

# 70in Edge540 balsa airplane

<Electric>

..... Instruction Manual .....





**Test photos...**



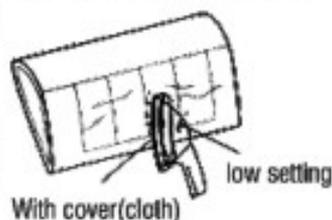


**Test photos...**



## BEFORE YOU BEGIN

- 1, Before the assembly please the careful reading instruction booklet, he can give you the full detail instruction If you are the first contact airplane model public figure, should assemble under the experienced correct instruction!
- 2, Please inspect in the packing all components, if lacks perhaps the damage, please immediately with dealer relation
- 3, As a result of weather Temperature The moist change, the model outer covering possibly can appear the phenomenon which relaxes, you may use the package to have a cotton fabric the iron to burn again the outer covering smoothly, but must pay attention to the temperature not to have too to be high



## Features:

- Latest structure
- Super quality
- Easy installation
- High performance hardware includes: Ball linkage control system  
Fiberglass long servo arms  
Servo extension safety connector clips
- Low wing loading makes it easy to fly
- Anodized 6061 Aluminum landing gear(standard), Carbon fiber landing gear
- Carbon fiber wing tube
- Aerofoil tail wings
- Powered by Electric or Glow
- Light weight construction with high structural strength
- Excellent aerobatics and 3D performance
- Two pieces removable wings fitted nylon bolts

## Specification :

### EDGE 540 70IN

Wingspan:70"(1778mm)

Length: 68"(1723mm)

Wing Area:63dm<sup>2</sup>

Glow:120 class nitro

Flying Weight:4400-4600g

Gas:26-30CC

Electric: 2000W brushless outrunner + 6-8S 3300-5000MAH

Radio:6CH 6 servo; 6CH 5 servo 1 ESC

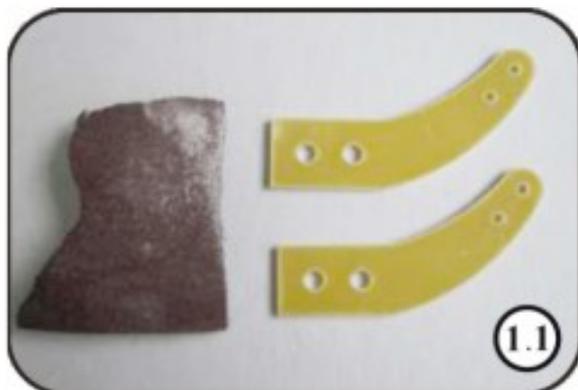
### Other Items Needed (not included in the kit)

- Propeller:18\*10E-20\*8E
- Spinner: 3in 75MM
- Servo Extension: 30CM\*3PCS , 60CM\*2PCS

## Wing Assembly



### Aileron Control Horns



1. Scuff the horns with sand paper to ensure a good glue bond. Drill 2.5mm holes in the horns and install the M2.5mm ball link with the screw.



2. Pre-hinged control surface is ready to fly. Remove the covering below to expose the pre-cut slots with a knife.



3. Apply 30 minute epoxy inside the pre-cut slots and coat the horns with epoxy. Insert them into the pre-cut slots. Wipe away excess glue with rubbing alcohol.

## Aileron Servo Installation

**Minimum Required Servo: 180 in.oz / Metal Gear / Digital**



1. Use the provided safety clips to secure the servo and servo extension leads.



2. The covering of the servo location had been removed as shown. Put the end of the servo extension in the servo location. And then pull the extension lead through to the root of the wing. Taping servo lead to the inside of the wing panel will help to prevent lead from dropping back inside of wing panel during transportation.



3. Drill 1mm holes for the servo mounting screws. Position the servo with the servo label closest to the wing trailing edge.



4. Use a drop of thick CA glue on each screw to prevent tapping screws from loosening due to vibration. Install servo with M2\*12mm tapping screws.



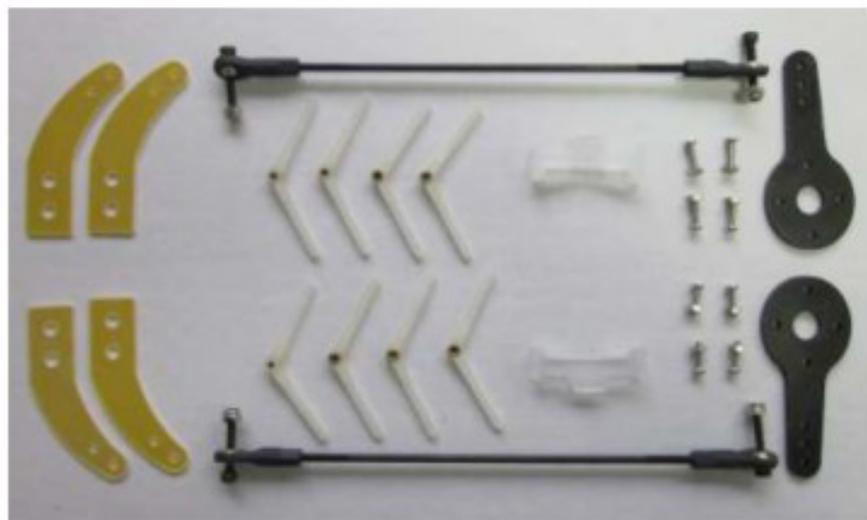
5. Mount the servo arm and the extension arm with M2\*8mm screws and locking nuts as shown. Then turn on the transmitter and plug the servo into receiver. Ensure the channel is neutral. Install the servo arm facing toward the wing tip. Position the servo degrees to the servo.



6. Adjust the pushrod length till the aileron and servo are in the neutral position. And then install the pushrod to the arm with M2.5\*16mm hex socket screw and lock nut.

7. Repeat all the previous steps for the other wing.

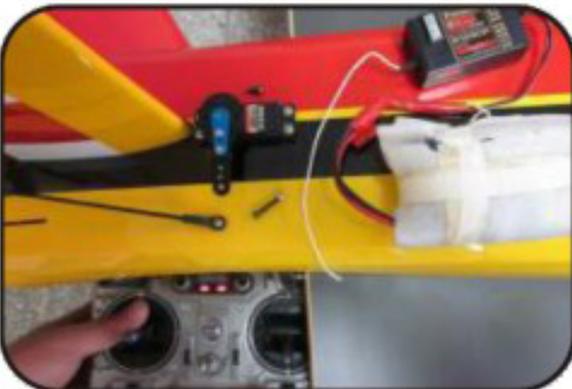
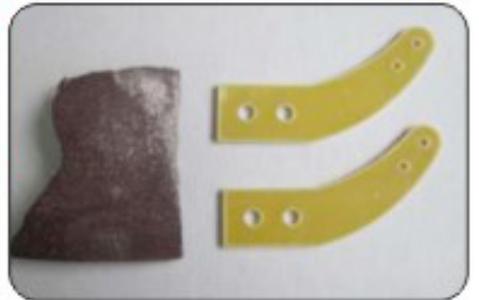
## Elevator Assembly



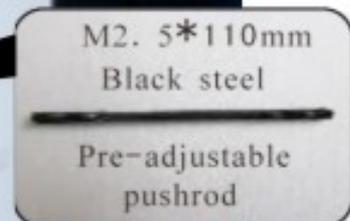
## Stab and Elevator Installtion



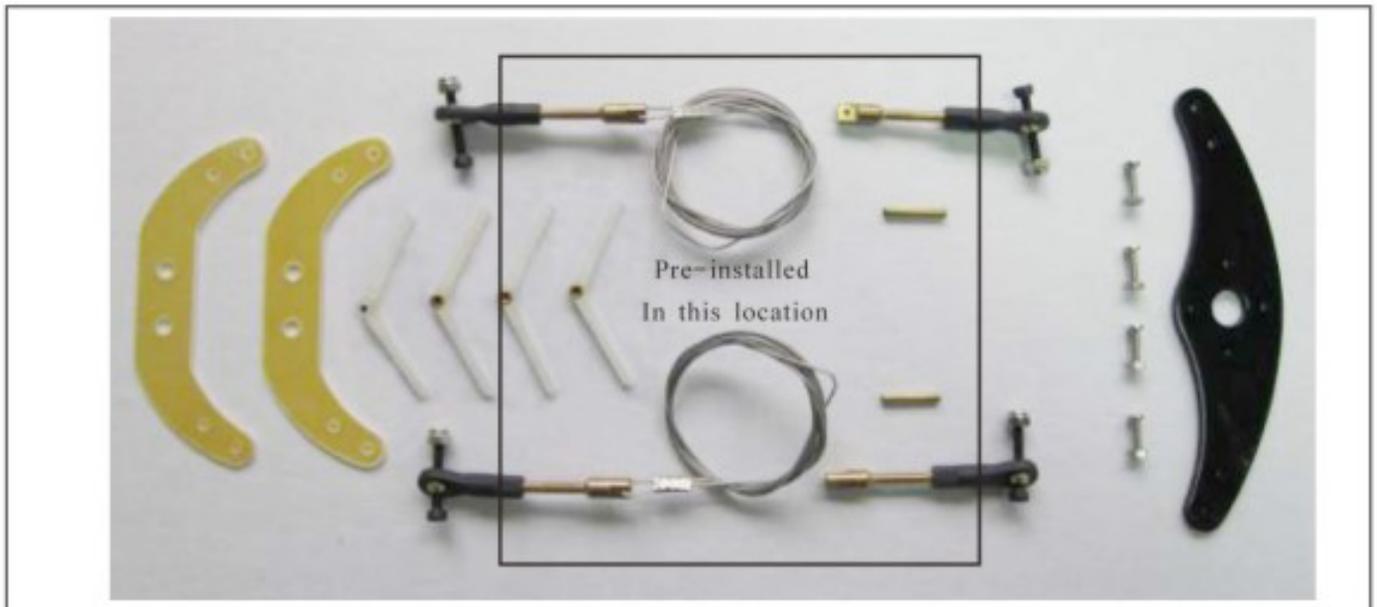
Pre-hinged control surfaces ready to fly



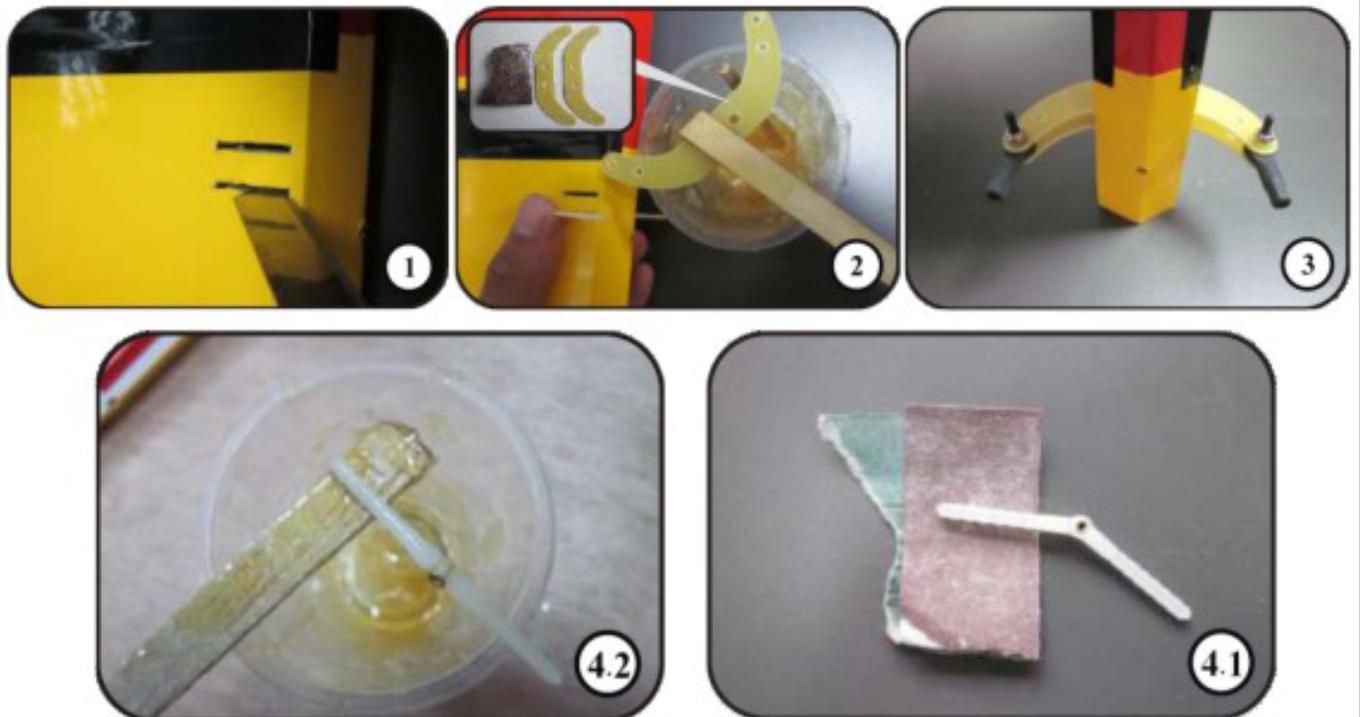
Turn on the transmitter. Make sure the servo is in the neutral position. Install the servo arm. Position the servo arm 90 degrees to the servo, and tighten the arm screw.



## Rudder Assembly



## Rudder Horns and Hinges

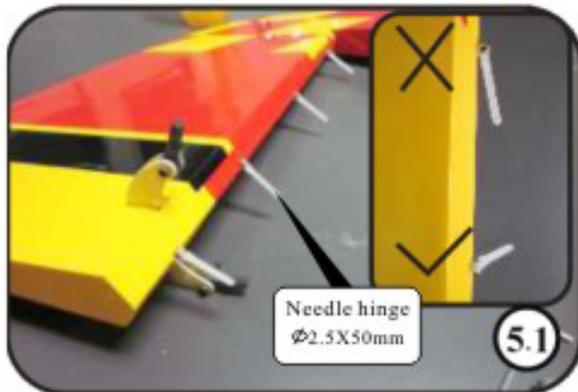


1. Remove the covering below to expose the pre-cut slots with a knife.

2. Scuff the middle of horns with sand paper to ensure a good glue bond. Apply 30 minute epoxy inside the pre-cut slots. Coat the horns with epoxy. Insert them into the pre-cut slots.

3. Install the ball link with M2.5\*16mm screws and locking nuts. Tightening the nuts is recommended. Wipe away excess glue with rubbing alcohol. Make sure the horns are correctly aligned and symmetry before the epoxy has cured.

4. Scuff the hinges with sand paper to ensure a good glue bond. Apply 30 minute epoxy inside the hinge-holes and coat the horns with epoxy.



5. Insert the them into the rudder hinge-holes. Watch the hinges direction. Coat other sides of the hinges with the epoxy.

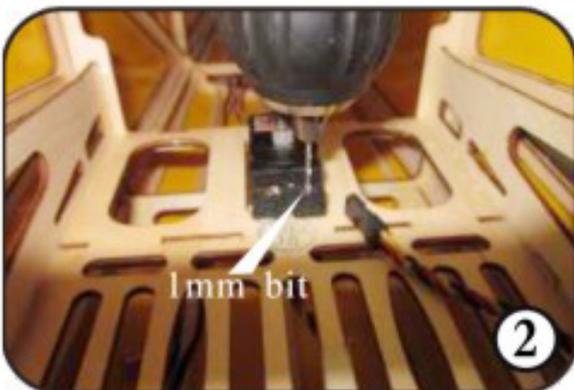


6. Insert them into the stabilizer hinge-holes. Check you have full rudder deflection before fasten with tape.

### Rudder Servo Installation



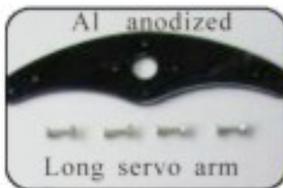
1. Drill 2.5mm holes in the AL long arm for installing 2.5mm ball links and screws. Drill 2mm holes in the servo arm and mount it with M2\*8mm screws and nuts.



2. Drill 1mm holes. Install the servo with the M2\*12mm tapping screws.



3. Mount the pre-installed ball link to the servo arm with the M2.5\*16mm screws and the locking nuts. Remove any slack in the cables and crimp to secure. Crimp the brass swage tube with a crimping tool or pliers. Finally you can adjust the cable by loosening or tightening the cable connectors.



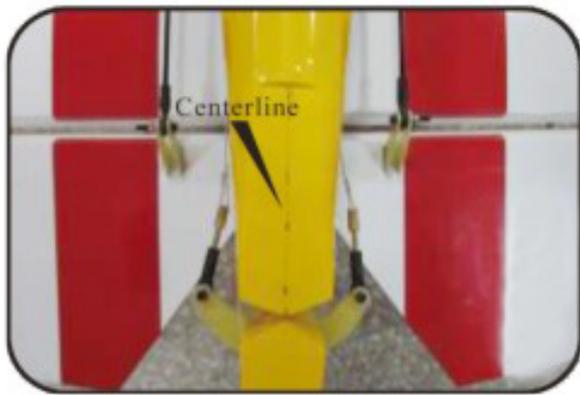
## Tail Wheel Installation



1. Install the carbon fiber tail wheel bracket with M5mm locking nut and M5 permanent seat AL screw.

2. Install the wheel to the steel wire with wheel collars. All wheel collars should be secured with Blue Loctite.





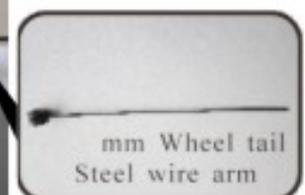
3. Draw a centerline on the fuselage tail with a pen.



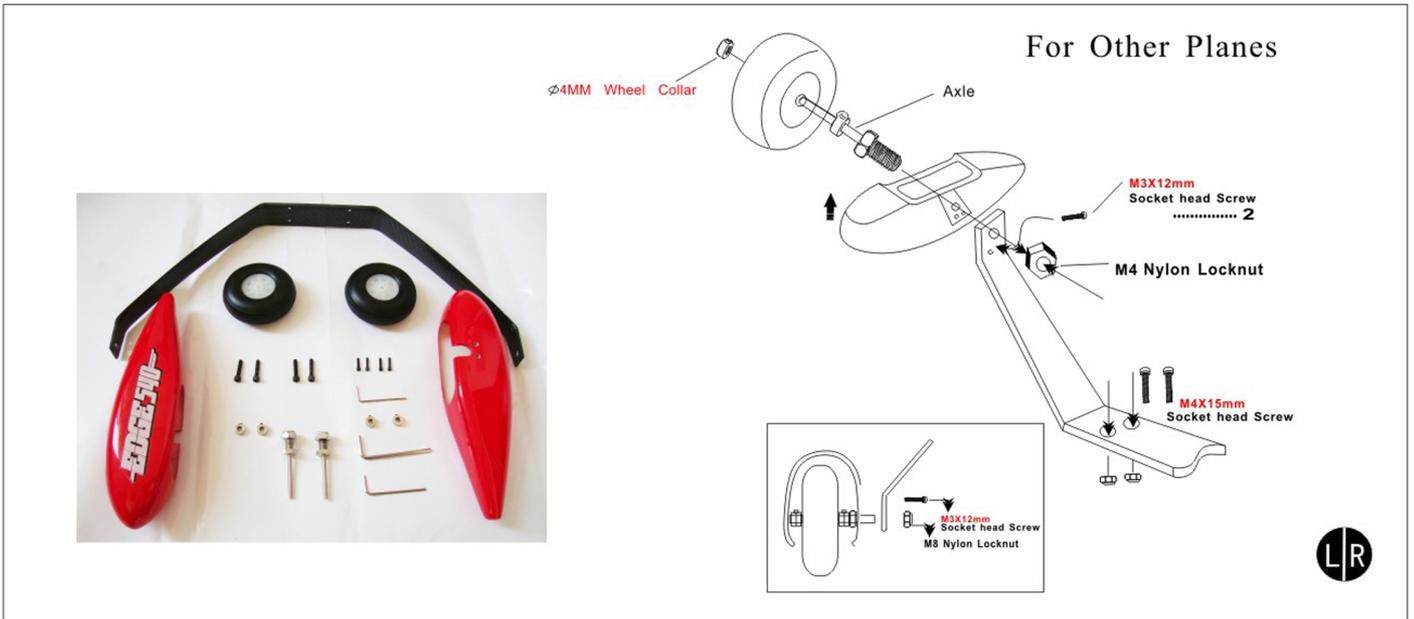
4. Use the tail wheel bracket as a template and drill 2mm holes. Install the tail wheel bracket with three M3\*12mm tapping screws.



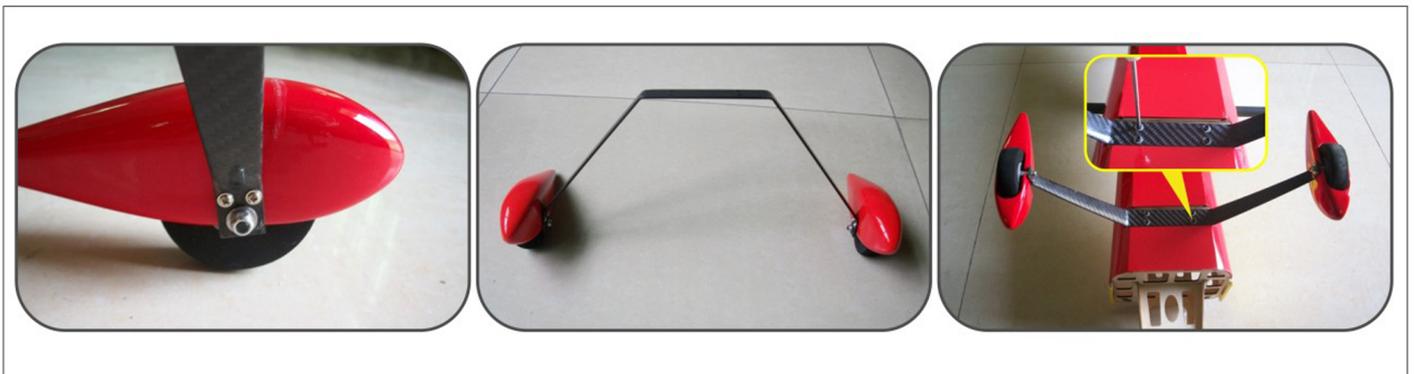
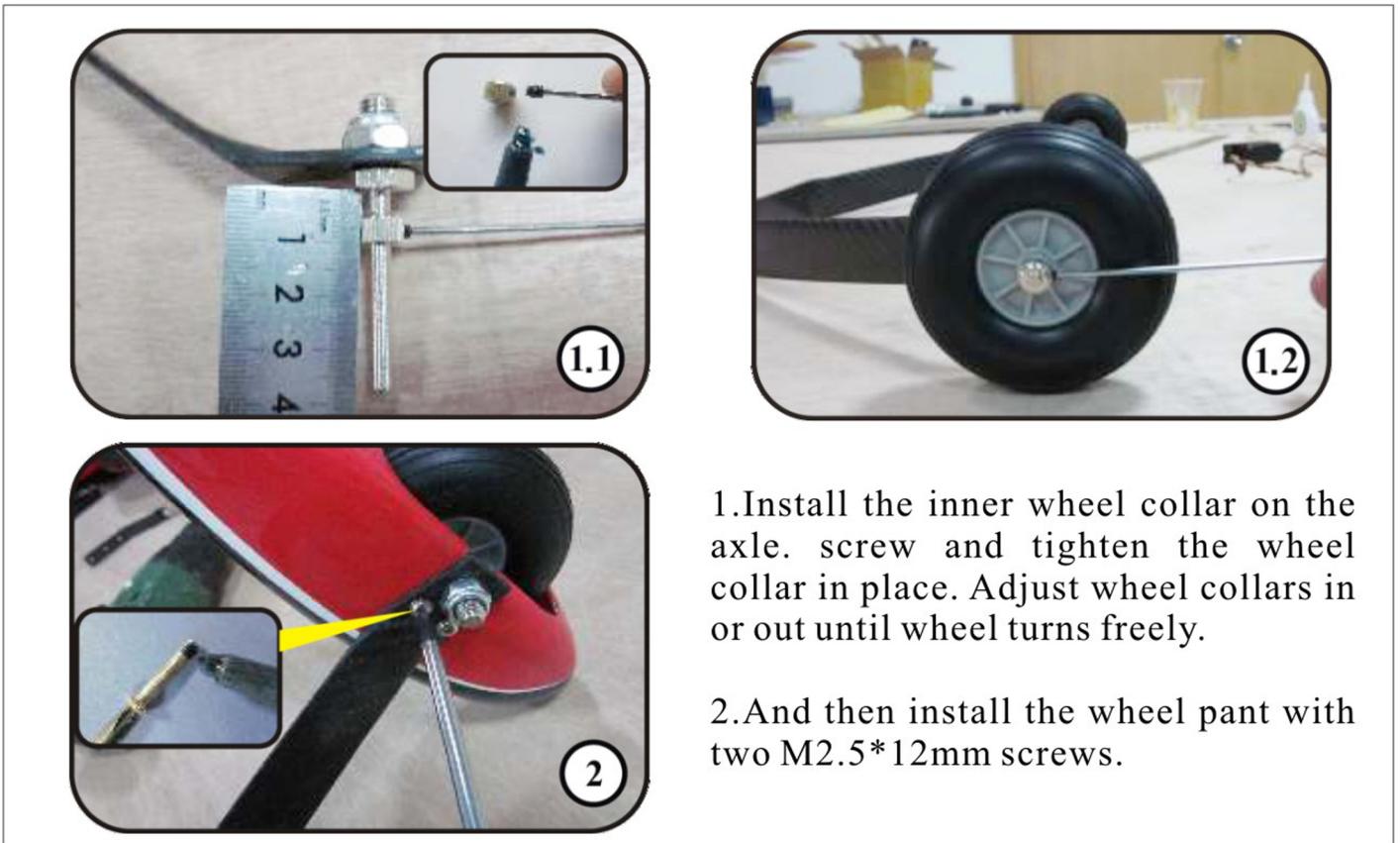
5. Drill 4mm holes in the bottom of the rudder. Scuffing the ball link with sand paper to ensure a good glue bond is suggested before gluing. Make sure the ball link hole is parallel to the rudder. Apply 30 minute epoxy inside the 6mm hole and coat the hinges with epoxy, Insert the ball link into the hole.



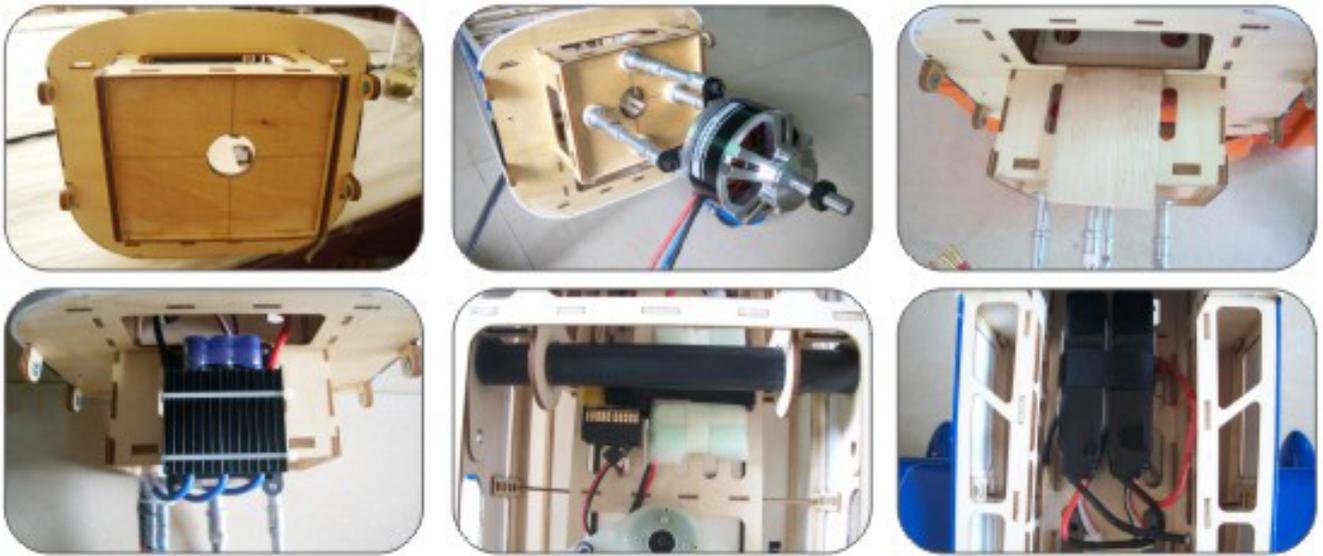
# Main Landing Gear Installation



## Landing Gear Installation

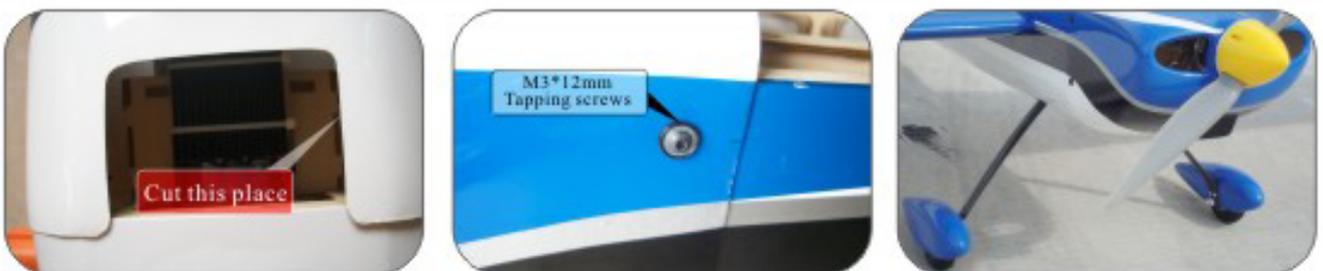


## Motor Installation



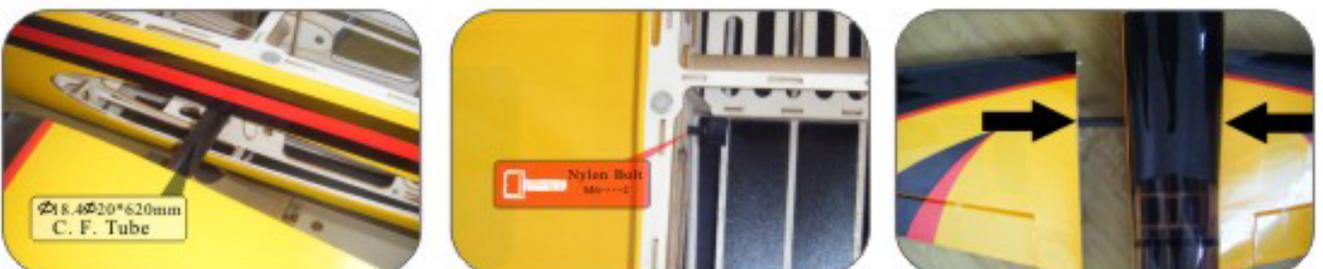
1. Install the OPTO to the firewall board with the nylon tie. It is necessary to remove the tail cover for battery heat dissipation.

## Cowling Installation



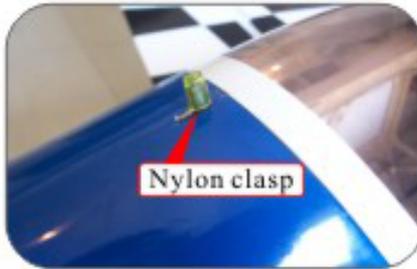
1. It is necessary to remove a part of the cowling for OPTO heat dissipation. Drill four 1mm holes and install the cowling with four M3\*12mm screws. And then you can install the propeller and the spinner.

## Wing Tube Assemble



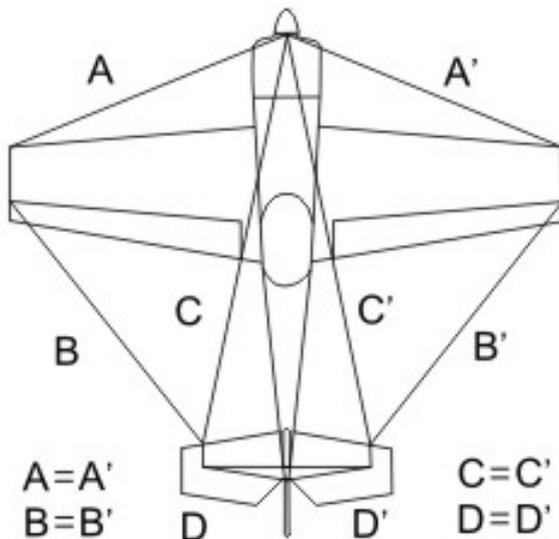
1. You can insert the wing tube into a wing and insert them together into fuselage first. Then install the M6\*20mm nylon bolt. Finally install the another wing to the fuselage.

## Canopy Assembly



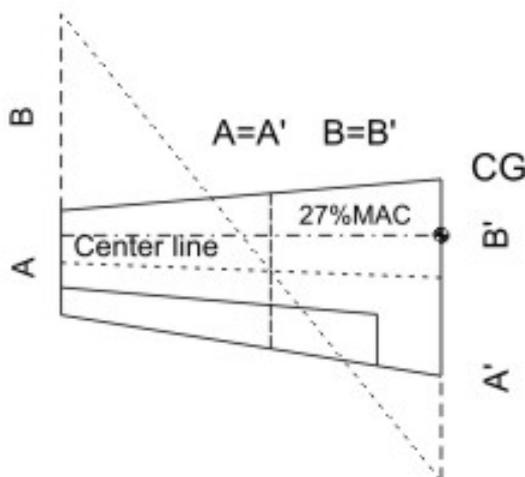
1. Nylon clasp is easy for canopy assembly.

## Symmetric



Adjust the aircraft and make sure both of the sides symmetric. Like the diagram shown.

## C.G Location



## TOP-WING

CG Measure the CG from the leading edge of wing root rib, Adjust the battery pack location. For CG proper position should be at 27%MAC. This recommendation balance point is for your first flights. The CG can be moved around later to fit your personal taste.

PLANE	EDGE540
27%MAC CG Location	4 102.3mm

1. Check every angle and adjust them to correct position.
2. Check all parts and make sure the installation is firm and reliable.
3. Add some weight in either of wingtip to balance the left and right wings.

### **Power on to trim your plane.**

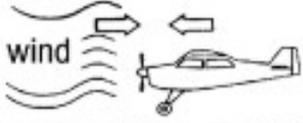
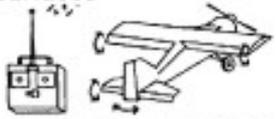
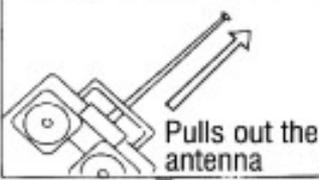
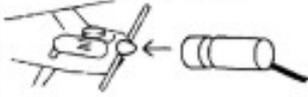
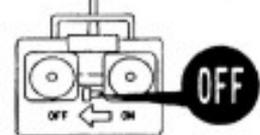
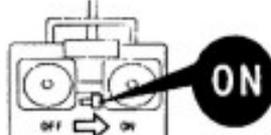
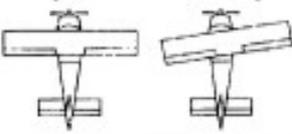
1. Range check the radio (test whether the Engine/Motor is running or not ).
2. Ensure that the servos and control surfaces move smoothly and are in the correct direction.
3. Adjust the servo throw. The chart below is the recommended throws for the first flight. You can adjust the servo arms and control horn length later to fit your flying style.

### **Control Throw:**

	Surface	Throws	Exp
Common flying	Aileron	20 degrees	25%
	Elevator	20 degrees	25%
	Rudder	30 degrees	30%
3D flying	Aileron	45 degrees	50%
	Elevator	45 degrees	50%
	Rudder	45 degrees	50%

**T**rail run the Engine to check its stability at high speed and low speed to ensure there are no problems with vibration on the model. Run the motor at high speed about 30min, check the Engine and make sure the temperature is below the prescription of manufacturer. Once everything is right... ..

# Flight operates order

before the flight	flighting	after the flight	 Safe Warning!
<p>Must choose a big location, don't have to approach the high tension cable, big building and airport</p>	<p>ok      not</p> <p>The wind is so strong</p> 	<p>Must landing against the wind</p> 	<p>Don't near to propeller when engine is working</p> 
<p>Please confirm the propeller and the spinner all already by the safe locking</p>	<p>top up the tank with fuel</p> 	<p>The high temperature, carefully scalds</p> 	<p>Make sure nobody and other obstacles of front</p> 
<p>Please confirm does not have the same frequency radio disturbance Before the flight, otherwise will create the serious accident</p>	<p>check the Wireless apparatus and all control surfaces</p> 	<p>Turn off receiver power</p> 	<p>Do not use the propeller and the spinner already damaged</p> 
<p>Pulls out the antenna</p> 	<p>Starting engine</p> 	<p>Turn off ransmitter power</p> 	<p>Must pay attention to the electric quantity the change, the electric quantity excessively is low may not fly</p> 
<p>Turn on ransmitter power</p> 	<p>Adjustment Needle</p> 	<p>Pulls out in the dry airplane the fuel</p> 	<p>Do not fly in the crowd top of the head</p> 
<p>Turn on receiver power</p> 	<p>Must take off against the wind</p> 	<p>Deletes the greasy dirt</p> 	<p>Do not have to invest in the fire with the spatial oil drum</p> 
<p>install right      install wrong</p> 			



**ZHUHAI HYX AIRCRAFT MODEL CO.,LTD**

**Address: No.33,Western Jinfeng Rd,Jinding  
science and technology Zone,Zhuhai,China**

**Postcode: 519085 Tel:86-756-3666179**

**Info email: [skylinerc@163.com](mailto:skylinerc@163.com)**

**[sales@skyline-rc.com](mailto:sales@skyline-rc.com)**