

# YAK-55 50CC Assembly Manual



Wing Span:86.6in/2200mm;	Flying Weight:7300-7700g;
Wing Area:94sq.dm;	Radio:6Channel 6Servos;
Length:85.5in/2172mm;	Engine:50CC Gas

**CAUTION : this plane is not a toy!**

**Before use , please carefully read this manual.**

●First-time builders should seek advice from people having building experience in order to assemble the model correctly and to produce its performance to full extent .

●Assemble this kit only in places out of children's reach!

●Take enough safety precautions prior to operating this model.

You are responsible for this model's assembly and safe operation!

●Always keep this instruction manual ready at hand for quick reference,even after completing the assembly.



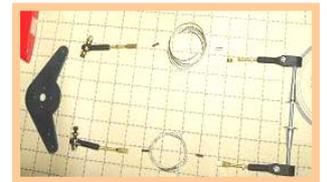
# RUDDER AND TAIL WHEEL



● Make sure to apply Vaseline to the rudder hinges to prevent the epoxy from getting in to the joint.

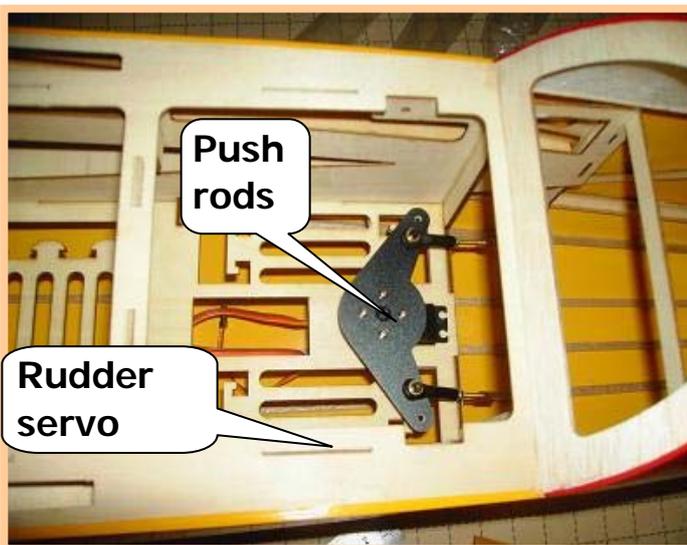
● Make sure to allow room for epoxy to penetrate the hinges. Carefully slide the rudder onto each hinge and against the trailing edge of the fin. Wipe away excess epoxy with alcohol wetted wipes.

● Ensure there is no gap between fin and rudder.



Install the rudder servo in the fuselage that prepared by factory. Feed the rudder cable through the cable exit tube in the tail of the fuse toward the front of the fuse. Repeat on other side.

Adjust rudder pull-pull cables to desired tension by screwing in or out on the threaded couplers and or ball links. Make all adjustments with the rudder servos still powered up and centered, and the rudder still taped in the neutral position.





● Ensure the servo doesn't bind at center or at either end point. Drill holes in the hardwood tail wheel mount and install the blind nut through the opening in the rear of the fuse. Install the mounting screw for the tail wheel.

● Ensure it has been totally screwed into the blind nuts.

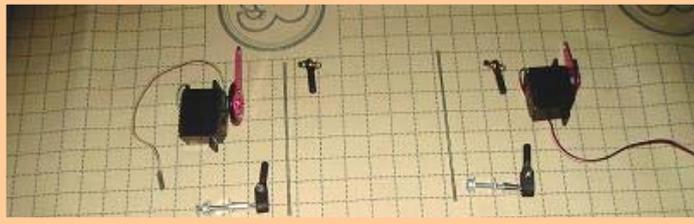


Install the hatch over the opening in the rear of the stabilizer with 4 screws

## STABILIZER AND ELEVATOR



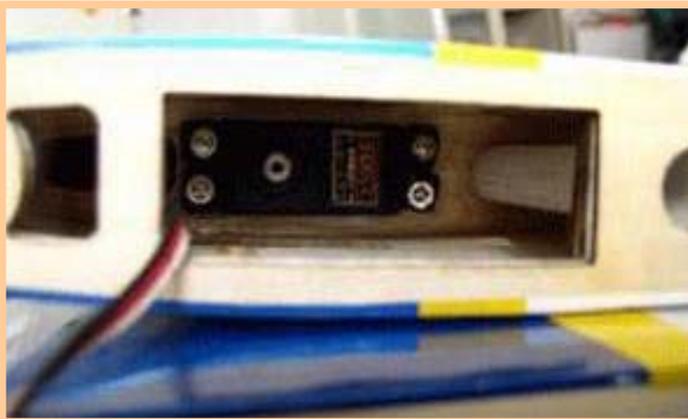
Mount the elevator onto the stab making sure you use Vaseline in the hinge points so the glue will not stick the hinge shut. Install the control horns in place for the elevator horn before sliding the stab in place. Screw the threaded pushrod and swivel in place onto the elevator horn. Plug in a 24" servo wire extension and use a securing clip provided to make sure they don't come unplugged in flight.



Mount the elevator servo in place and pull the servo wire extension up toward the front.



Attach the servo extension wire using foam wire holding brackets or zip ties to the formers along the sides of the fuse so they can't interfere with the rudder control cables.



Mount the servo arm on to the elevator push rod before installing it on the servo so you can tighten the nylon insert locking nut to the mounting screw.



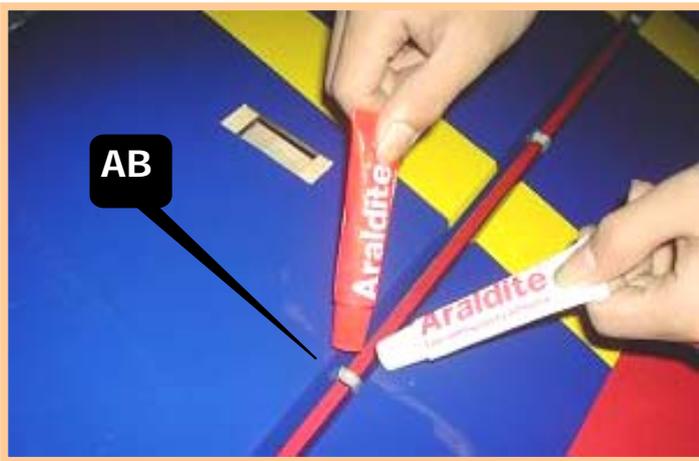
Slide the stab on to the aluminum tube and attach to fuse using the bolts provided.

● Make sure the bolts has been totally screwed into the blind nuts.



Install the servo arm to the servo after making sure the elevator is level with the stab with the servo is in dead center. Tape the elevator in place using blue painter's masking tape.

## MAIN WINGS



Install the aileron horns in place with AB glue. Align the holes in the horns. Install the servo after pulling the servo extension wire in the wing. Install the servo arm on the servo and loctitle it in place on the mount screw. Install the pushrod and control horn.



- Check for movement and center on the servo for the aileron to be in a level resting position.

- Check to make sure you have the servos in a reverse manner so ailerons will work properly.





Find out the holes in each sides of fuselage,then remove the covering.Insert the carbon joiner in place,then put on wings.



●Check to make sure you have the carbon in a right length in the wings.

Mounting the wings with plastic bolts on both sides.

## MAIN LANDING GEAR



Gather the wheels,axles and collars as shown.

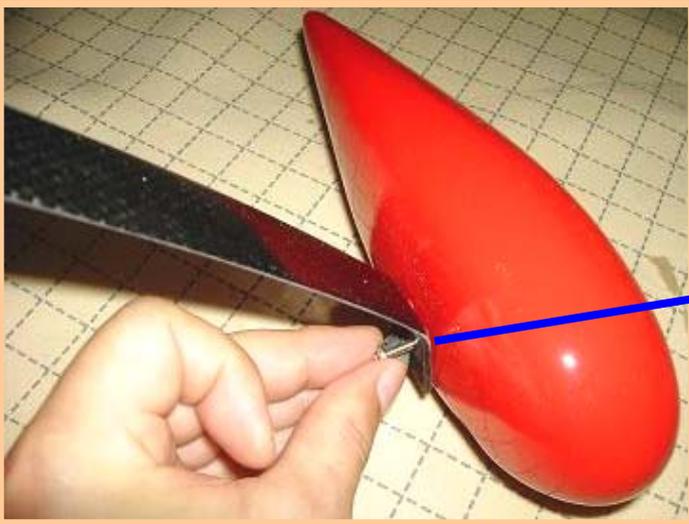
Install the main landing gear with the bolts provided and use blind nuts already installed and use blue Loctite on the mounting bolts



●Bottom View



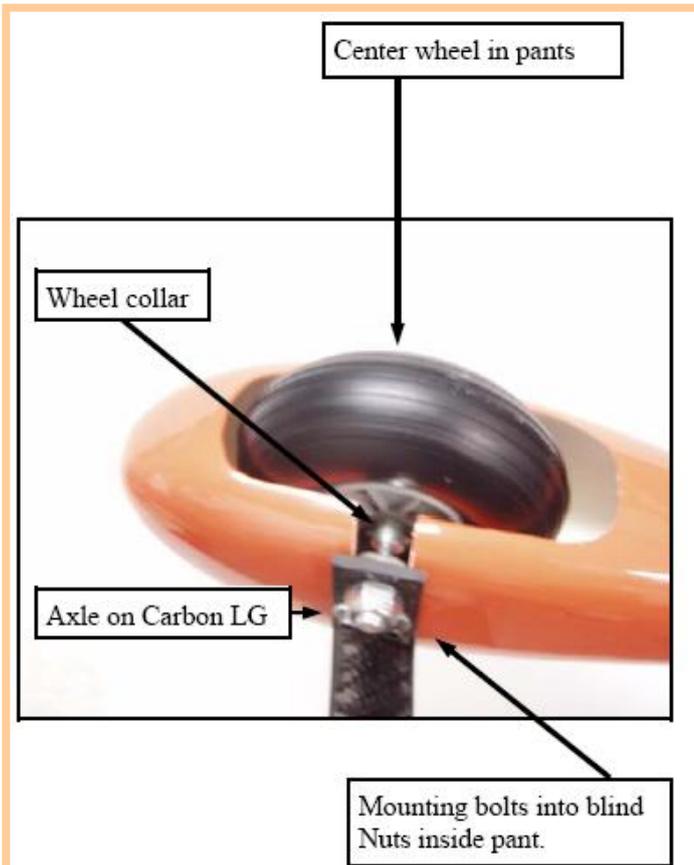
Permanently tighten the axle to the gear strut by wrenches.



Install wheel pants with two mounting bolts.



Wheel pants take a lot of abuse, mount securely!



The finished photo as shown.

# ENGINE



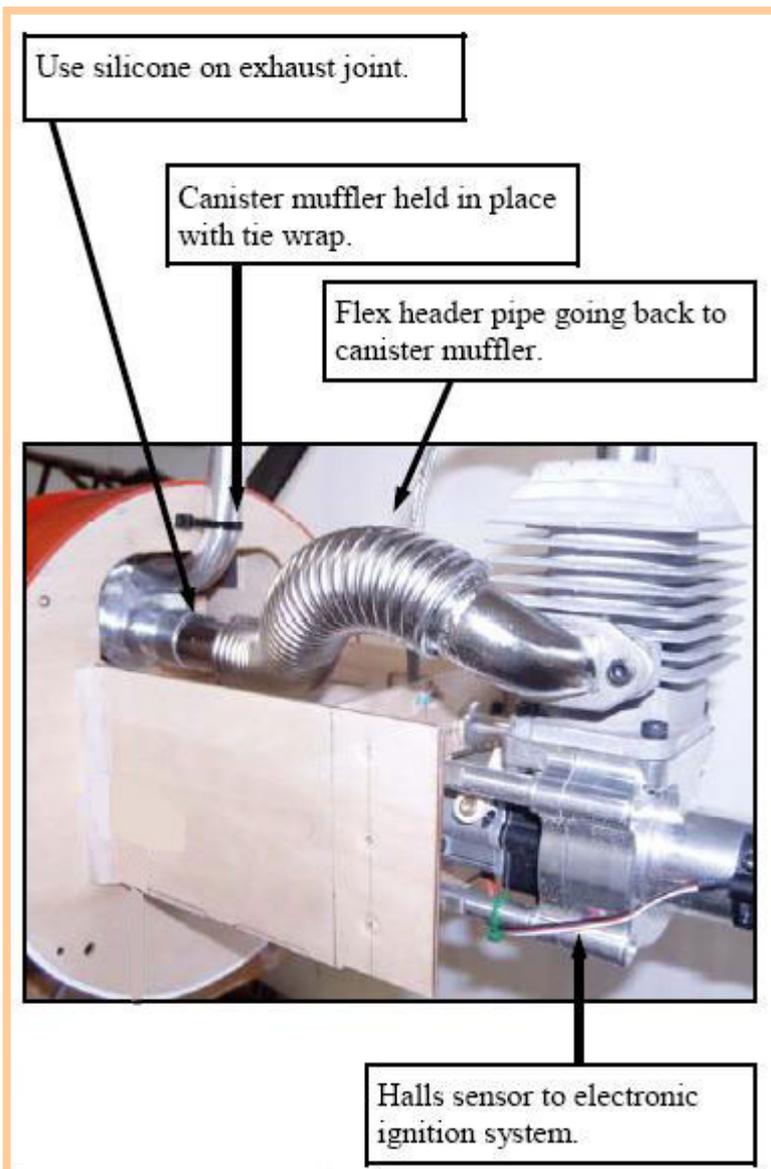
Measure the length of the engine from the firewall mounts to the prop thrust washer for the proper distance allowing 1/4" to 1/2" from the dege of the cowl.  
Move if needed.

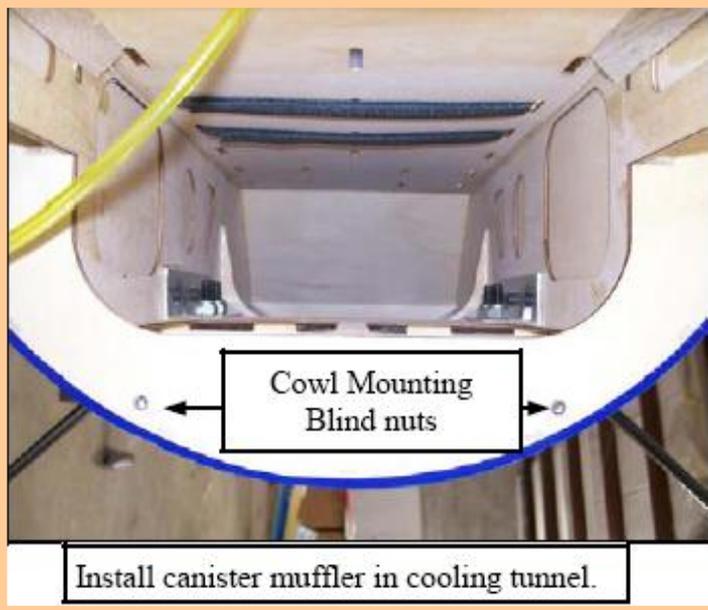
Draw the engine ecnter line and thrust line darker with a ball point. Note the 2 degree right thrust built in to the firewall.

The cowl is already built with this offset as well.

Use the drill template if you are going to use a DA 50 or measure your engines mounting location. Remember the engine is mounted inverted.

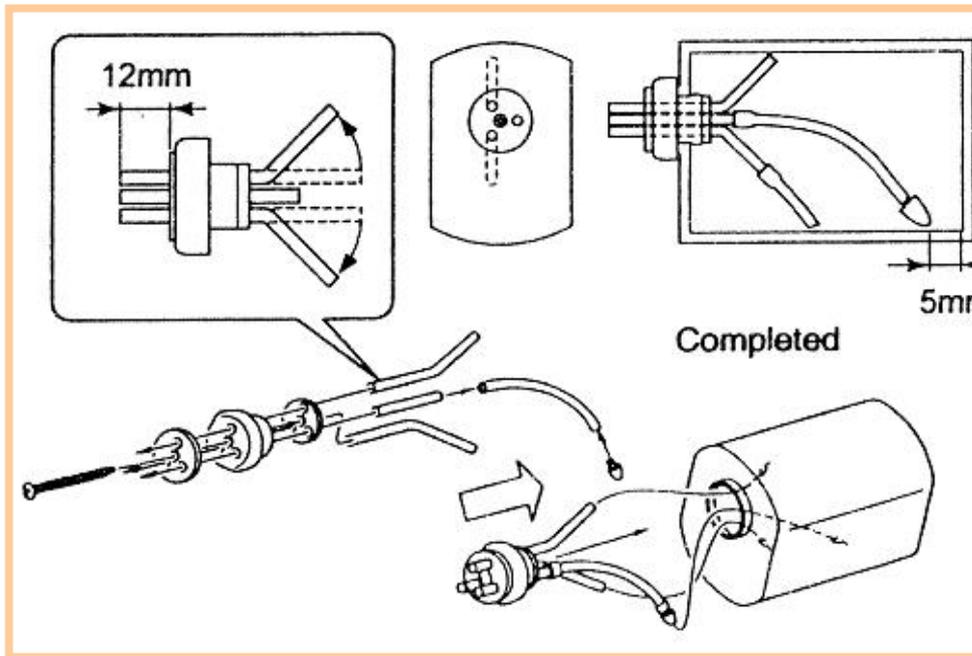
Determine where the throttle arm push rod is going to the firewall and drill a hole.If you are going to use a Nyrod,then make the hole the same size as the outsider red tube.





Install the canister muffler in the cooling tunnel with a commercial muffler mount and a support in the front of the muffler made of plywood using some silicon tubing for insulation form the heat using glue.

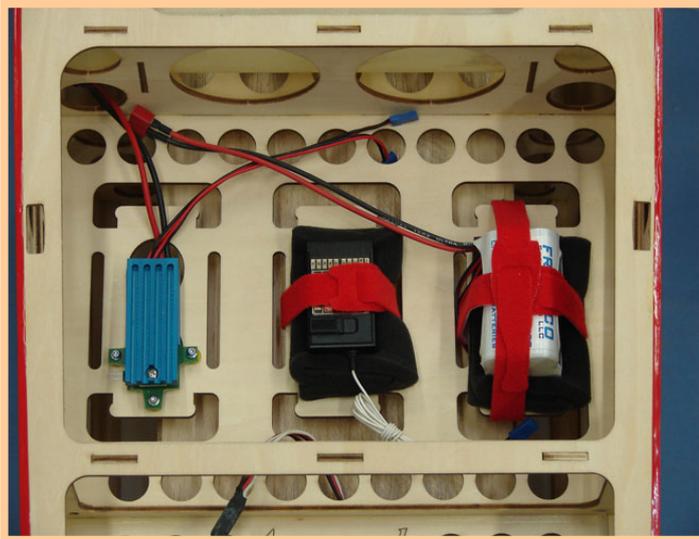
## FUEL TANK



Install the fuel tank mounting ties under the fuel tank floor.



External fuel pipe

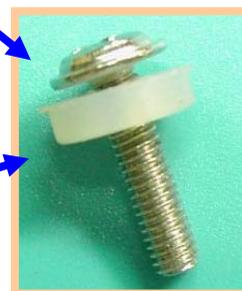


Install the battery, receiver and switch in place as shown.

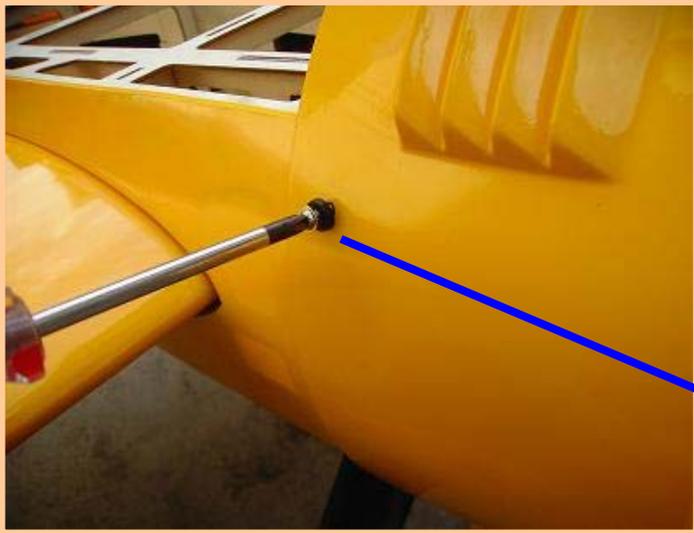
## CANOPY



Slide the rubber backed washers on the hatch mounting bolts and insert bolts through the hatch mounting holes and into the fuse blind nuts. Tighten snugly but do not over tighten and crush the hatch or the fuse sides.



# COWLING

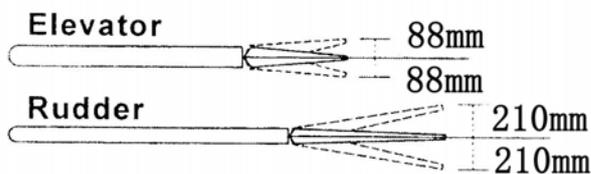


Mount the cowl using the cowl mounting screws and rubber backed washers. The rubber backed washers are to prevent the fiberglass cowl from cracking from normal engine vibration.



# CG POSITION & CONTROL THROWS

## Control Throws

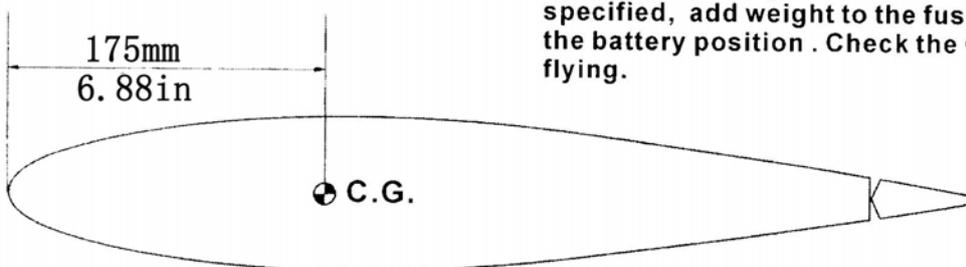


Adjust the control throws as shown in the diagram. These throws are good for general flying. You can adjust according to your personal preference.

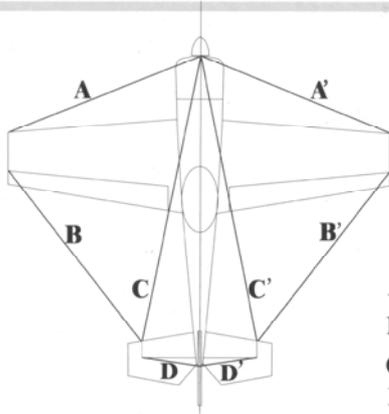
## Ailerons (away from fuselage)



## C.G.



The ideal C.G. Position is 175mm (6.88in) behind the leading edge measured at where the wing meets the fuselage. In order to obtain the C.G. specified, add weight to the fuselage or move the battery position. Check the C.G. before flying.



**A = A'**  
**B = B'**  
**C = C'**  
**D = D'**

The diagram depicts measurements which should be compared to ensure your aircraft is true, correct and flight ready.



**Another scheme for choice.**

## **Flight Model MFG CO**

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