

# Geebee Y 50cc

## Assembly Manual



Color W



Color R



Color Y



Color S

## Caution!

You should not regard this plane as a toy!

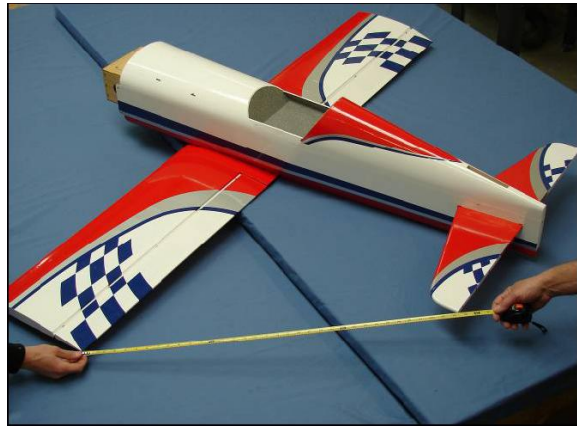
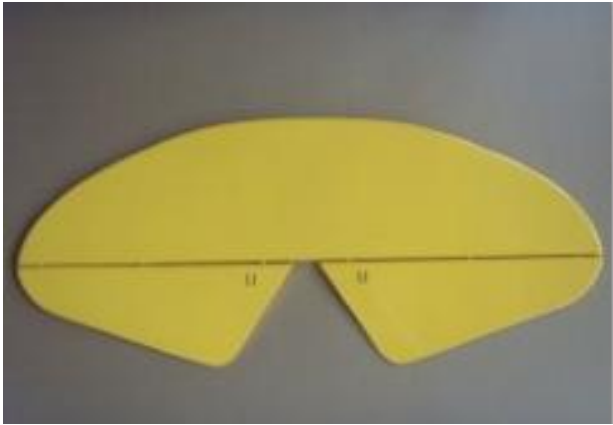
To ensure safety, please read this instruction manual thoroughly before assembly.

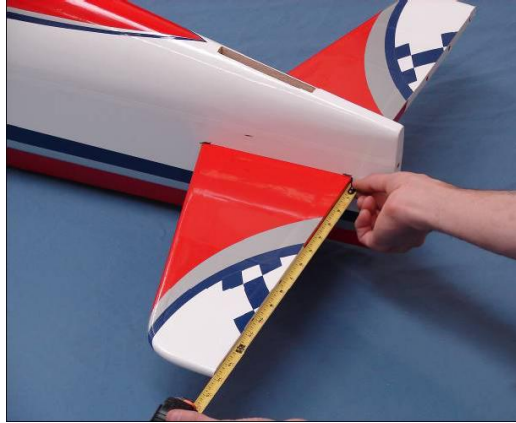
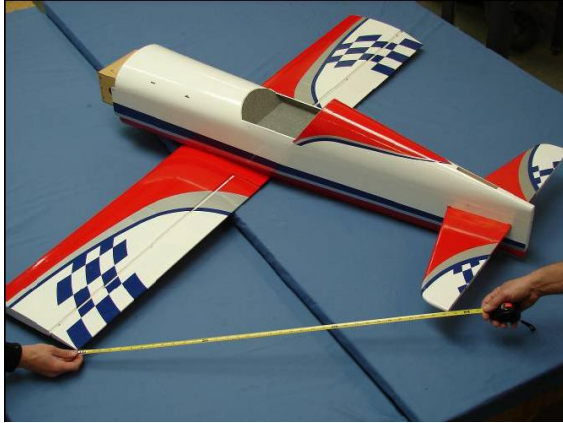
Building and operating a model plane requires diligent practice and correct guidance. An inexperienced flyer can cause serious injury and property damage.

Seek the assistance of an experienced RC pilot or model airplane club for help with assembly, operation and maintenance to ensure your flying experience is both enjoyable and safe.

Fly only in AMA (Academy of Model Aeronautics) approved areas. Approved areas or areas approved by the Model Association of your country.

## Stab and elevators

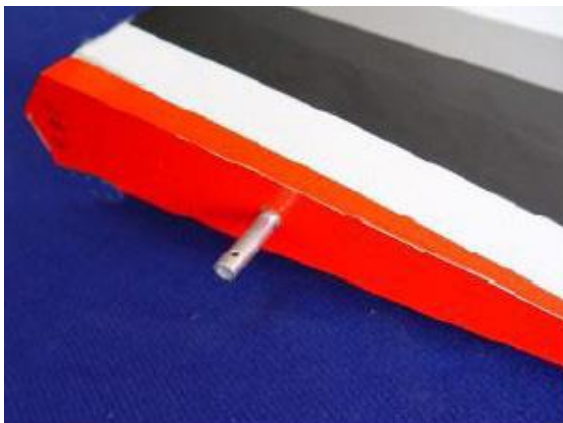




- **Cut out the holes on the elevator**
- **Mount bottom wing to fuselage. Slide the stab through the pre cut stab slot at the rear of the fuselage.**
- **Center stab in fuselage**
- **Align stab to wing. Ensure all dimensions are equal for both left and right sides.**
- **Make alignment marks on stab for easy realignment during the gluing process.**
- **Glue stab into fuselage. Be certain to put glue onto both the top and bottom sides of the stab.**
- **Double check all measurements are equal and stab is properly positioned before glue dries.**



## Tail wheel Unit



- Drill a hole and make it fit the steering tube. (Do not glue it into position until the tail wheel installation step is completed.)
- Assembled photo for the tail wheel parts.
- Use the tail wheel bracket as a template and drill holes for the

**mounting bolts.**

- **Install the blind nuts through the opening in the rear of the fuselage.**
- **Attach the tail wheel bracket and secure the bolts with Blue Loctite.**
- **Insert the steering arm into the rudder steering tube and position the tube ready for gluing. Tighten the set nuts.**
- **Epoxy the steering tube in place as shown.**

## Main Landing Gear Installation



- Whole photo for the GEEBEE Y anti-vibration landing gear
- Unscrew the wheel part from the landing gear. Be care of the spring in the landing gear
- Lock the landing gear onto the wing as shown

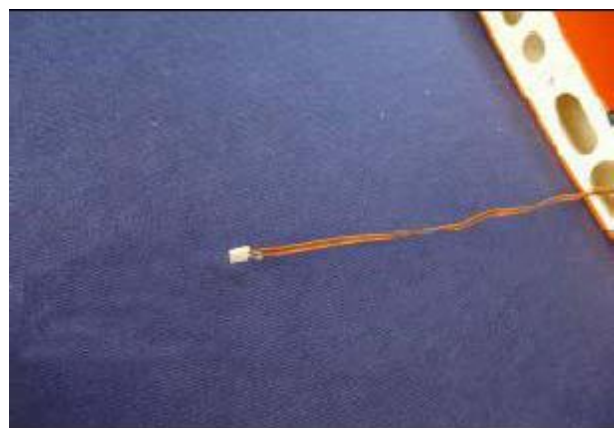
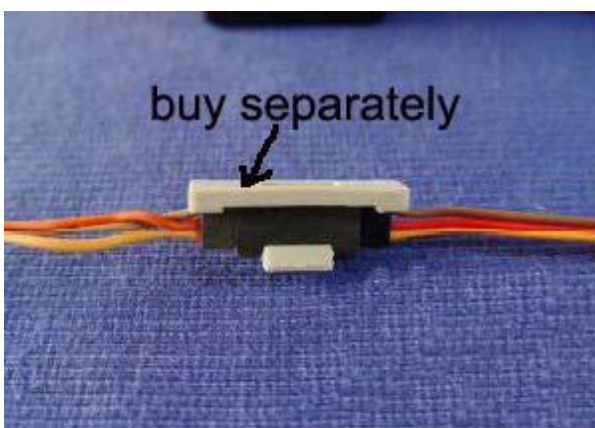
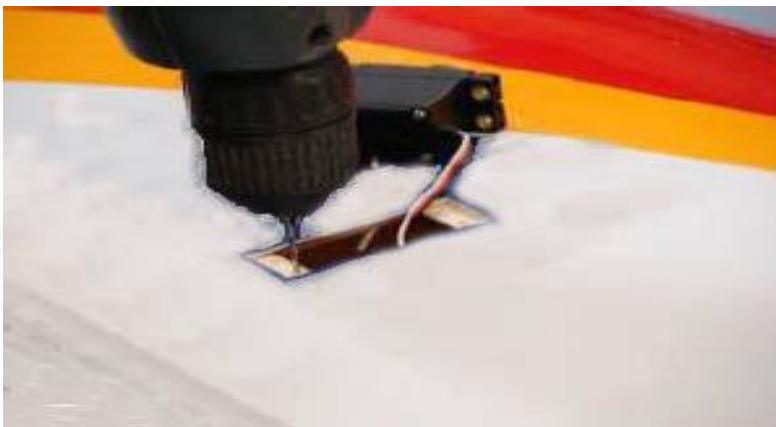
- **Stick the wheel cover onto the wing also**



- **Screw the wheel part into the landing gear, crossing the hole on the wheel cover.**
- **Repeat the same way on the other wing and landing gear.**

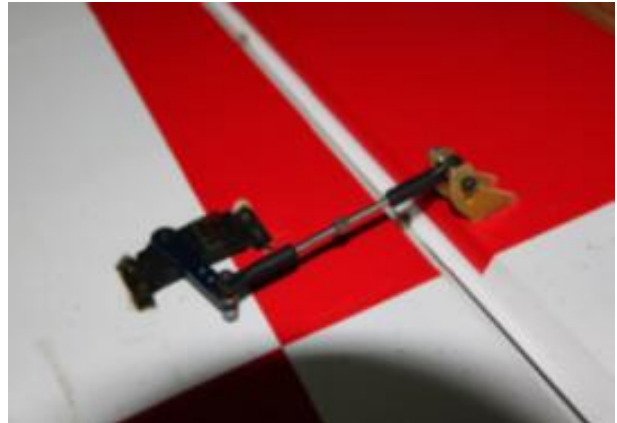
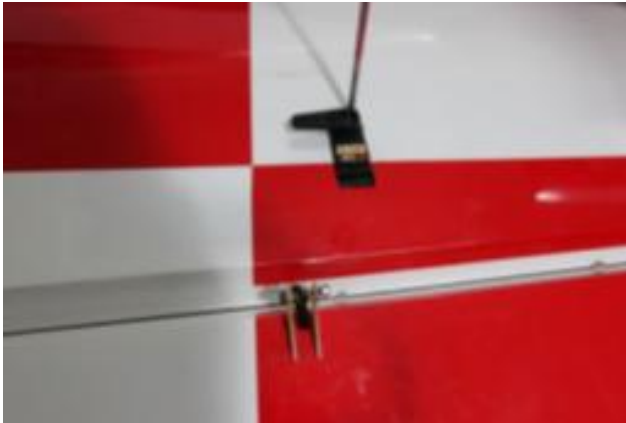


## Main wing installation



- Remove the covering from the servo position. Find out the slot pre-opened for rudder control horn, remove the film. as shown.
- Fit the control horn into the slot, glue the horns into the aileron of each side.

- Drill holes for the servo mounting screws and harden the wood around the holes with a drop of thin CA.
- Use the safety clips (buy separately) to secure the servo and servo extension connected.
- Put the servo into the servo hole, and mark the position for the screw to fixup the servo. Pull the extension lead through to the root of the wing.

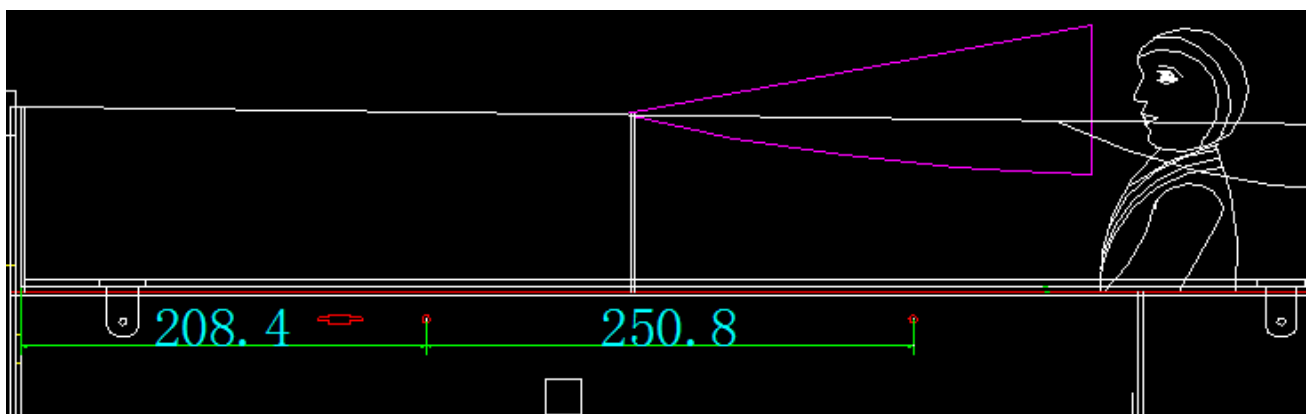


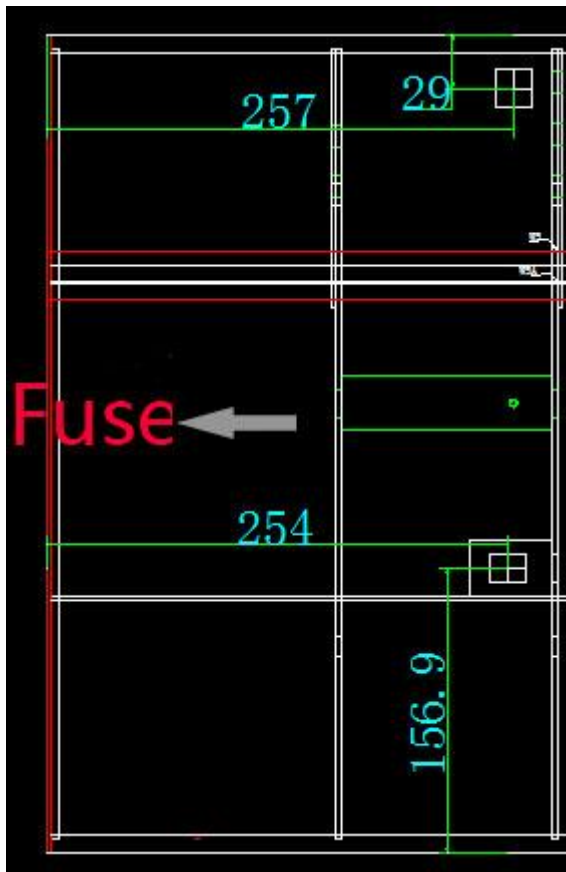
**Attn:**





- Drill holes for the servo mounting screws and harden the wood around the holes with a drop of thin CA.
- Install the control horn.
- Adjust the horn and servo arm. Fix the horn in place firmly. Install the ball link and push rod . Make sure it's firm and flexible.
- Repeat the previous steps for the other wing. Please install the wing tube and wing bolts in the final assembly.
- Connect the two wings with carbon fiber tube and four nylon screw supplied.





- Measure out the correct position for installing the wood rod decoration on the wing
- Lock the wood decoration onto the wings and fuselage each side with self-taps. Each correct part which needs self-taps we all have enhanced that part. Please find out the right position.

## Stab servo and Rudder servo Installation



- Connect the control horn, pushrod, and ball links.
- Put the control horn into the slot, glue it to the stab on each side
- Cut out the servo holes in each side of the fuselage tail. Then fix them up as shown



1 Find out the slot pre-opened for rudder control horn, remove the film



2 Fit the control horn into the slot, measure the correct length for it



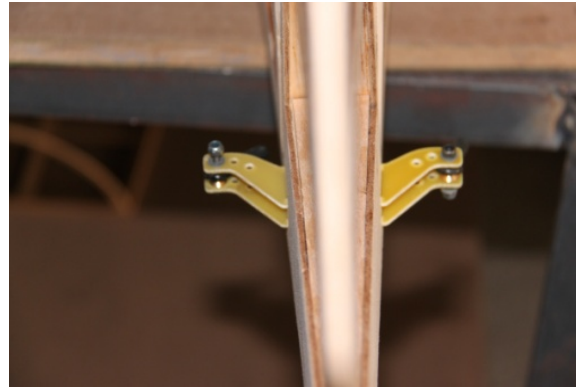
3 Cut the longer part



4 Glue the horns into the rudder of each side



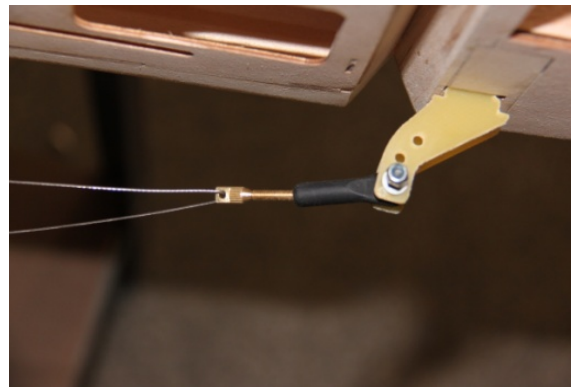
5 Repeat the same method on the other side of the rudder.



6 Thread the cable connector halfway into the ball link .



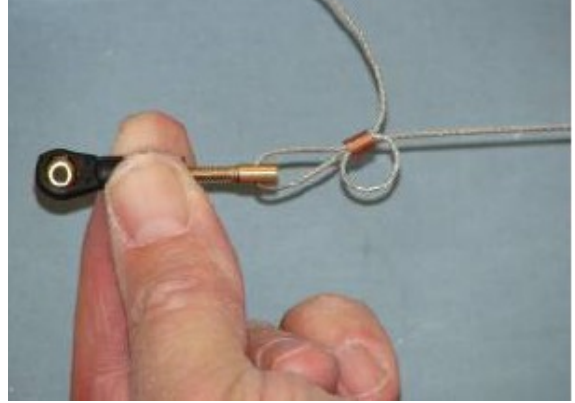
7 Connect the pull-pull wire and control horn with ball link



8 Drill holes for the mounting screws. Fit the servos as shown with the servo label facing the rudder. Harden the area around the holes with a drop of thin CA.



9 Use brass crimps on each cable and thread, the cable through the end of the pull-pull connector.



10 Crimp the brass tube with a crimping tool or pliers



11 A drop of thin CA may be applied to the brass tube to help secure the cable



12 Install the rudder ball links with bolts and locking nuts. Check the pull-pull cables. Rudder and the rudder servo should both be in the neutral position.



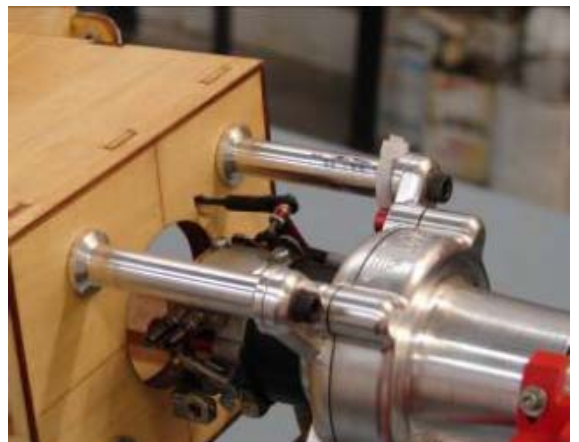
- 2 Insert the bolts through flat fender washers, the firewall and into the engine stand offs. Tighten firmly. Secure mounting bolts nuts with Blue Loctite.



- 3 Use a bit to drill a pushrod exit hole on the firewall in line with the engine carburetor throttle arm.



- 4 Attach the ball link to the throttle pushrod and secure to the carburetor throttle arm with a bolt and nylon lock nut.





- 5 Insert the throttle servo into the servo mounting tray with an output arm forward. Insert the throttle pushrod into the servo arm easy link.



- 6 Mark a line for the throttle servo tray, then glue it to the fuselage.



- 7 Use a drill to drill the servo mounting holes. Install the servo with servo screws.

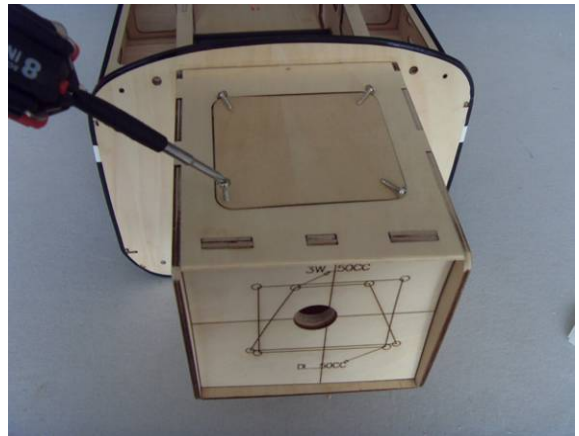




- 8 Insert the throttle pushrod into the servo easy link.  
Move the servo arm to the center position. So that carburetor is half open.  
Tighten the easy link set screw.

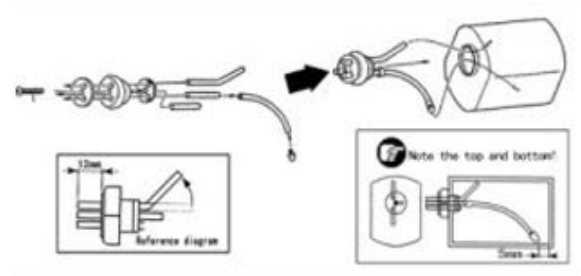


- 9 Use self-tapping screw to fixup the wood to lock the hatch of the engine box.

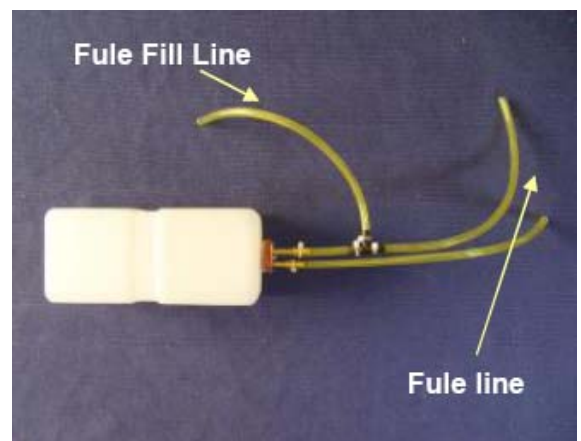


## Fuel Tank

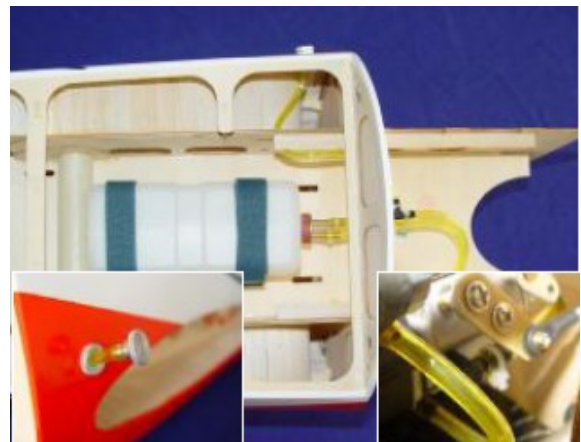
- 1 Install the inside parts of fuel tank as shown.



- 2 Assembly the outside fuel pipe as shown.

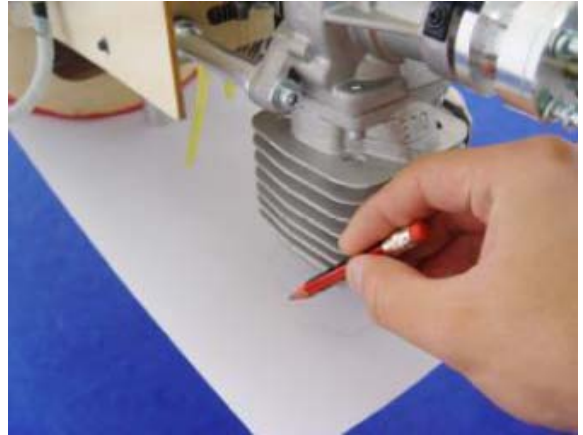


- 3 Tighten the velcro ties secure the fuel tank.



## Cowl Assembly

- 1 Use a paper template to measure where the cowl will need to be cut for the exhaust and spark plug. Trial fit to make sure there is a minimum of 3/8" clear space around the engine for cooling.

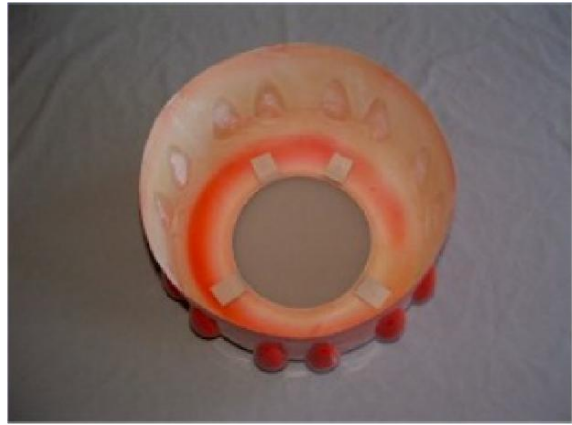


- 2 Use a fiber cutting tool to rough out the cowl and finish with a round sander.



- 3 Use templates to cut out other openings in the cowl for manifolds if fitted.

Note: Check the engine temperature. More cut holes may be required if the engine temperature is too high.

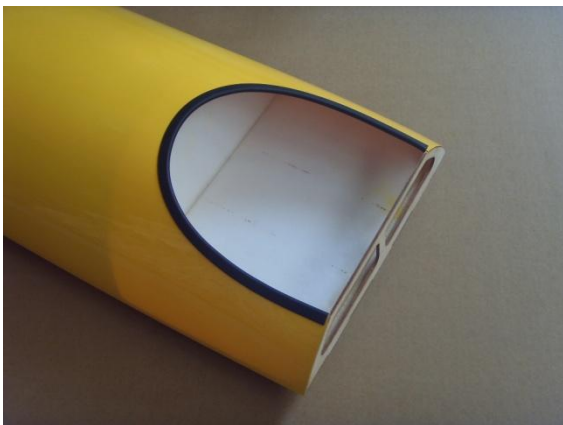
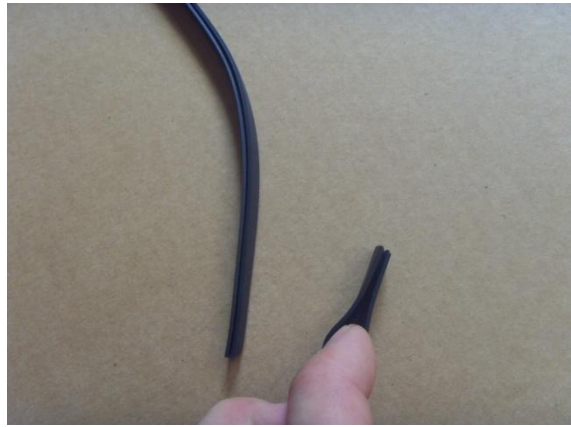




- **Scale engine plate and pre-installed cowl ring**
- **Stick the engine plate into the cowl**
- **Lock the cowl onto the fuselage by screws**



## Canopy decoration

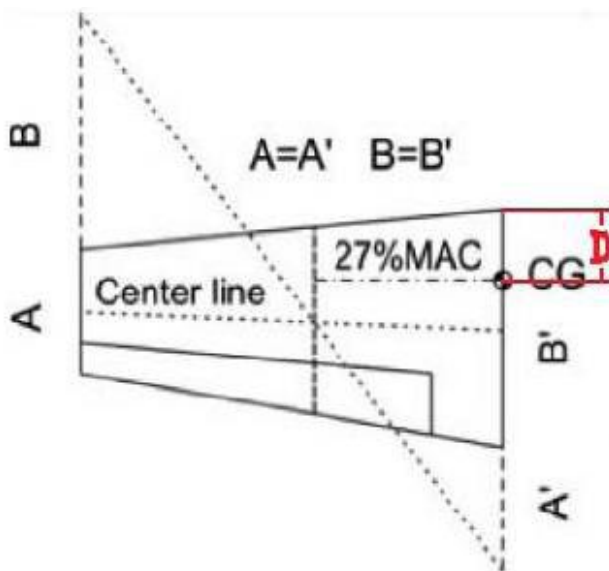
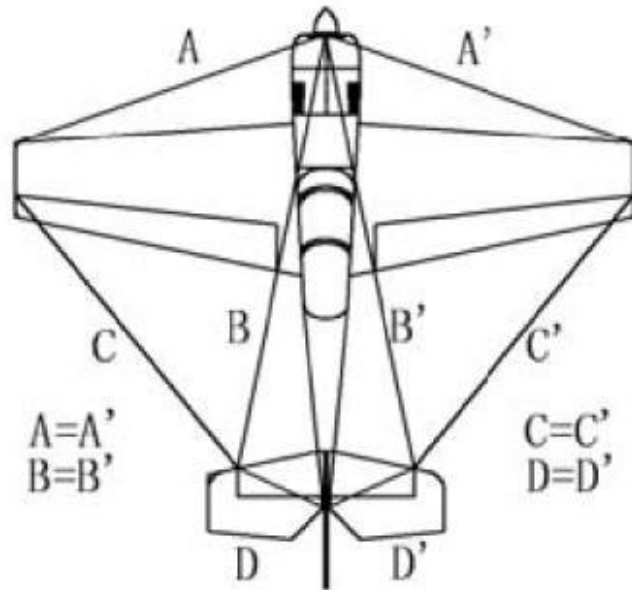


- Find out the black rubber strip
- Insert the window into the rubber strip as show.
- Repeat same way to decorate the canopy
- Stick the window on to the canopy

### Center of Gravity

The center of gravity is on the rear of the wings tube.

Your balance at the CG will determine the final mounting location for batteries. Mount batteries and secure with Nylon zip ties.



Measure the CG from the leading edge of wing root rib. Adjust the battery pack location. For CG proper position should be at 27% MAC. This recommendation balance point is for your first flights. The CG can be moved around later to fit your personal taste.

Geebee Y 50CC      D = 170 mm

## Power on to trim your plane.

1. Range check the radio (test whether the Engine/Motor is running or not ).
2. Ensure that the servos and control surfaces move smoothly and in the correct direction.
3. Adjust the servo throw. The chart below is the recommended throws for the first flight. You can adjust the servo arms and control horn length later to fit your flying style.

### Control Throw:

	Surface	Throws	Exp
Common flying	Ailcron	20 degrees	25%
	Elevator	20 degrees	25%
	Rudder	30 degrees	30%

3 D flying	Aileron	40 degrees	45%
	Elevator	40 degrees	45%
	Rudder	45 degrees	45%

Trail run the Engine to check its stability at high speed and low speed to ensure there are no problems with vibration on the model. Run the motor at high speed about 30 min, check the Engine and make sure the temperature is below the prescription of manufacturer.