OMPHOBBY®

Global Professional RC ModeL Brand

Installation Manual

78" Bighorn Airplane



Zhuhai Edge smart drive technology Co., Ltd

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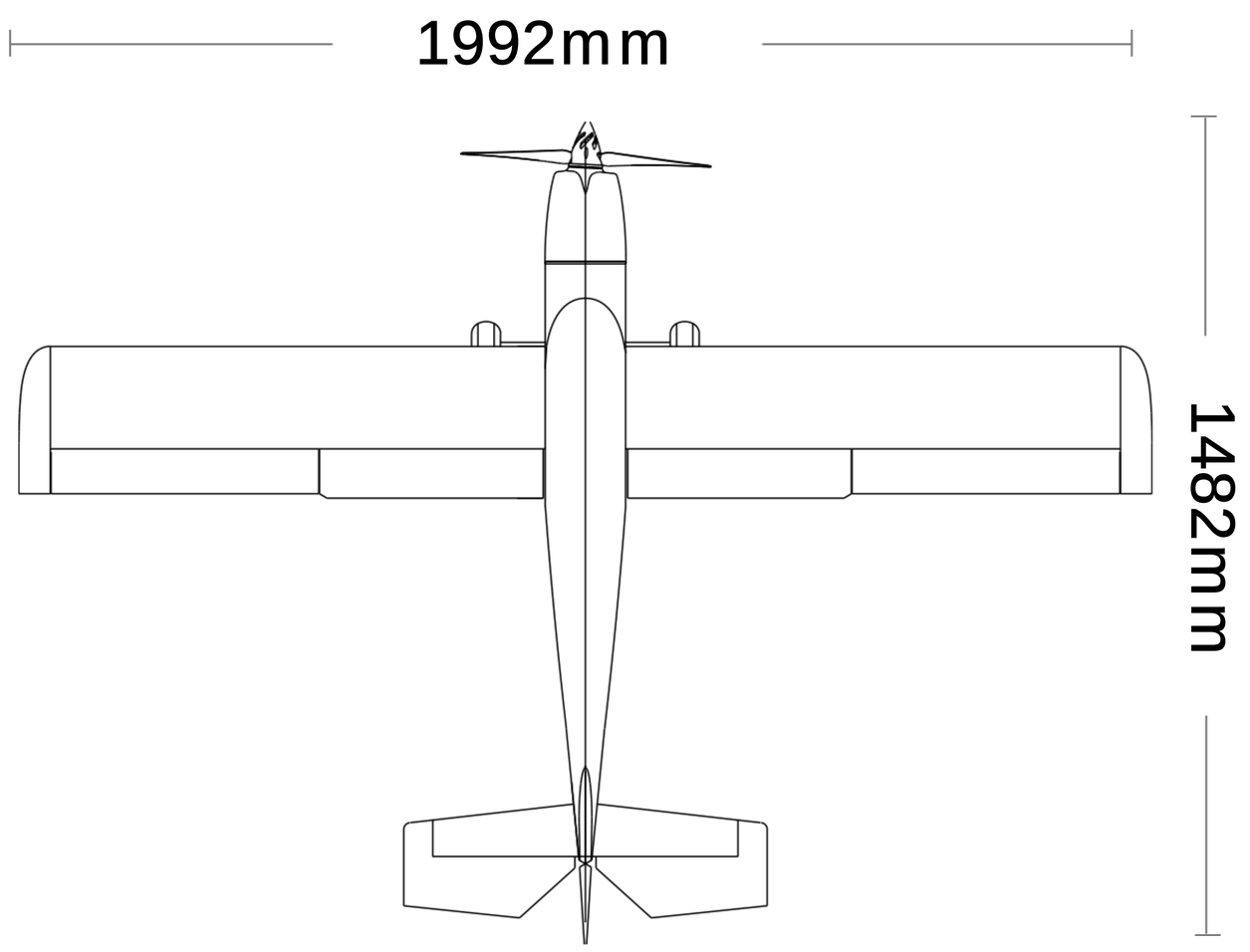
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78" Bighorn Balsa Wood Airplane

The aircraft design combines the flight performance of a sports plane with the easy handling characteristics of a trainer, offering a flying style that appeals to everyone from beginners to advanced pilots. Additionally, the Bighorn 78Pro features large flaps on its wings, providing the aircraft with remarkable short takeoff and landing capabilities. Equipped with a large rudder and lift-enhancing design, this plane is capable of performing aerobatic 3D maneuvers. This is exactly what you've been looking for in a 3D sport balsa wood monoplane.



Product Specification



Right thrust	Down thrust	Main wing incidence	CG
3°	4°	1°	85-90mm

Wing Aera	Weight	Wing loading	Flight duration
52.71dm2	4200-4300g	79.68-81.58g/dm2	4-8min

Spinner	Prop	Motor
2.5in	16x8	X4125III 480KV

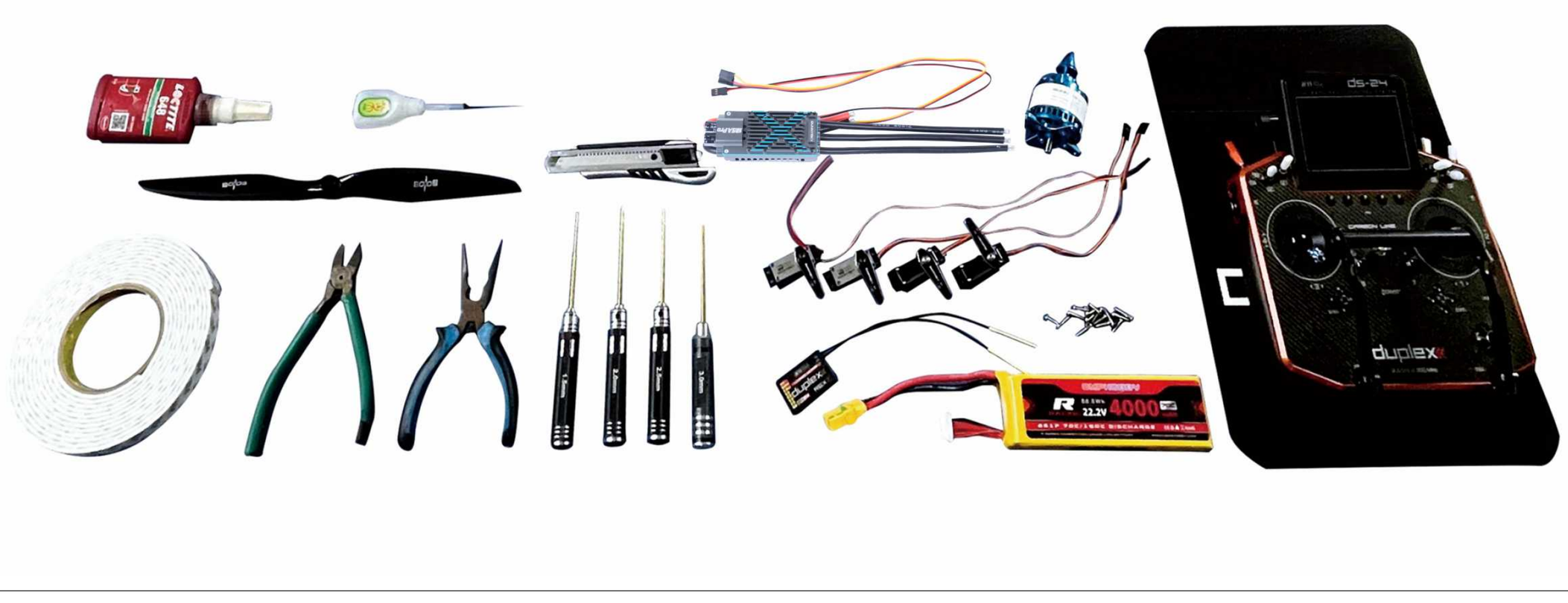
EsC	Battery	Servos
105A (BEC7.4v 10a)	6s3700-5200mAh	5*10 kg.cm and above 2*7 kg.cm and above

Aileron	Elevator	Rudder	Flap	retractable
servo*2	servo*2	servo	Yes	No

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

① Display the required parts

② Screws pass through the landing gear and tighten the metal components.
(Apply glue to screws)

③ Install the main wheel, thread the screw through the nut, and tighten the main wheel to ensure it can rotate.(Apply glue to screws)

④ Unscrew the bolts and install the landing gear in the designated position.
(Apply glue to screws)



1



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Tail wheel Assembly

Tail Wheel Installation

① Display the required parts

② The metal rod is connected to the idler wheel.(Apply glue to screws)

③ thread the metal rod through the ball joint on the rudder.

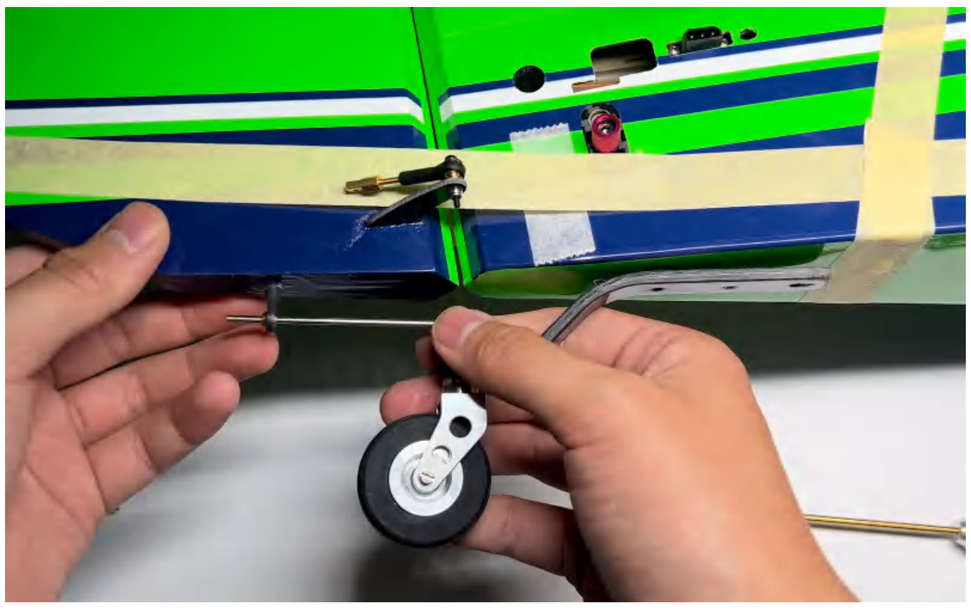
④ Then tighten the two tail wheel screws.(Apply glue to screws)



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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.



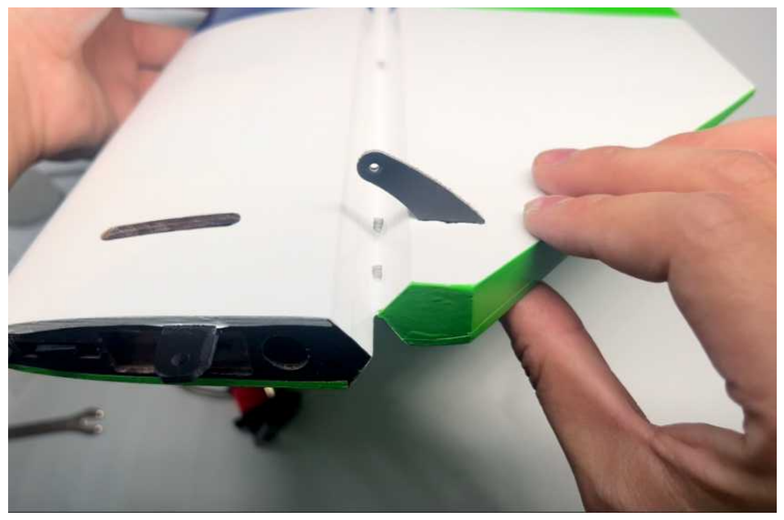




③ Put the control horns reinforcing piece, drop the horns in the holes,positioned correctly when the horns are directly above the hinge line,then stick masking tape around the reinforcing piece as shown in the picture, cut about 1mm inside with a knife and remove the covering, below to expose the pre-cut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





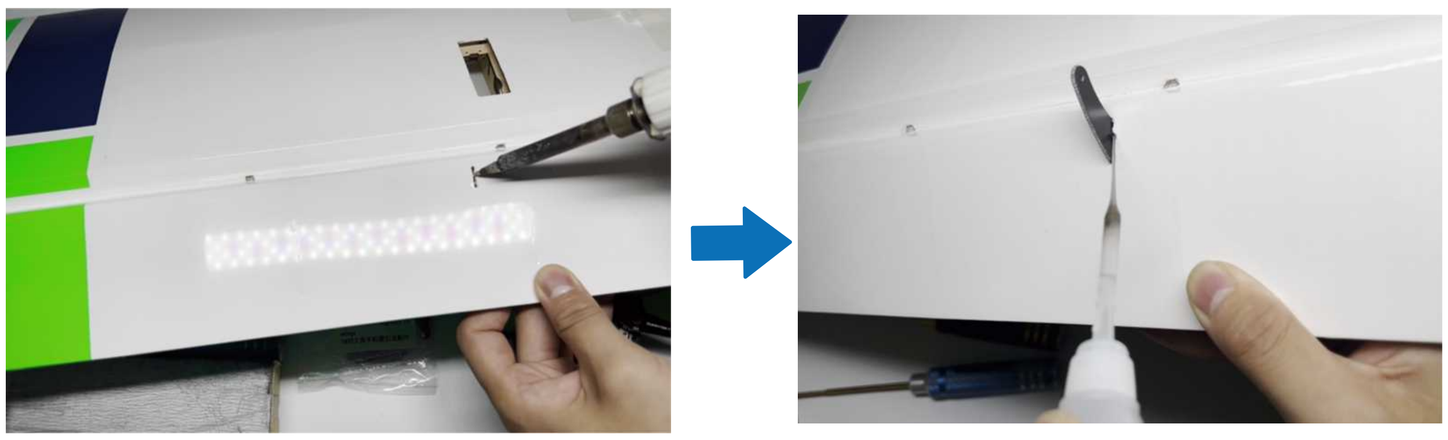


Wing Assembly

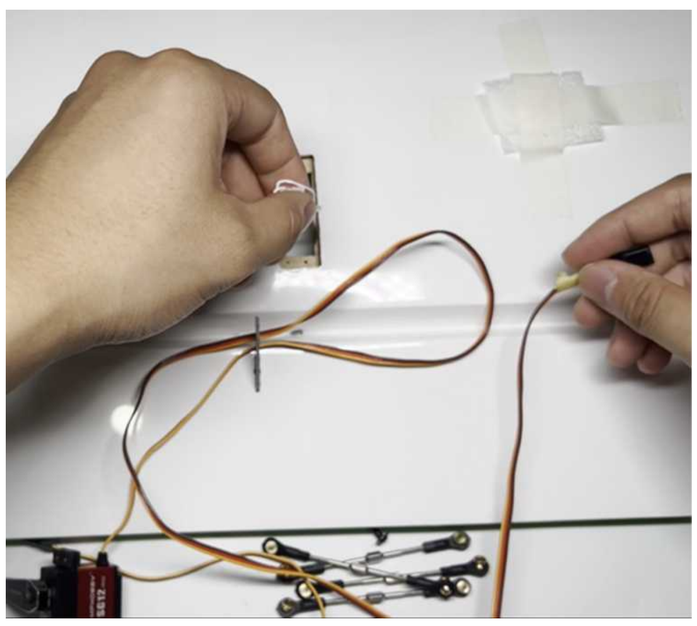
① Display the required parts

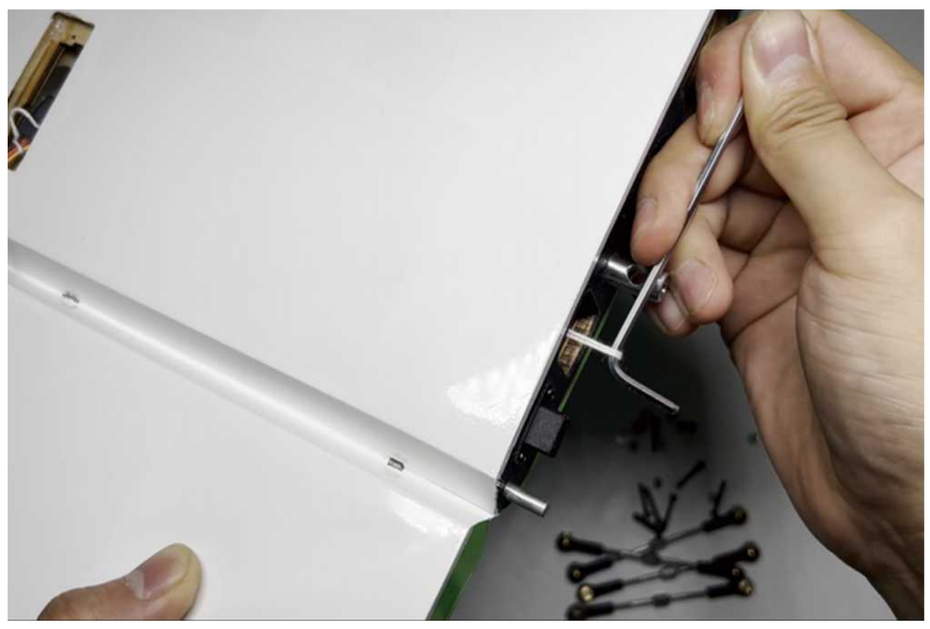


② Locate the reserved control horn position beneath the wing servo hole, then open and install.

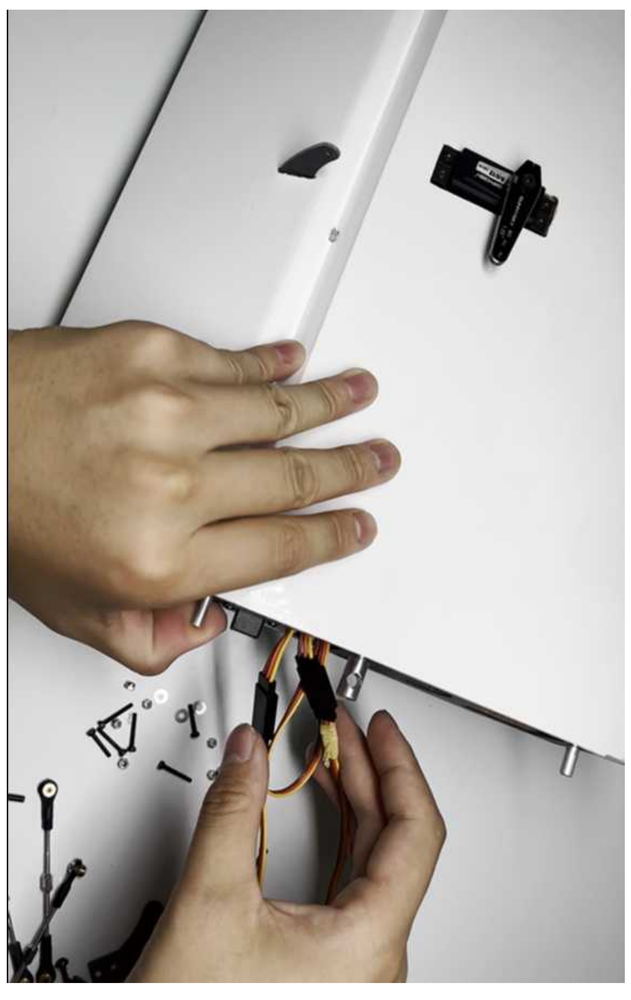


③ There is a white line at the wing servo location where you can secure the servo connection wires and pull them out from inside the wing.

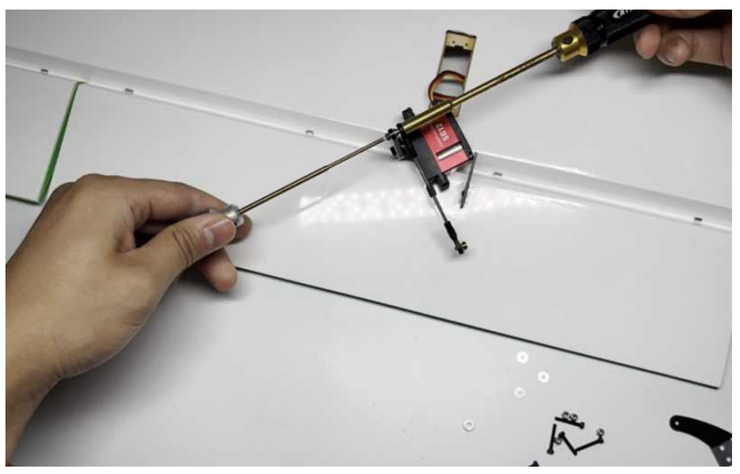




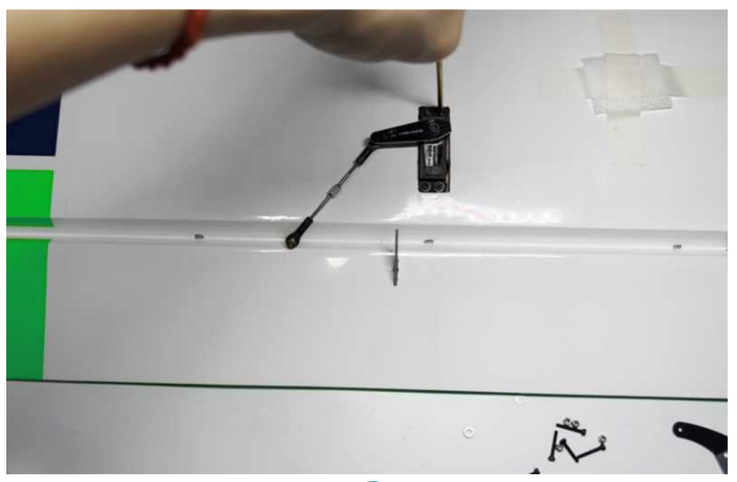
④ Connect to the interface inside the wing



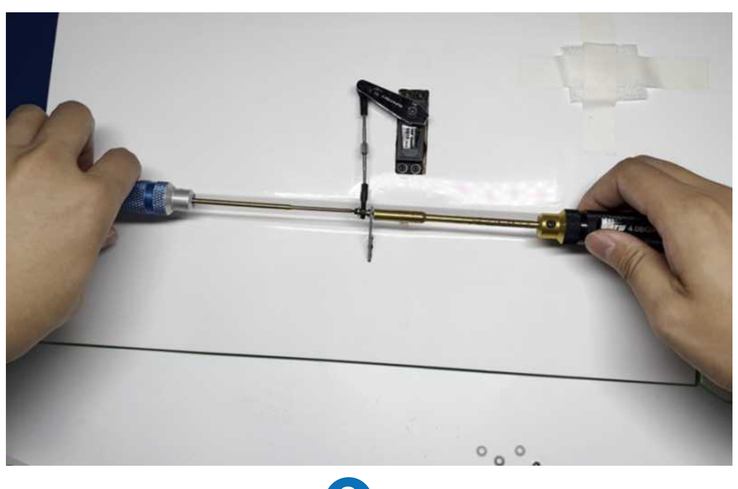
⑤ Install the servo and connect it to the control horn using a ball joint rod.



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Rudder Assembly

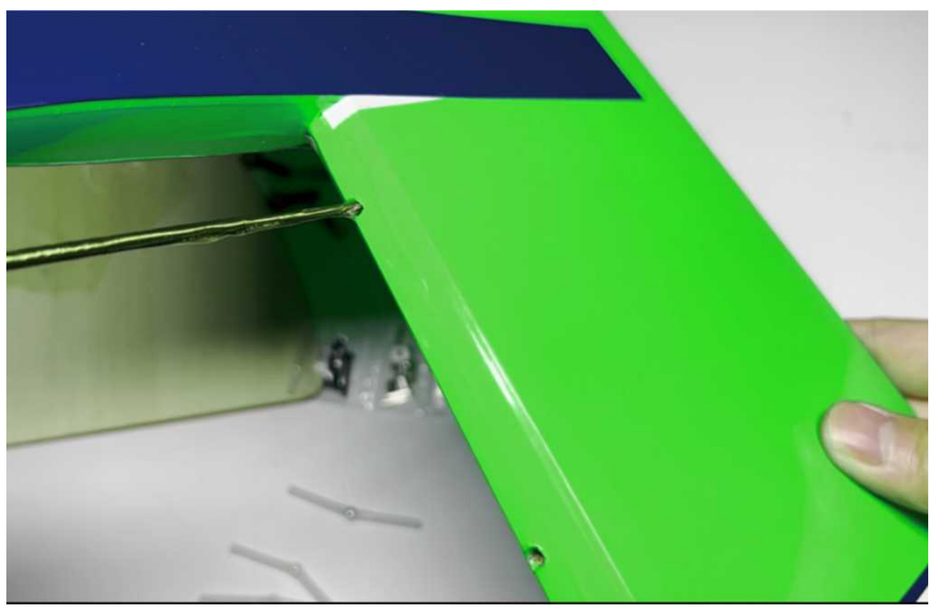
① Locate the reserved control angle position beneath the rudder.

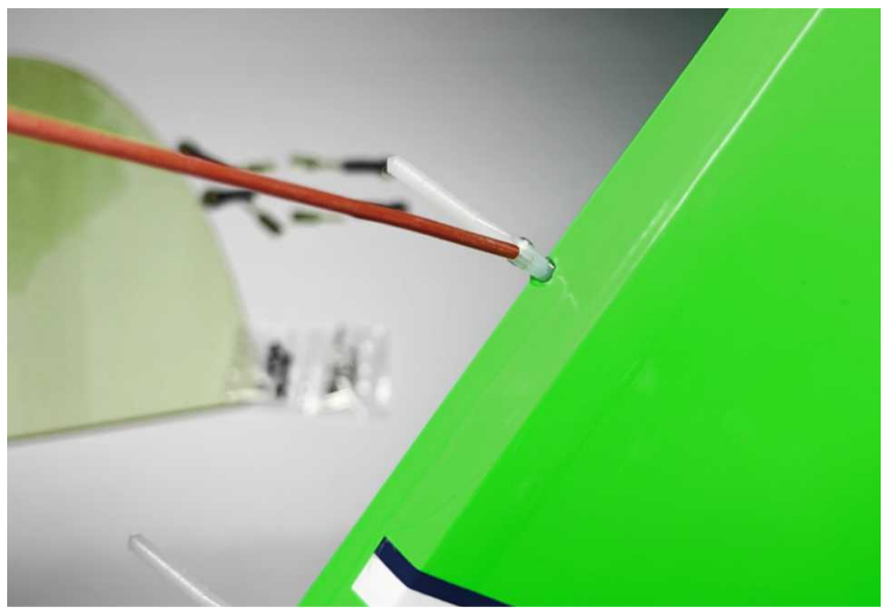


② Install the control horn



③ Apply adhesive to the rudder hinge location and spray lubricant on the bend.





④ Apply adhesive to the rudder hinge location and spray lubricant on the bend.



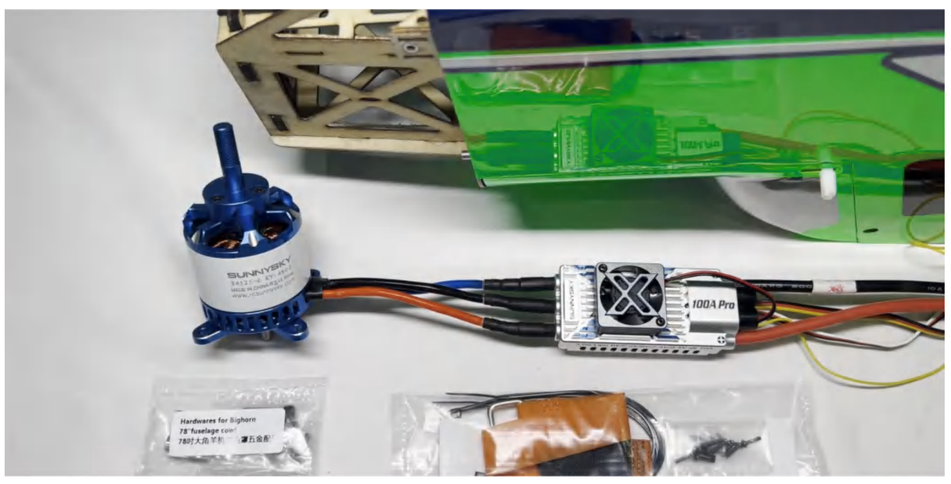


⑤ Install the ball-end rod



Motor installation

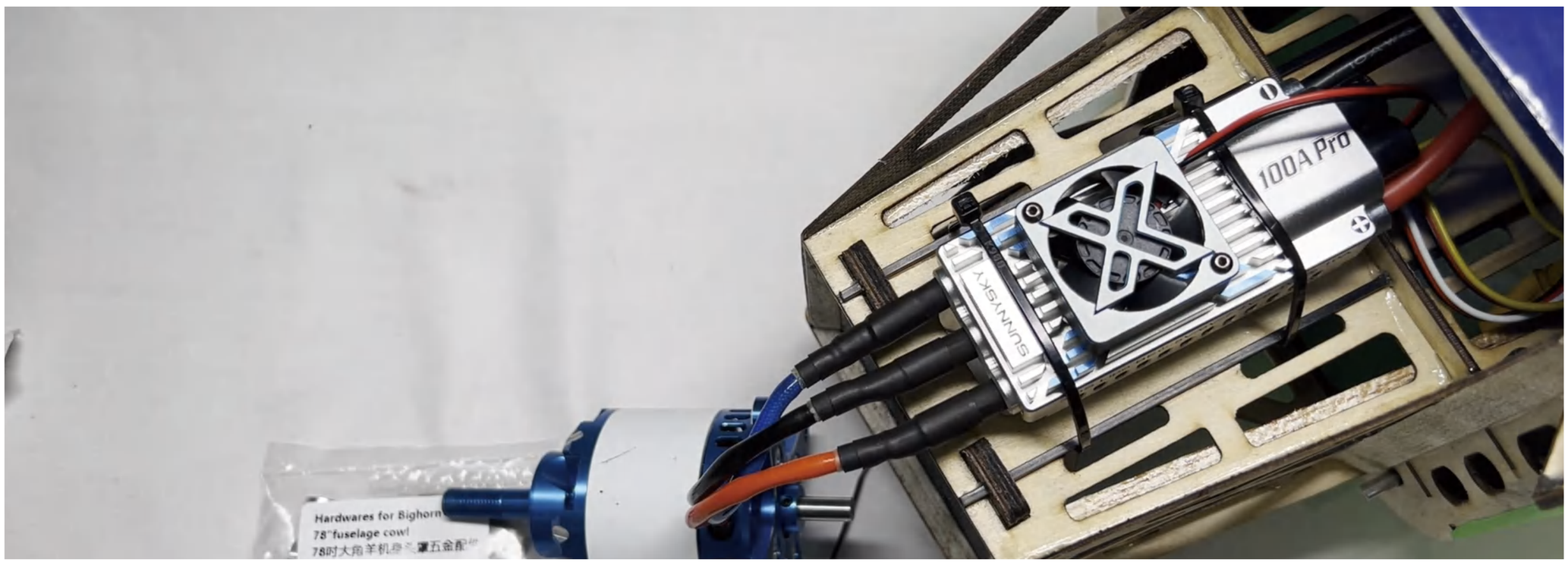
① Display the required parts



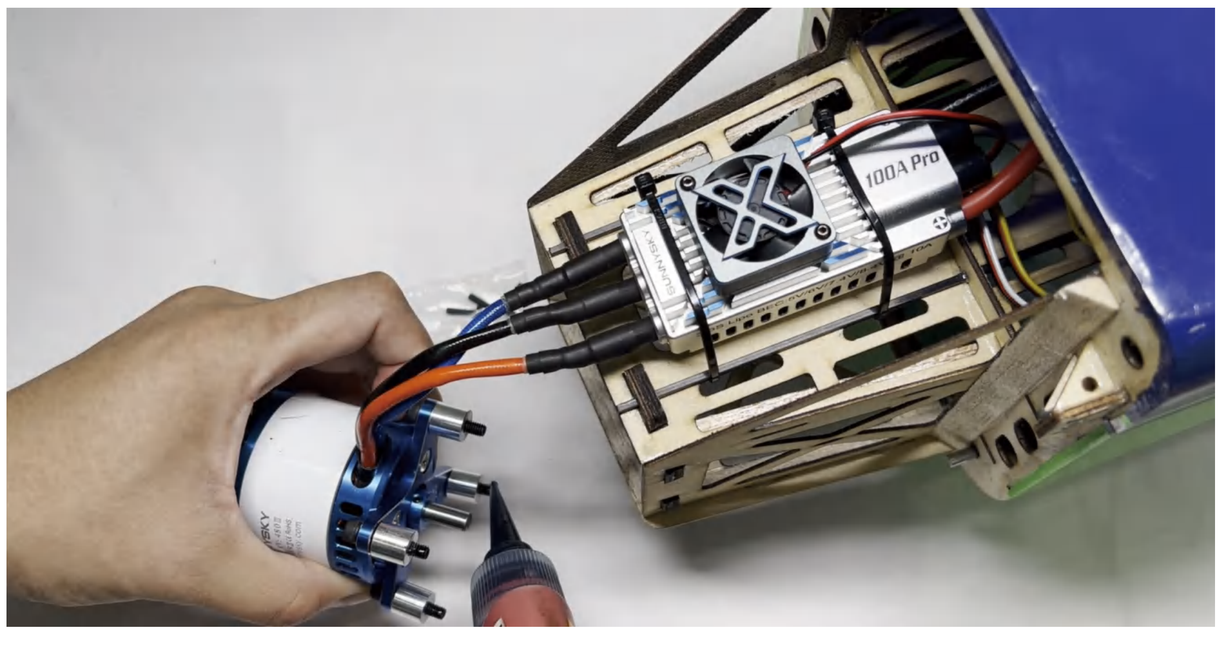
② Peel o□ the double-sided tape beneath the ESC.



③ Secure the ESC with wire ties and trim o□ any excess.



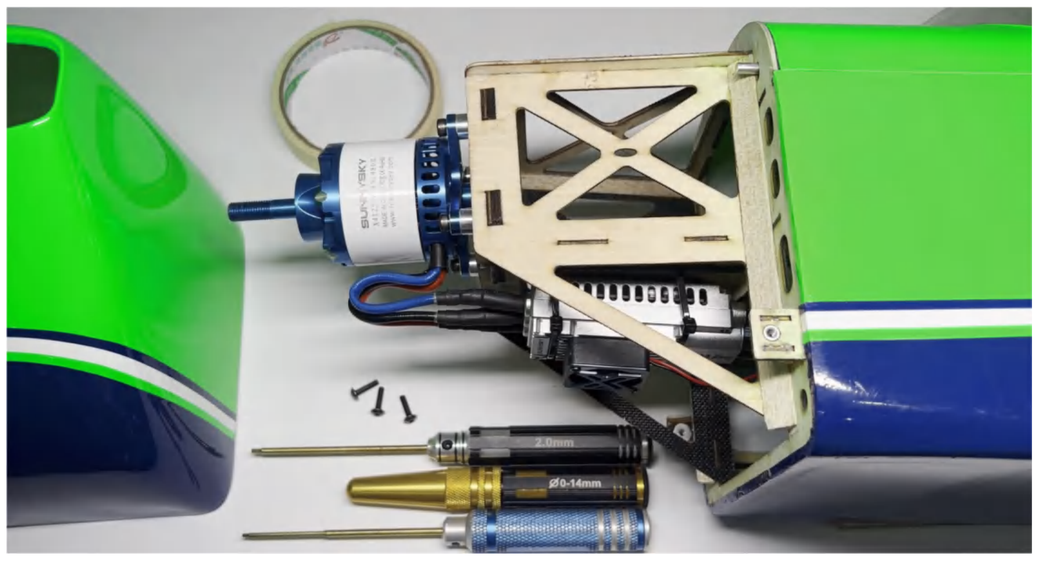
④ Install the four screws and support pillars, position them in the designated locations, and tighten securely.(Apply glue to screws)



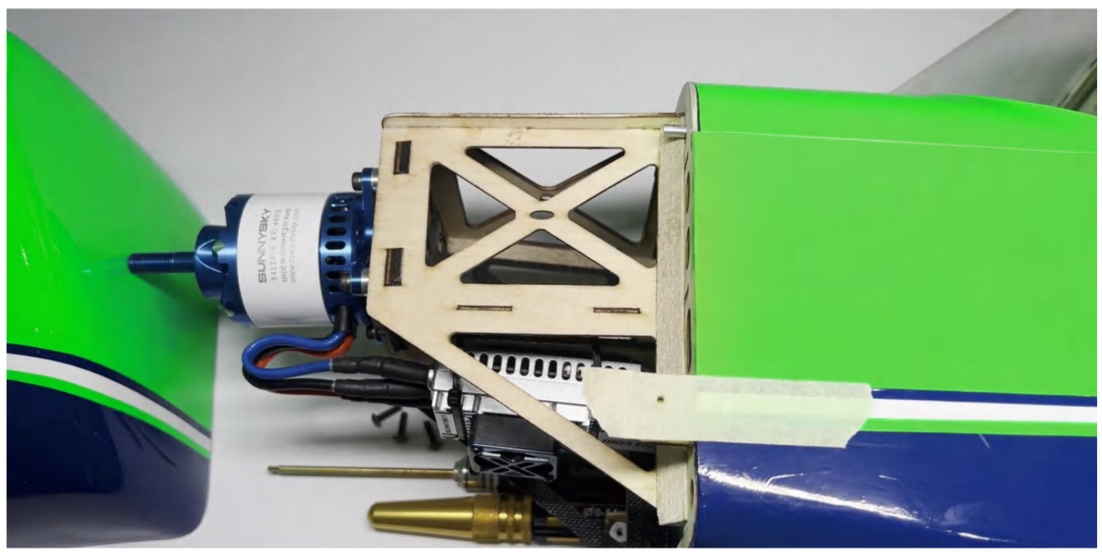


Cowl Assembly

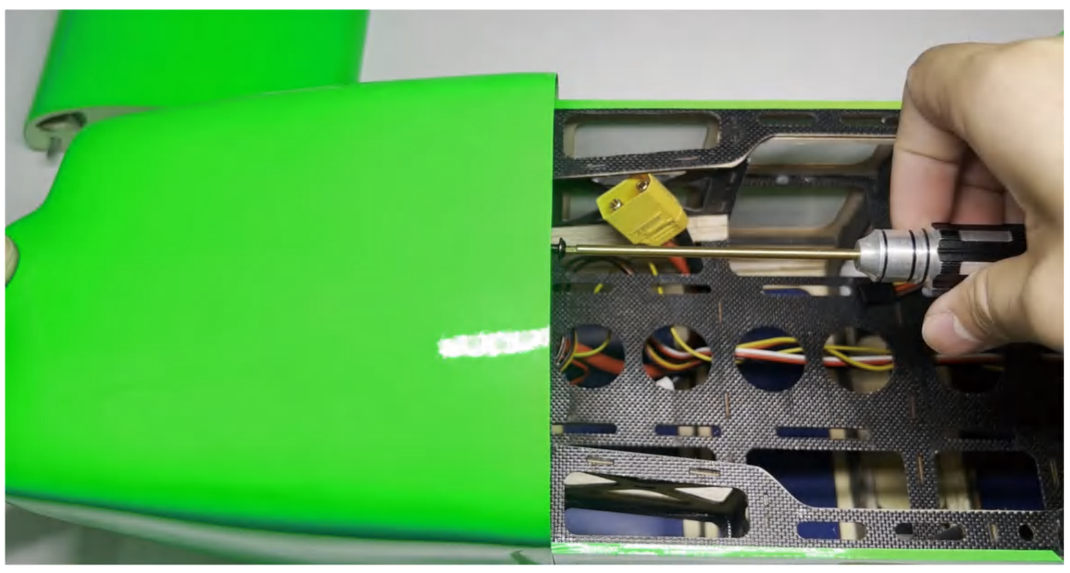
① Display the required parts



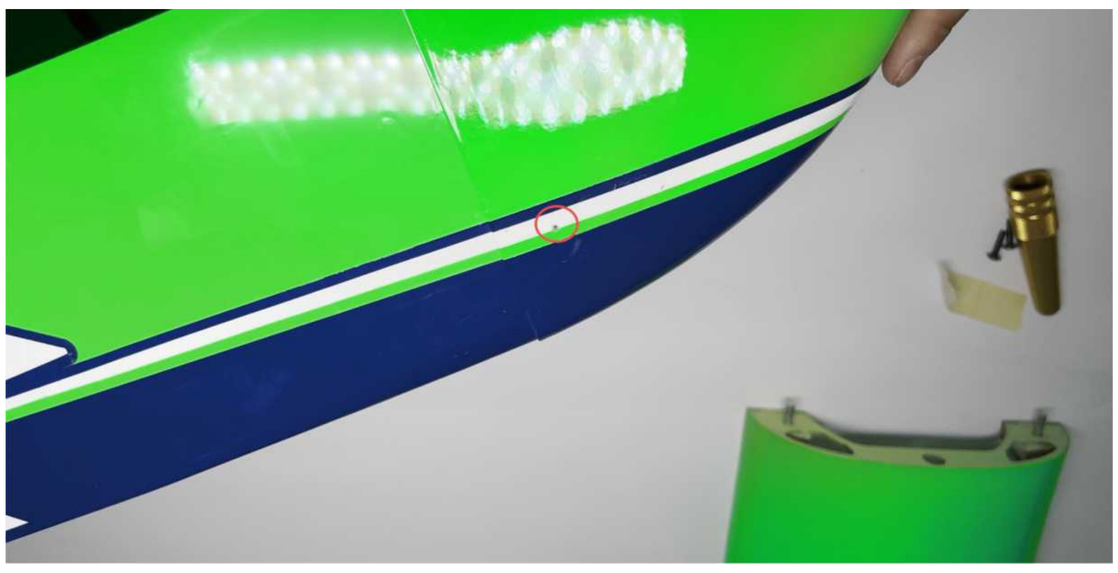
② Apply the sticker and mark it properly.



③ Install the hood, remove the canopy, and □rst secure the position above the hood with screws.(Apply glue to screws)



④ Mark the position and drill a hole.(To tighten the screw, excessive force is not required.)



⑤ Screw on the bolt(Apply glue to screws)

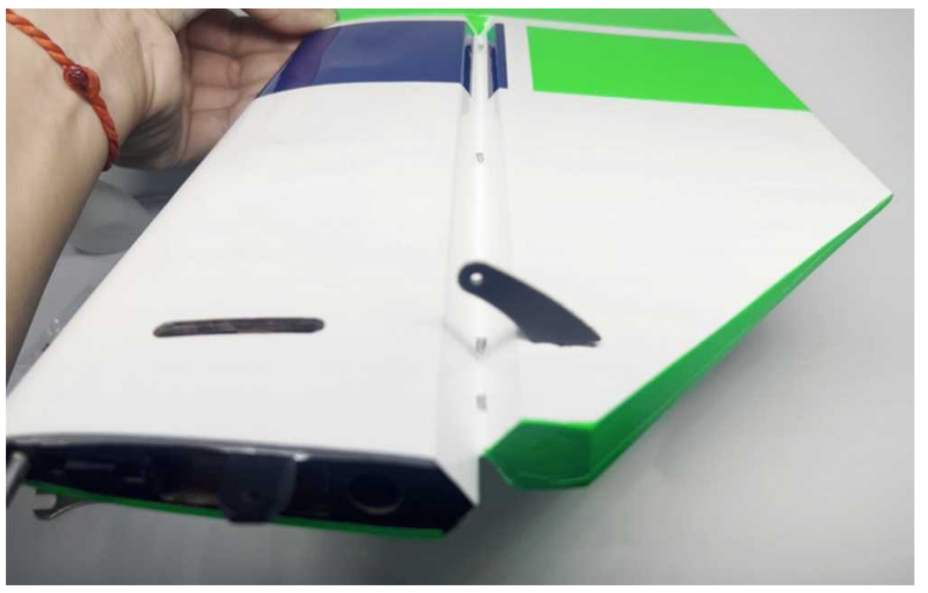


Elevator Assembly

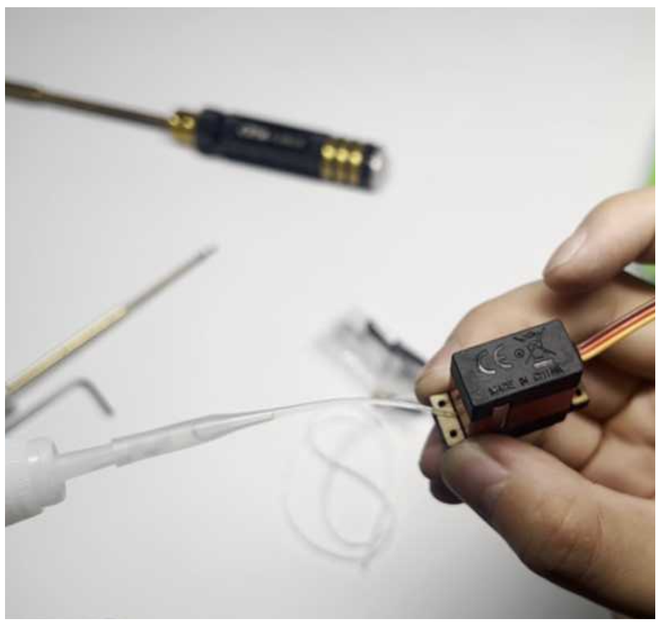
① Display the required parts

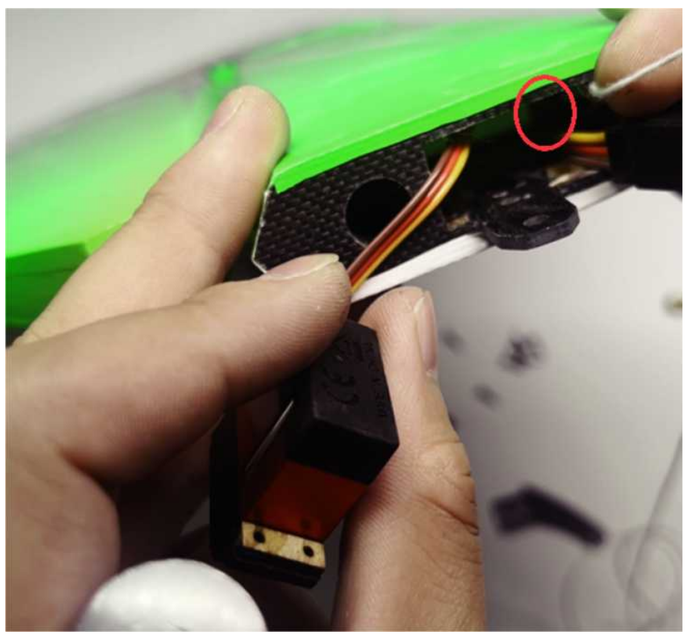


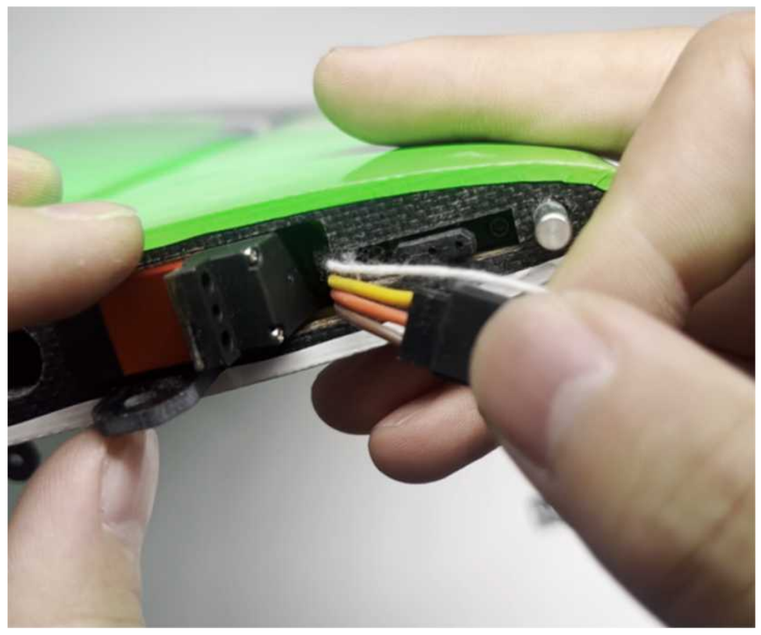
② Install the control angle according to the installation steps.



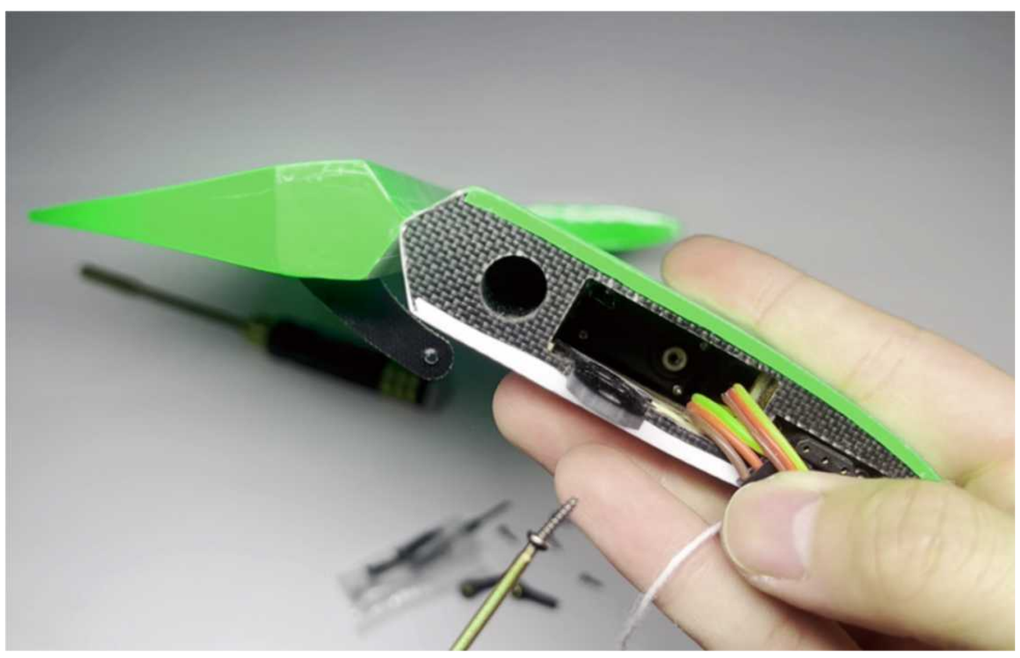
③ Glue the small wooden pieces to both sides, `route the servo wires around the struts, and insert the servo into the horizontal stabilizer.







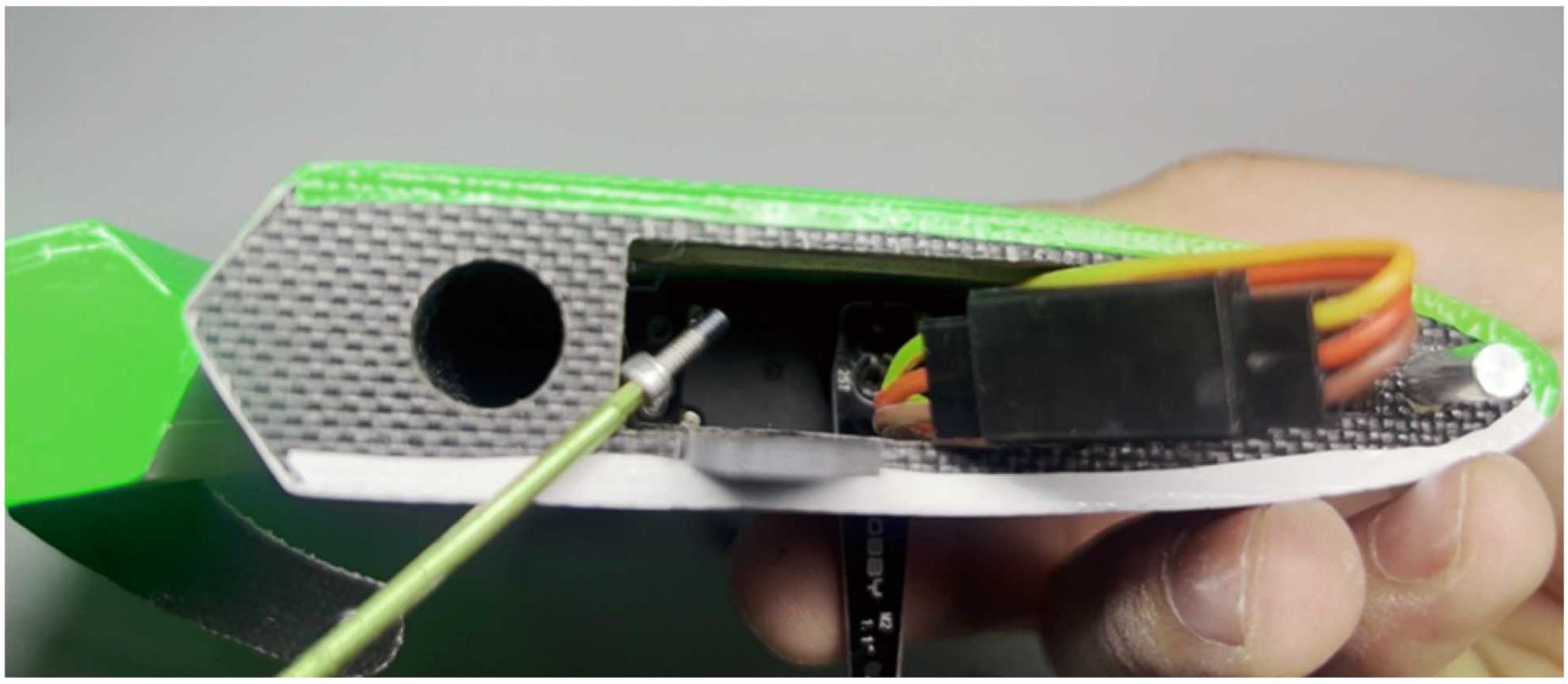
④ Secure the servo with screws.



⑤ Control cable connecting the servo to the horizontal stabilizer



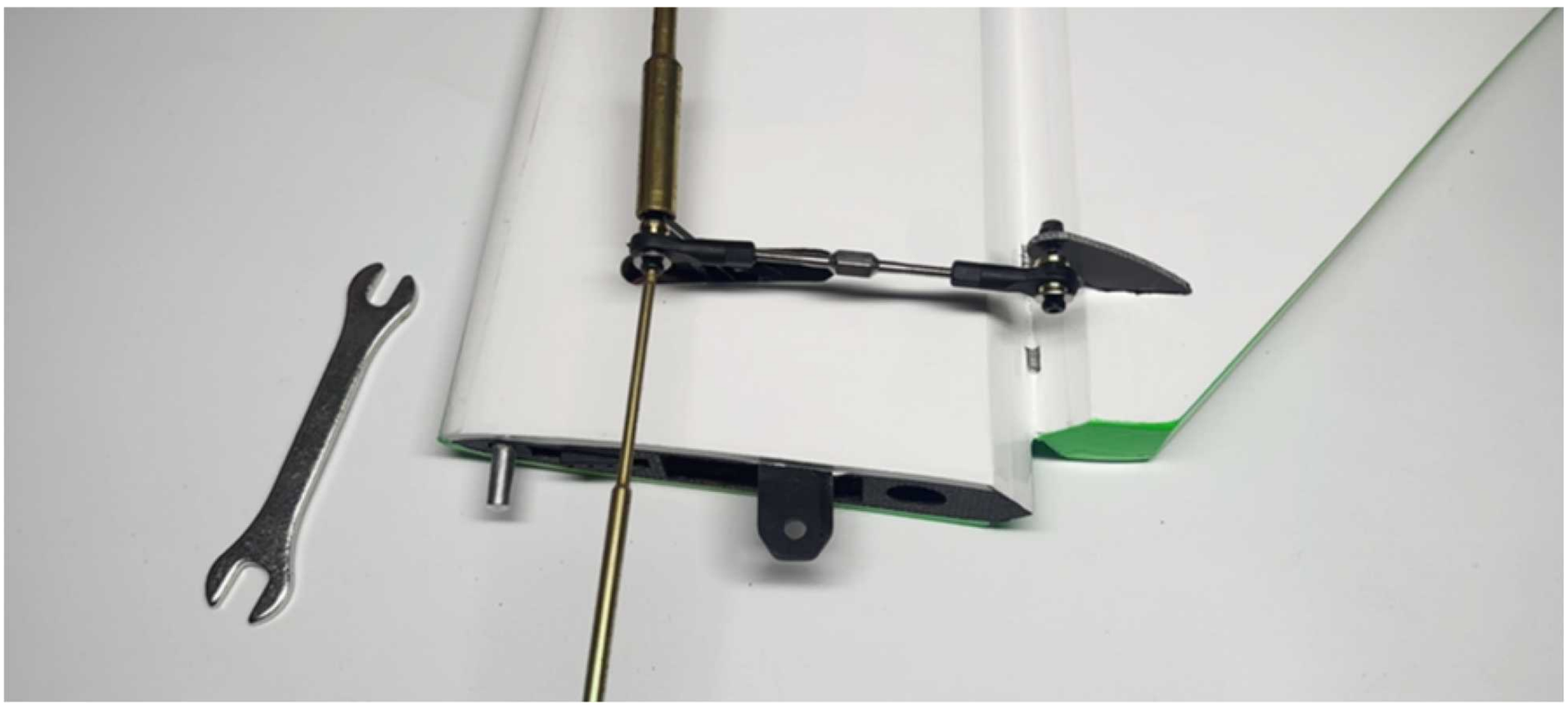
⑥ Attach the servo arm to the servo using screws.(Apply glue to screws)



⑦ Tighten the screw behind the servo arm.(Apply glue to screws)



⑧ Use screws to pass through the washers and ball studs, connecting the servo and control horn.





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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