OMPHOBBY®

Global Professional RC ModeL Brand

Installation Manual

100″ Bighorn Airplane



Zhuhai Edge smart drive technology Co., Ltd

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100” Bighorn Balsa Wood Airplane

Bighorn has exaggerated big feet, so that the aircraft can adapt to various harsh terrain take-off and landing. The design has the flight performance of a sports aircraft and takes into account the flight characteristics of the easy-to-control exercise aircraft From novice to veteran, almost everyone likes to control this flying style. At the same time, the Bighorn 100 Pro wing has a large flaperon design, which gives the aircraft an incredible short-distance take-off and landing capability. Coupled with a large rudder and lift, the aircraft has 3D flight skills. With a low-cost but powerful 3S power system, this is the 3D sports single-wing balsa aircraft you expect.



Product Specification

Item:
100” Bighorn

Wingspan
2540mm(100in)

Full Length
1845mm(73in)

Wing Area
84.95dm²

Wing Load
77.69~82.40g/dm²

Motor Thrust Angles
Down 4° & Right 3°

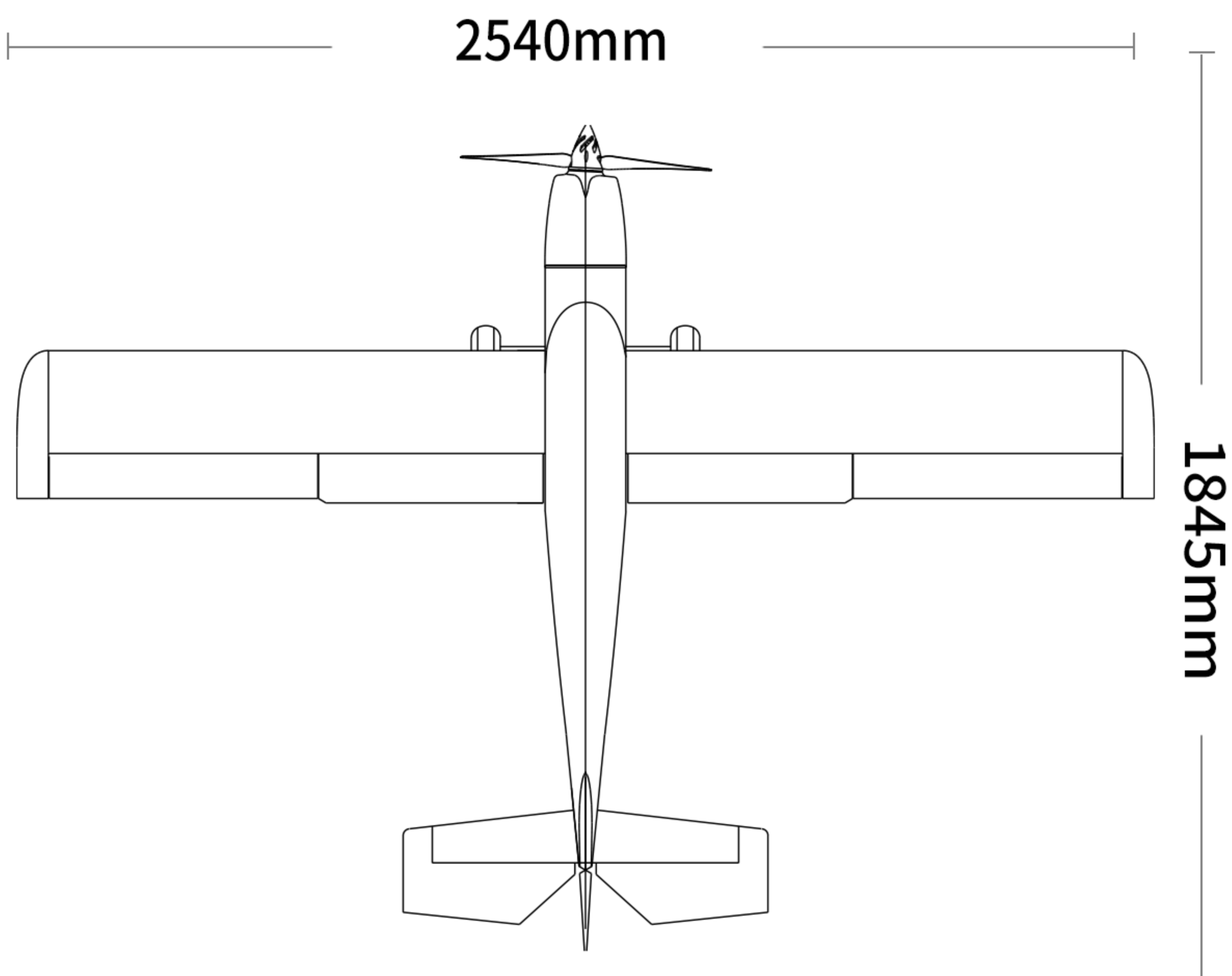
Gross Weight:
11KG

Pack Dimension
167*40*44 cm (L*H*W)

Wing Angle Of Incidence
1°

Flight Weight
6.6~7.0 KG

The Center of Gravity (CG):
Approx.95-120mm



Servo:
20~35 Kg*8(Aileron *2 Fap*2
Elevator*2 Rudder*1 Throttle*1)

Servo Arm:
1.5" 25T Servo Arm

Gas Power(Recommended):
Option 1:35CC,Propeller:20x8/20x9

Option 2:50~55CCPropeller:22x8/22x10

Electric Power(Recommended):

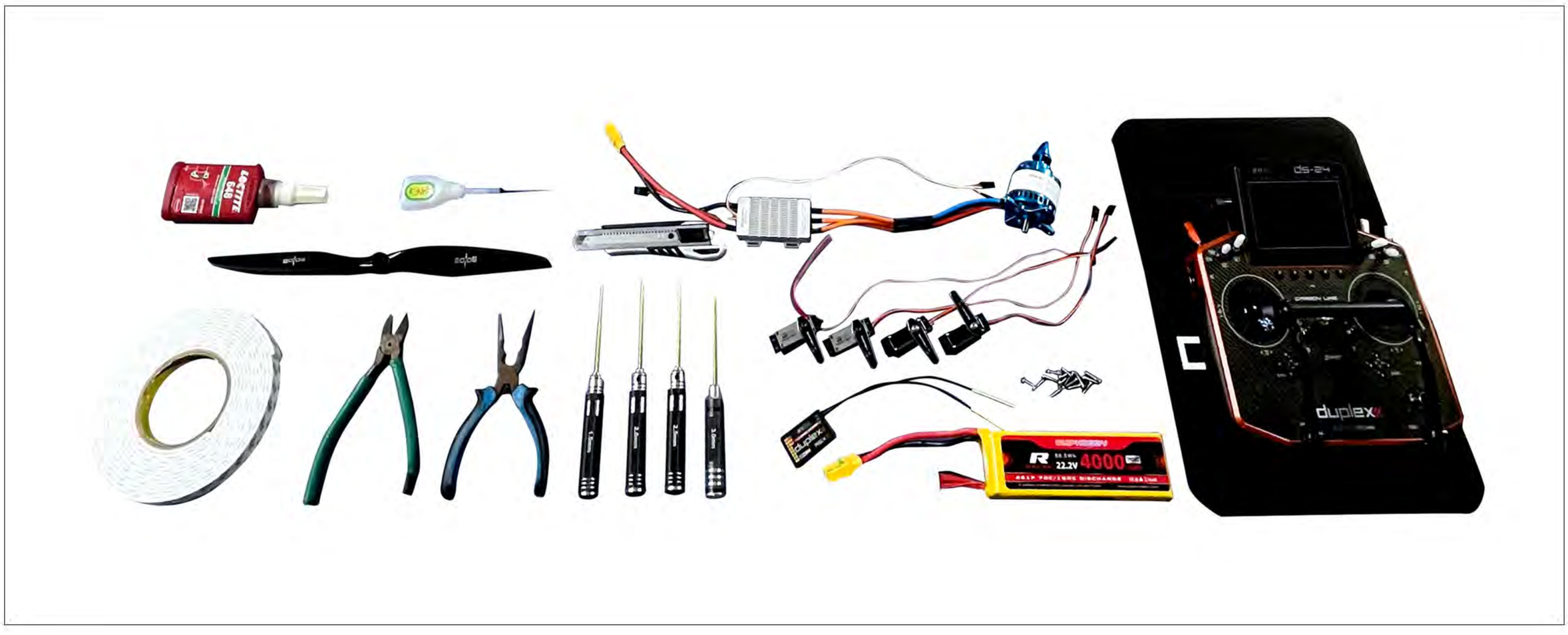
Option 1: Motor: Sunnysky 7020 kv195, ESC: 130A 12s, Propeller:21x10, Lipo 12s 4000-6000mah

Option 2: Motor: Sunnysky 7025 kv193, ESC: 160A 12s, Propeller:22x10, Lipo 12s 4000-6000mah

Package contents (ARF version)



Tools Needed

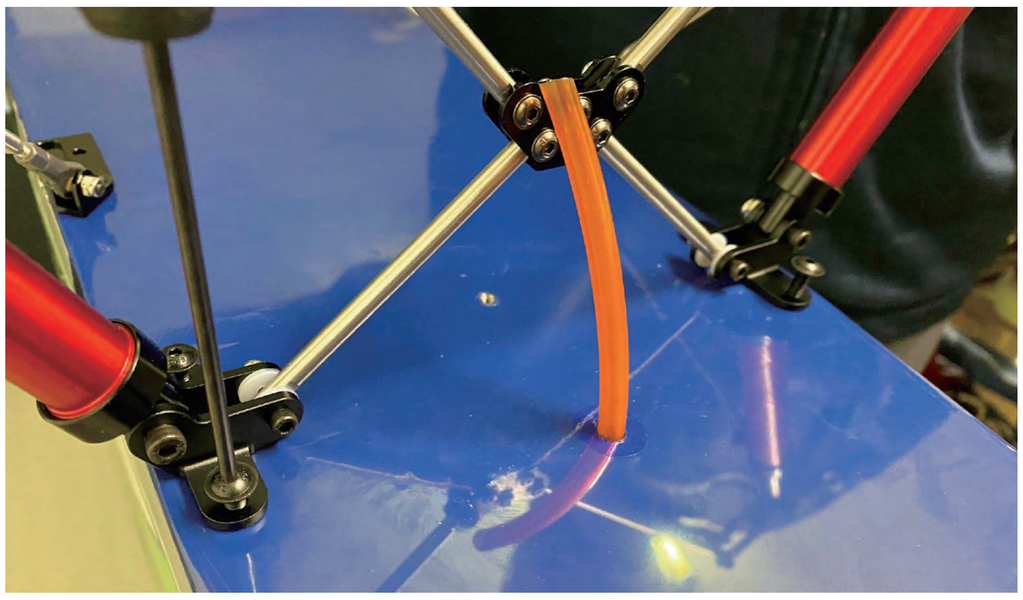


- Blue Painters Tape
- Denatured Alcohol & Paper Towels
- Blue Loctite
- Metric & Standard Allen Wrenches
- Hobby Knife & Fresh Blades
- 15 - 30 Minute Epoxy (or Gorilla Glue)
- Thin C/A
- Electric Drill with Assorted Small Bits
- Small Flat Head & Phillips Screwdrivers
- Sanding Block & Sandpaper
- Needle Nose Pliers
- Adjustable Wrench or Socket Set
- Measuring Tape & Ruler
- Fine-tip Sharpie Marker

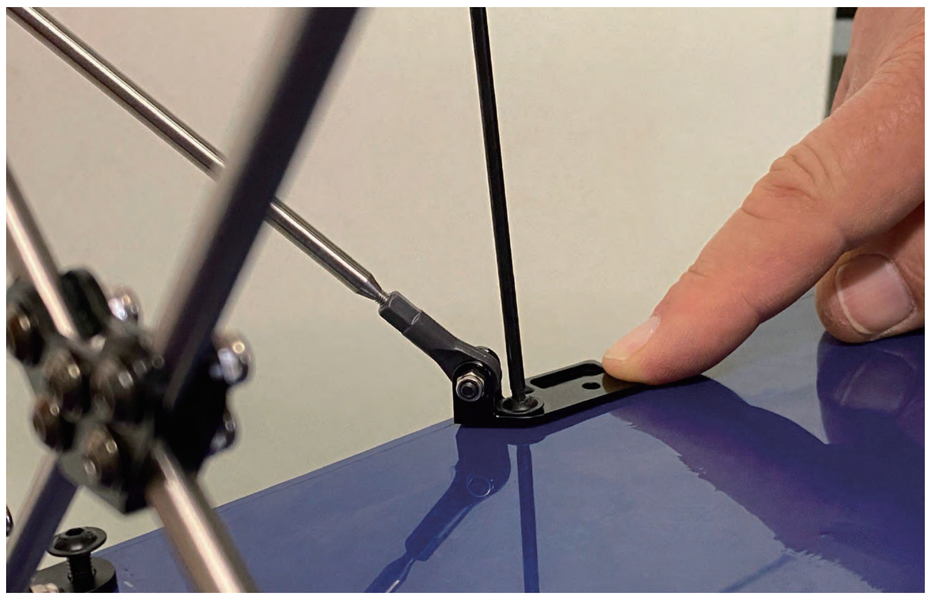
Landing gear Assembly

Landing Gear Installation

Unscrew the hexagon screws from the fuselage. Then use them to bolt the landing gear to the fuselage using threadlocker. Secure all 6 screws: four on the main legs and two on the back struts plates.



1



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Tighten the four screws on the inflator wheel first, Slide the inflatable wheels through the axles and secure them by screwing the bolt with the aluminium conical washer as shown.



1

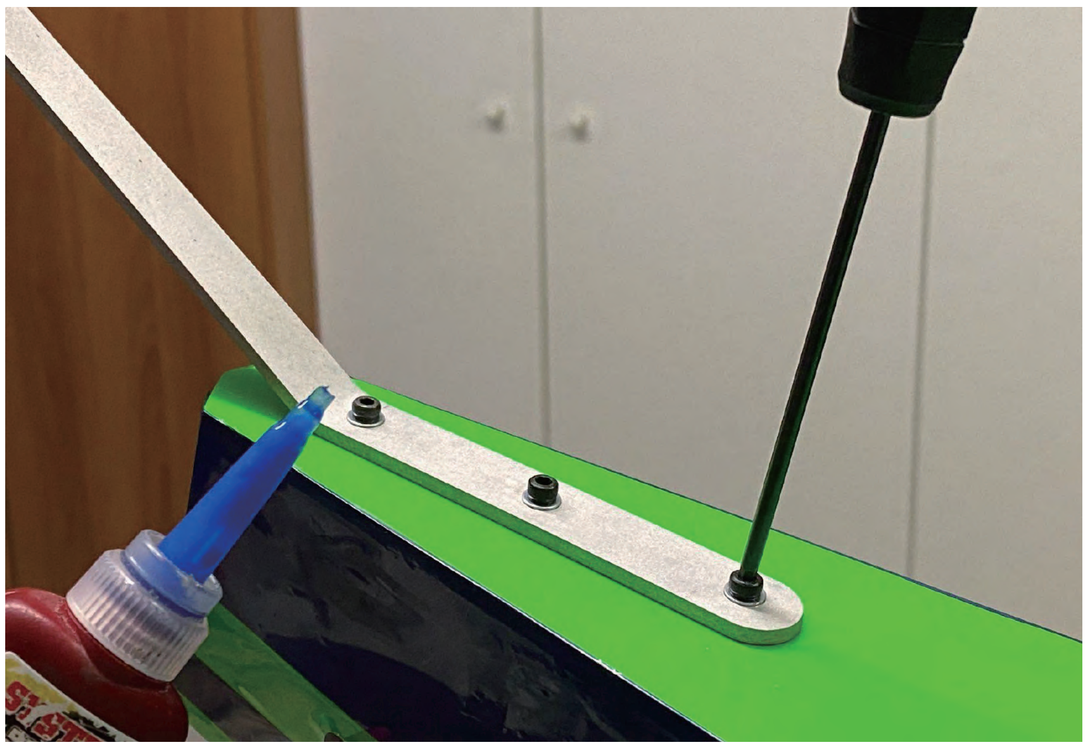


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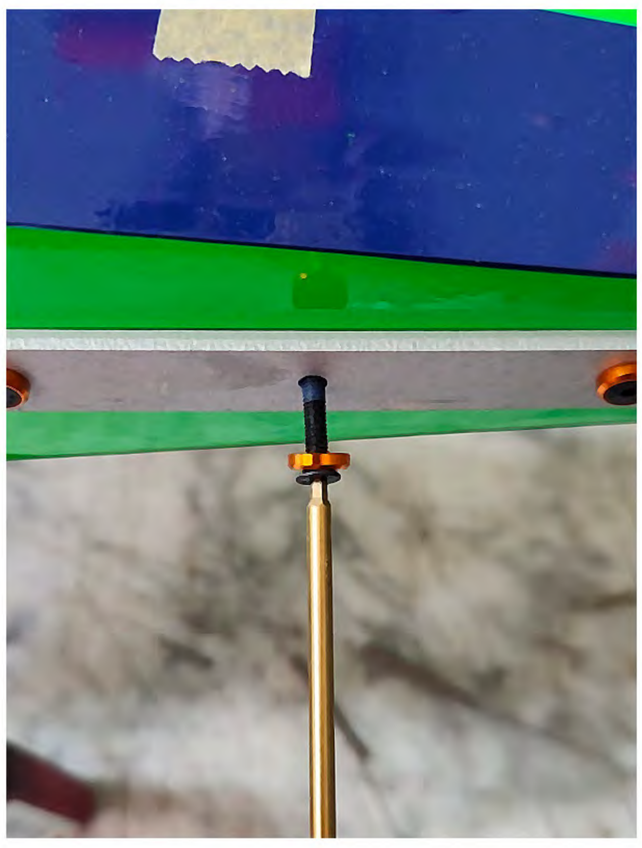
Install the tail gear with the provided socket head screws and washers, using threadlocker.



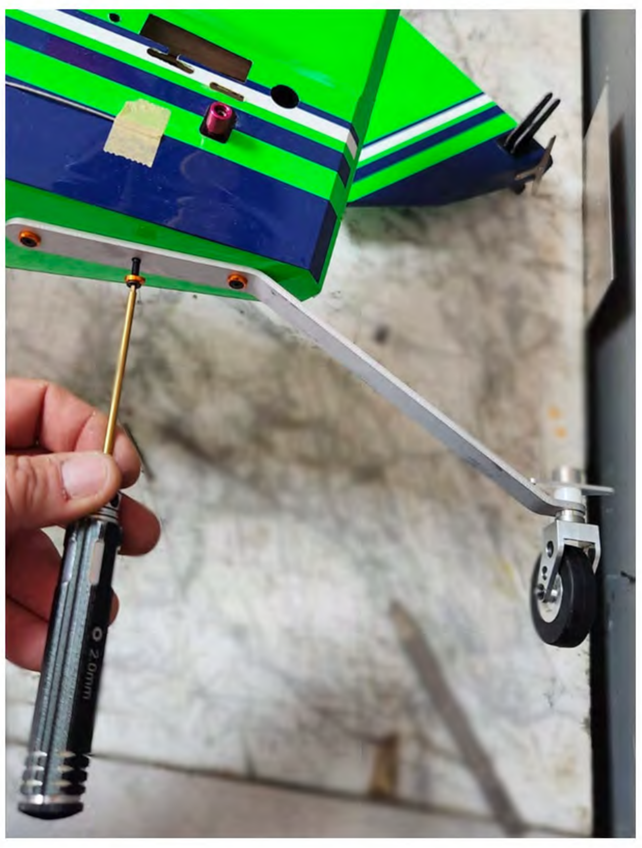
Tail wheel Assembly

Tail Wheel Installation

Install the tail wheel assembly using washers and socket head screws. Please apply anaerobic adhesive and lock three M3 fixing screws before installation.



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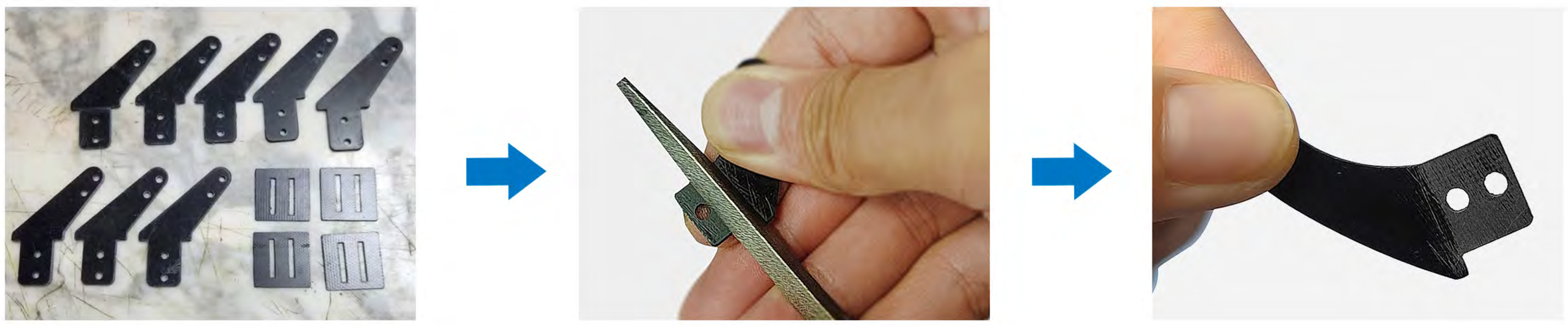
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Control Horns Assembly

① Carefully locate the slots which have been made on horizontal tails, wings, lightly cut through the covering but not into the balsa sheeting.



② Use sand paper to scuff up the bottom of the horns for a good glue bond. Try to insert it into the mounting slots to adjust the position first.



③ Put the control horns reinforcing piece, drop the horns in the holes,positioned correctly when the horns are directly above the hinge line,then stick masking tape around the reinforcing piece as shown in the picture, cut about 1mm inside with a knife and remove the covering, below to expose the pre-cut slots.



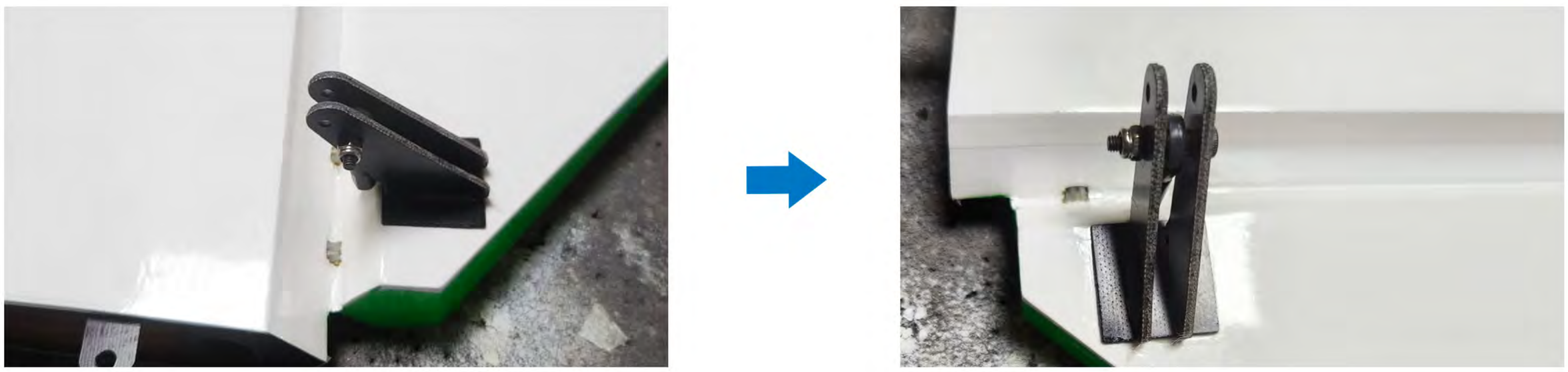
Servo Assembly and Wiring

Servo Assembly

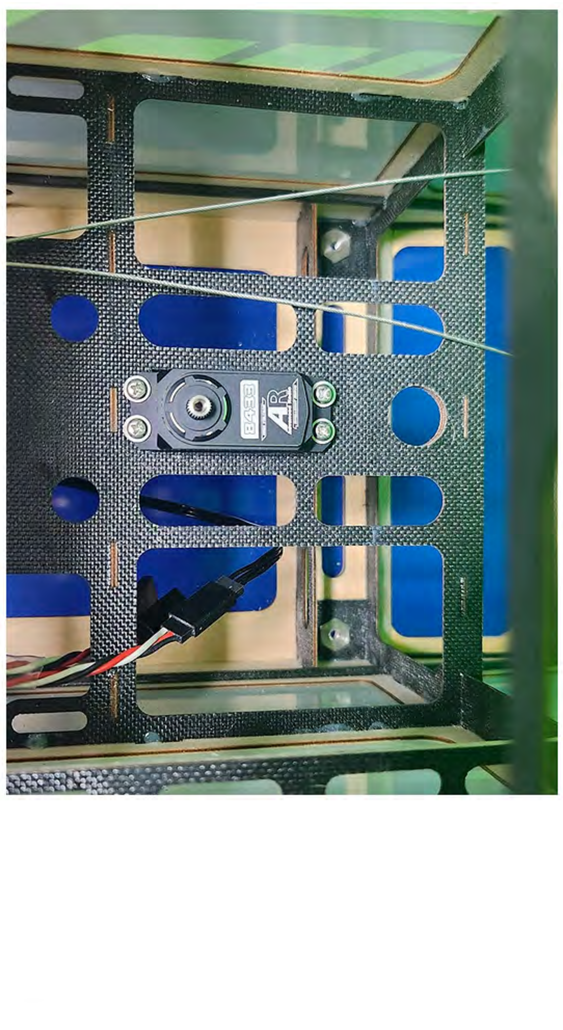
① Installing the 8433 servos using the stock linkage



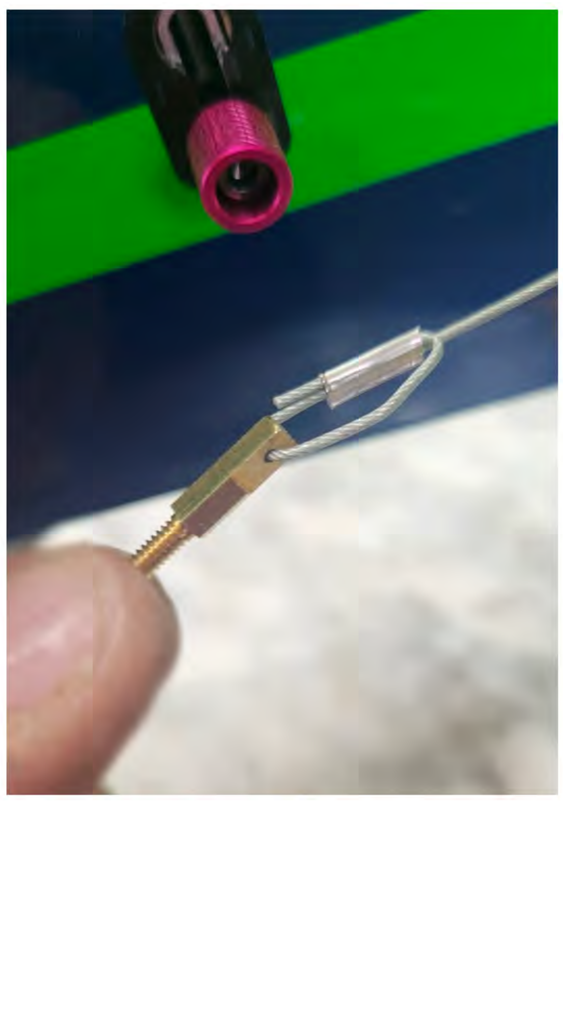
② Gluing in the elevator horns



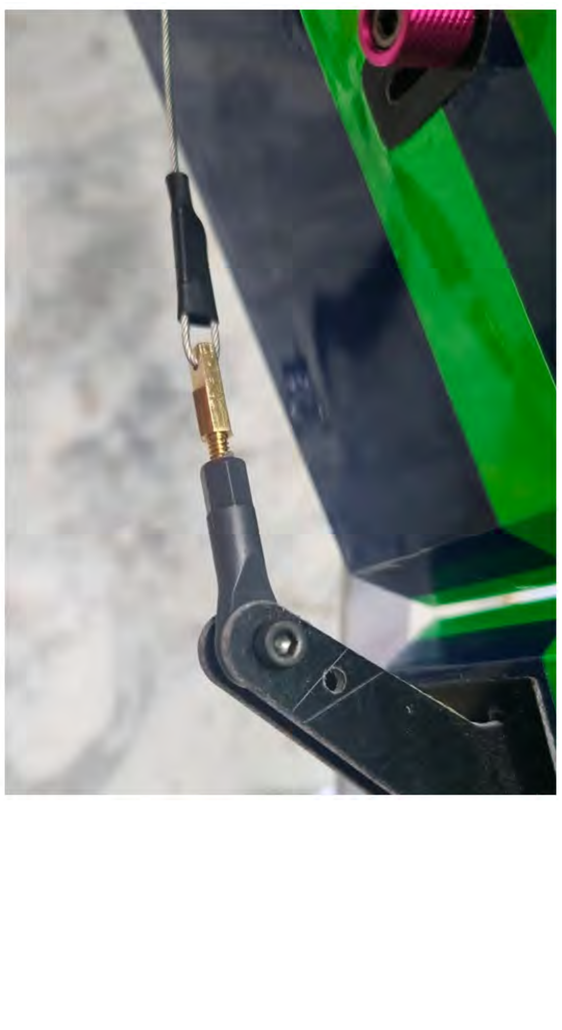
③ 8433 servo for the rudder



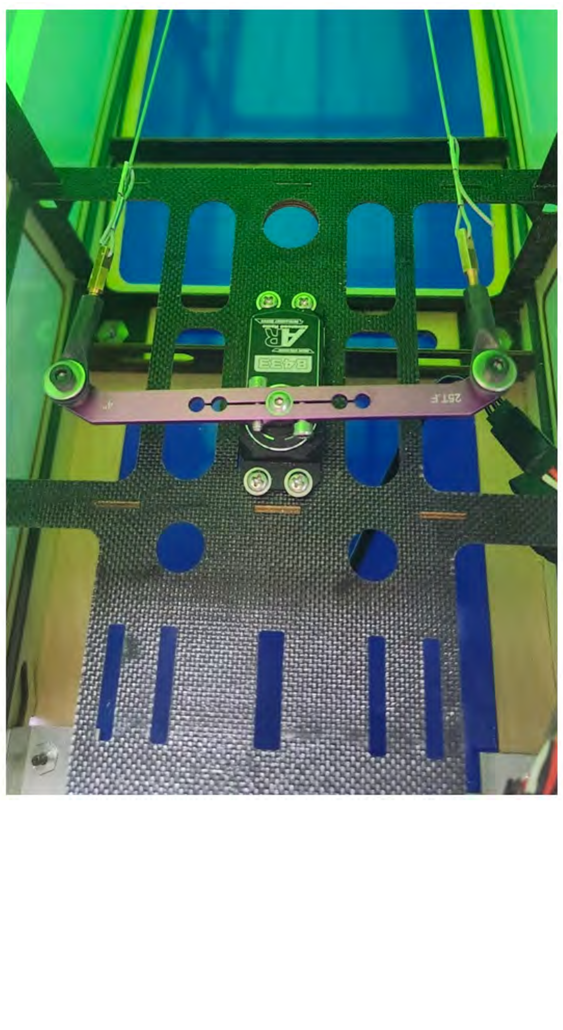
④ Rudder pull-pull arrangement



⑤ Ready and connected to the horn



⑥ Rudder servo done



Wiring



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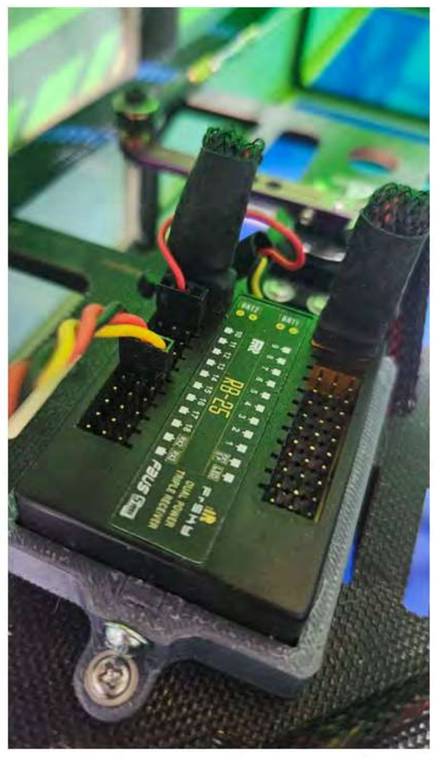
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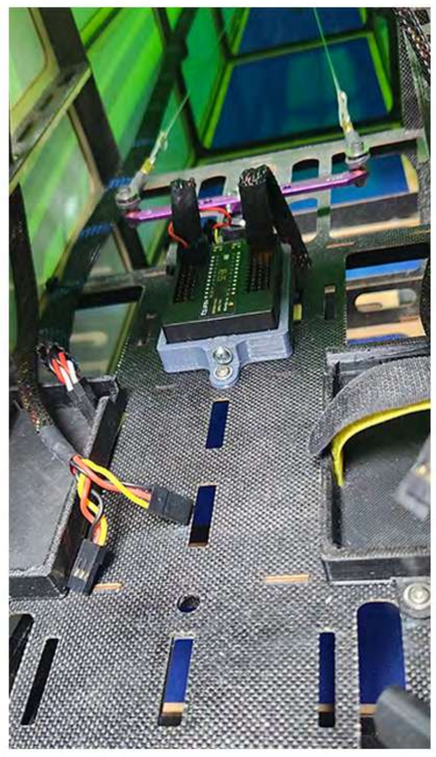
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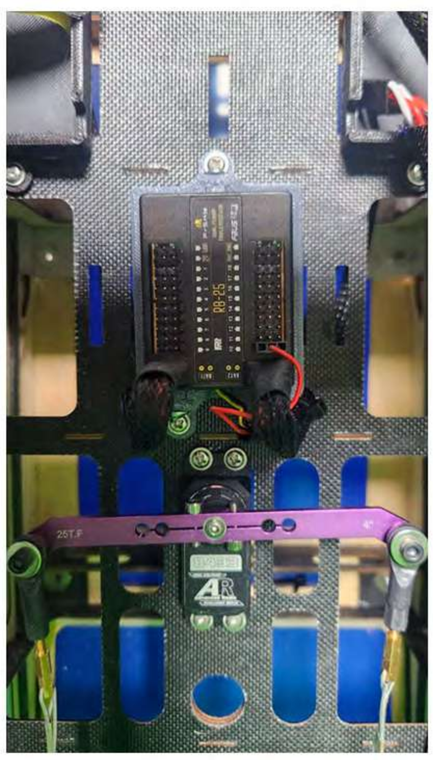
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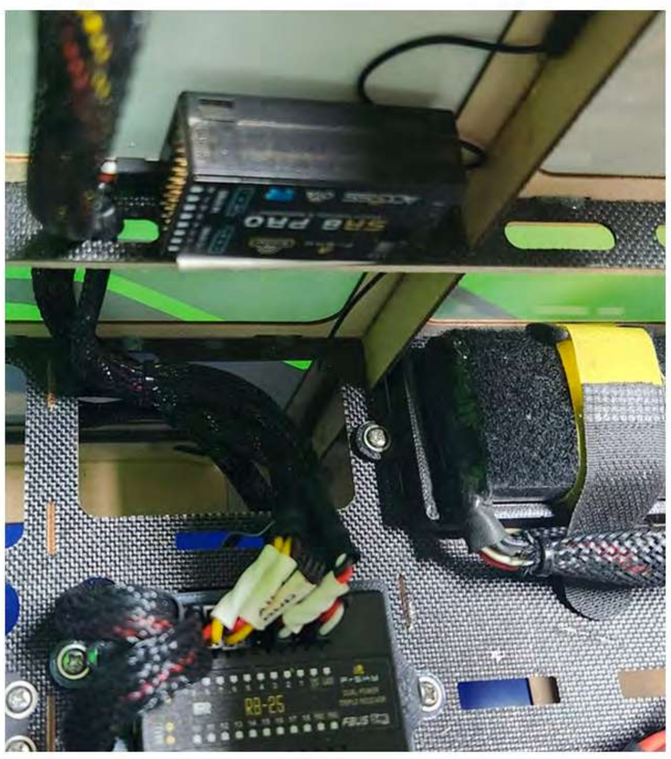
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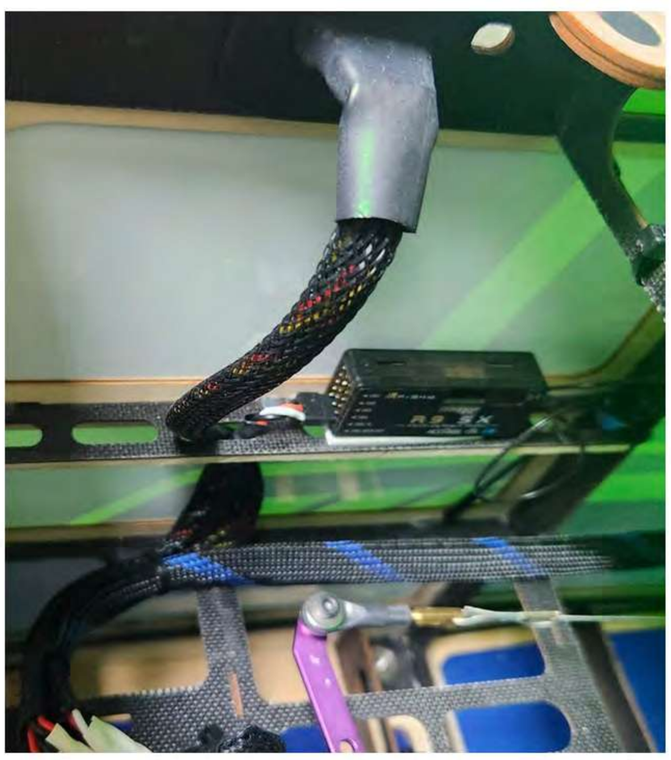
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Engine installation



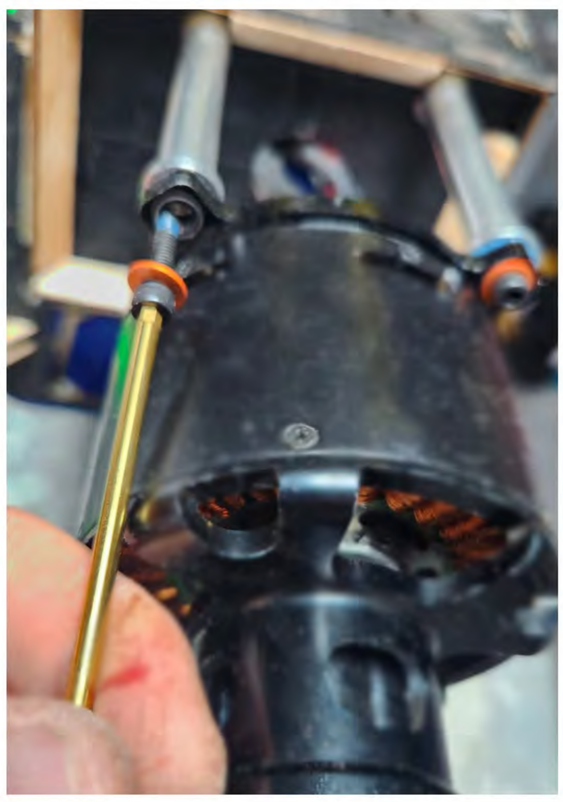
1

Marking the motor location, mounting the motor using the included firewall template is very simple

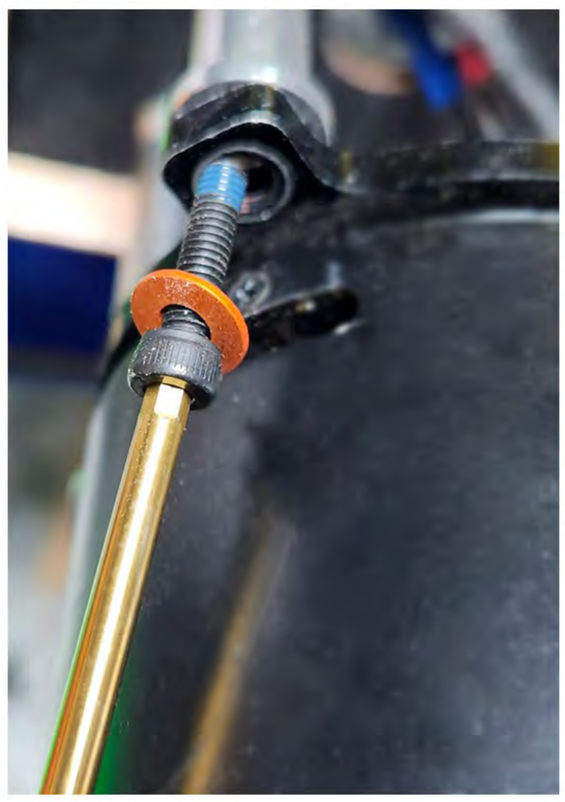
Turnigy 50cc electric motor,Mounting the motor on the included spacers



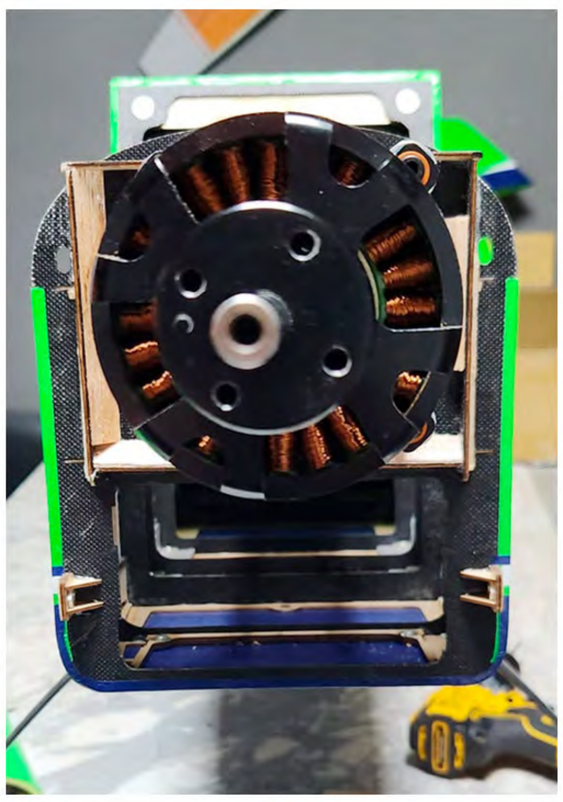
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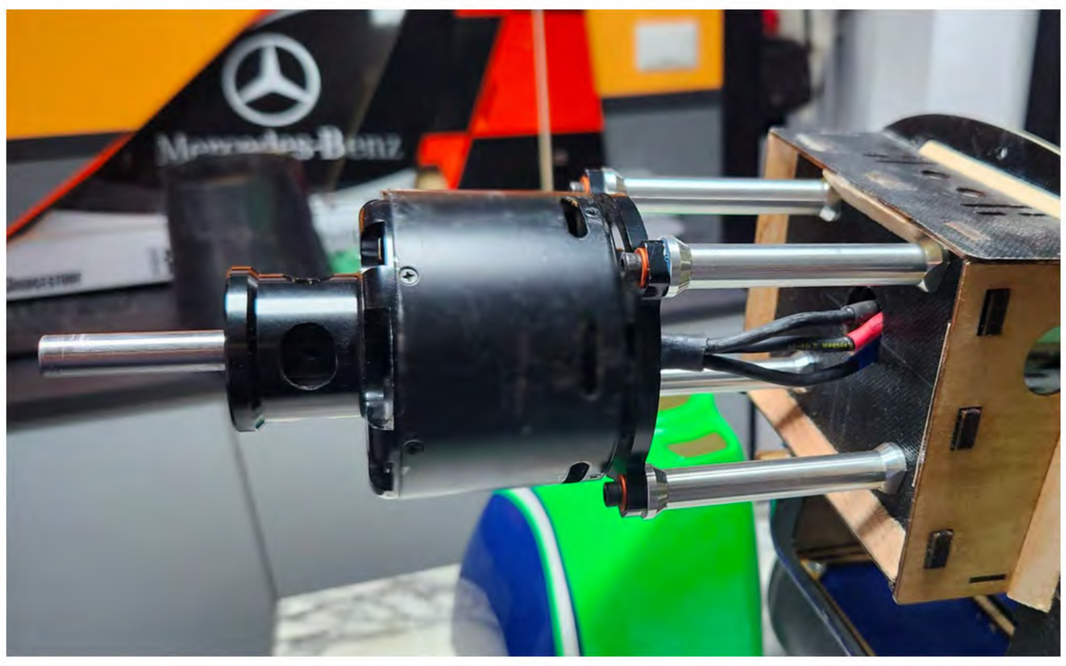
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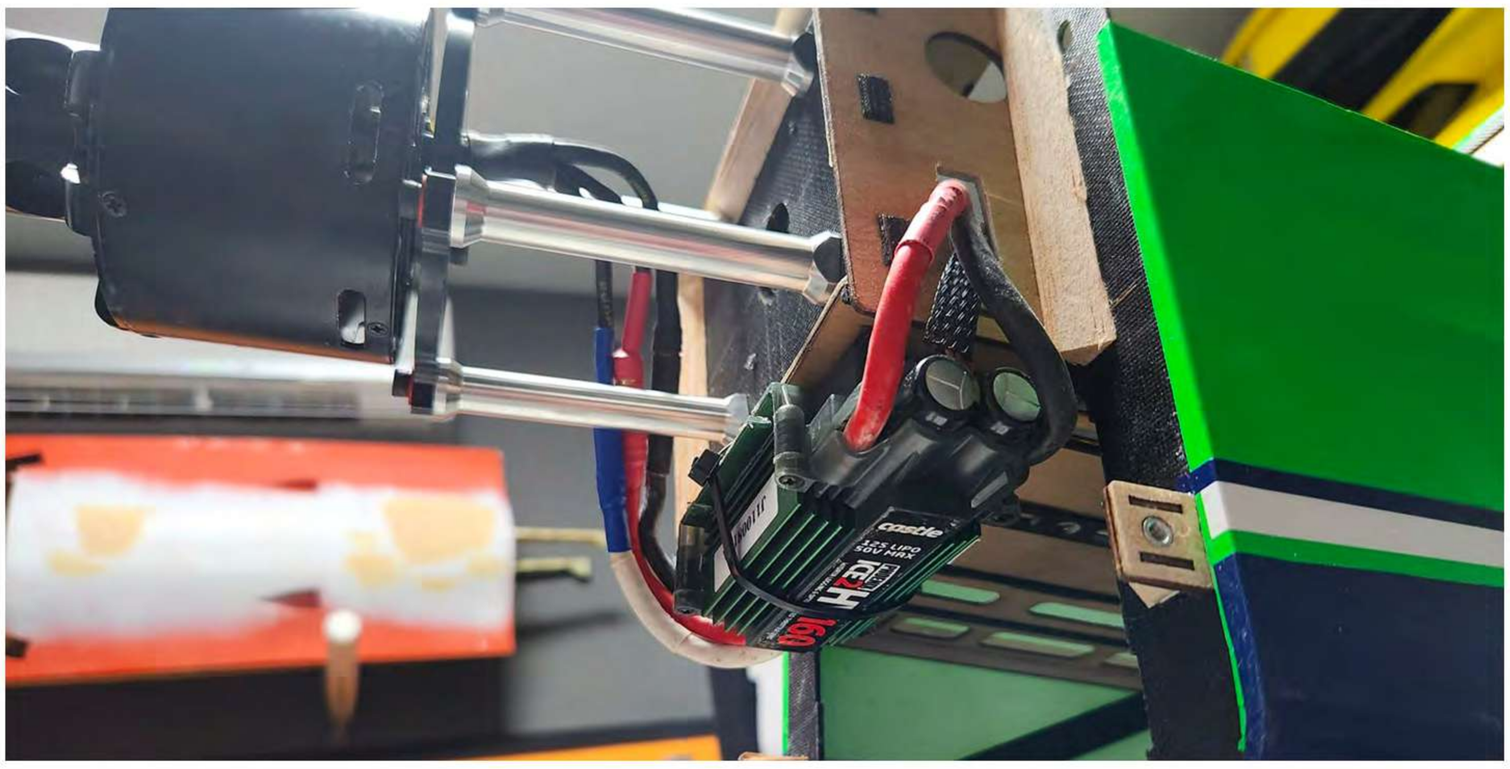
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Engine installation

After more consideration we decided to relocate the ESC to the bottom of the motor box for even better cooling



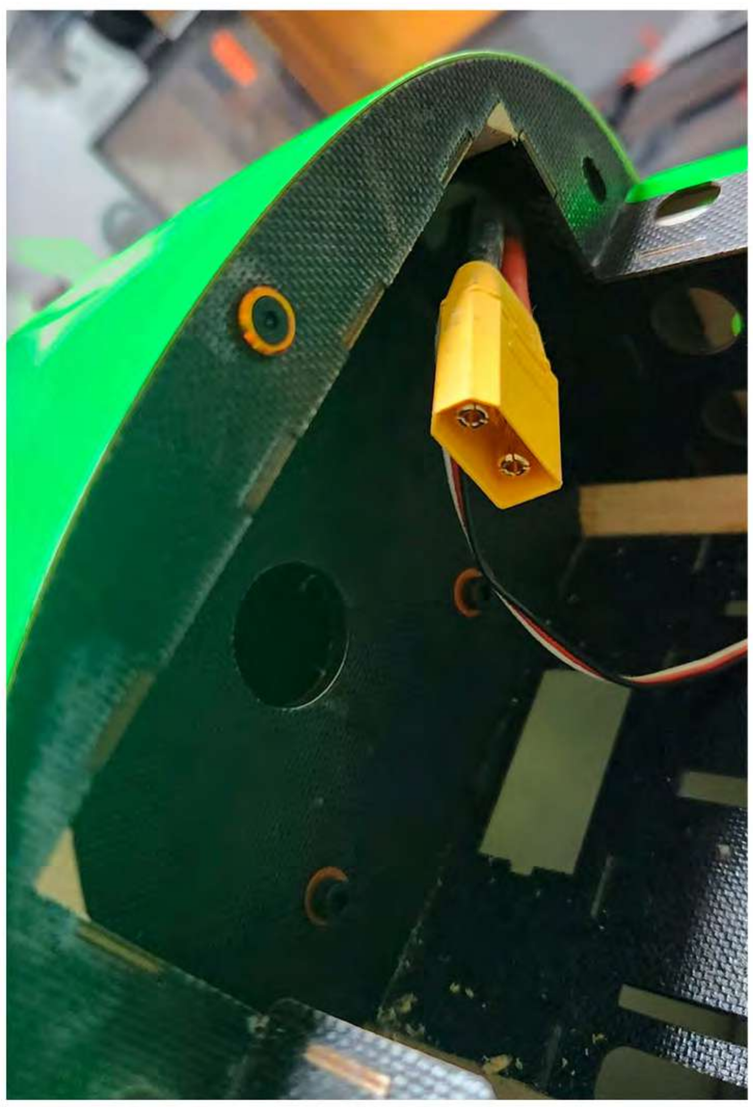
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Xt90 connector for motor 12s packs

Stock openings in the bottom hatch would be great to vent hot air out of the fuselage

Air vanes open



9



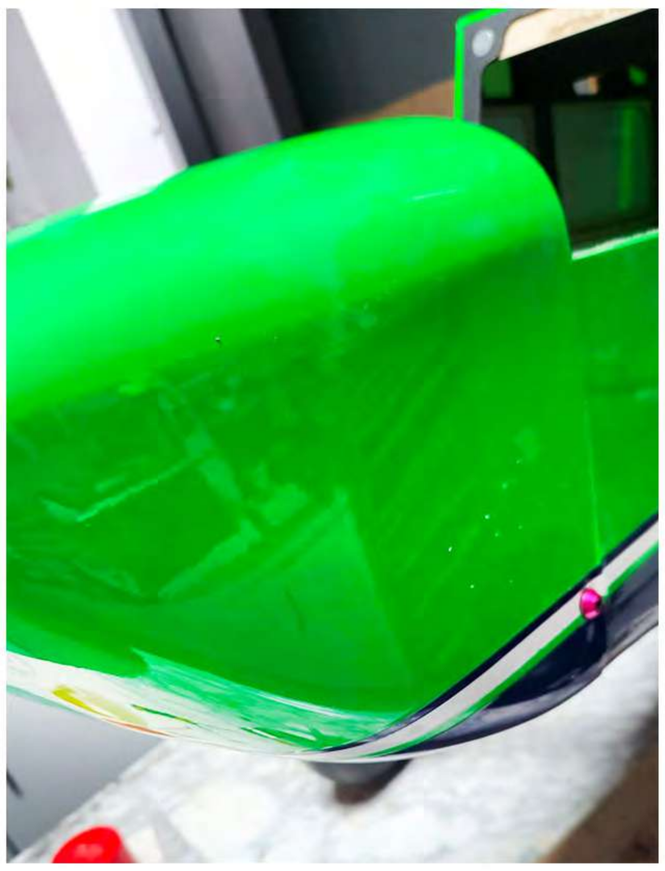
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Cowl installation

Mounting the cowling



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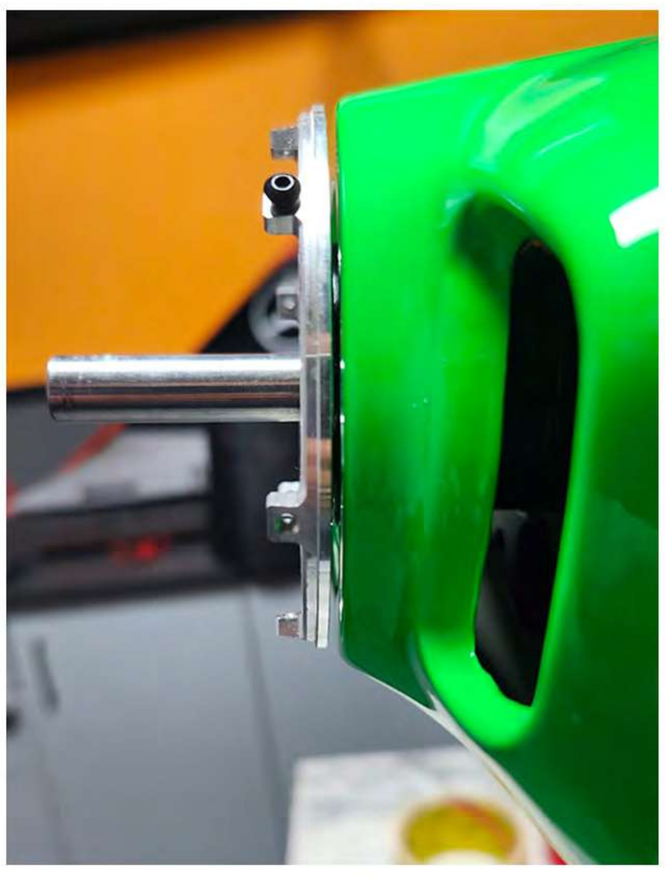


2



3

Spinner fits perfectly



4



5



6



For customer support in the USA, please contact Ohio Model Products in Ohio.

Tel: +1-614-733-9488 (9am -5pm, ET)

Email: support@omphobby.com

Website: www.OhioModelProducts.com

For customer support outside of the USA, please contact OMPHobby in China.

Email: store@omphobby.net

Website: www.omphobby.com

Disclaimer and Safety

- This product is not a toy. It is not recommended for children under age 14.
- Fly the airplane by abiding by local laws and rules.
- Fly the airplane in a designated location, and always maintain visual contact of the aircraft.
- Avoid flying directly over unprotected people, moving vehicles, and occupied structures.
- Read the safe code of AMA before flight. The guideline can be downloaded from the following link: https://www.modelaircraft.org/sites/default/files/documents/100.pdf