

Instruction Manual



PHOENIX MODEL®



KATANA-61



Wingspan : 1420 mm (56 in)



Length : 1420 mm (56 in)



Weight : 2700g - 3200g



Radio : 6-9 channel/ 6 digital servo



Engine : 6l two stroke

KIT CONTENTS: We have organized the parts as they come out of the box for better identification during assembly. We recommend that you regroup the parts in the same manner. This will ensure you have all of parts required before you begin assembly

KIT CONTENTS

MAIN GEAR ASSEMBLY

- . (2) Main gear
- . (2) 65mm diameter wheels
- . (2) Axle set
- . (2) Wheel pant
- . (4) 4mm x 20mm screw
- . (4) Flat washer

TAIL GEAR ASSEMBLY

- . (1) Tail gear
- . (1) 25mm diameter wheel
- . (2) Wheel collar
- . (2) Plastic clasp
- . (4) 2mm x 16mm screws

ELEVATOR CONTROL SYSTEM

- . (2) Control horn
- . (2) 3mm x 35mm screw
- . (2) Nylon horn
- . (2) Metal clevis M3
- . (2) 3mm x 12mm screws
- . (2) 6mm flat washer
- . (2) 3mm nut
- . (2) Aluminum ball
- . (2) Nylon ball link
- . (2) 3mm x 150mm metal pushrod
- . (2) 3mm nut

RUDDER CONTROL SYSTEM

- . (1) Control horn
- . (1) 3mm x 35mm screw
- . (1) Nylon horn
- . (1) Metal clevis M3
- . (1) 3mm x 12mm screws
- . (1) 6mm flat washer
- . (1) 3mm nut
- . (1) Aluminum ball
- . (1) Nylon ball link
- . (1) 3mm x 70mm metal pushrod
- . (1) 3mm nut

AILERON CONTROL SYSTEM

- . (2) Control horn
- . (2) 3mm x 50mm screw
- . (2) Nylon horn
- . (2) Metal clevis M3
- . (2) 3mm x 12mm screws
- . (2) 6mm flat washer
- . (2) 3mm nut
- . (2) Aluminum ball
- . (2) Nylon ball link
- . (2) 3mm x 75mm metal pushrod
- . (2) 3mm nut

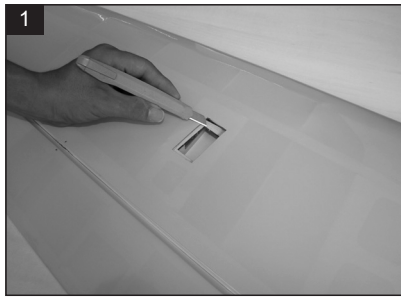
ENGINE MOUNT SYSTEM

- . (2) Engine mount
- . (4) 4mm x 25mm screw
- . (8) 4mm washer C
- . (4) 8mm washer
- . (4) 4mm x 30mm screw
- . (8) 4mm nut
- . (1) Metal rod 500mm
- . (1) Nylon housing 350mm
- . (1) Metal connector
- . (1) Fuel tank
- . (1) Stopper
- . (1) Metal clunk

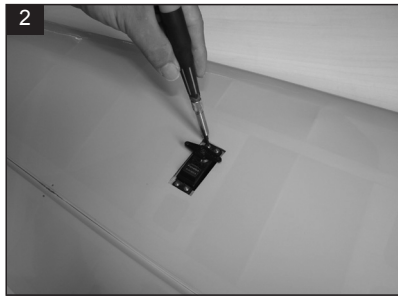
MISCELLANEOUS ITEMS

- . (1) Dihedral
- . (4) Wing screw
- . (2) Canopy screw
- . (4) 2,6mm x 10mm screws
- . (1) Spinner
- . (1) Cowl
- . (1) Plywood plate
- . (1) Decal sheet
- . (1) Manual book

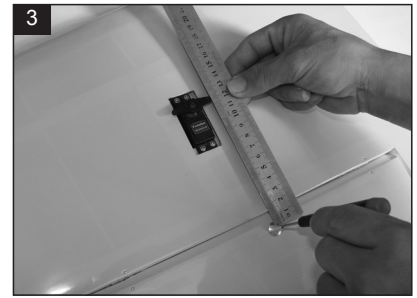
1 Installing the aileron servo:



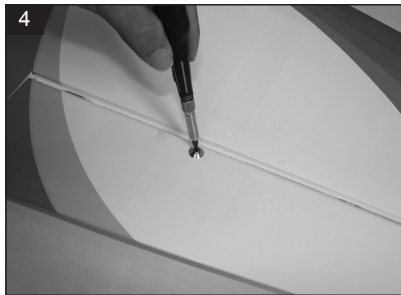
Remove the covering.



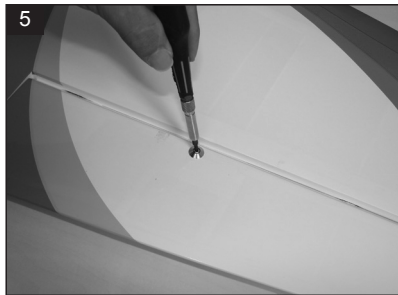
Install and secure the aileron servo.



Mark the holes from the control horn onto the bottom of the aileron and INLINE with the servo arm.



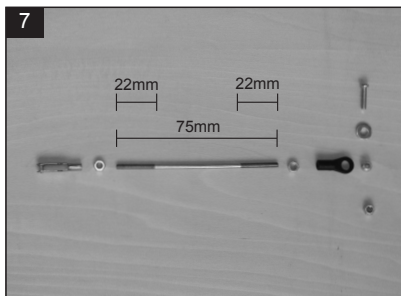
Drill a hole for control horn.



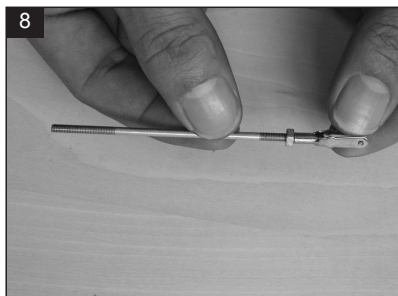
Secure the control horn.



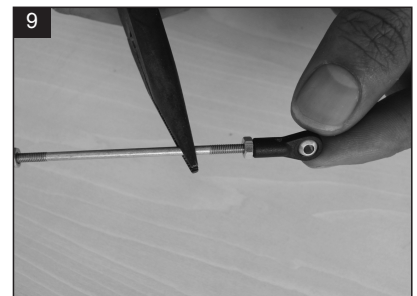
Secure the horn.



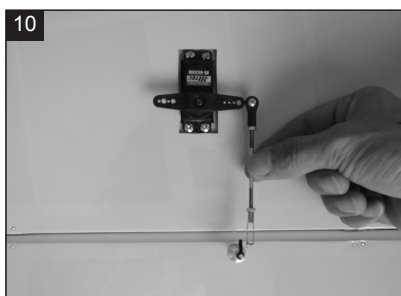
The aileron metal pushrod.



Install the clevis to the end of the pushrod.



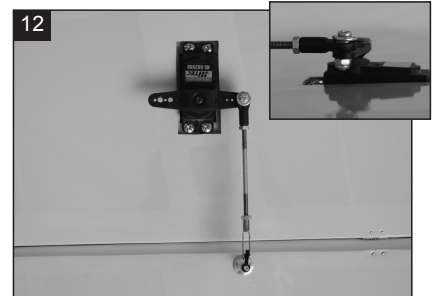
Install the nylon control to the end of the pushrod.



Adjust the length of the pushrod.

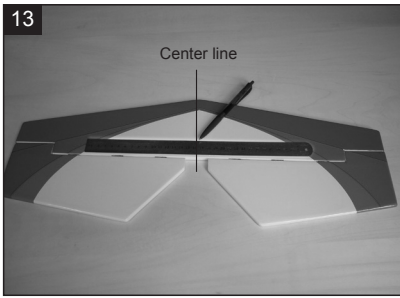


Attach the metal clevis to the nylon control horn.

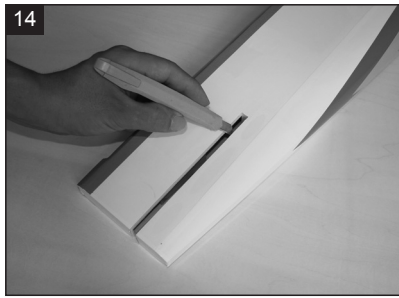


Attach the nylon control to the servo arm and secure it.

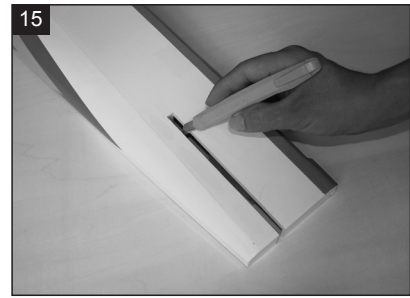
2 Installing the horizontal and the vertical:



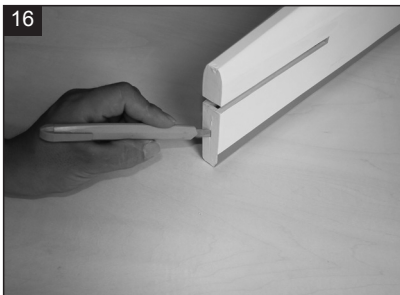
13 Make the center line onto the stabilizer.



14 Remove the covering.



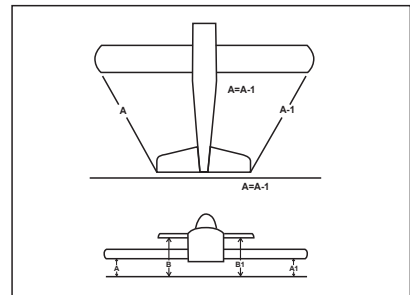
15 Remove the covering.



16 Make a slot for the rudder hinge .



17 Insert the horizontal into the fuselage.



18 Check the horizontal and the wing.



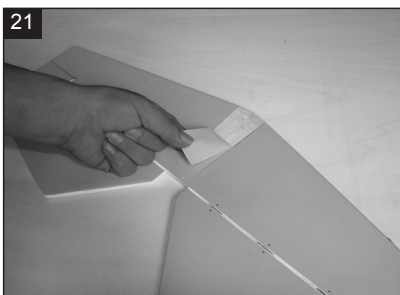
19 Mark the shape of the fuselage onto the top of the horizontal.



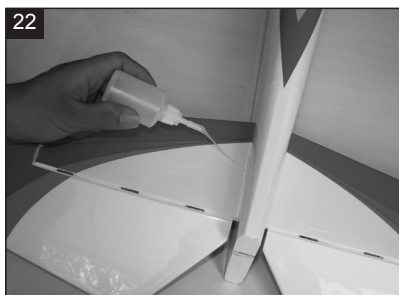
20 And mark the shape of the fuselage onto the bottom of the horizontal.



21 Remove the covering.



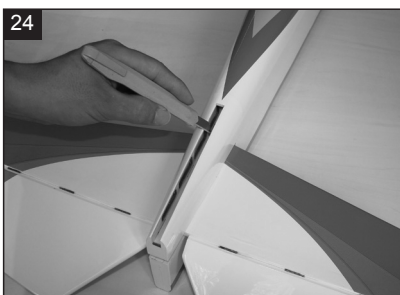
22 Remove the covering.



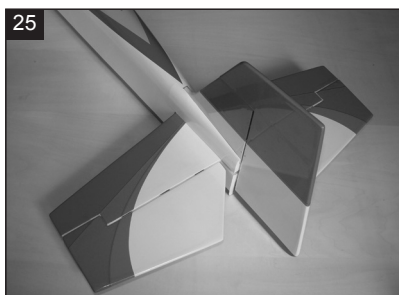
23 Glue the horizontal to the fuselage using the epoxy glue.



24 Glue the horizontal to the fuselage using the epoxy glue.



25 Remove the covering.



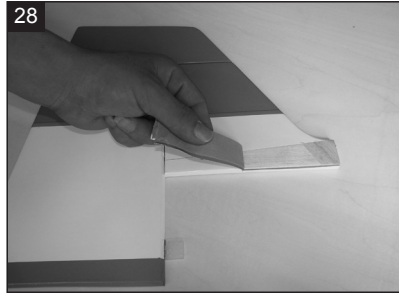
26 Insert the fin to the fuselage.



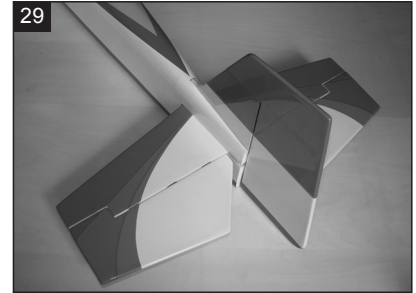
27 Insert the hinge into the slot.



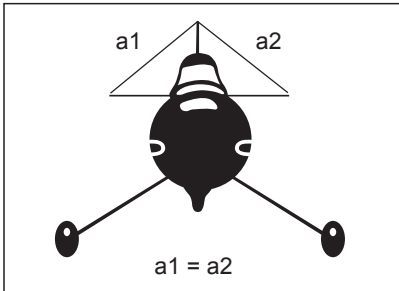
27 Mark the shape of the fuselage onto the vertical.



28 Remove the covering.



29 Insert the vertical into the fuselage.



Check the vertical.

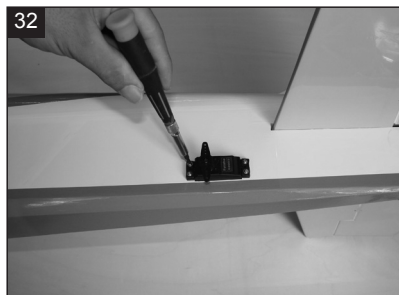


30 Glue the vertical using the epoxy glue.

3 Installing the servo of the elevator:



31 Remove the covering.



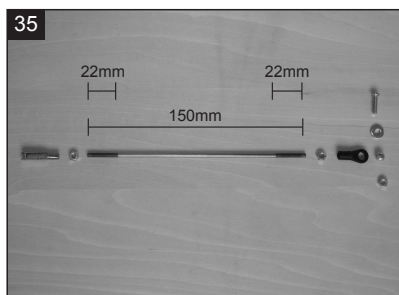
32 Secure the elevator servo.



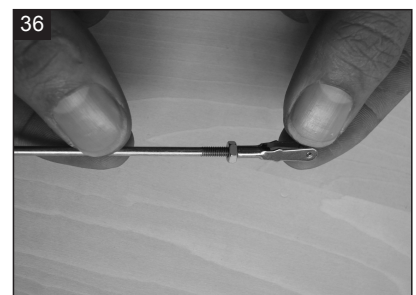
33 Install the control horn.



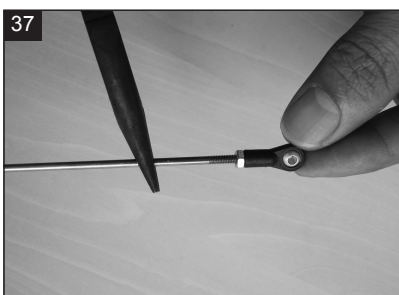
34 Install the nylon horn.



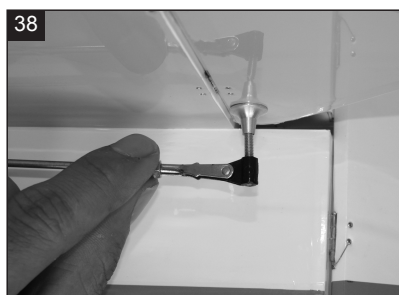
35 The elevator metal pushrod.



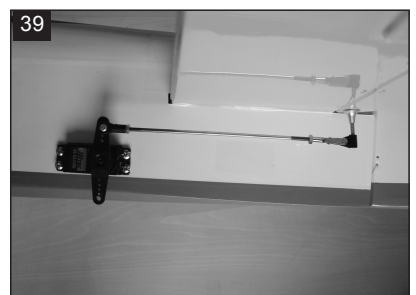
36 Install the metal clevis to the end of the pushrod.



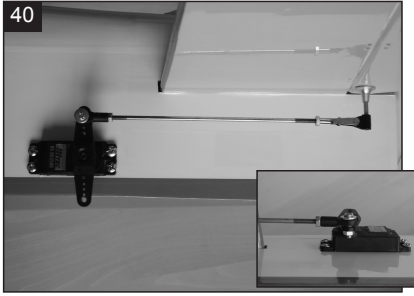
37 Install the nylon control to the end of the pushrod.



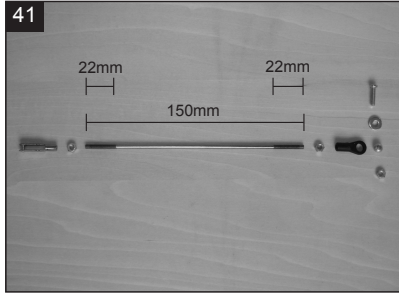
38 Attach the clevis to the nylon control horn.



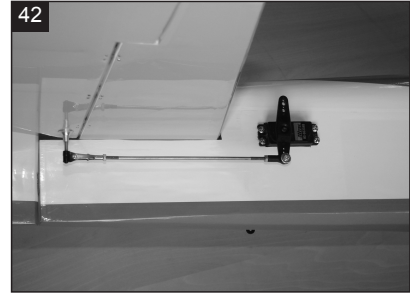
39 Adjust the length of the pushrod.



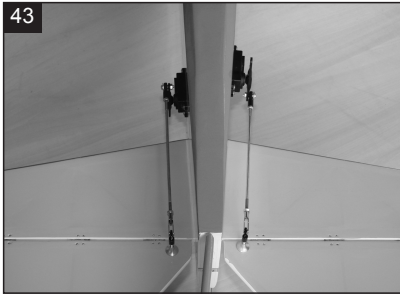
40 Install the nylon control to the servo arm and secure it.



41 The second elevator metal pushrod.

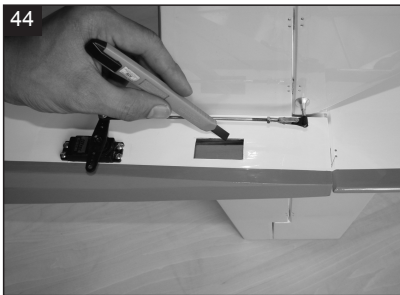


42 Make the same way of the second elevator pushrod.

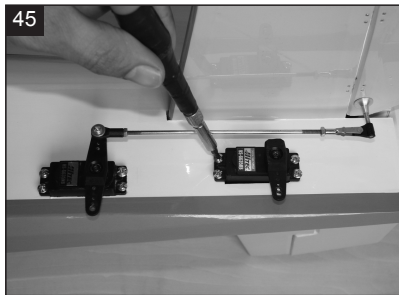


43 Completed the elevator pushrod.

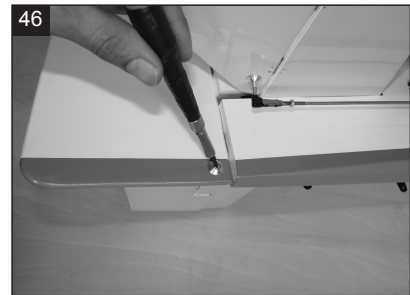
4 Installing the rudder servo:



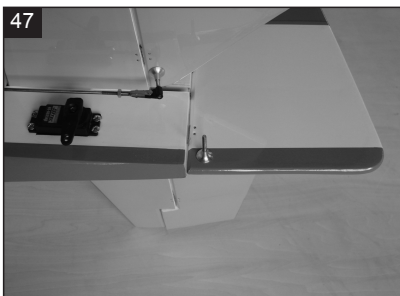
44 Remove the covering.



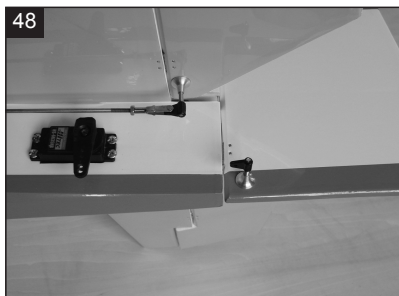
45 Secure the rudder servo.



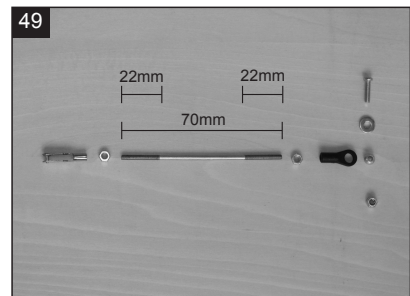
46 Install the control horn.



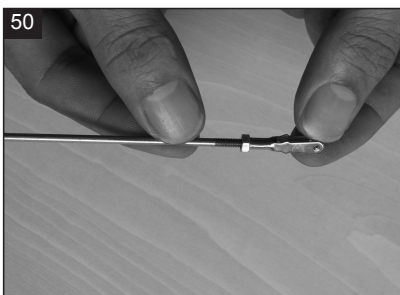
47 Secure the control horn.



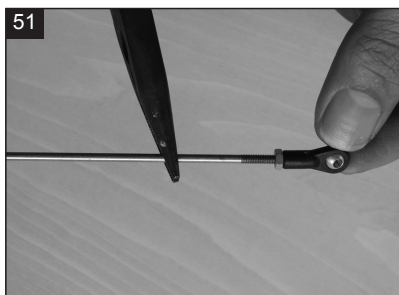
48 Install the nylon horn.



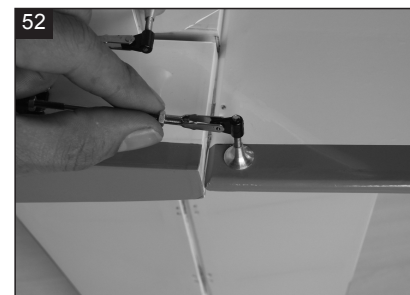
49 The rudder metal pushrod.



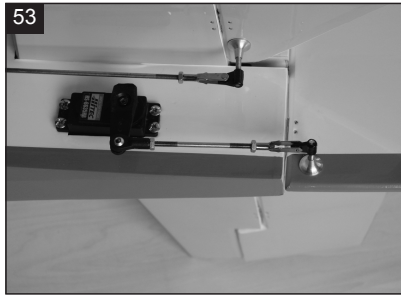
50 Install the metal clevis to the end of the pushrod.



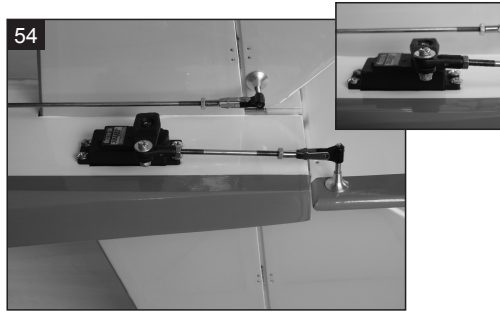
51 Install the nylon control to the end of the pushrod.



52 Attach the clevis to the nylon control horn.



53 Adjust the length of the pushrod.

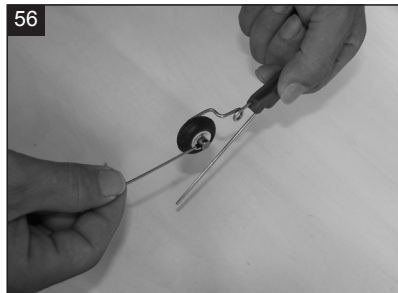


54 Install the nylon control to the servo arm and secure it.

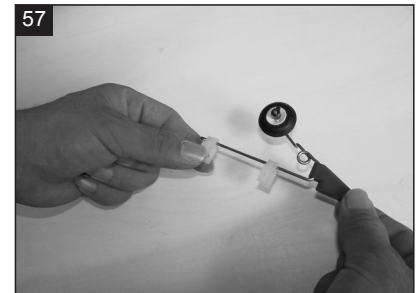
5 Installing the landing gear:



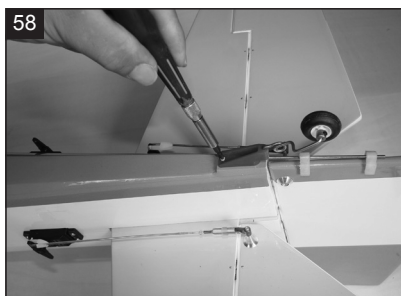
55 The tail gear set.



56 Install the wheel.



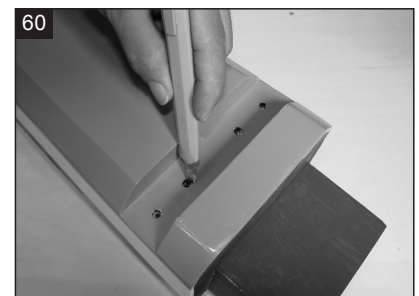
57 Install the nylon keeper.



58 Secure the tail gear.



59 Secure the nylon keeper.



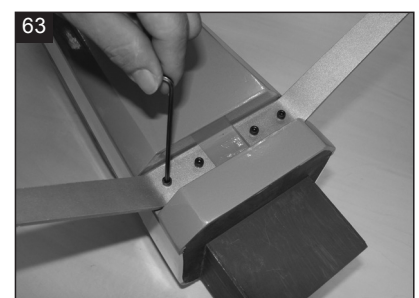
60 Remove the covering.



61 The main gear set.



62 Install the wheel pant.

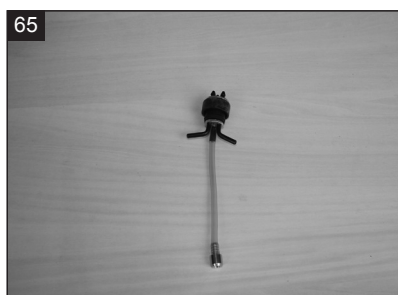


63 Secure the main gear.

6 Installing the fuel tank and the engine:



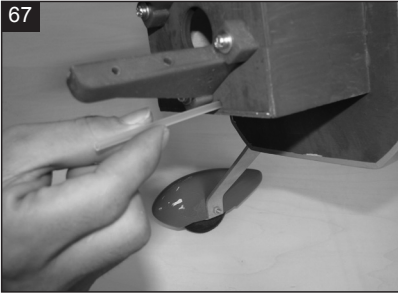
64 Install the engine mount to the fuselage.



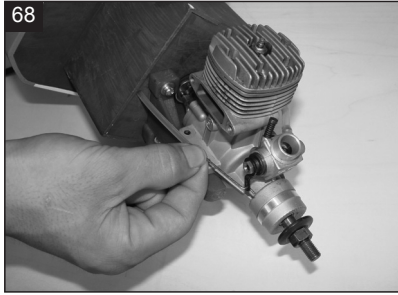
65 Prepare the stopper as picture above.



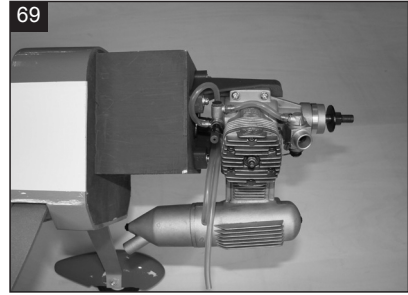
66 Install the stopper to the tank.



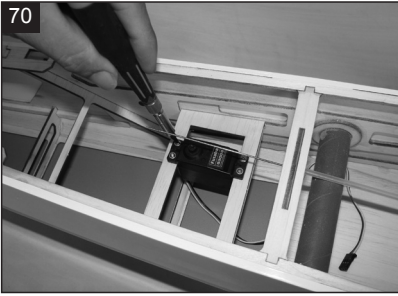
67 Insert the throttle rod into the fuselage.



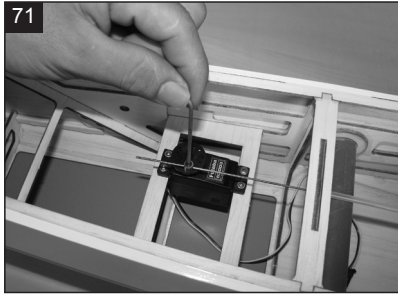
68 Insert the rod to the engine.



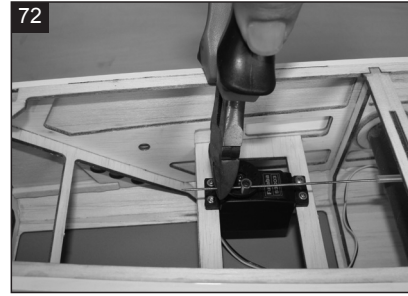
69 Install the engine.



70 Install the throttle servo.

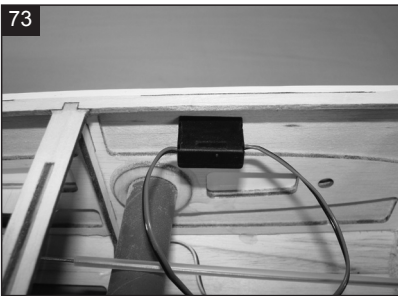


71 Insert the rod into the connector.

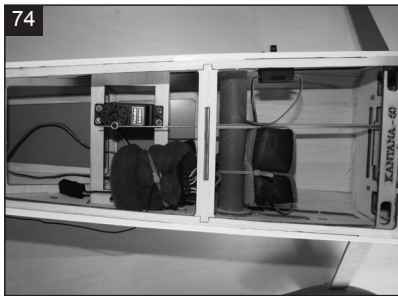


72 Cut away the throttle rod.

7 Installing the switch, battery and receiver:



73 Install the switch.



74 And receiver, battery.

8 Finishing the model:



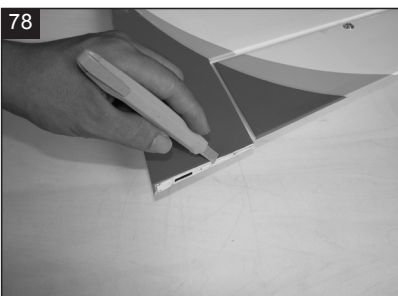
75 Make the hole for the engine, the muffler.



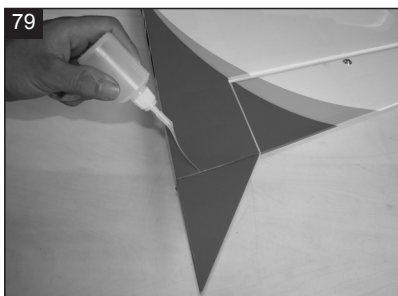
76 Secure the cowl.



77 Install the spinner.



78 Remove the covering.



79 Glue the wing fillets by C.A glue.



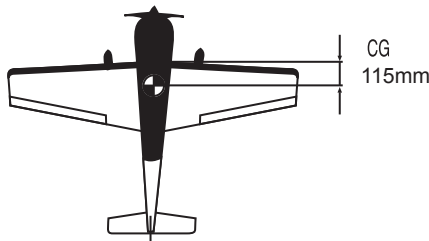
80 Secure the canopy to the fuselage.

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 115mm BACK FROM THE LEADING EDGE OF THE WING, AT THE FUSELAGE.

2. Mount the wing to the fuselage. Using a couple of pieces of masking tape, place them on the top side of the wing 115mm 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 .
4. If the nose of the plane falls, the plane is heavy nose. To correct this first move the battery pack further back in the fuselage. If this is not possible or does not correct it, stick small amounts of lead weight on the fuselage under the horizontal stabilizer. If the tail of the plane falls, the plane is tail heavy. To correct this, move the battery and receiver forward or if this is not possible, stick weight into the firewall. When balanced correctly, the airplane should sit level or slightly nose down when you lift it up with your fingers.



LATERAL BALANCE



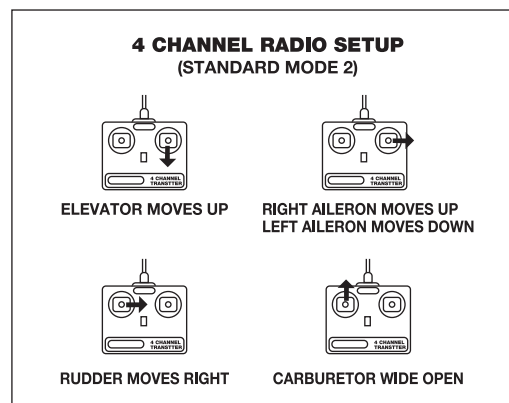
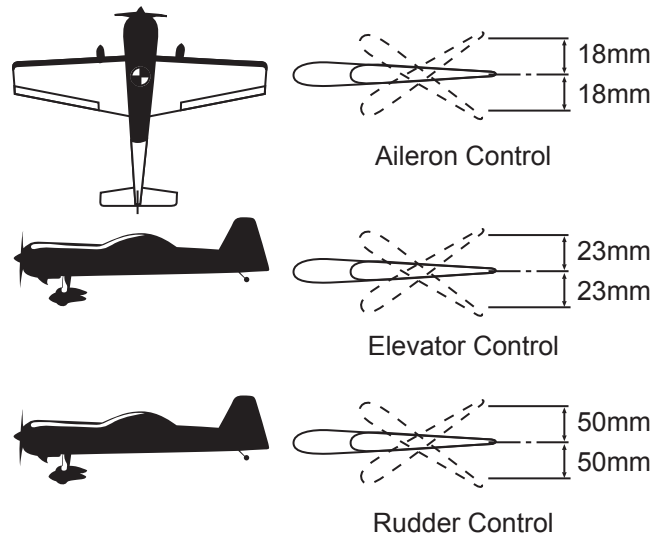
After you have balanced a plane on the C.G. You should laterally balance it. Doing this will help the airplane track straighter

1. Turn the airplane upside down. Attach one loop of heavy string to the engine crankshaft and one to the tail wheel wire. With the wings level, carefully lift the airplane by the string. This may require two people to make it easier.
2. If one side of the wing fall, that side is heavier than the opposite. Add small amounts of lead weight to the bottom side of the lighter wing half's wing tip. Follow this procedure until the wing stays level when you lift the airplane.

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.

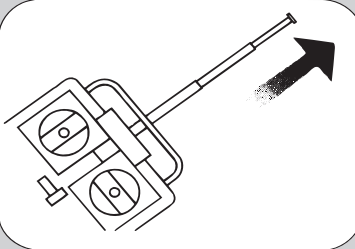
Ailerons : 18 mm up	18 mm down
Elevator : 23 mm up	23 mm down
Rudder : 50 mm right	50 mm left



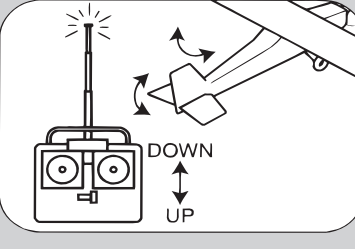
FLIGHT PREPARATION PRE FLIGHT CHECK

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.

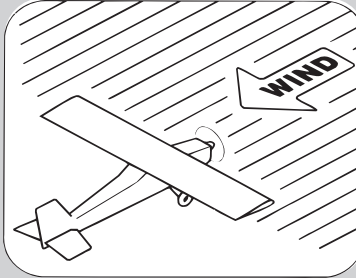
I/C FLIGHT GUIDELINES



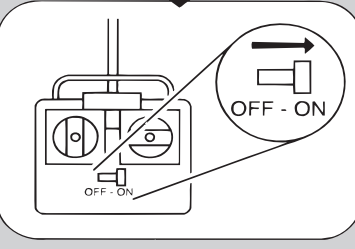
When ready to fly, first extend the transmitter aerial.



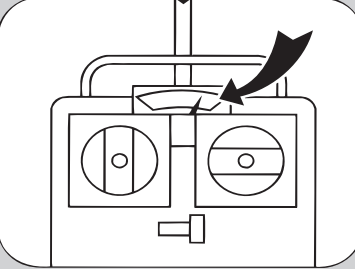
Operate the control sticks on the transmitter and check that the control surfaces move freely and in the **CORRECT** directions.



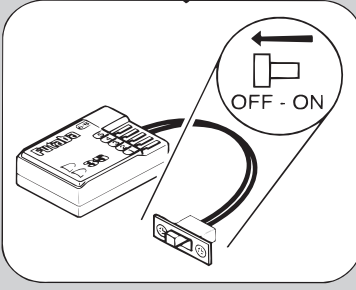
ALWAYS land the model **INTO** the wind, this ensures that the model lands at the slowest possible speed.



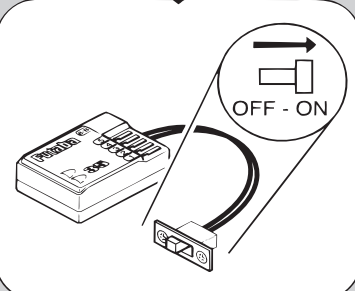
Switch on the transmitter.



Check that the transmitter batteries have adequate power.



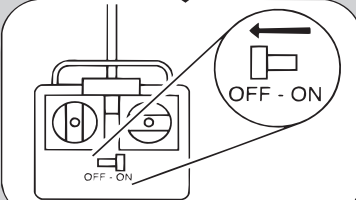
Switch off the receiver.



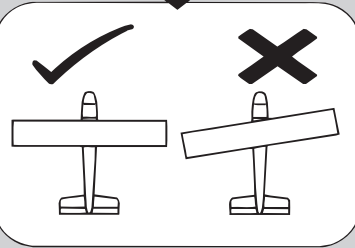
Switch on the receiver.



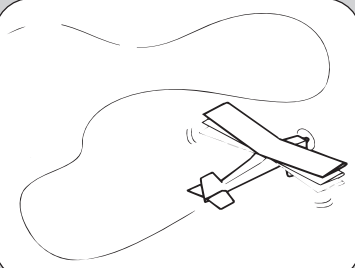
ALWAYS take off into the wind.



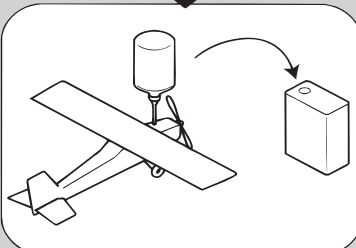
Switch off the transmitter.



Check that the wings are correctly fitted to the fuselage.



If the model does not respond correctly to the controls, land it as soon as possible and correct the fault.



Empty the fuel tank after flying, fuel left in the tank can cause corrosion and lead to engine problems.