



Instruction Manual book

SEDONA



SPECIFICATION

- | | |
|---|---|
| <input type="checkbox"/> Wingspan : 1,800mm. 70.87 in. | <input type="checkbox"/> Electric Motor: AXI 2826/10. |
| <input type="checkbox"/> Length : 1,470 mm. 57.871in. | <input type="checkbox"/> Battery: 4-5 Cells-Li-Poly-14.8-18.5v- 5.000 mAh - 20°C. |
| <input type="checkbox"/> Weight : 2.6kg. 5.72lbs. | <input type="checkbox"/> Speed Control: 60A. |
| Parts Listing required (not included). | |
| <input type="checkbox"/> Radio : 4 channels. | <input type="checkbox"/> Propeller : 13 x 6. |
| <input type="checkbox"/> Servo : 4-5 servos. | <input type="checkbox"/> Recommended R.C: 4 channels with 4-5 servos. |
| <input type="checkbox"/> Glow Engine : 46-55 cu.in. 2 stroke. | |

Made in Vietnam.

This instruction manual is designed to help you build a great flying aeroplane. Please read this manual thoroughly before starting assembly of your **SEDONA**. Use the parts listing below to identify all parts.

WARNING.

Please be aware that this aeroplane is not a toy and if assembled or used incorrectly it is capable of causing injury to people or property. WHEN YOU FLY THIS AEROPLANE YOU ASSUME ALL RISK & RESPONSIBILITY.

If you are inexperienced with basic R/C flight we strongly recommend you contact your R/C supplier and join your local R/C Model Flying Club. R/C Model Flying Clubs offer a variety of training procedures designed to help the new pilot on his way to successful R/C flight. They will also be able to advise on any insurance and safety regulations that may apply.

TOOLS & SUPPLIES NEEDED.

- ☐ Thick cyanoacrylate glue.
- ☐ 30 minute epoxy.
- ☐ 5 minute epoxy.
- ☐ Hand or electric drill.
- ☐ Assorted drill bits.
- ☐ Modelling knife.
- ☐ Straight edge ruler.
- ☐ 2mm ball driver.
- ☐ Phillips head screwdriver.
- ☐ 220 grit sandpaper.
- ☐ 90° square or builder's triangle.
- ☐ Wire cutters.
- ☐ Masking tape & T-pins.
- ☐ Thread-lock.
- ☐ Paper towels.

Some more parts.

HARDWARE PACK

COWLING.

Landing gear.....

SUGGESTION.

To avoid scratching your new airplane, do not unwrap the pieces until they are needed for assembly. Cover your workbench with an old towel or brown paper, both to protect the aircraft and to protect the table. Keep a couple of jars or bowls handy to hold the small parts after you open the bag.

PARTS LISTING.

FUSELAGE ASSEMBLY

- ☐ (1) Fuselage.

WING ASSEMBLY

- ☐ (1) Right wing half with pre-installed aileron.
- ☐ (1) Left wing half with pre-installed aileron.

Tail section assembly

- ☐ (1) Vertical stabilizer with pre-installed rudder.
- ☐ (1) Horizontal stabilizer with pre-installed elevator halves.

NOTE.

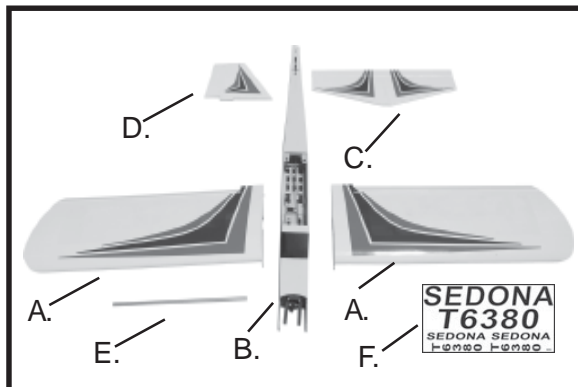
Please trial fit all the parts. Make sure you have the correct parts and that they fit and are aligned properly before gluing! This will assure proper assembly. **SEDONA** ARF is hand made from natural materials, every plane is unique and minor adjustments may have to be made. However, you should find the fit superior and assembly simple.

The painted and plastic parts used in this kit are fuel proof. However, they are not tolerant of many harsh chemicals including the following: paint thinner, C/A glue accelerator, C/A glue debonder and acetone. Do not let these chemicals come in contact with the colors on the covering and the plastic parts.

SAFETY PRECAUTION.

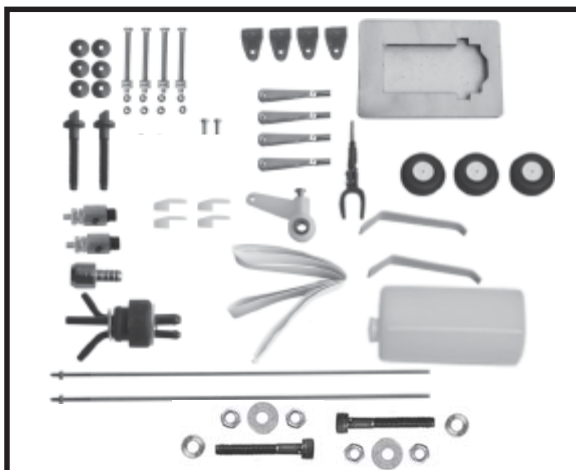
- + This is not a toy
- + Be sure that no other flyers are using your radio frequency.
- + Do not smoke near fuel
- + Store fuel in a cool, dry place, away from children and pets.
- + Wear safety glasses.
- + The glow plug clip must be securely attached to the glow plug.
- + Do not flip the propeller with your fingers.
- + Keep loose clothing and wires away from the propeller.
- + Do not start the engine if people are near. Do not stand in line with the side of the propeller.
- + Make engine adjustments from behind the propeller only. Do not reach around the spinning propeller.

REPLACEMENT LARGE PARTS



- A. Wing panel.
- B. Fuselage.
- C. Horizontal stabilizer.
- D. Vertical stabilizer
- E. Aluminium wing dihedral brace.
- F. Decal sheet.

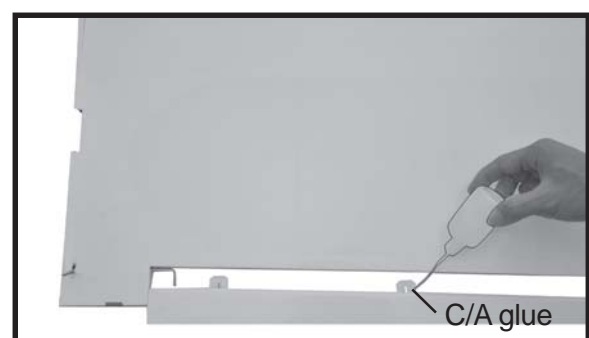
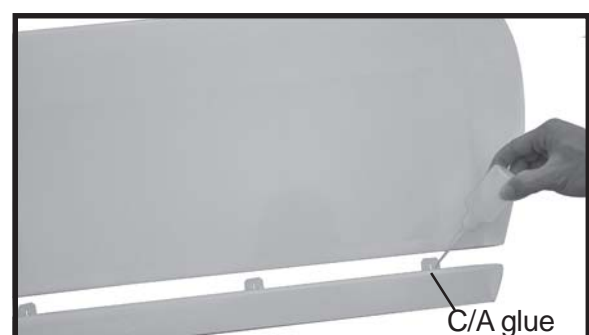
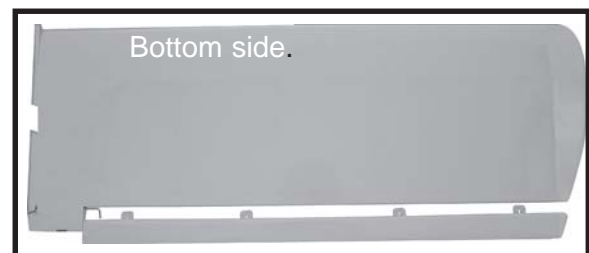
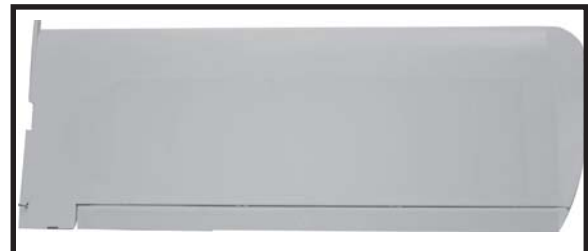
REPLACEMENT SMALL PARTS

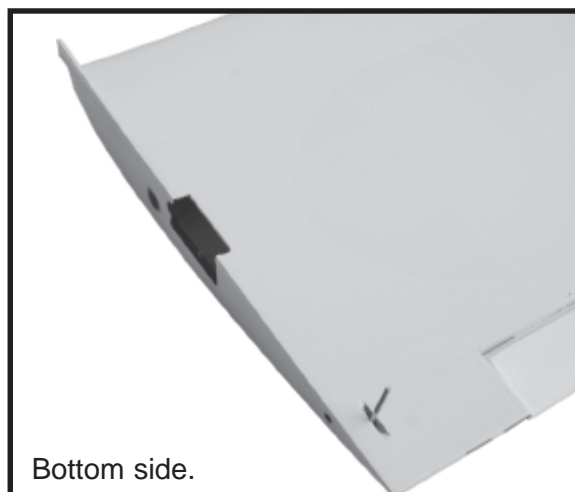
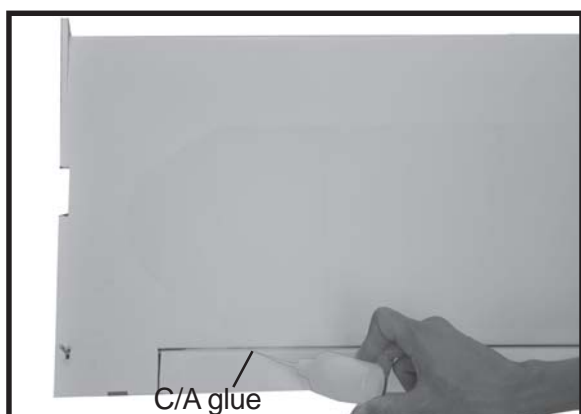
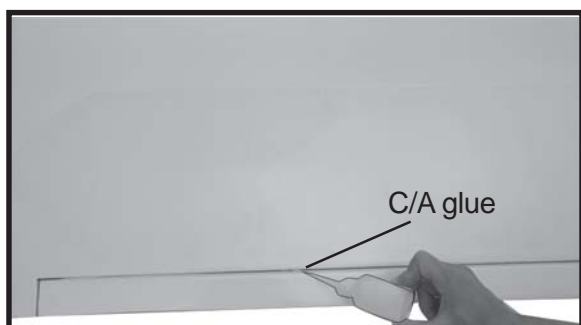
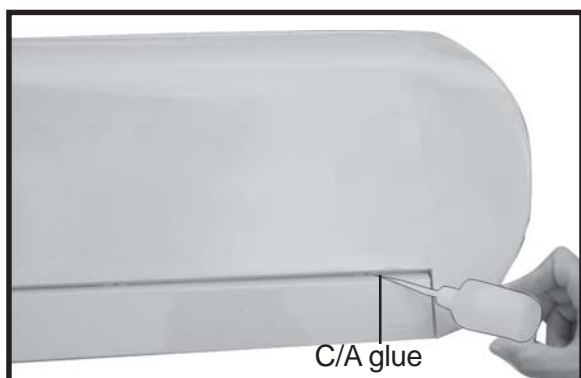
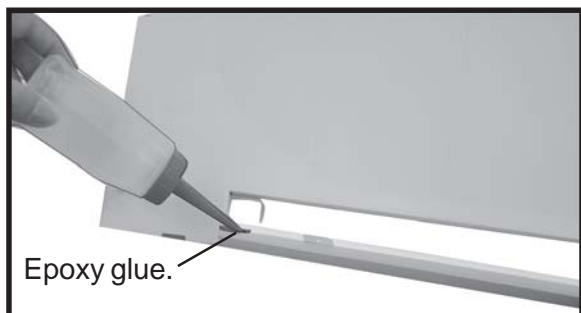
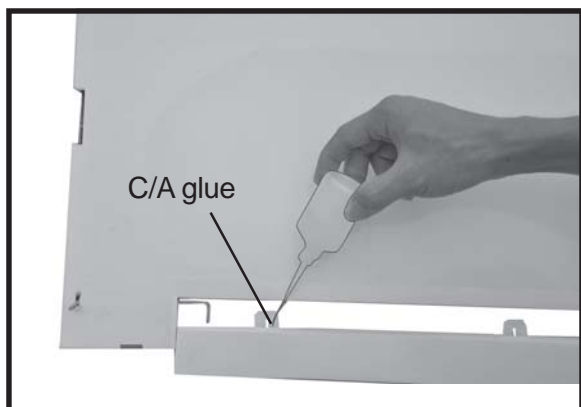


INSTALLING THE AILERON SERVOS.

- 1) Install the rubber grommets and brass eyelets onto the aileron servo.

Because the size of servos differ, you may need to adjust the size of the precut opening in the mount. The notch in the sides of the mount allow the servo lead to pass through.

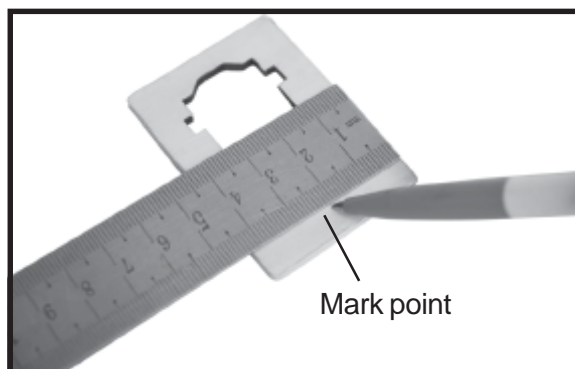
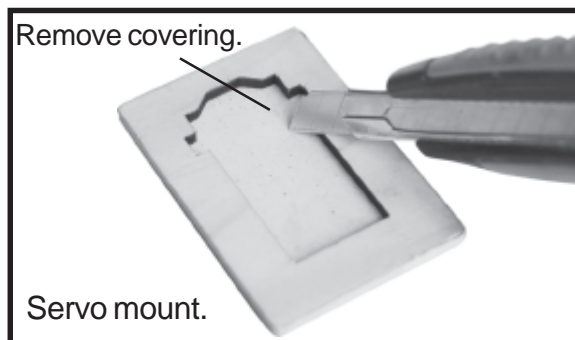


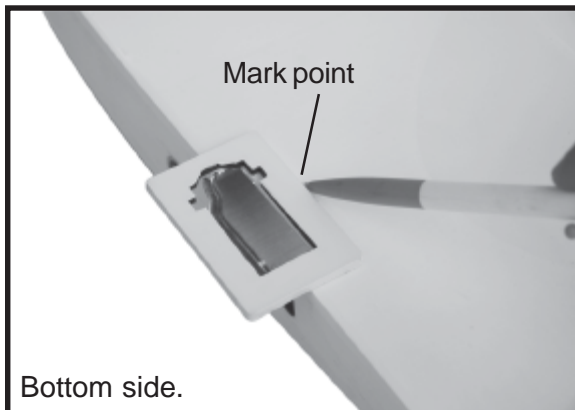
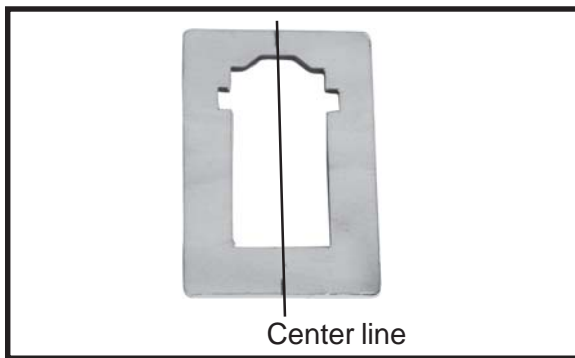


□ 2) Place the mount onto the wing haft, aligning the cut out in the mount with the cut-out in the wing. The two notches in the mount should face the leading edge of the wing.

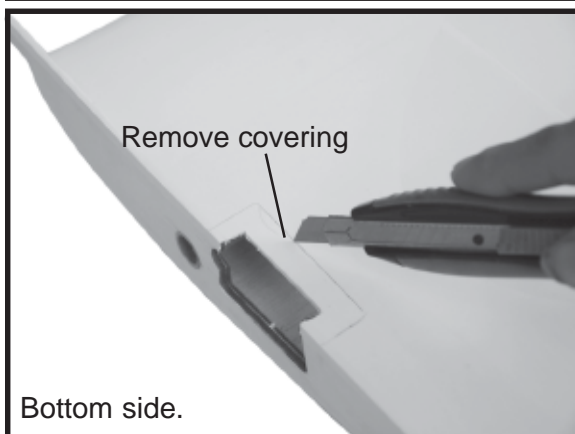
□ 3) While holding the servo mount firmly in place, trace around it using a pen.

□ 4) Remove the mount, and using a modeling knife, carefully remove the covering from inside the outline you drew.





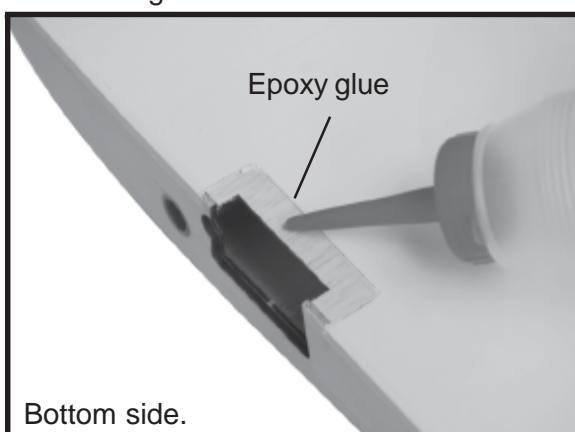
Bottom side.



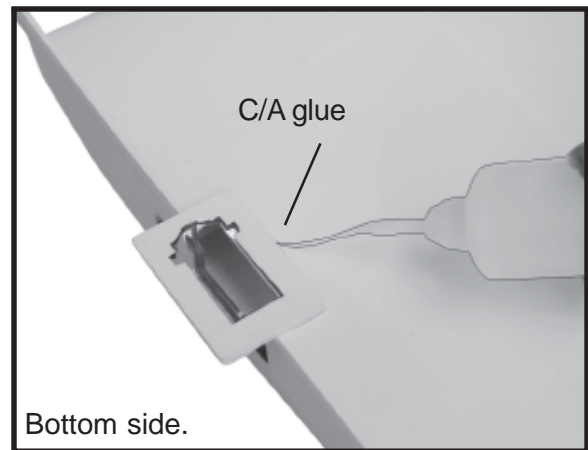
Bottom side.

□ 5) Using Kwik Bond 5 Minute Epoxy, glue the servo mount into place. Remove any excess epoxy using a paper towel and rubbing alcohol. Use pieces of masking tape to hold the tray in place until the epoxy fully cures.

□ 6) Using a modeling knife, carefully remove the covering from servo mount.

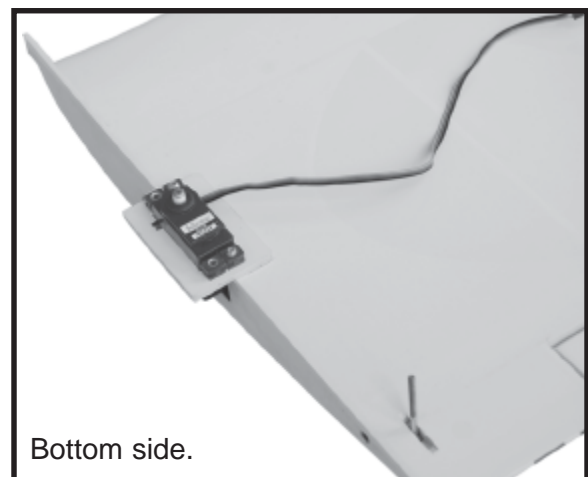


Bottom side.



Bottom side.

□ 7) Install the aileron servo into the servo mount, with the out put shaft towards the leading edge of the wing, using the wood screws provided with your radio system. Drill 1/16" pilot holes through the mount before installing the screws. This will prevent the wood from splitting.



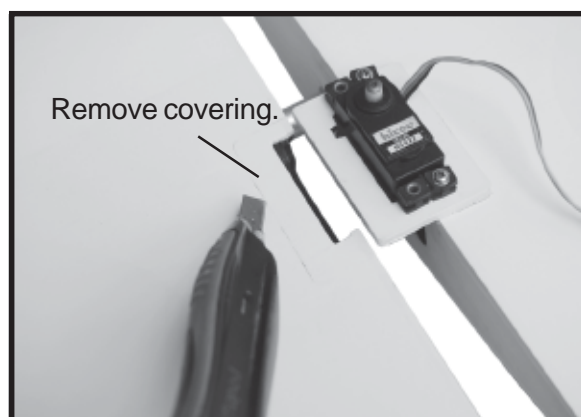
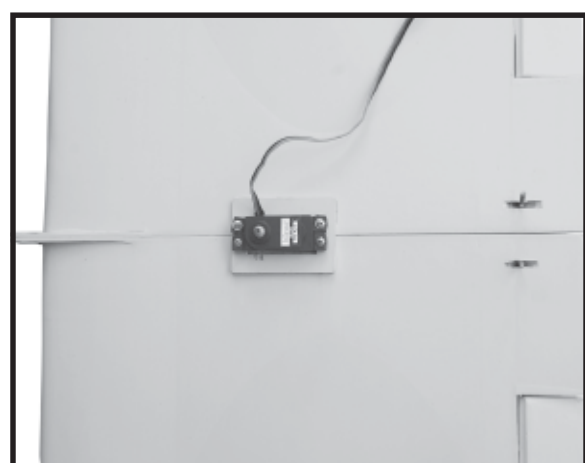
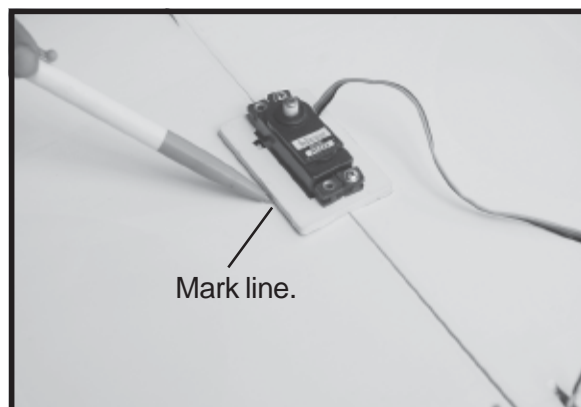
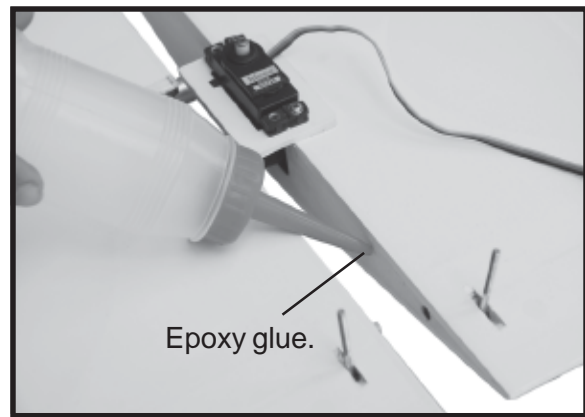
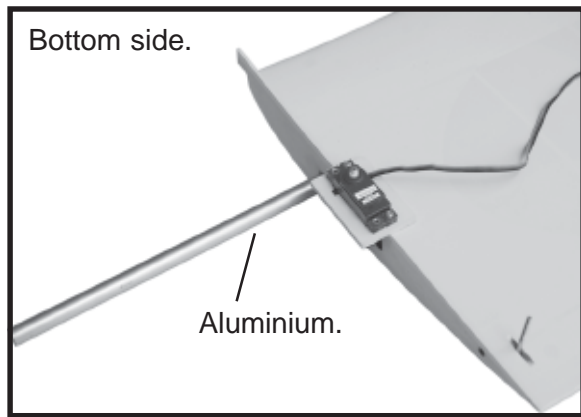
Bottom side.

WING ASSEMBLY.

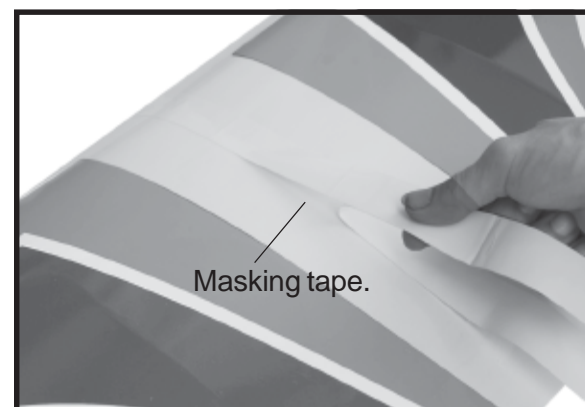
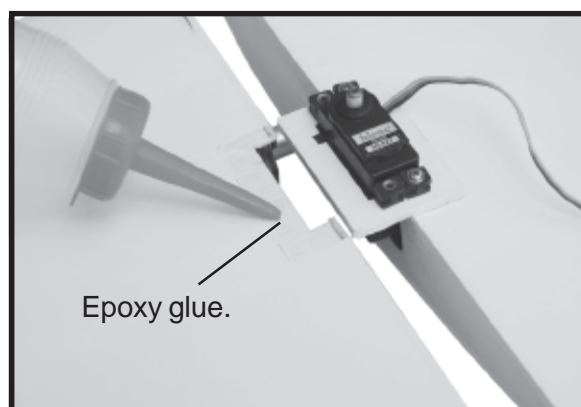
□ 1) Location the aluminium wing dihedral brace.

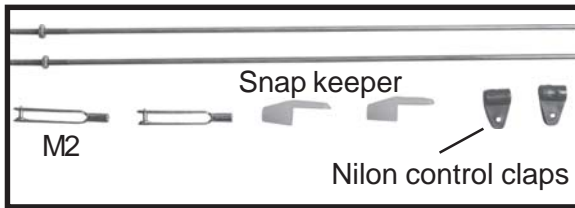


□ 2) Test fit the dihedral brace into each wing half. The brace should slide in easily. If not, use 220 grit sandpaper with a sanding block and sand down the edges and ends of the brace until it fits properly.

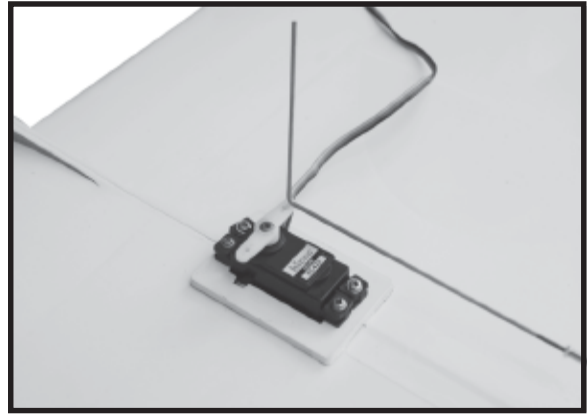


□ 3) Apply masking tape at the wing join to hold the wing halves together securely.

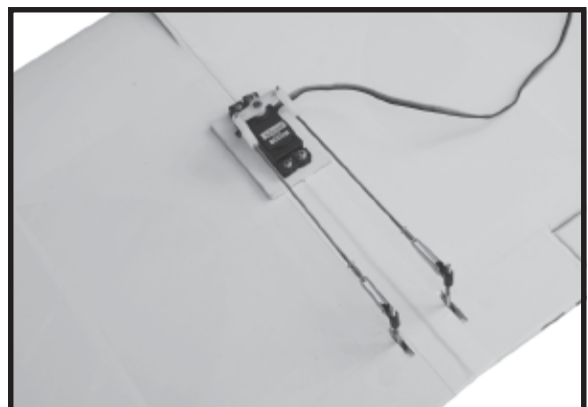
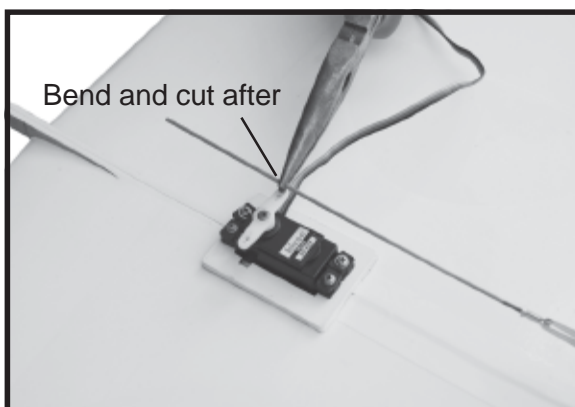
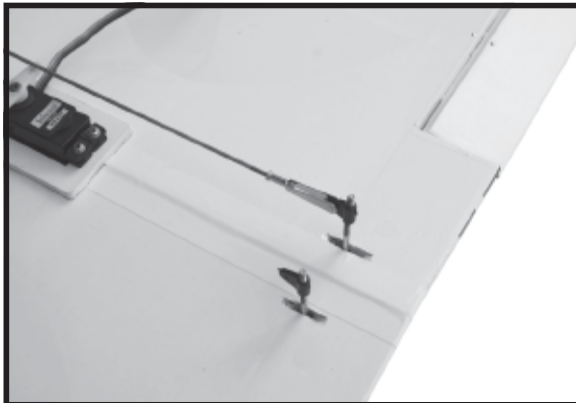


INSTALLING THE AILERON LINKAGE.

- ☐ 1) Thread one nylon adjustable control horn onto each aileron torque rod. Thread the horns on until they are flush with the ends of the torque rods.
- ☐ 2) Thread one M2 at least 5/16" onto each of the two 1.7mm x 100mm threaded wires.



- ☐ 3) With the aileron servo centered, install the servo arm onto the servo. The arm should be installed so it is parallel with the trailing edge of the wing.

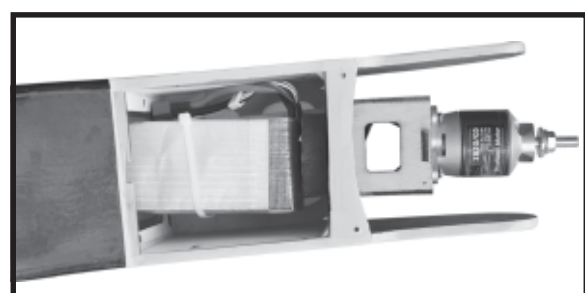
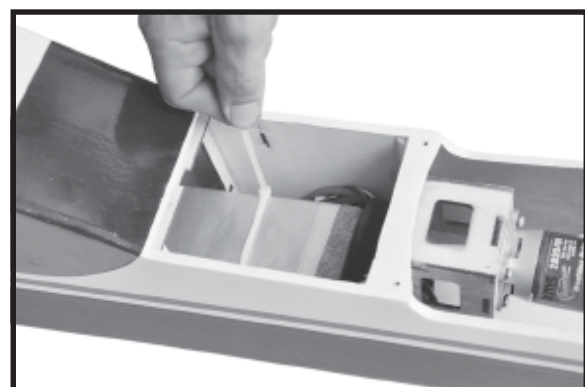
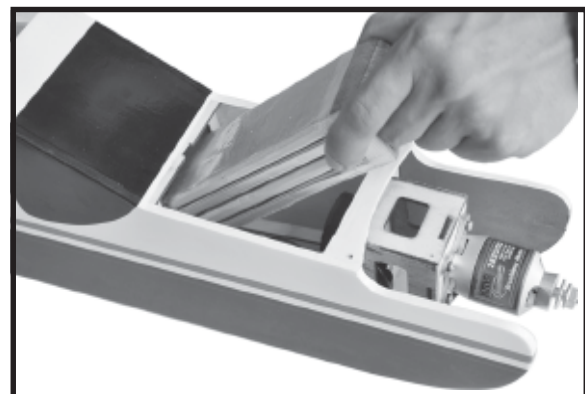
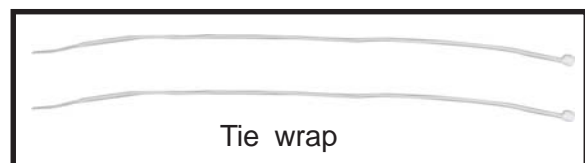
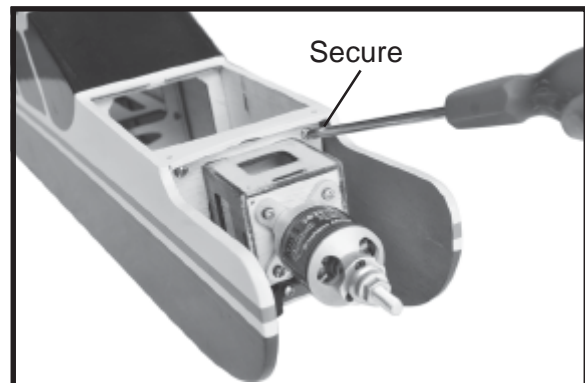
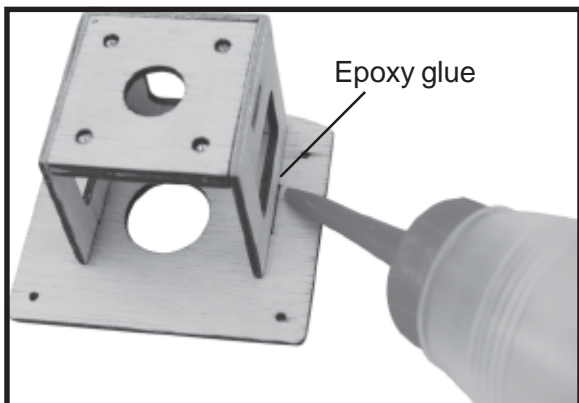
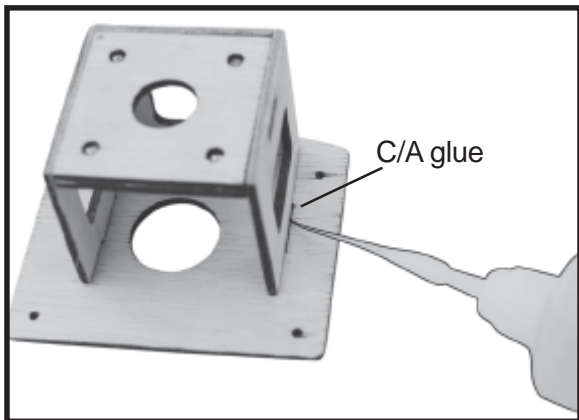
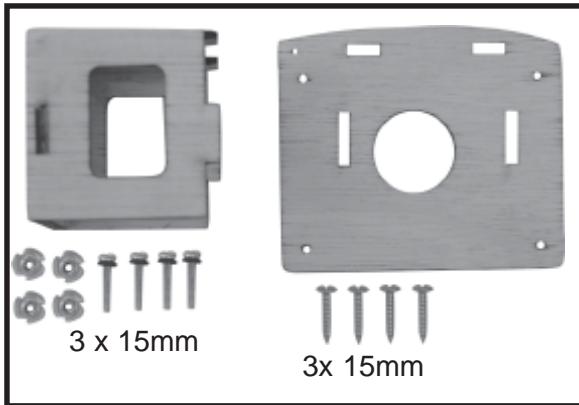


INSTALLING THE ENGINE MOUNT.

THERE ARE TWO OPTIONS:

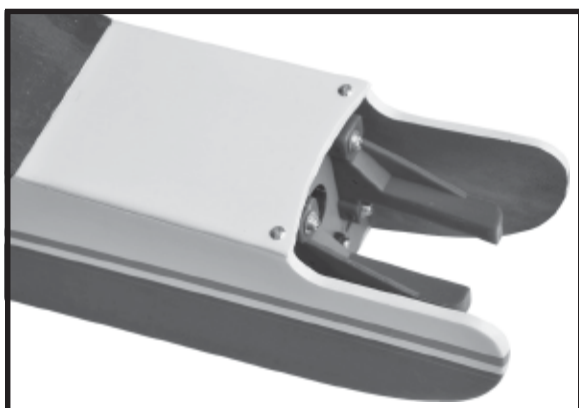
1. ELECTRIC MOTOR
2. ENGINE MOUNT.

1. OPTION 1: ELECTRIC MOTOR.





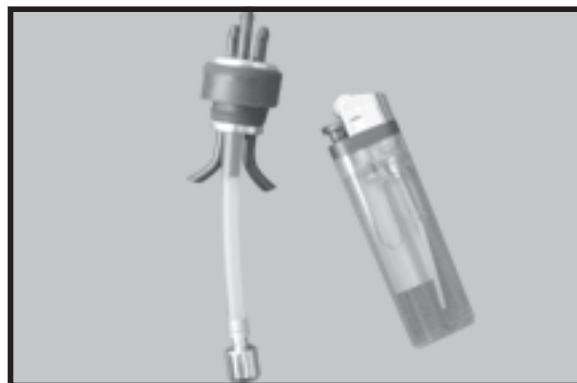
2. ENGINE MOUNT.



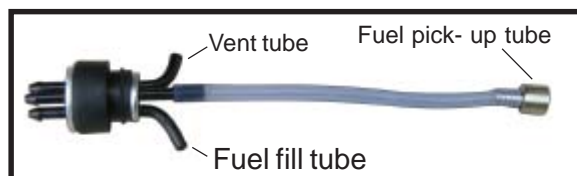
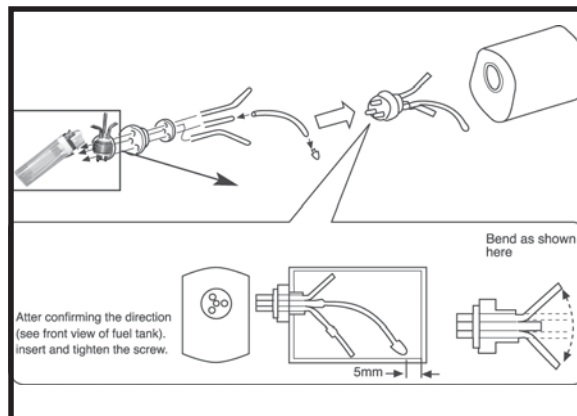
FUEL TANK.

INSTALLING THE STOPPER ASSEMBLY

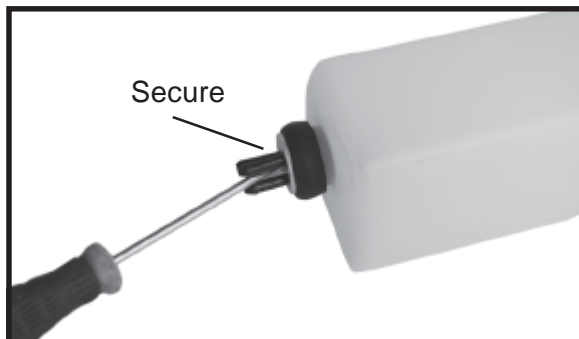
- ☐ 1) The stopper has been pre-assembled at the factory.
- ☐ 2) Using a modeling knife, cut one length of silicon fuel line (the length of silicon fuel line is calculated by how the weighted clunk should rest about 8mm away from the rear of the tank and move freely inside the tank). Connect one end of the line to the weighted clunk and the other end to the nylon pick up tube in the stopper.
- ☐ 3) Carefully bend the second nylon tube up at a 45 degree angle (using a cigarette lighter). This tube will be the vent tube to the muffler.
- ☐ 4) Carefully bend the third nylon tube down at a 45 degree angle (using a cigarette lighter). This tube will be vent tube to the fueling valve.



When the stopper assembly is installed in the tank, the top of the vent tube should rest just below the top surface of the tank. It should not touch the top of the tank.



- ☐ 5) Test fit the stopper assembly into the tank. It may be necessary to remove some of the flashing around the tank opening using a modeling knife. If flashing is present, make sure none of it falls into the tank.
- ☐ 6) When satisfied with the alignment of the stopper assembly tighten the 3mm x 20mm machine screw until the rubber stopper expands and seals the tank opening. Do not over tighten the assembly as this could cause the tank to split.
- ☐ 7) Using a modeling knife, cut 3 lengths of fuel line 150mm long. Connect 2 lines to the 2 vent tubes and 1 line to the fuel pickup tube in the stopper.

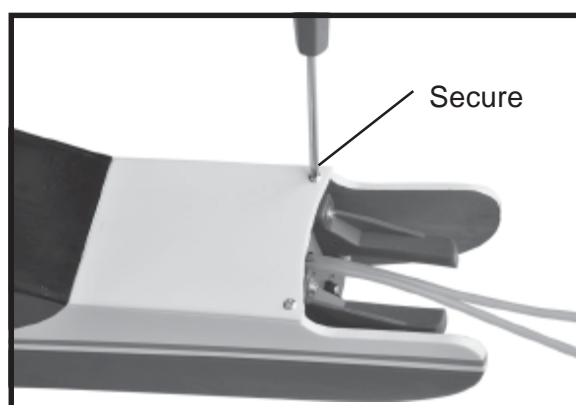
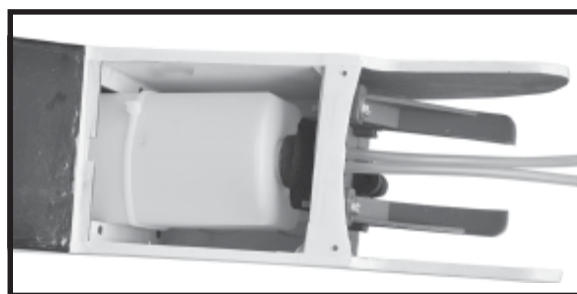
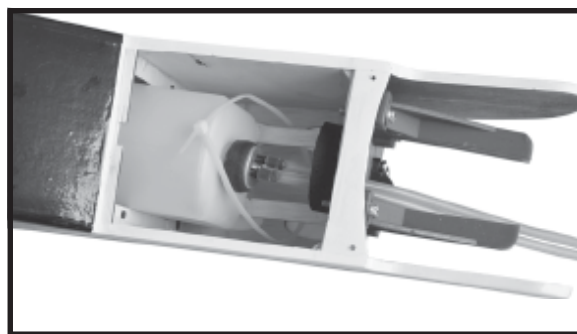


□ 8) Feed three lines through the fuel tank compartment and through the pre-drilled hole in the firewall. Pull the lines out from behind the engine, while guiding the fuel tank into place. Push the fuel tank as far forward as possible, the front of the tank should just about touch the back of the firewall.

Blow through one of the lines to ensure the fuel lines have not become kinked inside the fuel tank compartment. Air should flow through easily.

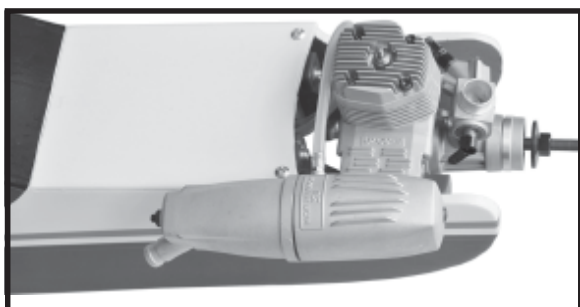
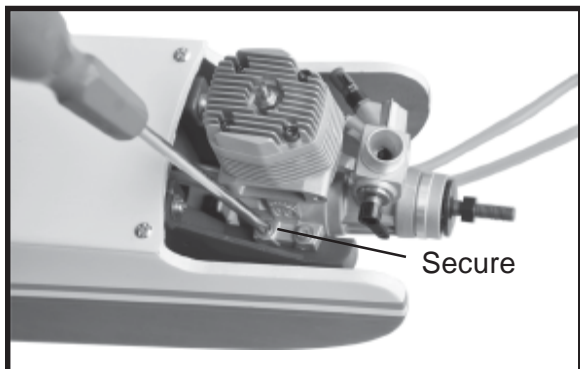
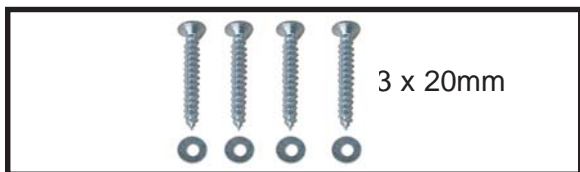
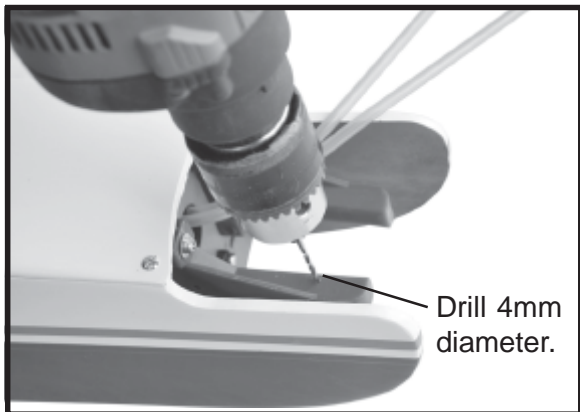
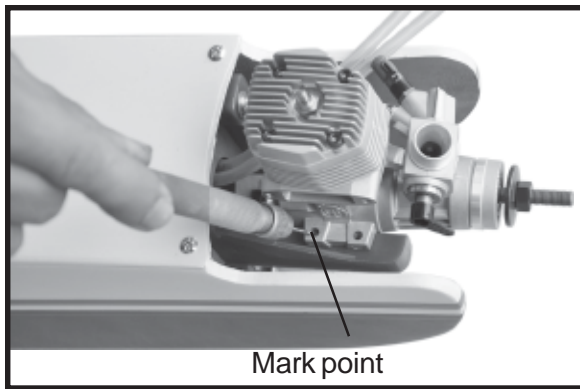
□ 9) To secure the fuel tank in place, apply a bead of silicon sealer to the forward area of the tank, where it exits the fuselage behind the engine mounting box and to the rear of the tank at the forward bulkhead.

Do not secure the tank into place permanently until after balancing the airplane. You may need to remove the tank to mount the battery in the fuel tank compartment.



INSTALLING THE ENGINE.

Locate the long piece of wire used for the throttle pushrod. One end of the wire has been pre-bend in to a "Z" bend at the factory. This "Z" bend should be inserted into the throttle arm of the engine when the engine is fitted onto the engine mount. Fit the engine to the engine mount using the screws provided.

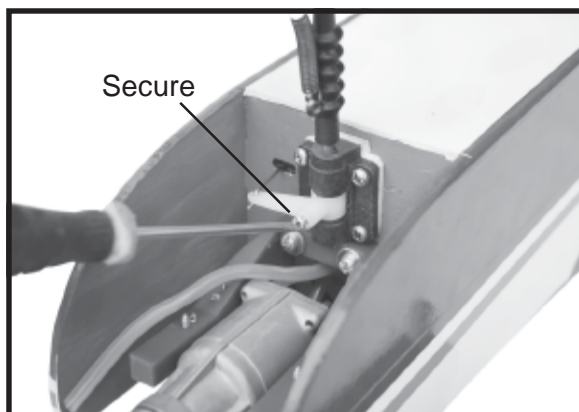


NOSE GEAR INSTALLATION.



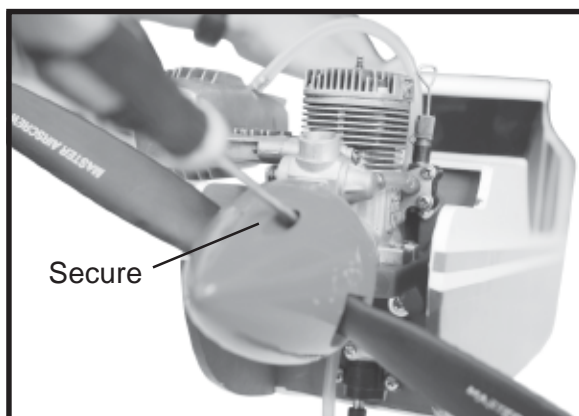
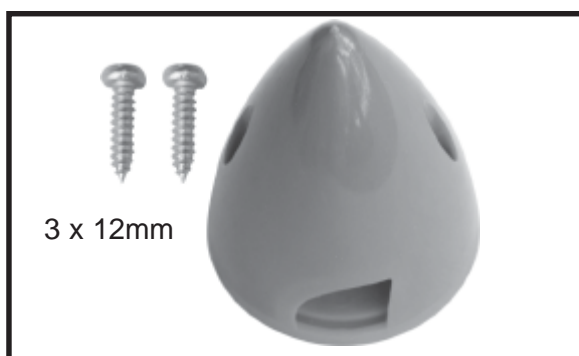
Installing steering arm as follow
Adjust the nose gear steering arm until the arm is parallel with the fire wall.





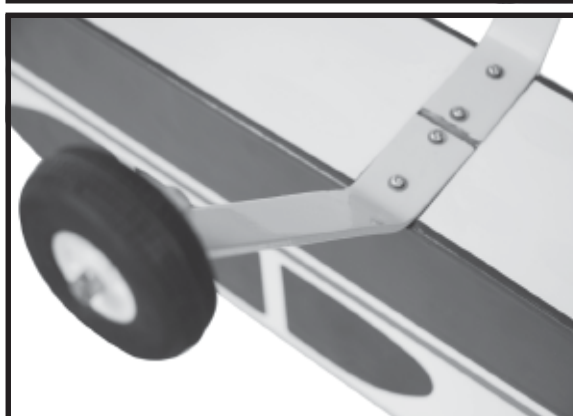
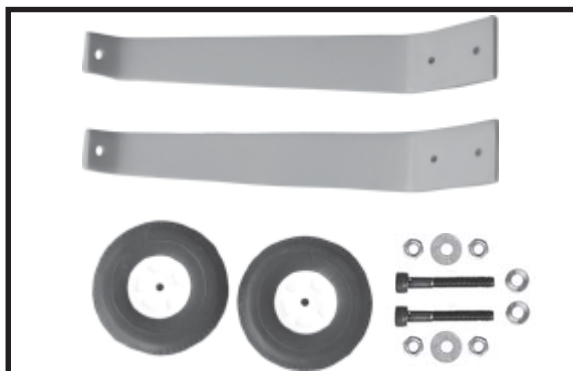
INSTALLING THE SPINNER.

Install the spinner backplate, propeller and spinner cone. The spinner cone is held in place using two 3mm x 12mm wood screws.



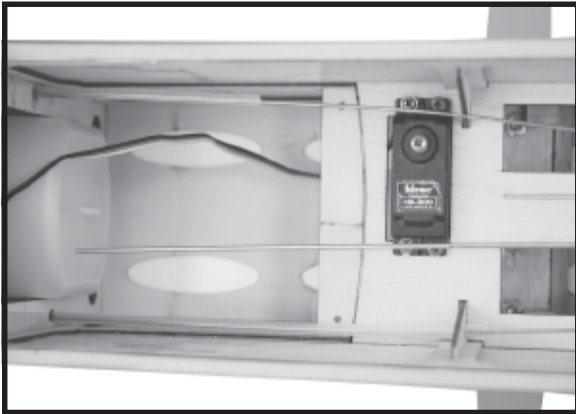
INSTALLING THE MAIN LANDING GEAR.

- ☐ 1. The blind nuts are already mounted inside the fuselage.
- ☐ 2. The holes in the landing gear should be to accept the mounting bolts.
- ☐ 3. Using the hardware provided, mount the main landing gear to the fuselage.



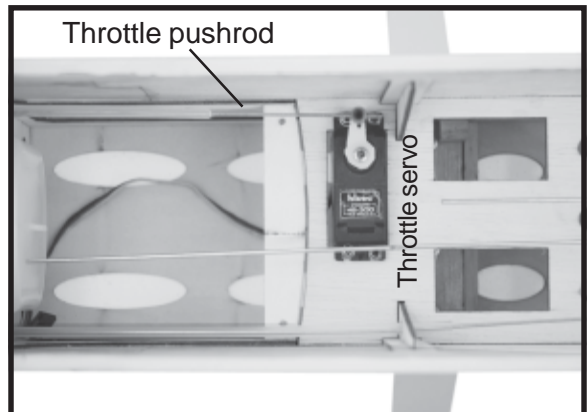
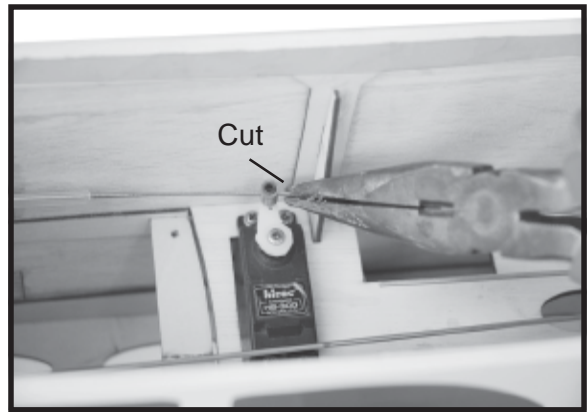
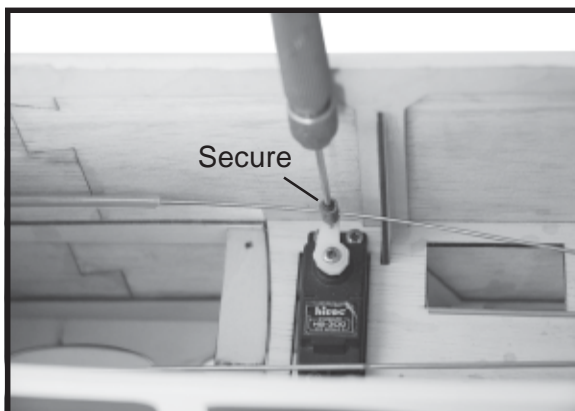
INSTALLING THE THROTTLE PUSHROD.

See pictures below:

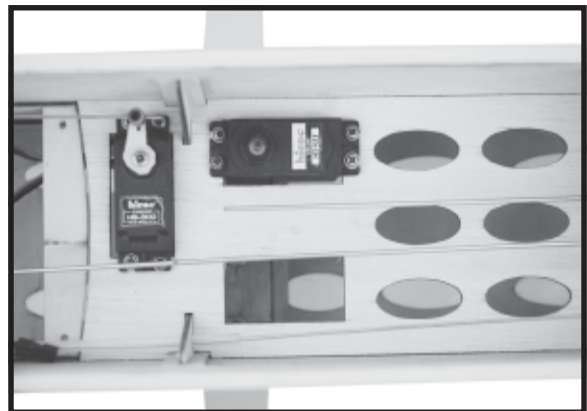


- Install one adjustable metal connector through the third hole out from the center of one servo arm, enlarge the hole in the servo arm using a 2mm drill bit to accommodate the servo connector. Remove the excess material from the arm.

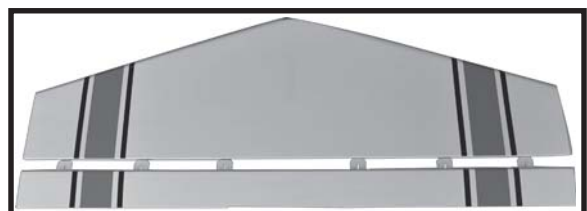
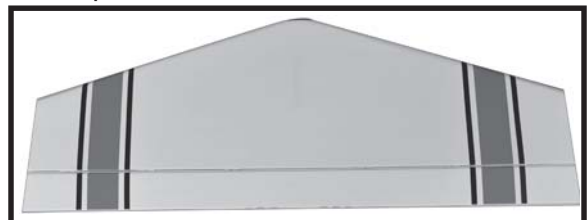
After installing the adjustable metal connector apply a small drop of thin C/A to the bottom nut. This will prevent the connector from loosening during flight.

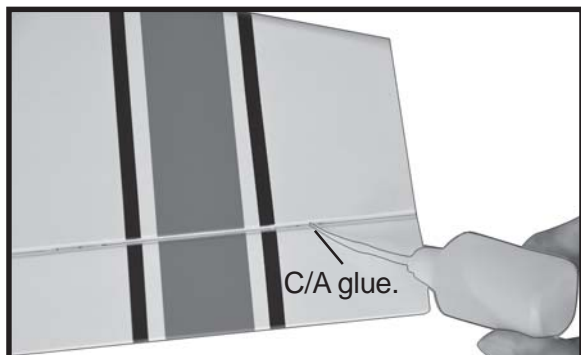
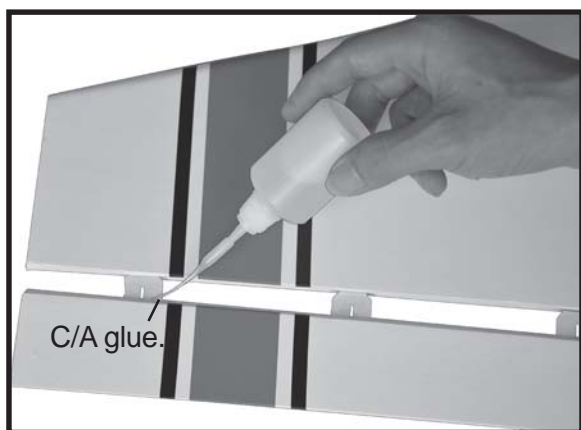
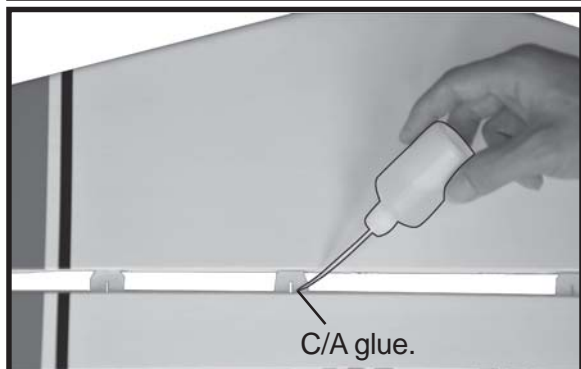
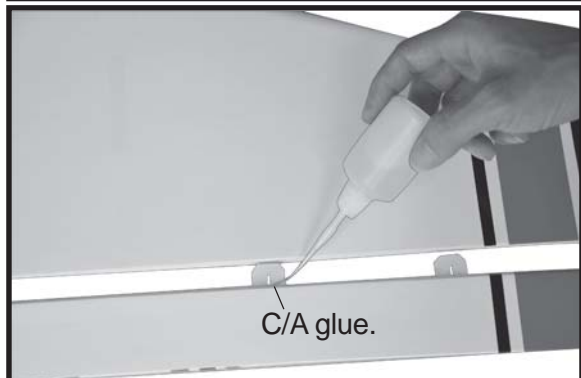
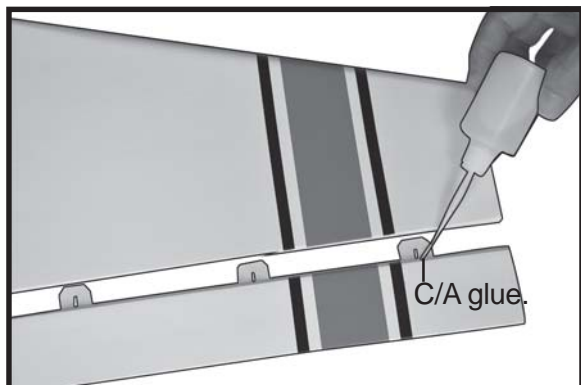
**ELEVATOR SERVO INSTALLATION.**

See pictures below:

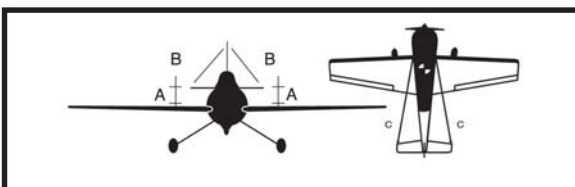
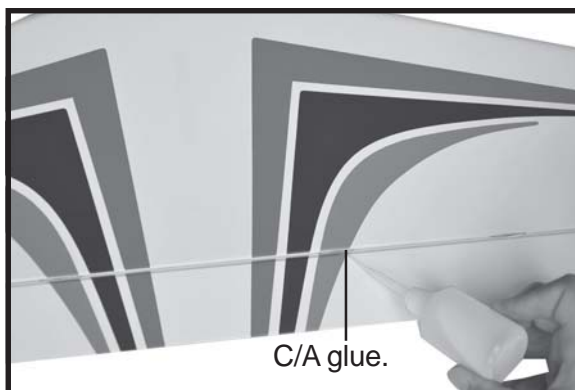
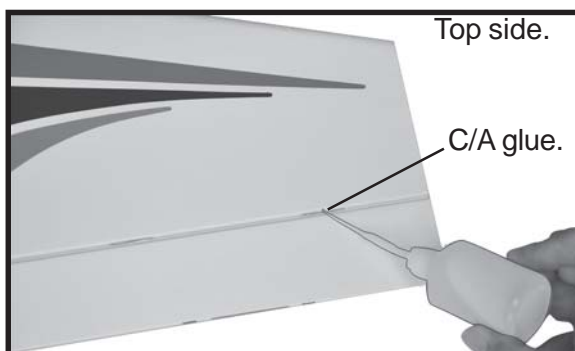
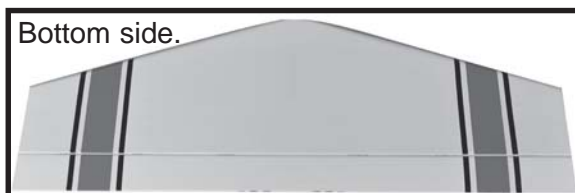
**HORIZONTAL STABILIZER.**

See pictures below:

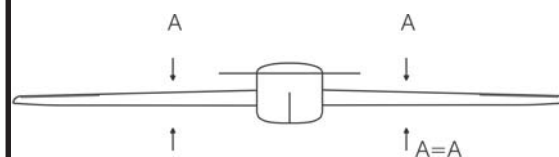


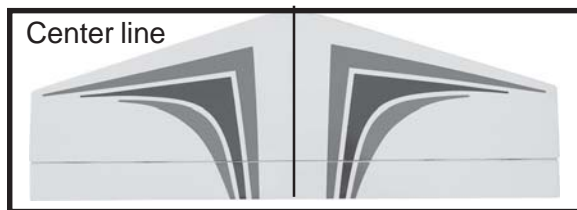


Bottom side.



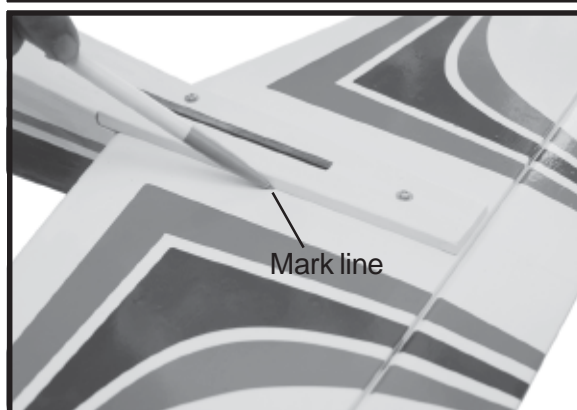
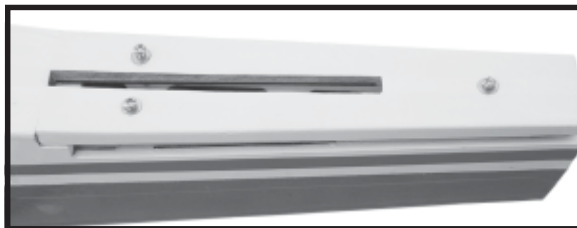
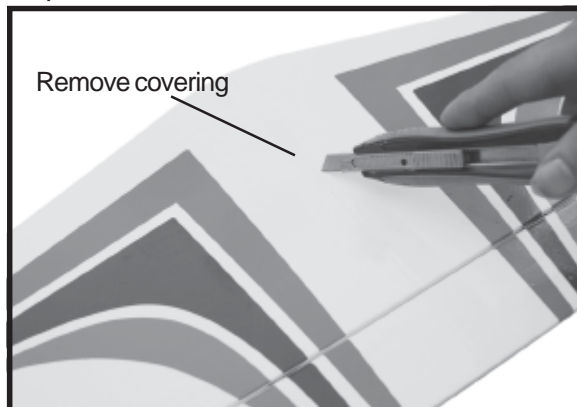
Check to mark sure the wing and stabilizer are parallell. If they are not, lightly sand the opening in the fuselage for the stabilizer until the stabilizer is parallell to the wing.



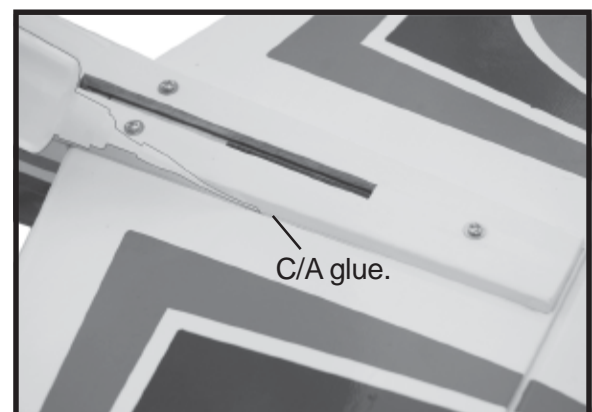
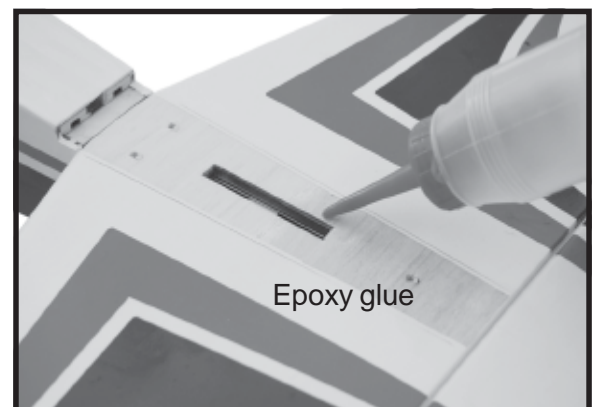
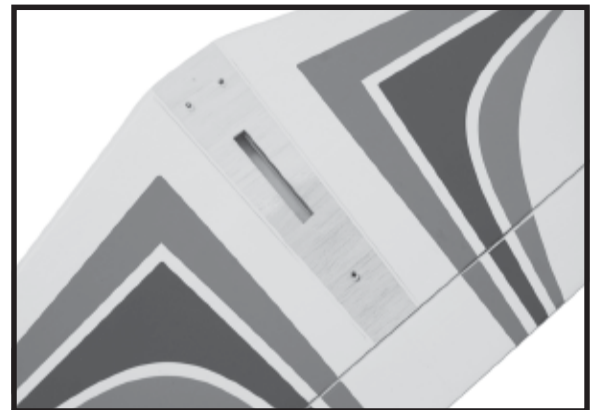
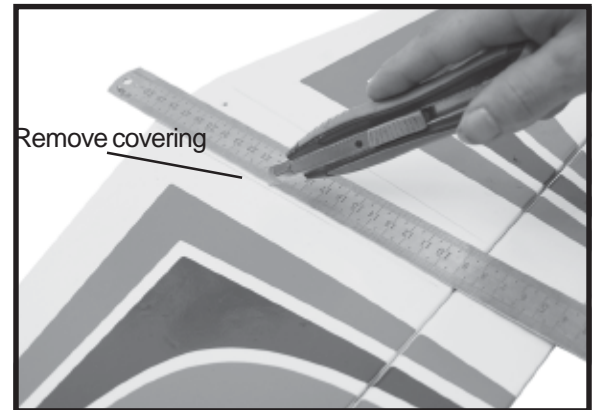


□ Using a ruler and a pen, locate the centerline of the horizontal stabilizer, at the trailing edge, and place a mark. Use a triangle and extend this mark, from back to front, across the top of the stabilizer. Also extend this mark down the back of the trailing edge of the stabilizer.

□ Tracing a line with your finger and using a modeling knife, carefully remove the covering as picture below.

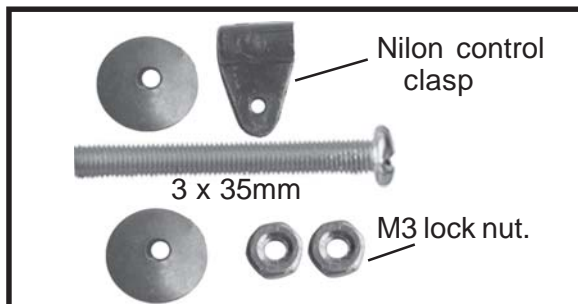


When cutting through the covering to remove it, cut with only enough pressure to only cut through the covering itself. Cutting into the balsa structure may weaken it.

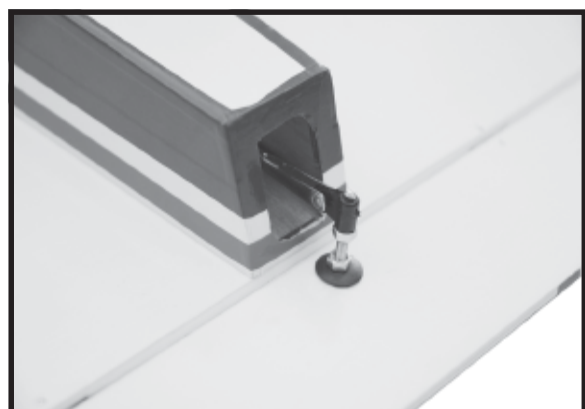
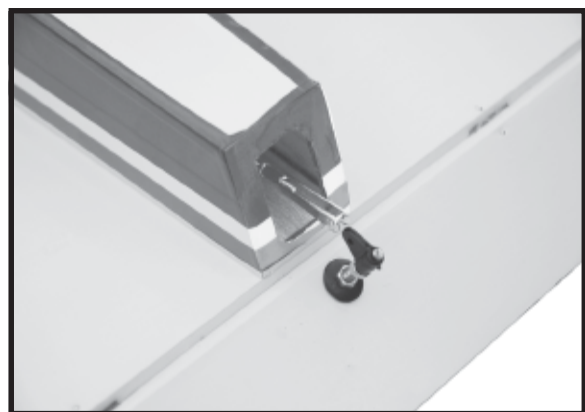
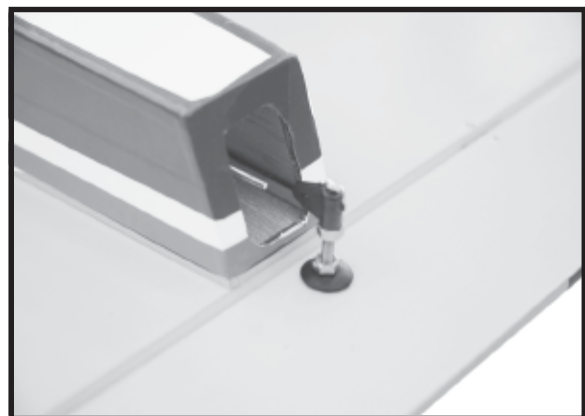
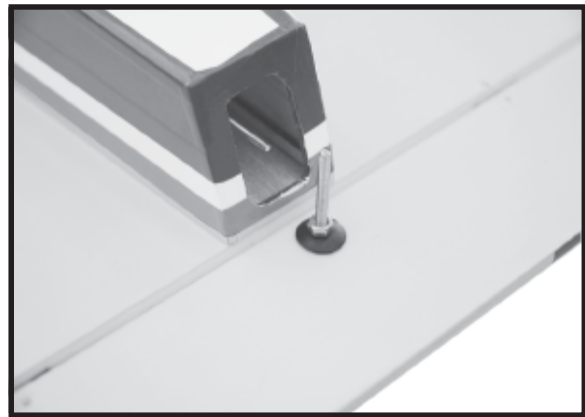


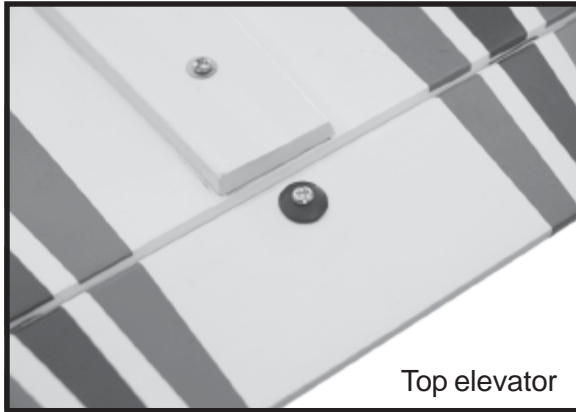
ELEVATOR CONTROL HORN AND - ELEVATOR PUSHROD INSTALLATION.

Elevator control horn install as same as the way of aileron control horn. Please see pictures below.



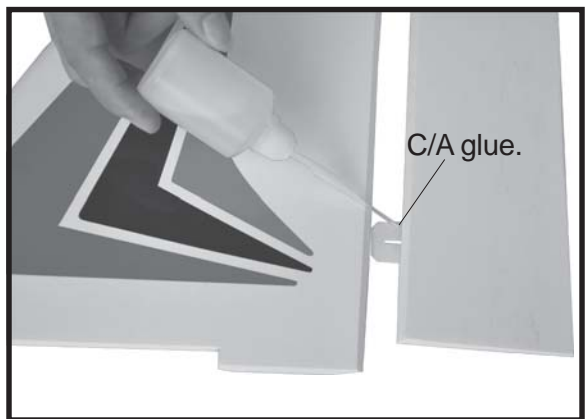
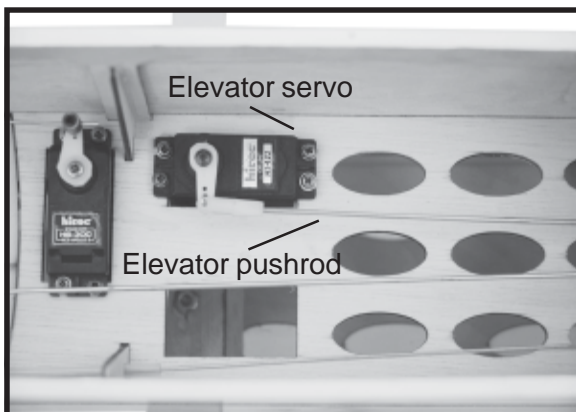
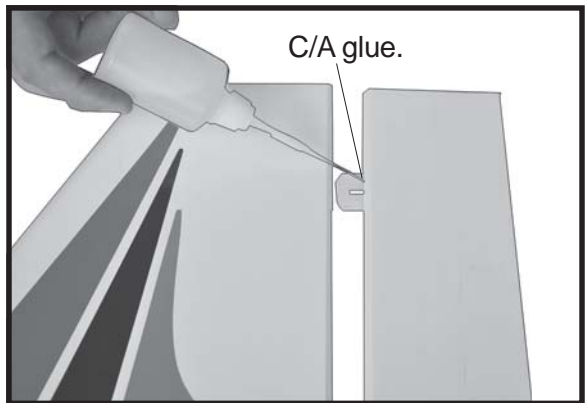
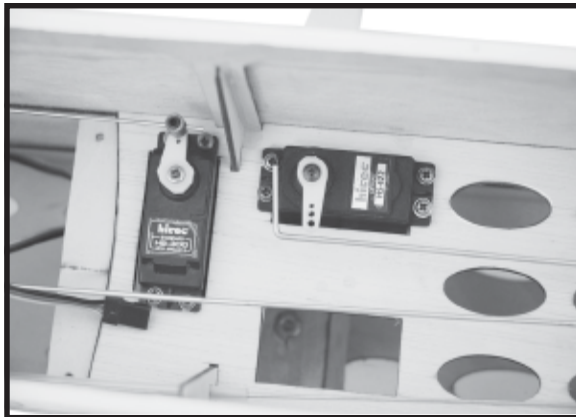
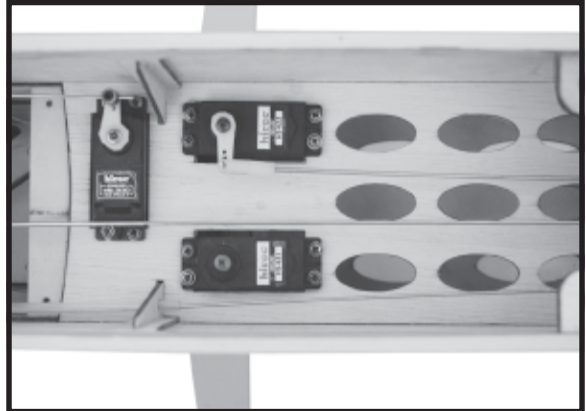
Elevator control horn.

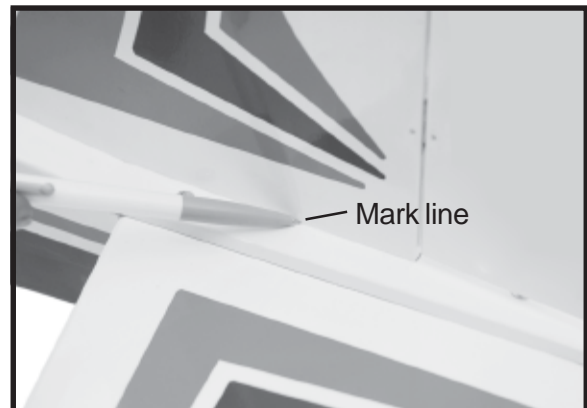
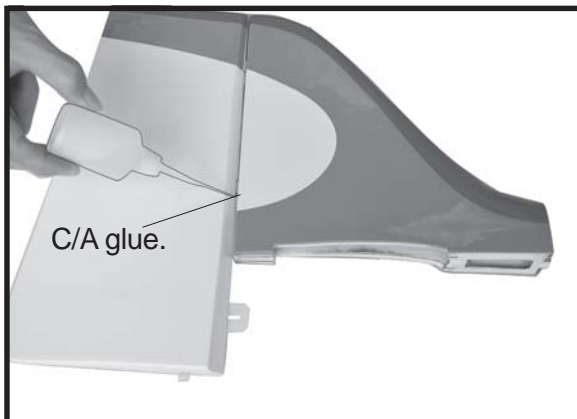
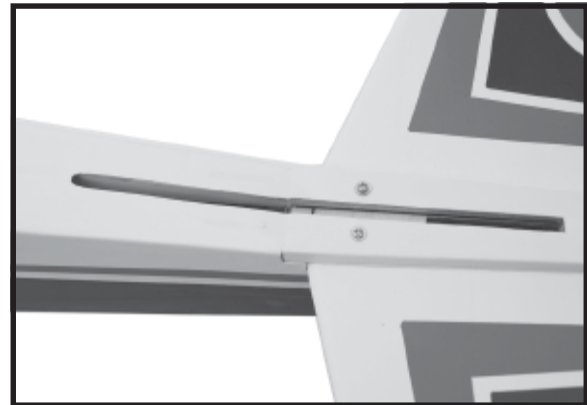
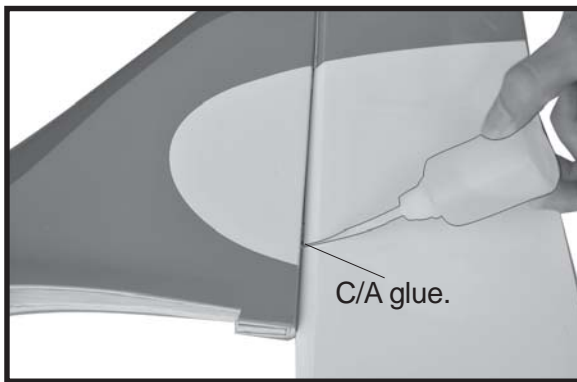
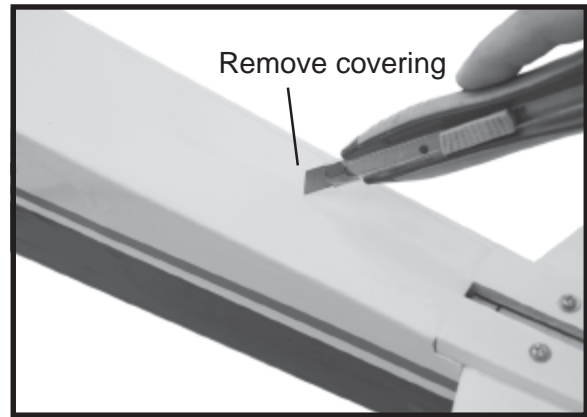
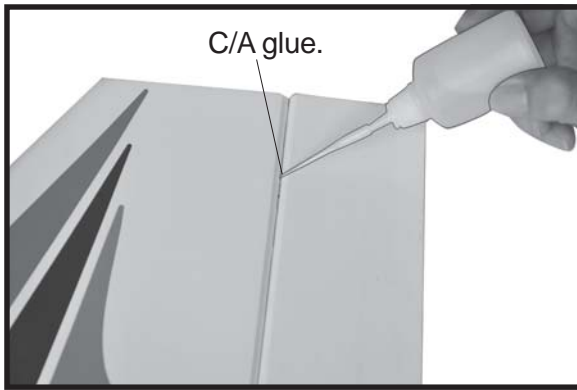




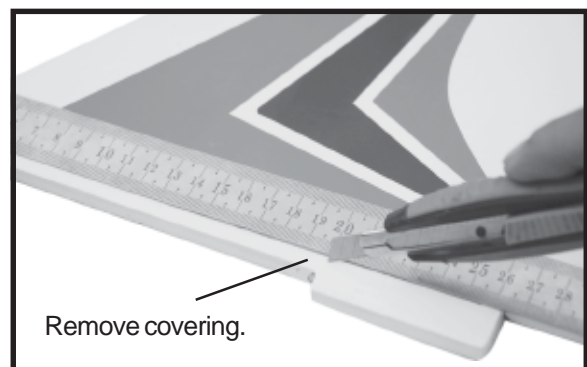
VERTICAL INSTALLATION.

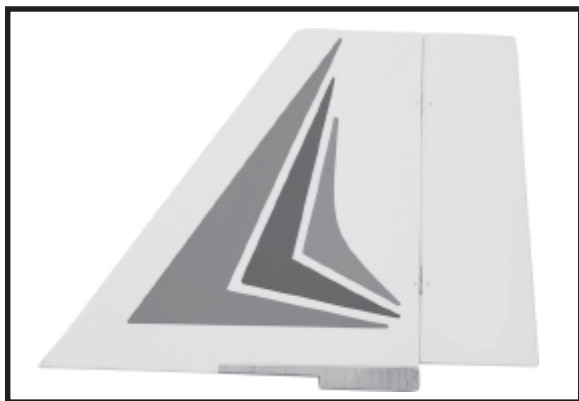
Rudder servo install as same as method of elevator servo. See picture below:



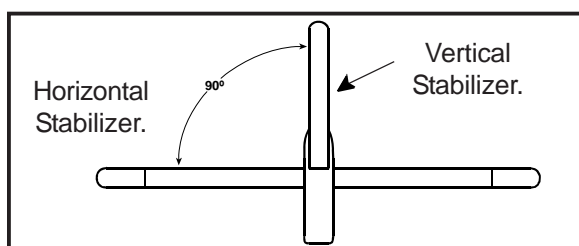
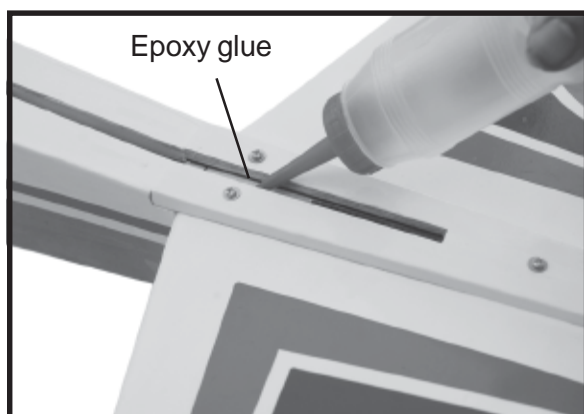


When cutting through the covering to remove it, cut with only enough pressure to only cut through the covering itself. Cutting into the balsa structure may weaken it.

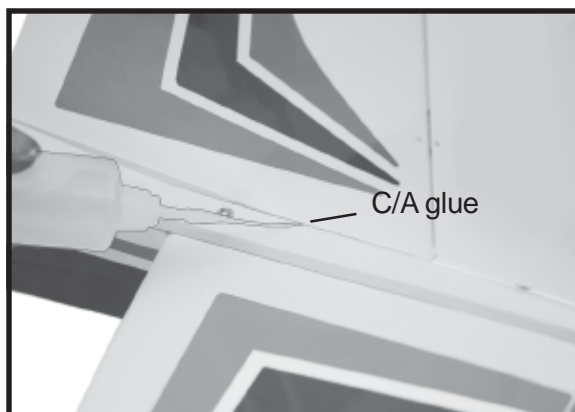




Slide the vertical stabilizer back in place. Using a triangle, check to ensure that the vertical stabilizer is aligned 90° to the horizontal stabilizer.

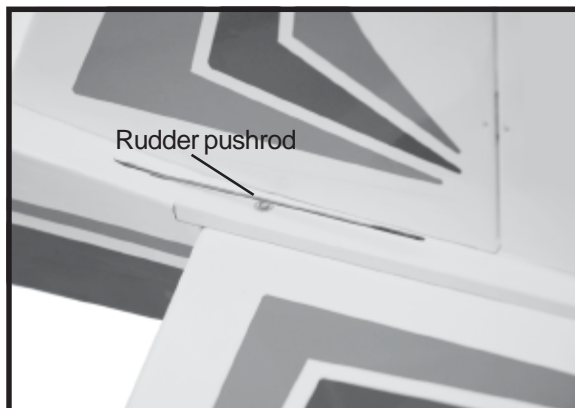
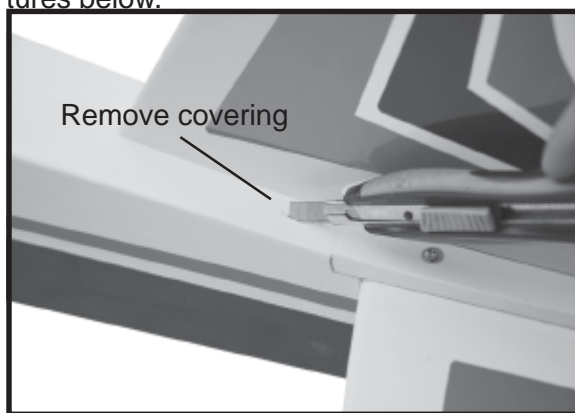


□ When you are sure that everything is aligned correctly, mix up a generous amount of Flash 30 Minute Epoxy. Apply a thin layer to the mounting slot in the top of the fuselage and to the sides and bottom of the vertical stabilizer mounting area. Apply epoxy to the bottom and top edges of the filler block and to the lower hinge also. Set the stabilizer in place and re-align. Double check all of your measurements once more before the epoxy cures. Hold the stabilizer in place with T-pins or masking tape and remove any excess epoxy using a paper towel and rubbing alcohol. Allow the epoxy to fully cure before proceeding.



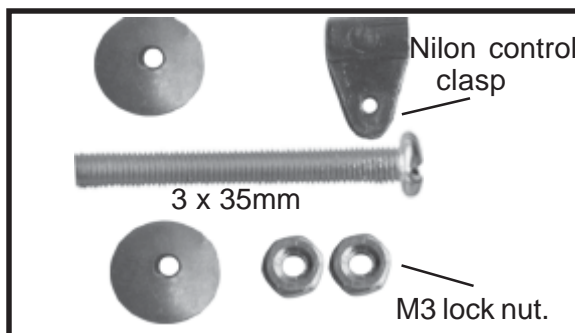
RUDDER CONTROL HORN INSTALLATION.

Rudder control horn install as same as the way of aileron control horn. Please see pictures below.

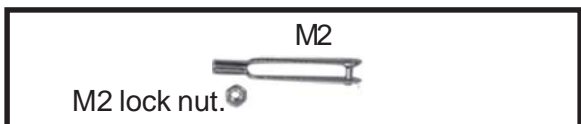
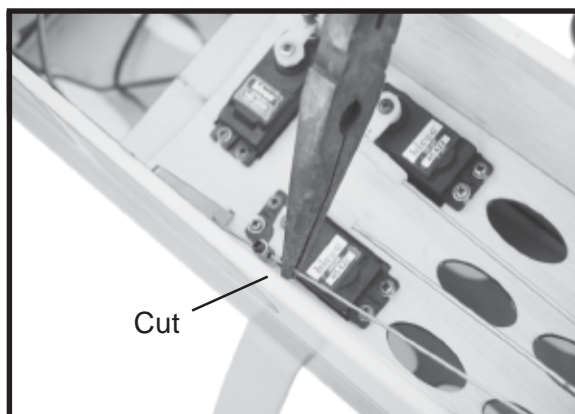
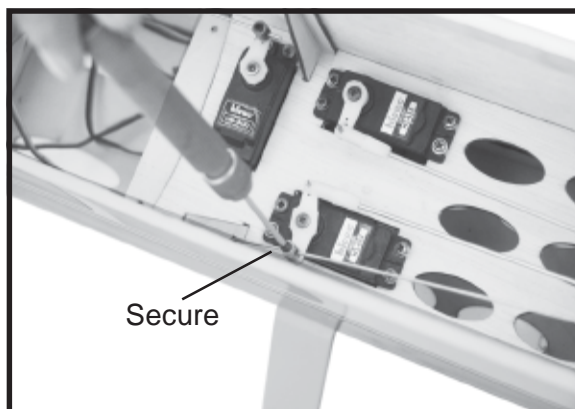
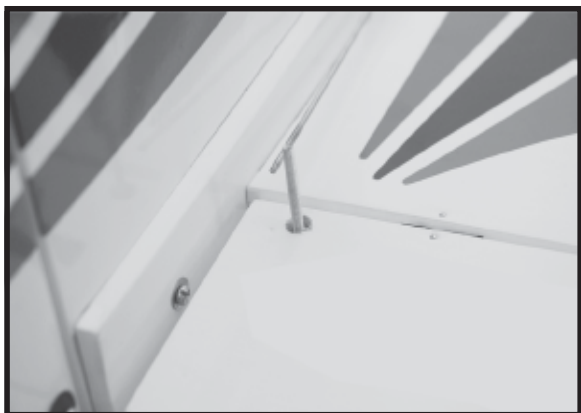
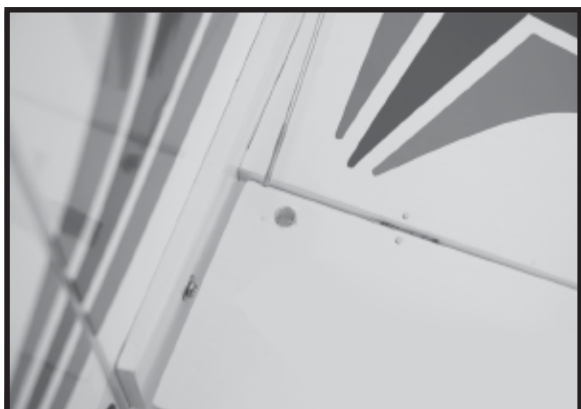
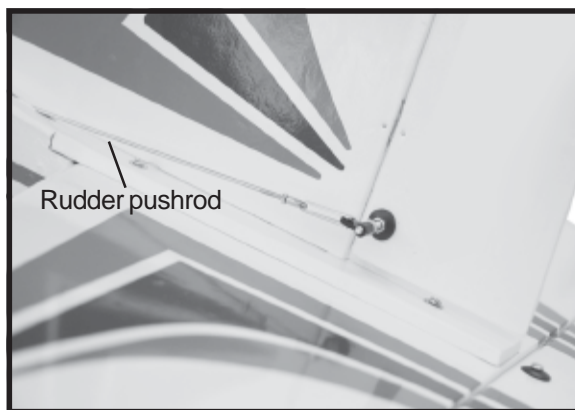


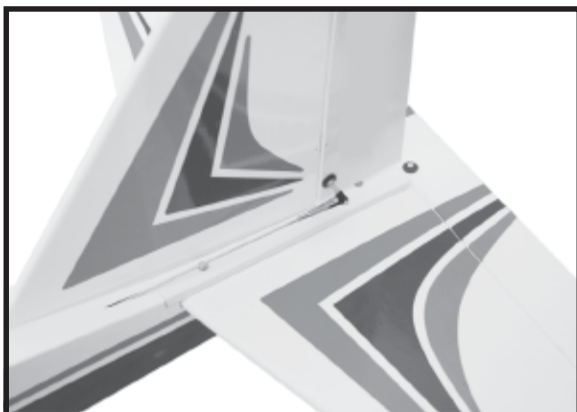
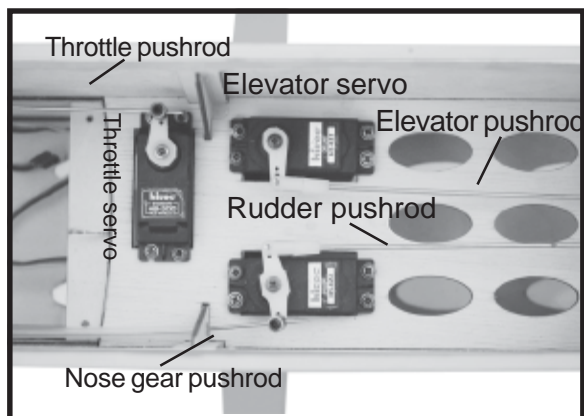
RUDDER CONTROL HORN INSTALLATION.

Rudder control horn install as same as the way of aileron control horn. Please see pictures below.



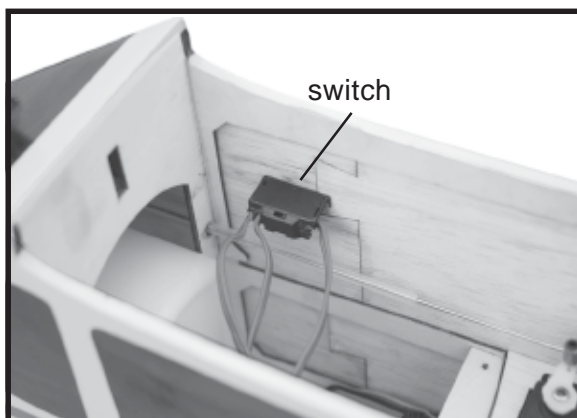
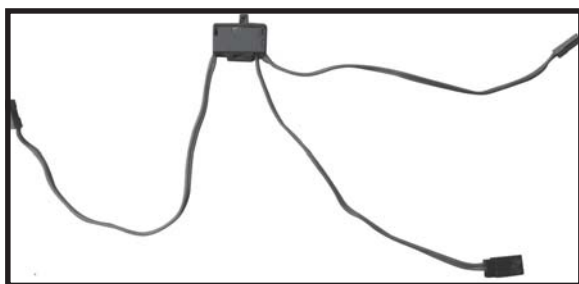
Drill a hole of the mounting rudder control horn on to the rudder with 6mm diameter.





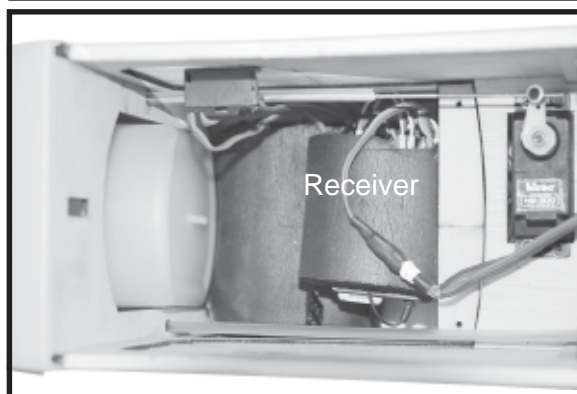
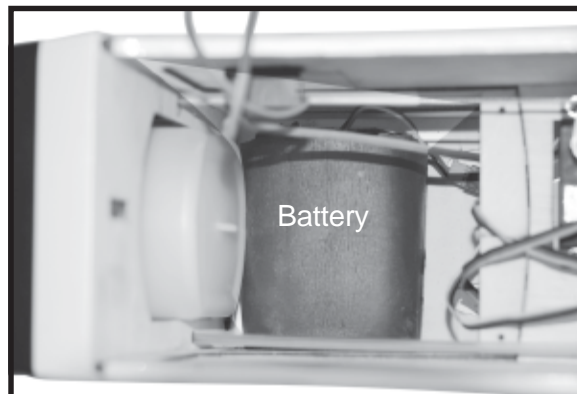
INSTALLING THE SWITCH.

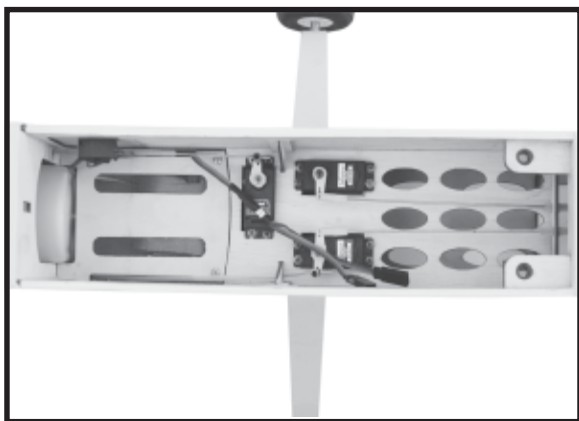
- ❑ 1. Cut out the switch hole using a modeling knife. Use a 2mm drill bit and drill out the two mounting holes through the fuselage side.
- ❑ 2. Secure the switch in place using the two machine screws provided with the radio system.



INSTALLING THE RECEIVER AND BATTERY.

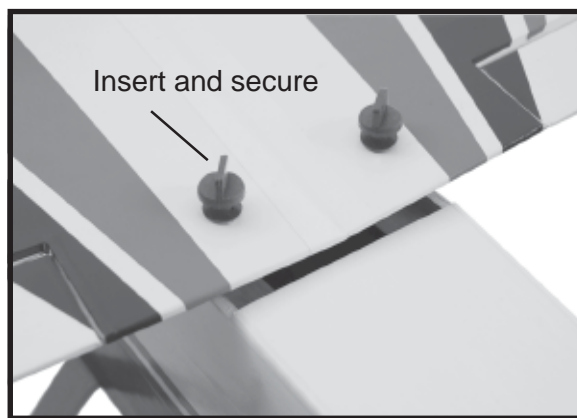
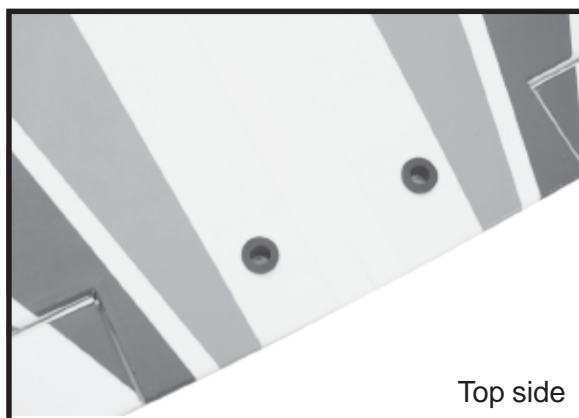
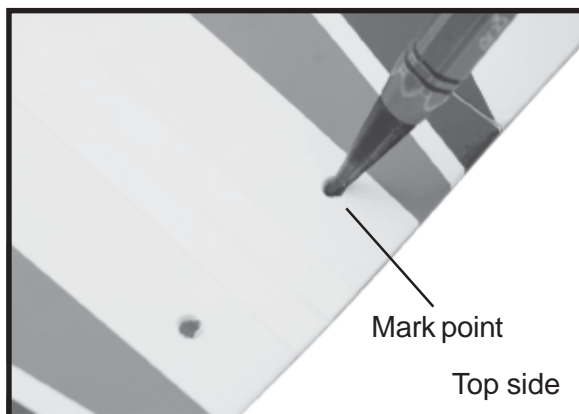
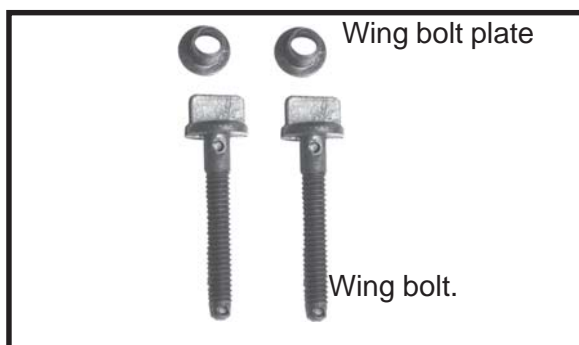
- ❑ 1. Plug the servo leads and the switch lead into the receiver. You may want to plug an aileron extension into the receiver to make plugging in the aileron servo lead easier when you are installing the wing. Plug the battery pack lead into the switch.
- ❑ 2. Wrap the receiver and battery pack in the protective foam to protect them from vibration. Use a rubber band or masking tape to hold the foam in place.
- ❑ 3. Position the battery pack and receiver behind the fuel tank. Use two tie wraps to hold the battery and receiver securely in place as picture below.
Do not permanently secure the receiver and battery until after balancing the model.
- ❑ 4. Using a 2mm drill bit, drill a hole through the side of the fuselage, near the receiver, for the antenna to exit.





WING ATTACHMENT.

See picture wing attach to fuselage.
Installing the fuselage hatch as same as picture below.



BALANCING.

❑ 1) It is critical that your airplane be balanced correctly. Improper balance will cause your plane to lose control and crash.

THE CENTER OF GRAVITY IS LOCATED **75mm** BACK FROM THE LEADING EDGE OF THE WING.

❑ 2) Mount the wing to the fuselage. Using a couple of pieces of masking tape, place them on the top side of the wing **75mm** back from the leading edge, at the fuselage sides.

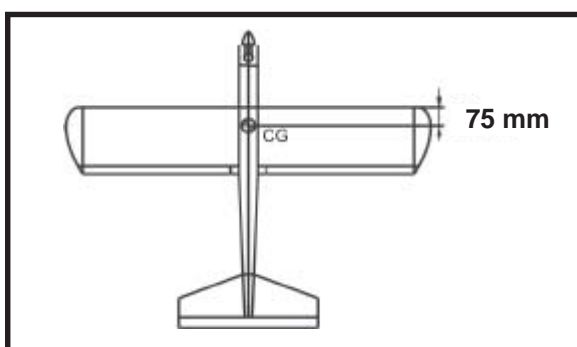
❑ 3. Turn the airplane upside down. Place your fingers on the masking tape and carefully lift the plane .

Accurately mark the balance point on the top of the wing on both sides of the fuselage. The balance point is located **75mm** back from the leading edge. This is the balance point at which your model should balance for your first flights. Later, you may wish to experiment by shifting the balance up to 10mm forward or back to change the flying characteristics. Moving the balance forward may improve the smoothness and arrow- like tracking, but it may then require more speed for take off and make it more difficult to slow down for landing. Moving the balance aft makes the model more agile with a lighter and snappier "feel". In any case, please start at the location we recommend .

With the wing attached to the fuselage, all parts of the model installed (ready to fly), and empty fuel tanks, hold the model at the marked balance point with the stabilizer level.

Lift the model. If the tail drops when you lift, the model is "tail heavy" and you must add weight* to the nose. If the nose drops, it is "nose heavy" and you must add weight* to the tail to balance.

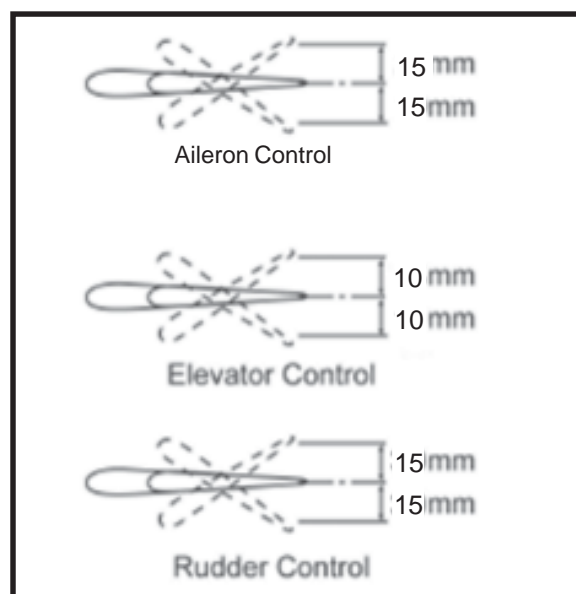
*If possible, first attempt to balance the model by changing the position of the receiver battery and receiver. If you are unable to obtain good balance by doing so, then it will be necessary to add weight to the nose or tail to achieve the proper balance point.



CONTROL THROWS.

- ☐ 1. We highly recommend setting up a plane using the control throws listed.
- ☐ 2. The control throws should be measured at the widest point of each control surface.
- ☐ 3. Check to be sure the control surfaces move in the correct directions.

Ailerons : 15mm up 15mm down
 Elevator : 10mm up 10mm down
 Rudder : 15mm right 15mm left



PRE-FLIGHT CHECK.

- ☐ 1. Completely charge your transmitter and receiver batteries before your first day of flying.
- ☐ 2. Check every bolt and every glue joint in your plane to ensure that everything is tight and well bonded.
- ☐ 3. Double check the balance of the airplane.
- ☐ 4. Check the control surface.
- ☐ 5. Check the receiver antenna . It should be fully extended and not coiled up inside the fuselage.
- ☐ 6. Properly balance the propeller.

We wish you many safe and enjoyable flights with your SEDONA.