

**OMP HOBBY®**

Global Professional RC Model Brand

# Installation Manual



**67 "Extra NG ARF version**





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# 67"Extra NG Balsa Wood Airplane

OMP Hobby 67"Extra NG is a lightweight and easy-to-fly model that delivers excellent performance, with its sleek design and powerful performance, it's sure to take your flying experience to new heights. It's a fantastically balanced aircraft, precise yet aggressive, and for pilots who prefer a "natural look", it flies great even without SFG wing tips. It is also highly visible even when the sun is low, largely thanks to the graphic design, which, same as on the full scale Extra NG, comes from Italy. And the Extra is super stable in during high speed maneuvers as well as low and slow flying. The construction is heavily reinforced with carbon fiber, so it's able to withstand a lot.





# Product Specification

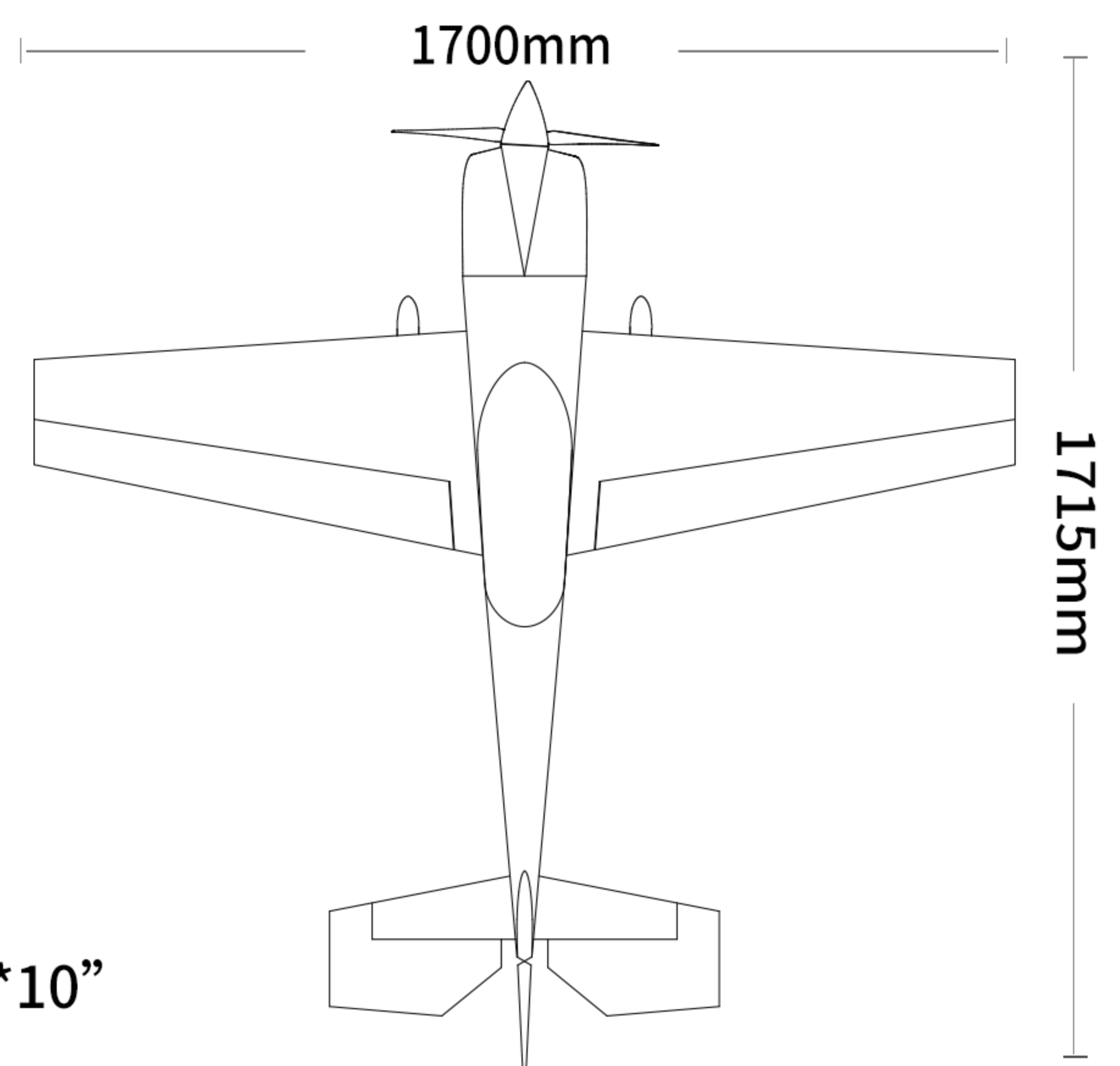
Item:	Wingspan	Full Length
<b>67" Extra NG</b>	<b>1700mm(67in)</b>	<b>1715mm(67.5in)</b>
Wing Area	Wing Load	Motor Thrust Angles
<b>57.58dm<sup>2</sup></b>	<b>15.99g/dm<sup>2</sup></b>	<b>Down 0° &amp; Right 3°</b>
Gross Weight:	Pack Dimension	Wing Angle Of Incidence
<b>8.34KG</b>	<b>158*51*30(L*H*W)cm</b>	<b>0°</b>
Flight Weight	The Center of Gravity (CG):	
<b>3.8KG</b>	<b>Approx.130mm</b>	

Color Option:  
**Gold / Green / Red / Yellow**

Servo:  
**20 Kg.cm\*4 (Aileron\*2,Elevator\*1, Rudder\*1)**

Servo Arm:  
**1.25" 25T Servo Arm**

Electric Power (Recommended):  
**Motor: Sunnysky X6215 440KV 25cc Propeller: Eolo 18\*10"**  
**ESC: Sunnysky X125A PRO Lipos: 4200mAh-4500mAh**



## Recommended Settings of Dual Rates and Exponentials of Control Surfaces

	Rate	EXP	Direction	Throw
Aileron	High	35~40%	Up	36~39°
	Low	40~45%	Down	20~26°
Elevator	High	38~45%	Up	45~53°
	Low	45~55%	Down	30~35°
Rudder	High	38~45%	Up	42~50°
	Low	45~55%	Down	28~32°

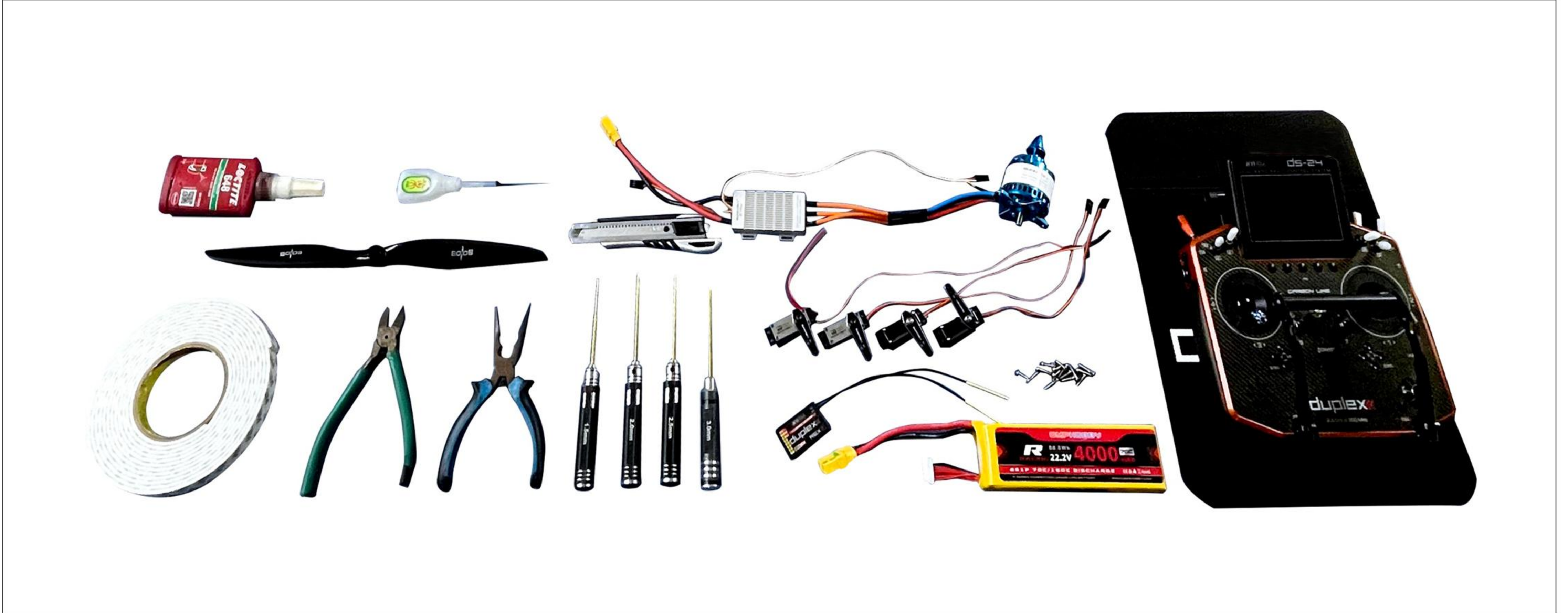


# Package contents (ARF version)

<b>Fuselage</b>	<b>Cowl</b>	<b>Left &amp; Right Wings</b>	<b>Horizontal Tail</b>
			
<b>Rudder</b>	<b>Wing Tips</b>	<b>Wheel Cowling</b>	<b>Spinner</b>
			
<b>Landing Gear Fairings</b>	<b>Wing Tube</b>	<b>Fastening Strap</b>	<b>Tail wheel fairing</b>
			
<b>Canopy</b>	<b>Fins</b>	<b>Landing gear</b>	<b>Tail wheel set</b>
			
<b>Main wheels</b>	<b>cowl/Motor hardware</b>	<b>Rudder hardware</b>	<b>Elevator hardware</b>
			
<b>Wings hardware</b>	<b>Landing gear hardware</b>	<b>Fastening Strap</b>	<b>Wing bag</b>
			
<b>Extra hardware</b>			
			



# Tools Needed



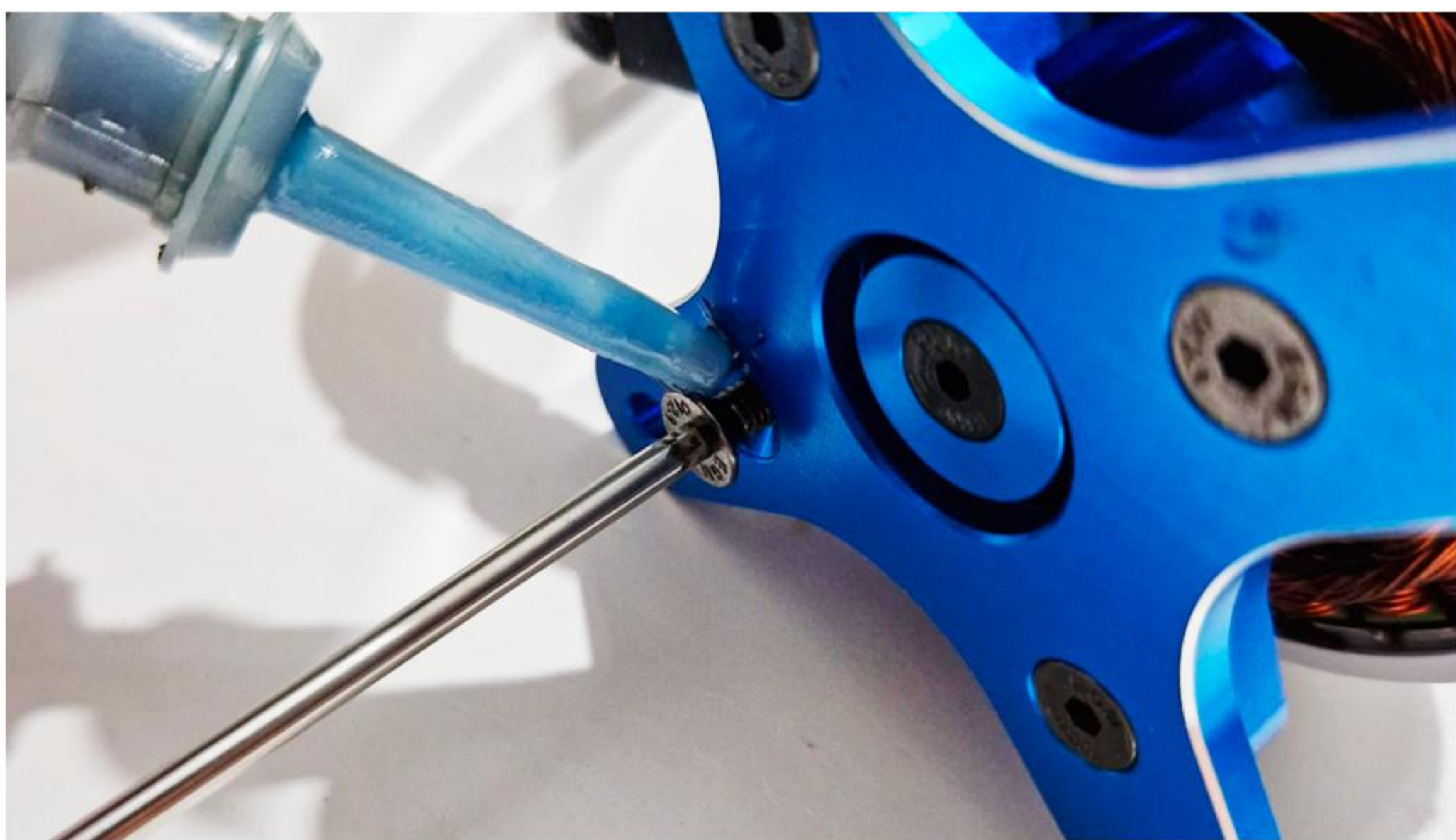
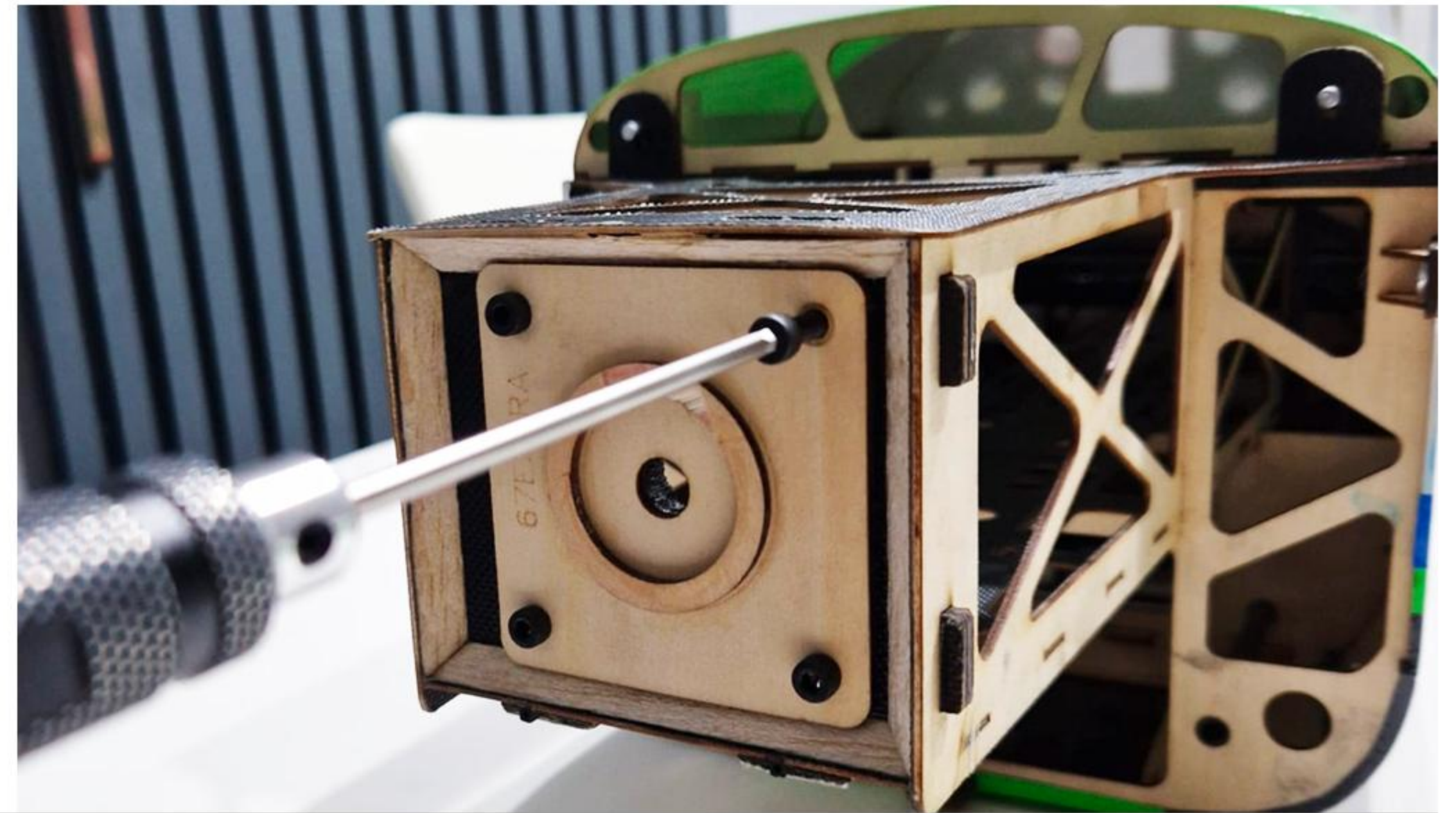
- Blue Painters Tape
- Denatured Alcohol & Paper Towels
- Blue Loctite
- Metric & Standard Allen Wrenches
- Hobby Knife & Fresh Blades
- 15 - 30 Minute Epoxy (or Gorilla Glue)
- Thin C/A
- Electric Drill with Assorted Small Bits
- Small Flat Head & Phillips Screwdrivers
- Sanding Block & Sandpaper
-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



# Cowl and Motor Assembly

## Motor Installation

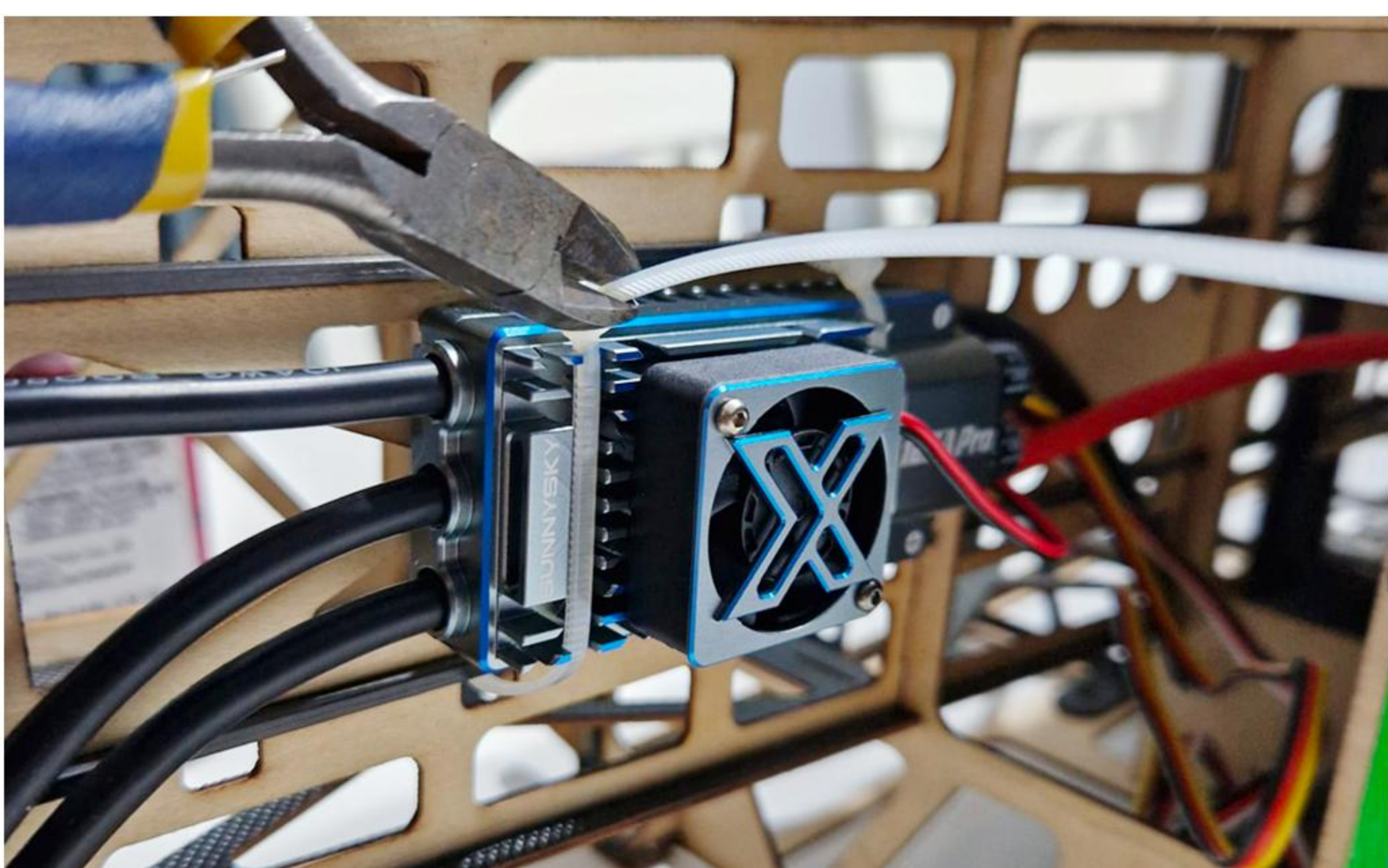
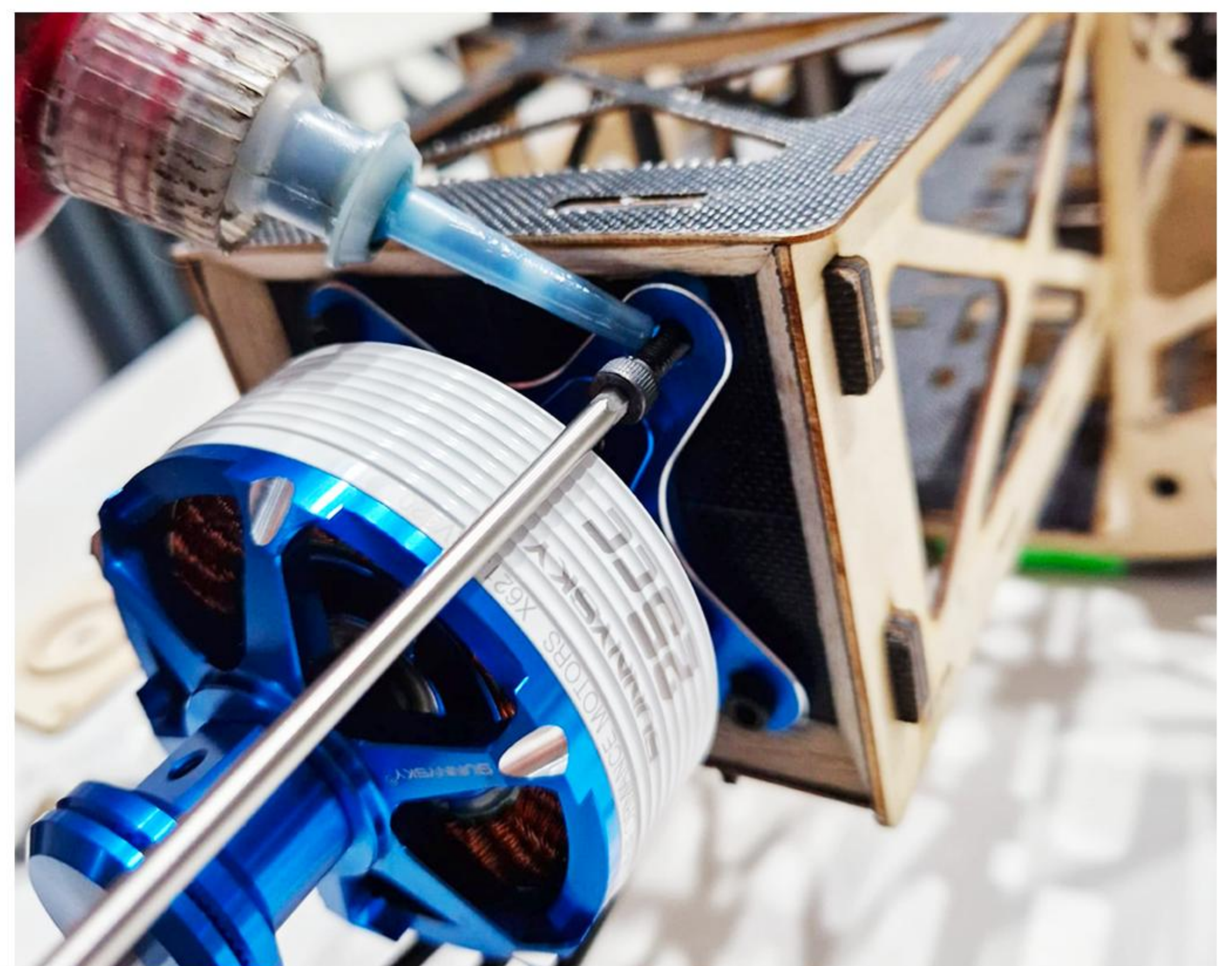
- ① Using a 3mm hex tool, remove the packaging plate screwed to the front of the motorbox, keeping the bolts to be re-used for mounting.



- ② Assemble the motor mounting plate to your motor, and then bolt to the motorbox firewall, ensuring the cables will line up well with the ESC

**PRO Tip: Apply threadlock to the mounting bolts to ensure they do not work their way loose.**

- ③ Using the motor mount and any standoffs needed, mount the motor to the motor box. There are pre-drilled holes and captive nuts for the recommended motor.
- ④ If you are using another motor with a different mounting plate, drill the holes required, taking care to ensure correct alignment with the cowl and spinner



## ESC Installation

- ① Attach the connected ESC to ESC holder with double-sided tape and Secure with cable ties.
- ② Tie the wires of ESC and motor with fastening strap and cut the excess length off

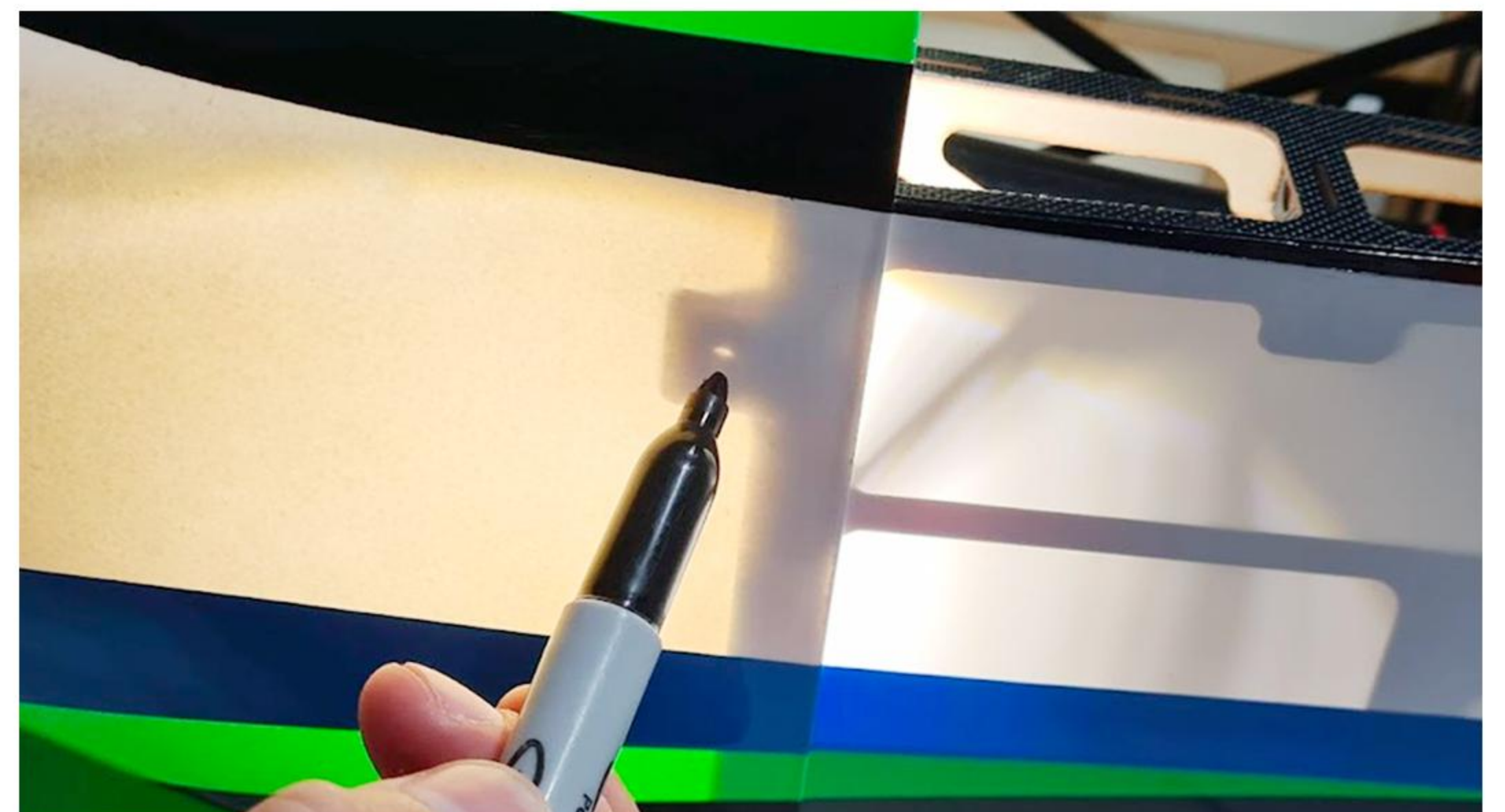


# Cowl Part Assembly

## Cowl , Propeller, Spinner Installation

**NOTE: Trial fit your cowl with the motor in place before finally fitting your cowl, to ensure a good fit. Depending on the motor used, you may need stand offs to space the motor out further. With the recommended motor this is not needed.**

- ① Remove the spinner from the spinner back plate ready for trial fitting.
- ② With the canopy fitted, hold the cowl in place, and fit the spinner to the motor to ensure you can get the correct alignment of spinner to cowl, and cowl to fuselage - NOTE: You MUST do this before drilling any holes in the cowl
- ③ With the canopy fitted, hold the cowl in place, and fit the spinner to the motor to ensure you can get the correct alignment of spinner to cowl, and cowl to fuselage - NOTE: You MUST do this before drilling any holes in the cowl
- ④ Once satisfied you can achieve good alignment, drill small holes in the side of the cowl. An easy way to find and mark where the holes need to go, is using a torch/light inside the motor box (see photo xx below), then mark the outside of the cowl.



- ⑤ Fit the cowl side bolts with the washers provided using a 2mm hex tool. Once you have fitted the side bolt, repeat the process for the 3rd hole at the bottom of the cowl.

- ⑥ Once the cowl is fitted you can refit the spinner and propeller, again ensuring alignment with the cowl is correct. Ensure the correct prop bolt (and lock bolt if provided) is fitted tightly to secure the propeller).

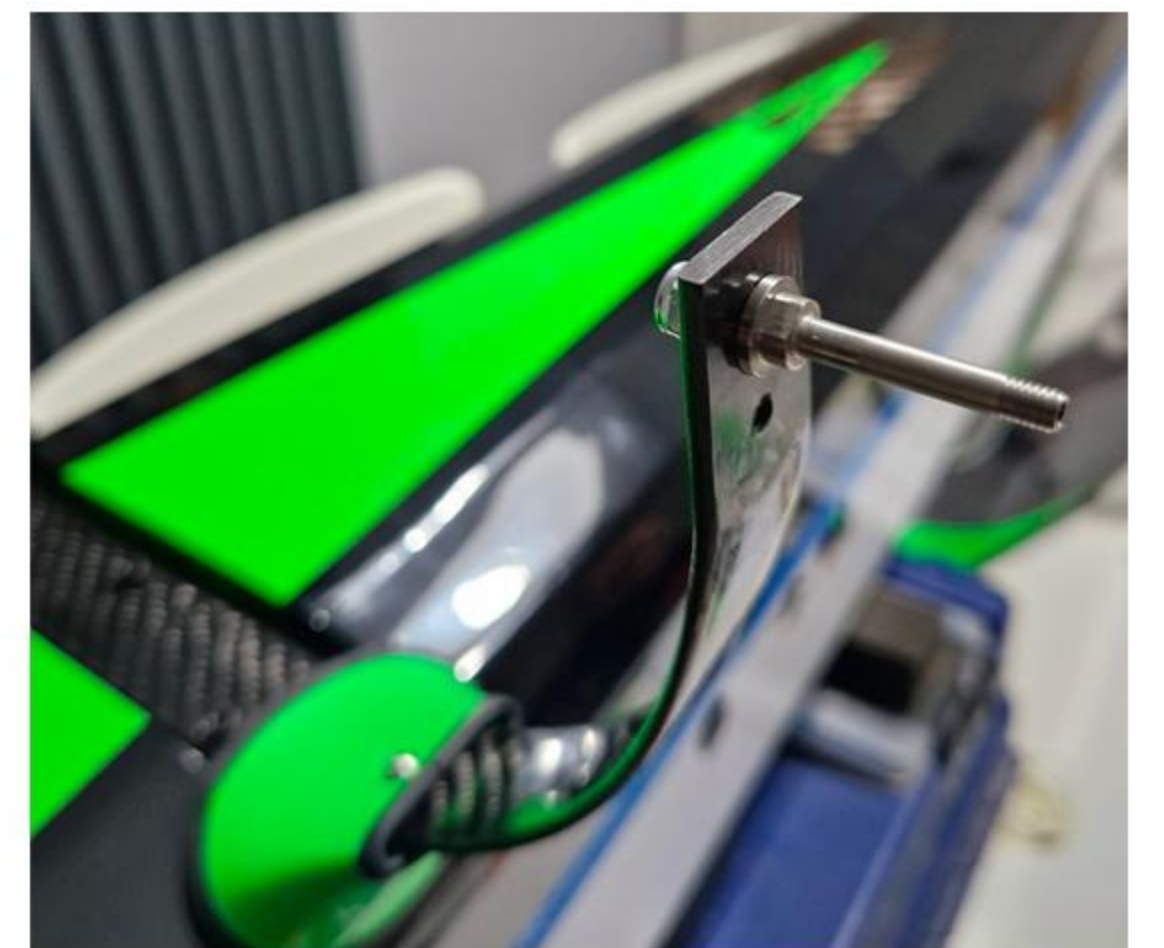
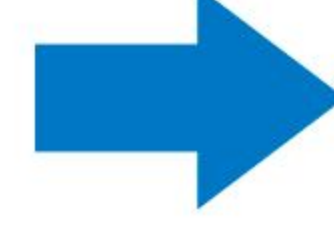
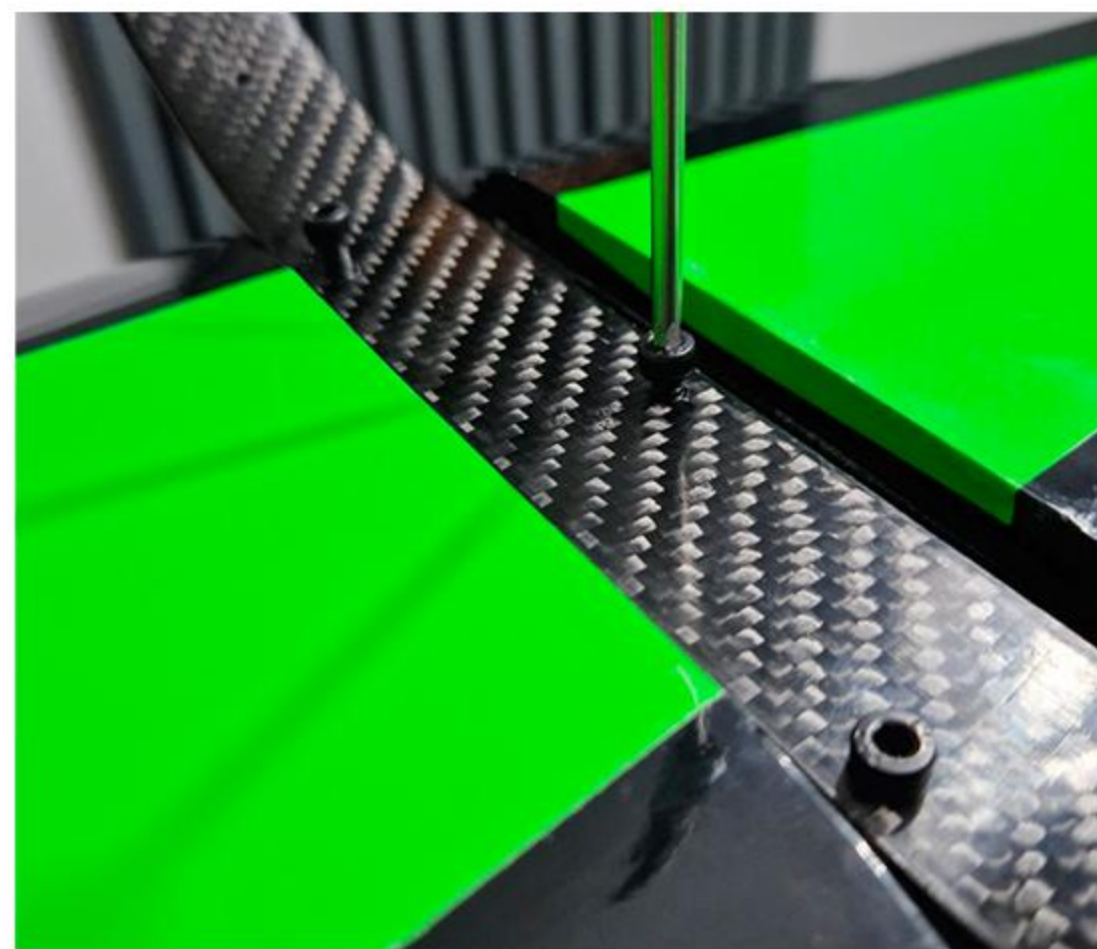
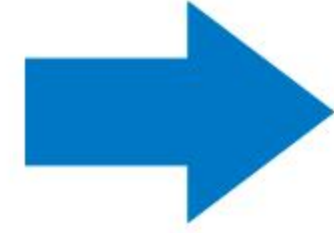
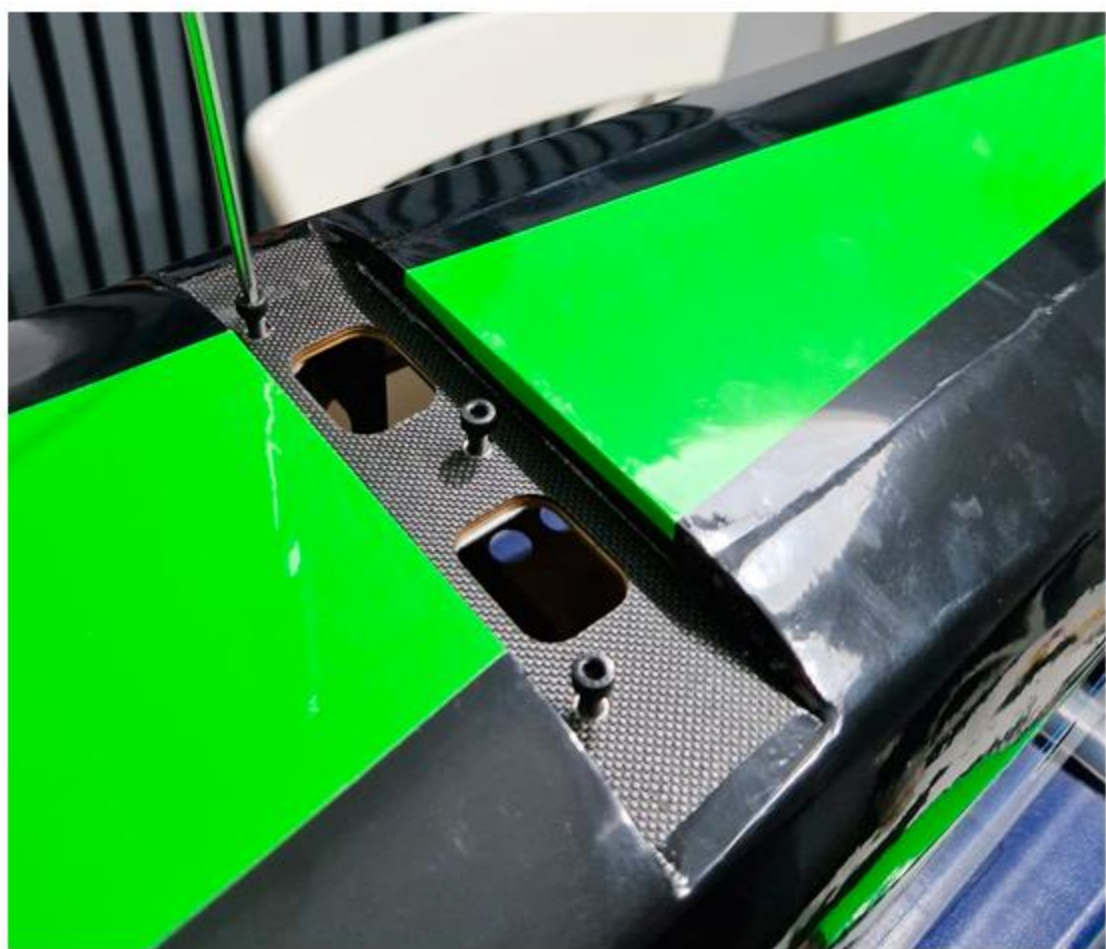




# Landing gear Assembly

## Landing Gear Installation

- ① Unscrew the 3 hex bolts from the undercarriage mounting plate using a 3mm hex tool  
**PRO Tip: Apply threadlock to the mounting bolts to ensure they do not work their way loose.**
- ② Fit the carbon fibre undercarriage to the undercarriage plate with the same 3 hex bolts and washers
- ③ Install landing gear cuffs, securing each one with a screw and washer
- ④ Install both wheel axles, then wheels and finally secure the wheels in place with the nylock nut.
- ⑤ Once the wheels are secured in place, the spats should slide over the axles.
- ⑥ The spats are an advanced design, which you secure in place with a screw and washer through the carbon undercarriage leg, and an additional bolt on the outside of the spat, into the wheel axel (again using threadlock on the bolt into each axle)



Ensure spat screw does not fowl on wheel



# Tail wheel Assembly

## Tail Wheel Installation

- ① Using a 1.5mm hex tool, remove the 2 bolts at the rear of the fuselage

**PRO Tip: Apply threadlock to the mounting bolts to ensure they do not work their way loose.**

- ② Fit the tail wheel bracket and assembly to the fuselage using the bolts removed above

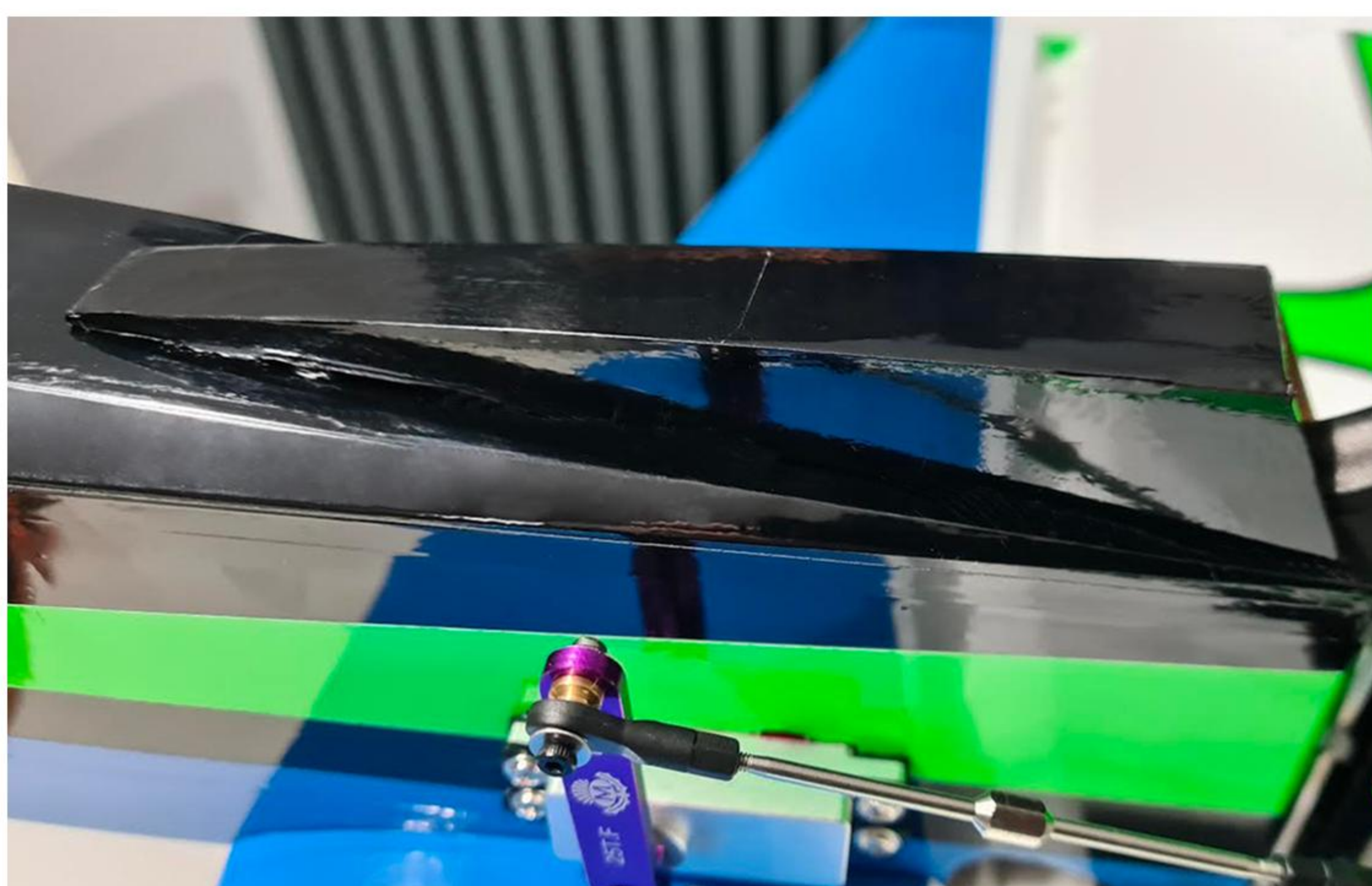
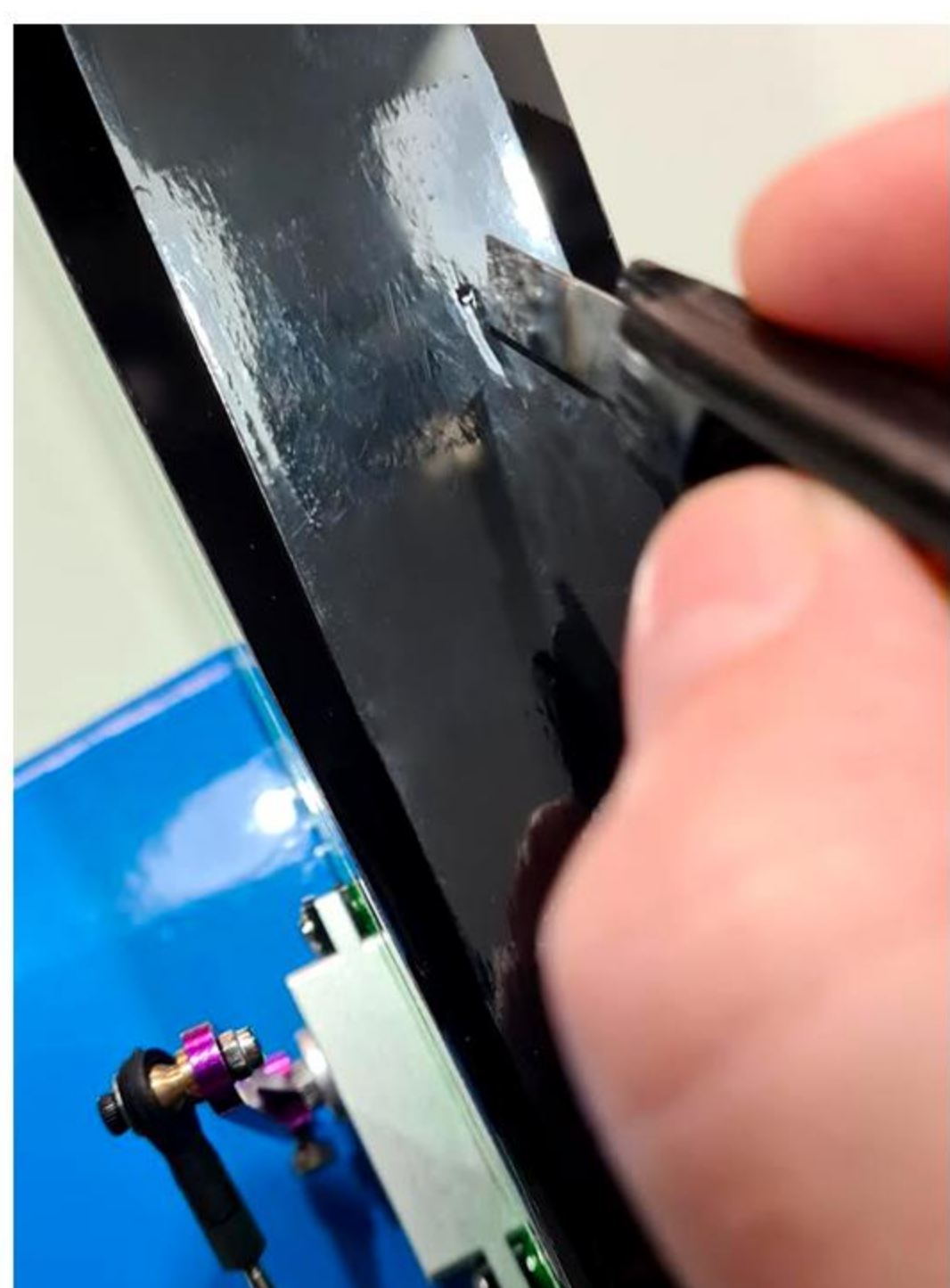


## Tail Wheel Installation

- ① Once the tail wheel is mounted you may optionally fit the tail wheel fairing

- ② Carefully cut the 2 slots on the rear of the fuselage - the easiest way to find these is to put the fairing in place and push down, then it marks the holes

- ③ We used an impact type adhesive to secure the fairing in place





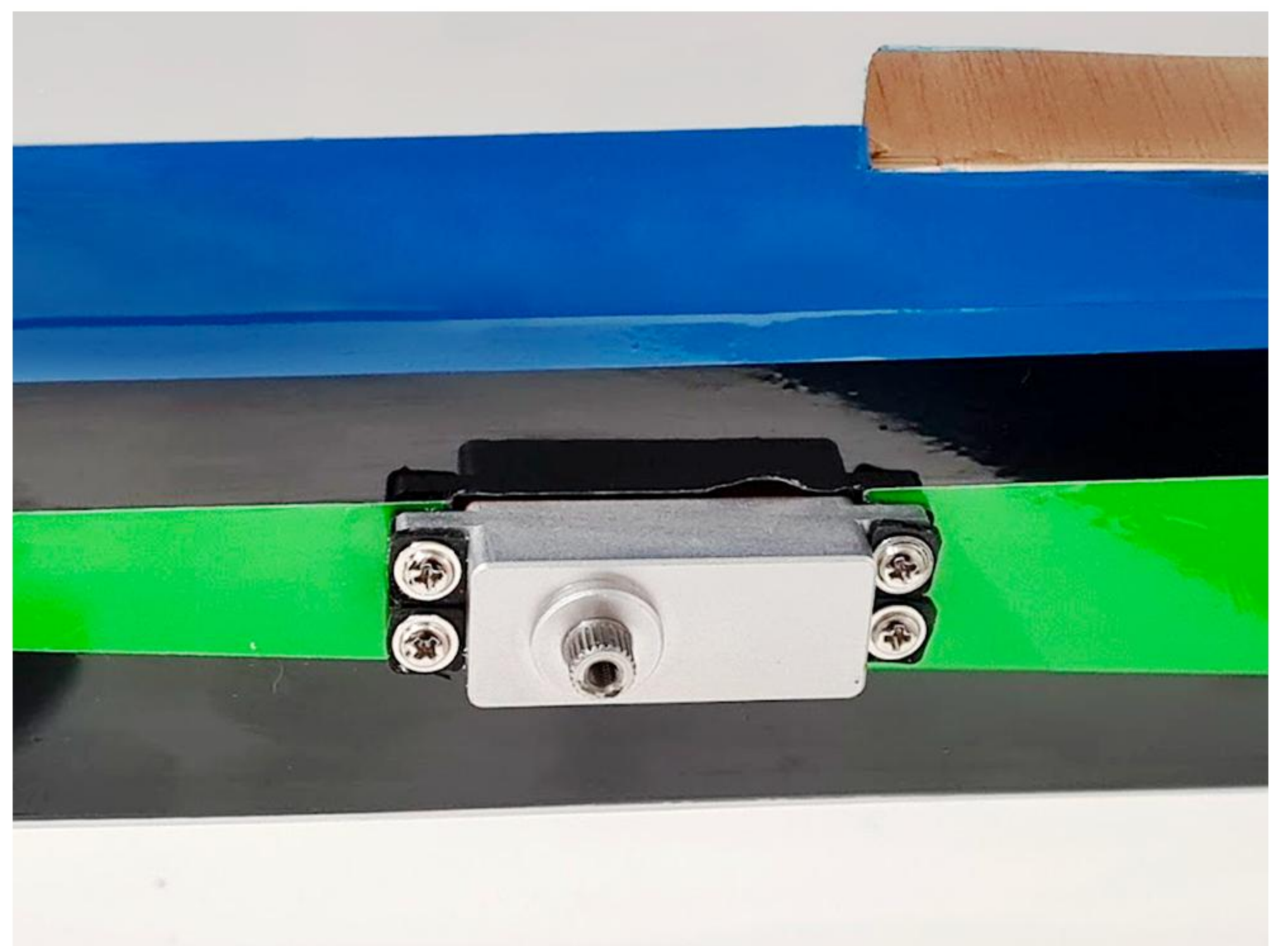
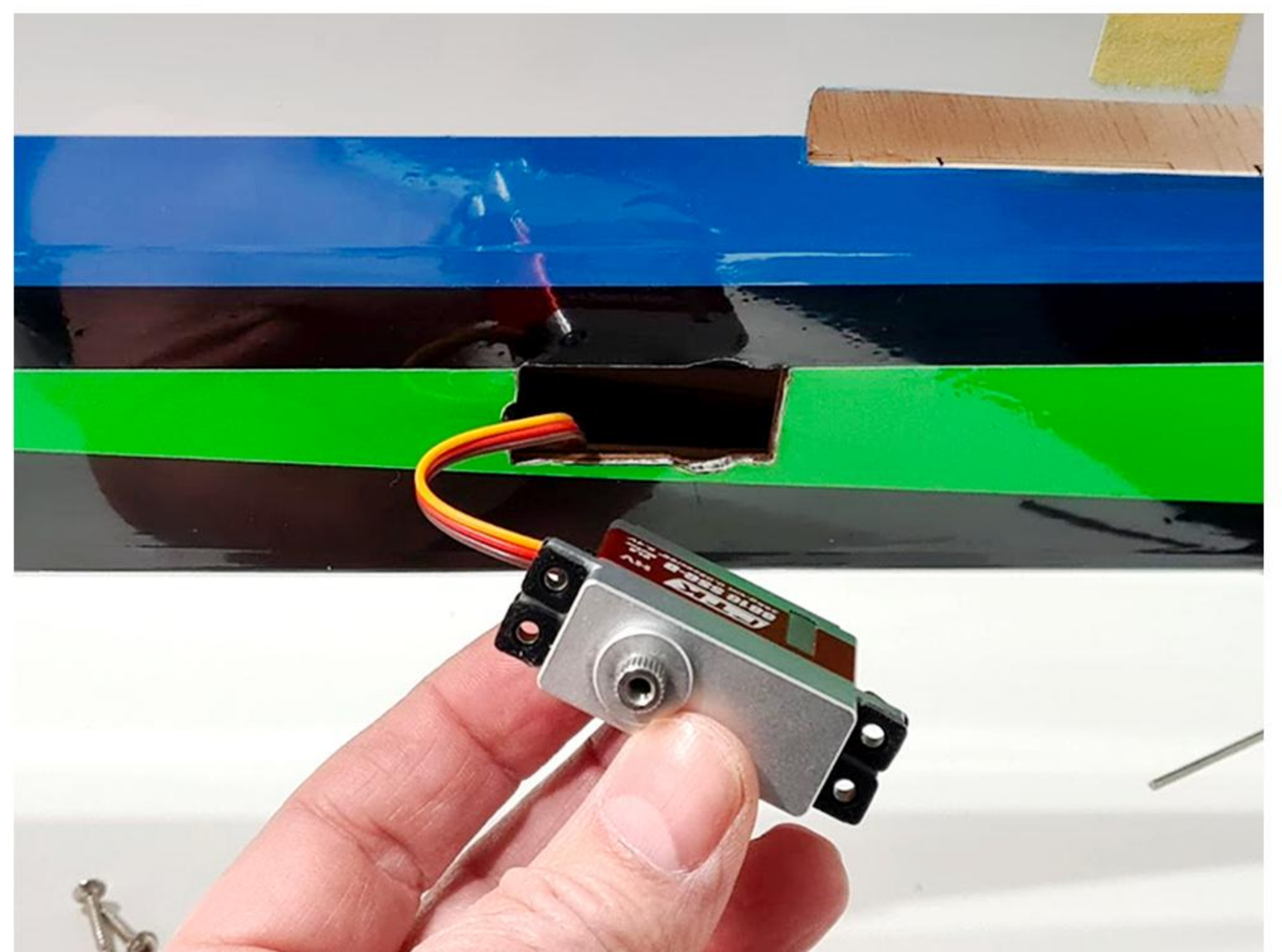
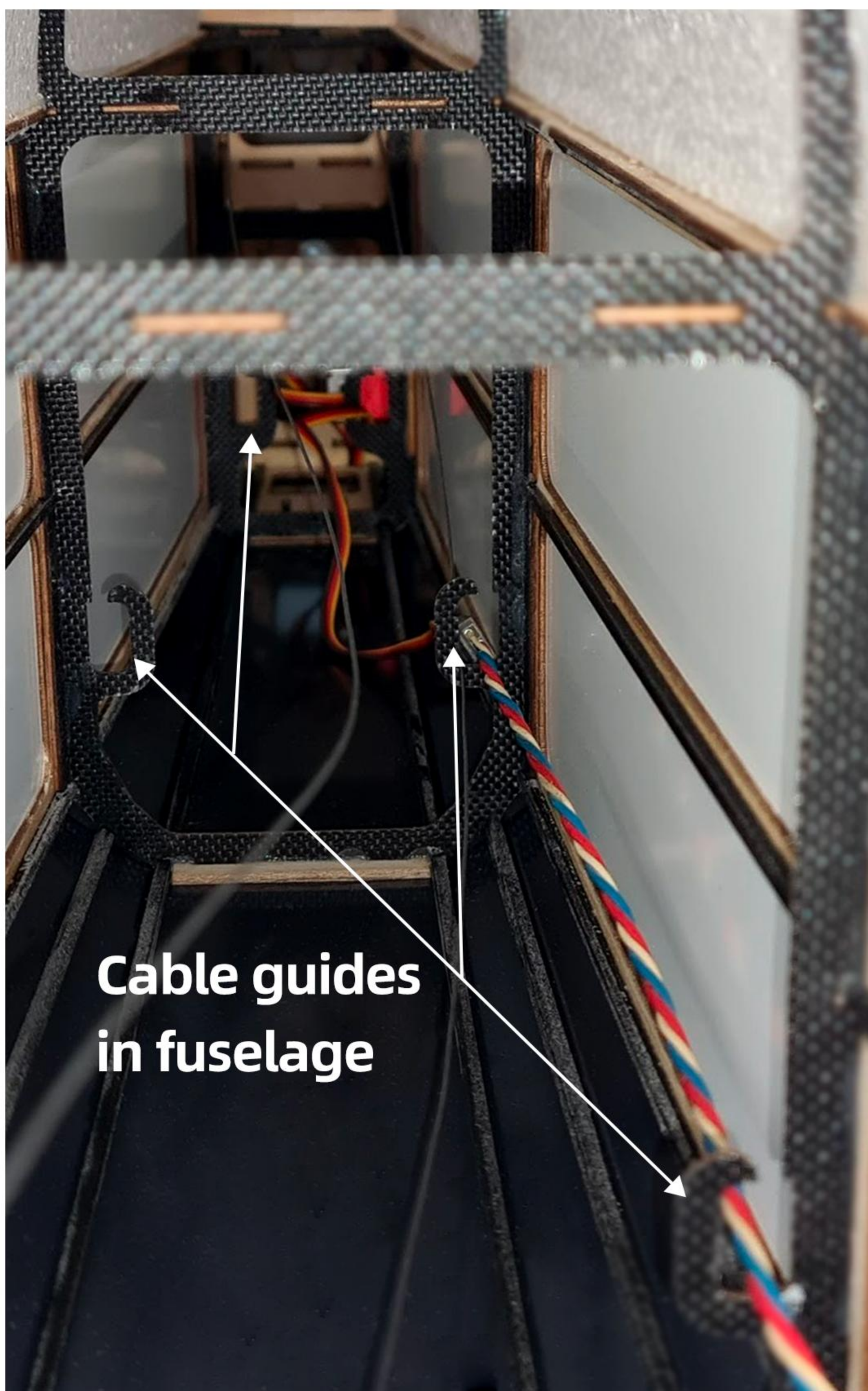
# Elevator and rear servo Assembly

## Elevator Servo Installation

- ① Fit your elevator extension servo running from the pre-cut hole for the servo at the rear of the fuselage, upto the tray where your receiver will mount.
- ② Secure the cable using the built in hooks in the fuselage

**NOTE: If you are mounting your rudder servo at the rear of the fuselage, you may find it easier to run the servo extension for this at the same time.**

- ③ Fit your elevator servo with the servo splines nearer the front of the fuselage, and screw in place. For added security, once screwed in, remove the screws and servo, drop some thin CA around the servo holes, then refit.





# Elevator and rear servo Assembly

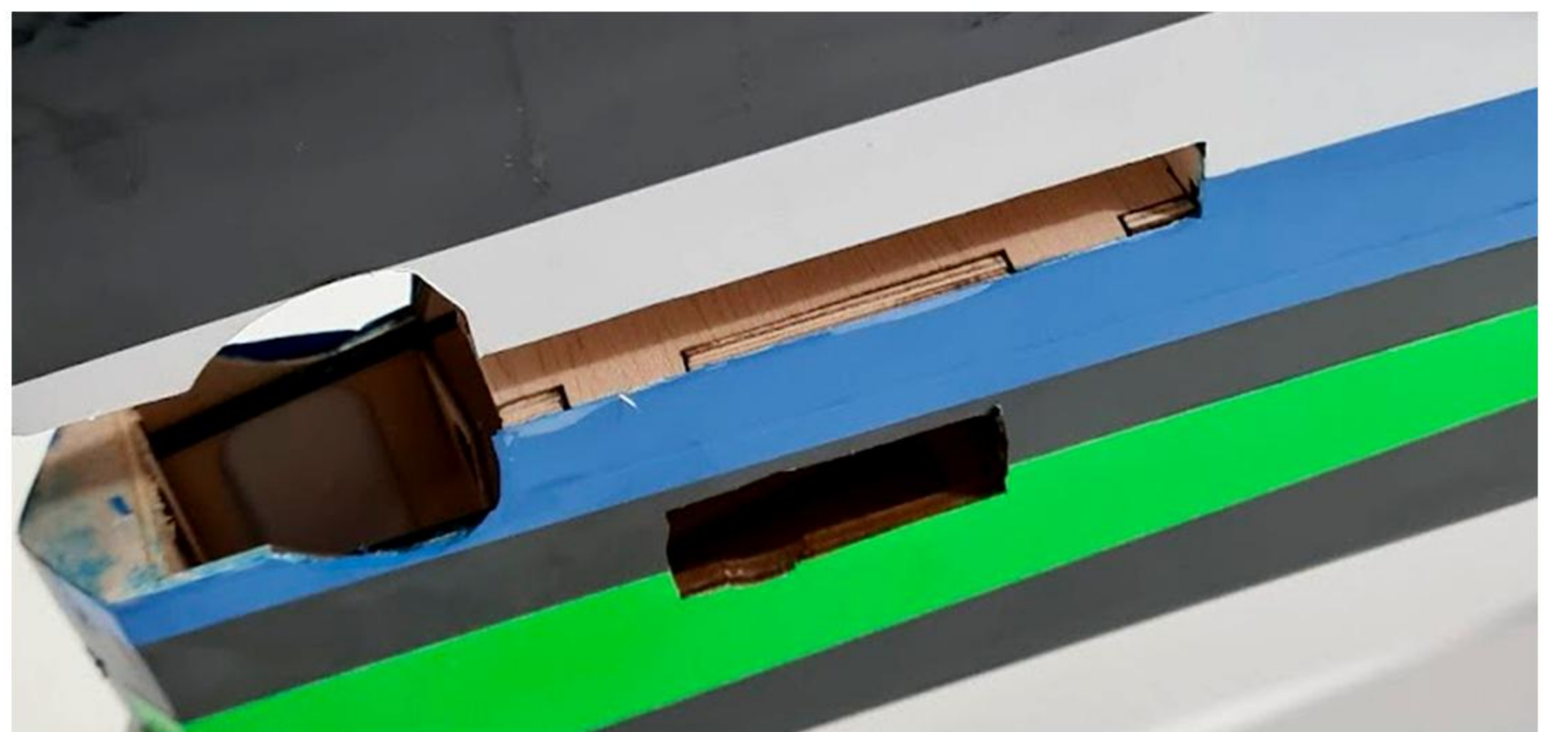
## Rudder Servo Installation

**NOTE:** If fitting pull/pull cables and a rudder servo under the canopy, please skip to the horizontal tail section, as this section only applies if you are mounting your rudder servo at the rear of the fuselage.

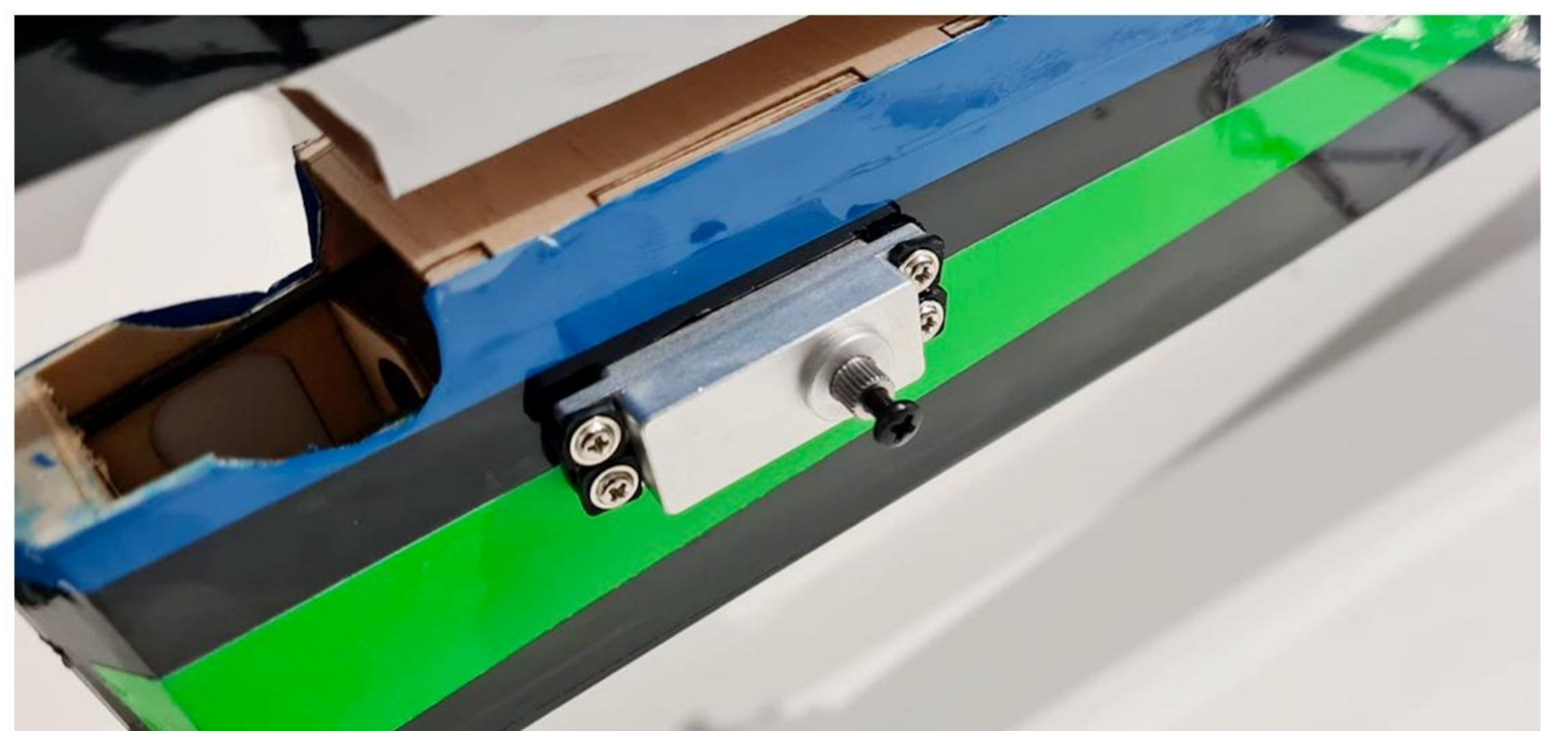
- ① Using a sharp knife, gently cut away the covering on the opposite side of the fuselage to the elevator servo (the rudder servo slot is closer to the rear of the fuselage than the elevator servo.)



- ② Fit the rudder extension lead in the same way as the elevator extension lead, ensuring it's fitted into the hooks built into the fuselage



- ③ Mount the rudder servo in the same way as the elevator servo with the servo splines nearer the front of the fuselage, following the same technique using thin CA.



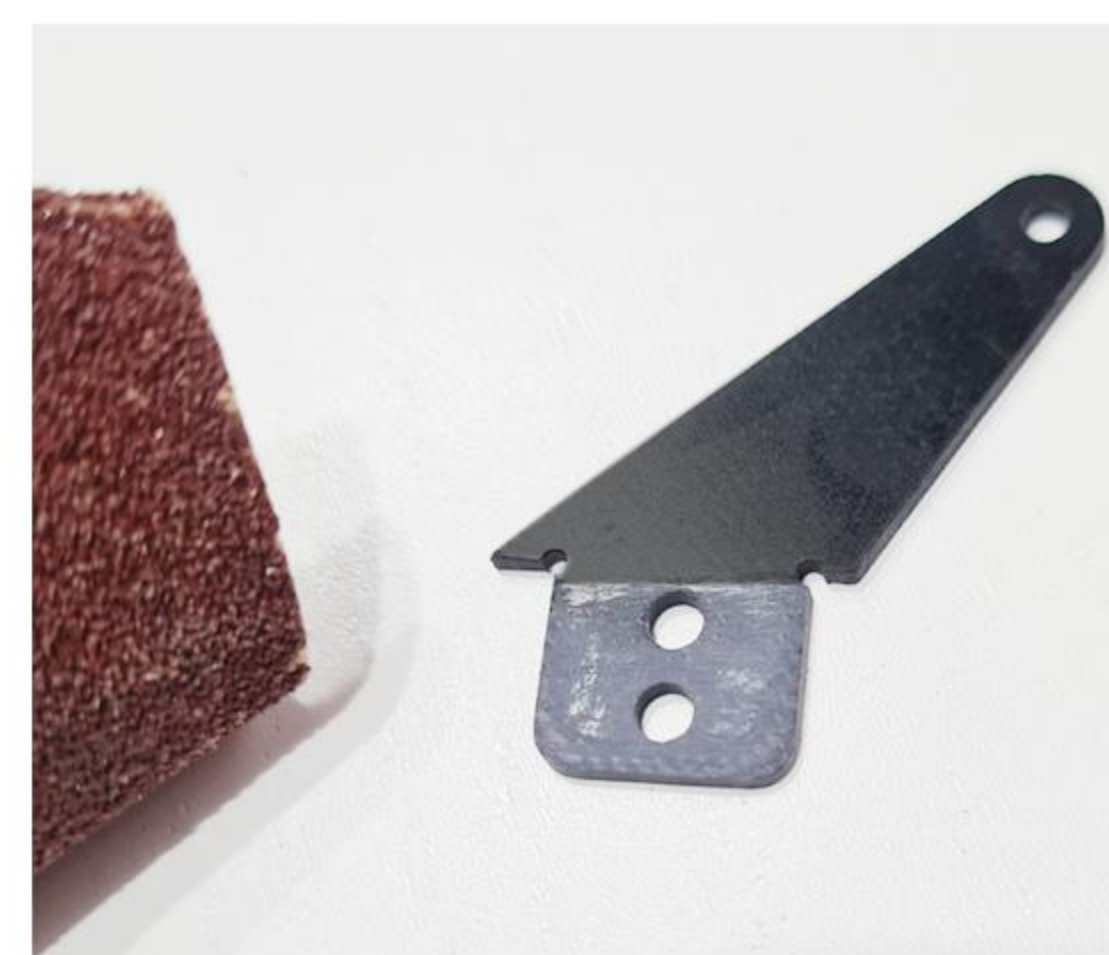
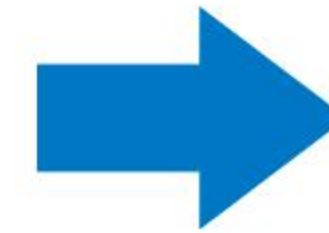


# Elevator and rear servo Assembly

## Elevator and rear servo Assembly

- ① Carefully locate the slot for the elevator control arm on the horizontal tail, and using a sharp knife, gently cut the covering ensuring you do not damage the balsa.
- ② Unpack the parts from the elevator bag ready for assembly.
- ③ Before fitting the elevator control arm, sand the portion that will be in the balsa to ensure it will bond when fitted.
- ④ Trial fit the elevator control arm into the elevator to ensure a good fit before gluing into place.
- ⑤ It is recommended to use epoxy to secure the elevator control arm into place.

**Pro Tip:** to ensure no excess goes onto the film covering, it is advised to lightly place masking tape around the slot before applying epoxy to the hole and control arm.

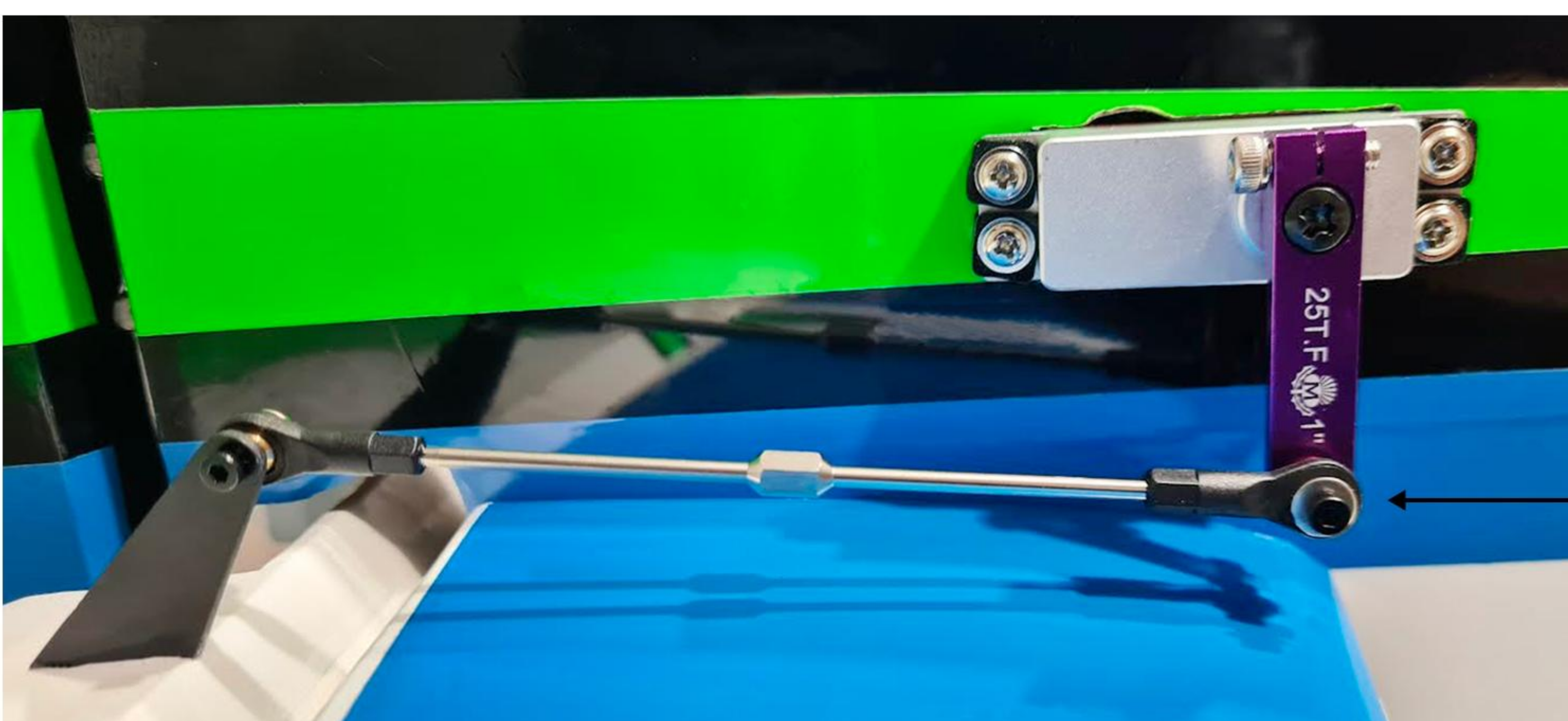
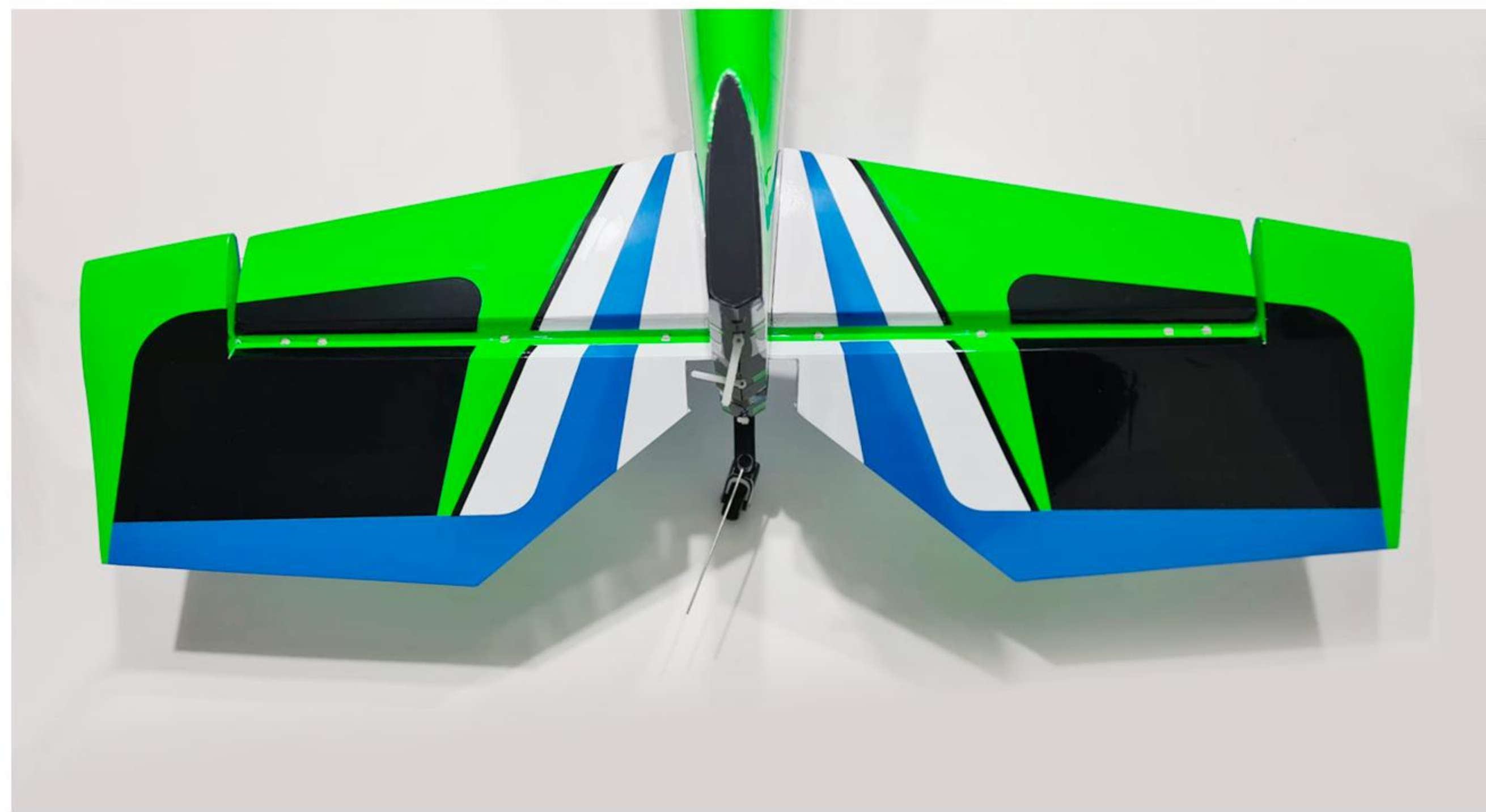




# Elevator Assembly

## Horizontal Tail Installation

- ① Once the elevator control arm has been fitted and glue/epoxy has set, it is time to fit the horizontal tail.
- ② It is recommended to use a thin smear of 30 minute epoxy for this as it gives a strong bond, but time to ensure it's correctly in place.
- ③ To avoid epoxy getting on the covering of the fuselage/horizontal tail, it's best to loosely fit masking tape.
- ④ After the glue is dried, assemble the servo arm and control arm with ball head pull rod, secure the cup head hexagonal screw, washer, ball head to the servo arm, secure it with pliers, adjust the ball head pull rods to proper length.
- ⑤ Secure screw, washer, ball head to control arm.
- ⑥ Check the angle between the servo arm and control arms. (Make sure the control arm is at 90 degrees against servo.)



**Note: Washers positioned to prevent ball link accidentally coming off**



# Rudder Assembly

## Rudder Installation

- ① Carefully locate the slot which has been made on the vertical tail, lightly cut through the covering but not into the balsa sheeting.
- ② Sand the root of the control arm, test fit it into the slot to adjust the position, then take it out, apply epoxy to the slot and the root of the control arm, insert it to the slot to secure it.

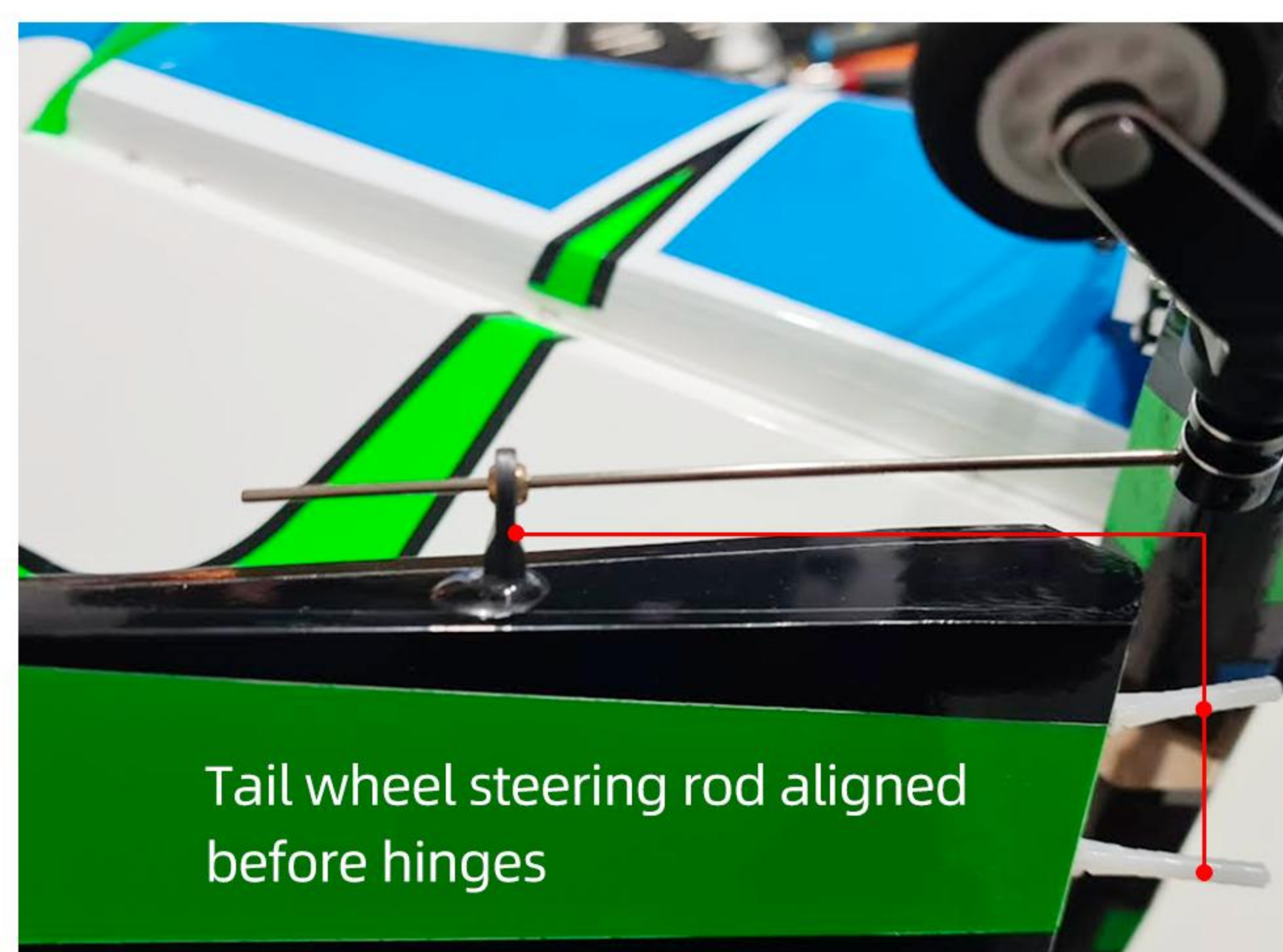
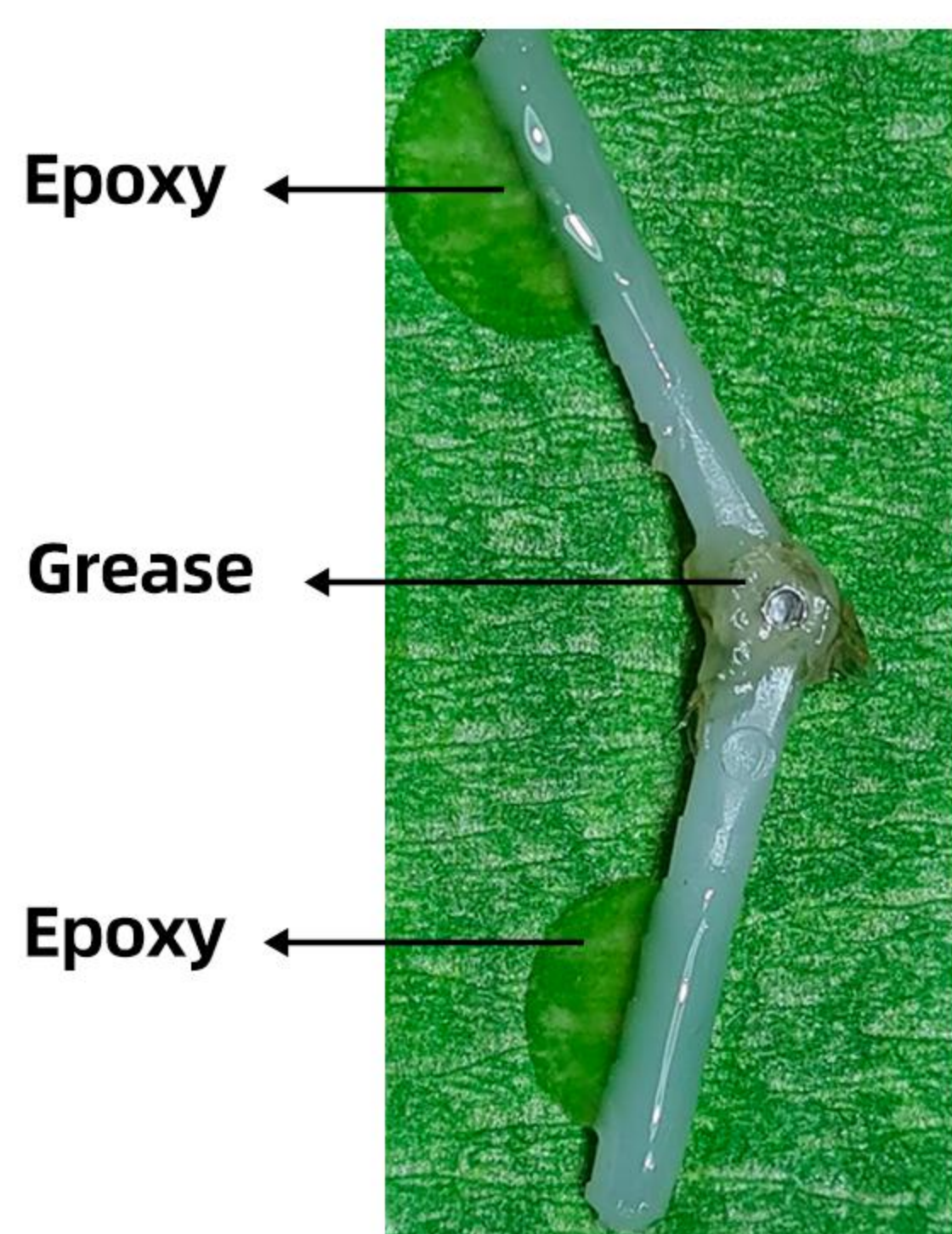
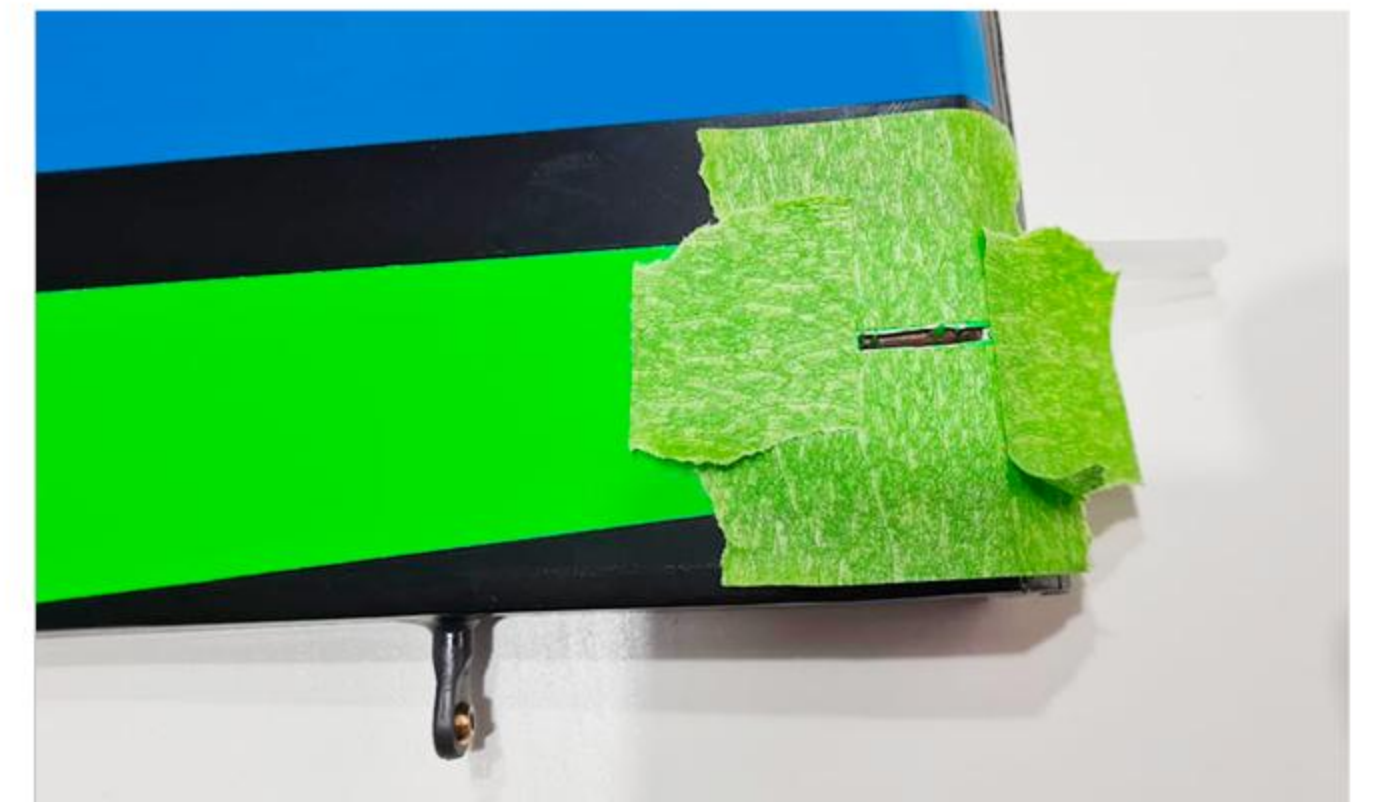
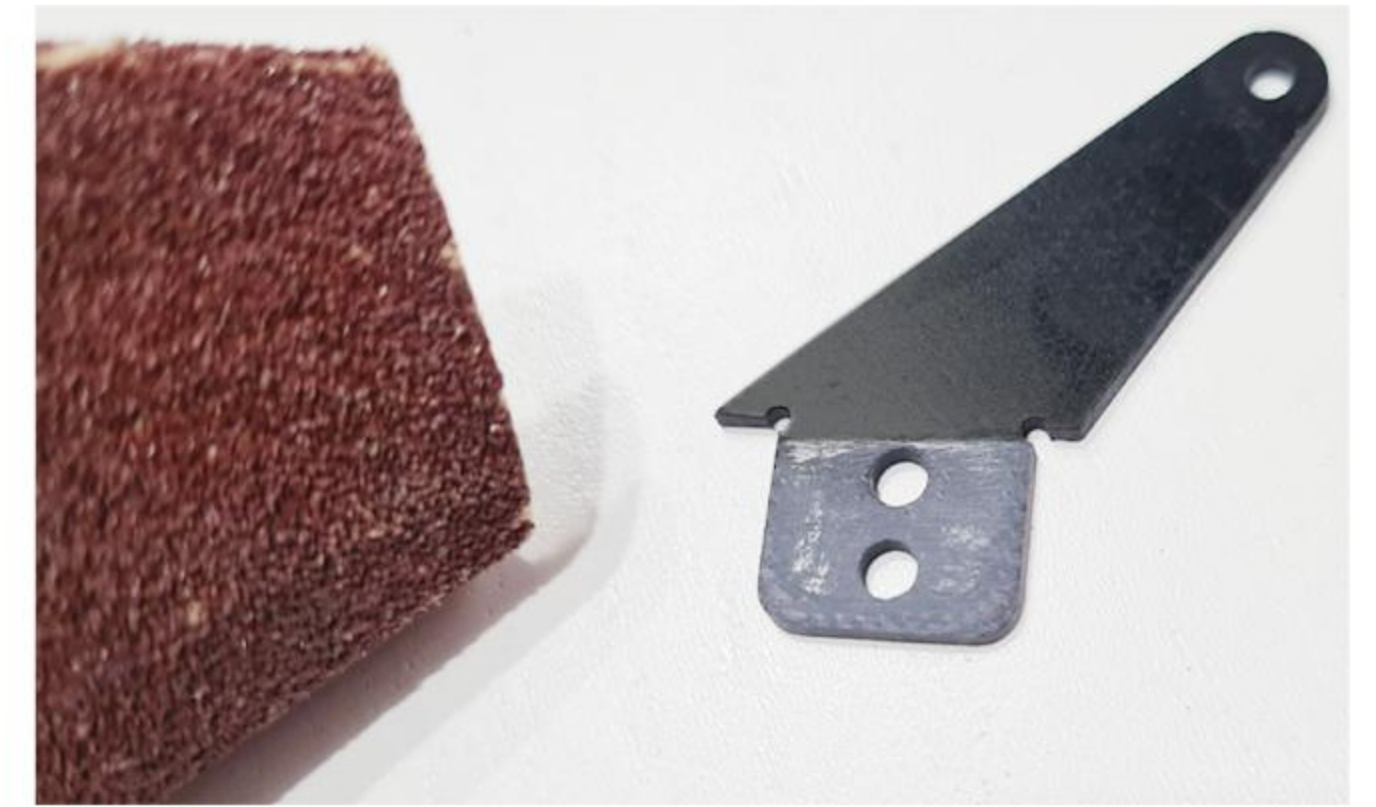
**Pro Tip:** to ensure no excess goes onto the film covering, as with the installation of horns already covered in the manual, it is advised to lightly place masking tape around the slot before applying epoxy to the hole and control arm.

- ④ Remove the 5 hinges from the rudder/fuselage.

**Pro Tip:** Use 30 minute epoxy gives time to ensure correct alignment.

**Pro Tip:** Apply grease or engine oil on the pin part of each hinge, to avoid them binding once glue/epoxy has dried.

- ⑤ Inject glue/epoxy into the holes on the rudder and fuselage, and to each end of every hinge (avoid the area near the pin and grease on each hinge), then insert the hinges into the rudder.
- ⑥ Carefully align the rudder with the fuselage and all 5 hinges (NOTE: ensure the tail wheel steering rod is fitted into the hole under the read before trying to get the hinges to align)... push in gently until the front of the rudder aligns with the fuselage.

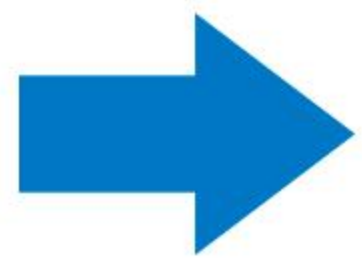




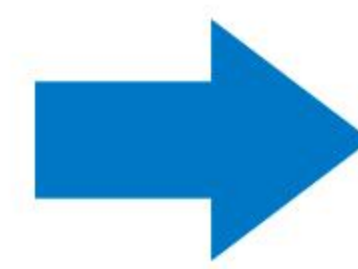
# Rudder Assembly

- ⑦ Secure rudder to fuselage with masking tape whilst the glue is drying to prevent it moving, ensuring the front edge of the rudder aligns with the post on the fuselage
- ⑧ Make sure the shaft is in the middle position, and keep the gap between rudder and fuselage within 1mm.
- ⑨ Carefully wipe away any excess glue/epoxy.

Masking tape to secure rudder whilst glue/epoxy is setting



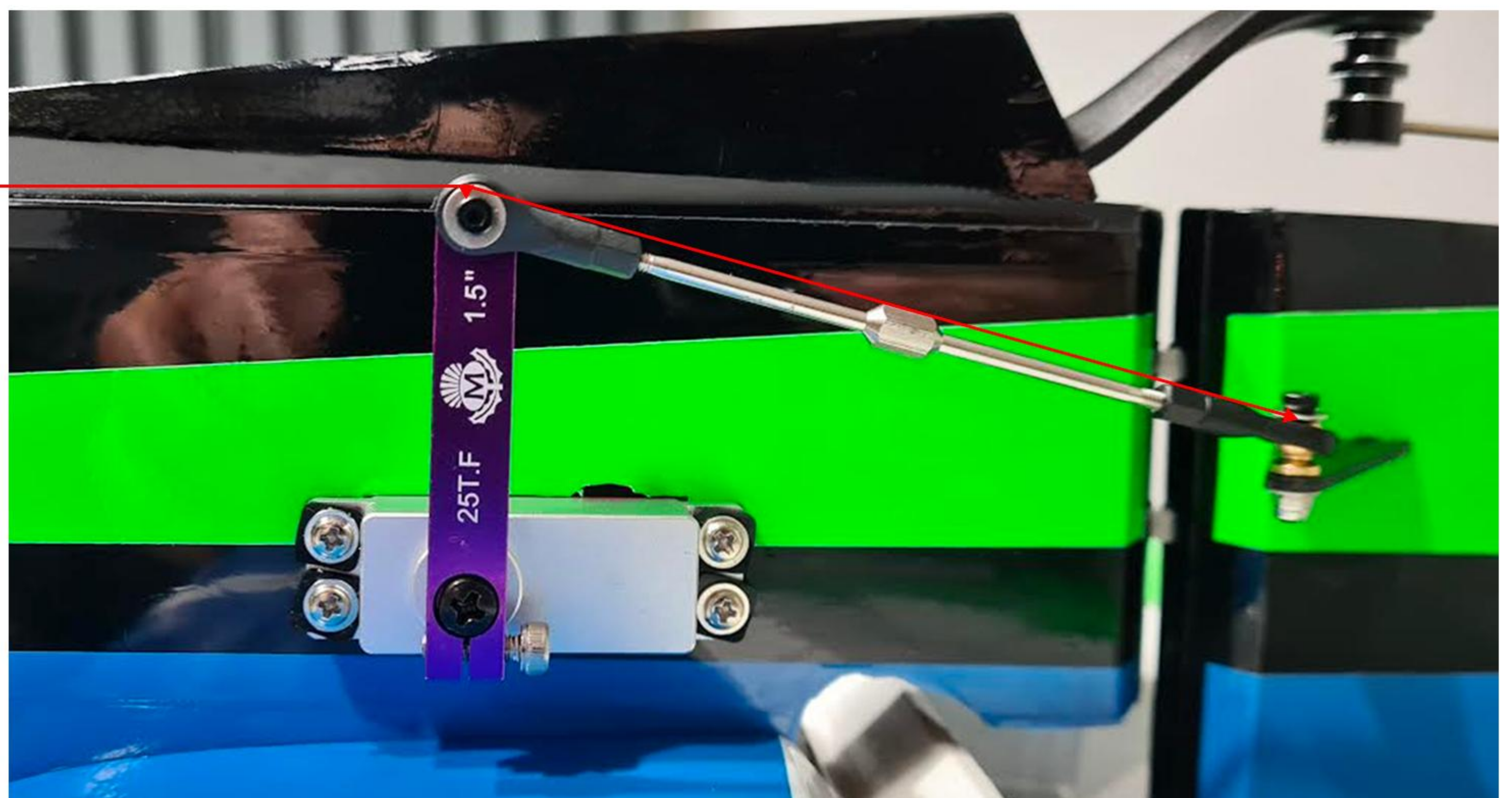
Finished rudder



- ⑩ After the glue is dried, secure the servo arm and control arms with a ball head pull rod.
- ⑪ Make sure the angle of servo and control arms is 90° and ensure rudder is symmetrical to the 2 sides of fuselage.



**Note: Washers positioned to prevent ball link accidentally coming off**

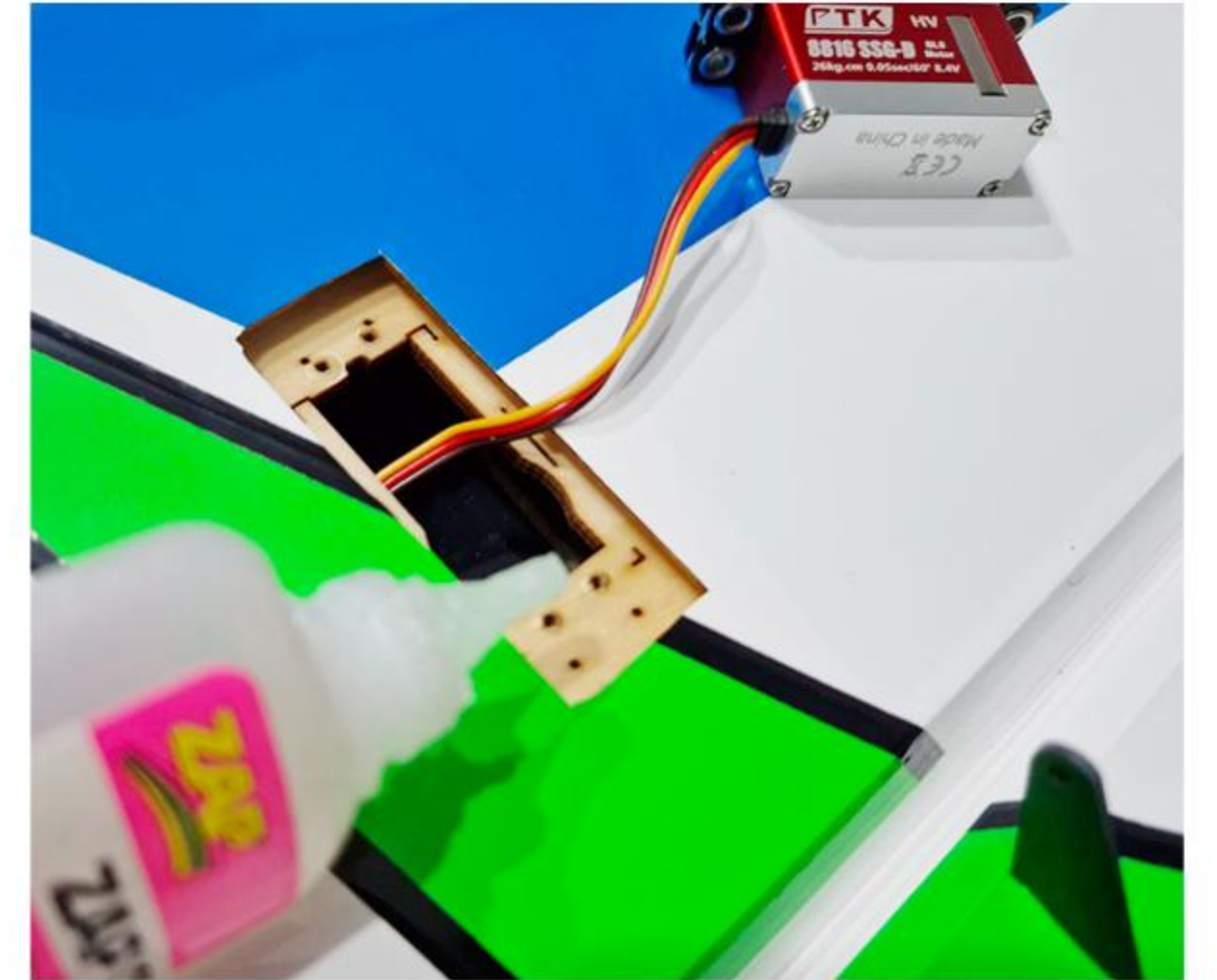




# Wings Assembly

## Aileron Servo Installation

- ① Carefully locate the slot which has been made on the aileron, lightly cut through the covering but not into the balsa sheeting.
- ② Use sand paper to roughen the root of control arm. Try to insert it into the mounting slot to adjust the position at first, then take it out, apply glue to the slot and the root of the control arm, insert it to the slot to secure it.  
**Pro Tip: to ensure no excess goes onto the film covering, it is advised to lightly place masking tape around the slot before applying epoxy to the hole and control arm.**
- ③ To mount the servo in the pre-cut hole, pull out the white polyester thread from the servo hole with tweezers, tie up with aileron servo connector.
- ④ Remove black rubber ring from the wing side, pass aileron servo wire into the black rubber ring and secure it to the original position.
- ⑤ Find the other head of white polyester thread from wing side, pull it until aileron servo is placed in servo hole.



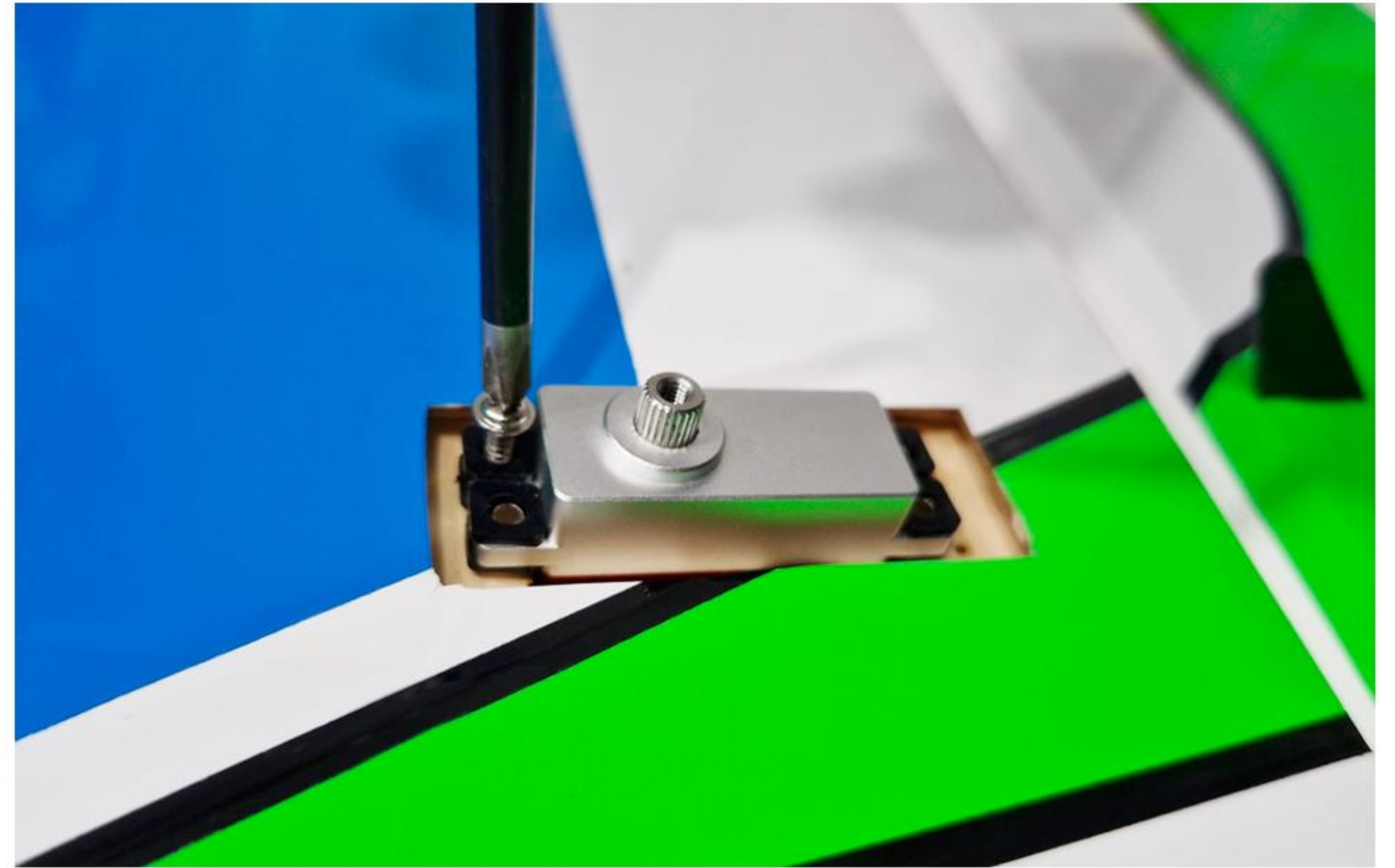
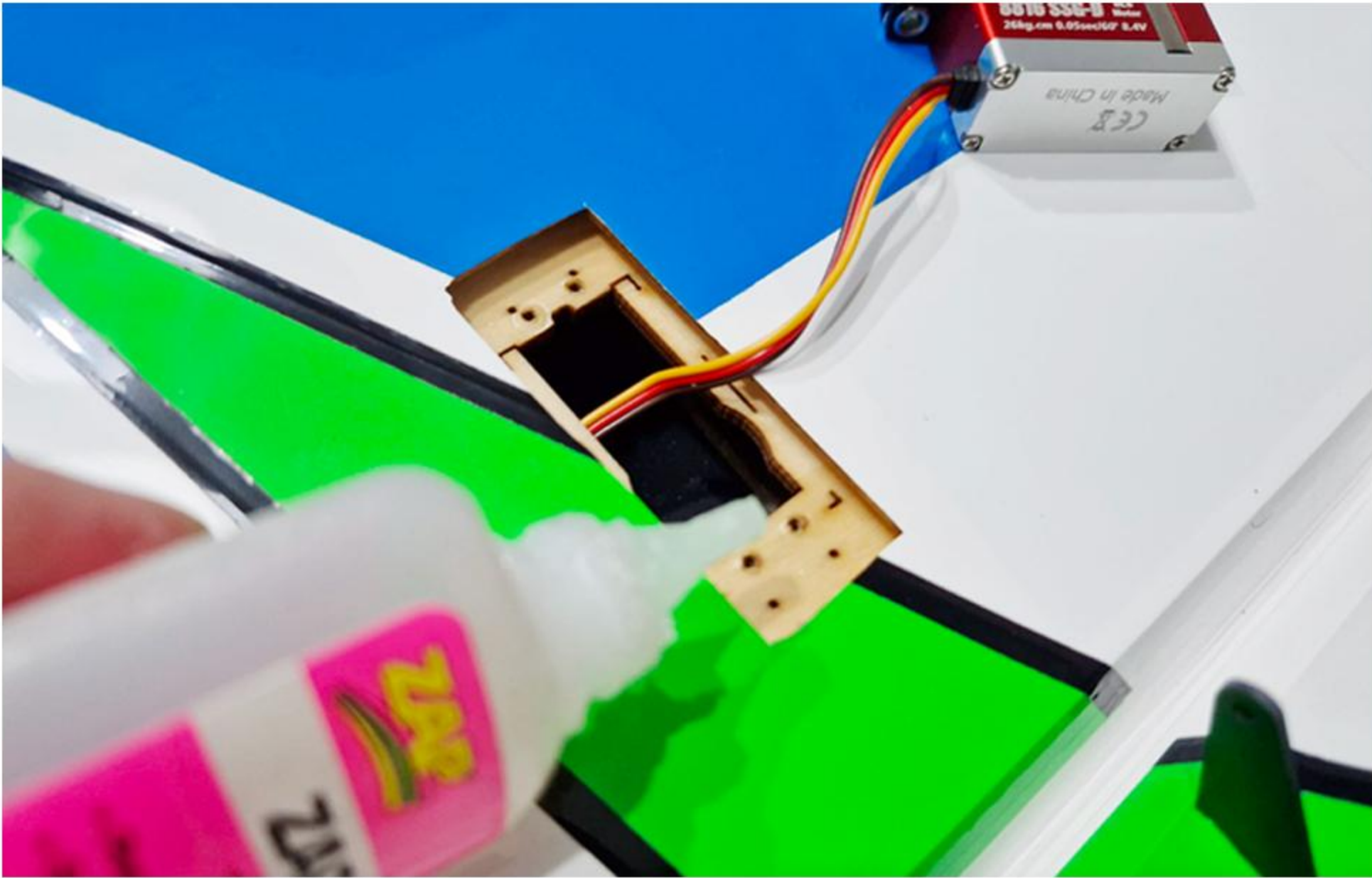
Remove this rubber grommet, insert the servo plug and lead through it, then refit





# Wings Assembly

**Pro Tip:** trial fit the servo, screw into place, then remove, CA the screw holes, then refit



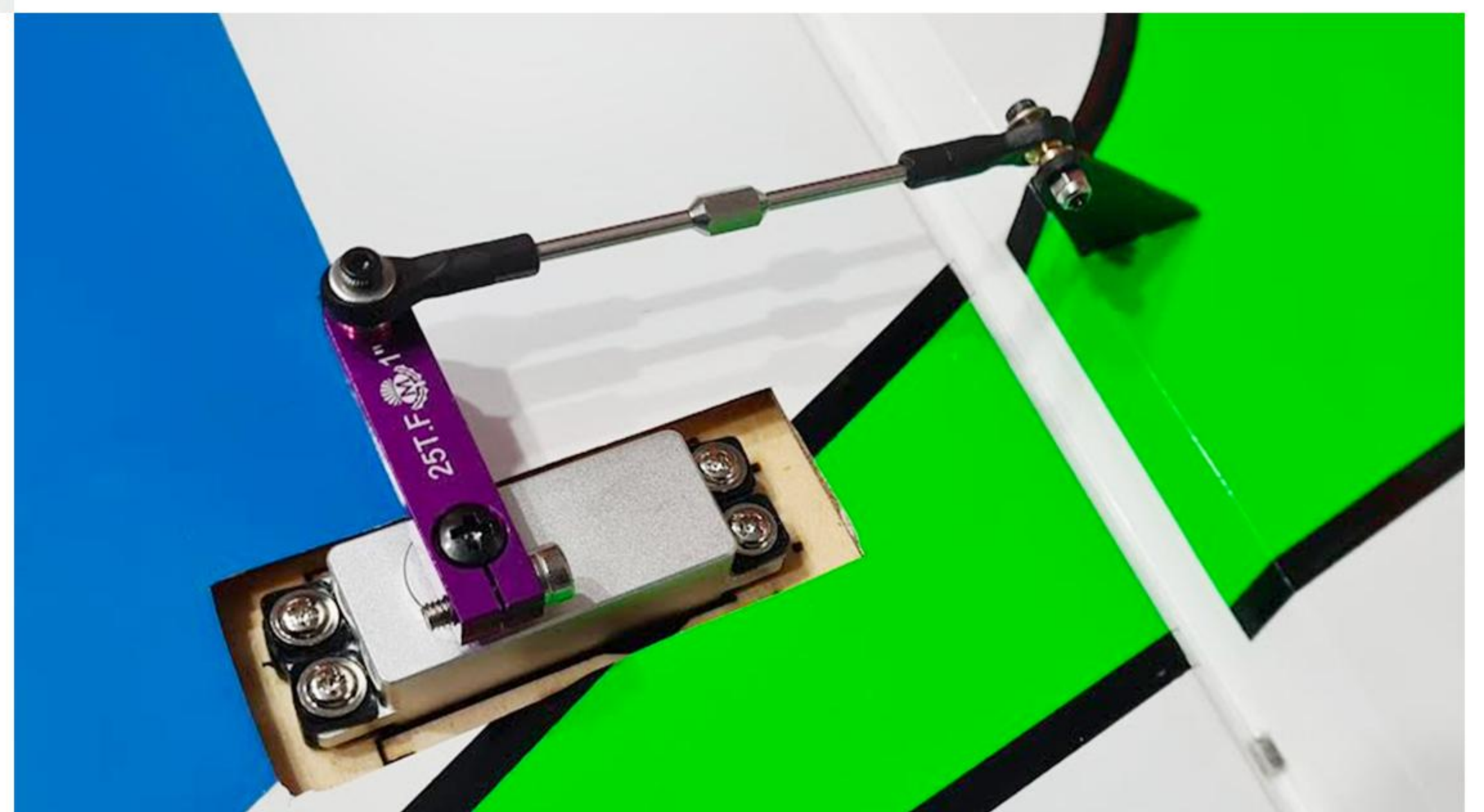
**Pro Tip:** As aileron throws are a personal preference, choose the appropriate servo arm for your aileron servo. Our team pilots settled on between 1" and 1.25"

- ⑥ Secure aileron servo arm and control arms with ball head pull rod, put the cup head hexagonal screw, gasket, ball head on servo arm, secure it with iron pliers, adjust the ball head pull rods to proper length.
- ⑦ Secure screw, washer, ball head to control arm, control arm is at 90 degrees against servo.



**Note:** Washers positioned to prevent ball link accidentally coming off

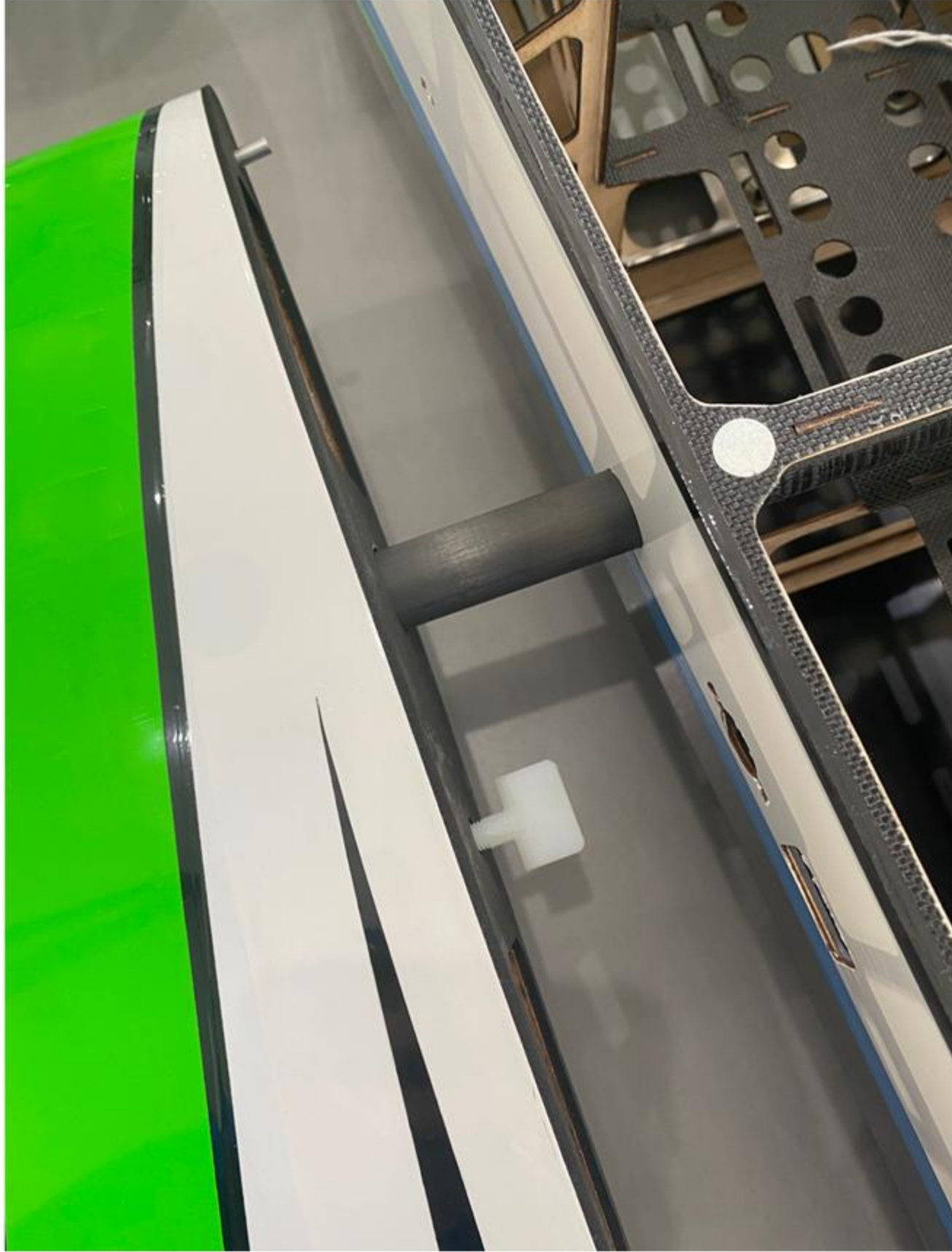
Servo arm is at 90 degrees to the servo when aileron centered



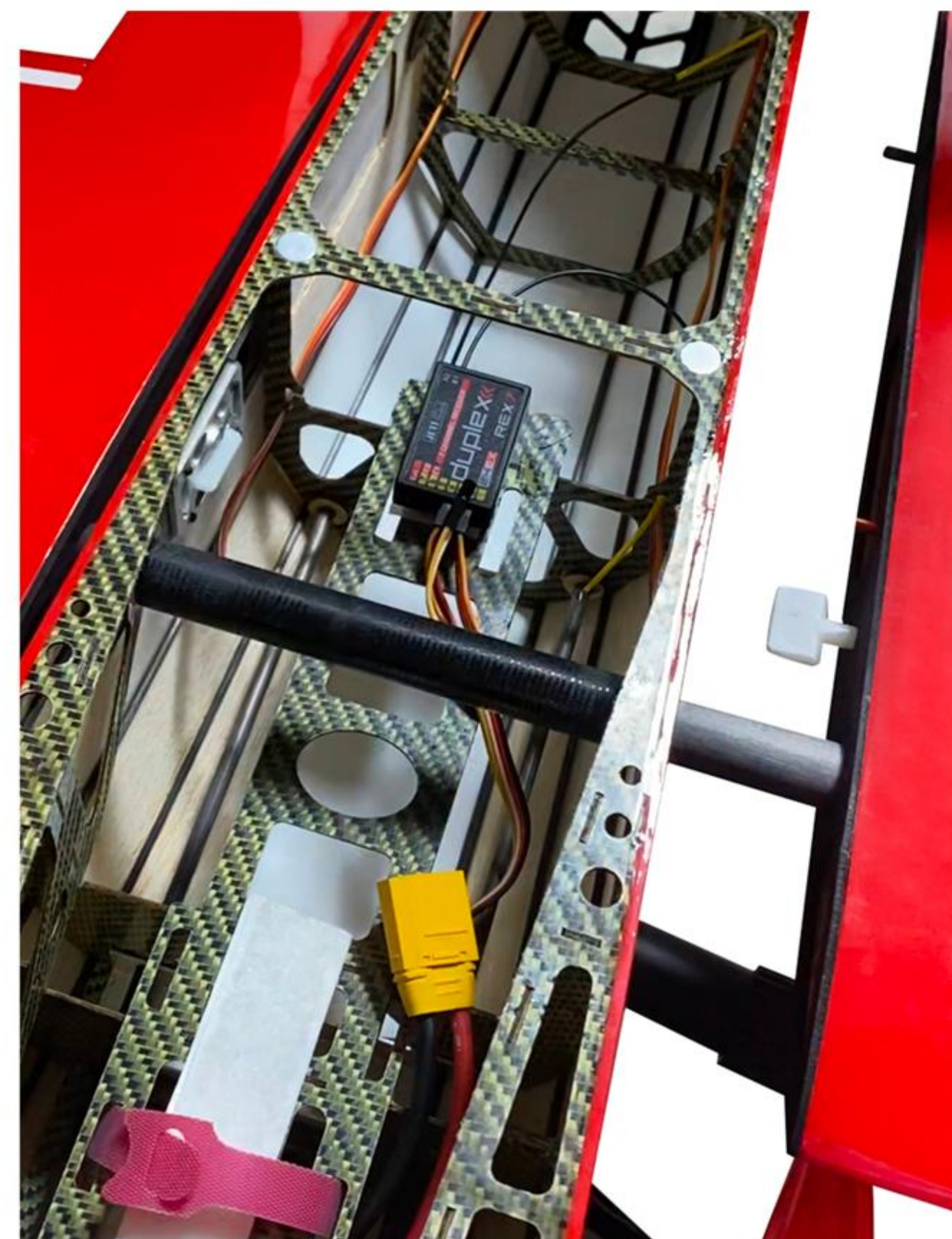


## Wings Assembly

- ⑧ Assemble the wing tube into the fuselage then install wings, turn white screws to secure the wings.
- ⑨ Unscrew the retaining screws on the wing, install wingtip.



## Connect Receiver and Battery







**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](mailto:support@omphobby.com)

Website: [www.OhioModelProducts.com](http://www.OhioModelProducts.com)

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

Email: [store@omphobby.net](mailto:store@omphobby.net)

Website: [www.omphobby.com](http://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>