YAK 55M 60”

Item No：A-G030010

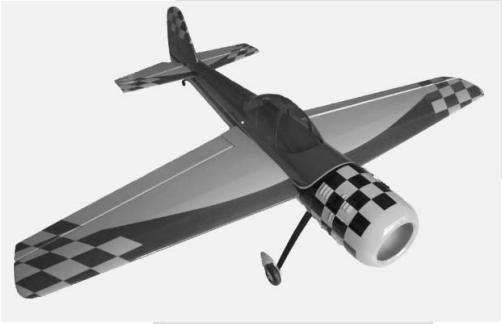
Specifications

WING SPAN:60"(1520mm)
LENGTH: 58.5"(1490mm)
WING AREA: 738sq.in.(47.6sq.dm.)
FLYING WEIGHT:5-5.5lbs(2300-2500g)
Electric:Brushless outrunner 8Oz. PROP APC16x10E-17x8E LI-POLY 5-6S 3800-5000mAh
Glow:.46-.52 2C .52-.82 4C
RADIO:4CH/5S or 4s 1ESC（70A)

Description

Carbon Fibre : Wing tube, landing gear, tail gear;
Fiberglass servo arms and horn;
Lightweight wheels
ball-link hardware
Powered by Electric or Glow

2 Colour schemes



A-G030010A

A-G030010B

Unpacking

Carefully unpack the model making sure that if you use a sharp knife to open bags, not to cut any covering on the model. Inspect each item to make sure no transit damage has happened. If you are not happy with any part or are unsure please contact the Dealer that you purchased from.

Covering

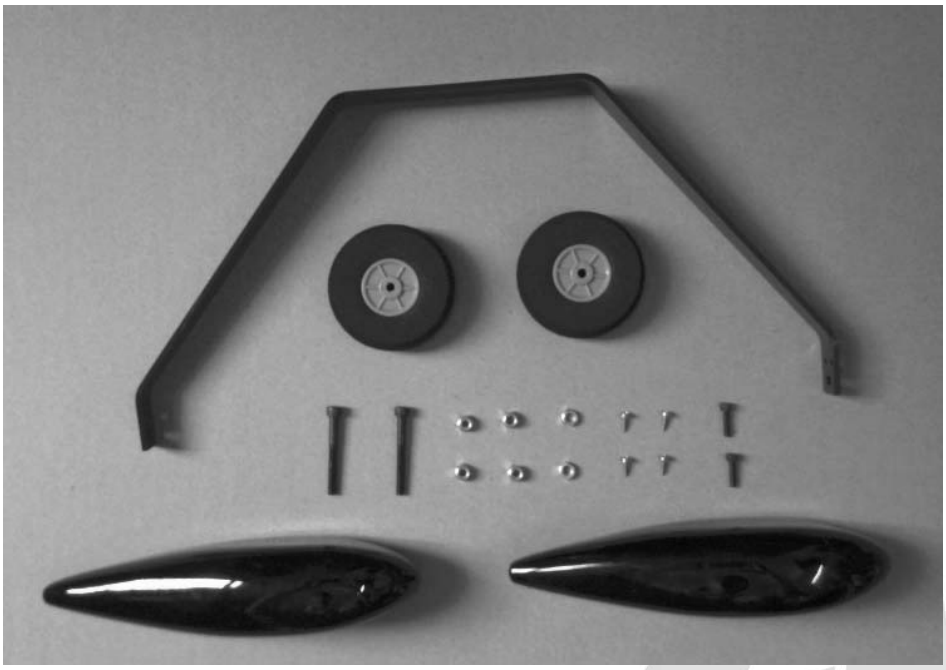
Due to the model spending time in different climates zones from the factory on its way to you, some of the covering may have wrinkles. We highly recommend that you take time to re-seal all covering edges with an iron and to use a heat gun to remove any wrinkles and re-tighten the covering. It is best to do this now while the plane is not assembled, remember to not let any heat get near any parts like the canopy or cowl as this may cause damage.

Assembly Tips

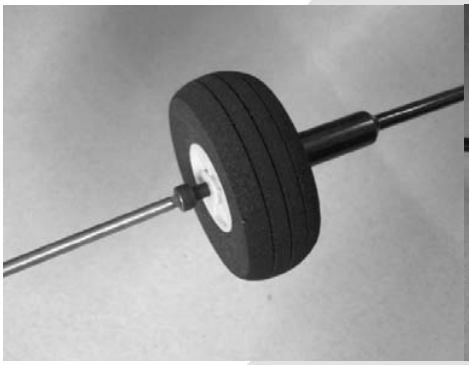
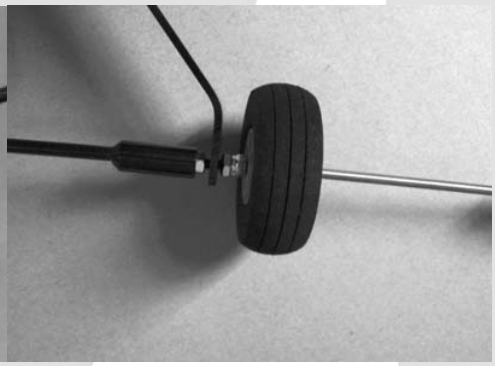
We also recommend that you go over all the accessible joints with cyano glue. Wick glue into areas of high stress around the U/C plate and motor box.

Use Nutlock on all metal to metal joints. Even if you are using electric with low vibration levels it will make sure that things do not drop off your airplane!!

Landing Gear Assembly



- Push each axle through the whell holes, and tighten up with 1x self locking nut and 1x blind nut. Then axle though the hole of landing gear, and tighten up with 1x self locking nut

- The U/C rakes forward so use the correct wheel pant per side, and using a fine drill, drill holes for the screws.

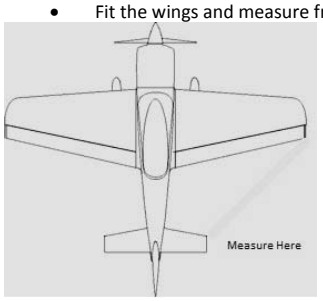

- Now line up the wheel in the centre of the wheel pant opening and tighten the collets. Remember to use nutlock and to make sure the wheel can move freely.

Rear Stab

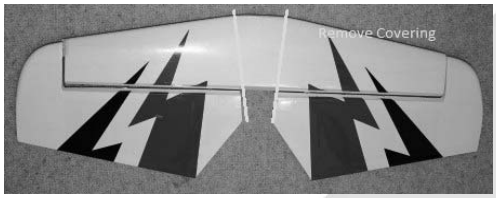
- Remove the elevators and hinges from the rear stab and place it in the opening.

It is important that care is taken when aligning the rear stab. Measure each side to make sure that an equal amount shows on each side.

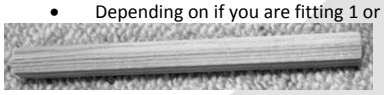
- Fit the CF wing tube and looking from the front and back check that the elevator plate is in horizontal alignment to the rear stab. If it is not then trim the opening so that it is equal.
- Fit the wings and measure from the end of the wing to the elevator stab to make sure that both sides are equal



- Glueing – Once you think you are ready to glue, measure again. We recommend 2 methods for gluing. Either remove the covering on the area that is covered by the fuselage and glue with epoxy or leave the covering on and glue with thin cyno. Wicking in thin first, if a large gap is visible then use medium or thick. Remember to wick in small amounts at a time keeping the plane level, this will ensure the glue stays where it needs to be.

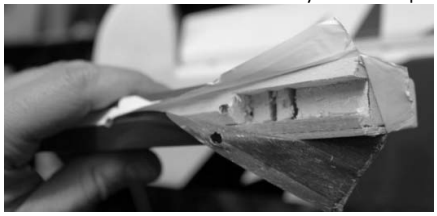


- Depending on if you are fitting 1 or 2 elevator servo's you may need to fit the elevator joining bar.

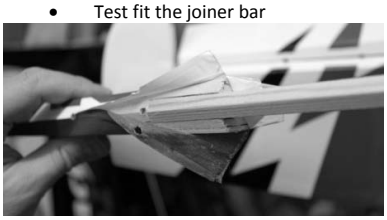


- Work out how much of the joiner bar need to go into the elevator half by laying the bar over the halves and setting the same length as the rear stab.
- Open up the covering at the inside of each of the elevator haves and mark the area of wood that needs to be removed.

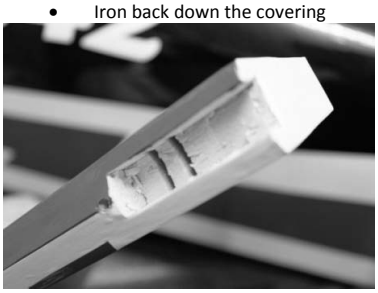
- Cut the area of wood away with a sharp knife



- Test fit the joiner bar

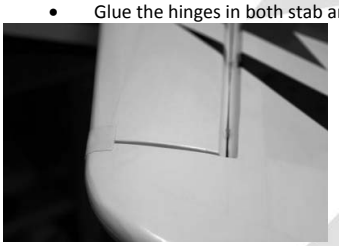


- Iron back down the covering

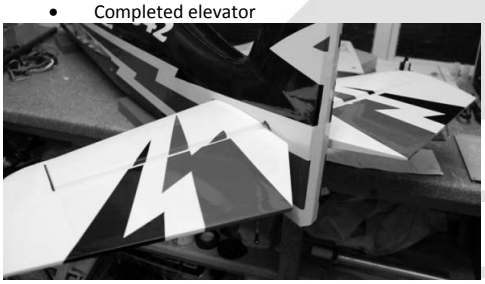


- Cover the joiner bar leaving the glue area exposed

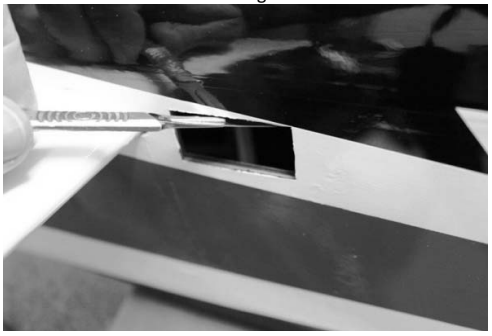
- Cut the area for the joiner bar on the other elevator half, iron down the covering and test fit.
- Glue the joiner bar into 1 of the elevator halves with epoxy.
- Now we can hinge one of the elevators with the joiner bar glued in.
- Apply 'vaseline' to the hinge point on the hinges and using 30 minute epoxy to glue these into the both the stab and elevator half. Wipe off excess glue before it sets.
- Dry fit the other elevator half with the hinges and make sure that both halves align to the stab. Trim where the joiner bar sits if required.
- Glue the hinges in both stab and elevator again with 30 minute epoxy. While gluing use tape to keep it in alignment



- Completed elevator

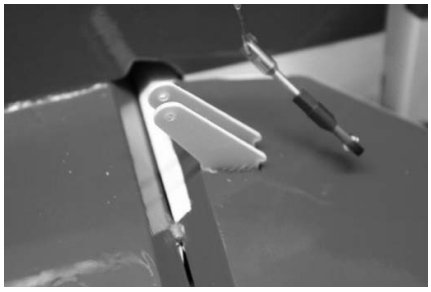


- Remove the covering for the elevator servo



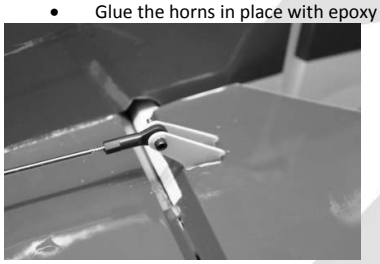
- Remove the covering where the elevator horns fit, use either a soldering iron or a sharp knife.

- Test fit the horns

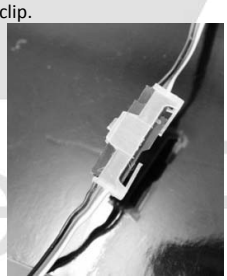


- The area on the horns that goes inside the elevator needs to be roughed up with sandpaper. This allows a better glue joint.

- Glue the horns in place with epoxy glue. Put a bolt through the ball joint hole to make sure that the horns stay in alignment while drying.



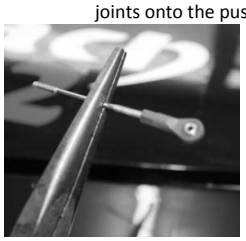
- Before fitting the elevator servo fix an extension lead so that the wire can be routed through the cardboard tube wire holder in the fuselage. On the servo lead joint add a servo plug clip.

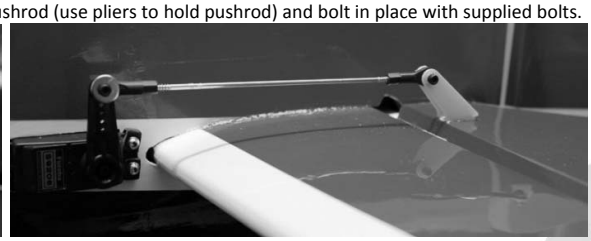


- Fit the Elevator Servo servo and using a fine drill, drill holes for the servo screws. Remove the servo and drop thin cyno into all 4 holes.

- Re-fit the elevator servo and secure it in with servo screws.

- Centre the servo using your TX, and fit a servo arm. Use either an aftermarket arm or attach the arms that were supplied to a servo head. Screw ball joints onto the pushrod (use pliers to hold pushrod) and bolt in place with supplied bolts. Centre of servo should align with elevator flat to the stab.





- If you are using dual elevator servos then repeat the process on the other side.

Rudder

- Assemble the rudder horns

- Glue the rudder hinges into both the rudder and fin using epoxy glue. Remember to use vaseline on the hinge joint. While drying use tape to keep it in alignment.

- Drill the rudder screws to fit the rudder hron on the rudder . Do this to both sides.

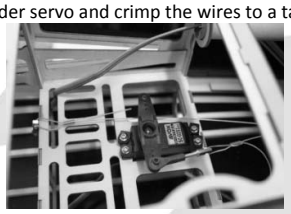
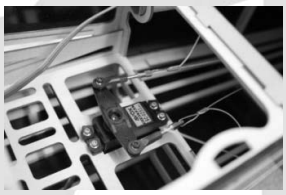
- Assemble the rudder servo control arm as below, drill holes for screws and use cyno to stop the nuts from coming loose.


- Fit the rudder servo and drill holes using a fine drill for the servo screws, drop thin cyno into the holes to strengthen the wood.


- Using servo screws fix the servo in place, note the spline is towards the front of the plane

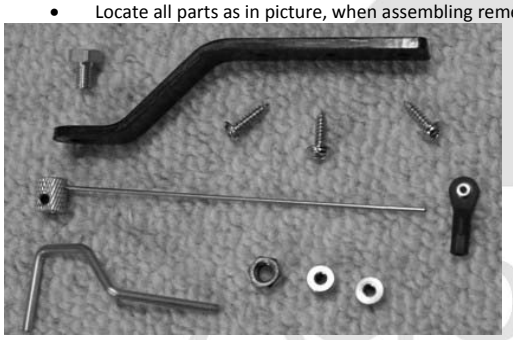
- The closed loop wires are assembled in the plane; attach the rear ball joints to the rudder. Do this to both sides.

- Fit the arm onto the rudder servo and crimp the wires to a taut tension

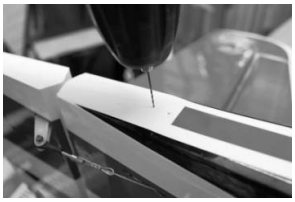
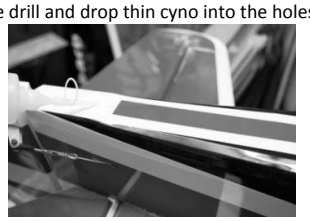
Tail Gear

- Locate all parts as in picture, when assembling remember to nutlock all parts



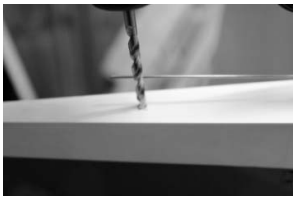
- Assemble the Gear as per photo

- At the rear of the fuselage you will find a ply wood area, lay the CF gear on this and mark the 3 holes. Taking care to make sure it is straight.
- Drill each hole with a fine drill and drop thin cyno into the holes to strengthen the wood.

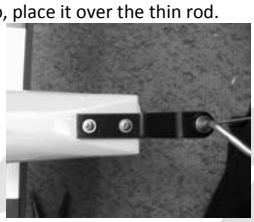



- Screw the CF gear on with the three supplied self taping screws.

- Drill a hole in the base of the rudder for the rudder steering guide.

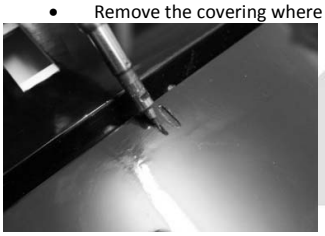


- Before gluing with cyano, place it over the thin rod.

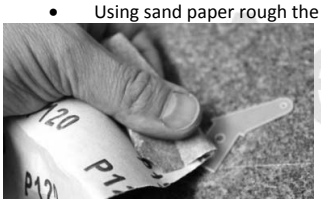



Aileron Servos

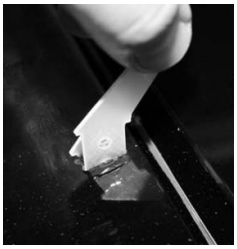
- The ailerons on the wings are pre-glued. Check each one by gently pulling to make sure that they are secure
- Remove the covering where the aileron horns are glued in place. Use either a soldering iron or a sharp knife



- Using sand paper rough the area that will be glued into the aileron.

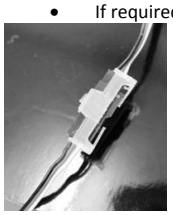


- Glue both horns in with epoxy glue, use a bolt through the horns when gluing to make sure the alignment is correct.



- Fit the aileron servo and drill fine holes where the servo screws will fit. Then apply thin cyano to strengthen the holes.

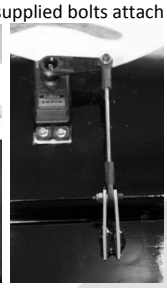
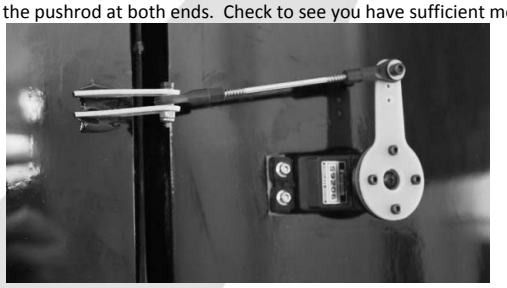

- If required install a servo extension lead onto the servo, remember to use a servo plug clip.



- Fit the servo and centre the servo arm.


- Using the pushrod supplied screw ball joints onto each end. The correct length will leave the aileron lined up to the inner part still attached to the wing.

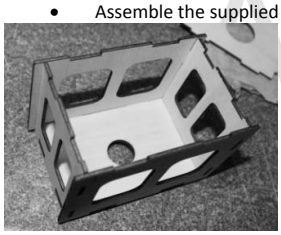
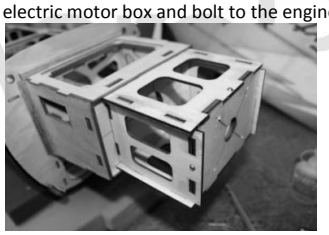
- Using supplied bolts attach the pushrod at both ends. Check to see you have sufficient movement of the aileron. If not adjust.

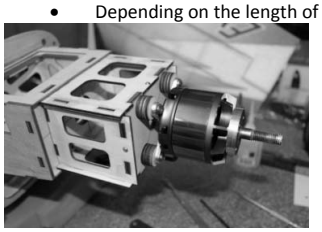
- Carry out the same procedure on the other wing.

Electric

- Assemble the supplied electric motor box and bolt to the engine bulkhead.

- Depending on the length of your motor you may need to use the supplied round plywood spacers to achieve the correct length for the motor.



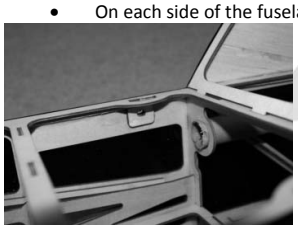
- Mount the ESC in airflow on the side of the electric motor mount, using a velco strap.

- With the removal of the fuel tank it leaves a large area where the batteries can be mounted.
- The cowl is fixed in 4 places, 2 at the top and 2 at the bottom. Place masking tape over the bottom 2 and pierce where the blind nut hole is.

- Refit the cowl and drill where the marked hole was.

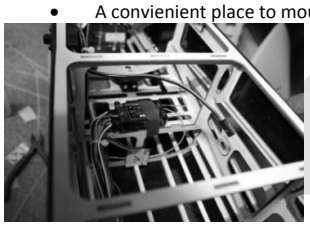
Switch

- On each side of the fuselage near the canopy bolts are areas for switches to be mounted.



RX

- A convienient place to mount the RX is just in front of the rudder servo. Ensure that it is mounted on velco and strapped down.



Set-up

We highly recommend the use of both dual rates and exponential. This will allow the model to fly both precision and 3D at the flick of a switch.

	Low Rates	Exponential	High Rate	Exponential
Elevator	15-20 deg	15-20 %	35-45 deg	45-60 %
Ailerons	15-20 deg	15-20 %	35-45 deg	45-60 %
Rudder	25-30 deg	15-20 %	35-45 deg	45-60 %

For test flights always use low rates, remember that + and – exponential is different per manufacturer, check your TX manual.
Always check the range on your model before the maiden flight. Carry out a short flight then go over everything to make sure nothing has come loose.

CG Location

We suggest for initial test flights set the CG 106mm or 4 inches from the leading edge of the wing.
Adjust after first flights to personal preference.