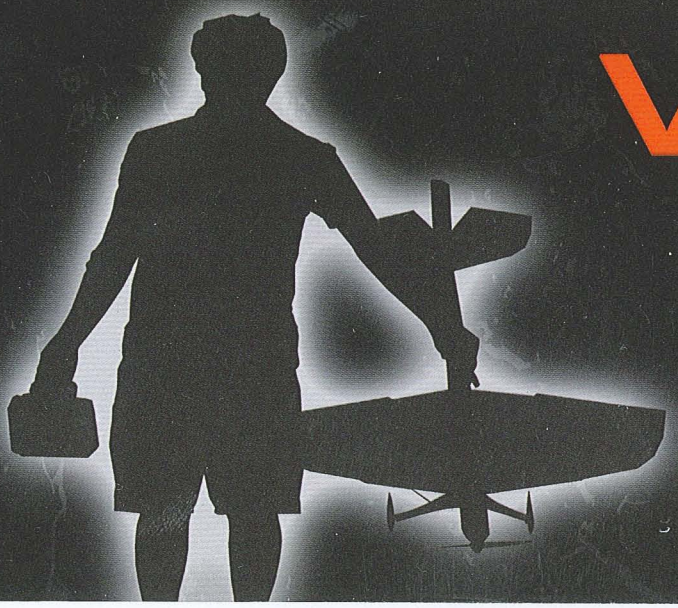
Super-E
BEST RC MODEL

YOUR DREAM IN 3D FLYING STARTS HERE!

User's Manual
Bedienungsanleitung
日本語の説明書

VENUS

3D PRO



TECHone

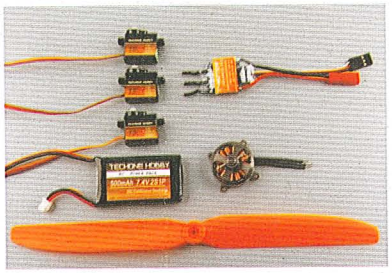
www.techonehobby.com

SUPER-E is a new brand from Techone Hobby. It focus on the design and manufacture of electrical molded models. Innovation and concentration is our principle. SUPER-E will develop more electrical molded models to you all and give you brand-new flying experience.

Features:

1. Venus—Molded 3D plane, originated from TechOne's popular F3P series.
2. Made of durable, crash-resistant EPO material, avoided the disadvantages of depron foam.
3. A thoughtful cabin design, all electronic equipments can be installed and safely secured inside.
4. Simple design, 85% pre-assembled and super convenient assembly process keeps you far away from the complicated traditional assembly process of indoor 3D plane and long time waiting.
5. The included T Motor AT series brushless outrunner motor are perfectly matched for both optimum power and performance.
6. Available in 3 different vibrant colors scheme to choose.
7. Professional airframe configuration and special airfoil design makes it a great lightweight 3D airplane for a wide flight speed range.
8. No matter you're professional 3D flyer or just starting out in 3D, we believe Venus is your best choice.
9. Your dream in 3D flying starts here!

Product Specifications



Fuselage length:	970mm (38.2 in.)
Wingspan:	828mm (32.6 in.)
Flying Weight:	210-250g (with battery)
Motor:	AT2206 V2 KV 1500
ESC:	T10 Amp
Propeller:	GWS HD 9050 or SF 9047
Servo:	5g*3 micro servo
Radio:	4/more channel
Receiver:	4/more channel
Battery:	400-600mah 7.4v lipo 25c

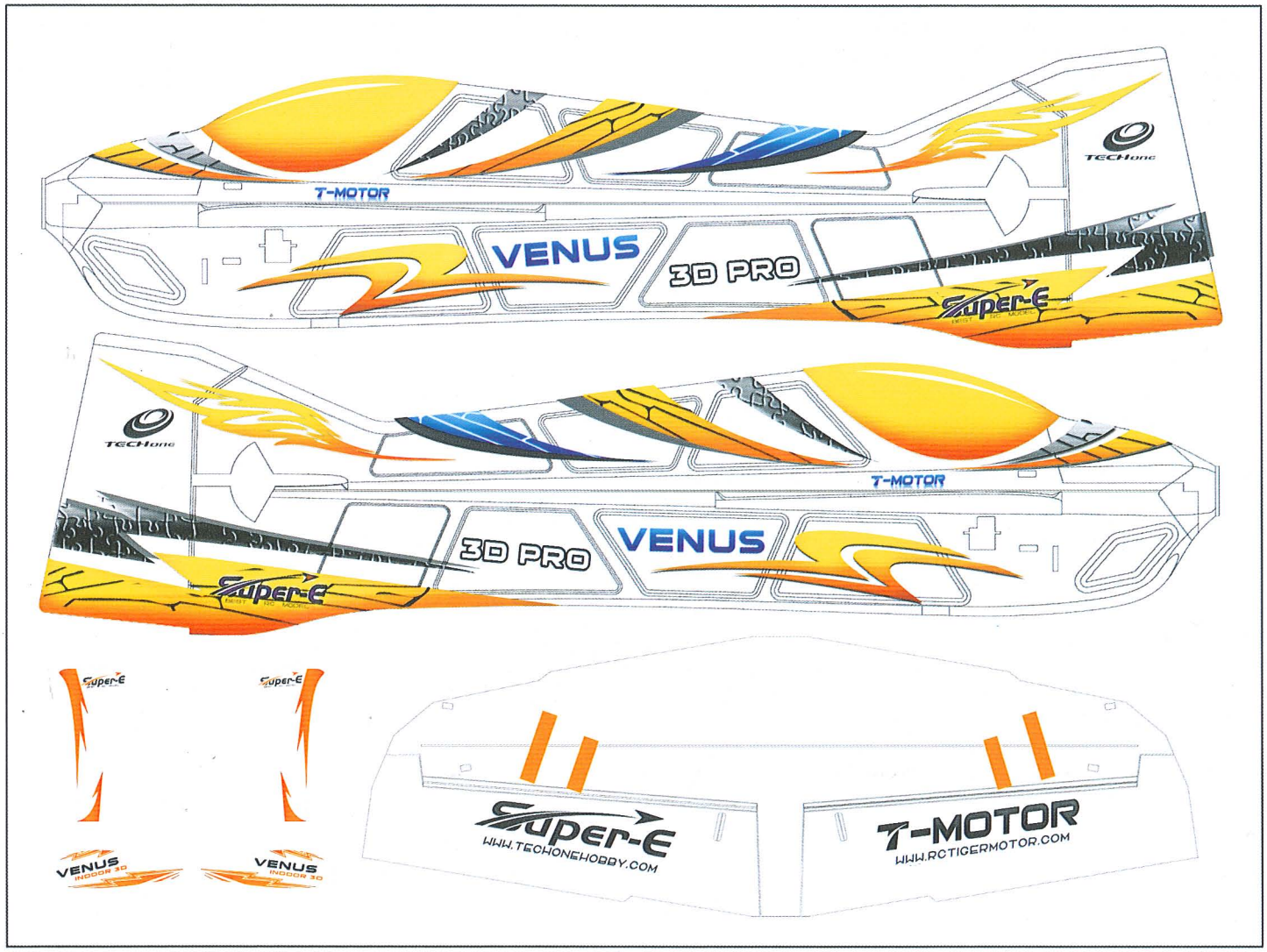
Examine your kit carefully!

Venus model kits are subject to constant quality checks throughout the production process, and we sincerely hope that you are completely satisfied with the contents of your kit. However, we would ask you to check all the parts before you start construction, referring to the Parts List, as we cannot exchange components which you have already modified. If you find any part is not acceptable for any reason, we will readily correct or exchange it once we have examined the faulty component. Just send the offending part to our Model Department. Please be sure to include the enclosed complaint form, duly completed. We are constantly working on improving our models, and for this reason we must reserve the right to change the kit contents in terms of shape or dimensions of parts, technology, materials and fittings, without prior notification. Please understand that we cannot entertain claims against us if the kit contents do not agree in every respect with the instructions and the illustrations.

Caution!

Adio-controlled models, and especially model aircraft, are by no means playthings in the usual sense of the term. Building and operating them safely requires a certain level of technical competence and manual skill, together with discipline and a responsible attitude at the flying field. Errors and carelessness in building and flying the model can result in serious personal injury and damage to property. Since we, as manufacturers, have no control over the construction, maintenance and operation of our products, we are obliged to take this opportunity to point out these hazards and to emphasise your personal responsibility.

Gilding the lily - applying the decals



A set of colorful decals are included inside the kit, for applying the fuselage and landing gears. And another set of self-adhesive paper is for bottom wings.

1.Please ingnore this step if you find the decals were applied to plane kit.

2.Please apply the decals before assemble the plane kit.

3. Cut out the decal from the sheet.
Place them in room temperature water using tweezers for 10 sec or so. Then the decal that you need are separated from the carrier film.
Slide the decal into position on the model, and gently rub down to remove excess water or bubbles from underneath(using cotton cloth).

4.After all the decals are applied, let the model dry 2 hours, otherwise, they will fall off.

5.Rip off the self-adhesive paper and stick to the proper position on the bottom wings. Remark: The self-adhesive paper cannot be re-positioned once applied, so place them carefully!

Do not fly under the conditions below

Wind strong enough to make the trees rustle.
A street with many trees or street lamps.
Close to high voltage electrical wires.
High Population density areas.

Cautions for flying

Front lawns and parks make excellent flying areas. Make sure you have permission to fly and follow safety guidelines set by local authorities. The calmer the wind, the better!

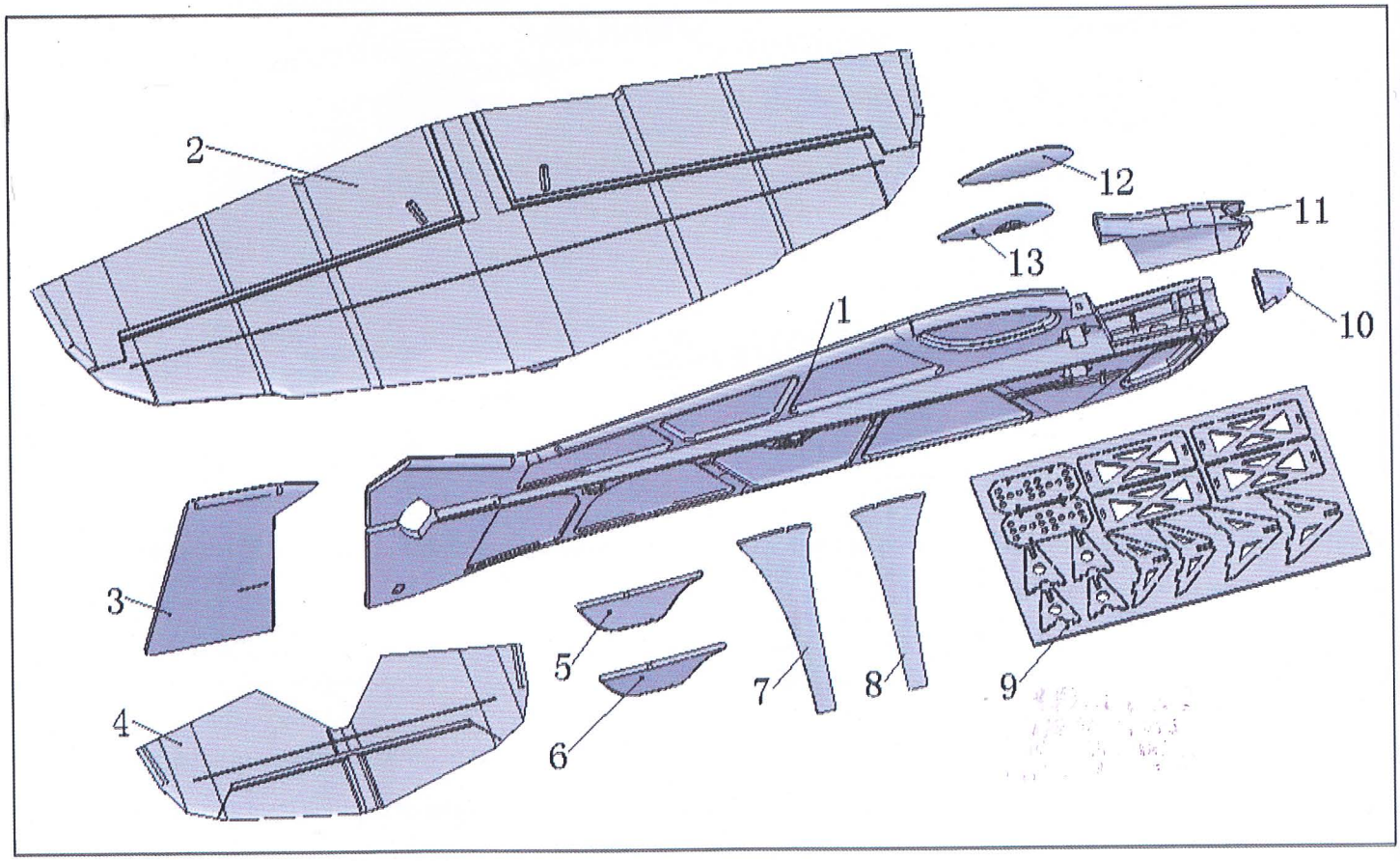
Note for Storage

Please disconnect the lipo packs when finished flying.
Do not press or crush the airplane when storing.
The best way to store is to hang the airplane to keep the control surface rigid.

Tools:

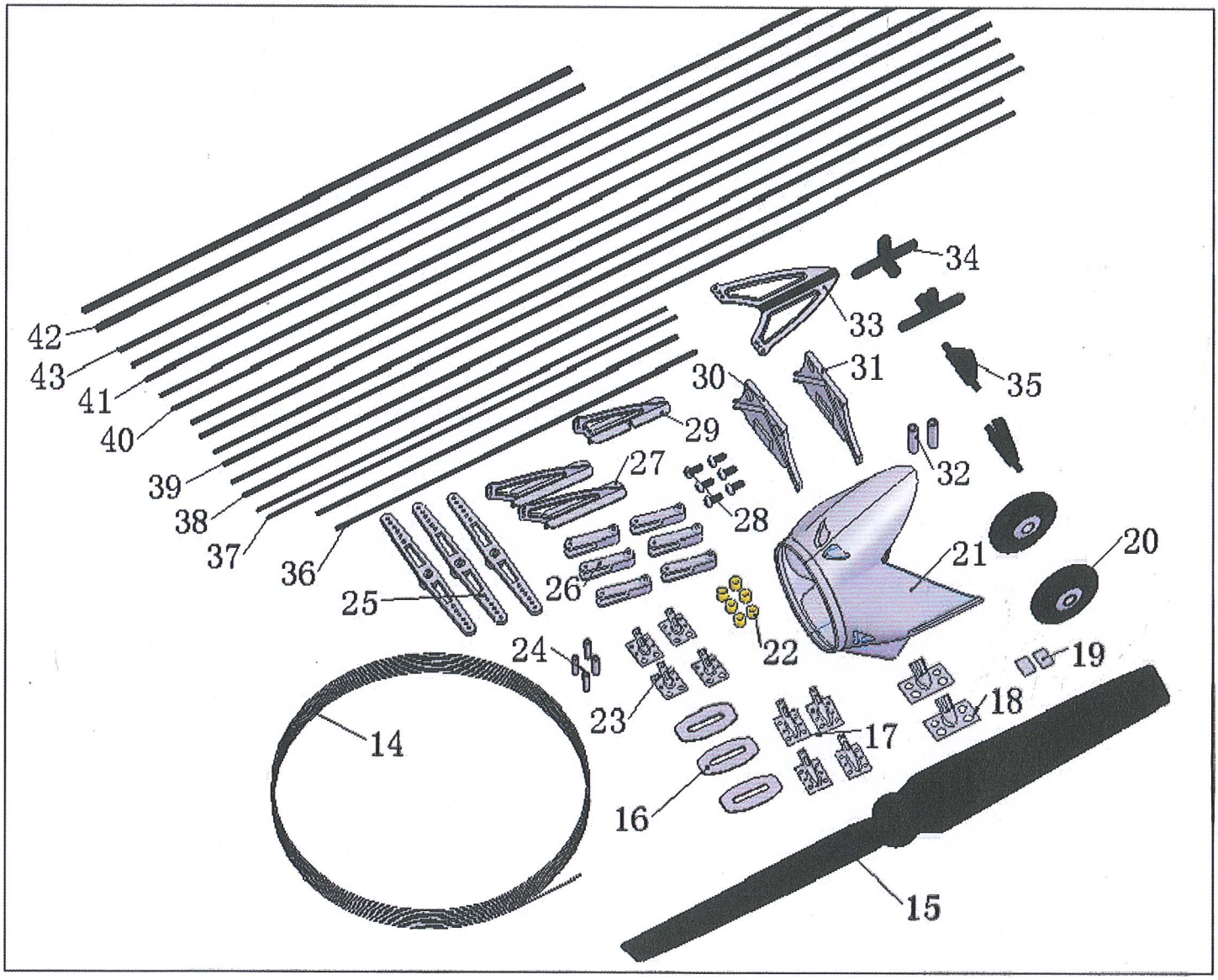
Scissors, balsa knife, combination pliers, screwdriver. quick-dry glue.

Foam parts included in the packing:



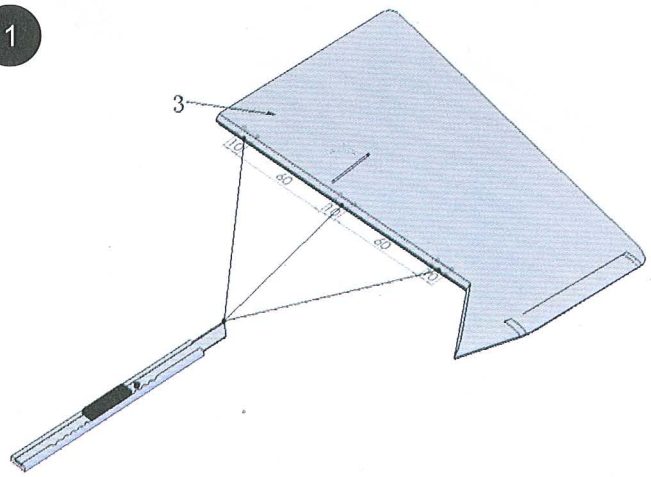
1	Fuselage	1pc	8	Left landing gear flow deflector	1pc
2	Wing	1pc	9	2 kinds of damping board	1pc
3	Rudder	1pc	10	Spinner	3pcs
4	Elevator	1pc	11	Equipment cabin	1pc
5	Left wing fence	1pc	12	Right wheel cover	1pc
6	Right wing fence	1pc	13	left wheel cover	1pc
7	Right landing gear flow deflector	1pc			

Parts included in the packing



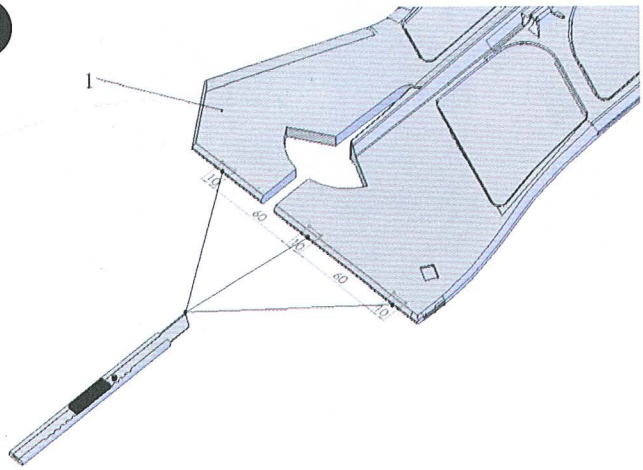
14	Rudder servo pull-pull fishing line	1pc	30	Landing gear retainer (left)	1pc
15	GWS HD 9050	1pc	31	Landing gear retainer (right)	1pc
16	Rudder servo hinges	3pcs	32	3mm transparent tubes	2pcs
17	Wing reinforcements	4pcs	33	Rudder servo control horn	1pc
18	Fuselage reinforcements	2pcs	34	Landing gear supportor	2pcs
19	Magnets for equipment cabin	2pcs	35	Landing gear axle	2pcs
20	Wheels	2pcs	36	1.3*125mm Aileron push rods	2pcs
21	Motor mount	1pc	37	1.3*150mm Stabilizer bracing carbon fiber rod	2pcs
22	Rubber bands for pushrod collet	6pcs	38	1.2*284mm Elevator strengthen fiber glass rods	2pcs
23	Elevator reinforcements	4pcs	39	1.3*294mm Wing bracing carbon fiber rods	4pcs
24	2mm white PVC tubes	4pcs	40	1.2*725mm Fuselage strengthen fiber glass rods	2pcs
25	Servo arm extension	3pcs	41	1.2*710mm Wing strengthen fiber glass rods	2pcs
26	Pushrod collet (replacing the Z bend, shrink tube...)	6pcs	42	2*180mm Landing gear carbon fiber rods	2pcs
27	Aileron servo control horn	2pcs	43	1.3*550mm Elevator push rod	1pc
28	Self-tapping screws for pushrod collet	6pcs	44	Self-adhesive paper for bottom wings	2pcs
29	Elevator servo control horn	1pc			

1



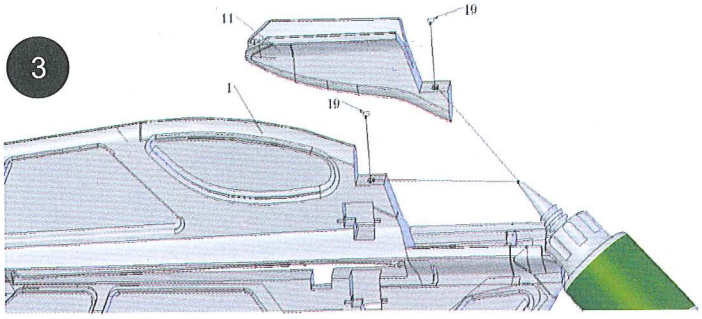
Use knife to cut 3 slots (10mm width * 12mm depth) on the rudder(refer to picture), for installing 3pcs rudder hinges (no.16 in the parts picture).

2



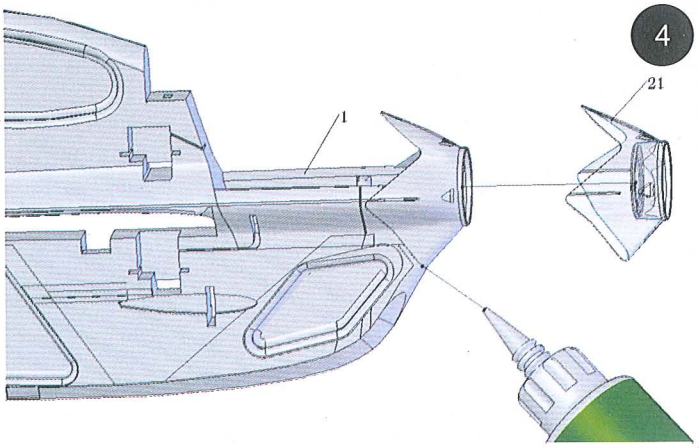
Cut 3 corresponding slots on the rear of vertical fuselage, same size as on rudder. (refer to the picture)

3



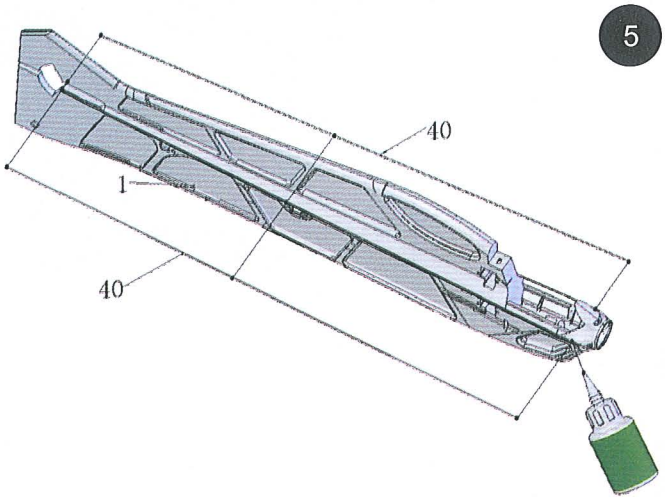
Install 2pcs cabin magnets (no. 19) into corresponding small quadrate slots on fuselage and cabin. (refer to picture)

4



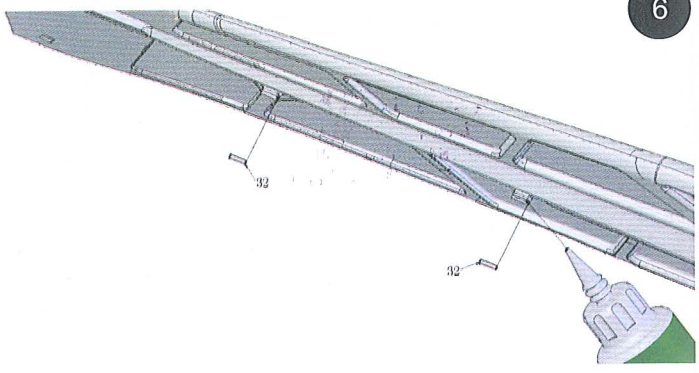
Install motor mount (no.21).
Remark: Please make sure the motor mount fits flush to the fuselage foam part and line up the sidelines.

5



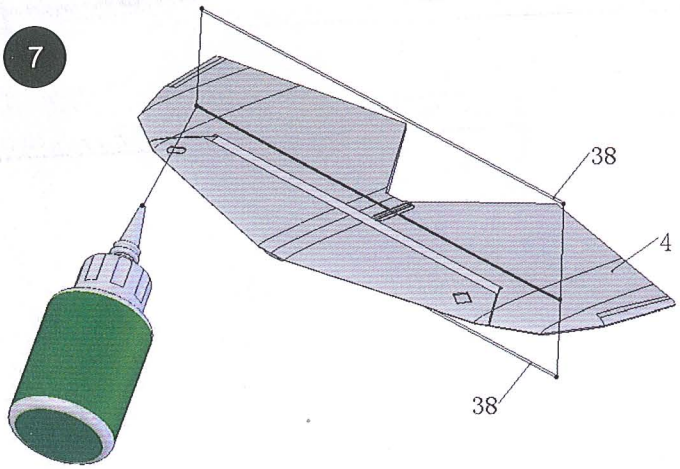
Use quick-dry glue to fix 2pcs 1.2*725mm Fuselage strengthen fiber glass rods (no.40) in the pre-cut slots on fuselage.
Make sure the fuselage is vertical after glue was dry, no distortion.

6



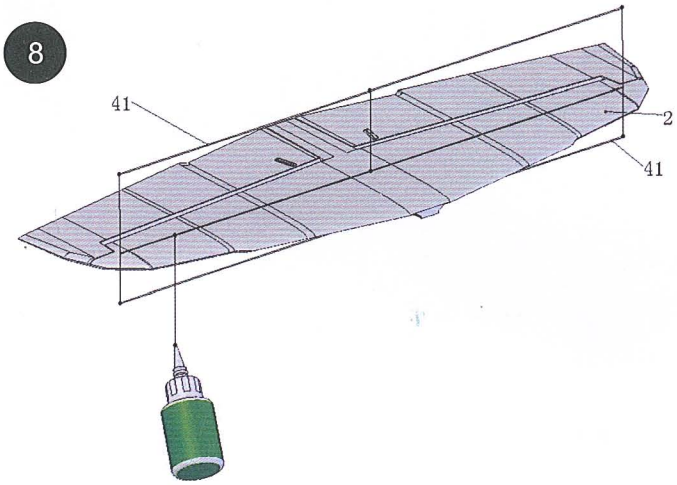
Glue the 3mm transparent tube (no.32) to the pre-cut slot on right fuselage.

7



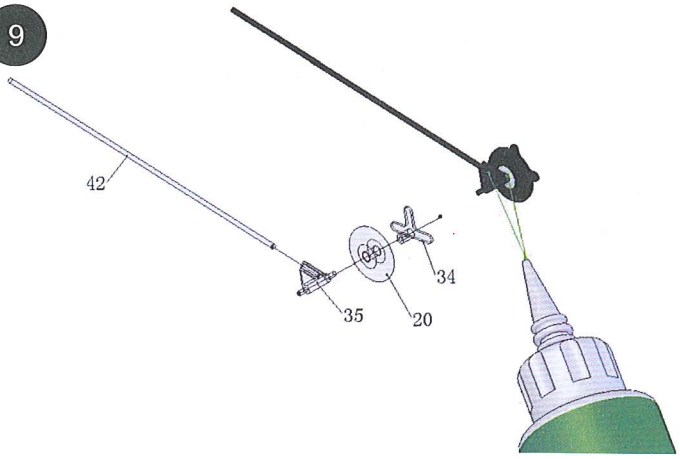
Install 2pcs 1.2*284mm Elevator strengthen fiber glass rods (no.38) on pre-cut slots on top and bottom elevator. Make sure the elevator is flat after glue was dry, no distortion.

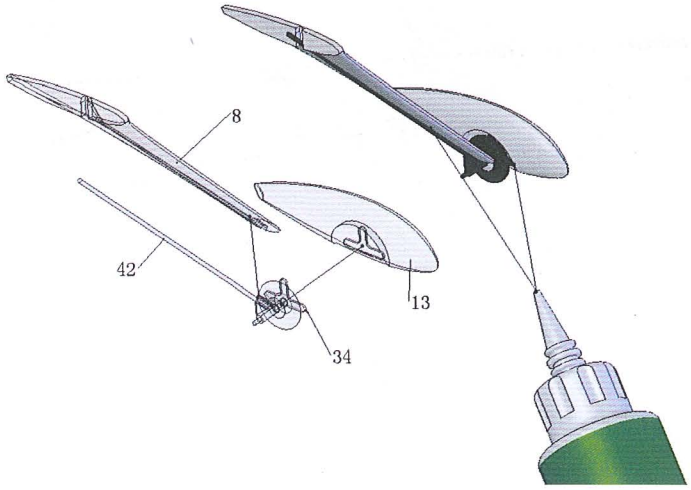
8



Install 2pcs 1.2*710mm Wing strengthen fiber glass rods (no.41) on pre-cut slots on top and bottom wing.
Make sure the wing is flat after glue was dry, no distortion.

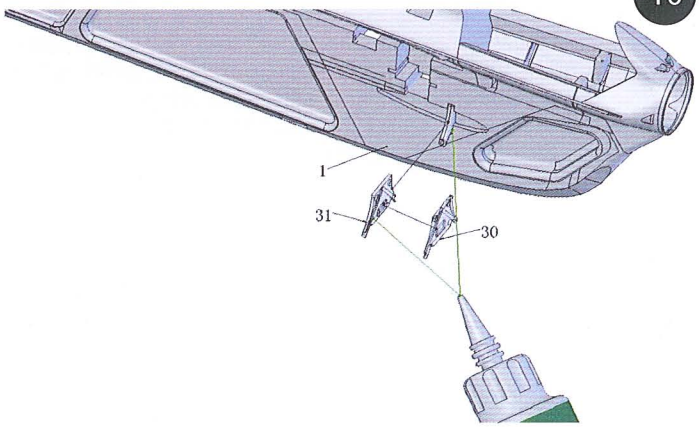
9





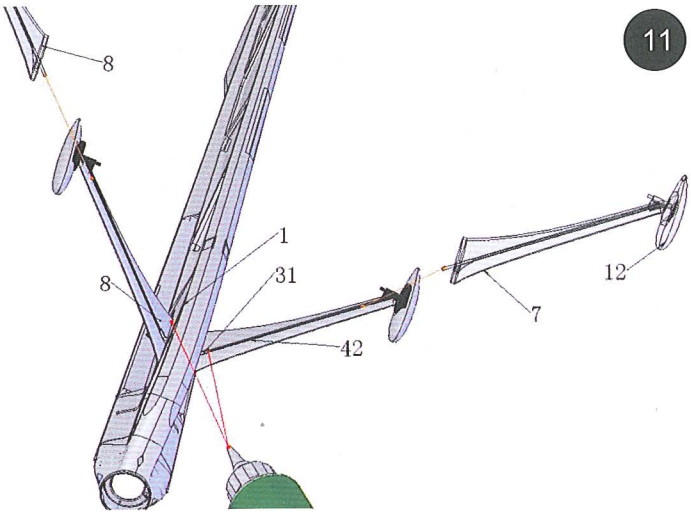
Right landing gear assembly process: Put wheel (no.20) on the round shaft of landing gear supportor (no.34), and insert landing gear axle(no.35) to the hole of no.34, then drop some glue on the joints (refer to picture). Remark: Please don't let the glue dropped inside the wheel hub, it would influence the normal running of wheel.
Insert 2*180mm landing gear carbon fiber rod (no.42) into the tilted slot of landing gear axle(no.35) and use quick-dry glue to fix. Then fix left landing gear flow deflector (no.8) on the carbon fiber rod (no.42). Glue the landing gear supportor (no.34) to the left wheel cover (no.13)
Same assembly process for the left landing gear.

10

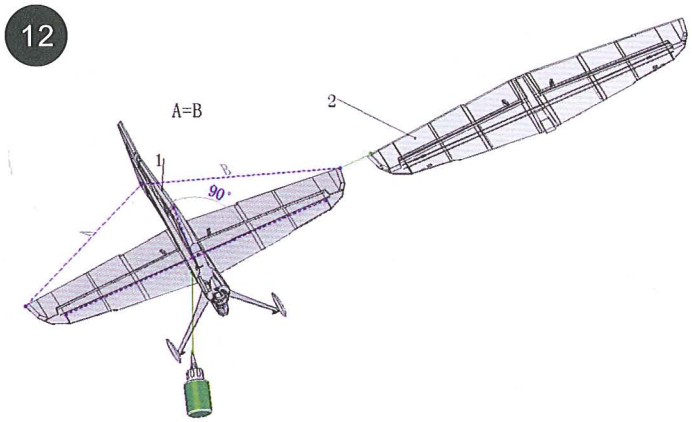


Assemble landing gear retainers (no.30 & no.31): left and right landing gear retainer both have 2pcs parts, please glue each two pieces together. Then insert them into the pre-reserved slots on lower vertical fuselage and fix with some glue.
Make sure they're all centered, no excursion.

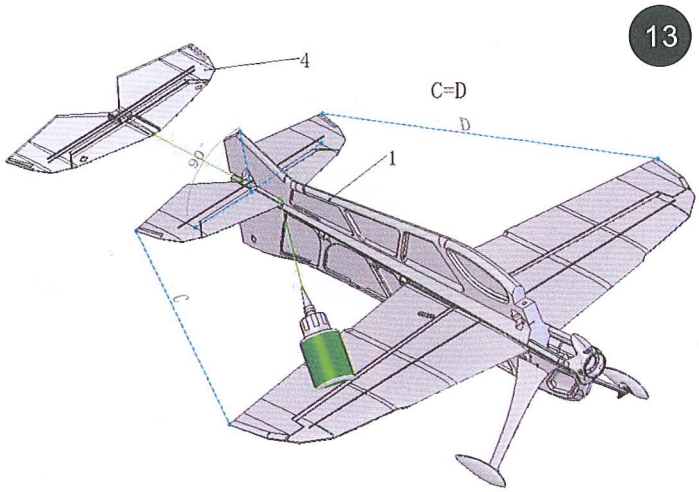
Above steps will be finished in our factory.



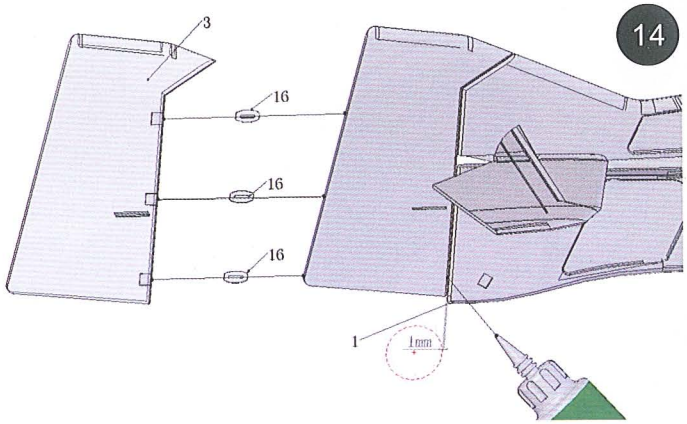
Insert the carbon fiber rods of assembled landing gears into the holes of the intalled landing gear retainers, then use glue to fix. At the same time, drop some glue on the joints of landing gear foam parts and fuselage.



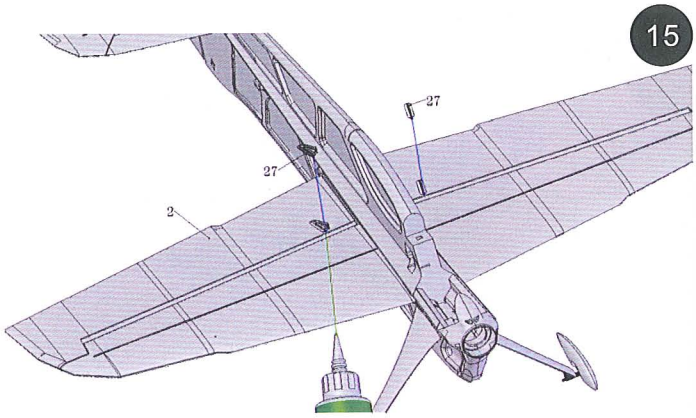
Insert wing to the slot of fuselage and use glue to fix. Make sure the fuselage is perpendicular to wing and the wing is centered, no excursion.



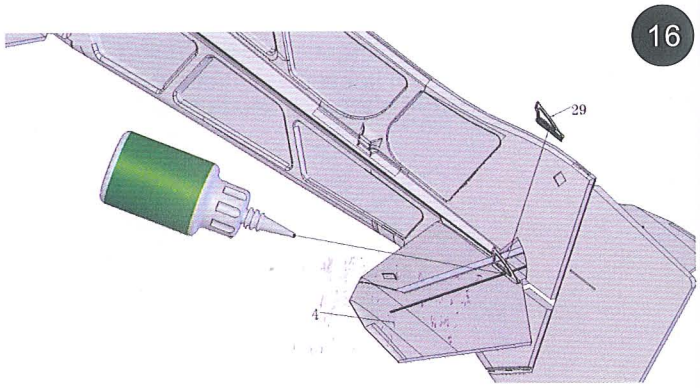
Insert stabilizer to the slot of rear fuselage and use glue to fix. Make sure the fuselage is perpendicular to stabilizer and the stabilizer is centered, no excursion.



Insert 3pcs rudder hinges (no.16) into the cut slots on rudder, and another part into the slots on fuselage, then drop some glue to fix.
Remark: please leave 1mm hinges outside, so the rudder can work smoothly.

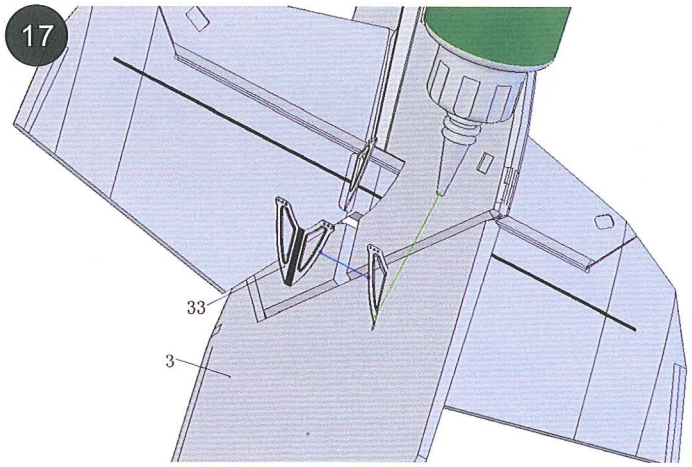


Insert aileron control horns (no.27) into the slots on top wings and fix with glue.



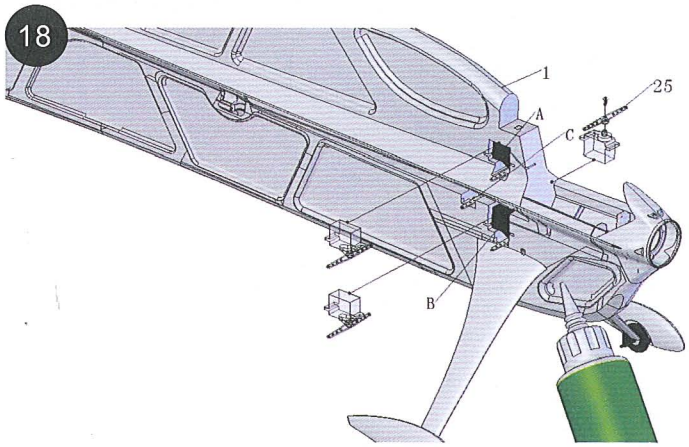
Insert elevator control horn (no.29) into the slot on bottom elevator and fix with glue.

17



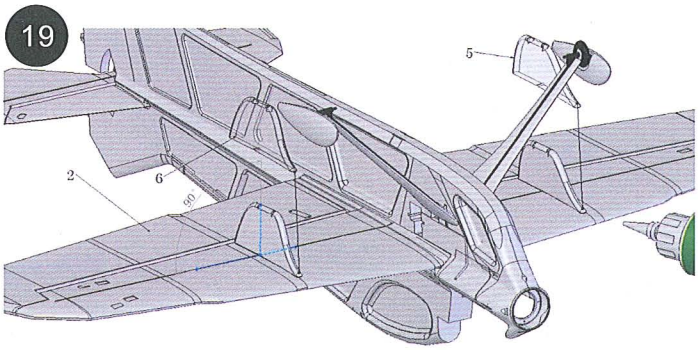
Insert rudder control horn (no.33) into the slot on rudder and fix with glue.

18



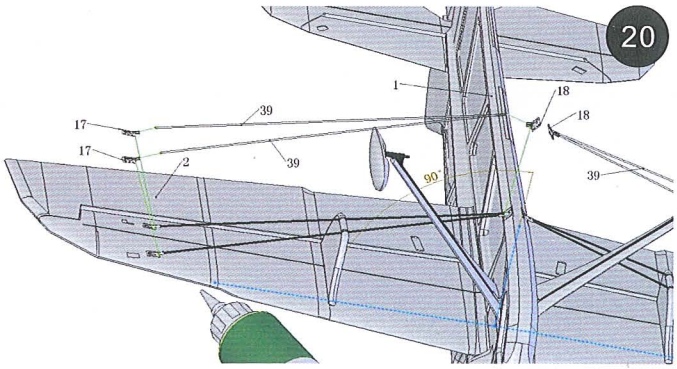
Install aileron servos (A)rudder servo (B)and elevator servo(C)into the corresponding slots.
Remark: when you drop glue to fix the servos and surrounding foam, please make sure they're completely glued, so servos will not fall off while working.

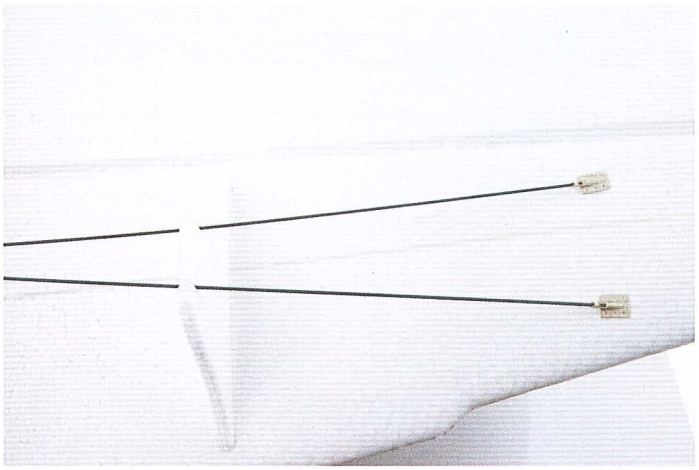
19



Install wing fences (left and right) to the corresponding slots on bottom wing. Remark: please distinguish the front and back before assembly.

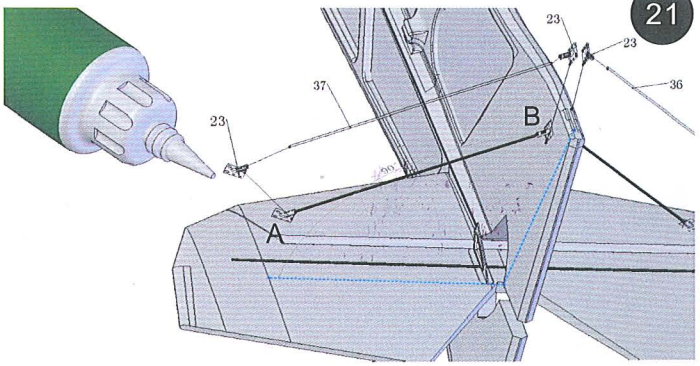
20

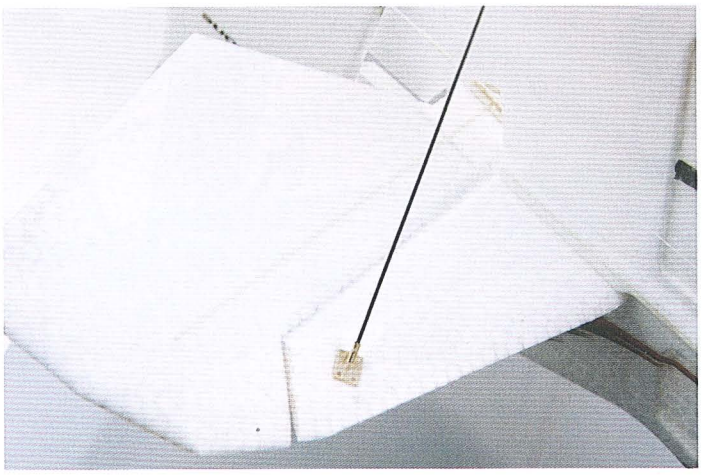




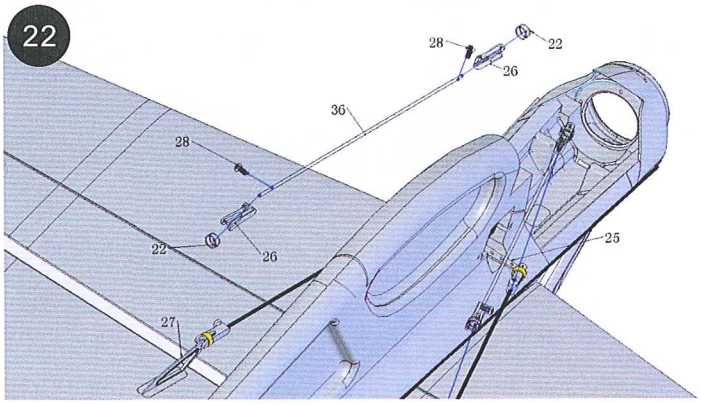
Install wing bracing rods:
1st, insert one end of 1.3*294mm wing bracing carbon fiber rods (no.39) into the holes of wing reinforcements (no.17), and another end into fuselage reinforcements (no.18).
2nd, gently glue the 4pcs wing reinforments (no.17) on corresponding slots on bottom wing.
3rd, gently glue the 2pcs fuselage reinforcements (no.18)on bottom fuselage.
4th, press the wing bracing rods (no.39) into the slots on wing fences, then use glue to fix.

21

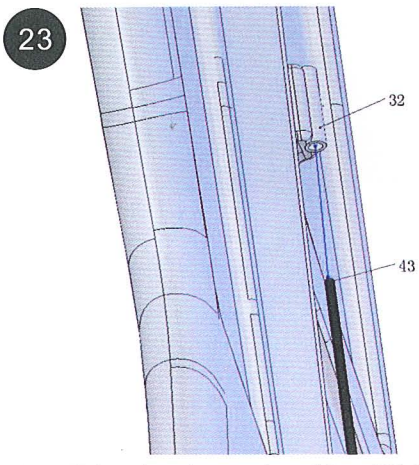




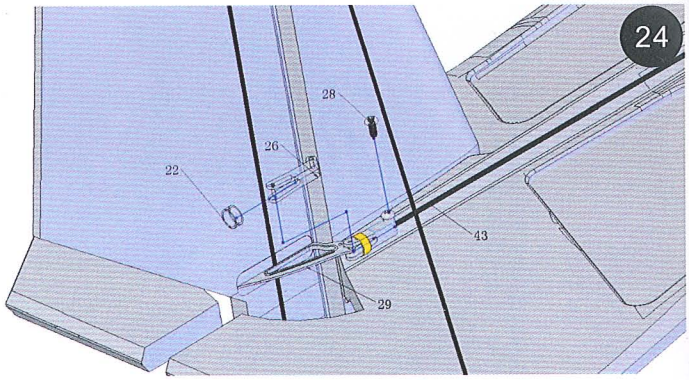
Install stabilizer bracing rods:Insert the two ends of stabilizer bracing carbon fiber rod (no.37) into the holes of elevator reinforcements (no.23), then fix one elevator reinforcement into the slot A on bottom stabilizer, another reinforcement into the slot B on fuselage. Repeat this assembly step for another bracing rod.

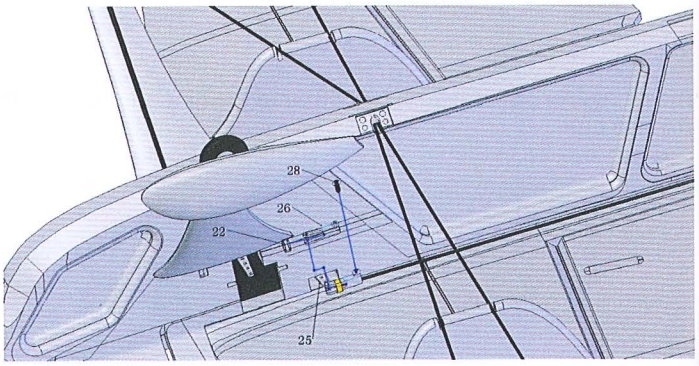


Install aileron push rods: Insert both ends of 1.3*125mm aileron push rod (no.36) into the hole of pushrod collets (no.26), and screw self-tapping screws (no.28) into the holes on collets (no.26), then put the rubber bands(no.22) on the collets (no.26) to fix. By adjusting the pushrod and collet, make sure there's no extra angle of aileron control surface when the servo arm is centered. At last, use screwdriver to screw down the 4pcs screws on collets (no.26) to avoid carbon fiber rod and collet fall off.

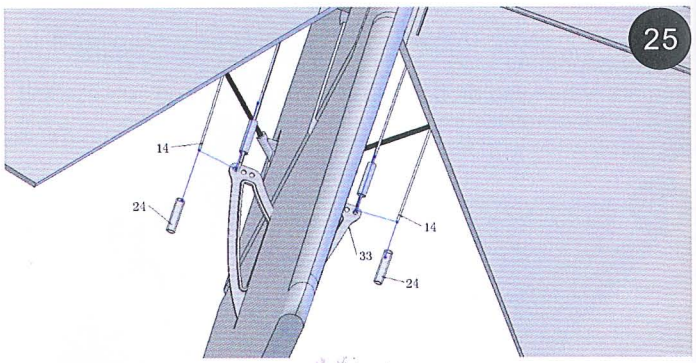


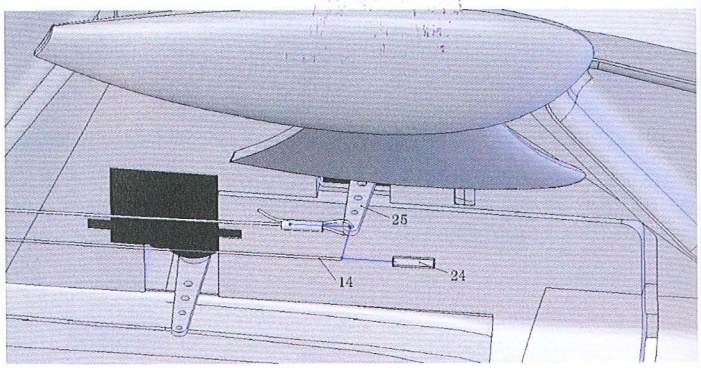
Thread the elevator push rod (no.43) through 2pcs transparent tubes (no.32) on right fuselage.

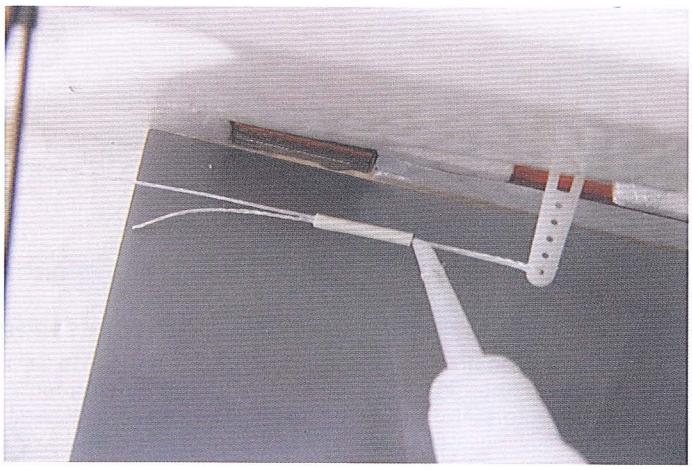




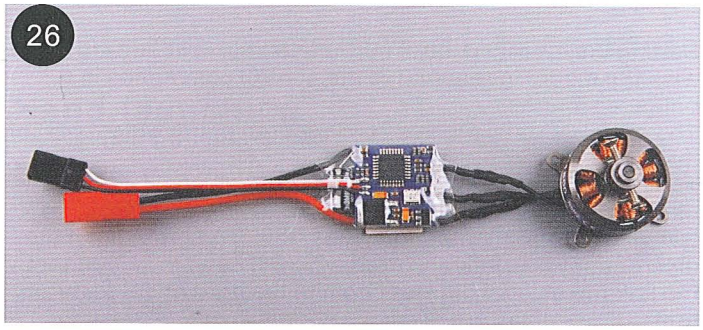
Insert two ends of the elevator push rod (no.43) into the holes of pushrod collets (no.26), and put rubber bands (no.22) on the collets (no.26), then clip the collet on the hole of rudder servo horn. Make sure there's no extra angle of elevator control surface when the servo arm is centered. At last, use screwdriver to screw down the 2pcs screws on collets (no.26) to avoid carbon fiber rod and collet fall off.



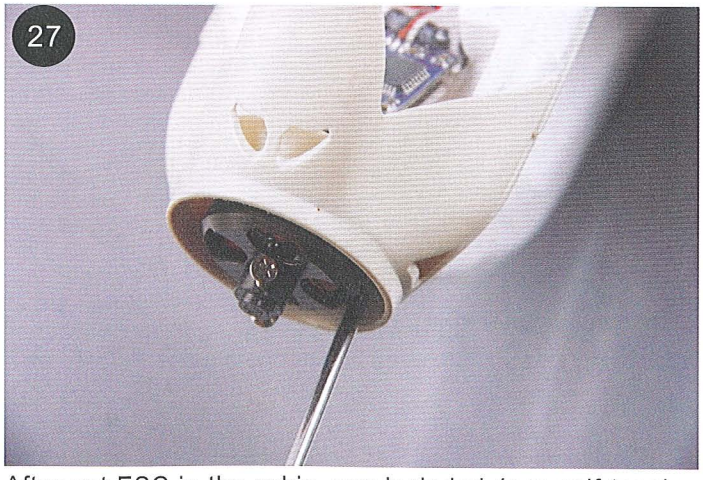




Thread one end of rudder servo pull-pull fishing line (no.14) through 2mm white PVC tube (no.24) and hole on rudder control horn, then throught back PVC tube (no.24), drop some glue to fix the fishing line with the pvc tube. For another end of fishing line and rudder servo arm, use the same assembly process. Repeat this process for another rudder servo pull-pull fishing line.
Remark: Before use glue, both sides of fishing line are taut when elevator control surface and servo arm is centered.

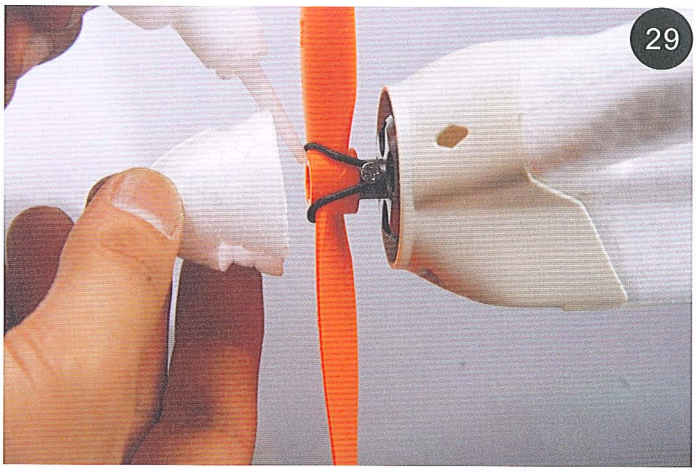


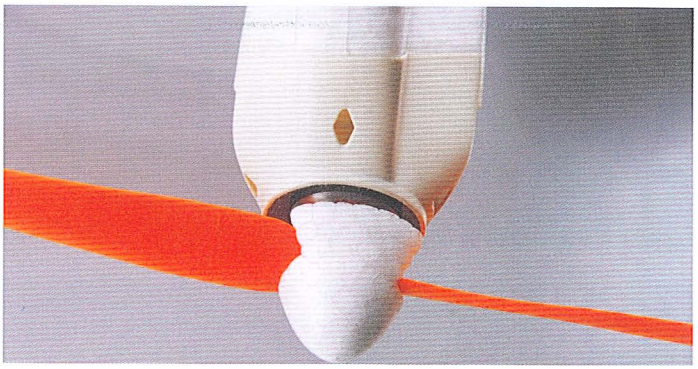
After weld the wires of motor and ESC together, connect ESC and receiver and test the propeller rotating direction. If not correct, change two wires of motor by random, then re-weld.
Remark: After power on, if no tones heard in ESC's 1st startup but only servo is working, you should reset the throttle program mode.



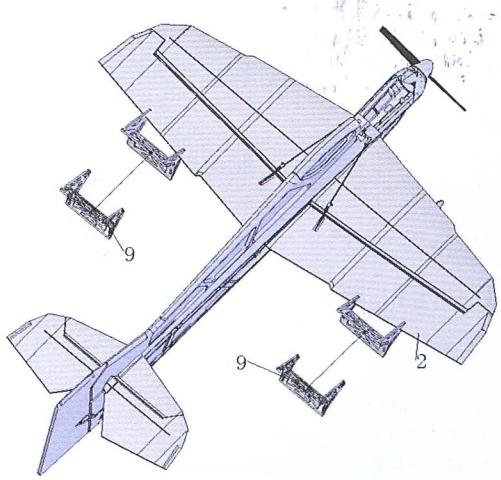
After put ESC in the cabin, use included 4pcs self-tapping screws to fix motor.

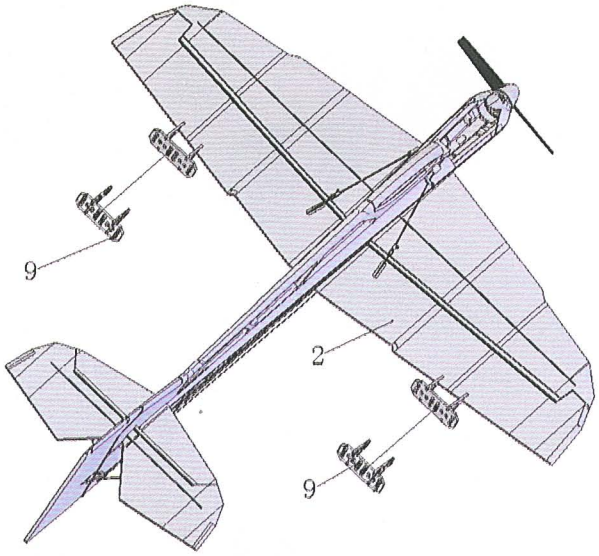
Use o rings to install the propeller.





Install the foam spinner (no.10). As it's easy to break, so we include 3pcs spinners in the pack for replacement.





As we offer 2 kinds of damping board, you can choose either one to install on the ailerons.

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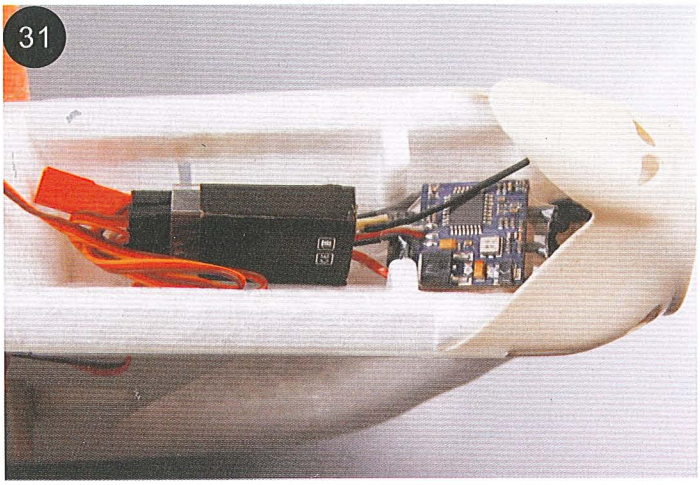

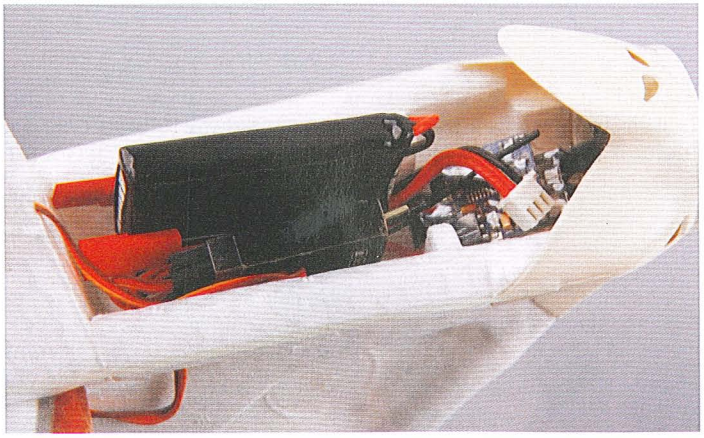

Install receiver and battery, then power on and test.

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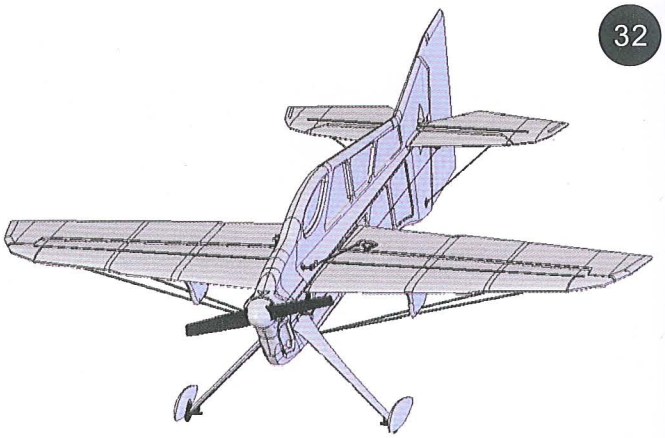

Setting the control surface travels

Recommended Flying Setup

Max servo travel of aileron: 35 degrees up and 35degrees down(60mm).

Max servo travel of elevator:50 degrees up and 50 degrees down(55mm).

Max servo travel of rudder: 50 degrees left and 50 degrees right (90mm).

Setting the correct control surface travels is important if you wish the model to respond to the control commands in a balanced manner.
The travels should always be measured at the widest part of the control surface.
The control surface throws are not critical, and if you are unable to set the exact stated travels using your transmitter's adjustment facilities, that's no problem. If the discrepancy is relatively great, you will need to re-connect the linkage using a different hole at the horn or servo output arm.
If you intend to fly the model as a trainer, we recommend that you reduce the control surface travels to about 50 - 60% of the stated values.

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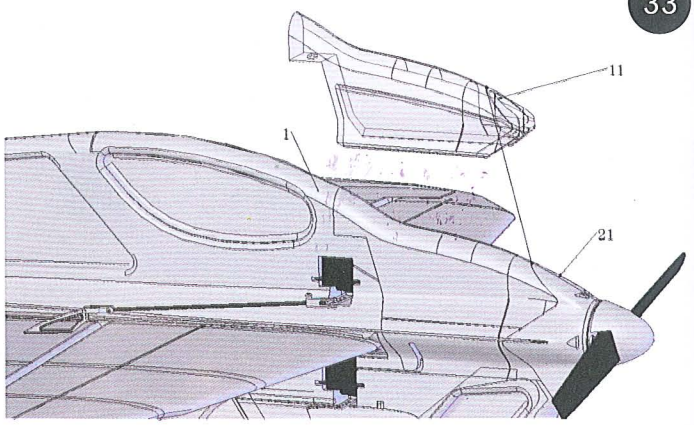
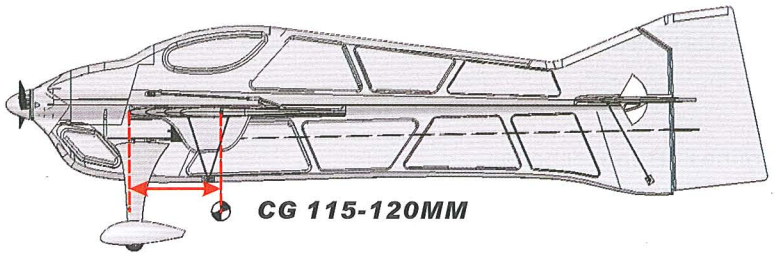


Install equipment cabin canopy.



Setting the Centre of Gravity

Like any other aircraft, the *venus* must be balanced at a particular point in order to achieve stable flying characteristics.
Assemble your model ready to fly, and install the flight battery.
The Centre of Gravity (CG) should be at a position 115-120 mm aft of the root leading edge, i.e. at the fuselage sides. Mark this point on both sides of the fuselage.
Support the model at this position on two fingertips, and it should balance level. If not, you can move the flight battery forward or aft to correct the balance point. Once the correct position is found, mark the location of the flight pack inside the model to ensure that it is always replaced in the same position.

Preparations for the first flight

Please wait for a day with as little breeze as possible for the model's initial test-flight. The evening hours are often ideal for calm conditions.
Be sure to carry out a range check before the first flight, using the procedure described in your RC system instructions. If you encounter a problem, please don't risk a flight.
The first flight ...
If you are a beginner to model flying we strongly recommend that you ask an experienced model pilot to help you for the first few flights.

If you have access to a hard landing strip, a ground take-off is always the safest option.

Hand-launching

Please don't try unpowered test-glides with this model – the result is invariably a damaged airframe. The venus should be hand-launched with the motor running at half-throttle, and always pointing directly into wind.
Ask an experienced modeller to hand-launch your aircraft for you.

The launcher should run forward for two or three paces, then give the machine a powerful straight launch, with the wings and fuselage level. Use the controls to hold the model in a steady, gentle climb - remember to keep the rate of ascent shallow and the airspeed high!

Allow the aeroplane to climb to a safe height, then adjust the trims on the transmitter until it flies in a perfectly straight line "hands off". While the model is still at a safe altitude, throttle back and try out the controls on the glide. Carry out a "dry run" landing approach at a safe height so that you are prepared for the real landing when the battery runs flat.

Don't try any tight turns at first, and especially not on the landing approach at low altitude. It is always better to land safely at some distance from you, than to force the model back to your feet and risk a heavy landing.

Safety

Safety is the First Commandment when flying any model aircraft.
Third party insurance should be considered a basic essential. If you join a model club suitable cover will usually be available through the organisation. It is your personal responsibility to ensure that your insurance is adequate. Make it your job to keep your models and your radio control system in perfect order at all times. Check the correct charging procedure for the batteries you are using. Make use of all sensible safety systems and precautions which are advised for your system. An excellent source of practical accessories is the SUPER-E main catalogue, as our products are designed and manufactured exclusively by practising modellers for other practising modellers.
Always fly with a responsible attitude. You may think that flying low over other people's heads is proof of your piloting skill; others know better. The real expert does not need to prove
himself in such childish ways. Let other pilots know that this is what you think too.

Always fly in such a way that you do not endanger yourself or others. Bear in mind that even the best RC system in the world is subject to outside interference. No matter how many years of accident-free flying you have under your belt, you have no idea what will happen in the next minute.
The SUPER-E team - hope you have many hours of pleasure building and flying your new model.

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www. techonehobby. com
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hobbytechone@gmail.com

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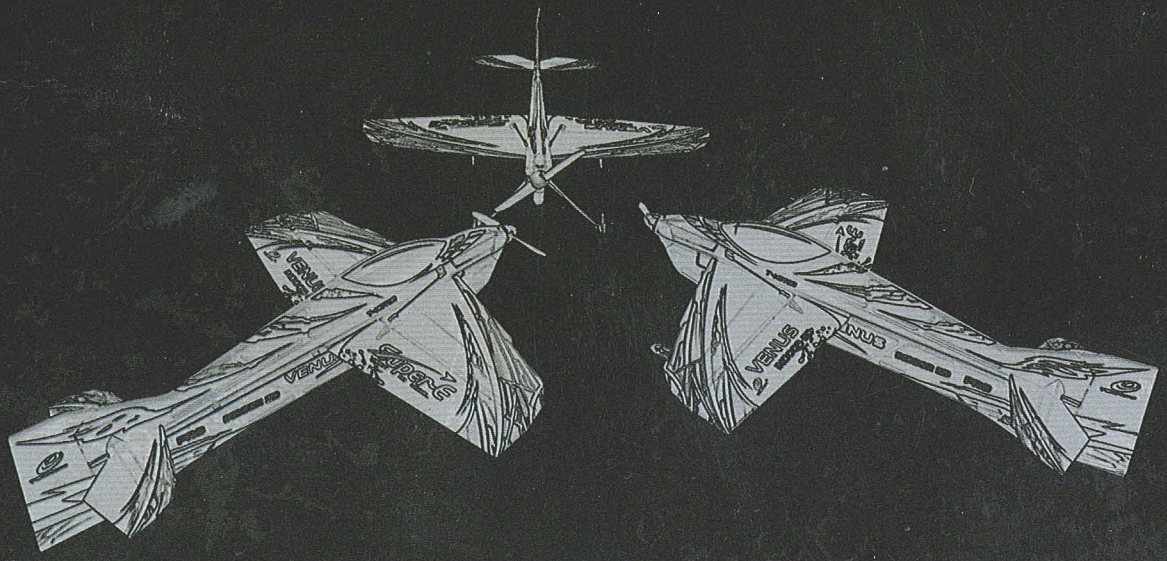

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