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INSTRUCTION MANUAL

TUTOR 32E



For Beginner Pilots · 適合初階玩家

Length (全長)	1160 mm	45.7 In
Wing Span (翼展)	1440 mm	56.7 In
Wing Area (翼面積)	33.4 Dm ²	517.7 sq.In
All up Weight(全備重)	1470 g	51.85 oz
Wing Loading (翼荷重)	44 g/dm ²	14.4 oz/sq.ft
Radio Requirement	4 Channel	4(動作)

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PRECAUTION

- Please read through the entire instruction manual before you start .
- First time builders if not familiar with the processes in the manual, please find an experienced builder to help with assembly.
- Always keep children away from the assembly area due to small parts and glue which are dangerous to children.
- Please save this instruction manual for future repair or parts ordering purposes.

請注意

- 組裝前請先閱讀使用說明書
- 初學無任何組裝經驗者請與經驗較豐富的高階玩家一同組裝
- 請在孩童拿不到零件的環境下組裝以確保安全
- 請保留本說明書方便您日後的快速查閱

Dear customer,

We thank you for your selection on this Beginner model. This "Tutor 32E" is designed to fly like a glow engine Trainer model. Our intention is to replace the old glow engine trainer market. With the electric power model, beginner pilots don't have to worry about engine shot down and tuning issues any more. The fast assembly design also helps the beginner pilot to get into this Hobby easier than usual. The larger wing span and win resistant airfoil allows the pilot to fly/practice in windy situation easier than all the small size foam models. By introducing this model, we wish to help more dealers to embrace the new beginner pilots with ease!

If you don't like to fly slow, by changing the propeller to a 10x7E, this model becomes very aggressive. You will discover a lot fun with this new power and new flying performance. It is a model for fun as well!

We would like to explore further on the special features for our target pilots:

This 1.44m trainer model is the lightest one (AUW: 1.5kg) in market at its size. The light weight contributes to its light wing-loading which allows it to fly at lower speed and give the pilot more response time in the air. The stall speed is also much slower than the traditional glow engine trainer. Even in stall situation, the reaction is gentle and predictable! The special designed airfoil allows it to penetrate win with ease regardless it light weight. All the above features make "Tutor 32E" the perfect choice for all beginners!

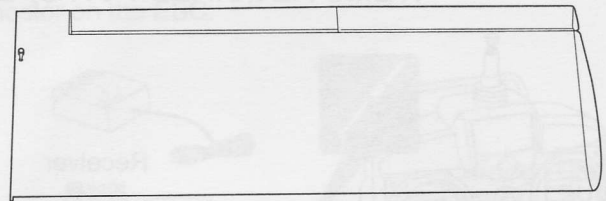
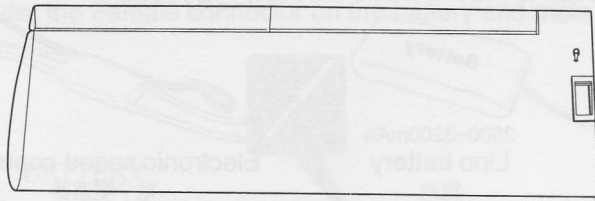
For the beginner pilots, we recommend you to join the local club and asked help from the club member/instructor on guiding you through the assembly sequence. After that helping you trim/tune up the model and lead you in your first flight. If you can not find such instructor, please try asking help from the store you purchased the model. They usually can help you by explaining the assembly sequence and the necessary glue and tools you would need to finish the built. Some may even introduce the local club to you. If you can not get any help, please read through this manual before you start the build and follow all the steps express in each chapter.

We asked the dealer to spend a little time recommending this model and explaining how simple the assembly process can be. All necessary tools and glue should be purchased in the store! Most importantly, explain the effect of all control surface on this model. It would help the pilot understanding how to set up and trim the model.

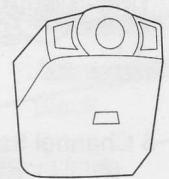
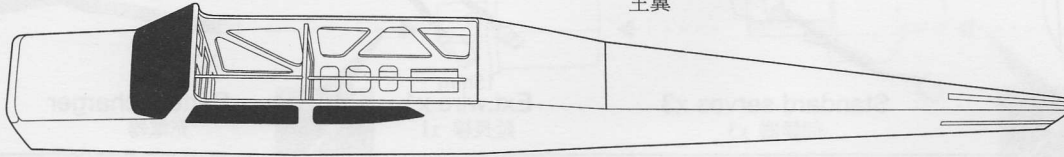
Sincerely yours,

Ultrafly Model Team

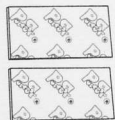
INCLUDED PARTS



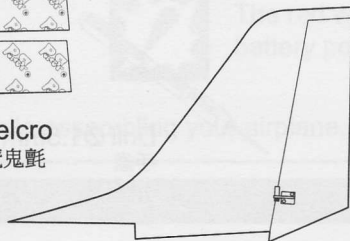
Wing
主翼



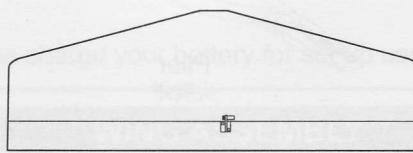
Cowling
整流罩



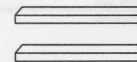
Velcro
魔鬼氈



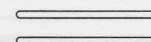
Rudder
垂直尾翼



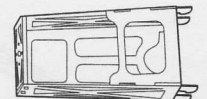
Elevator
水平尾翼



Motor Mount
Reinforcement Strip
(Triangle Shape)
馬達座加強固定片



Wood Stick
For Rubber Band
Ø6x105mm
橡皮筋固定木條



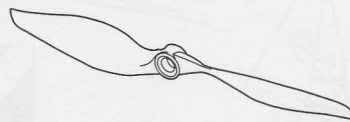
Motor Mount
馬達座



Screw M2.6x8
螺絲



Spinner
機頭罩



Propeller 10x5E
螺旋槳



M6 Nut
螺帽



Prop adapter
鋁轉接頭



Screw M2x5
丸頭自攻螺絲x4



Screw M2.6x10
螺絲x2

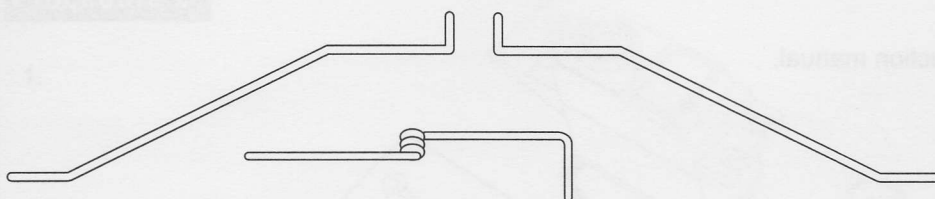


Washer M6.2x12
華司x2

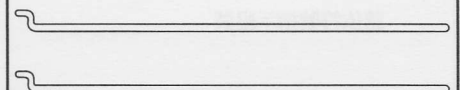


M3x3
內六角螺絲x2

Propeller & Propeller Adapter
動力組和螺旋槳



Main Landing Gear Strut Set
主輪架組



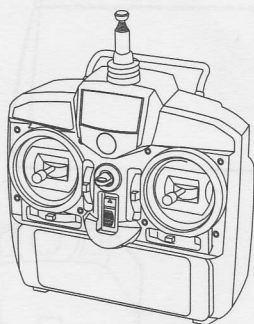
Push Rod
推拉桿組



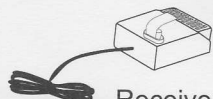
Main Wing Joiner
主翼連接板

PARTS NOT INCLUDED IN KIT

ITEMS REQUIRED FOR OPERATION(Not included in kit)另購裝備



4~8 Channel transmitter
4動作以上發射機



Receiver
接收機



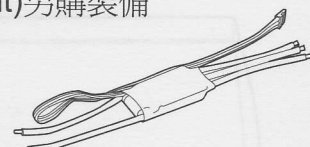
Standard servos x3
伺候器 x3



2500~3200mAh
Lipo battery
電池



15mm
Ext. wire x1
延長線 x1



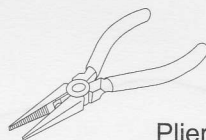
Electronic speed controller
電子變速器

Battery charger
充電器

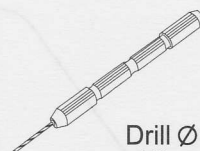
TOOLS REQUIRED 組裝必須工具



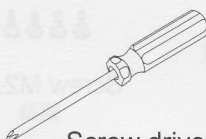
Cutting knife
美工刀



Plier
尖嘴鉗



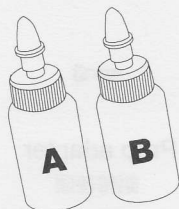
Drill Ø1.5mm
手鑽



Screw driver
起子組



(1.5mm)
Hex wrench
(L)型六角板手



Epoxy Glue
(AB)膠



C.A glue
瞬間膠

IMPORTANT NOTE BEFORE YOU BEGIN (組裝注意事項)

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

組裝前請詳閱說明書

2.Symbols used through out the instruction manual.

請依符號指示組裝



Apply epoxy glue
使用(AB)膠



Cutting knife
使用美工刀



Use drill
使用手鑽



Important
重點



Apply (C.A) glue
使用瞬間膠



Use screw driver
使用起子組



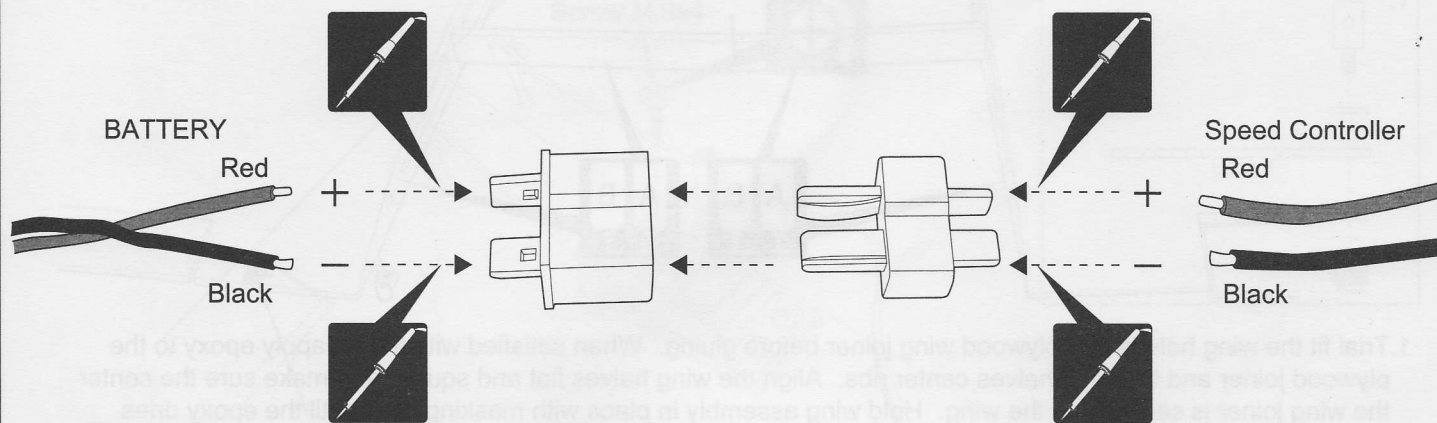
Use soldering Iron
使用烙鐵



Pliers
尖嘴鉗

BATTERY & ESC ASSEMBLY

1. Solder the Female connector on the battery and male connector on the ESC.

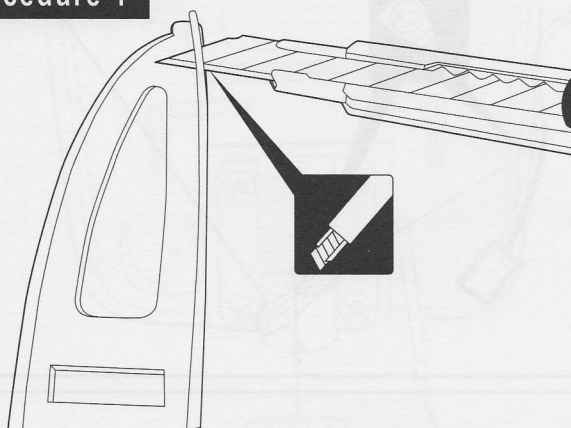


The red wire means positive "+", Please keep this in mind. Mis-connect the battery power will cause damage to the "ESC"

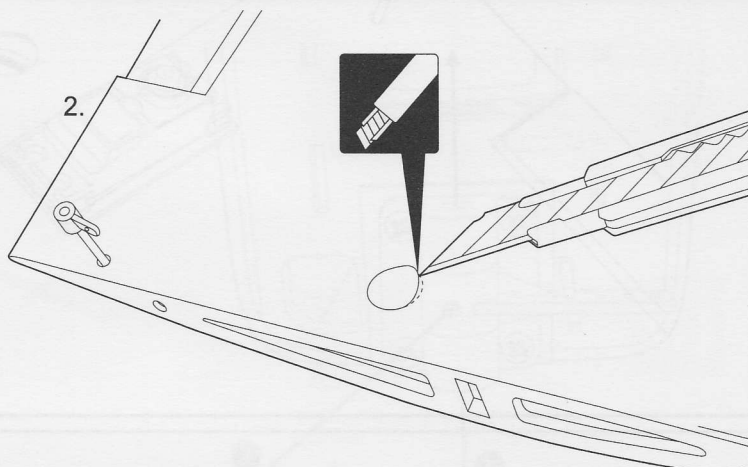
2. "While assembling your airplane, please charge your battery for set up use in the next steps."

WING ASSEMBLY

Procedure 1



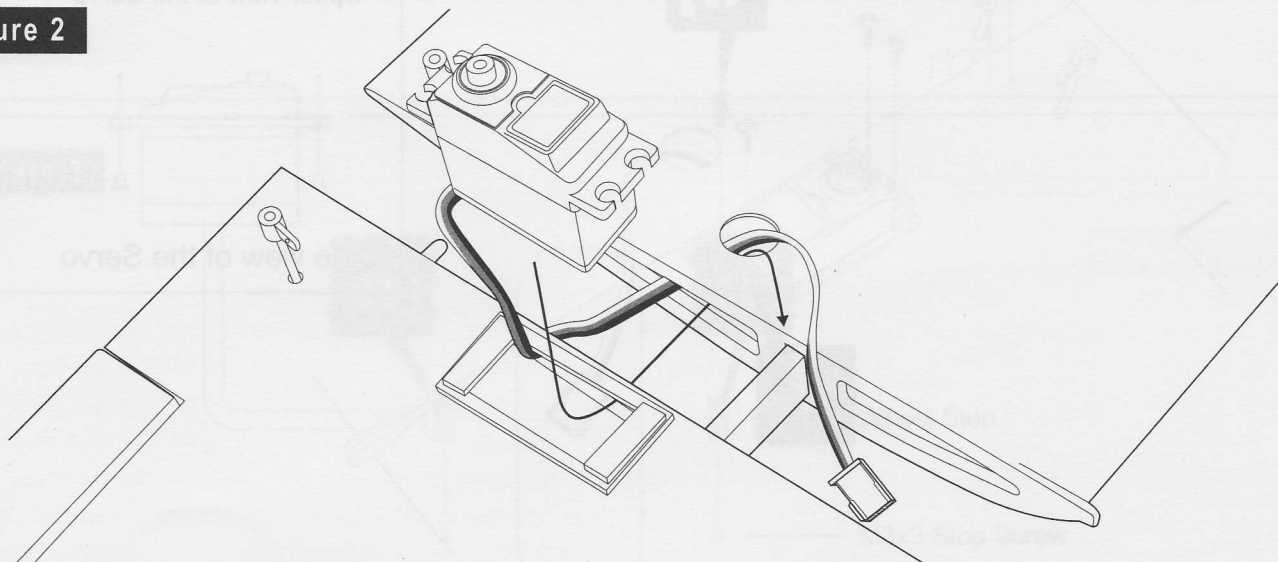
1. Carefully remove the covering material with sharp knife at the wing root location as graphics shows. Do not cut into the balsa wood!



2. Carefully remove the covering material with sharp knife at the wing root location as graphics shows. Do not cut into the balsa wood!

Procedure 2

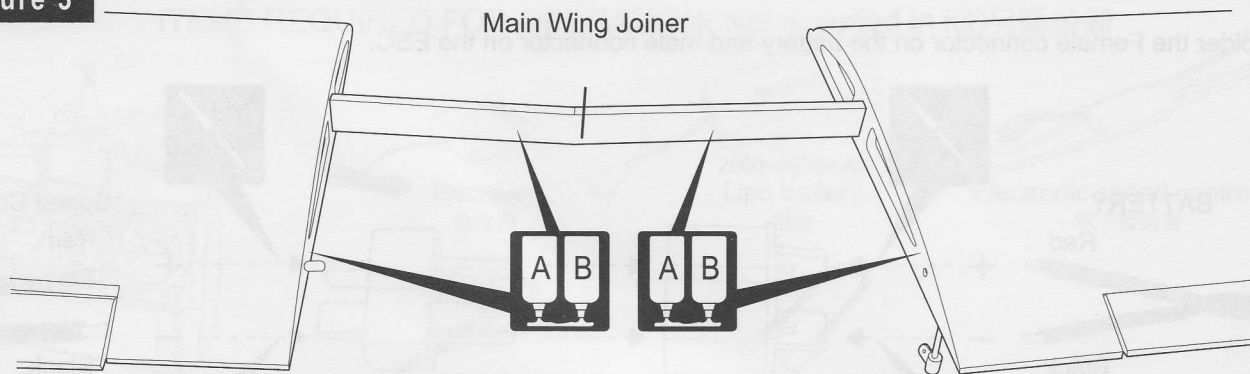
1.



1. When you glue the wing together in next step, you must guide the servo wire through the holes as graphic shows.

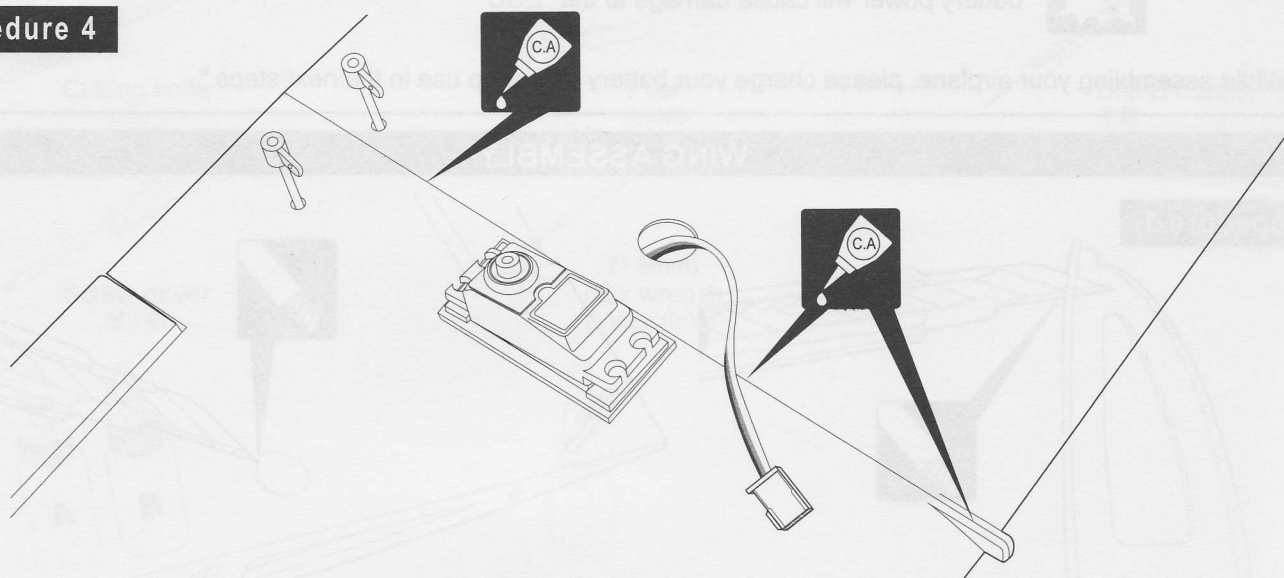
Procedure 3

1.

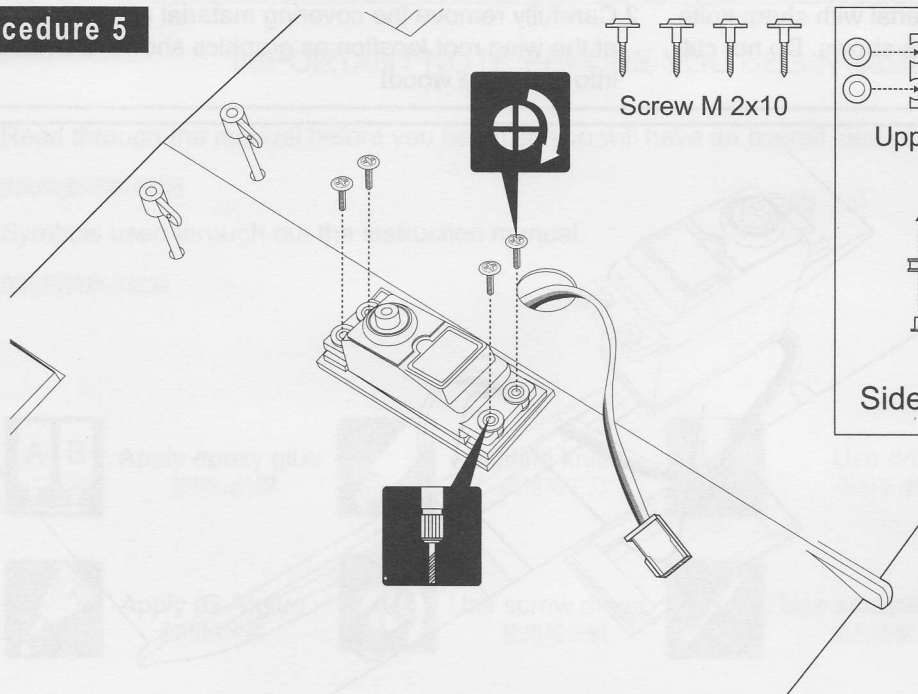


1. Trial fit the wing halves and plywood wing joiner before gluing. When satisfied with the fit, apply epoxy to the plywood joiner and the wing halves center ribs. Align the wing halves flat and square and make sure the center the wing joiner is centered in the wing. Hold wing assembly in place with masking tape until the epoxy dries. Use of 30 minute type epoxy here is strongly recommended.

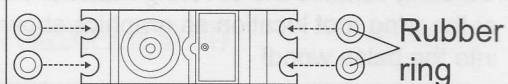
Procedure 4



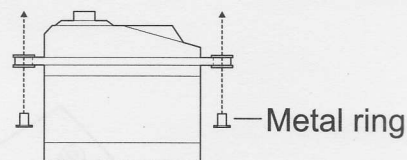
Procedure 5



Screw M 2x10



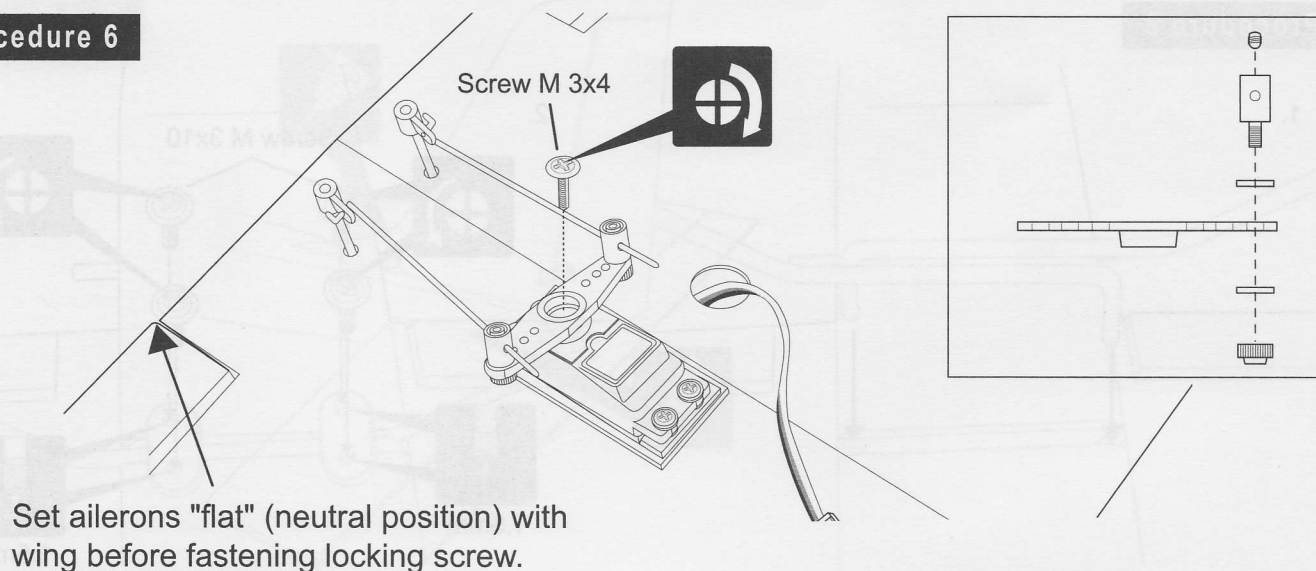
Upper view of the Servo



Side view of the Servo

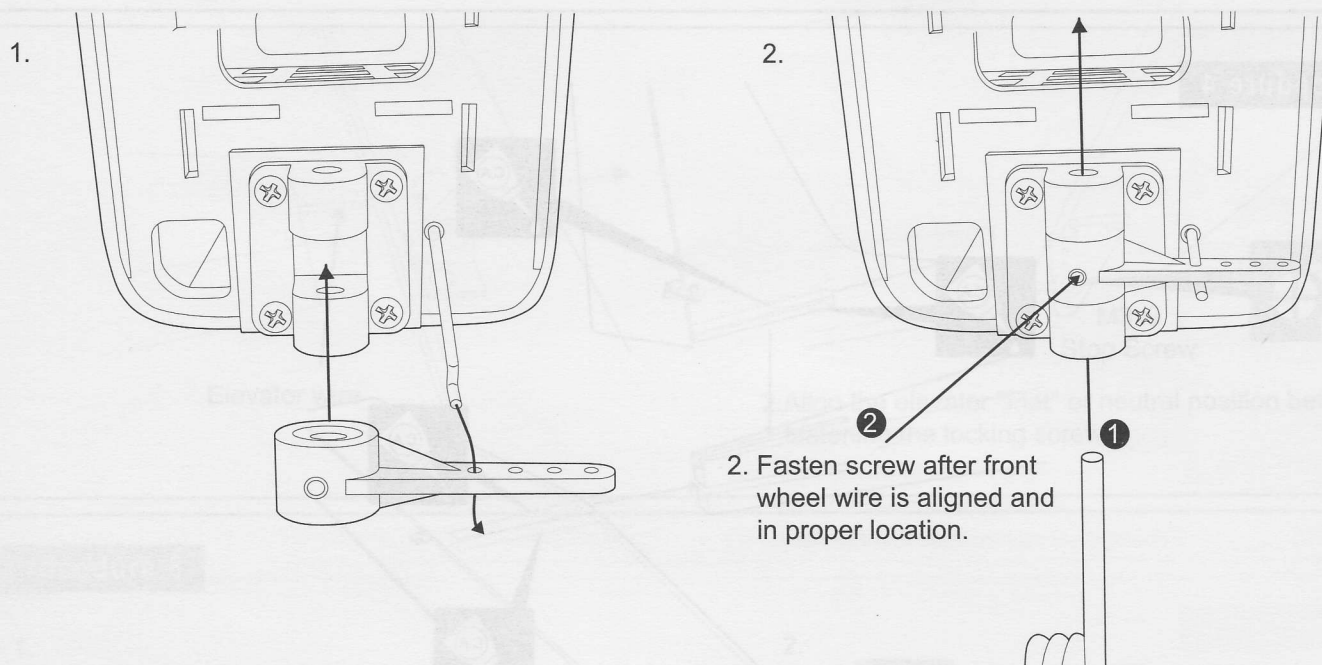
Set all servo arms at neutral position before installation

Procedure 6

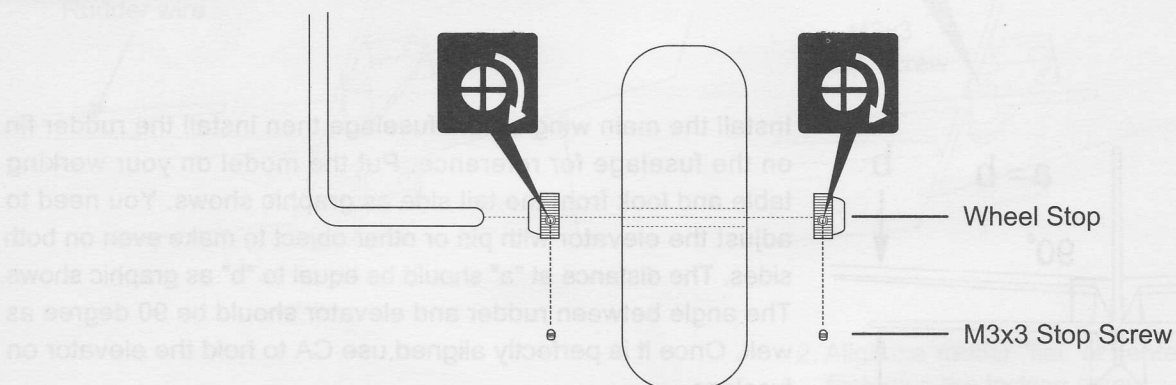


TAIL & LANDING GEAR ASSEMBLY

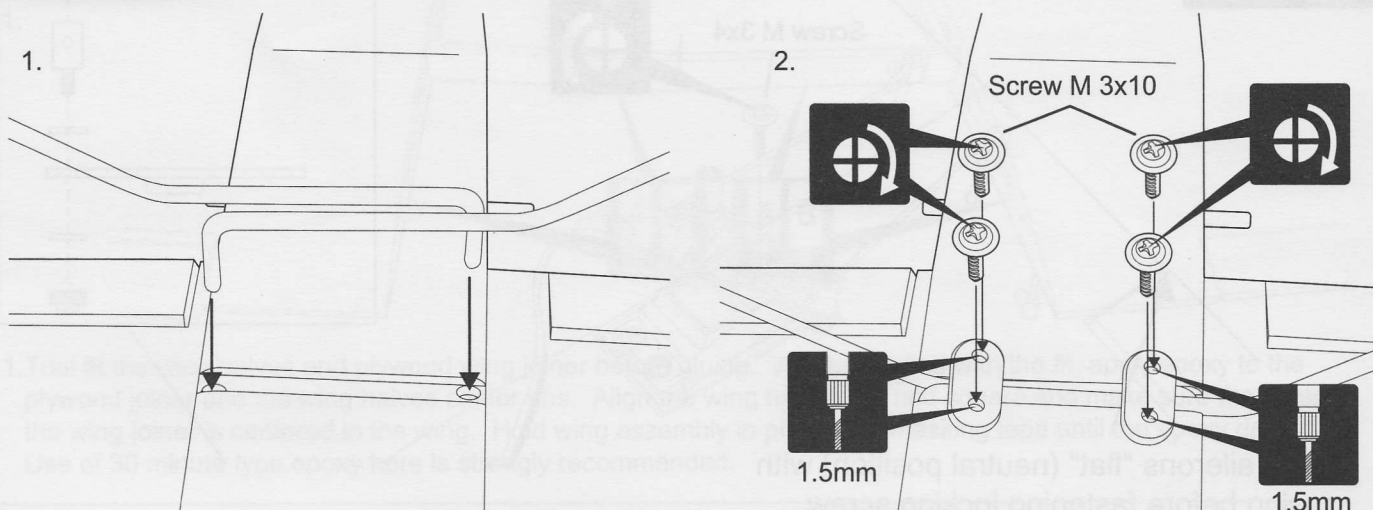
Procedure 1



Procedure 2



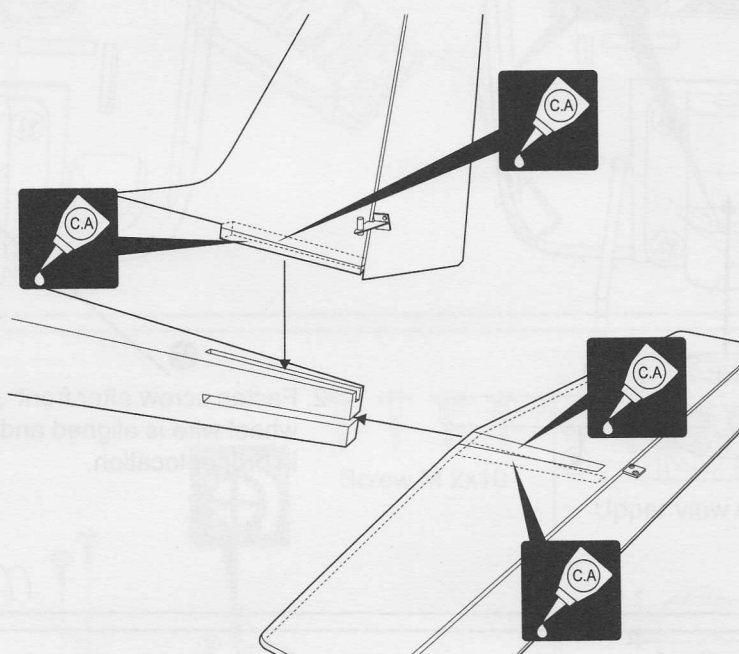
Procedure 3



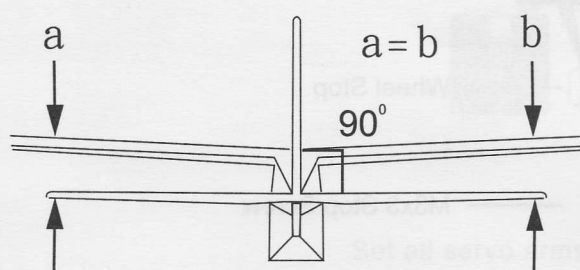
1. Install the main landing gear wire at the bottom of the Fuselage. Make sure the wire is in the slot. Use a 1.5mm hand drill to drill a 5mm deep hole before you fasten the screw on the landing gear wire.

2.

Procedure 4

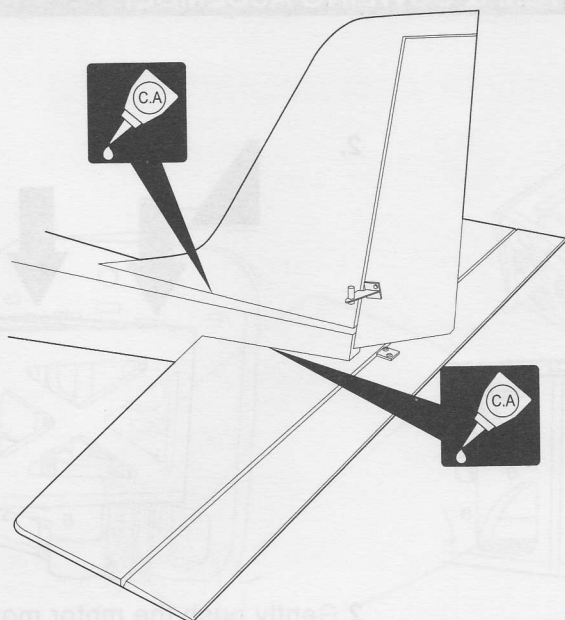


Procedure 5



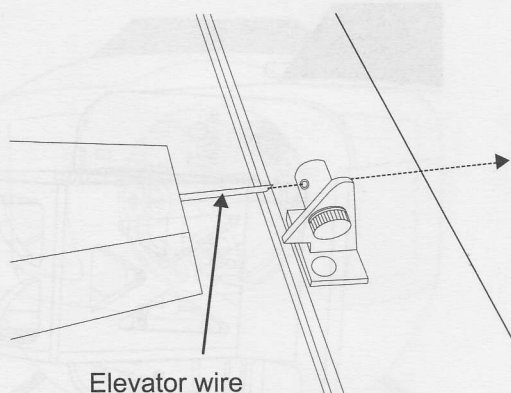
Install the main wing on the fuselage then install the rudder fin on the fuselage for reference. Put the model on your working table and look from the tail side as graphic shows. You need to adjust the elevator with pin or other object to make even on both sides. The distance at "a" should be equal to "b" as graphic shows. The angle between rudder and elevator should be 90 degree as well. Once it is perfectly aligned, use CA to hold the elevator on fuselage.

Procedure 6

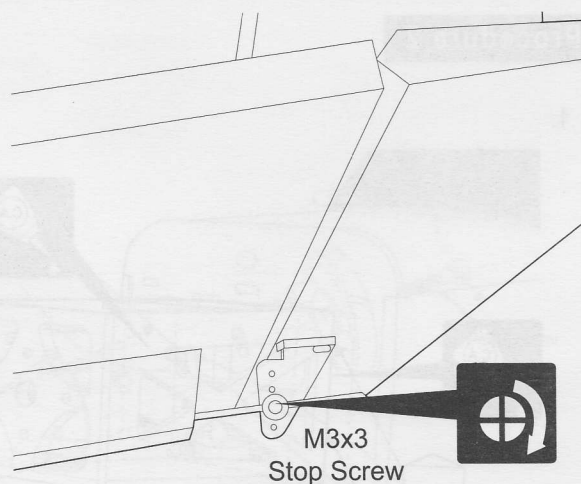


Procedure 7

1.



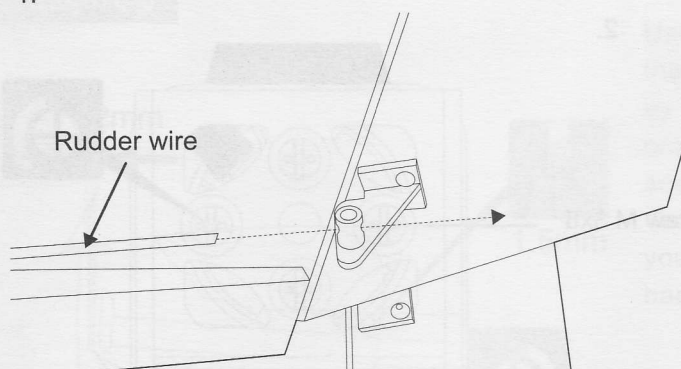
2.



2. Align the elevator "Flat" or neutral position before fastening the locking screw.

Procedure 8

1.



2.

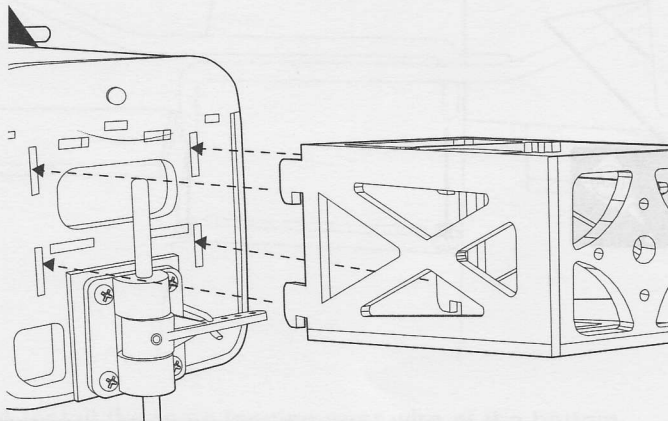


2. Align the rudder "flat" or centered before fastening the locking screw.

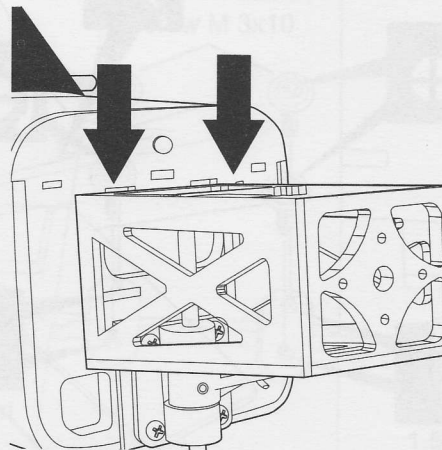
POWER SYSTEM & COWLING ASSEMBLY

Procedure 1

1.



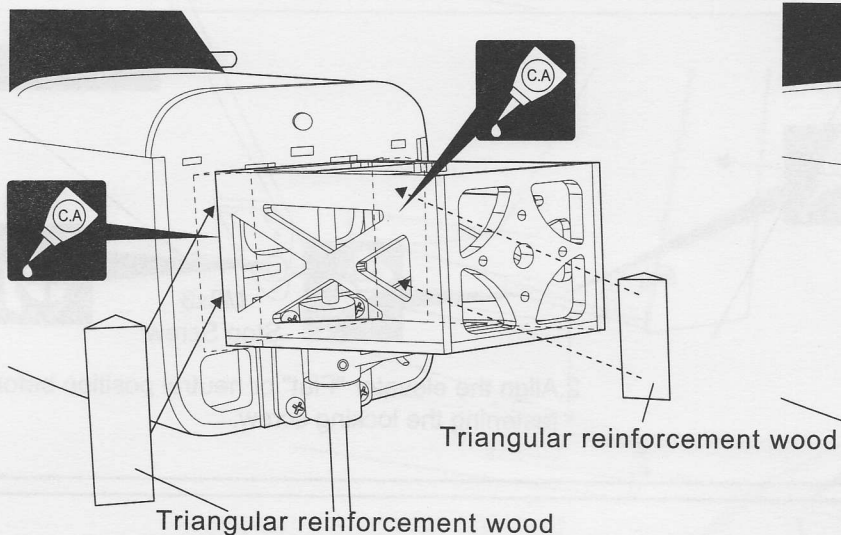
2.



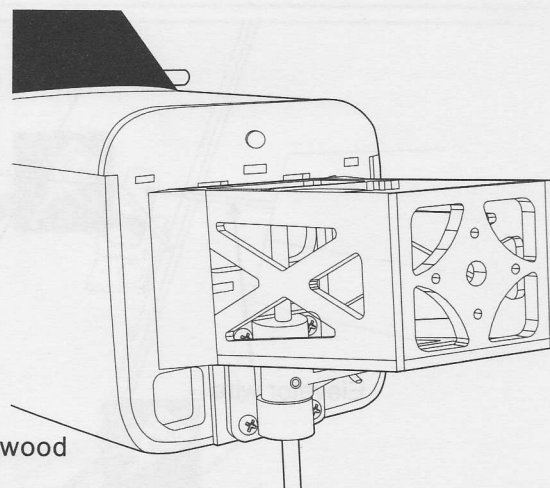
2. Gently push the motor mount into the firewall and lock down into place on the firewall.

Procedure 2

1.

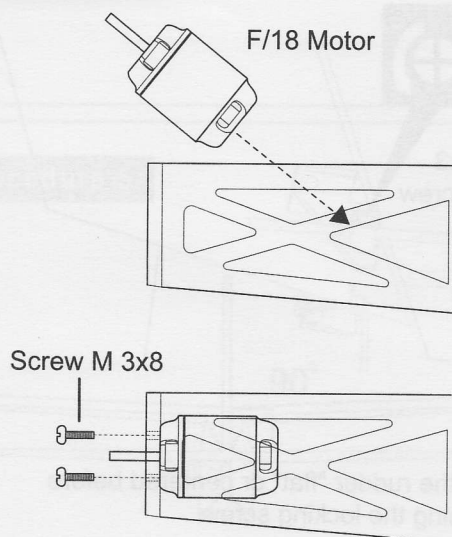


2.

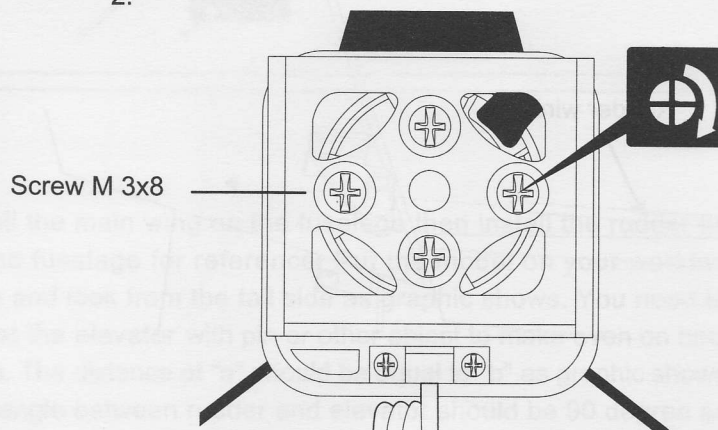


Procedure 3

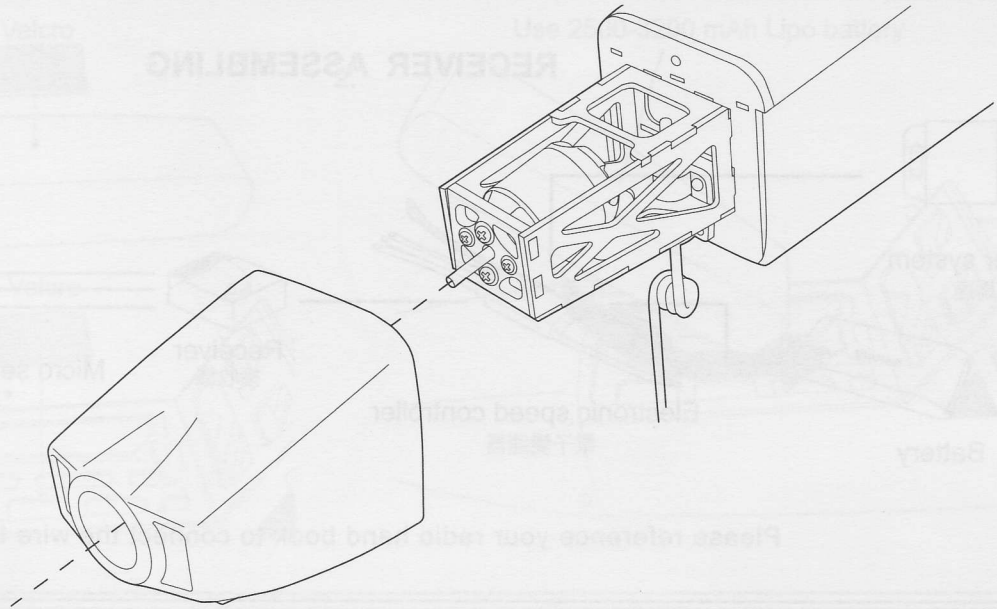
1.



2.

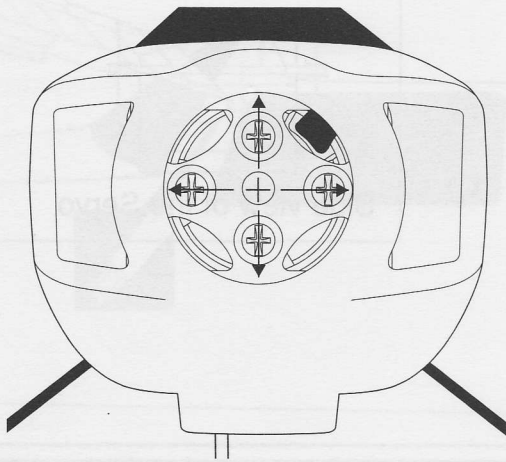


Procedure 4



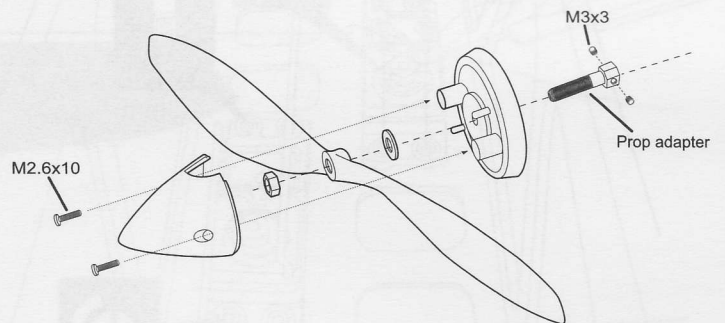
Procedure 5

1.



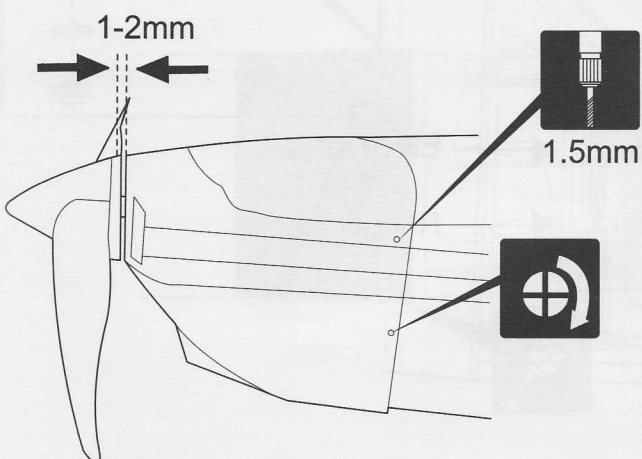
1.The shaft should be in the center of the cowling hole.

2.



2.Assembly the spinner as shown in the graphics.

Procedure 6

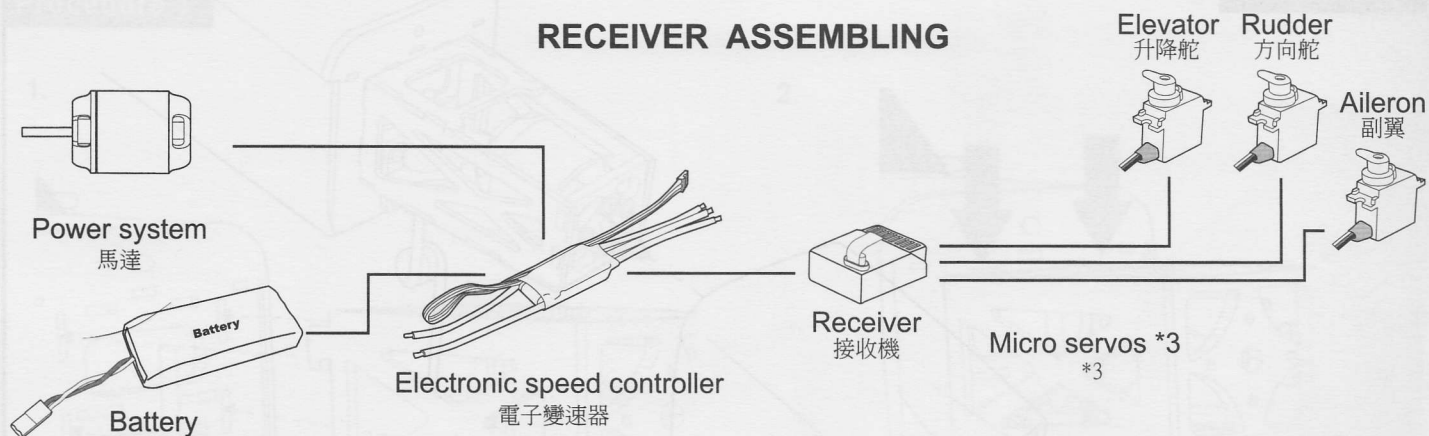


Using tape to temporarily hold the cowl in place, install the spinner/prop assembly onto the motor output shaft by tightening the two hex screws on each side of the prop adaptor. Make sure these two screws are tight and secured as if they are not, the prop may come free from the motor and hurt either yourself or others around you. Set the cowl so there is a 1-2 mm gap between the back of the spinner assembly and the front of the cowl.



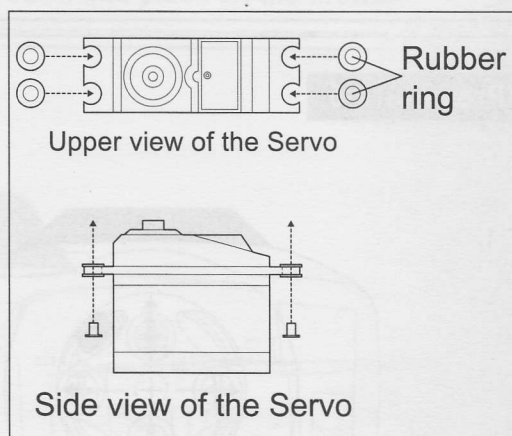
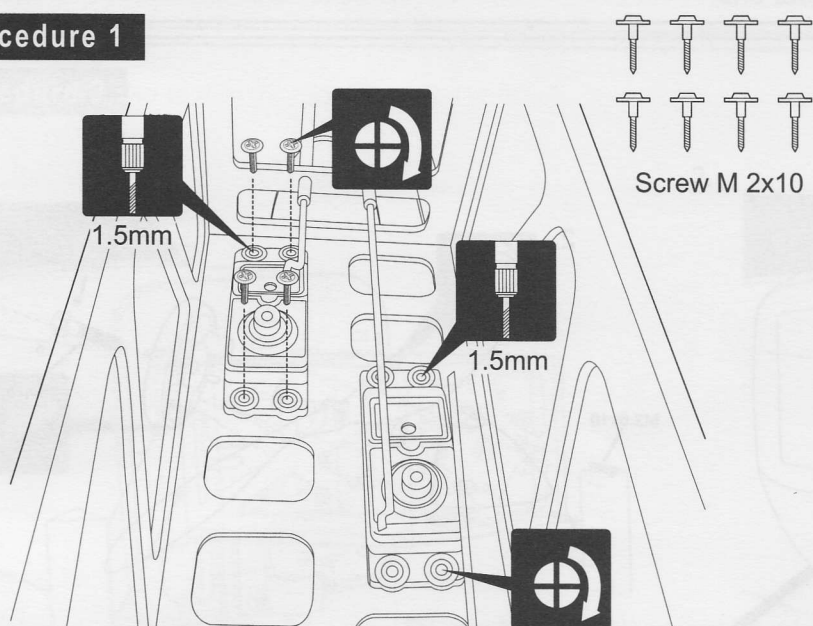
Use a hand drill to drill the screw hole at the screw mount location. Finally fasten it up with the M2x5 screw and remove the tape.

RECEIVER ASSEMBLING

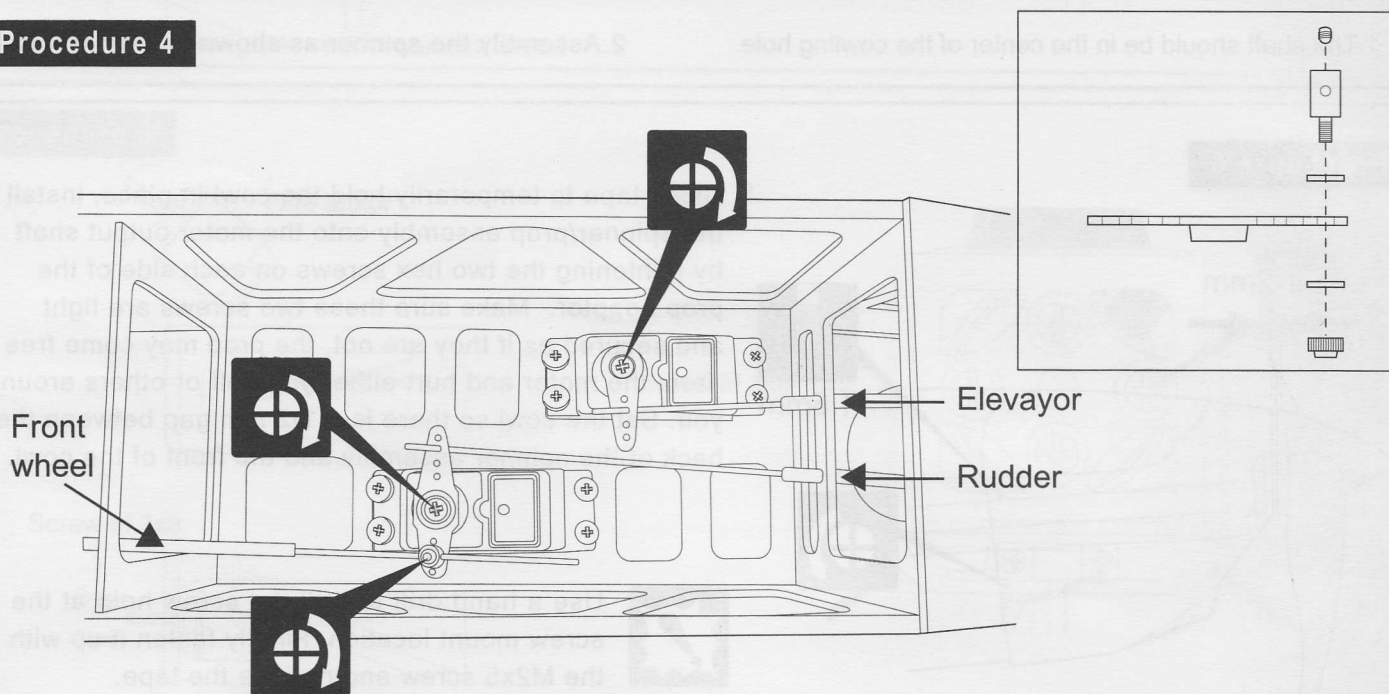


Please reference your radio hand book to connect the wire to receiver

Procedure 1



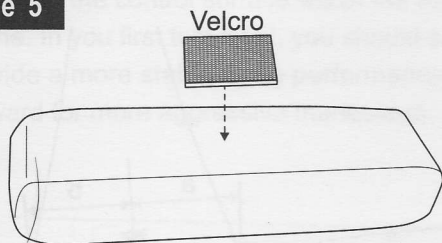
Procedure 4



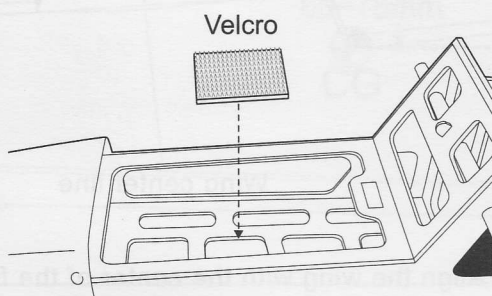
Procedure 5

1.

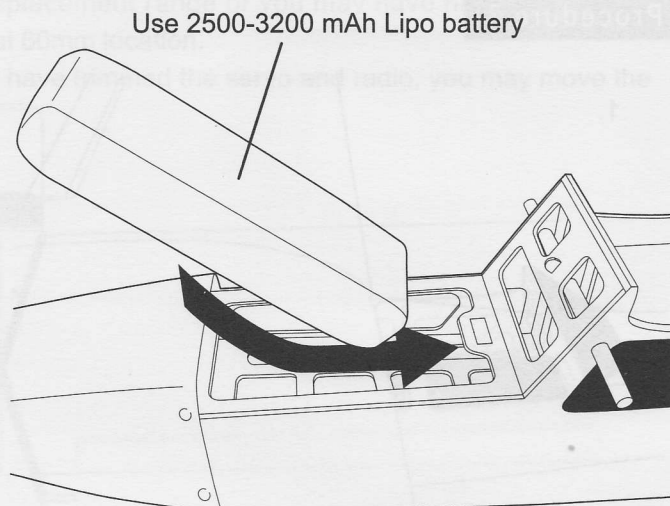
①



②

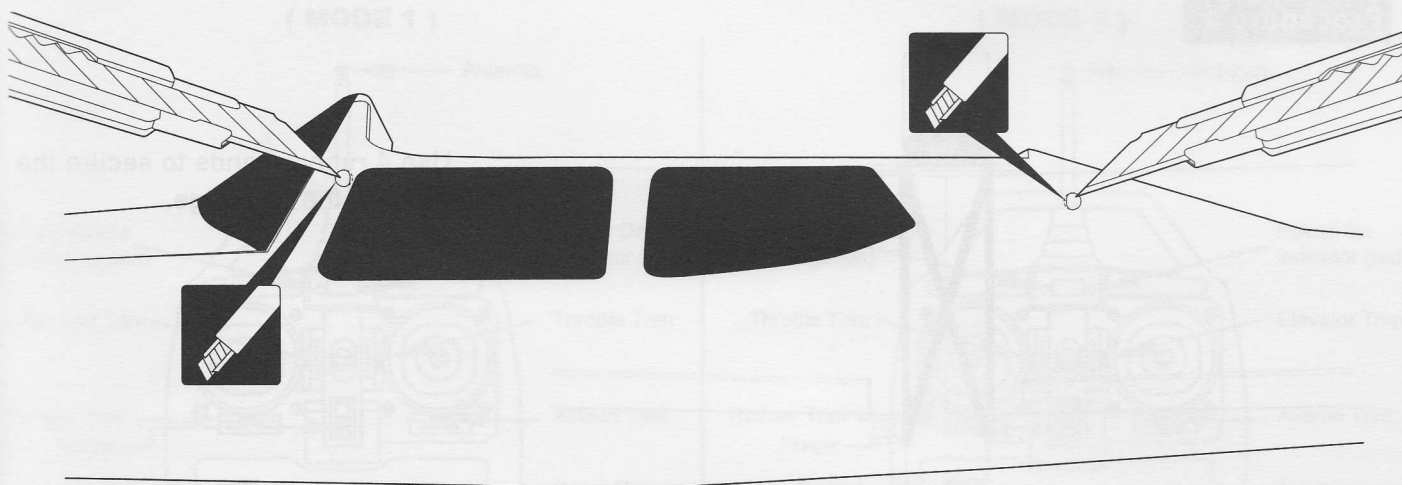


2.

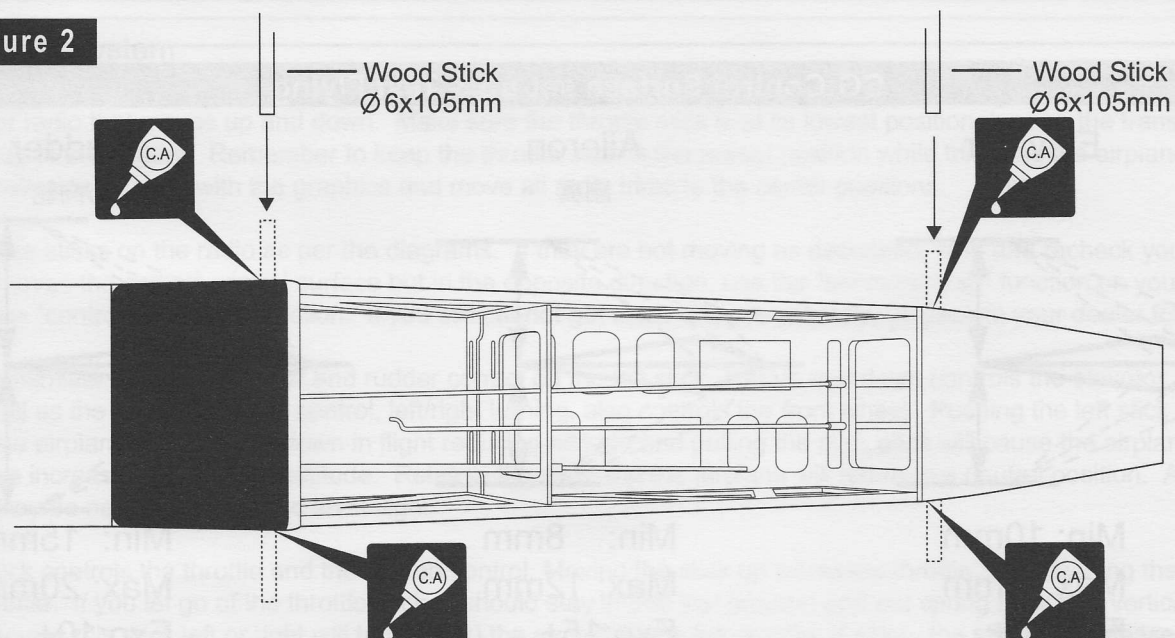


FUSELAGE ASSEMBLY

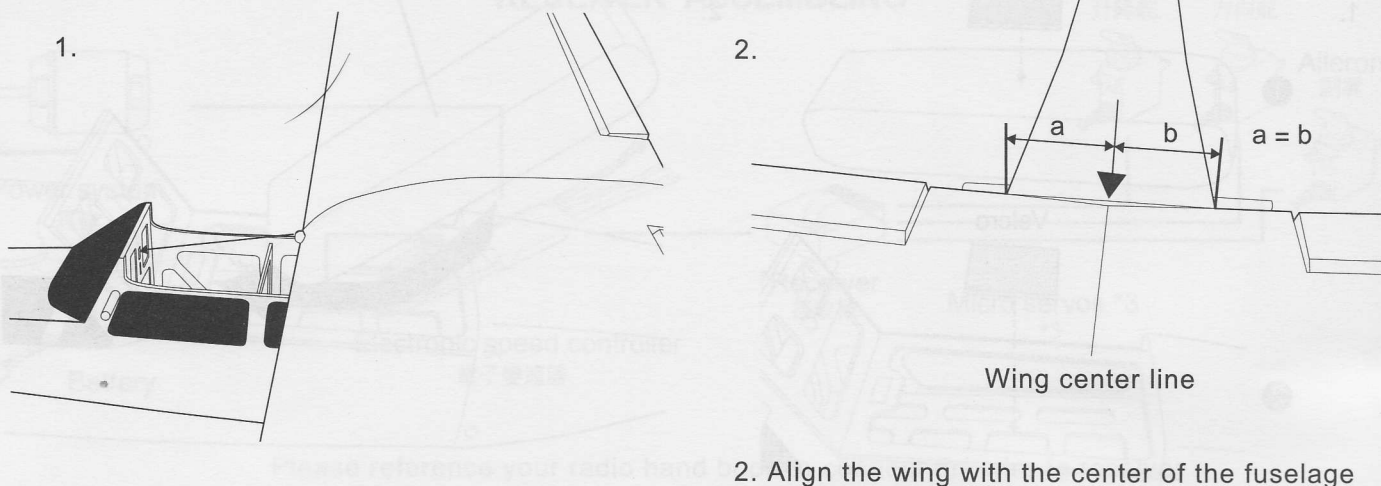
Procedure 1



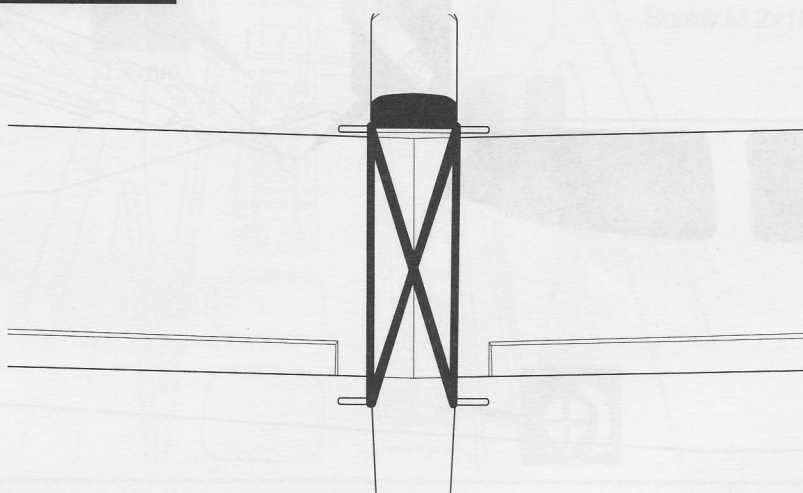
Procedure 2



Procedure 3

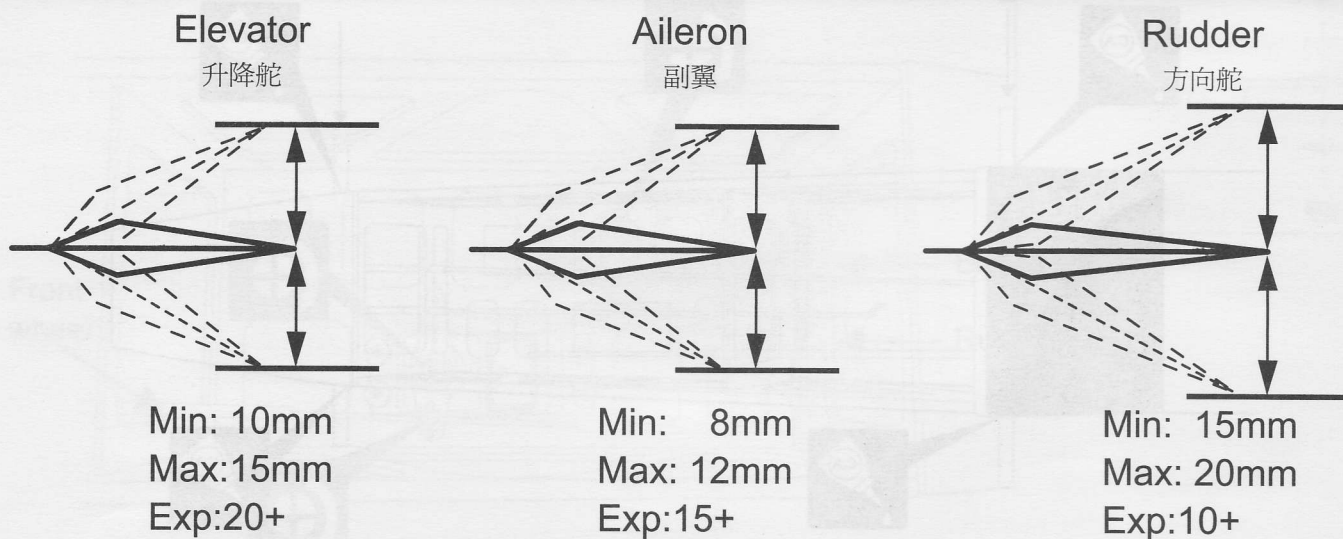


Procedure 4

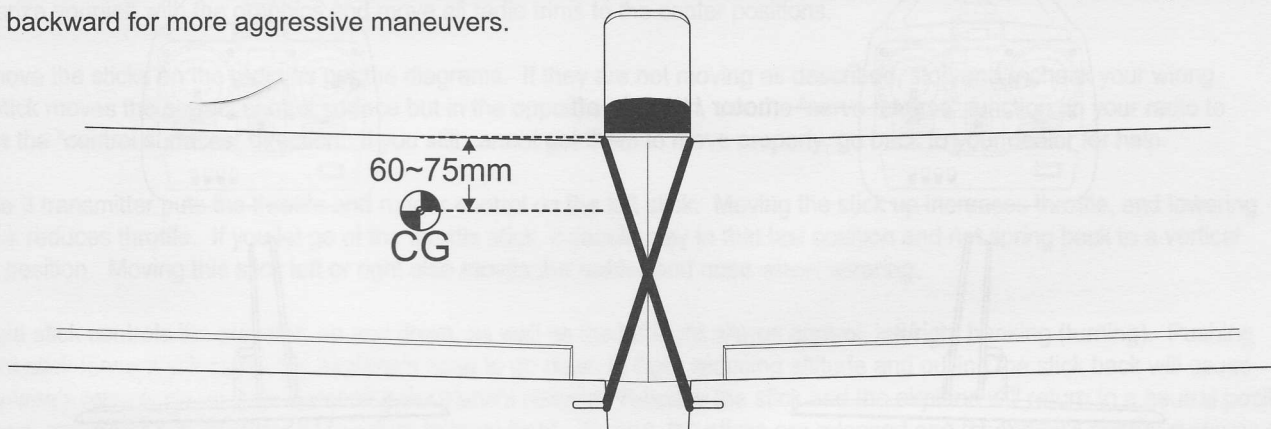


Use 4 rubber bands to secure the wing on the Fuselage.

CG:Control Surface set-up & Test Flying



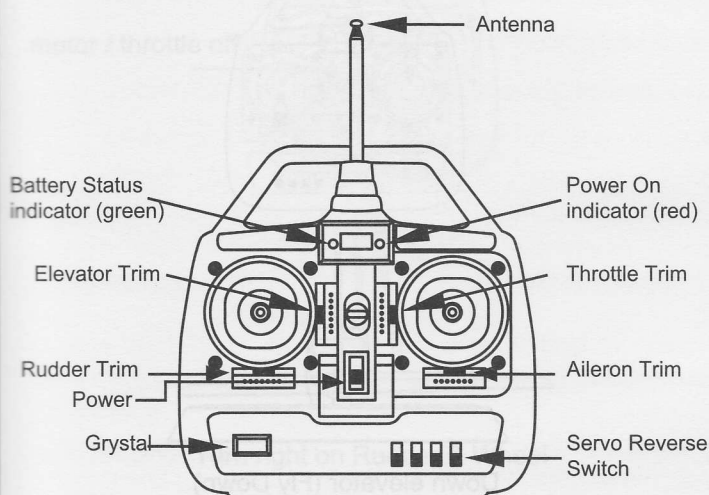
Use the battery to adjust the CG location. If the battery is not heavy enough add more weight in the nose or tail location. Set all the control surface within the maximum displacement range or you may have hard time to fly the airplane. In you first test flight, you should set the CG at 60mm location. It will provide a more stable flying performance. After you have trimmed the servo and radio, you may move the CG backward for more aggressive maneuvers.



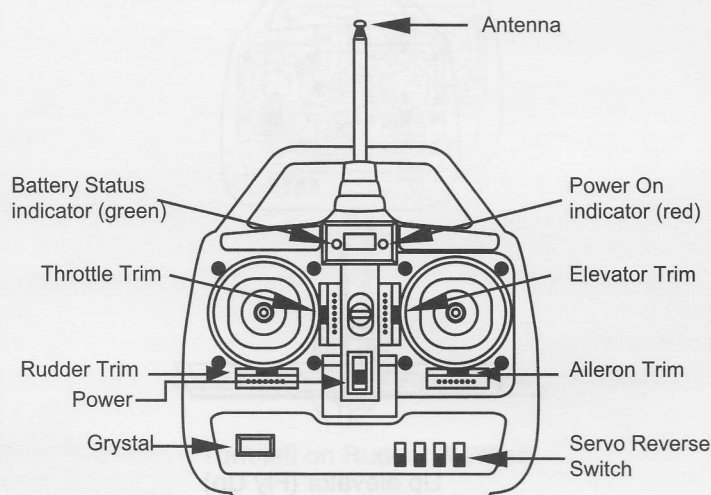
CHECK THE RADIO & TRIM THE AIRPLANE

The RADIO transmitter system has 2 different configurations. Mode I and Mode II. Look at the back of your Radio transmitter, there should be a clear label marked Mode I or Mode II. Please follow the procedure to check the Radio system and the control surface on rudder and elevator by its Mode type in the next two pages.

(MODE 1)



(MODE 2)



Mode I Radio System

If you are using a Mode I transmitter, please go through the following set up pages. Find the throttle stick, it is the right stick on your radio that moves up and down. Make sure the throttle stick is at its lowest position, turn on the transmitter, and then plug in the battery. Remember to keep the throttle stick in the lowest position while trimming the airplane on the bench. Familiarize yourself with the graphics and move all radio trims to the center positions.

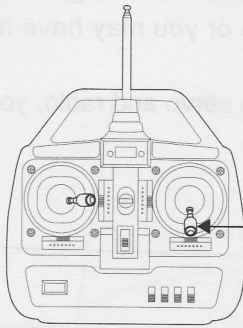
Now move the sticks on the radio as per the diagrams. If they are not moving as described, stop and recheck your wiring. If the stick moves the correct control surface but in the opposite direction, use the "servo reverse" function on your radio to change the "control surfaces" direction. If you still cannot get them to move properly, go back to your dealer for help.

A Mode I transmitter puts the elevator and rudder control on the left stick. The up and down controls the elevator, up and down, as well as the left/right rudder control, left/right turning, also controls the front wheel. Pushing the left stick forward will cause the airplane's nose to go down in flight reducing altitude and pulling the stick back will cause the airplane's nose to go up thus increasing the plane's altitude. Release the stick and the airplane will return to a neutral position. Additional correction may be needed to return to level flight.

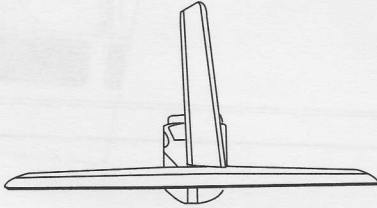
The right stick controls the throttle and the aileron control. Moving the stick up increases throttle, and lowering the stick reduces throttle. If you let go of the throttle stick, it should stay in that last position and not spring back to a vertical center position. Moving this stick left or right will turn (bank) the aircraft to the left or right. If, when, the sticks are released and the model's control surfaces do not return to a neutral or center position, use the radio trims to re-center the controls.

Test Rudder & Wheel

1.

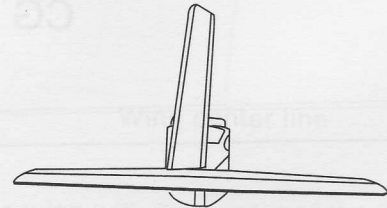
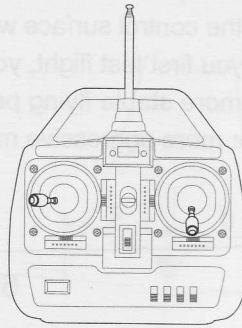


motor / throttle off



Turn right on Rudder & Wheel

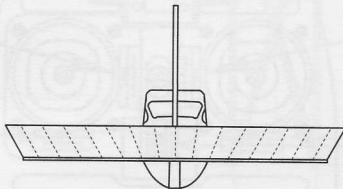
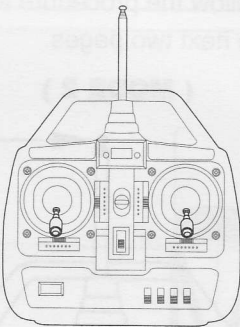
2.



Turn left on Rudder & Wheel

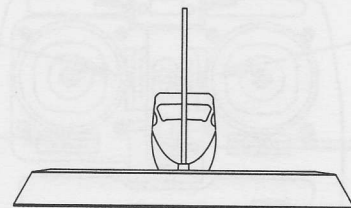
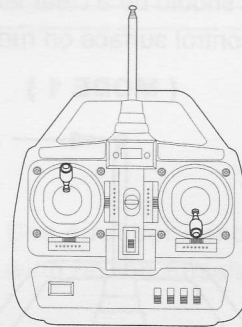
Test Elevator

3.



Up elevator (Fly Up)

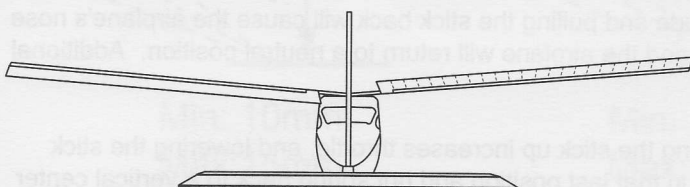
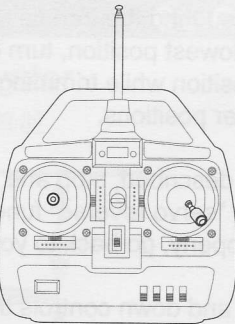
4.



Down elevator (Fly Down)

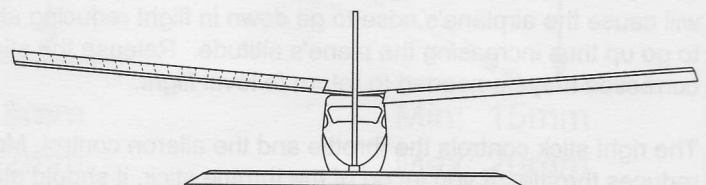
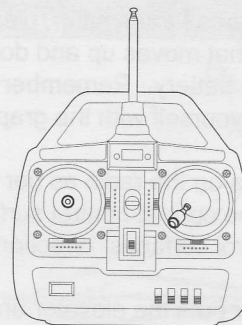
Test Aileron

5.



Up right aileron (Right turn)

6.



Down left aileron (Left turn)

Mode II Radio System

If you are using a Mode II transmitter, please go through the following set up pages. Find the throttle stick, it is the left stick on your radio that moves up and down. Make sure the throttle stick is at its lowest position, turn on the transmitter, and then plug in the battery. Remember to keep the throttle stick in the lowest position while trimming the airplane on the bench. Familiarize yourself with the graphics and move all radio trims to the center positions.

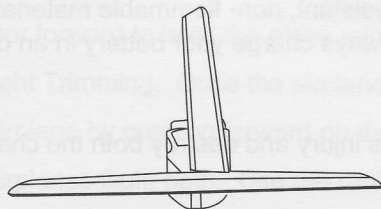
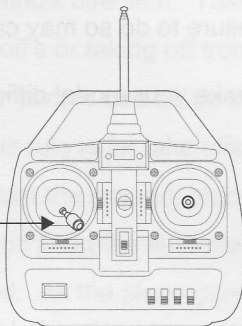
Now move the sticks on the radio as per the diagrams. If they are not moving as described, stop and recheck your wiring. If the stick moves the correct control surface but in the opposite direction, use the "servo reverse" function on your radio to change the "control surfaces" direction. If you still cannot get them to move properly, go back to your dealer for help.

A Mode II transmitter puts the throttle and rudder control on the left stick. Moving the stick up increases throttle, and lowering the stick reduces throttle. If you let go of the throttle stick, it should stay in that last position and not spring back to a vertical center position. Moving this stick left or right also moves the rudder and nose wheel steering.

The right stick controls the elevator, up and down, as well as the left/right aileron control, left/right banking (turning). Pushing the right stick forward will cause the airplane's nose to go down in flight reducing altitude and pulling the stick back will cause the airplane's nose to go up thus increasing the plane's altitude. Release the stick and the airplane will return to a neutral position. Additional correction may be needed to return to level flight. If, when, the sticks are released and the model's control surfaces do not return to a neutral or center position, use the radio trims to re-center the controls.

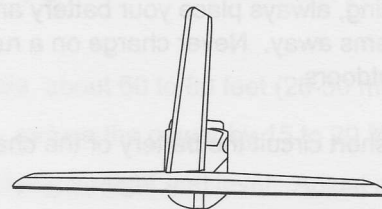
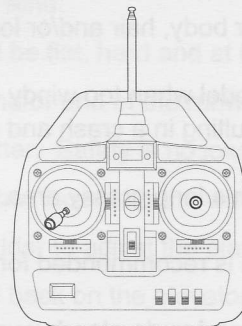
1.

motor / throttle off



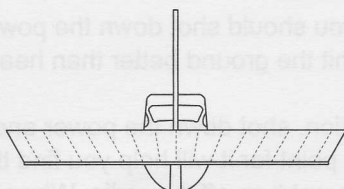
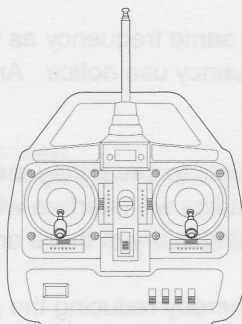
Turn right on Rudder & Wheel

2.



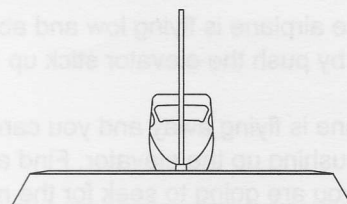
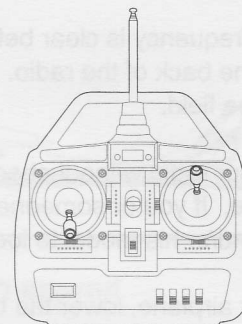
Turn left on Rudder & Wheel

3.



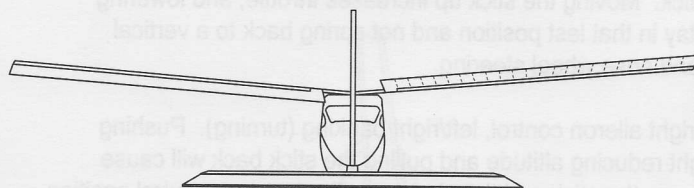
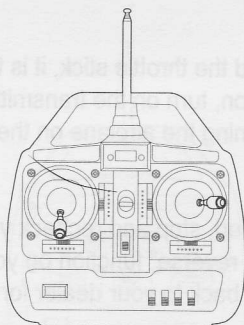
Up elevator (Fly up)

4.



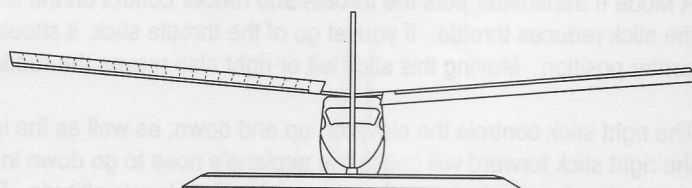
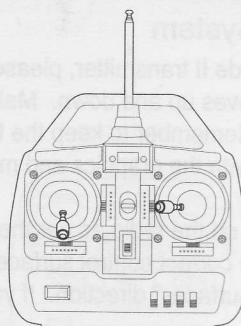
Down elevator (Fly down)

5.



Up right aileron (Right turn)

6.



Down left aileron (Left turn)

WARNING & SAFETY REQUIREMENTS

1. Always keep your body, hair and/or loose clothing away from the propeller. Failure to do so may cause injury.
2. Never fly your model when too windy (10km/hr or 6 miles/hr). Doing so may make your model difficult to control thus possibly resulting in a crash and damaging the model.
3. Do not take off on a long grassy area. Damage to the nose wheel may occur
4. Adult supervision is recommended for ages 12 and under.
5. Thoroughly read and understand your charger manual. Never leave a battery charger unattended while charging. During charging, always place your battery and charger on a hard, heat resistant, non- flammable material and keep flammable items away. Never charge on a rug or similar surface. Also always charge your battery in an open area preferably outdoors.
6. Never try to short circuit the battery or the charger. This will cause serious injury and destroy both the charger and the battery.
7. After landing, always turn off the model first, unplug the battery and then turn off the transmitter in that order. To fly, after verifying your frequency is clear, first turn on the radio with the throttle stick down, plug in the battery keeping yourself clear of the propeller and then turn the airplane on.
8. Check that your frequency is clear before turning on and look for others on the same frequency as you. Your frequency is on the back of the radio. Follow all club field rules for proper frequency use notice. Any questions, ask a fellow pilot at the field.
9. Do not turn on your radio without checking the frequency board or with other pilots to see if they are using the same frequency you are. If you or someone else turns on the same frequency, the radios will interfere with each other and will cause your and/or his model to loose control possibly crashing and/or causing injury to those around you.
- 10.If you crash your airplane, lower the throttle to the off or lowest stick position thereby reducing the possibility of damage to the model or others that may approach the airplane.
- 11.If you find the airplane is flying low and about to hit a person or vehicles, you should shot down the power and crash the airplane by push the elevators stick up (down elevator). Make airplane hit the ground better than hearting people!
- 12.If your airplane is flying away and you can hardly recognize its flying direction, shot down the power and crash the airplane by pushing up the elevator. Find a reference target near the crash point for it will help you find the airplane later. When you are going to seek for the model keep the throttle off and do not turn off the radio. When you are near by the airplane but you can't find it, try to move the elevator and rudder stick. The movement of the servo may help you locate the model.

PREPARE FOR YOUR FIRST FLIGHT

Please read the Warning and Safety Requirement before you go out to fly.

The best way of learning to fly is at an established model flying field with an experienced pilot next to you. The instructor will give you lots of tips, guidance, and take over the controls if necessary. Your instructor can also help trim your model during its first flight thereby reducing the possibility of a crash. However if an instructor or experienced helping hand is not available, please read the suggestions below.

Take off

1. You need a large open field free of obstructions to fly this model. A local school yard or park will most likely not be big enough.
2. Identify the wind's direction. Take off and landings are best done into the wind.
3. Rolling take off's or taking off from the ground is best. The runway should be flat, hard and at least 200 feet long. No objects or people can be on the runway or in line with the beginning and/or end of the runway for safety reasons. This rule is for take offs or landings or general flying for that matter. Safety is no joke.
4. To take off from the ground, place the airplane at one end of the runway that faces into the wind. Slowly raise the throttle and keep the airplane going straight into the wind. Use the rudder to adjust the planes direction while on the ground. As the plane goes faster, it will begin to lift off. Gently pull back on the elevator until the model gently climbs into the air. Once the model is in the air and has gently gained sufficient altitude, you can push the elevator forward to level the plane and you are flying.
5. In Flight Trimming. Once the airplane is flying at a sufficient altitude, about 60 to 80 feet (20-30 meters), level the airplane by pushing forward on the elevator stick. At this time, reduce the power by 15 to 20 % and check the airplanes flight path. Use the radio trims to keep the airplane flying straight and level. Adjust accordingly.

Wind Direction



and level with ground

6. Turning. Make sure you have at least 60 feet (20 meters) of altitude before starting a turn. To make a turn, gently move the rudder stick in the direction you want to turn. If you see the plane begin to lose altitude, add a little "up" elevator by pulling back on the stick. Do this elevator step gently. Too much will cause the plane to "snap" or dive from a stall. Once the airplane is turned around, about 180 degrees in the opposite direction, release the rudder stick, and level the plane's attitude with the elevator stick accordingly. Turning in the opposite direction is the same. As you get better you can use the ailerons to produce a banking, sharper turn.
7. During flight, try to keep the plane's altitude at 60 feet (20 meters) at all time.
8. Always watch your airplane. Never take your eyes off the plane while in flight.

Landing

9. After a few minutes you will notice the power dropping and getting weaker. When you find the airplane will not climb as fast as it did initially, it is time to land. Again, landing is best accomplished into the wind. To land, set the plane on a course heading into the wind parallel towards your runway. Reduce the throttle slowly until you see the airplane start to descend. If your plane is descending too quickly, adding a little more power will help to slow the descent. Try to keep the plane at a 3-5 foot altitude as it approaches the runway. Also if it looks like your plane will not reach the runway, add a little more power until you get to the approaching end of the runway. After passing the tip of the runway, lower the throttle completely letting the plane glide in and keep it level until the wheels touch the ground.

Landing





SAFETY PRECAUTIONS

- First-time modelers should seek advice from an experienced modeler in order to correctly maintain and operate the model. Always keep the instruction manual handy for reference.
- Please take adequate safety measures when operating this model. You are responsible for this model's safe operation and correct maintenance.

This product is suitable only for people of 14 years and older. This is not a toy! WARNING: CHOKING HAZARD – May contain small parts. Keep away from children under 3 years.

Este producto es indicado sólo para personas de más de 14 años de edad. ¡No es un juguete! ADVERTENCIA: PELIGRO DE SOFOCAMIENTO – Puede contener piezas de tamaño pequeño. Mantener fuera del alcance de niños menores de 3 años de edad.

Ce produit convient seulement pour les personnes de 14 ans et plus. Ceci n'est pas un jouet ! AVERTISSEMENT : DANGER DE SUFFOCATION – Peut contenir de petites pièces. Gardez loin des enfants de moins de 3 ans.

Dieses Produkt eignet sich nur für Personen ab 14 Jahren. Es ist kein Spielzeug! WARNUNG: GEFAHR DES VERSCHLUCKENS – Kann Kleinteile enthalten. Von Kindern unter 3 Jahren fern halten.

Questo articolo è indicato solo per persone maggiori di 14 anni di età. Non è un giocattolo! ATTENZIONE: PERICOLO DI SOFFOCAMENTO – Può contenere pezzi di piccole dimensioni. Tenere fuori dalla portata dei bambini minori di 3 anni.

Este produto é adequado apenas para pessoas acima de 14 anos de idade. Não é um brinquedo! ADVERTÊNCIA: RISCO DE SUFOCAÇÃO – Pode conter pequenas partes. Mantenha fora do alcance de crianças abaixo de 3 anos de idade.

