

# RADIO CONTROL MODEL

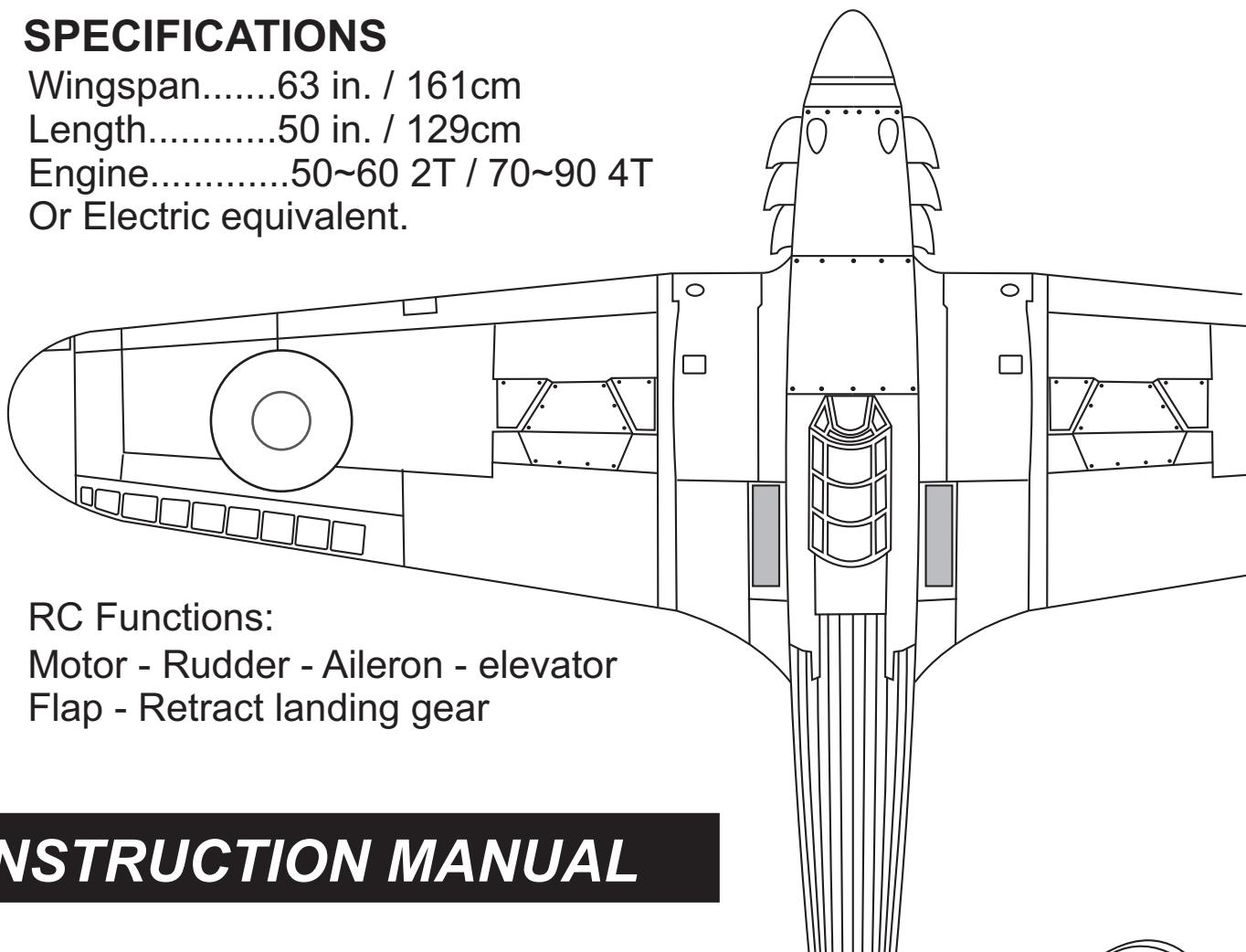
# HURRICANE

VQAA040G  
VQAA040B

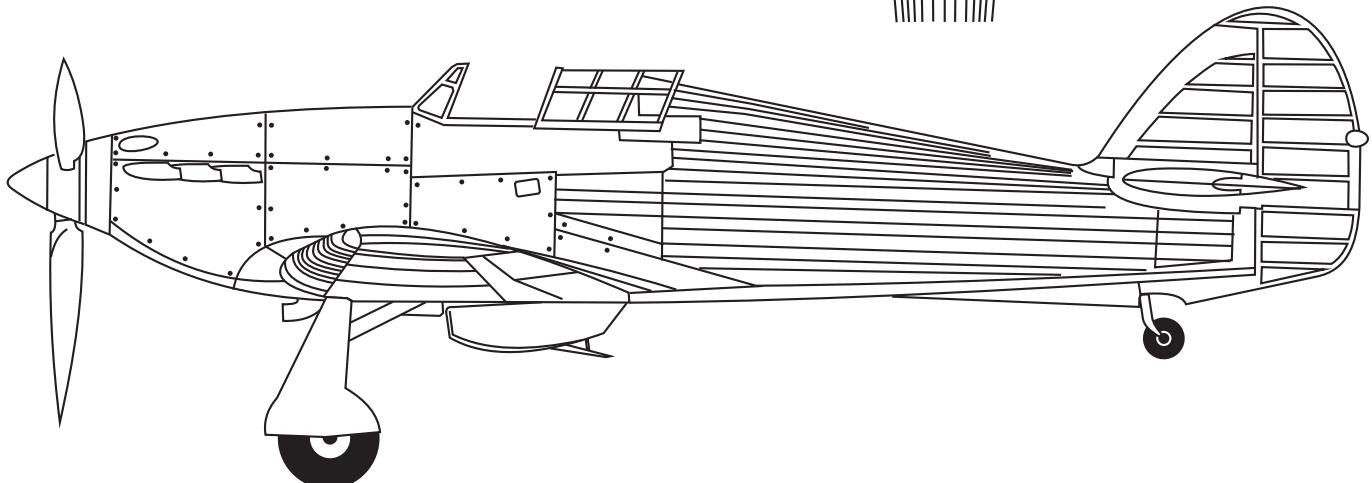
*Almost ready to fly*

## SPECIFICATIONS

Wingspan.....63 in. / 161cm  
Length.....50 in. / 129cm  
Engine.....50~60 2T / 70~90 4T  
Or Electric equivalent.



## INSTRUCTION MANUAL



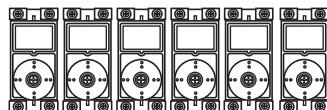
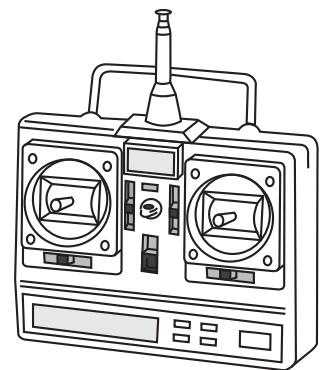
### WARNING!

This radio control model is not a toy. If modified or flown carelessly it could go out of control and cause serious bodily injury or property damage.

Before flying your airplane, ensure the air field is spacious enough.  
Always fly it outdoors in safe areas with no debris or obstacles.



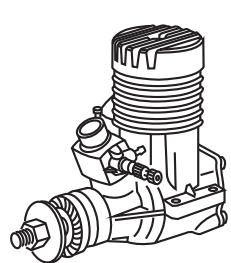
## REQUIRED FOR OPERATION (Purchase separately)



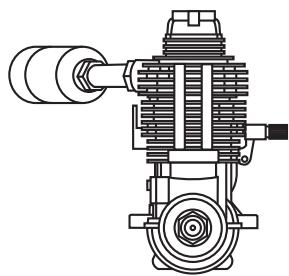
Minimum 6 channel radio  
for airplane with 6 servos  
.Motor control x1 .Aileron x2  
.Elevator x1 .Rudder x1  
-Flap x1



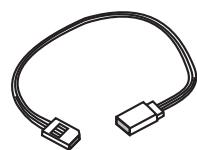
12x6 for .60 - 2 cycle engine  
13x6 for .70 - 4 cycle engine  
14x6 for .90 - 4 cycle engine  
14x8 ~ 15x8 - Brushless Motor



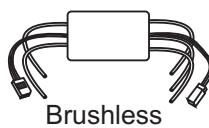
.50 ~ .60 - 2 cycle



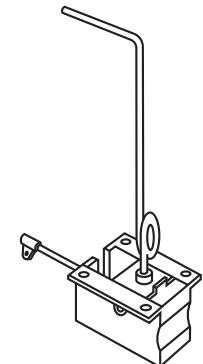
.70 ~ .90 - 4 cycle



Extension for aileron  
servo, retract servo.



Brushless  
Motor Control



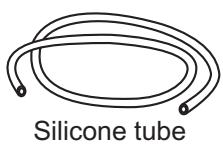
Retract landing  
gear VQAR06



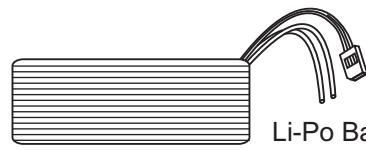
Retract servo  
x1



Linkage Stopper x2  
(for retract servo)



Silicone tube



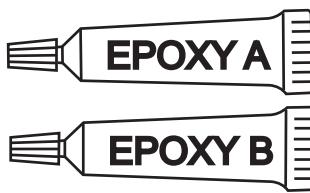
Li-Po Battery.

## GLUE (Purchase separately)



Silicon sealer

Cyanoacrylate  
Glue



Epoxy Glue ( 5 minute type)  
Epoxy Glue (30 minute type)

## TOLLS REQUIRED (Purchase separately)

Hobby knife



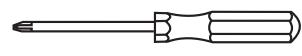
Needle nose Pliers



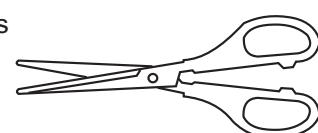
Sander



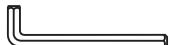
Phillip screw driver



Scissors



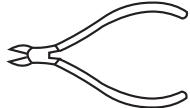
Hex Wrench



Awl



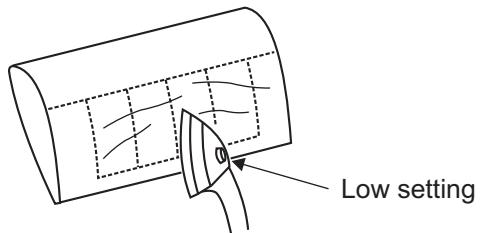
Wire Cutters



Masking tape - Straight Edged Ruler - Pen or pencil - Rubbing alcohol - Drill and Assorted Drill Bits

The pre-covered film on ARF kit may wrinkle due to variations of temperature. Smooth out as explained right.

\* Use an iron or heat gun. Start as low setting. Increase the setting if necessary. If it is too high, you may damage the film



Symbols used throughout this instruction manual, comprise:

Drill holes using the stated size of drill (in this case 1.5 mm Ø)

Take particular care here

Hatched-in areas: remove covering film carefully

Check during assembly that these parts move freely, without binding

Use epoxy glue

Apply cyano glue

Assemble left and right sides the same way.

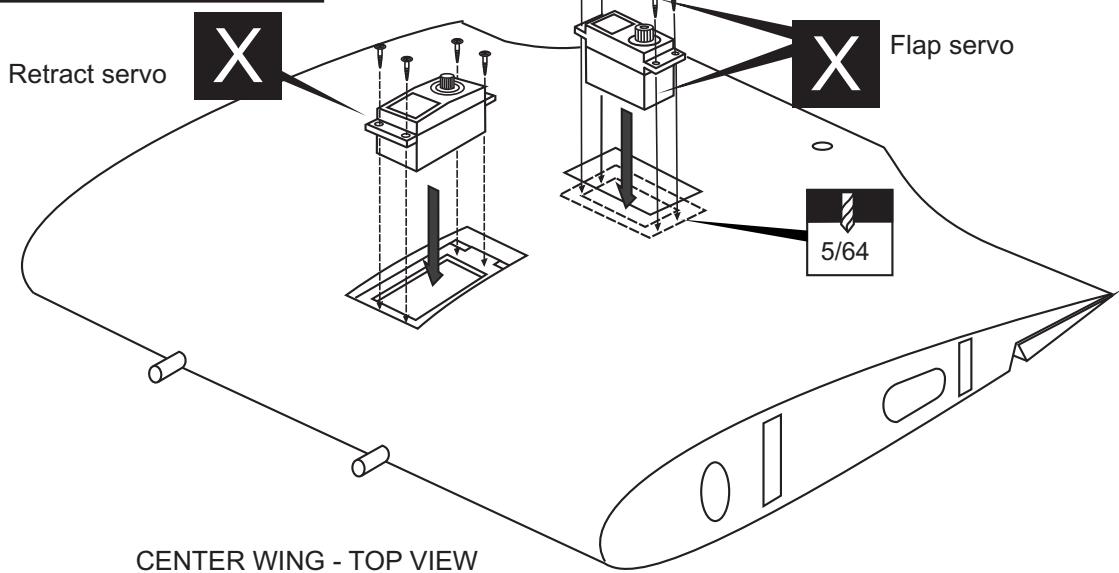
Not included.  
These parts must be purchased separately

**Read through the manual before you begin, so you will have an overall idea of what to do.**

## CONVERSION TABLE

1.0mm = 3/64"	3.0mm = 1/8"	10mm = 13/32"	25mm = 1"
1.5mm = 1/16"	4.0mm = 5/32"	12mm = 15/32"	30mm = 1-3/16"
2.0mm = 5/64"	5.0mm = 13/64"	15mm = 19/32"	45mm = 1-51/64"
2.5mm = 3/32"	6.0mm = 15/64"	20mm = 51/64"	

## 1- Retract / Flap servo



## 2- Retract landing gear

3x12mm screw  
.....8

L/R

Trial fit the push rod into the wing. Join the pushrod to the retract gear arm and trial fit the retract into the wing.

Pull and push the retract push rod by hand to be sure to adjust the stroke so that the landing gear locks in both up and down position.

After checking that the retract works smoothly with the servos, fix the retract on the wing with 3x12mm screws

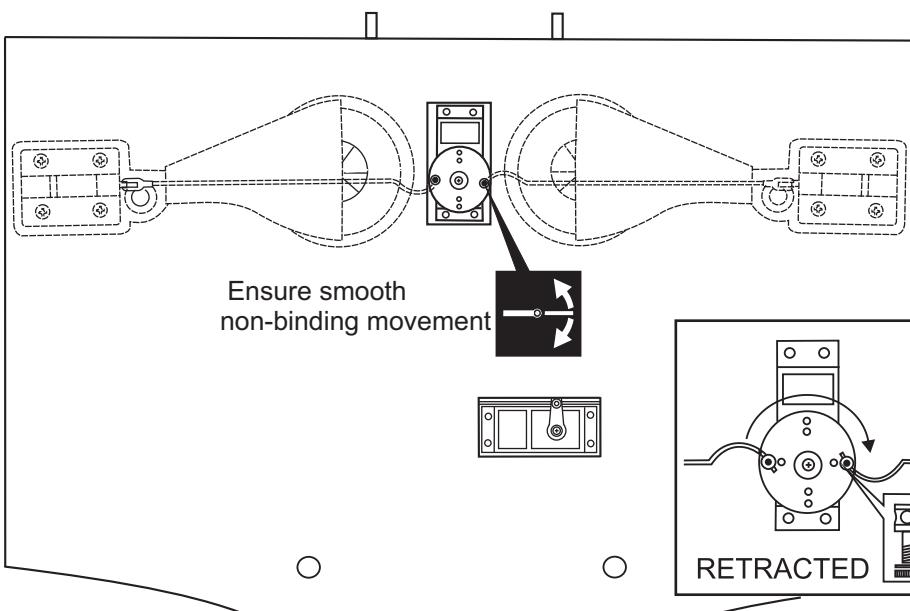
CENTER WING - BOTTOM VIEW

Bend wire for smooth retracting

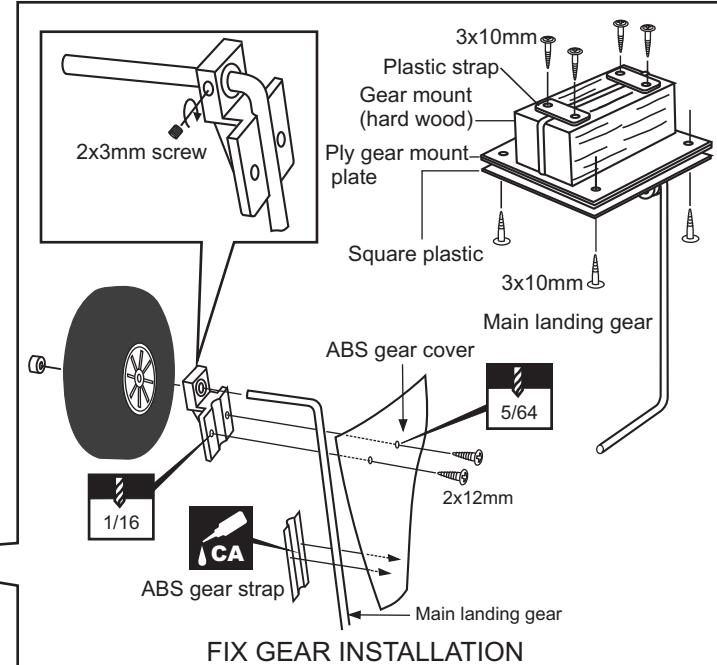
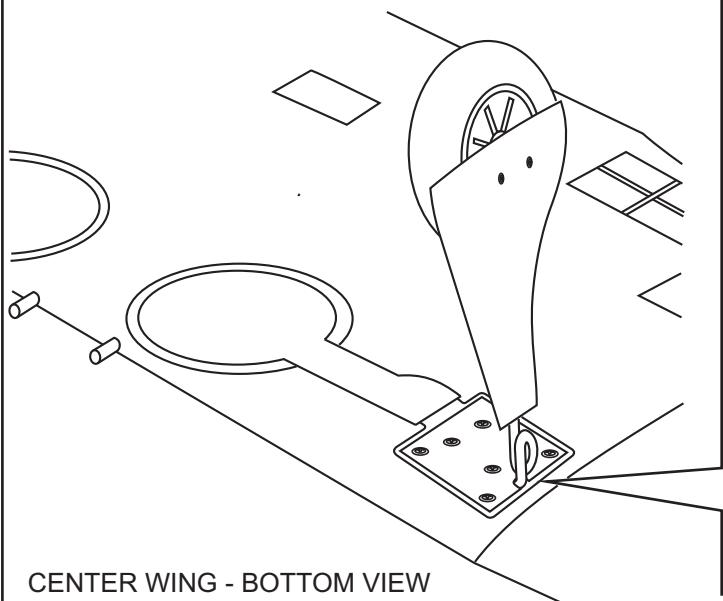
5/64

## 3- Retract landing gear

CENTER WING - TOP VIEW

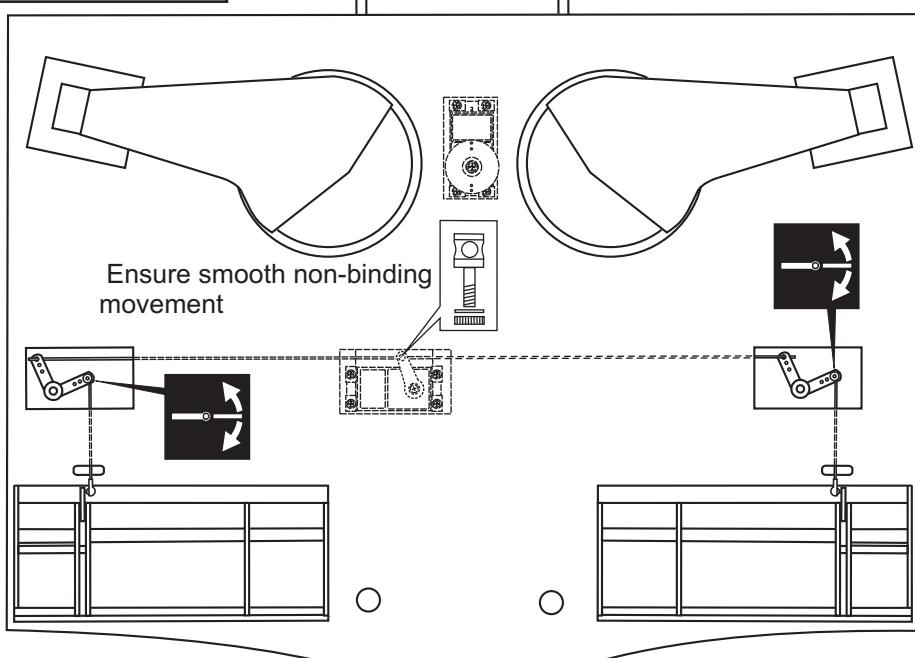


## 4-Center wing - Fix gear



## 5- Center wing - Flap

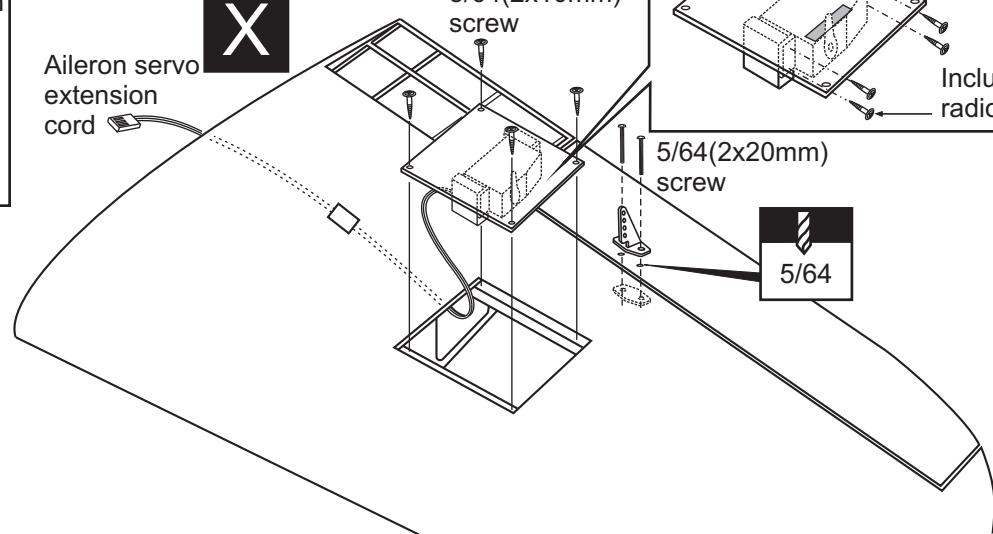
CENTER WING - BOTTOM VIEW



## 6- Aileron servo

Plastic control horn	.....	2
2x30mm screw	.....	4

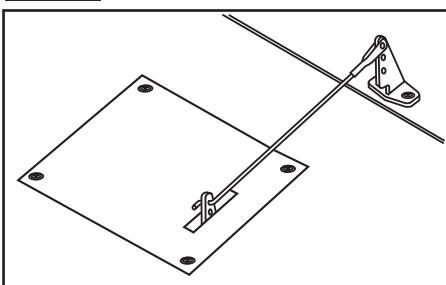
Aileron servo extension cord



## 7- Aileron servo

L/R

Assemble left and right wings  
the same way



WING - BOTTOM VIEW

WING - TOP VIEW



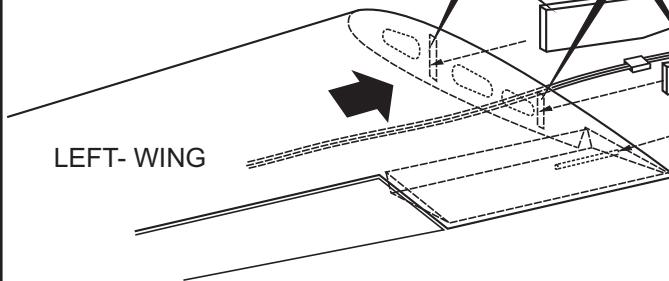
Dowel

Dowel

Aileron servo  
extension (N.I.)

## 8- Joining the wing

*Securely glue together, If coming off during flights, you lose control of your airplane which leads to accidents !*



Metal rod, D=5/64 in. (2mm) do not glue here



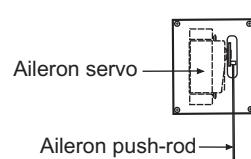
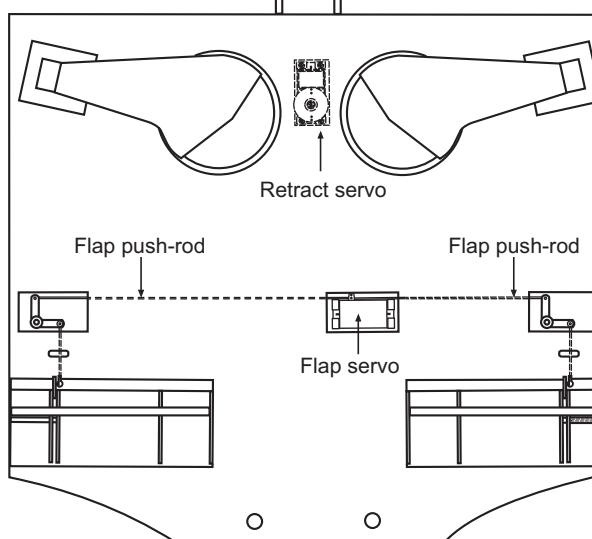
Assemble left and right wings  
the same way

- 1- Trial fit the wing joiner, into one of the wing panels. It should insert smoothly up to the center line marked. Next, slide the other wing half onto the dihedral brace until the wing panels meet. If the fit is overly tight, it may be necessary to lightly sand the dihedral brace.
- 2- Check for the correct dihedral angle
- 3- Apply a generous amount of epoxy into the wing joiner cavity of one wing half. Next, Coat one half of the dihedral brace with epoxy up to the center line. Install the epoxy-coated side of the dihedral brace into the wing joiner cavity up to the center line.
- 4- Do the same way with the other wing half. Carefully slide the wing halves together, ensuring that they are accurately aligned. Firmly press the two halves together, allowing the excess epoxy to run out. Clean off the excess epoxy.
- 5- Apply masking tape at the wing joint to hold the wing together securely while the epoxy cures.

**IMPORTANT:** Please do not clean off the excess epoxy on the wing with strong solvent or pure alcohol, only use kerosene to keep the colour of your model not fade.

## 9- Linkages

WING - BOTTOM VIEW



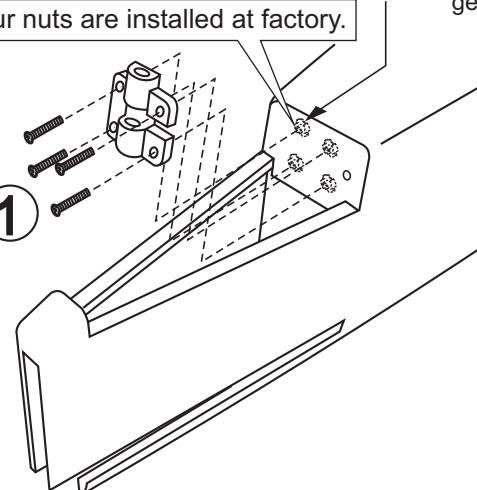
Aileron servo

Aileron push-rod

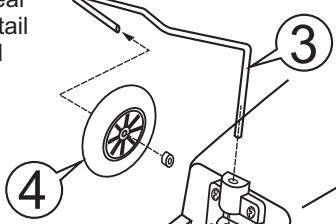
## 10- Tail wheel

Four nuts are installed at factory.

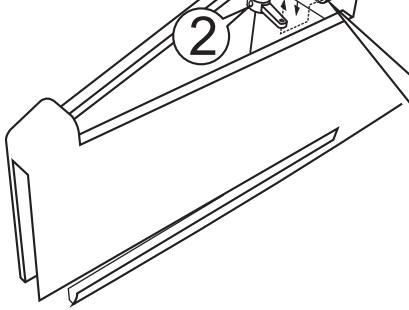
1



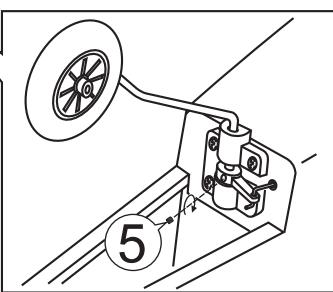
NOTE: Insert the tail gear pushrod into the tail gear horn before insert the tail gear horn on to the tail gear mount (step 2)



4



2



5

2mm tail gear horn	.....	1
Tail gear mount	.....	1
3x15mm screw	.....	4

## 11- Vertical / Horizontal Tail

Plastic control horn

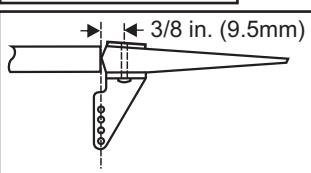


.....3

2x25mm screw



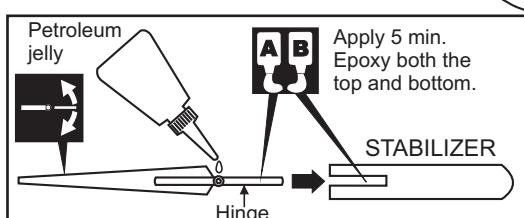
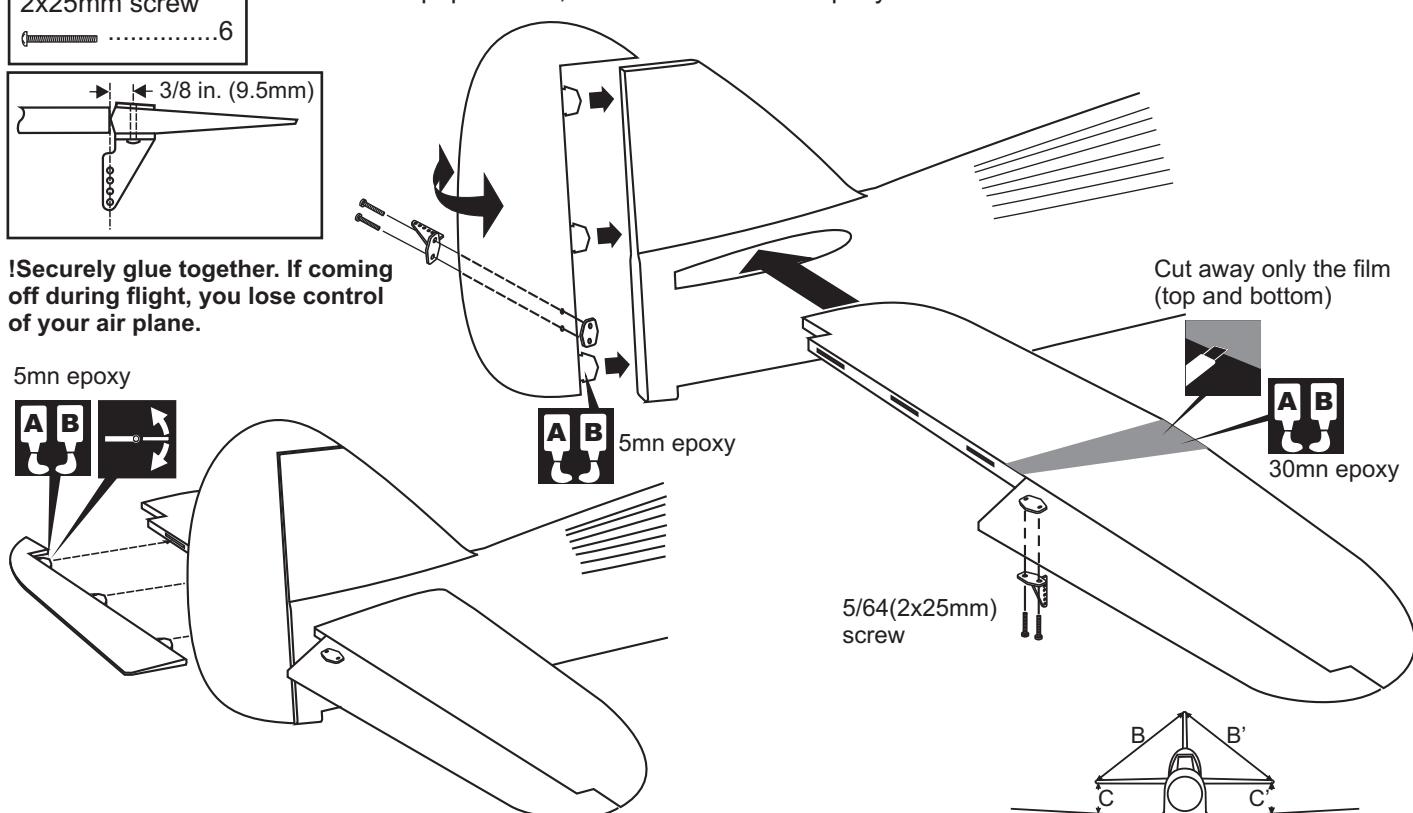
.....6



!Securely glue together. If coming off during flight, you lose control of your air plane.

-When joining the stabilizer it is extremely important to use plenty of epoxy (30 minutes) or CA glue (thin type).

-Carefully slide the stabilizer into the fin, ensuring that they are accurately aligned, using rubbing alcohol and paper towel, clean off the excess epoxy.

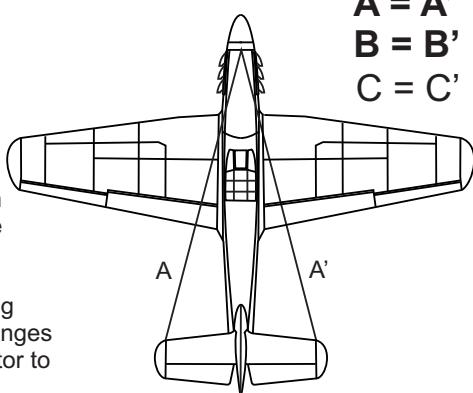


Apply a thin layer of machine oil or petroleum jelly to only the pivot point of the hinges on the elevator, then push the elevator and its hinges into the hinge slots in the trailing edge of the horizontal stabilizer.

There should be a minimal hinge gap.

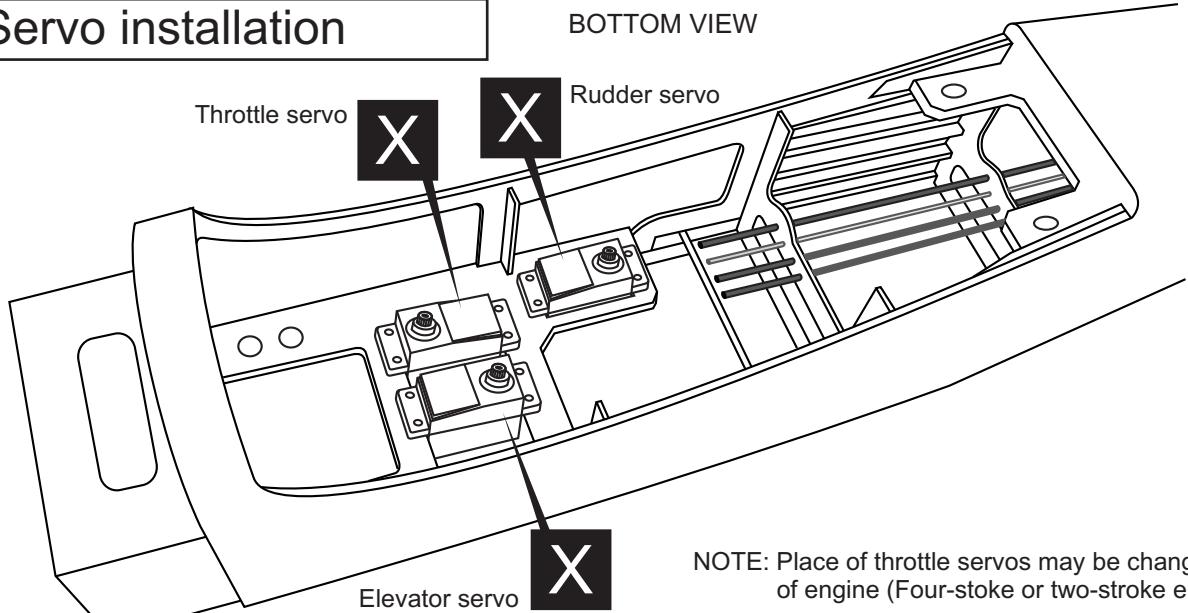
When satisfied with the alignment, hinge the elevator to the horizontal stabilizer using 5 minute epoxy. Make sure to apply a thin layer of epoxy to the top and bottom of both hinges and to inside the hinge slots. Repeat the previous procedures to hinge the second elevator to the other side of the horizontal stabilizer.

A = A'  
B = B'  
C = C'



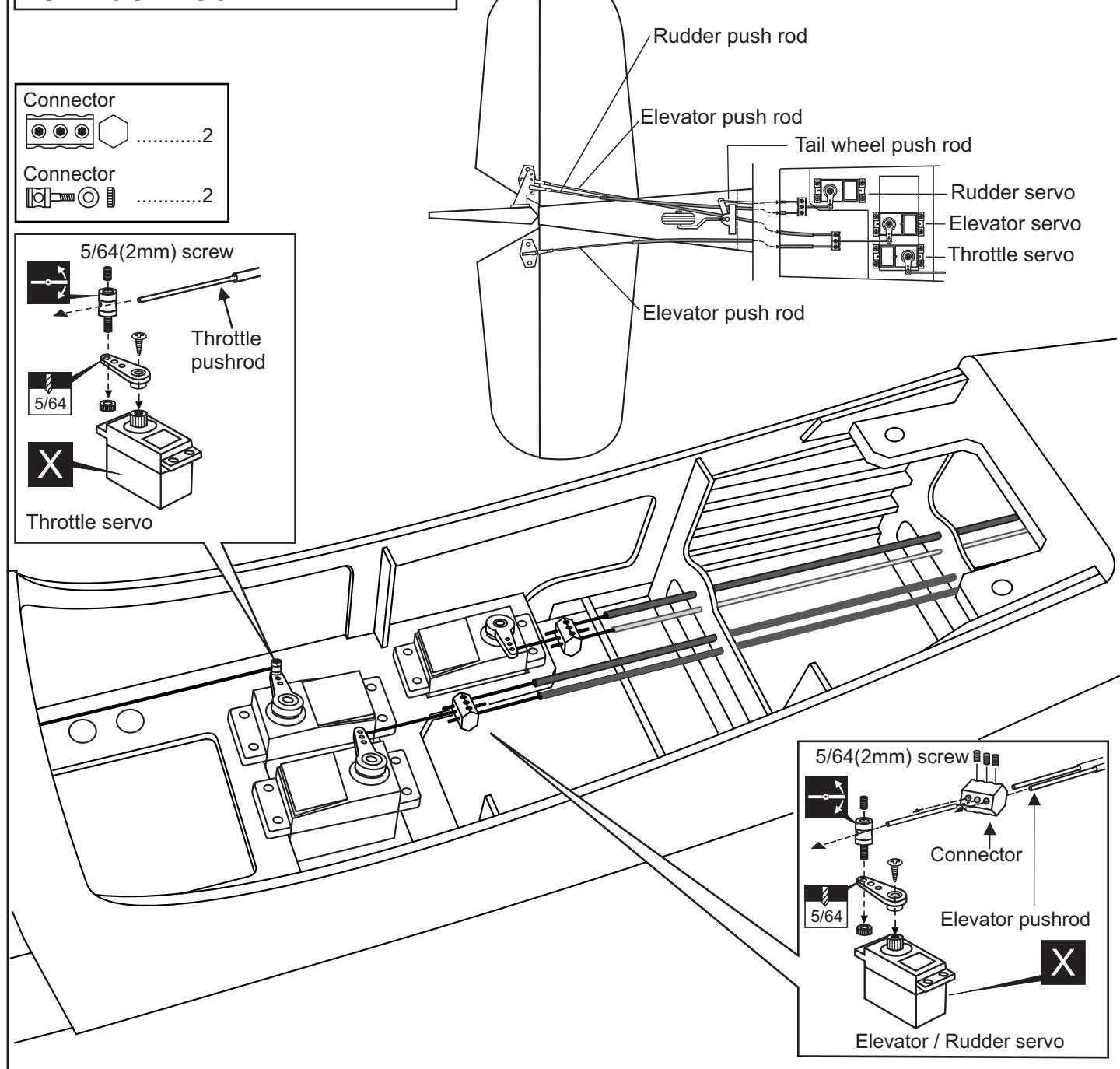
## 12- Servo installation

BOTTOM VIEW



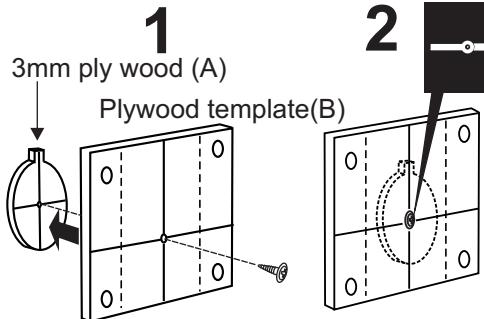
## 13- Push rod

BOTTOM VIEW

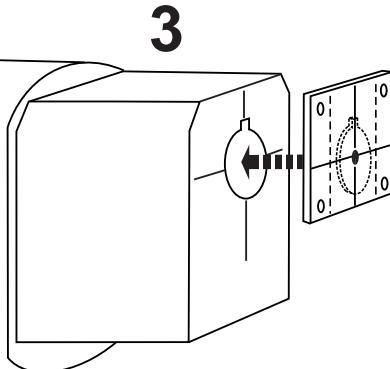


## 14- Engine mounts

Engine thrust on balk head is already adjust at factory



Attach the plywood (A) to the plywood template(B)  
Secure them together with one 3x10mm screw, ensure  
that these parts move freely.

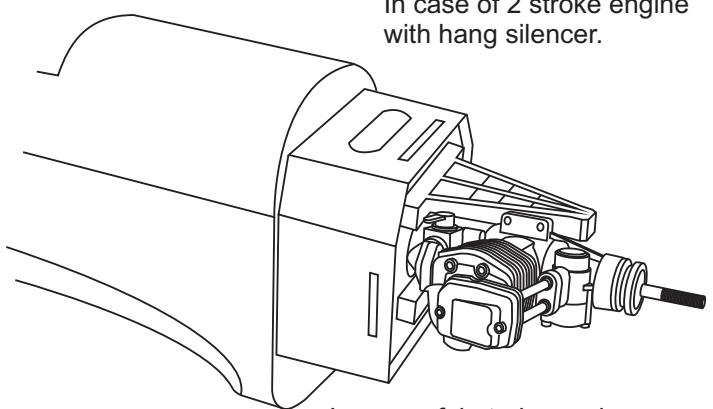
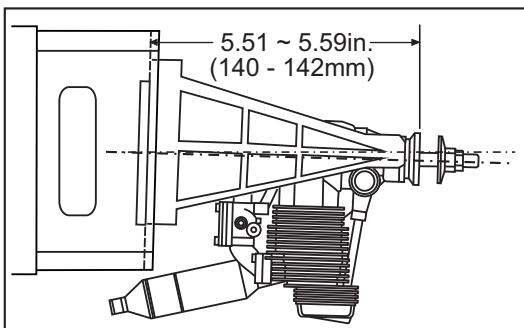
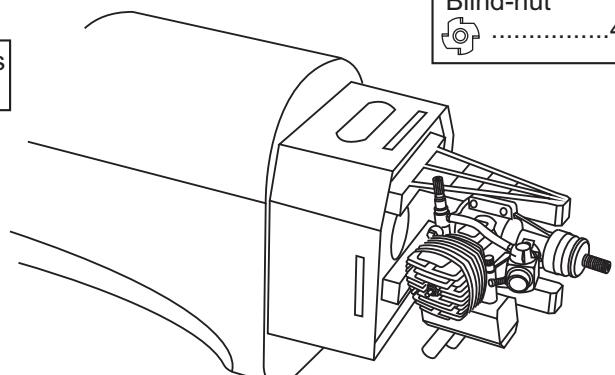
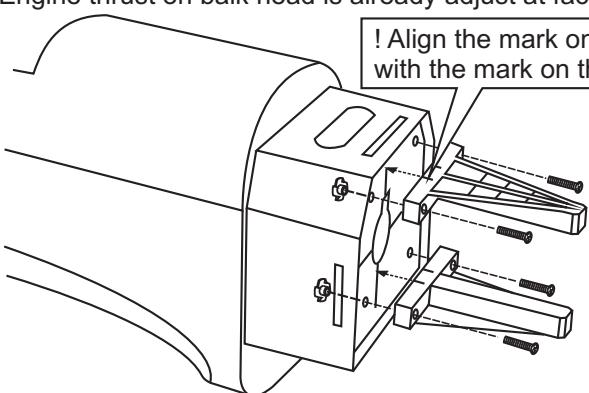


## 15- Engine mounts / Engine

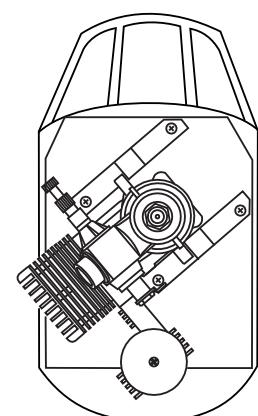
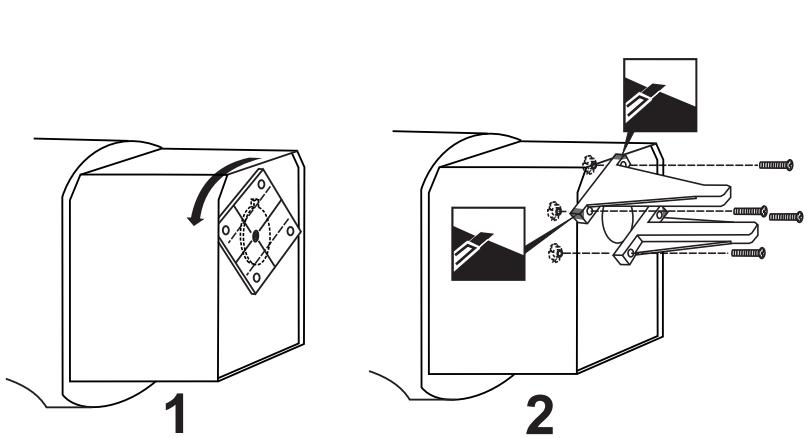
! Engine thrust on balk head is already adjust at factory.

! Align the mark on both mounts  
with the mark on the fuselage.

4x25mm screw ..... 4  
Blind-nut ..... 4



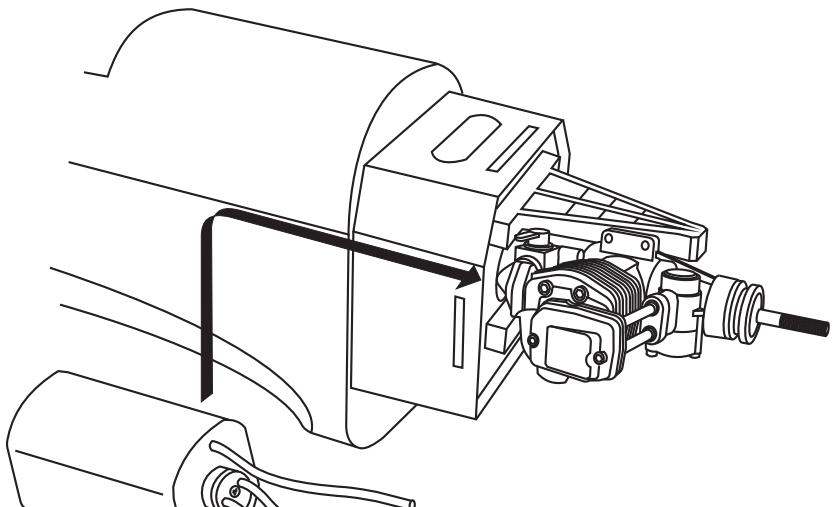
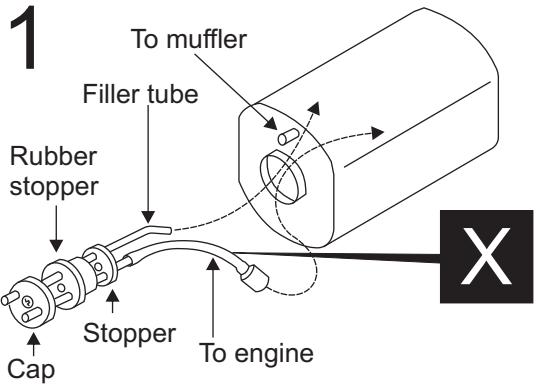
In case of 2 stroke engine  
with hang silencer.



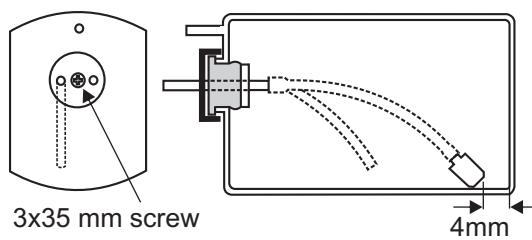
In case of 4 stroke  
engine with side  
silencer.

## 16- Fuel tank installation

**1**



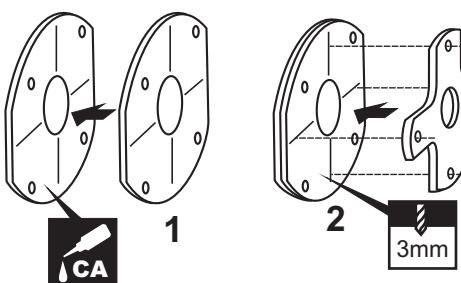
**2**



After confirming the direction . Insert this assembly, clunk end first, into the fuel tank and tighten and screw the fuel tank cap on firmly.

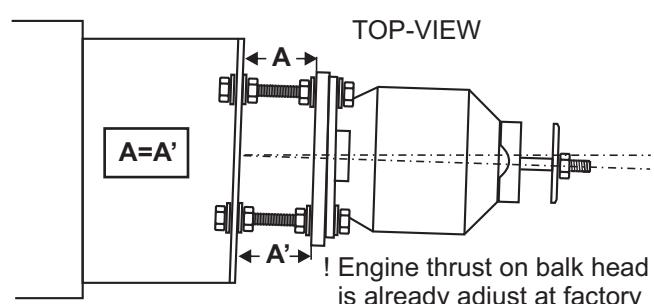
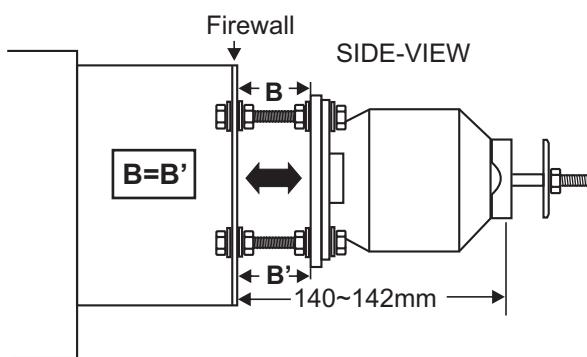
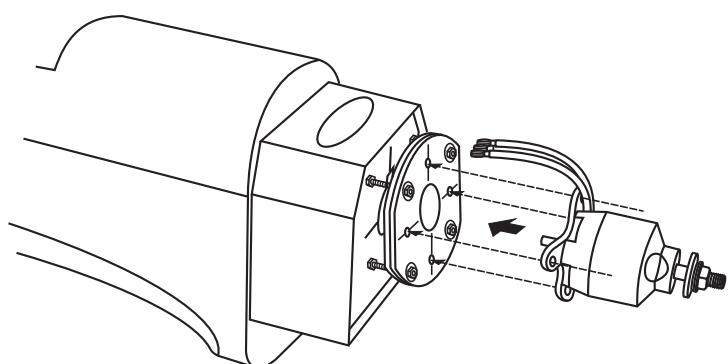
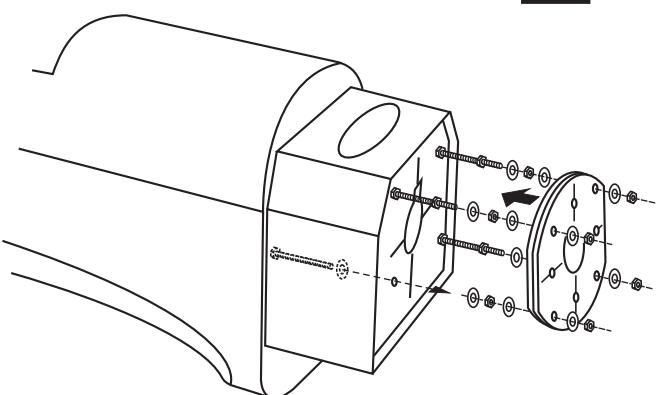
## 17- Electric Motor mount

Using a aluminum motor mounting plate as a template, mark the plywood motor mounting plate where the four holes are to be drilled (2).



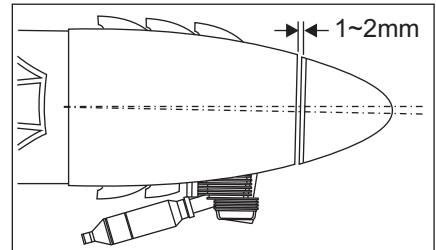
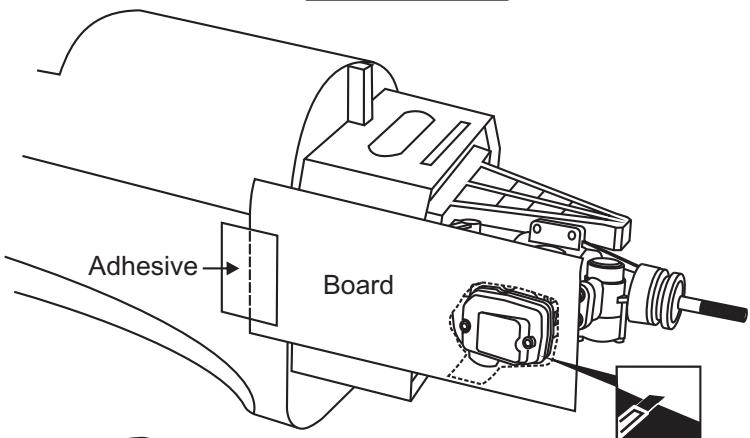
Remove the aluminum motor mounting plate and drill a 1/8"(3mm) hole through the plywood at each of the four marks marked .

Note: The aluminum motor mounting included with electric motor set.



## 18- Cowling

2.5x10mm.....5

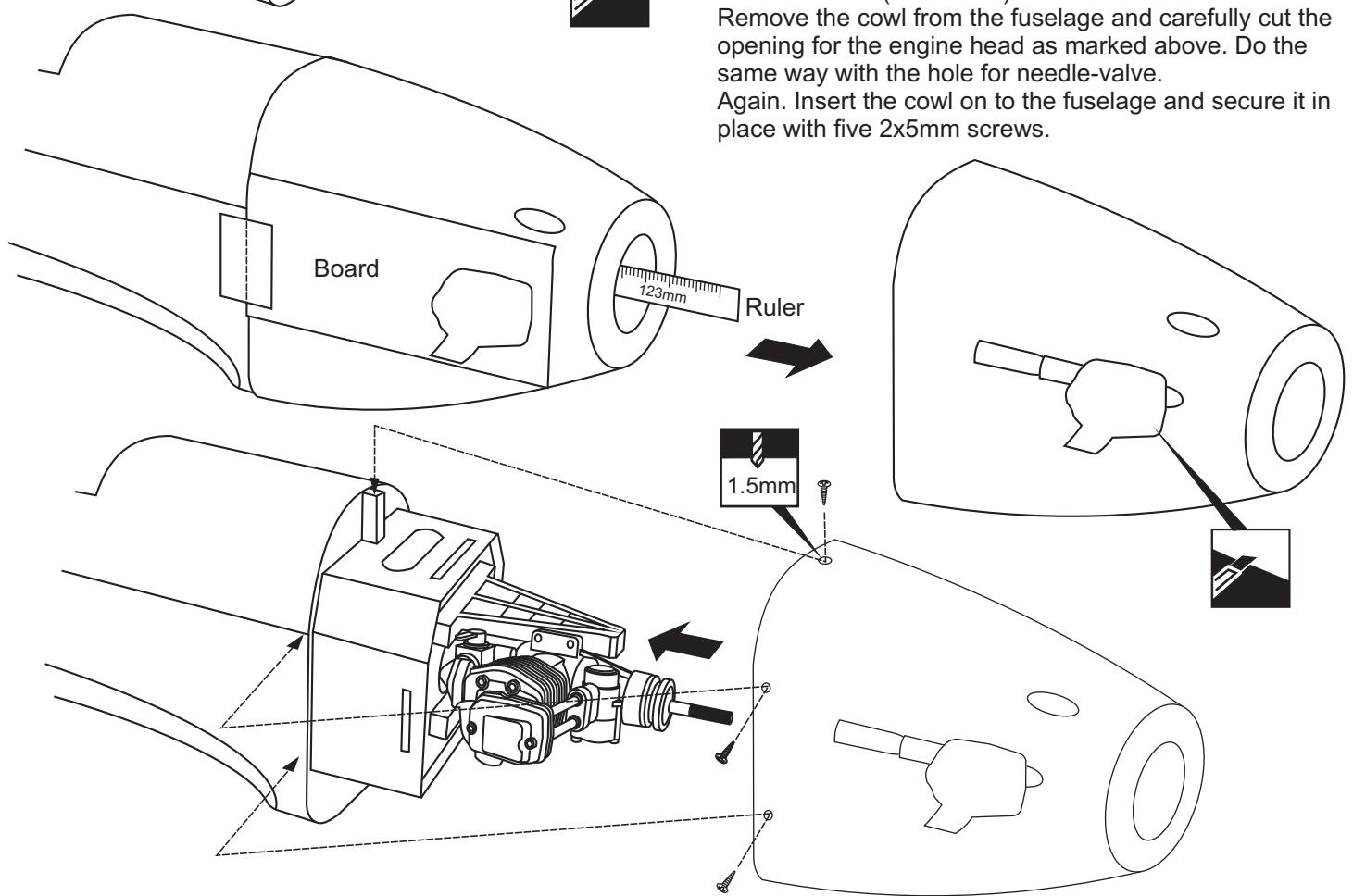


Attach the board or transparent plastic on the side of the fuselage with the adhesive as show.  
Using a pencil or felt tipped pen trace around the engine head where it meet the cowl. Cut the opening the board or transparent plastic for the engine head as marked before.

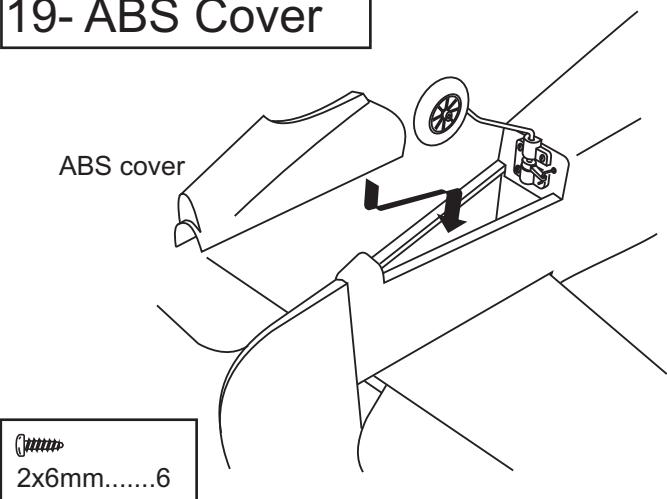
Remove the engine and insert the cowl on to the fuselage so the distance from the fire wall to the front of the cowl is 140 to 142mm (section 14).

Remove the cowl from the fuselage and carefully cut the opening for the engine head as marked above. Do the same way with the hole for needle-valve.

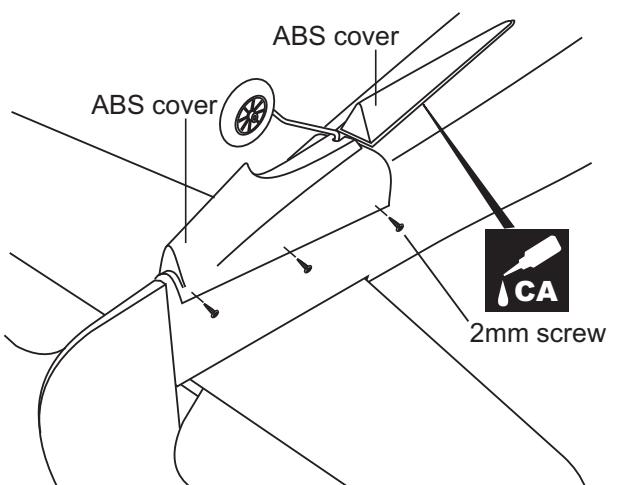
Again. Insert the cowl on to the fuselage and secure it in place with five 2x5mm screws.



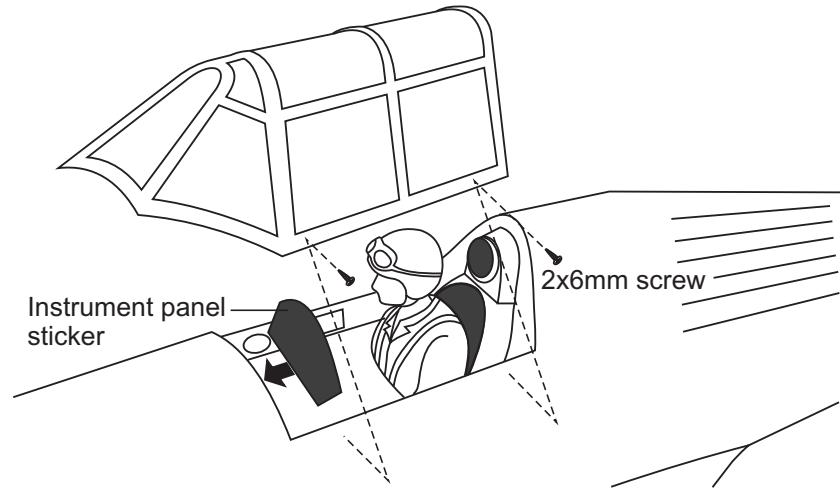
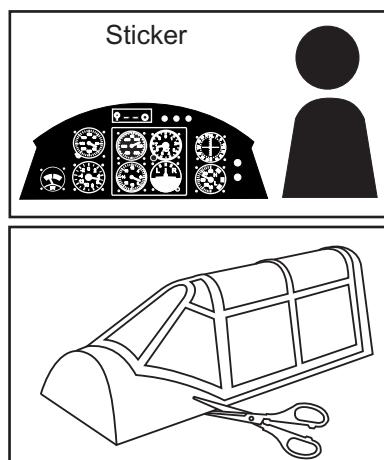
## 19- ABS Cover



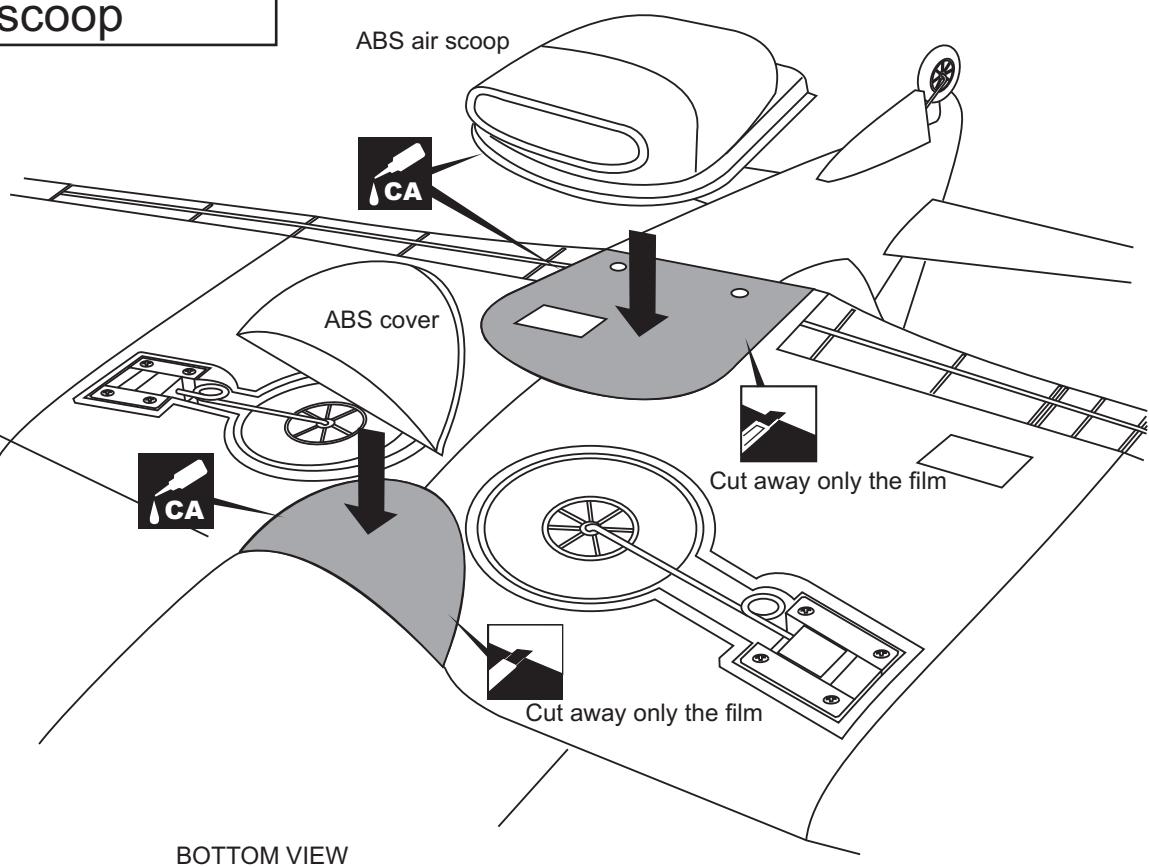
2x6mm.....6



## 20- Canopy



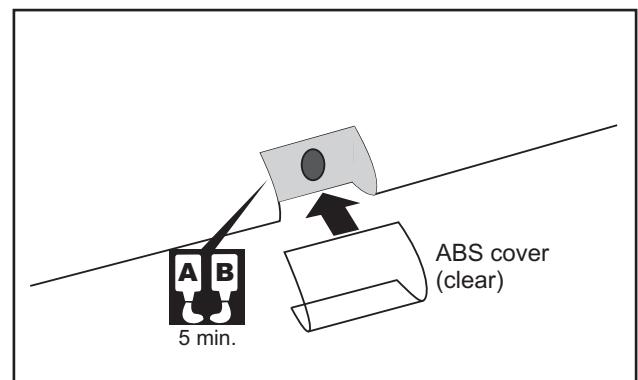
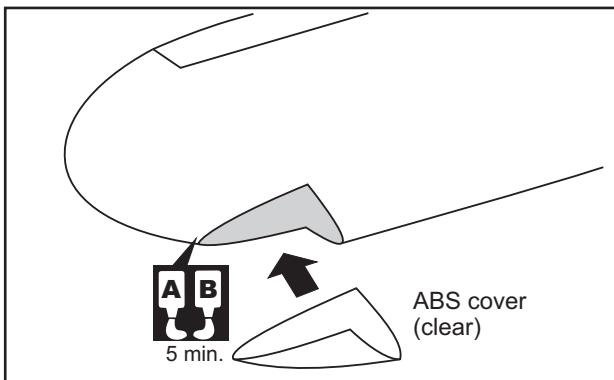
## 21- Air scoop



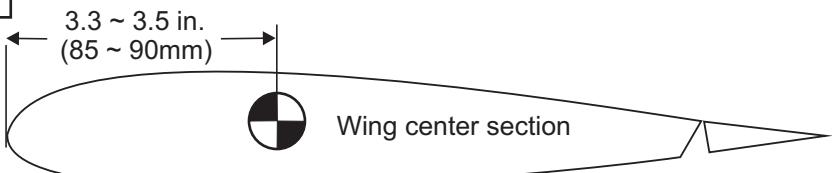
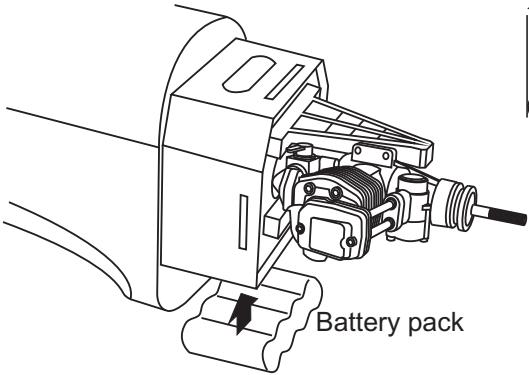
BOTTOM VIEW

## 22- Light

Do not use CA glue to much or it will make the ABS light cover white



## 23- Balance



DO NOT try to fly an out-of-balance model !

Add weight to nose (as show) until the correct balance is achieved. Stick-on weights are available at your local hobby shop and work well for this purpose.

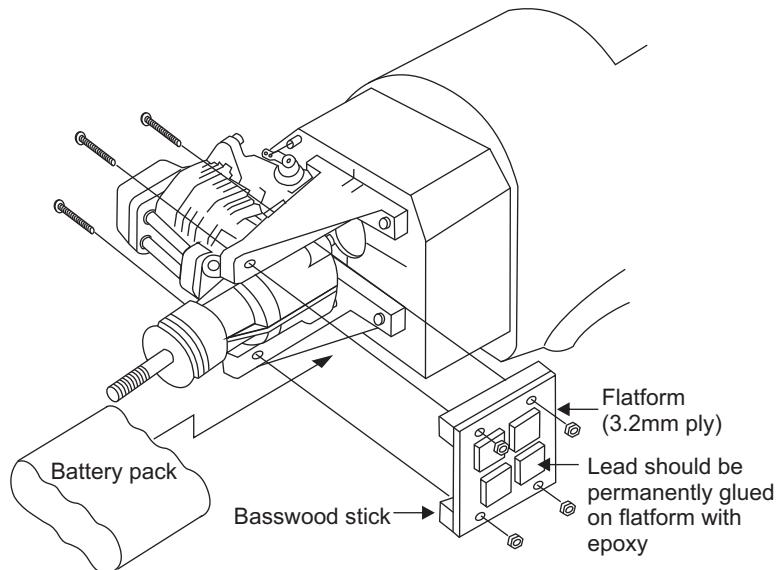
! Securely install the battery pack ensuring it will not come loose during flights.

### How to add nose-weight

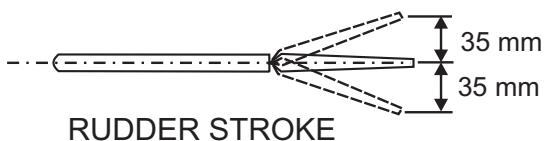
To get the correct C.G., Several strips of lead weight were required in the nose of this model . To minimize the amount of weight required, it is desirable to position the weight as far forward as possible. This can be done by making a platform form leftover basswood stick and 3.2mm (1/8") ply wood. Using 4x35mm bolts to mount the engine would also be long enough to mount the platform. The lead should be permanently glued on with epoxy.

**IMPORTANT:** Recheck the C.G. After the weight has been installed.

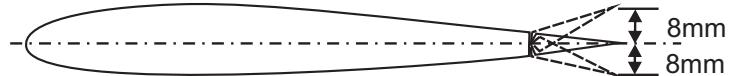
! Securely install the nose-weight ensuring it will not come loose during flights.



## 24- Control Surface



AILERON STROKE



Adjust the travel of the control surfaces to achieve the values stated in the diagrams. These value will be suitable for average flight requirements. Adjust the values to suit your particular needs.

### BEFORE FLYING CHECK EVERYTHING

Before each flight, inspect the airplane for any loose parts. Check the hinges, make sure the pushrods are still firmly attached, and check the engine mounting bolts. In general, check everything on the plane that might possibly come loose.

### CHECK THE FREQUENCE BEFORE FLYING

#### DO NOT FLY NEAR A POWER LINE

The power lines cause radio interference, so avoid flying near them.

**IMPORTANT:** Please do not clean your model with pure alcohol, only use liquid soap with water or use glass cleaner to clean on surface of your model to keep the colour not fade.