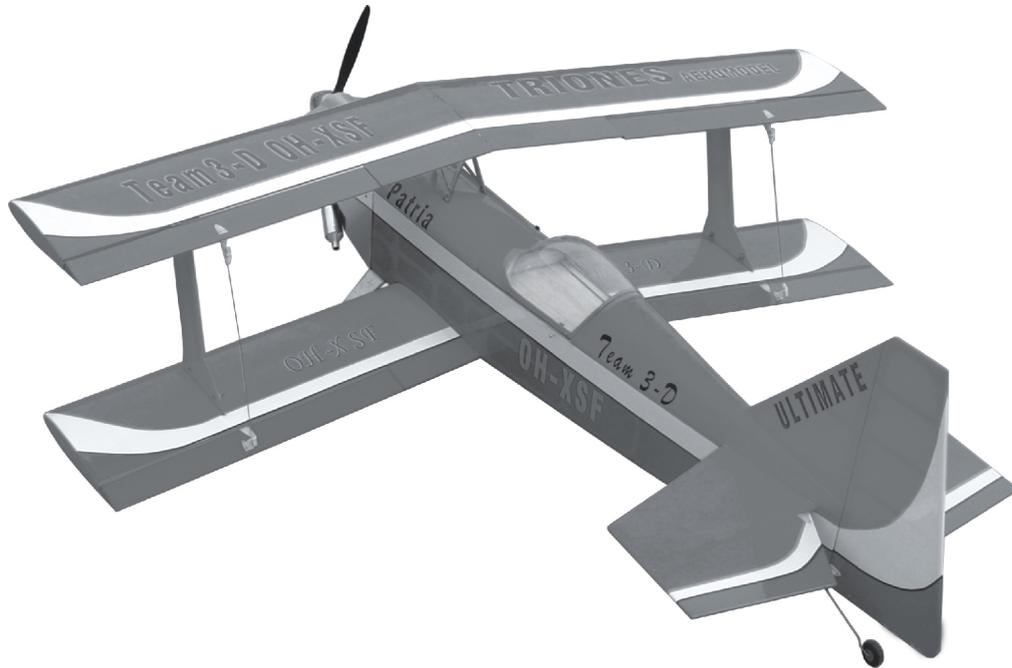


ULTIMATE



Specifications

| | |
|-----------------|--------------------|
| Wing Span | 55in/1400mm |
| Wing Area | 1023sq in/66sq dm |
| Flying Weight | 9.25 lbs/4200g |
| Fuselage Length | 59.5in/1512mm |
| Engine | 91(2c) 120(4c) |
| Radio | 4 channels 6servos |

Warning! This model is not a toy.

It is designed for maximum performance. Please seek advice if one is not familiar with this kind of engine powered precision model. Operating this model without prior preparation may cause injuries. Remember, safety is the most important thing. Always keep this instruction manual at hand for quick reference.

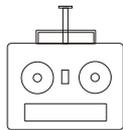
PIPER J-3 CUB

INDEX

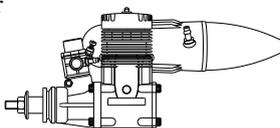
| | |
|------------------------------|--------|
| REQUIRED FOR OPERATION ----- | P.1 |
| TOOLS REQUIRED ----- | P.1 |
| BEFORE YOU BEGIN ----- | P.2 |
| PARTS LIST ----- | P.2 |
| ASSEMBLY ----- | P3-P10 |
| SAFETY PRECAUTIONS ----- | P10 |

REQUIRED FOR OPERATION (Purchase separately!)

1 4 Channel R/C Transmitter



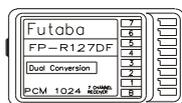
3 Motor



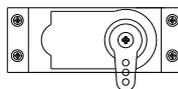
5 Propeller



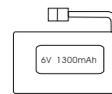
2 4 Channel Mini R/C receiver



4 Helm



6 Battery of receiver

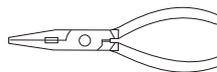


TOOLS REQUIRED (Purchase separately!)

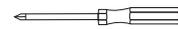
Sharp Hobby Knife



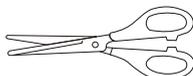
Needle Nose Pliers



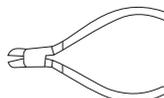
Screw Driver



Scissors



Wire Cutters



Awl



BEFORE YOU BEGIN

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 defective or missing parts contact your local dealer. Please DRY FIT and check for defective for all parts that will require CA or Epoxy for final assembly. Any parts you find to be defective after the gluing process may be difficult to remove for warranty replacement. The manufacturer will replace any defective parts, but will be difficult to extend to the good parts that are good before gluing to defective parts during assembly.
3. Symbols used throughout this instruction manual, comprise:



Apply P.A. Glue



Pay close attention here



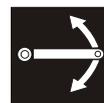
Drill holes with the specified diameter (here: 2mm)



Apply C.A. Glue



Cut off shaded portion



Ensure smooth non-binding movement while assembling



Apply A.B. Glue

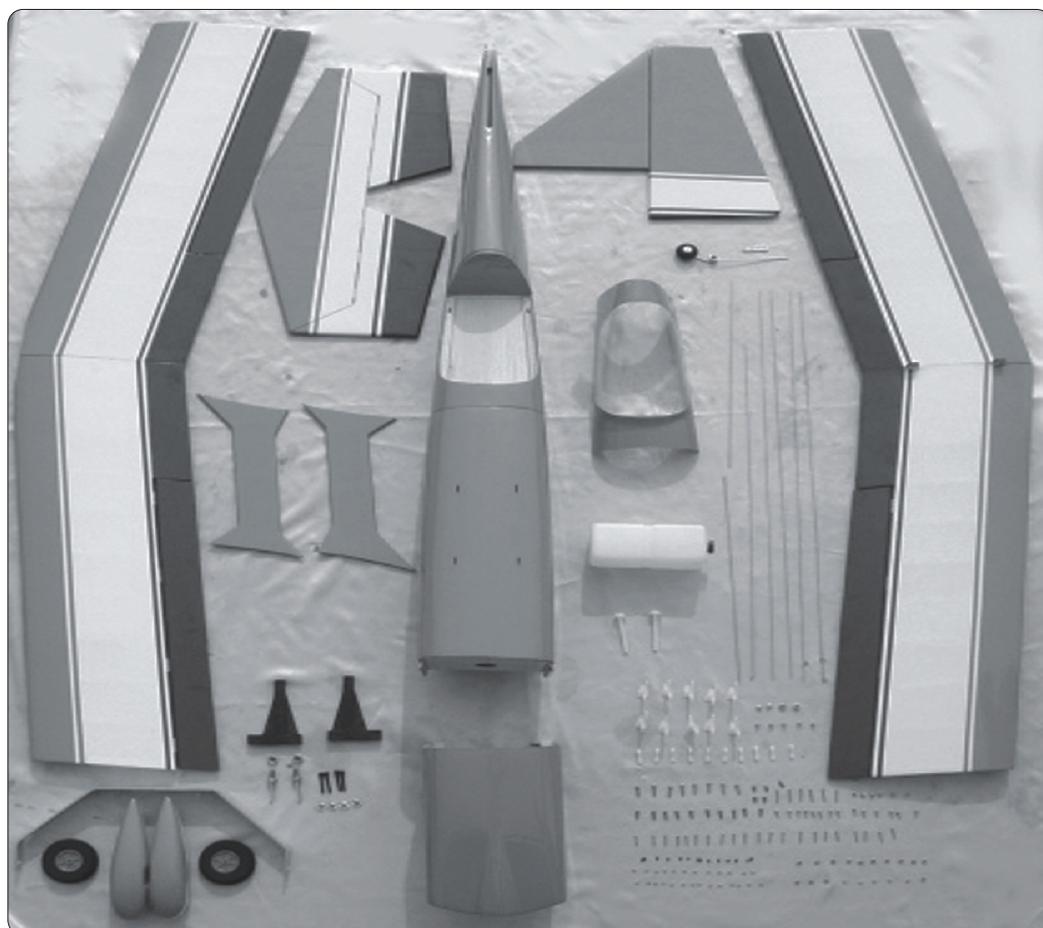


Purchase separately



Assemble left and right sides the same way

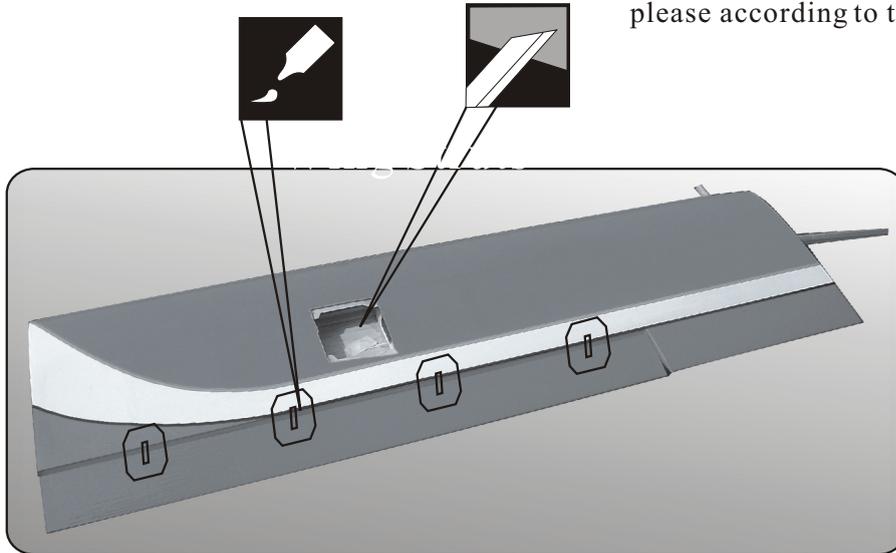
Parts List



ASSEMBLY

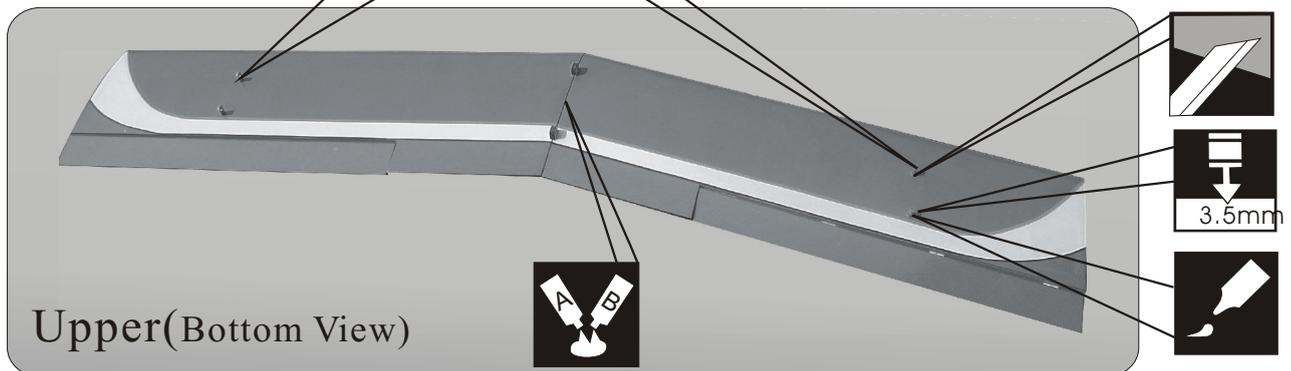
Main Wing

Peel off shaded portion covering film, please according to the diagram.



CABANE MOUNT

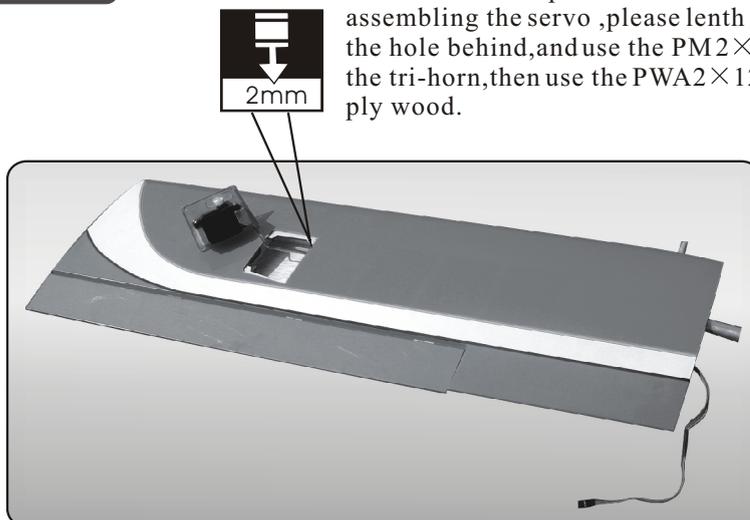
Please drill the 3.5mm or little big hole, and insert the screw into. then apply the P.A glue .



Upper(Bottom View)

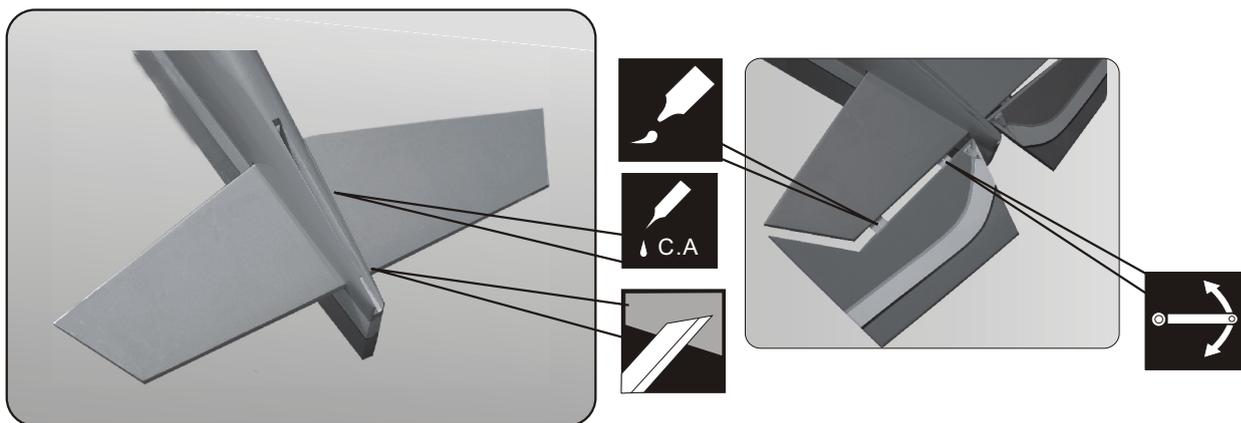
Aileron servo

Please drill 2mm pilot holes for the model tri-horn. When assembling the servo, please length the leads and go through the hole behind, and use the PM2×25mm screw assembled the tri-horn, then use the PWA2×12mm screw to install the ply wood.



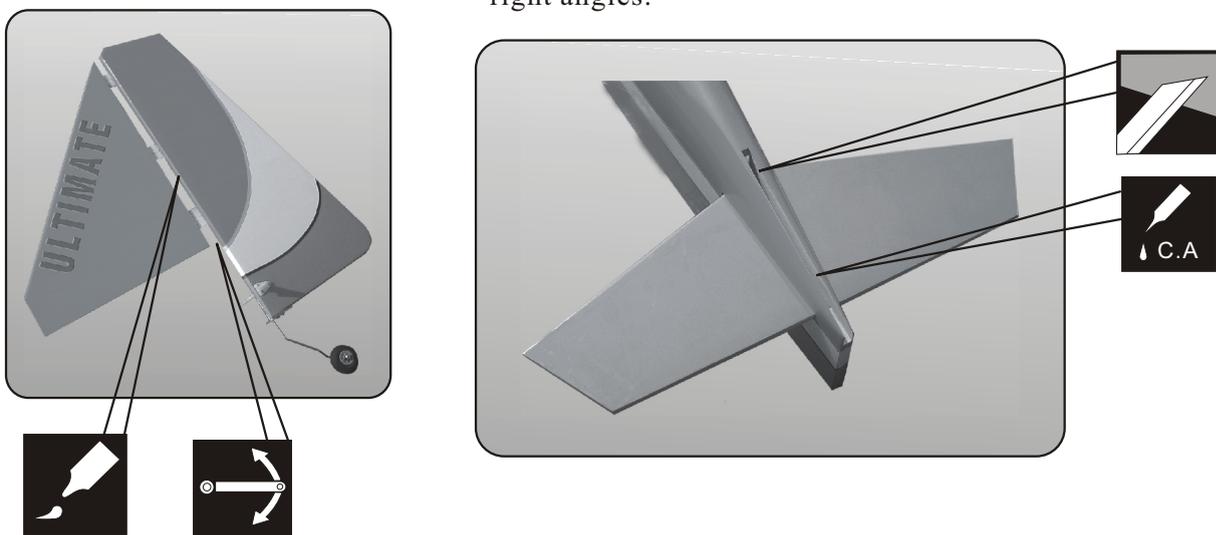
Stabilizer/Elevator

Insert the elevator into the hole at the end of the fuselage, according to the diagram.

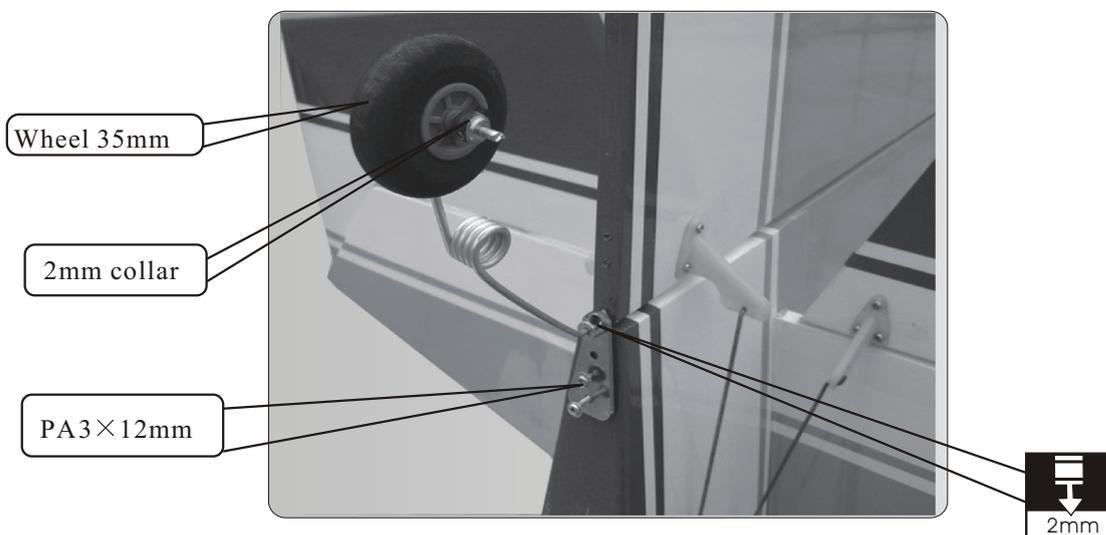


Vertical Fin/Rudder

Insert the rudder into the end of the fuselage, make sure vertical fin and stabilizer are at right angles.



Tail Landing Gear



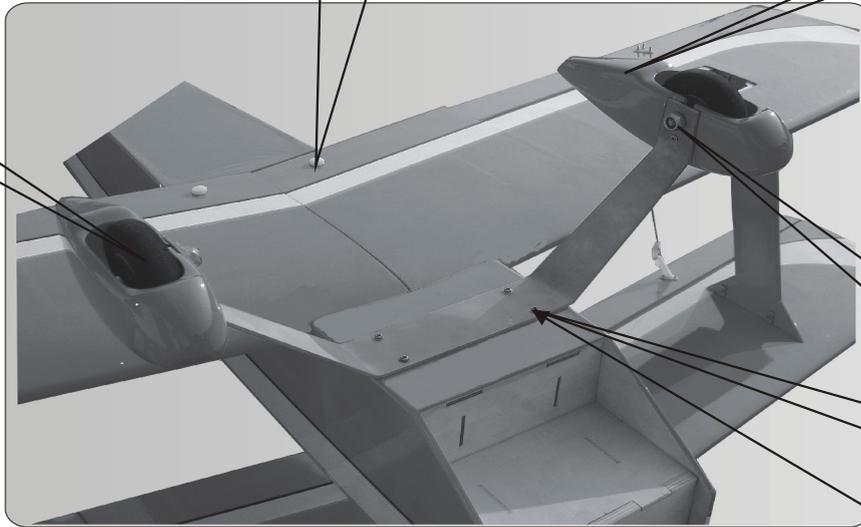
Main Landing Gear

Please assemble the main landing gear according to the diagram.

Use the 4×60mm nylon screw to keep the wing

In the assembly, use the 4mm collar, set screw 3mm and the washer 3mm

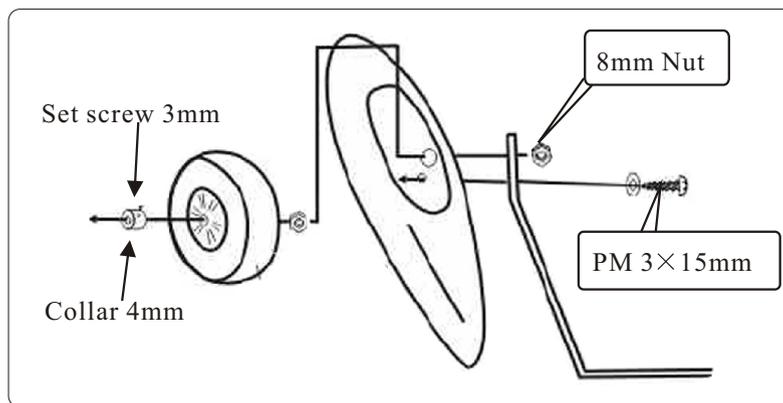
Wheel 70mm



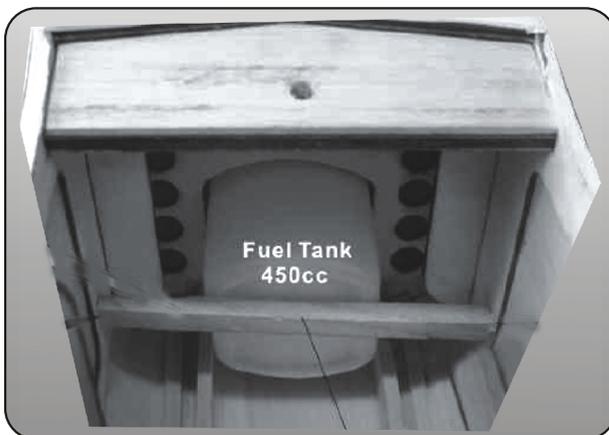
Nut 8mm



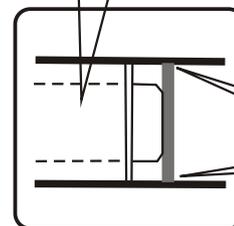
PM 3×15mm



Fuel Tank

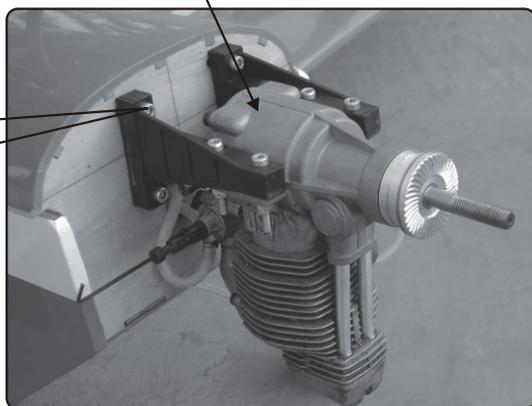


Fuel tank



Engine

Screw KM 4×30mm/captive nut 4mm



Please install the engine according to the diagram

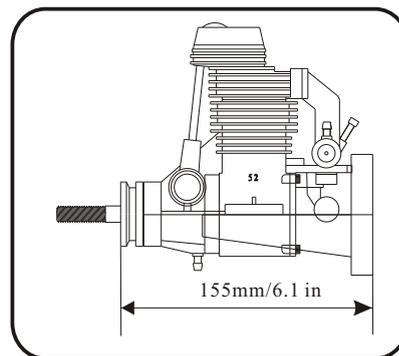
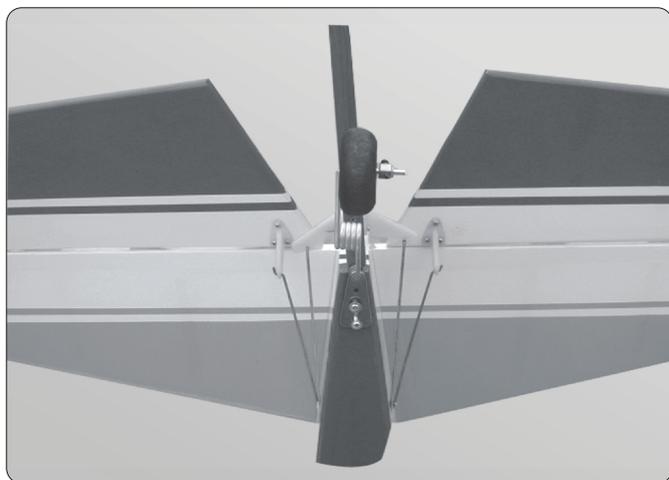


Illustration is for inverted mounting. You can mount the engine upright or side ways simply by rotation the engine mount. Thrust angles will not be affected.

Elevator and Rudder Pushrod



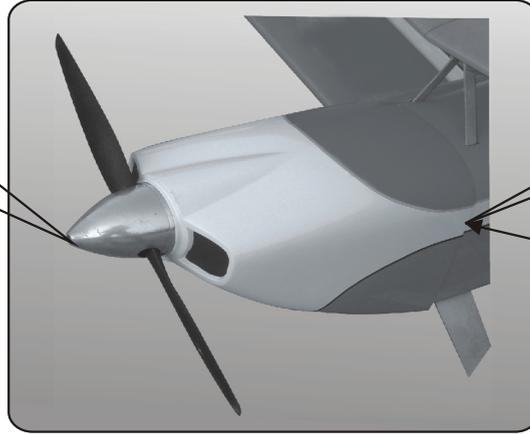
Please drill 2mm pilot hole for tri-horn. please assemble the elevator and the rudder pushrod according to the diagram.



Please assemble two tri-horn for the elevator and the rudder servo separately

Cowling&Spinner

Spinner ϕ 70mm



PWA 2×12 mm

Radio Equipment

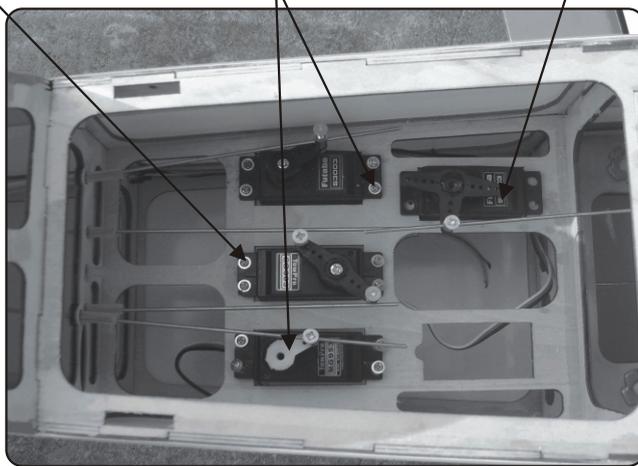
Install and arrange the servo as shown in the diagram.

Please settle the canopy like the diagram

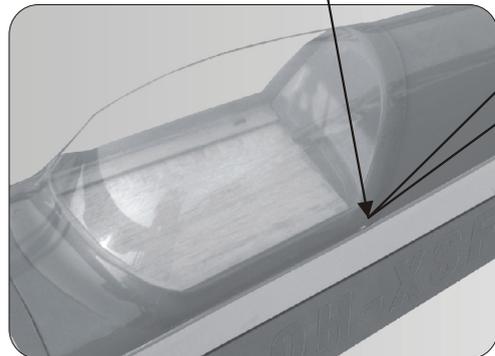
Rudder servo

Elevate servo

Throttle servo

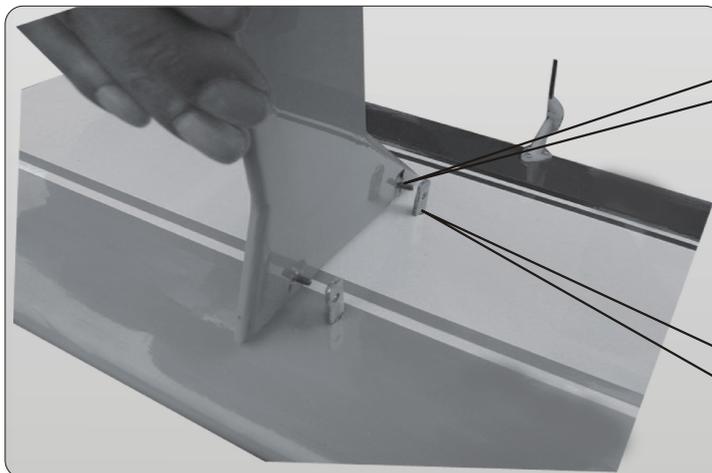


PWA 2×8 mm



Main wing strut

First assemble the screw for keeping the wing. Please settle the strut according to the diagram.

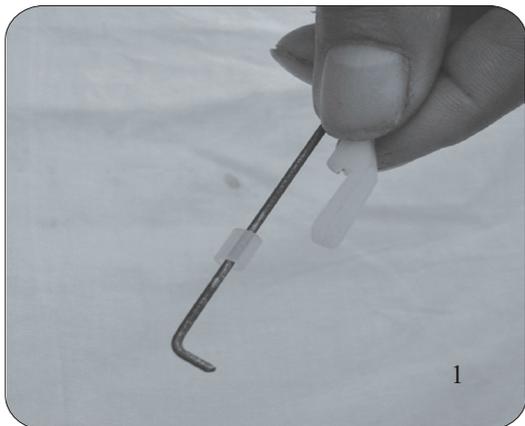


Round head screw 3×14 mm

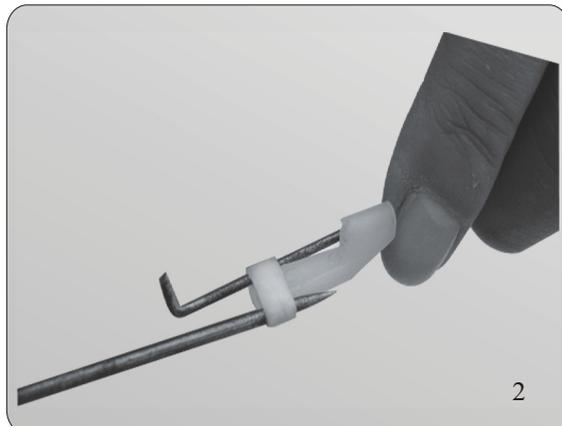


Main wing

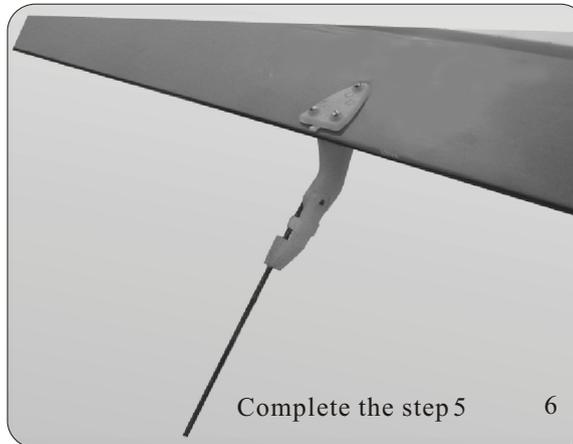
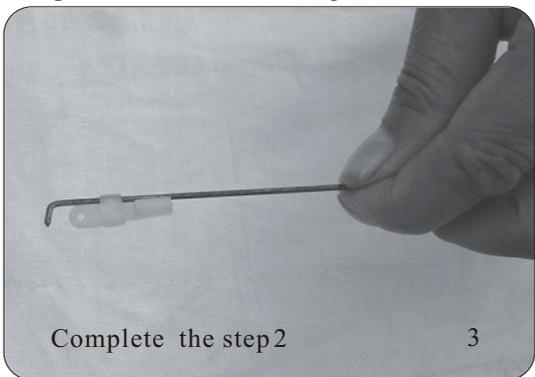
Please assemble the main wing tri-horn like the diagrams



Make the pushrod like "7", then put into the plastic tube like the diagram.



Put the tri-horn into the plastic tube



Connect the pushrod between the upper and lower wing



Complete the assembly

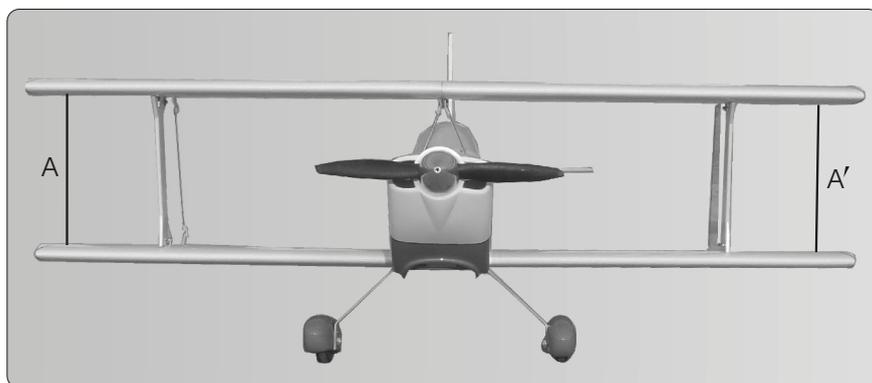
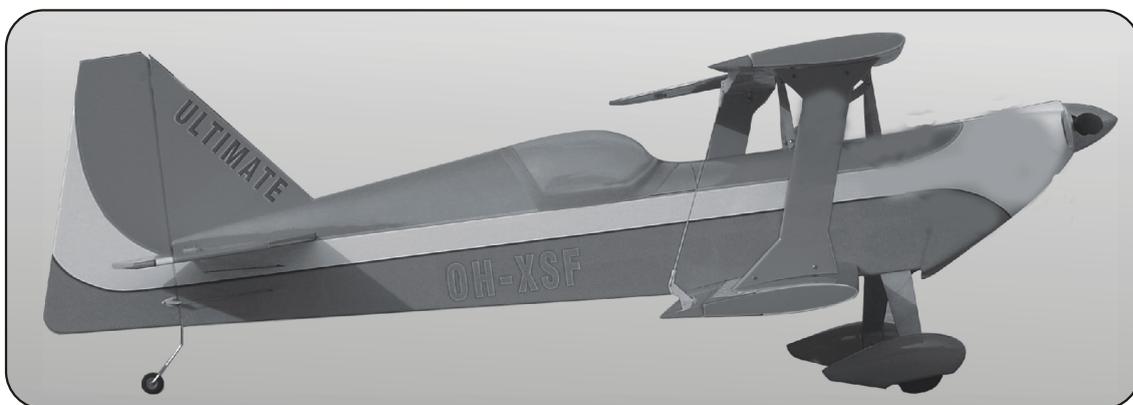
Main wing



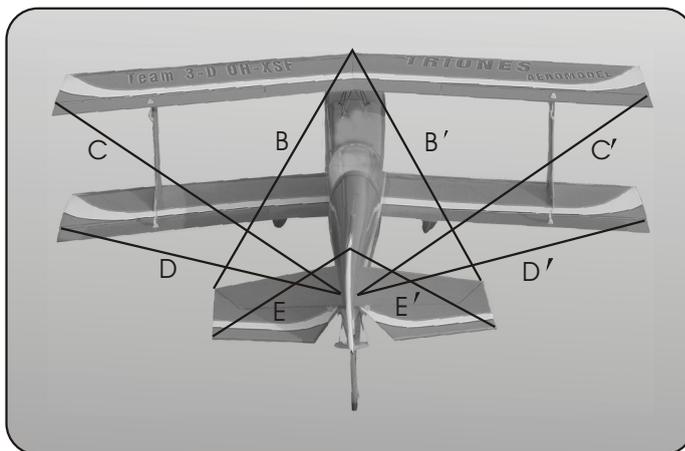
Round head screw 3×8mm

Wing Setting

Adjust the wing and fuselage configuration as shown in the diagrams.



$$A = A'$$



$$B = B'$$

$$C = C'$$

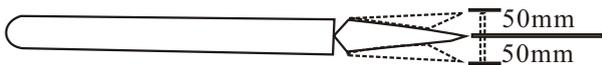
$$D = D'$$

$$E = E'$$

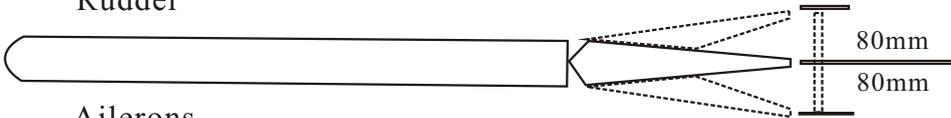
Control Throws

Adjust the control throws as shown in the diagram. These throws are good for general flying. You can adjust according to your personal preference.

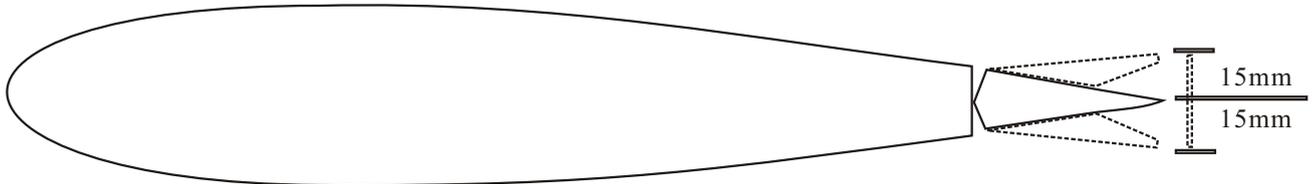
Elevator



Rudder



Ailerons



C.G.

The ideal C.G. position is 106mm (4.17in) behind the leading edge measured at top wing centre line. In order to obtain the C.G. specified, add weight to the fuselage or move the battery position. Check the C.G. before flying.



Warning!

Important Safety Precautions

- #First time flyer should never fly by himself/herself. Assistance from experienced flyer is absolutely necessary.
- #Pre-flight adjustment must be done before flying, it is very dangerous to fly a badly pre-adjusted aircraft.
- #Ultimate is specially designed to be powered by 2C 0.60 or 4C 0.70 engine, using a more powerful engine does not mean better performance. In fact, over powered engine may cause severe damage and injuries.
- #Make sure the air field is spacious, never fly the plane too close to people and never get too close to a running propeller.
- #If you find wrinkles on the covering as a result of weather changes, you can use hot iron to remove the wrinkles. Please begin with lower temperature setting and gradually raise the temperature until the wrinkles are gone. Too hot an iron may damage the covering.
- #Check and re-tighten up all factory assembled screws, use thread locker if applicable.