OMPHOBBY®

Global Professional RC ModeL Brand

Installation Manual

OMPHOBBY 77" RV8

Zhuhai Edge smart drive technology Co., Ltd

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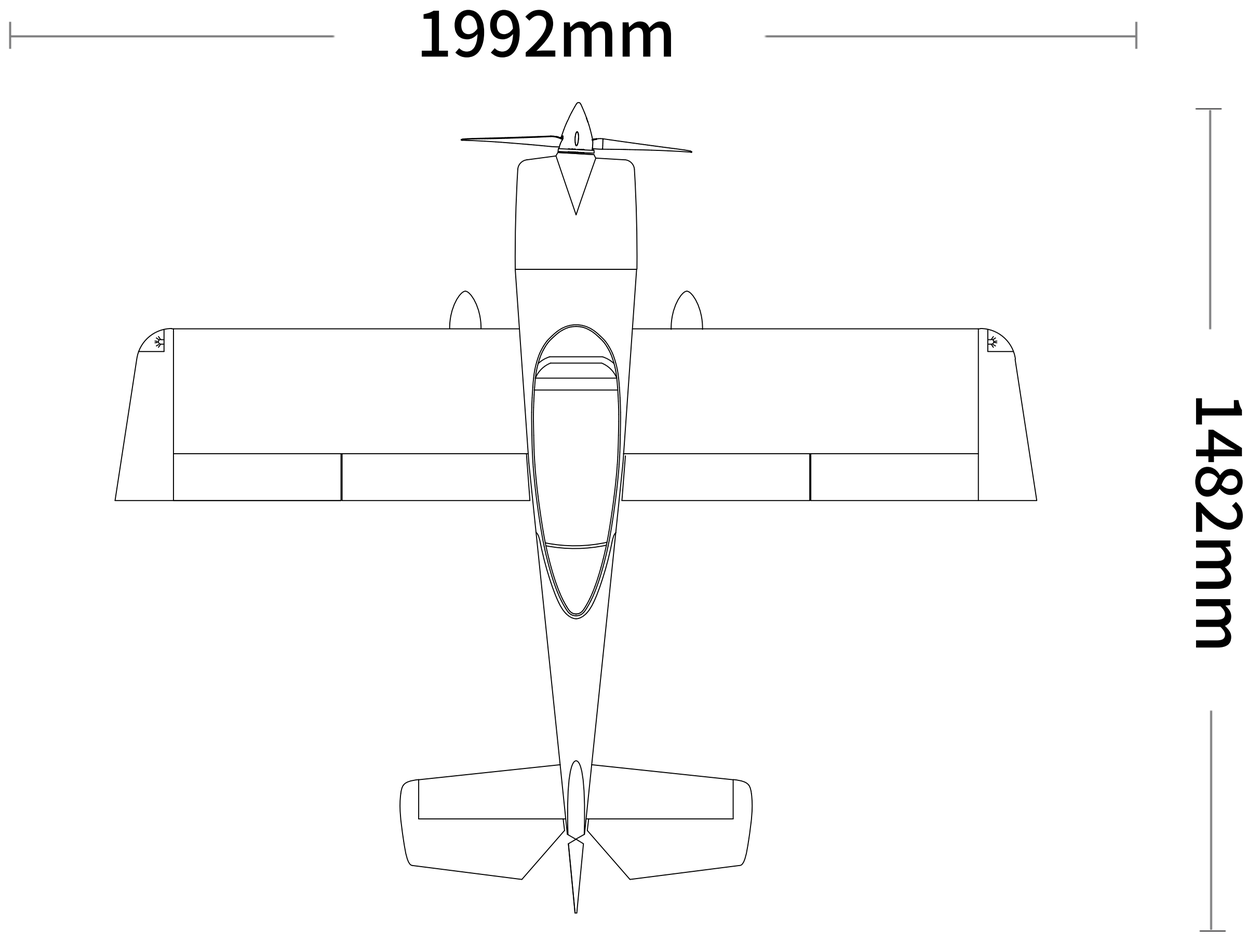
OMPHOBBY 77" RV8 Balsa Wood Airplane

OMPHOBBY's latest 77" RV-8 is a faithful recreation of the full-scale aircraft, with every detail carefully considered to preserve its outstanding performance while adapting it to the specific demands of RC flight. The airfoil has undergone multiple rounds of refinement to strike the perfect balance between lift, drag, and handling across both low and high speeds. The result is an aircraft that feels more stable at low speeds, more precise at high speeds, and makes aerobatic maneuvers feel effortless.The internal structure has also been meticulously engineered – maximizing flight rigidity while shaving off every possible gram of weight.

Whether you're a beginner or a seasoned pilot, this RV-8 has something to offer that will hit your "sweet spot". With its 77-inch wingspan delivering excellent wind penetration and a commanding presence in the air, every takeoff, flyby, and landing exudes the authentic charm of a true sport aircraft.



Product Specification



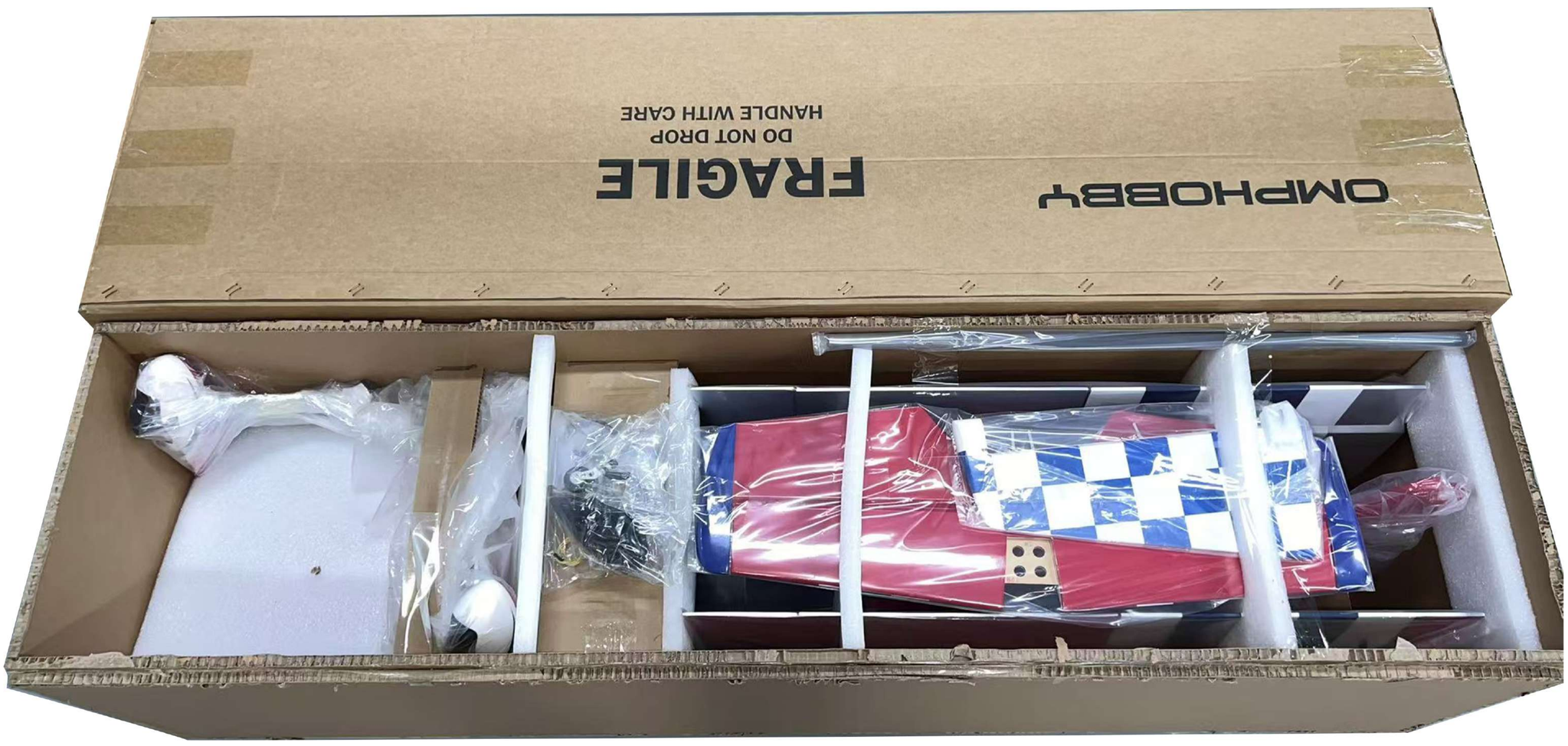
Right thrust	Down thrust	Main wing incidence	CG
2.5°	0°	0.5°	85-90mm

Wing Aera	Weight	Wing loading	Flight duration
69.19dm2	4100g	59.25g/dm2	5-10min

Spinner	Prop	Motor
3in	18x8	X6215III 420KV
ESC	**Battery**	**Servos**
125A (BEC7.4v 10a)	6s4500-5000mAh	5*10 kg.cm and above 2*7 kg.cm and above

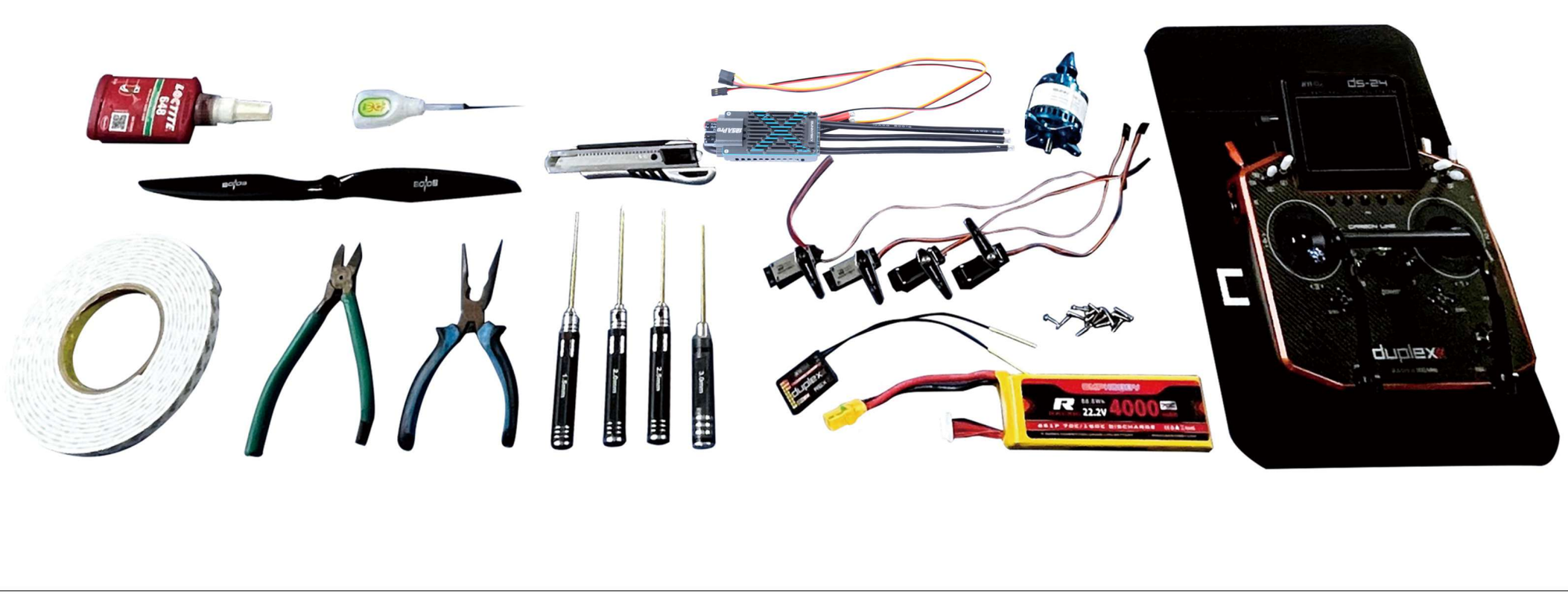
Aileron	Elevator	Rudder	Flap	retractable
servo*2	servo	servo	Yes	No

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

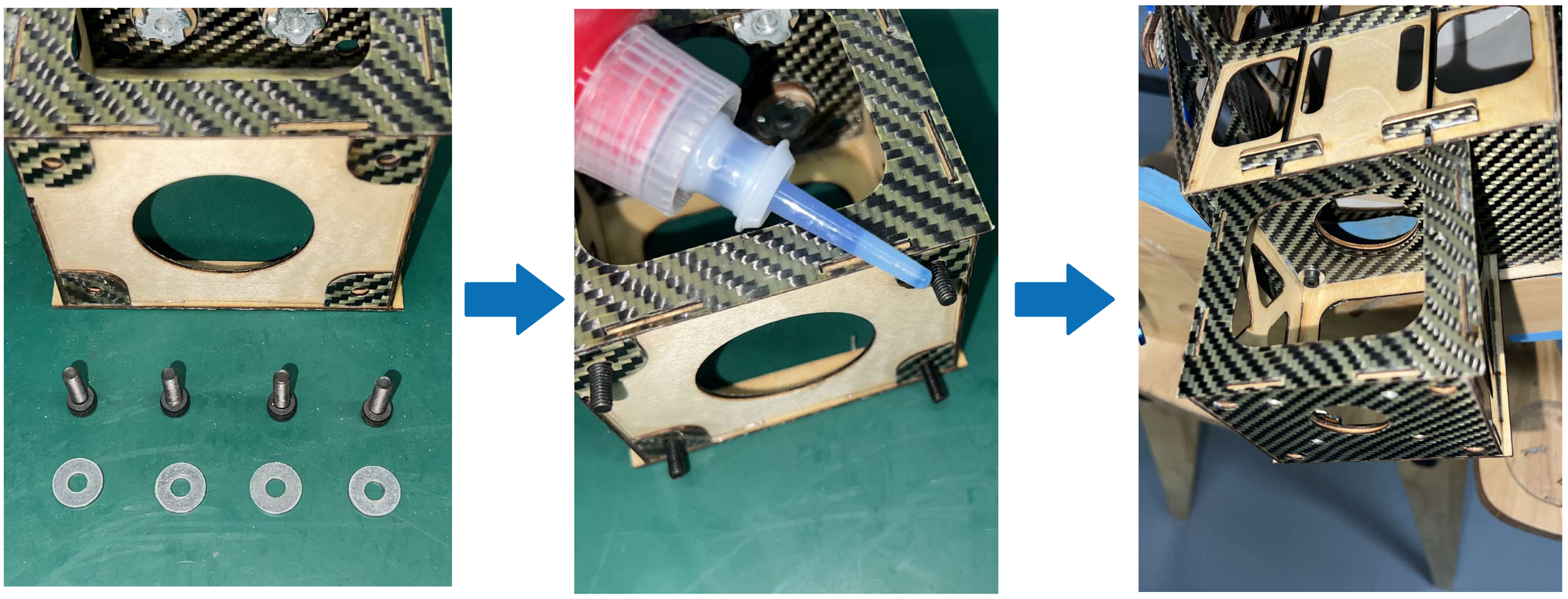
Power Assembly

Power Installation

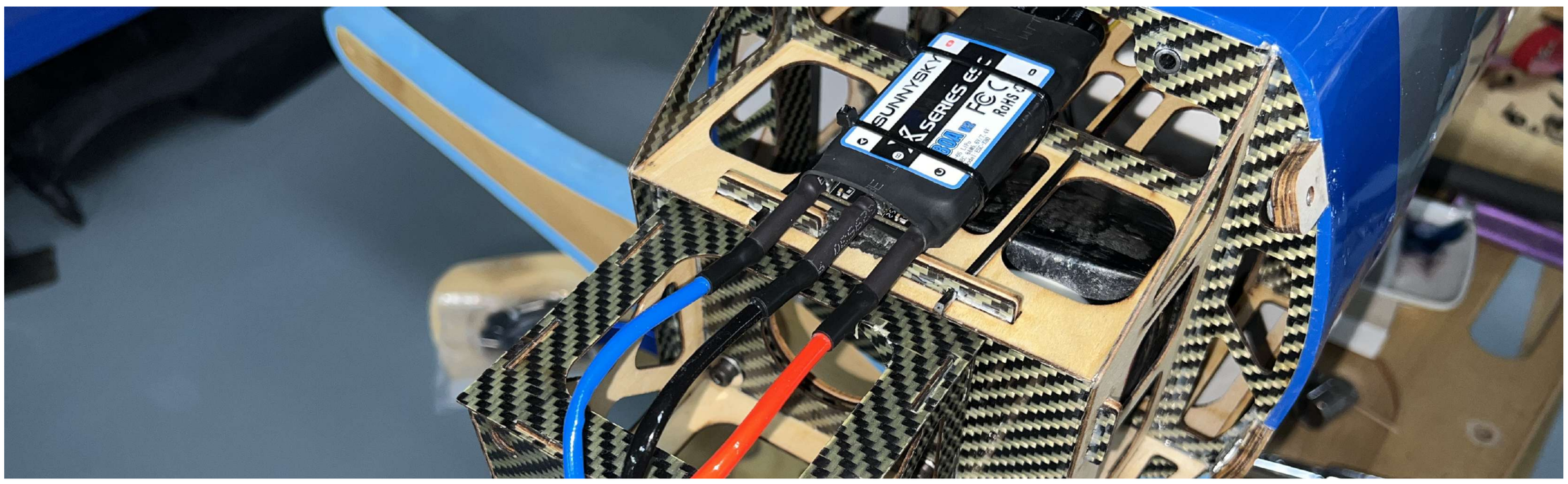
① Ensure the motor box is correctly oriented (front/rear and up/down). Insert the washers and screws through the rear holes, apply medium-strength threadlocker to the threads, and fasten them firmly to the firewall.

② Install the pre-assembled power system with the motor rotation direction correctly set onto the motor box. Note that both the motor mounting screws and the cross-plate screws must be coated with medium-strength threadlocker.

③ Make sure all screws are tightened securely.



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Cowl Assembly

Cowl Installation

① Use masking tape horizontally across the fuselage and cowling to keep them aligned while securing the mounting points.

② Use a marker pen to place a dot at the exact center of the alignment reference point.

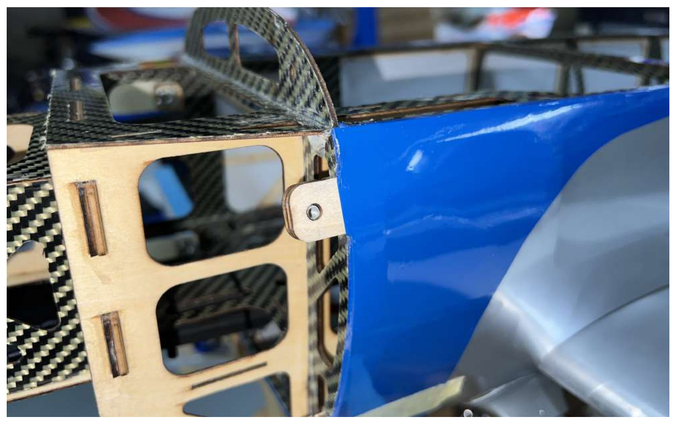
③ Peel off the front section of the masking tape, then install the cowling onto the fuselage. Fit the spinner onto the motor and check from both the top and side views to ensure an even 2mm gap between the spinner and the cowling.

④ After confirming that everything is properly installed, reapply the masking tape – make sure it is straight and not skewed.

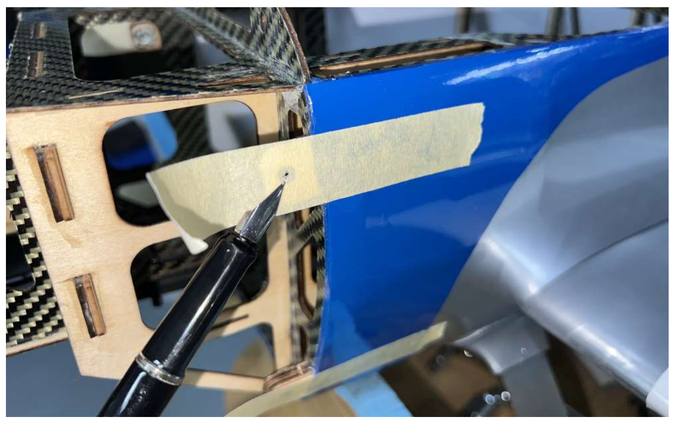
⑤ Use a drill bit to make a pilot hole at the marked point. Once done, remove the cowling and enlarge the hole to the required size.

⑥ Finally, peel off the masking tape, reinstall the cowling, and tighten the mounting screws securely.

⑦ Tighten the propeller blade and spinner mounting screws as well. This completes the installation of the propeller, spinner, and cowling.



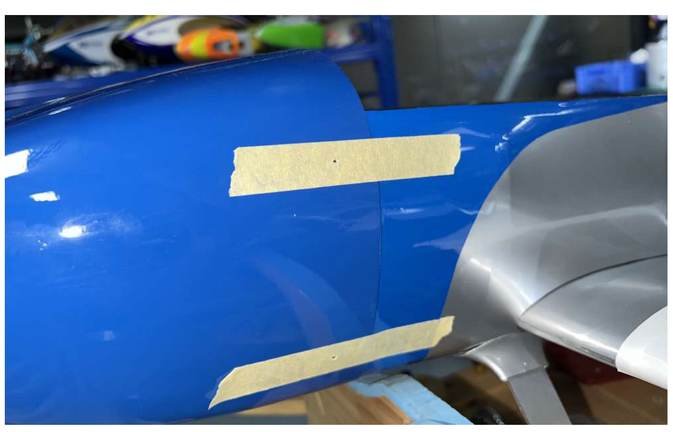
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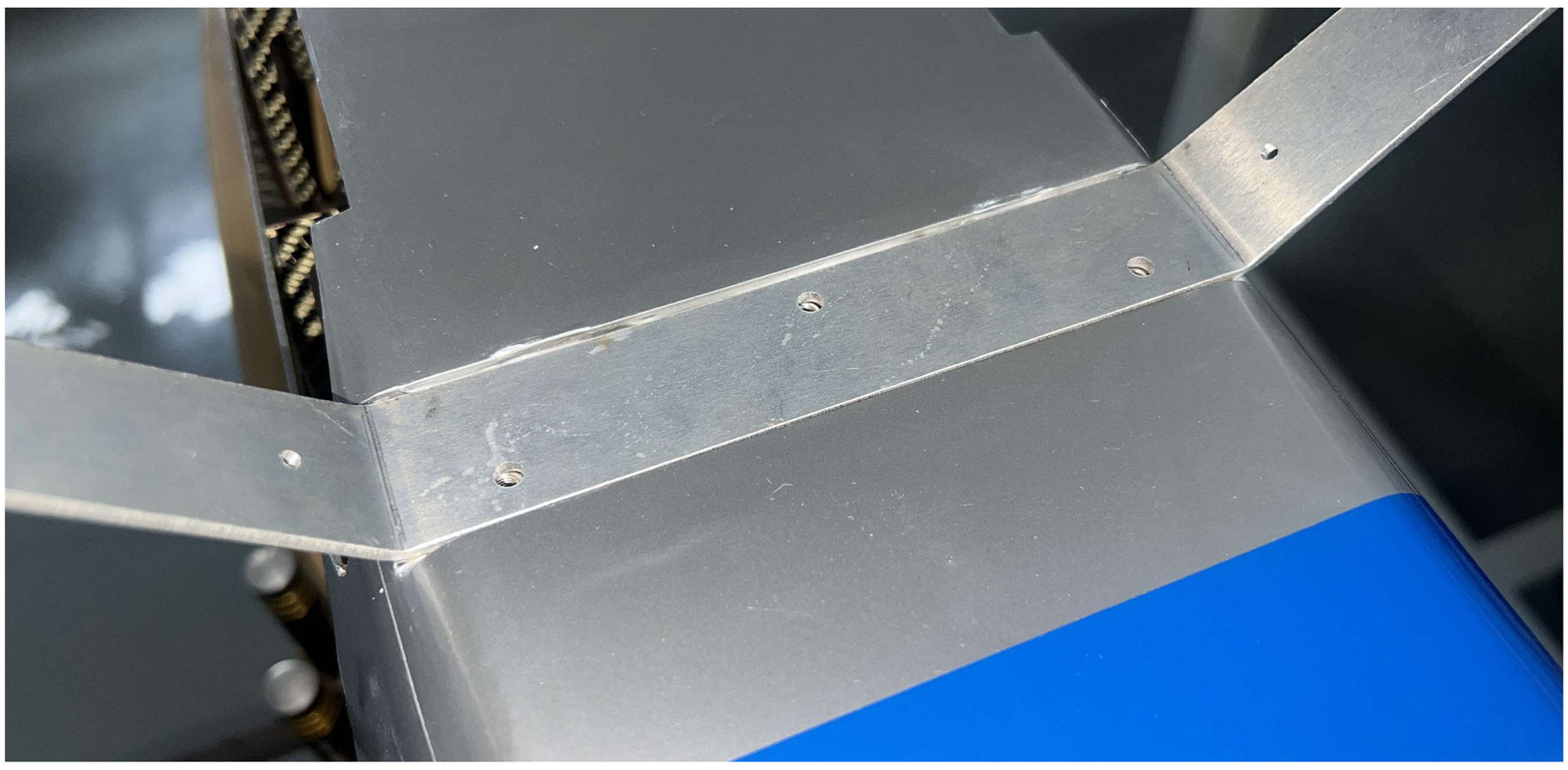
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landing gear Assembly

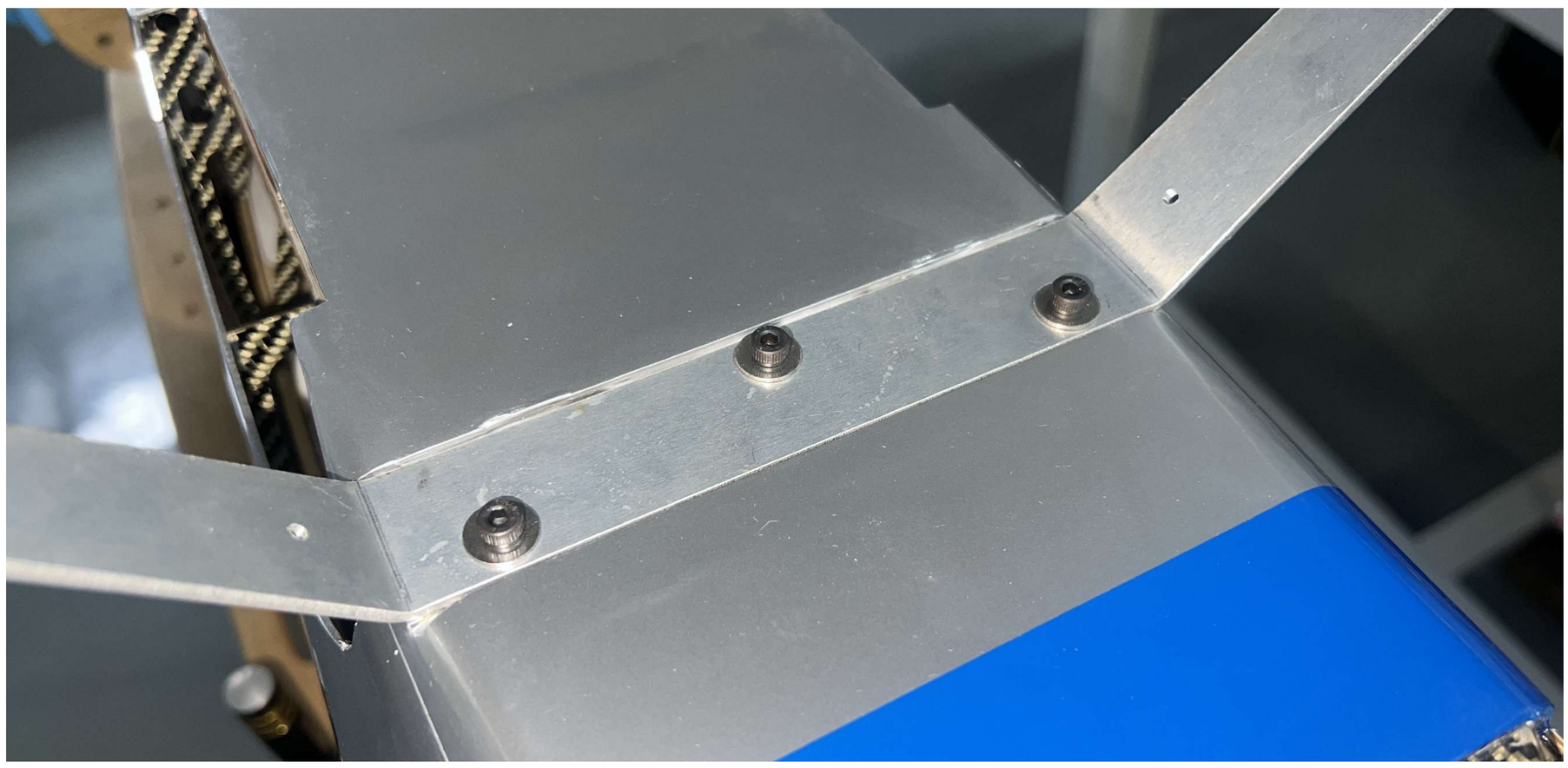
landing gear Installation

① Align the reference marks on the landing gear with those on the fuselage, and ensure that the landing gear mounting nuts are properly aligned with their corresponding positions on the airframe.

② Install the screws with the washers in place. Apply a moderate amount of medium-strength threadlocker to the screw threads, then tighten them securely.



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Main wheel Assembly

Main wheel Installation

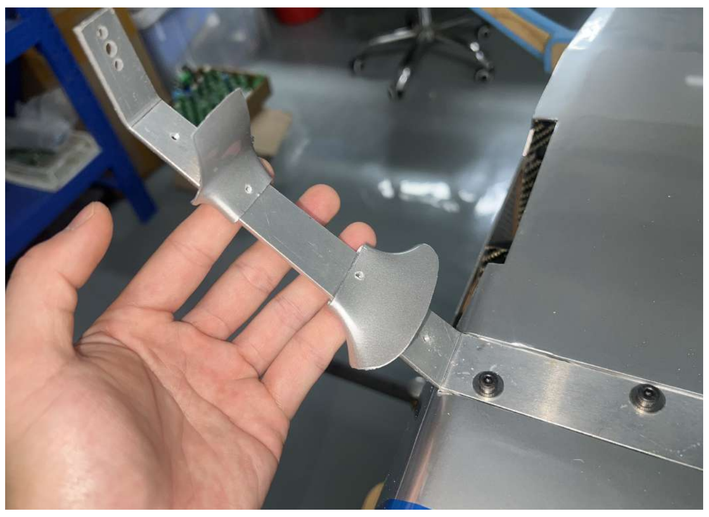
① Install the landing gear fairing and secure the wheel covers(Note: Front and Back)

② Install the main wheel according to the hole pattern(All screws should be coated with an appropriate amount of threadlocker.)

③ First tighten the wheel collar set screws. Then thread the two axle mounting screws only halfway (do not fully tighten them).

④ After the wheel pants are properly positioned, tighten the axle mounting screws securely.

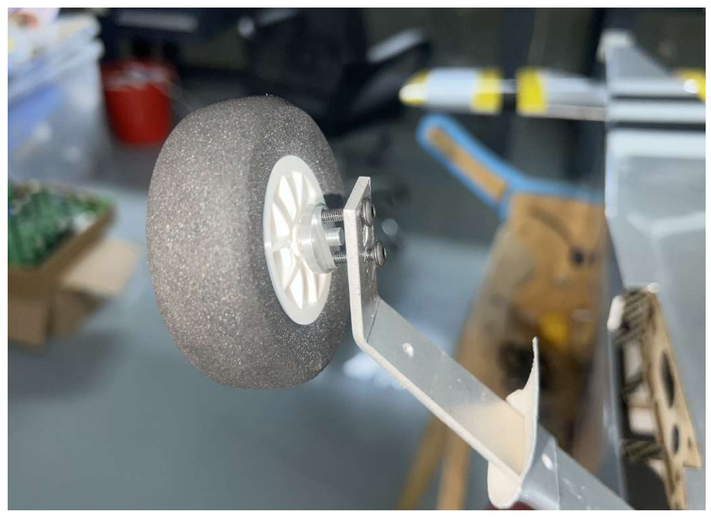
⑤ Tighten the two fairings securely. Apply threadlocker to the screws before tightening.



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Stabilizer Assembly

Stabilizer Installation

① Insert the horizontal stabilizer into the fuselage and push it fully into place.



② Apply a bead of CA glue (with a fine-tip applicator) along the gap between the fuselage and the horizontal stabilizer.



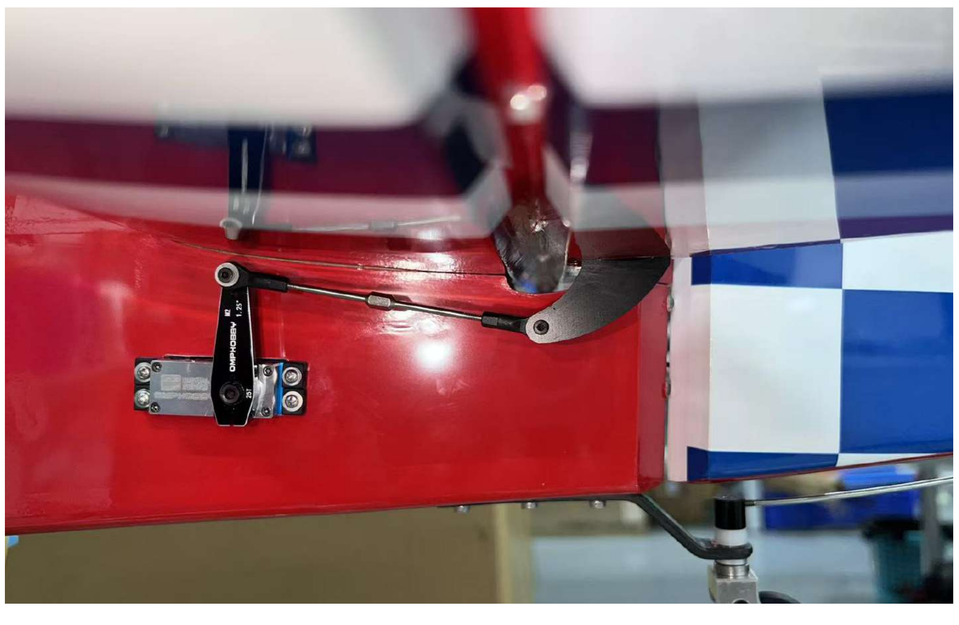
③ Insert the main wing carbon tube and check whether the main wing and horizontal stabilizer are perfectly level with each other. If there is a slight misalignment, you can insert a piece of A4 paper as a shim at the stabilizer mounting point to correct it.



④ Glue the vertical stabilizer filler block into the slot using CA glue.



⑤ Install the ball link onto the control horn with the ball end facing inward. The distance between the two ball link holes should be 83.9 mm (with a +1.5 mm tolerance).



Rudder Assembly

Rudder Installation

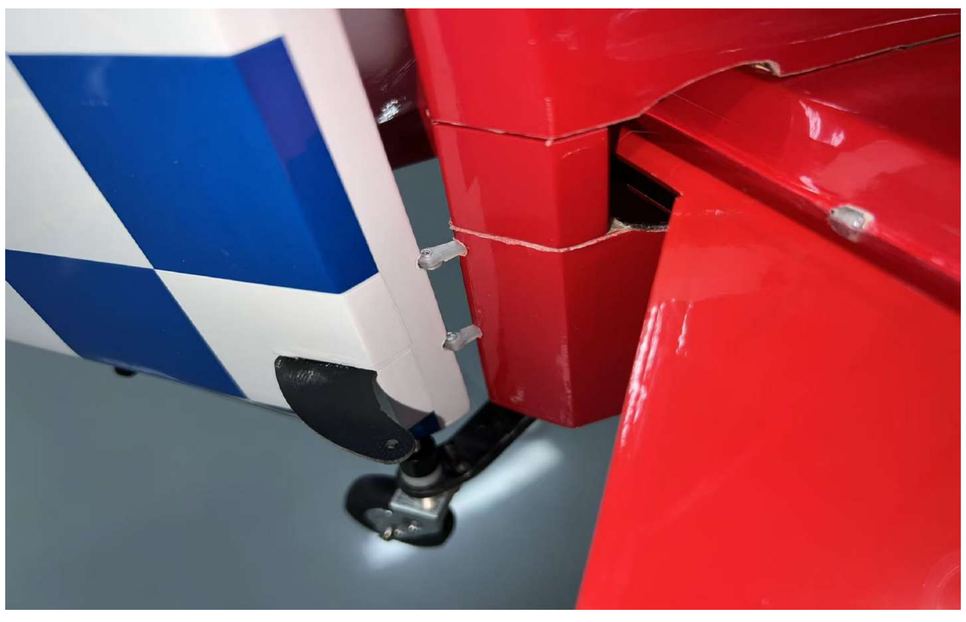
① Apply one drop of lubricating oil to the center of each hinge to prevent it from binding during the gluing process. Then, coat the mounting holes on the rudder and vertical stabilizer with AB glue (epoxy resin) before inserting the hinges.



② Insert the tail wheel control wire into the ball link at the bottom of the rudder.



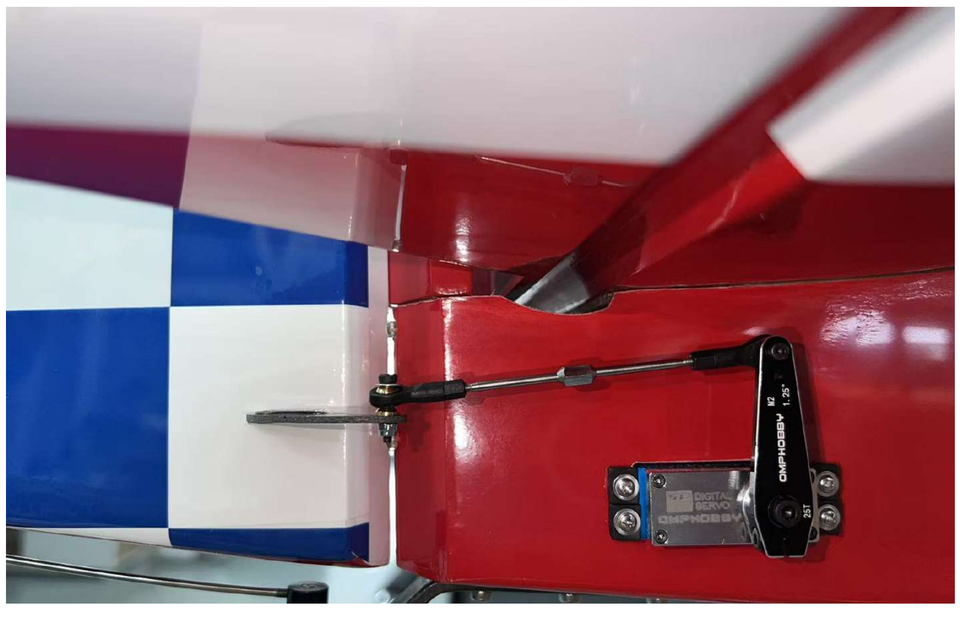
③ Insert the other side of the hinge into the fuselage, then use a cleaner (alcohol) to wipe off any excess glue that has squeezed out.



④ Tape the rudder and vertical stabilizer together, keeping a 1mm gap. Wrap masking tape around the joint to hold alignment during curing – time varies with fast- or slow-curing epoxy.



⑤ Secure the pushrod to the control horn with the ball link facing upward. The center-to-center distance between the two ball link holes should be 79 mm (with a tolerance of ±1.5 mm).



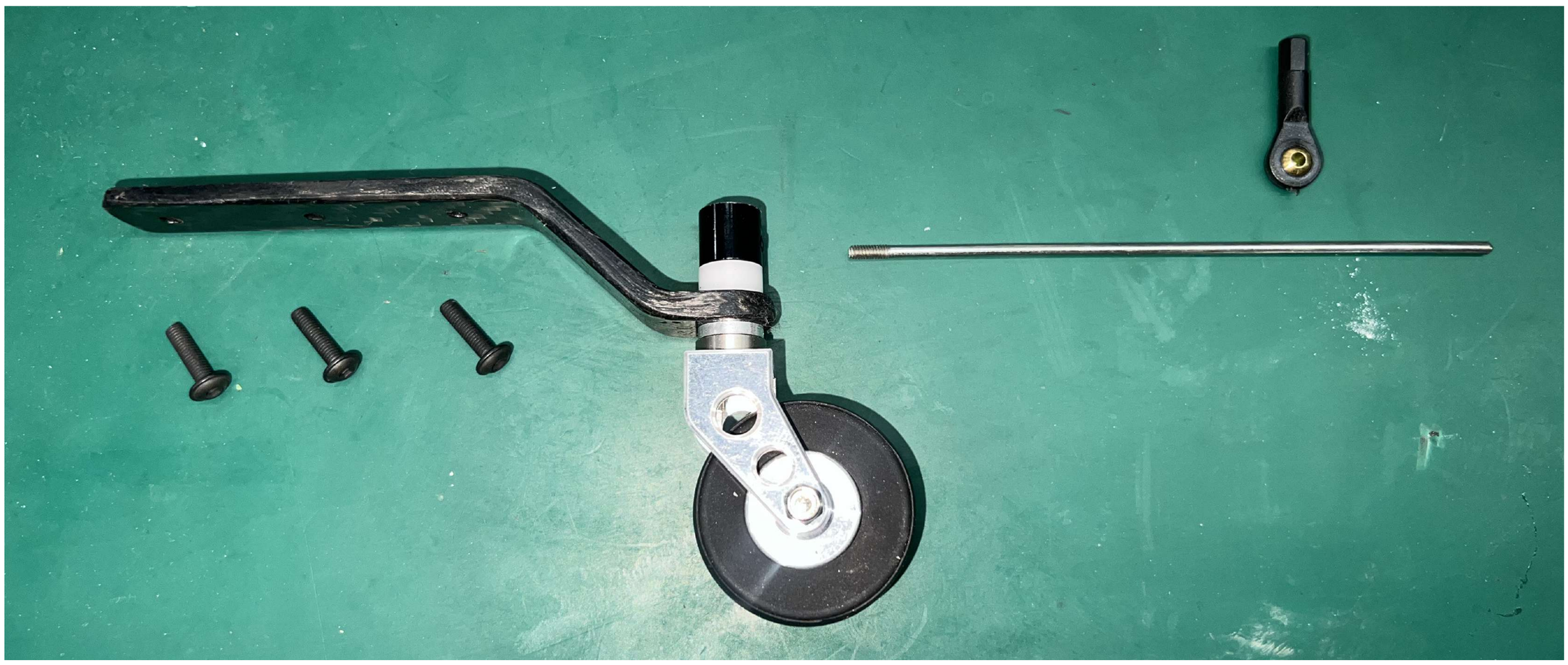
Tail wheel Assembly

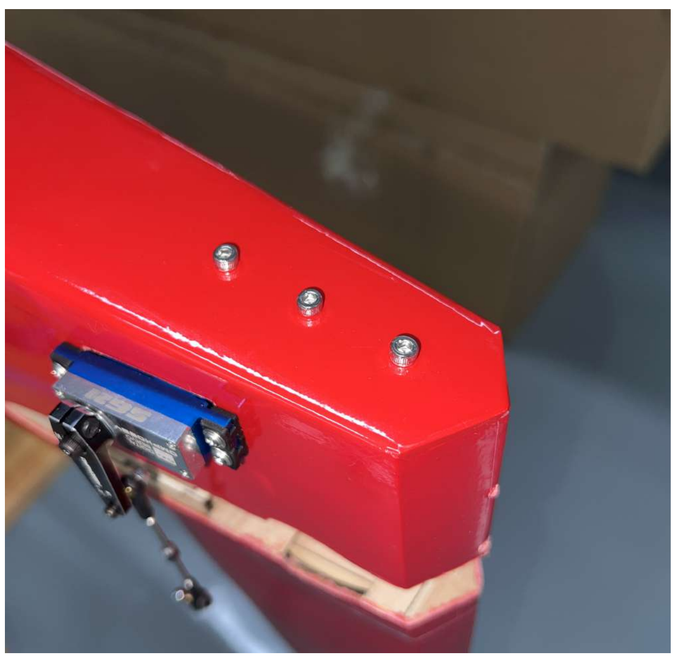
Tail wheel Installation

① Remove the screws from the designated locations at the rear of the unit

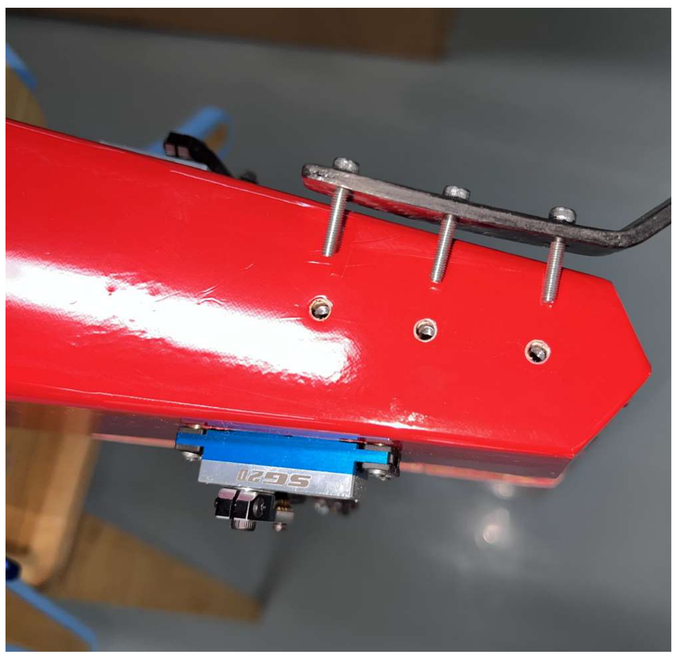
② Insert the screw through the tail wheel bracket, then apply a moderate amount of medium-strength threadlocker to the threads

③ Installation complete





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Wing Assembly

Wing Installation

① Follow the servo installation instructions to install the servo.



② Connect the servo wires to the wing wires and tuck them back into the wing.





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

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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