

CITABRIA



ARF

Specifications

Wing Span	105.5in/2680mm
Wing Area	1596.5 sq in/103sq dm
Flying Weight	14.3lb/6500g
Fuselage Length	65in/1655mm
Engine	50CC gas engine
Radio	4channels 6 servos

Warning! This model is not a toy.









It is designed for maximum performance. Please seek for advice if one is not familiar with this kind of engine-powered precise 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.

INDEX

PART LIST-----P.1
 BEFORE YOU BEGINNING-----P.1
 SAFETY PRECAUTION-----P.1
 ASSEMBLY-----P.2-P.7

BEFORE YOU BEGINNING

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,

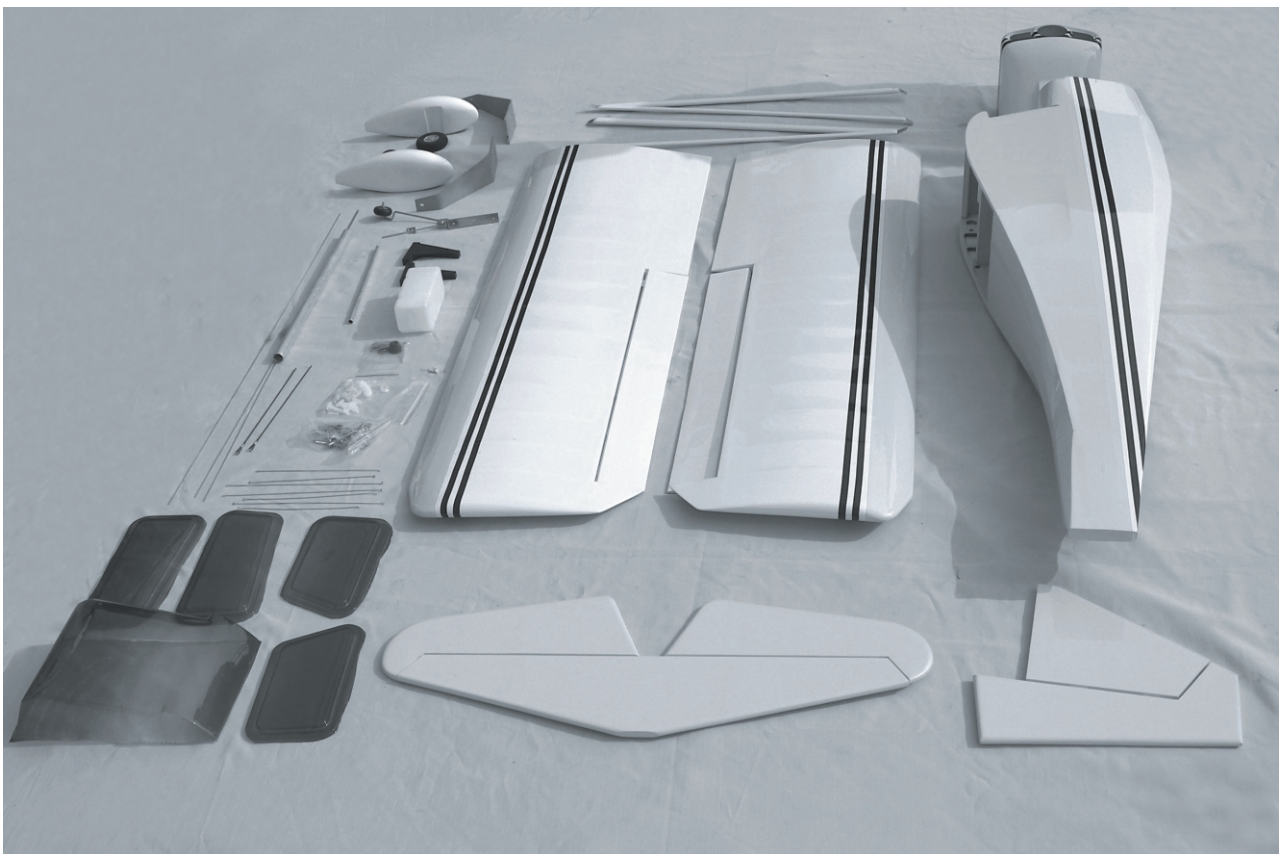
- | | |
|---|---|
|  Apply C.A Glue |  Pay close attention here |
|  Apply A.B Glue |  Cut off shaded portion |
|  Drill holes with the specified diameter (here: 2mm) |  Purchase separately |
|  Assemble left and right sides the same way |  Ensure smooth non-binding movement while assembling |

SAFETY PRECAUTION

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.
- #Citabria is specially designed to be powered by 50cc 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.

INDEX



INSTALLING THE AILERONS

Do the left wing first so your work matches the photos the first time through. You can do one wing at a time, or work on them together.

1. Connect aileron with wing by five hinges each side. There are five slot on the wing and aileron. Half hinges insert in to wings and half to aileron.
2. Test fit the ailerons to the wing with the hinges. If the hinges does not remain centered. Stick a pin through the middle of the hinge to hold it in position.
3. Remove any pins you may have inserted into the hinges. Adjust the aileron so there is a small gap between the aileron and the wing. The gap should be small, just enough to see light through or to slip a piece of paper through.



4. Apply six drops of thin CA to the top and bottom of each hinge. Do not use CA accelerator. After the CA has fully hardened, test the hinges by pulling on the aileron.
5. Repeat this procedure for installing the right aileron.

INSTALL AILERON SERVO



1. The slot for servo installation is already laser cut you just need to cut off the covering with knife.
2. Use four sheet metal screws to attach the servo to the wing.
3. Pull the servo wire out the root of the wing.
4. Repeat this procedure for installing the right wing.



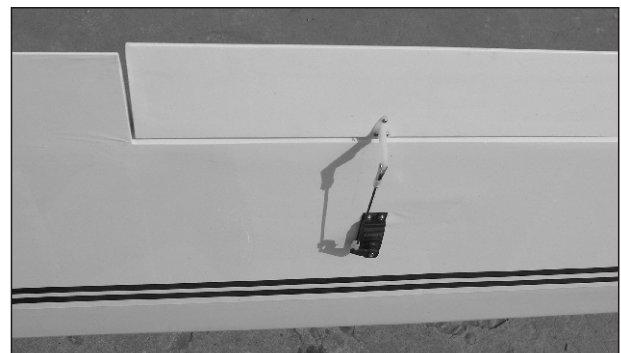
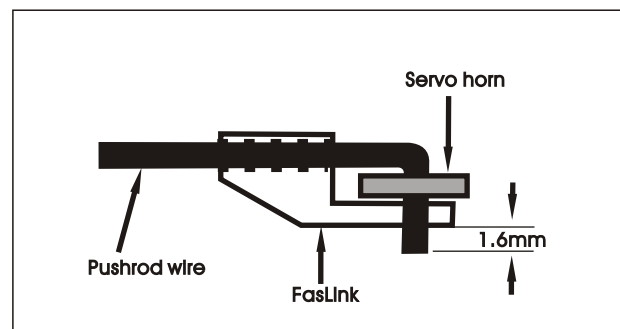
INSTALL AILERON PUSHRODS

1. Position a small nylon control horn on the aileron positioning it as shown in the sketch and aligning it with the servo. Mark the location for the screw holes. Drill through the marks you made with a drill bit. Mount the nylon control horn to the aileron by inserting three machine screws through the control horn and into the nylon mounting plate on the top of the aileron.

2. Locate a pushrod wire threaded on one end. Thread a nylon clevis onto the threaded end of the wire 20 turns. Install a silicone clevis retainer onto the clevis. Then install the clevis on the aileron control horn.

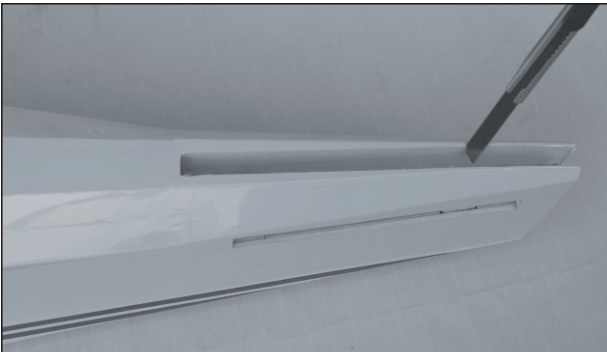
3. Be sure the aileron servo is centered. Enlarge the hole in the servo arm with a Hobbico Servo Horn Drill. Center the aileron and align the wire pushrod with the hole in the end of the servo arm. Using a marker, mark the location where the wire aligns with the hole in the servo arm on that mark a 90 bend. From the bend measure an additional 9.5mm and cut off the excess pushrod wire.

4. Install the wire into the hole in the servo arm using a nylon FasLink as shown in the sketch.



JOIN RUDDER AND FUSELAGE

1. Examine the tail of fuselage, there are two slots for installation elevator and rudder. First, cut the cover with knife at the tail of fuselage as shown the next pictures.

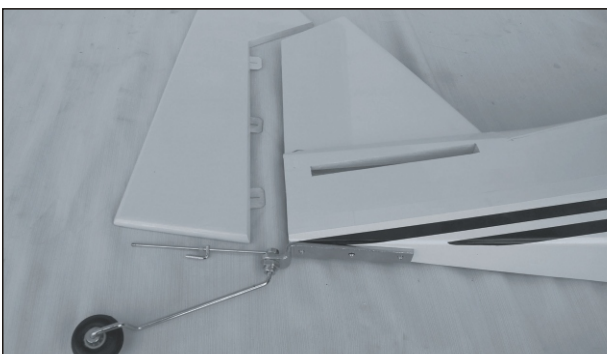


2. Put the rudder into the slot you just cut off. Draw a line according to the joining at rudder and fuselage. Then put the rudder out and cutoff the covering along the line you drew. This procedure is necessary cause the rudder will easy move if you do not peel off the covering.

3. Put the rudder into the slot again. Glue it to the fuselage with epoxy.



INSTALL RUDDER

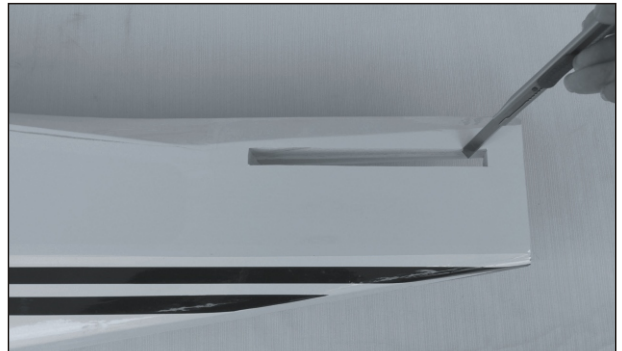


Install the rudder to stab with three hinges. Using the same installation method used on the ailerons.

INSTALL ELEVATOR

1. Examine the tail of fuselage. There are two slots each side you need to cut off the covering.

2. Insert the elevator to the slot, make the left and right are equal. Then drawing two lines along the joining at fuselage and elevator.



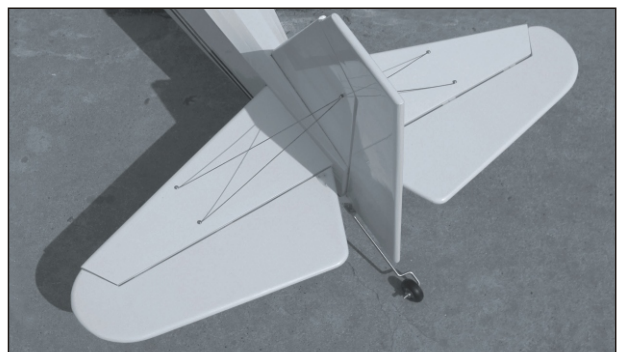
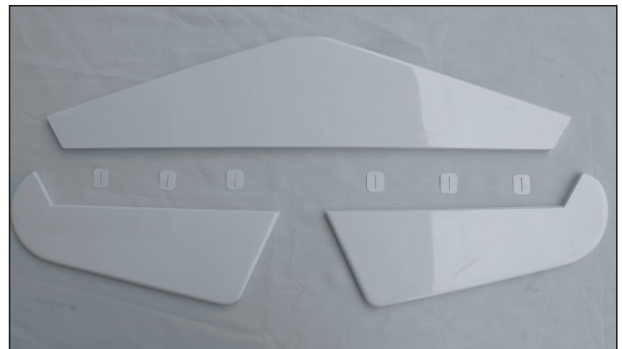
3. Put out the elevator, cut off the covering with knife along the line.

4. Insert the elevator to the slot again, glue the elevator to the fuselage with epoxy.



INSTALL ELEVATOR

Insert the elevator to the fuselage. Using the same installation method used on the rudder. Please reference the next pictures.



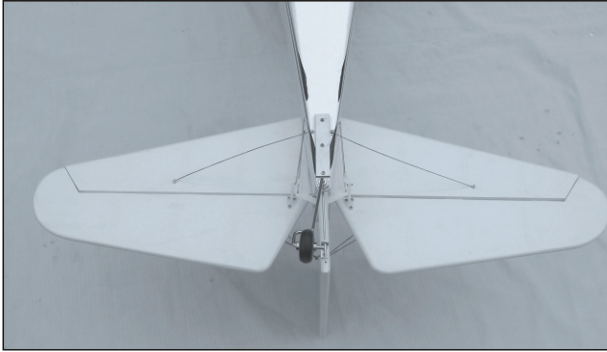
INSTALL ELEVATOR & RUDDER PUSHRODS

Examine the tail of fuselage, there are four slots. Two for elevator servo pushrods installation, the rest for rudder servo horn.

1. There are four tubes from the slots to the engine room directly. You need insert four wires from engine room out of the slot at the tail of fuselage.

2. Install the elevator and rudder servo pushrods. Using the same installation method used on the aileron servo pushrods.

Please reference the next pictures.



3. Fix four struts on the elevator with screws. The bottom are same. Please reference the next pictures.



INSTALL THE TAIL WHEEL

Use three sheet metal screws to attach the tail wheel bracket to the tail of fuselage. Then attach the other side to the rudder. The tail wheel can move with the rudder moving .

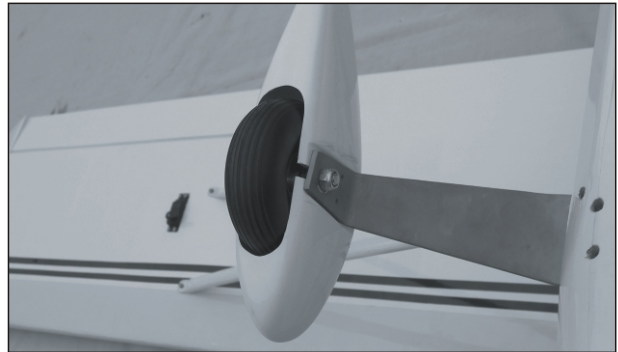


INSTALL THE MAIN LANDING GEAR

1. Examine the middle of the fuselage. There are two slots each side. Cut off the covering with knife first. The longer one for landing gear installation. The smaller one for wing struts installation.

2. At the bottom of the middle of the fuselage, there are eight round slot. You need to cut off the covering too.

3. Insert the main landing gear bracket into the longer slot . Then fix the bracket with fuselage with screws. Please reference the next pictures.

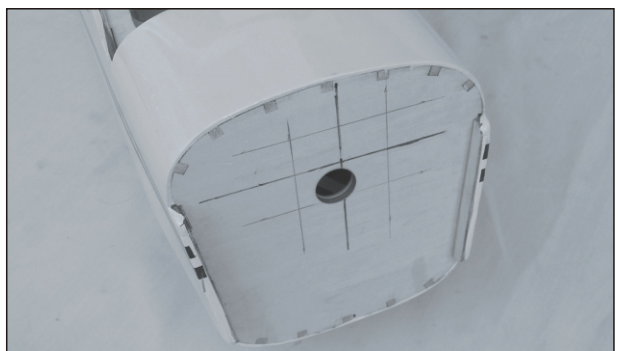


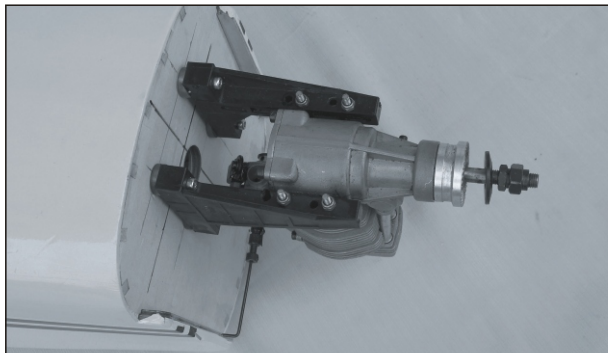
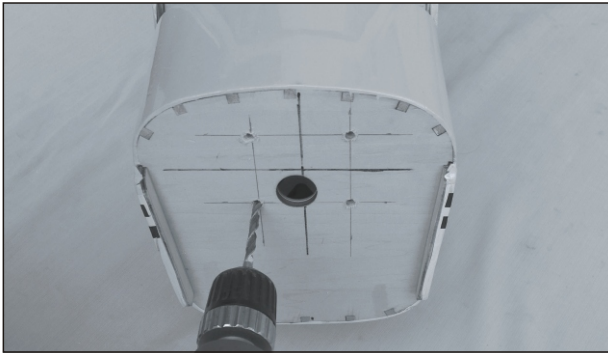
INSTALL ENGINE

1. Molded into the firewall are lines that are for referencing the location of the engine mount template. Using a felt-tip pen, draw through the line extending them further out to each side of the firewall.

2. Drill four pilot hole through each of the marks in the corners of the pattern.

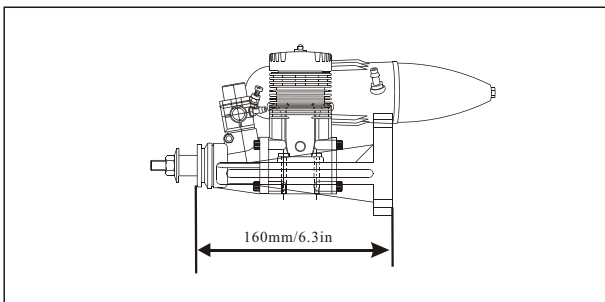
3. Use four sheet metal screws to attach the mount.





4. Position your engine onto the engine mount. With the engine resting on the engine mount rails. Center the engine and engine mount. Then tighten the engine mount bolts. With your engine still resting on the rails, position the engine so that the distance from the firewall to the front of the engine thrust washer is 145mm. With the engine properly positioned, resting on the engine mount, slide the cowl onto the fuselage to be sure the engine is extending out of the cowl far enough.

5. Using the engine as a guide, mark the four holes for the engine bolts on the engine mount. Install the engine onto the engine mount. Drill four holes in the mount. Drill four holes in the fuselage. Then, use a tap to thread the holes.



INSTALL THE COWL

1. Place the cowl in position on the fuselage. Making sure the engine is centered in the opening in the front of the cowl.



INSTALL FUEL TANK

Assemble the fuel tank as shown in the sketch. When tightening the center screw be sure not to over tighten it. You just want it snug enough to pull the rubber stopper tight against the tank.

Hold the tank in place inside the fuselage by two rubber banks around the tank, attaching the banks to the tabs in the plywood former that supports the tank.

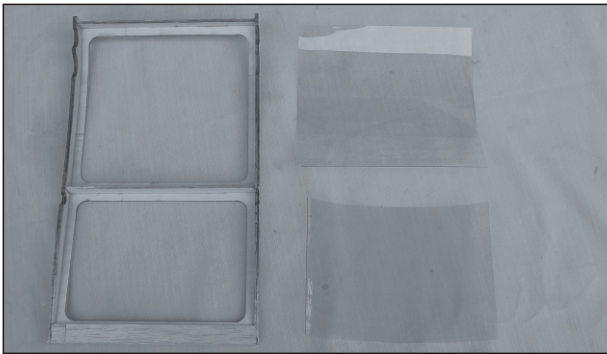
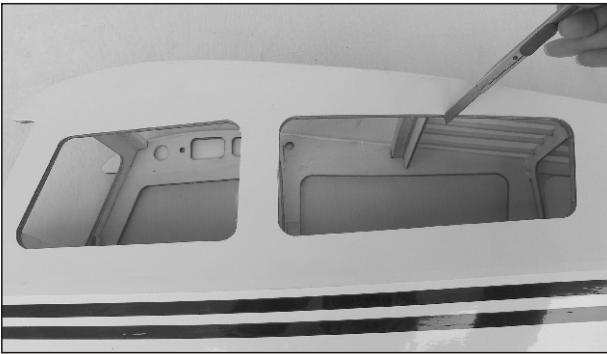


STICK THE WINDOWS

Examine the side of the fuselage, there are small rooms you need to cut off the covering. These small rooms are like the windows of plane. You may find some plastic board in your parts bag.

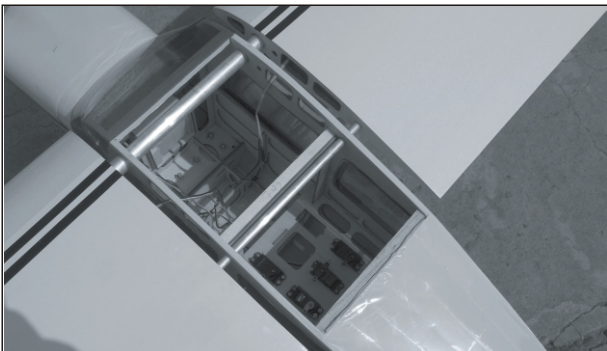
Stick these plastic board on the slots you just cut off inside the fuselage.





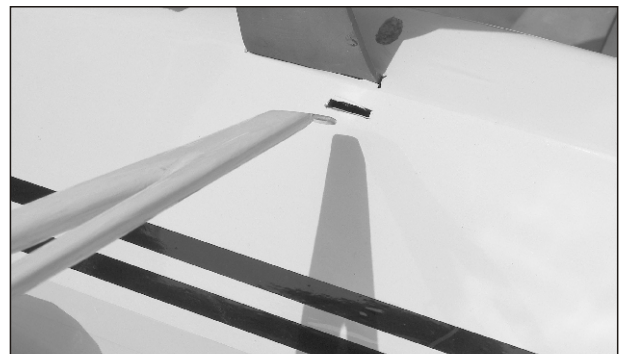
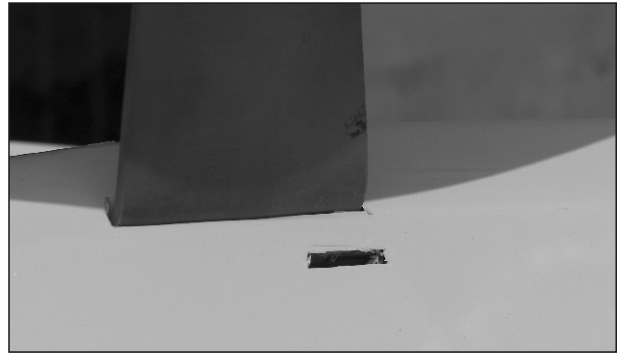
JOIN THE WINGS AND FUSELAGE

Examine the side of fuselage, there are five slots here. The first one for bolt joining, the second one for screw joining, the third one for servo wires, the fourth one just for weight reduction, the last one for bolt joining. Please fix the wings with fuselage with two screws. Before you join the wings with fuselage, please insert the windproof glass into the slot. Then fix the wings with fuselage.



ATTACH THE STRUTS

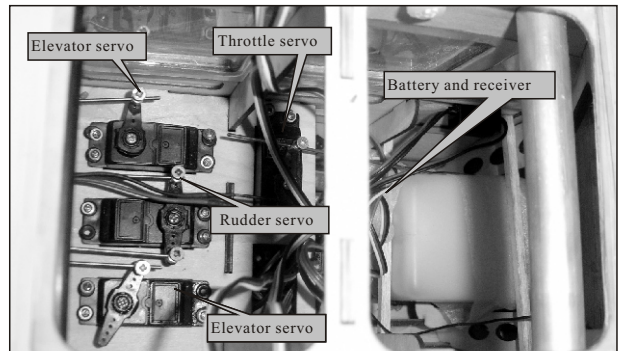
Examine the side of fuselage near the main landing gear, there are slots you need to cut off the covering. Insert the wing struts to the slot and fix it inside the fuselage. Fix the other side at the wings with screws.



INSTALL THE BATTERY AND RECIVER

There are four servos you need to install. Two for elevator, one for rudder and one for throttle. Please reference the next pictures.

Using the hardware included with your servos. Mount the throttle, elevator and rudder servos onto the tray, positioning them as shown.



INSTALL THE CANOPY

1. After battery and receiver installation, cover the setting of canopy. There are two small slots at the front of fuselage, insert the bamboo bolts to these two slots. Then attached the other side with sheet metal screws.



INSTALL THE SPINNER

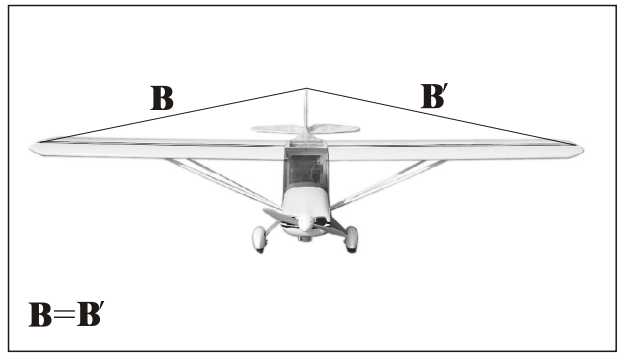
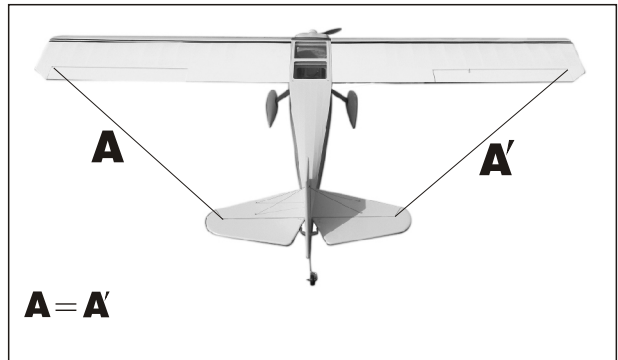
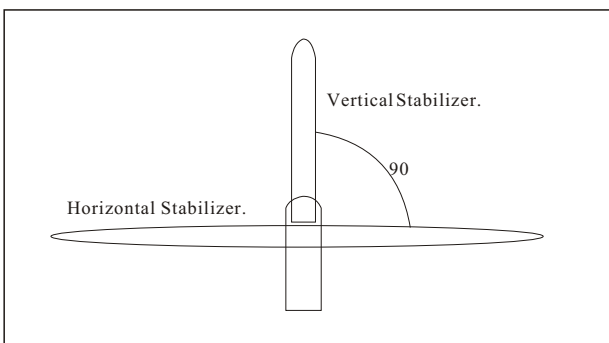
1. Place the cowl in position on the fuselage. Making sure the engine is centered in the opening in the front of the cowl.
2. Install the appropriate propeller for your engine and the spinner.



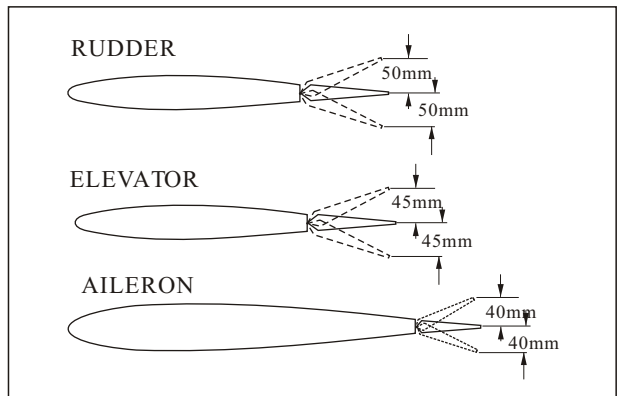
WING SETTING

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

Slide the vertical stabilizer back in place. Using a triangle, check to ensure that the vertical stabilizer is aligned 90 degree to the horizontal stabilizer.



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.

C.G.

The ideal C.G. position is 115mm(4.5in) 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.

