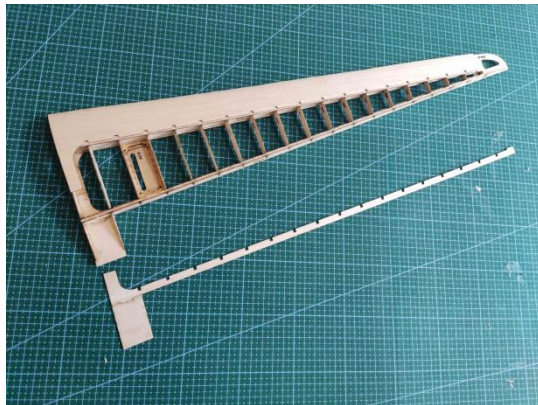
Step19



Step20



Step21



Step22



Step23



Step24



Step25



Step26



Step27



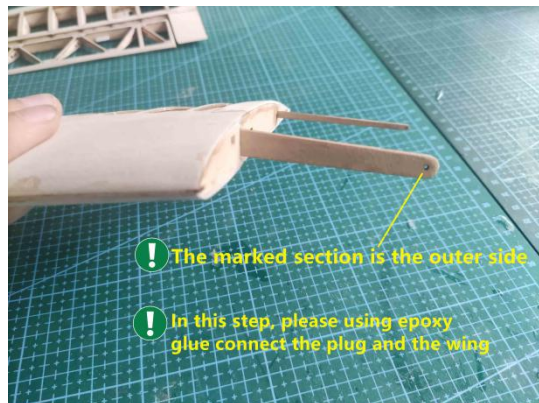
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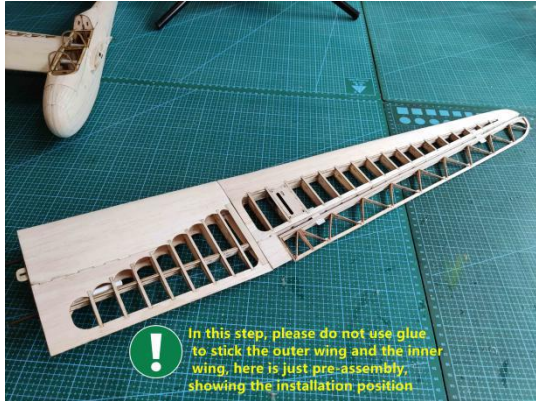
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Step30



Step31



Step32



Step33



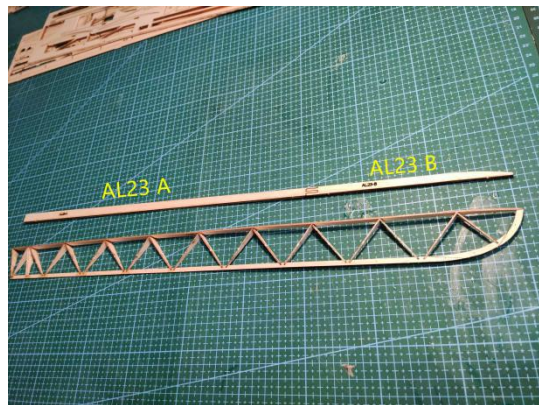
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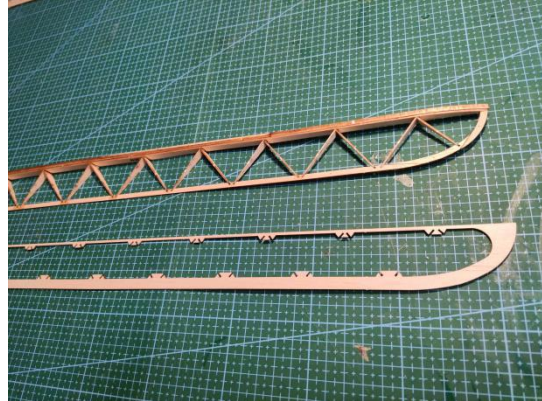
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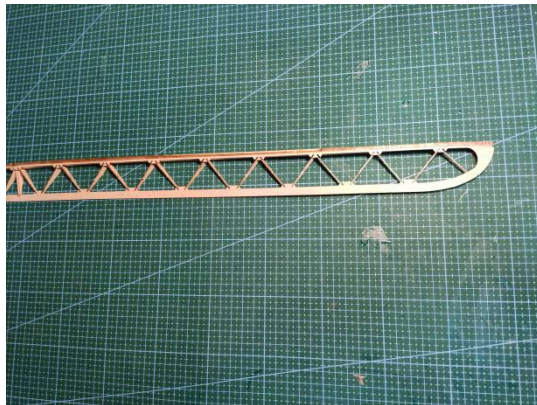
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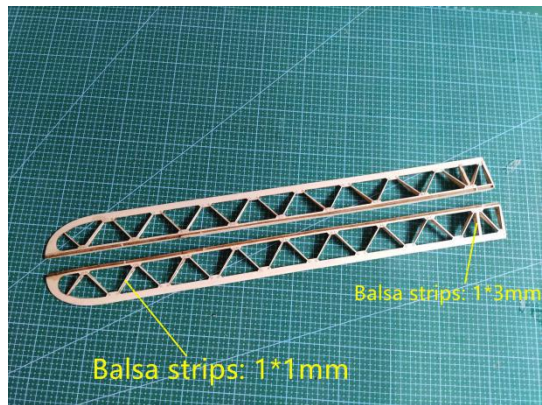
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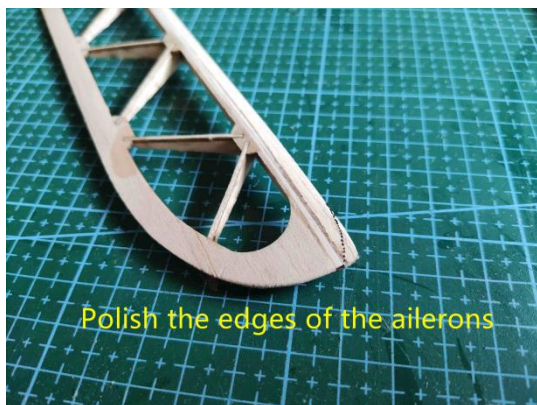
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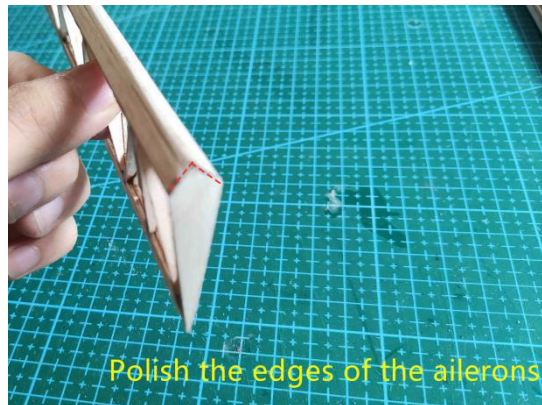
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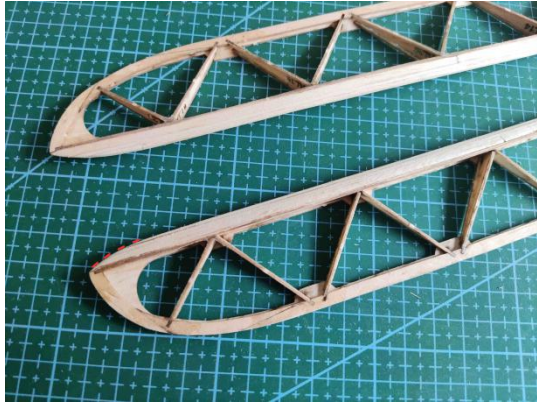
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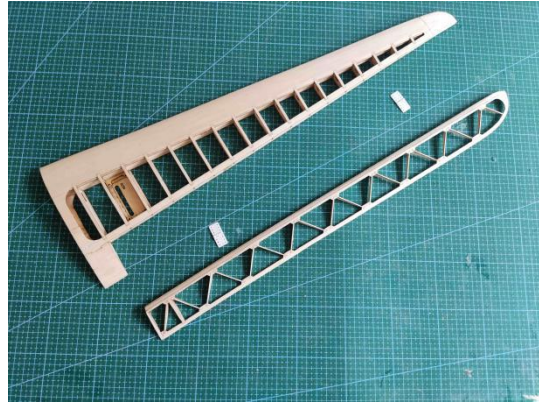
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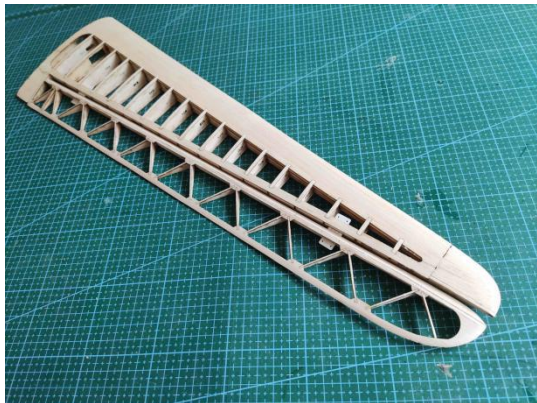
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Step44



Step45



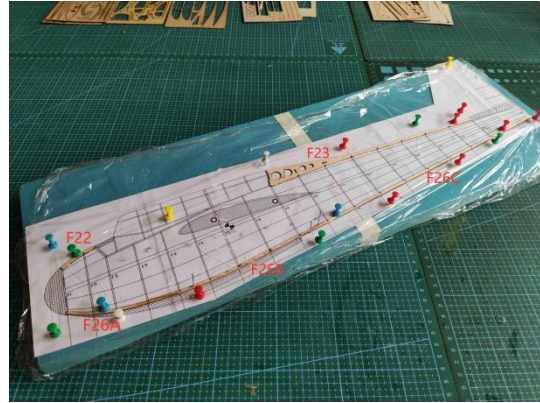
Builder's note:

Part5.Fuselage I

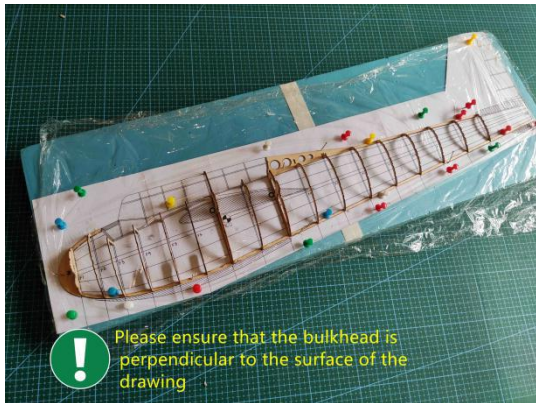
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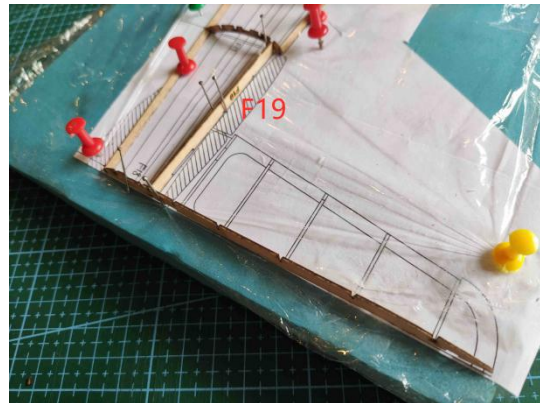
Step 2



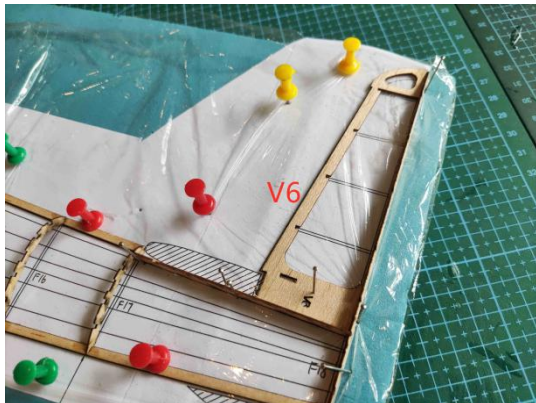
Step 3



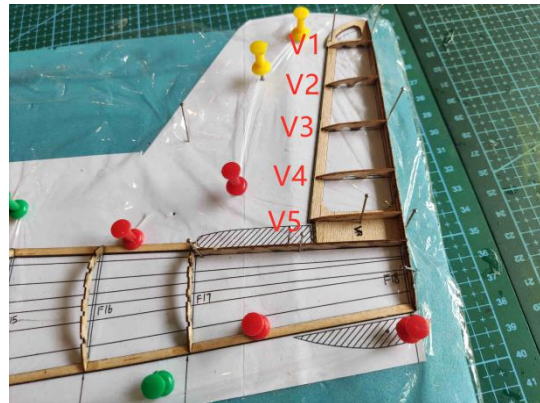
Step 4



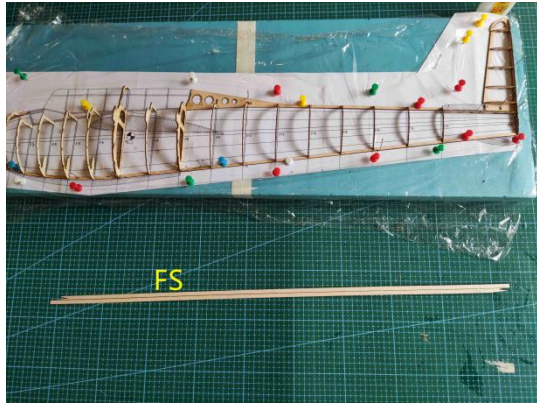
Step 5



Step 6



Step 7



Step 8



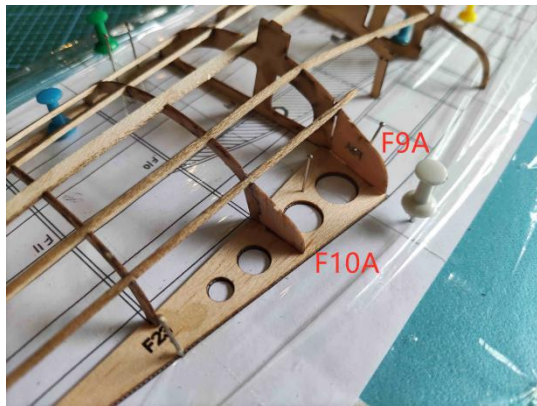
Step 9



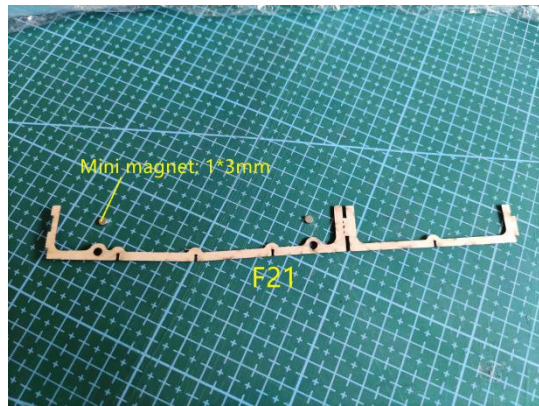
Step 10



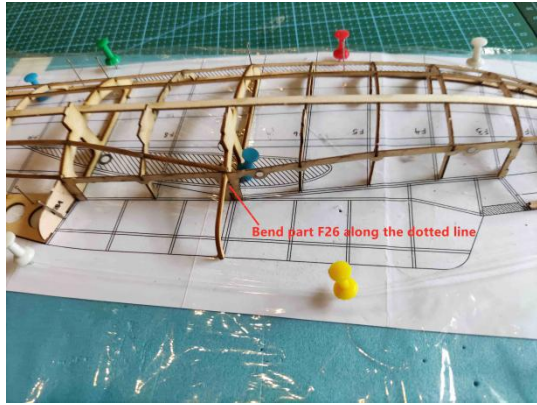
Step 11



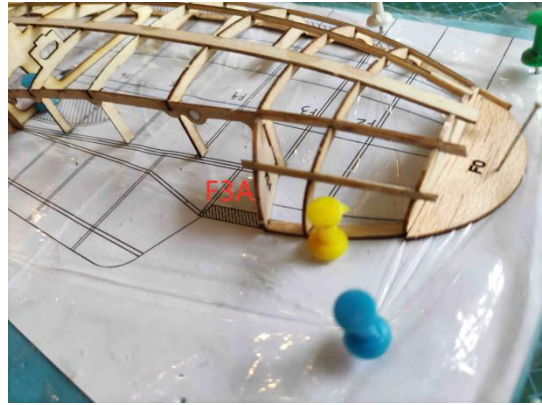
Step 12



Step 13



Step 14



Step 15



Step 16



Step 17



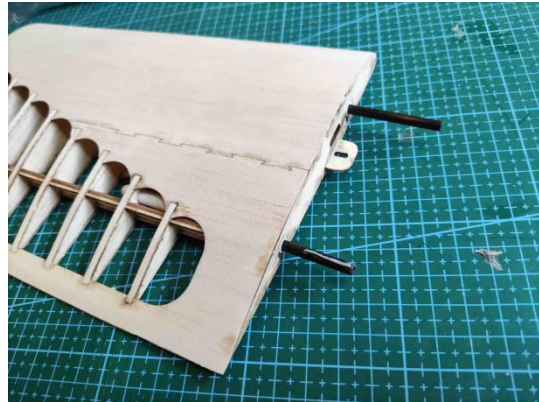
Step 18



Step 19



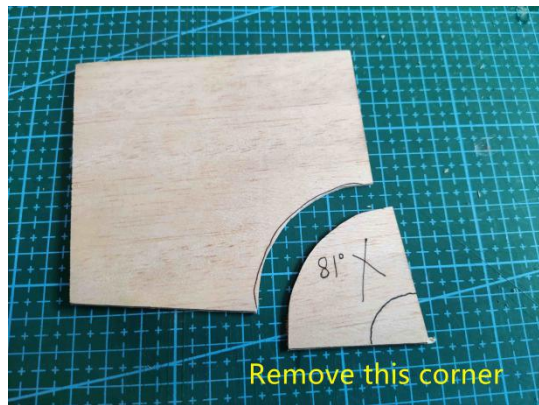
Step 20



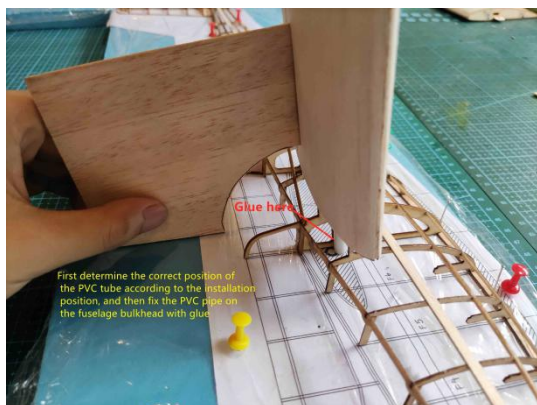
Step 21



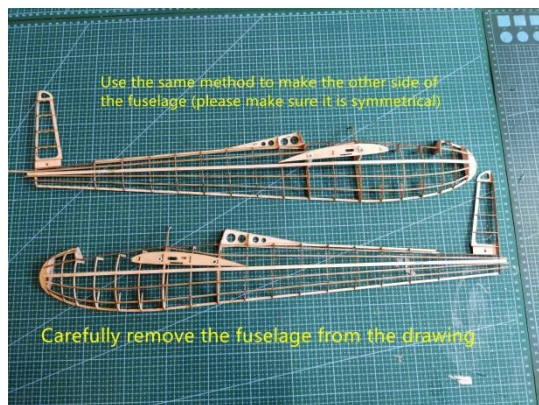
Step 22



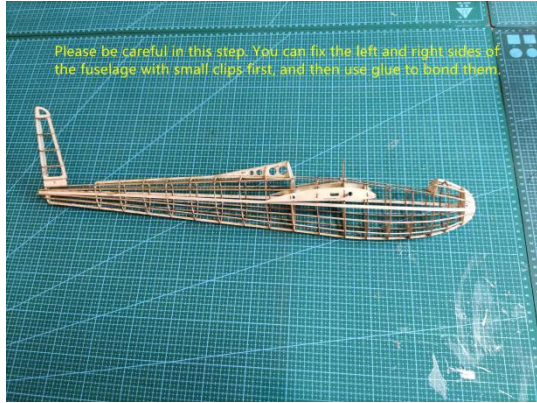
Step 23



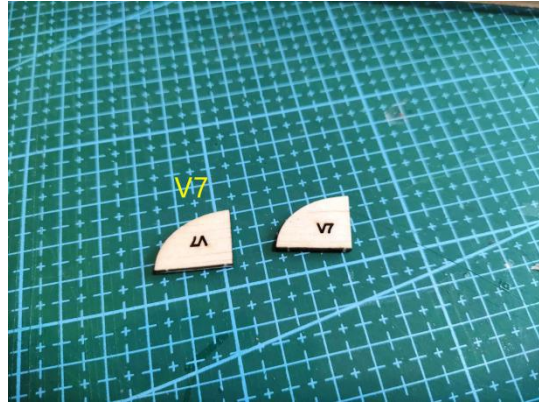
Step 24



Step 25



Step 26



Step 27



Step 28



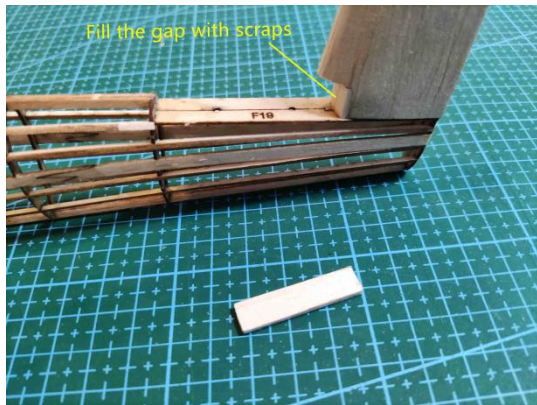
Step 29



Step 30



Step 31



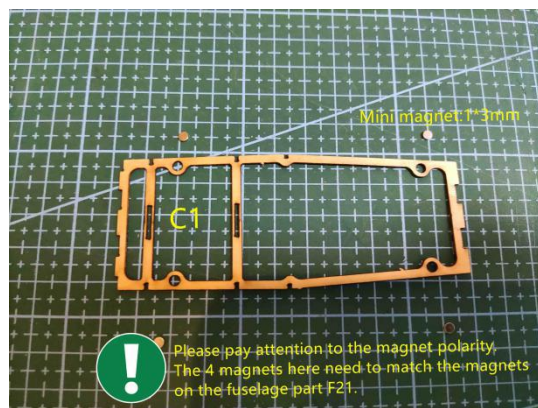
Step 32



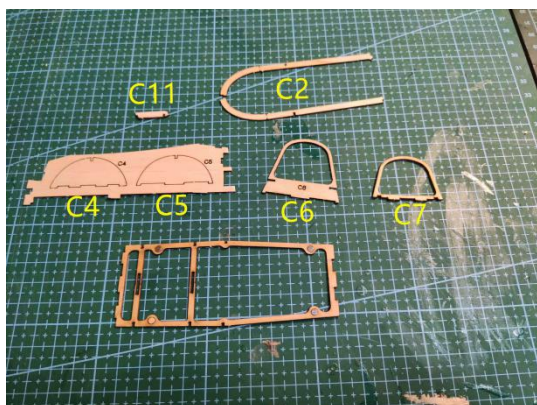
Step 33



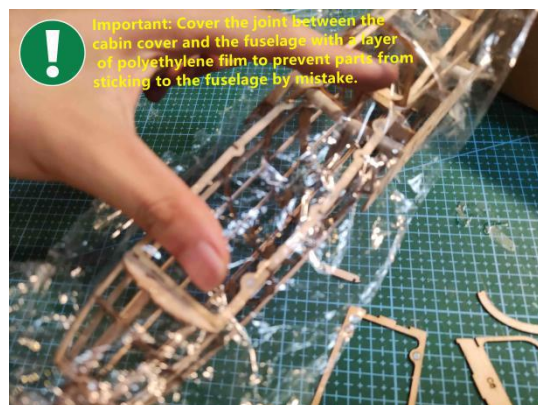
Step 34



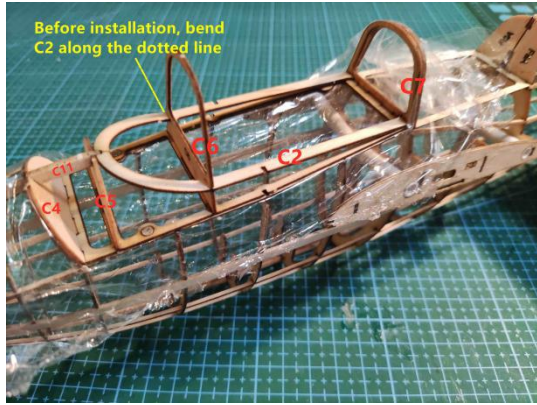
Step 35



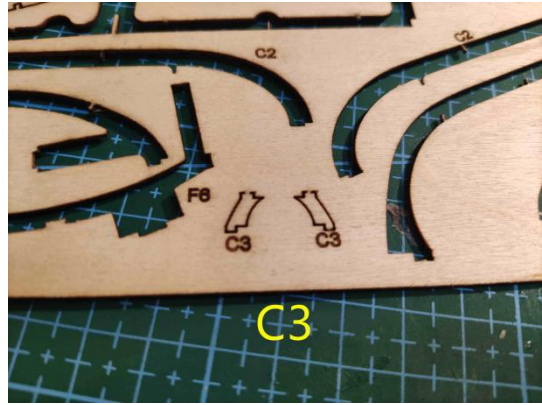
Step 36



Step 37



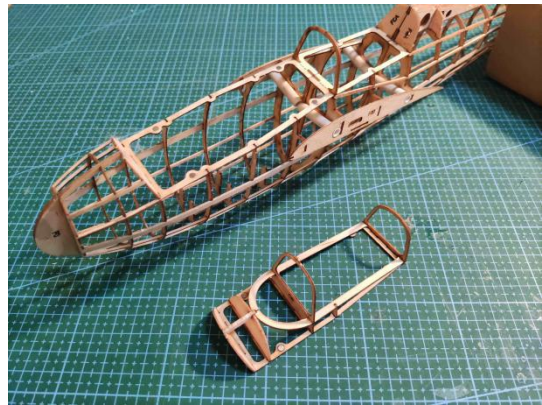
Step 38



Step 39



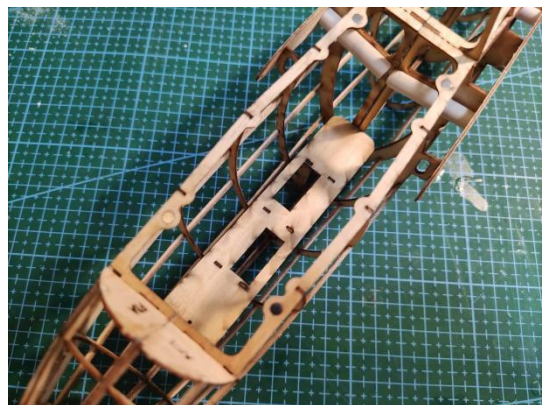
Step 40



Step 41

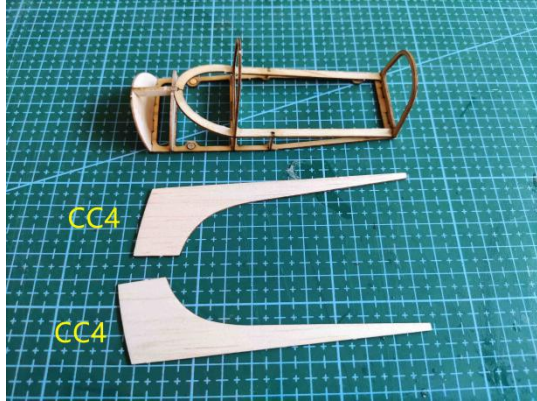


Step 42



Part6. Fuselage II

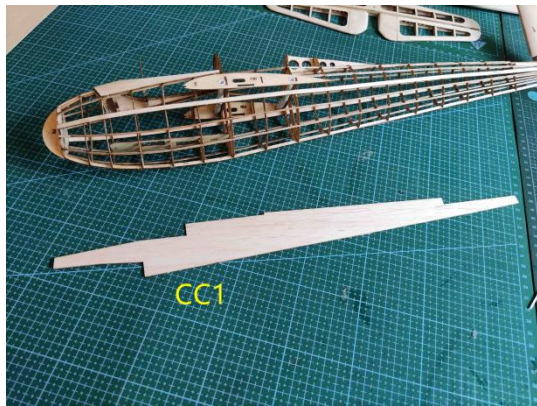
Step 1



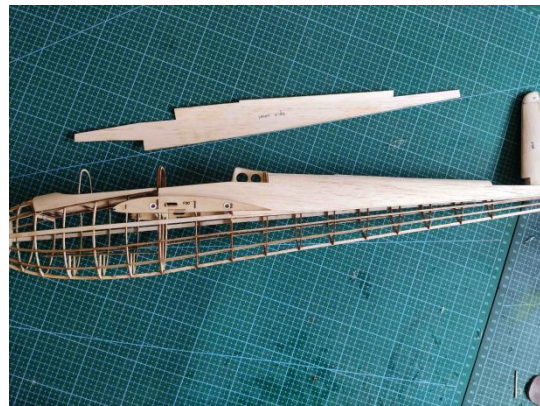
Step 2



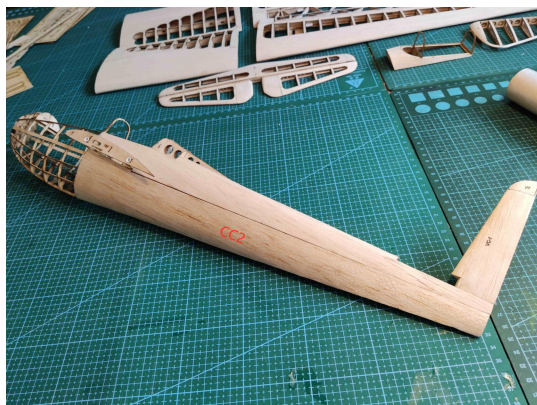
Step 3



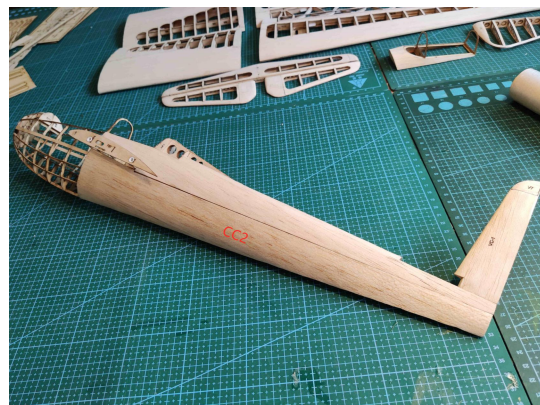
Step 4



Step 5



Step 6



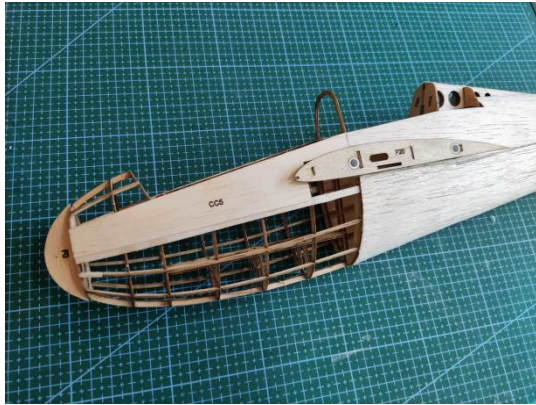
Step 7



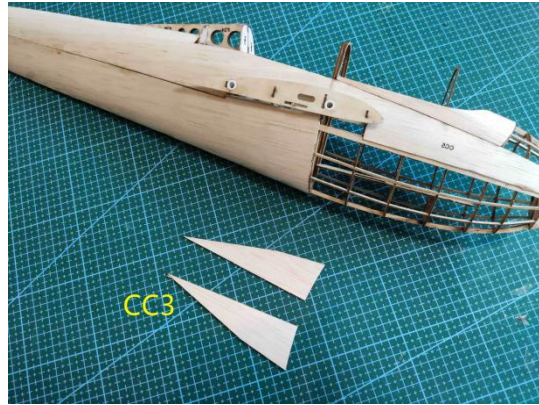
Step 8



Step 9



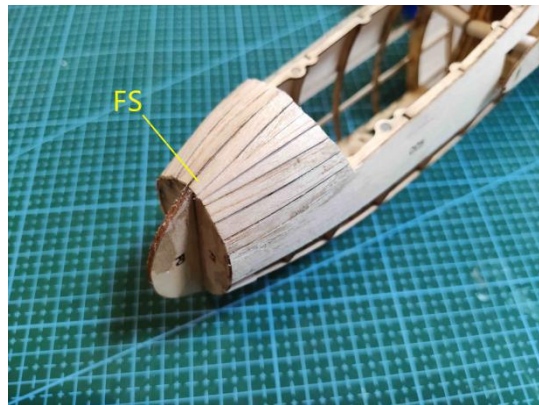
Step 10



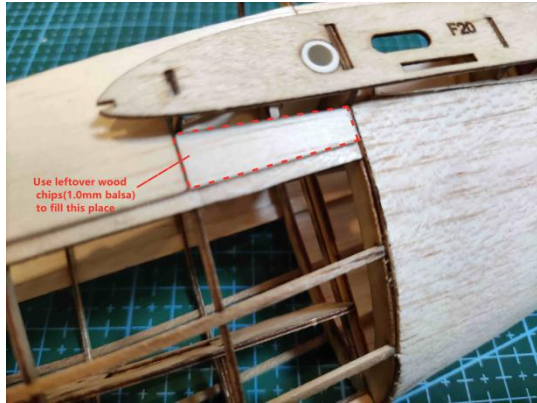
Step 11



Step 12



Step 13



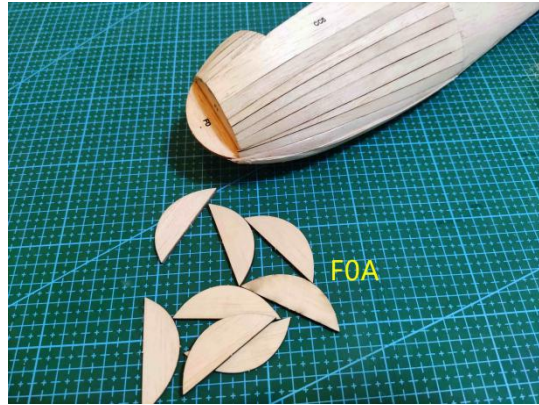
Step 14



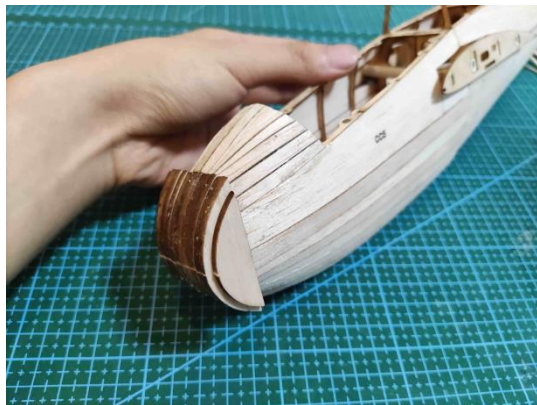
Step 15



Step 16



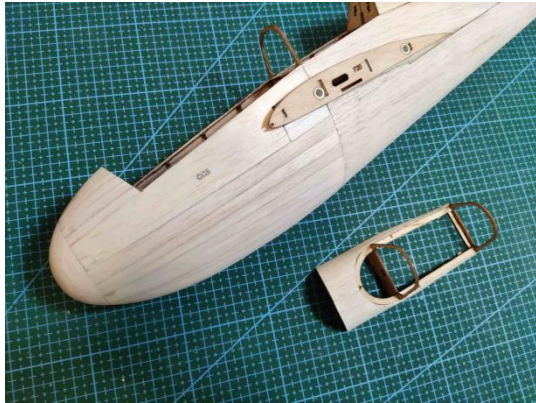
Step 17



Step 18



Step 19



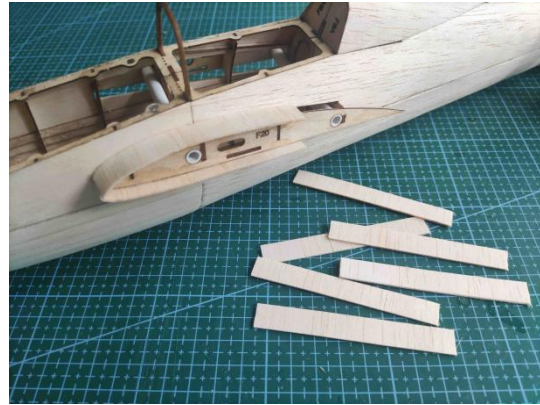
Step 20



Step 21



Step 22



Step 23



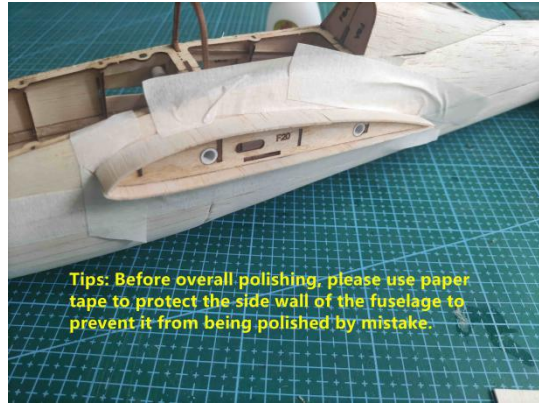
Step 24



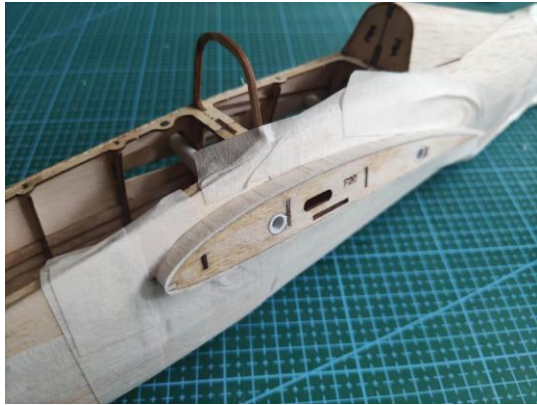
Step 25



Step 26



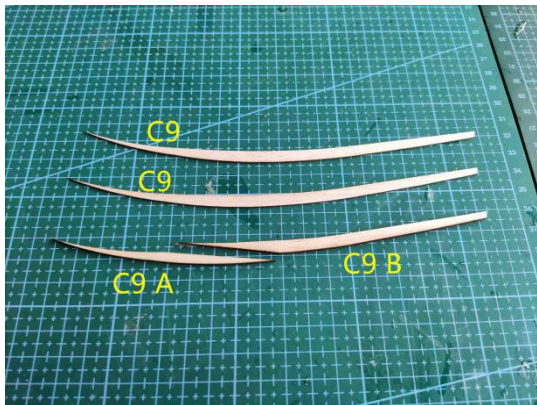
Step 27



Step 28



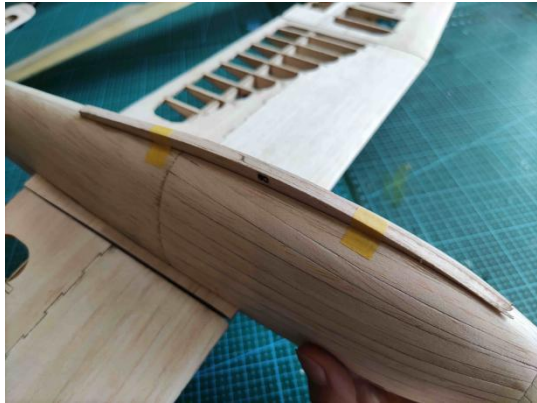
Step 29



Step 30



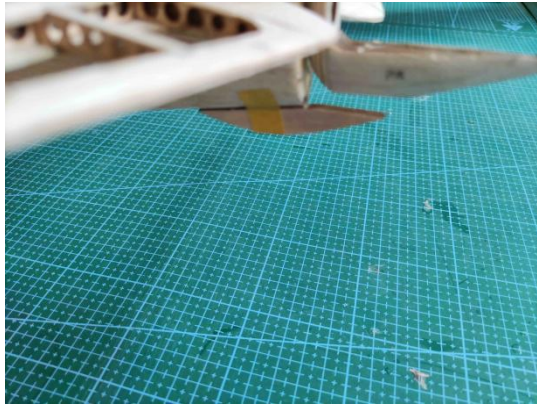
Step 31



Step 32



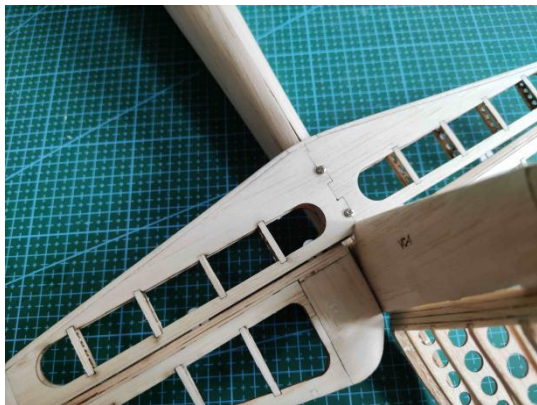
Step 33



Step 34



Step 35



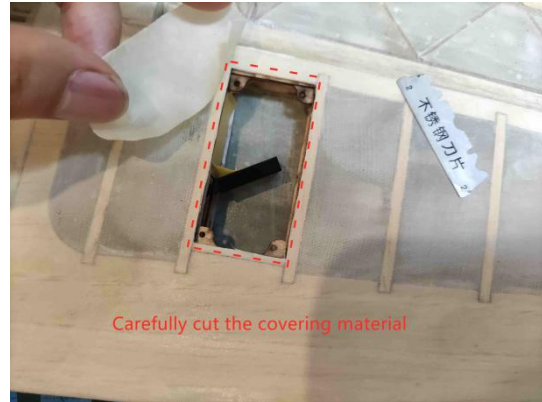
Builder's note:

Part7.Electronics

Step1



Step2



Step3



Step4



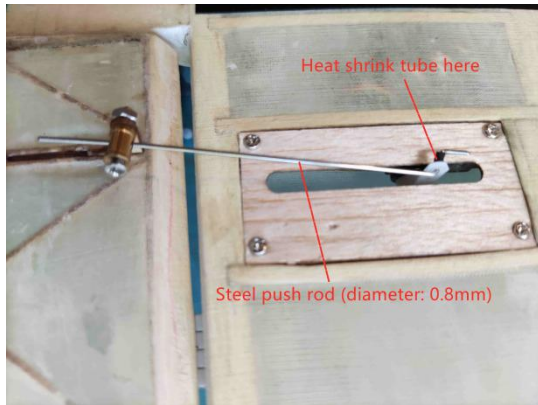
Step5



Step6



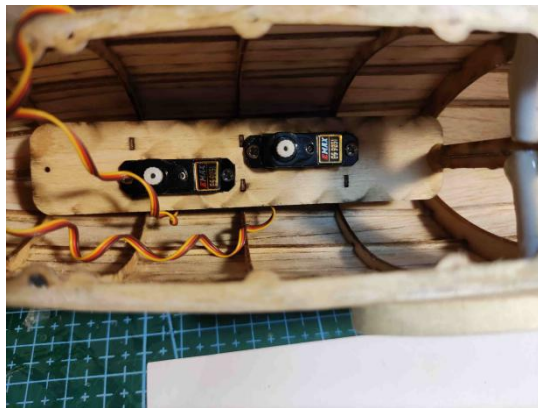
Step7



Step8



Step9



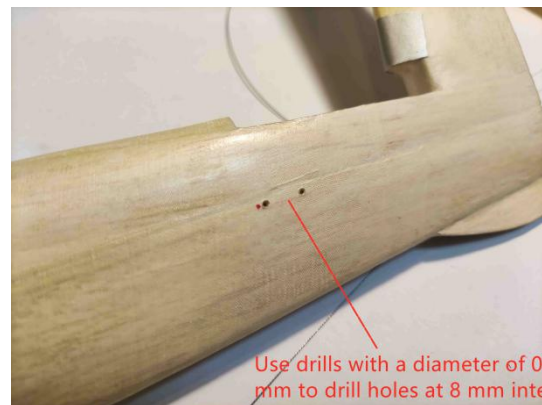
Step10



Step11



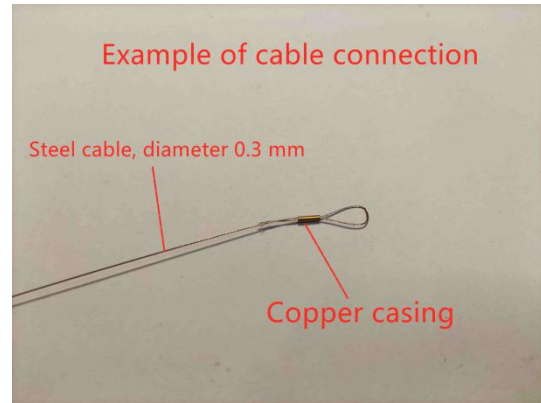
Step12



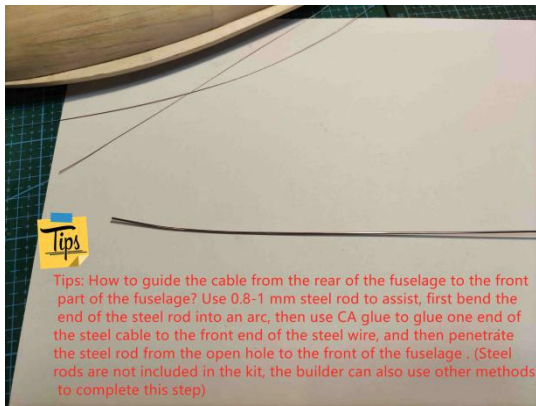
Step13



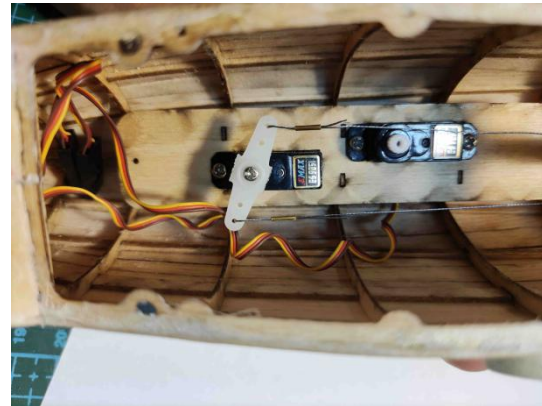
Step14



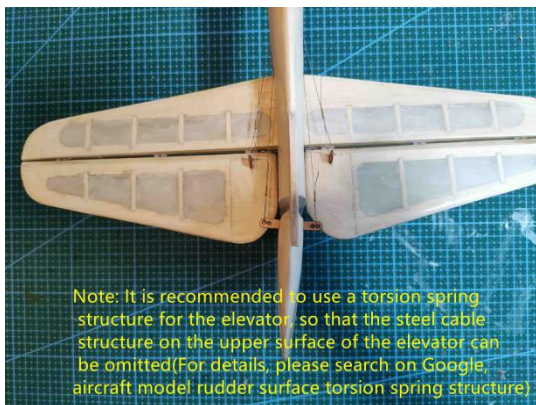
Step15



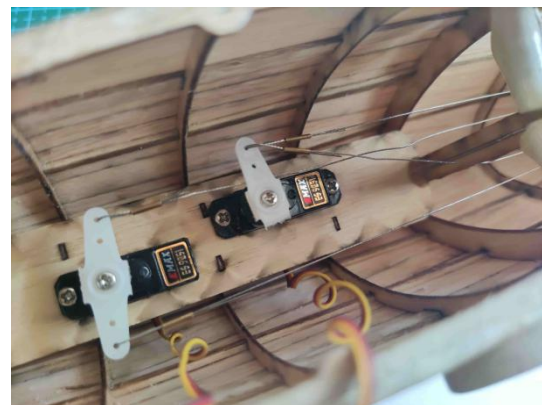
Step16



Step17



Step18



Step19



Builder's note:

Please refer to the installation drawing to debugging center of gravity

Thank you!