OMPHOBBY®

Global Professional RC Model Brand

Installation Manual

Challenger 49 PNP Version

Zhuhai Edge Smart Drive Technology Co., Ltd.

CHALLENGER 49”

OMP Hobby Challenger 49” is a sport RC model airplane built in the traditional way: balsa and film cover.
The air fighter has a slender and smooth fuselage with good route capability. At the same time, a larger control surface with strong power can easily complete P3A actions and some 3D actions. The overall design is light and the wing load is extremely low. It is designed and positioned as an easy to use balsa airplane.In addition to high-speed precision and violence, it also has the elegance of low speed. Novices can grow faster with this aircraft, and senior model friends can feel the precise and neat high-speed route action when flying, and also the smooth rolling axis. Everyone can find their own flying style on this plane. The plane can use the most common 3s 2200 battery to fly and the use cost is low. The whole plane uses ball joint pull rods to ensure flight accuracy. The detachable design of the horizontal tail and tail wheel system is convenient for molders to who are inconvenient to transport.

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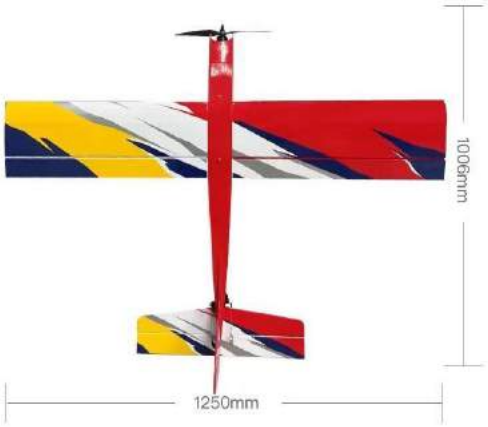
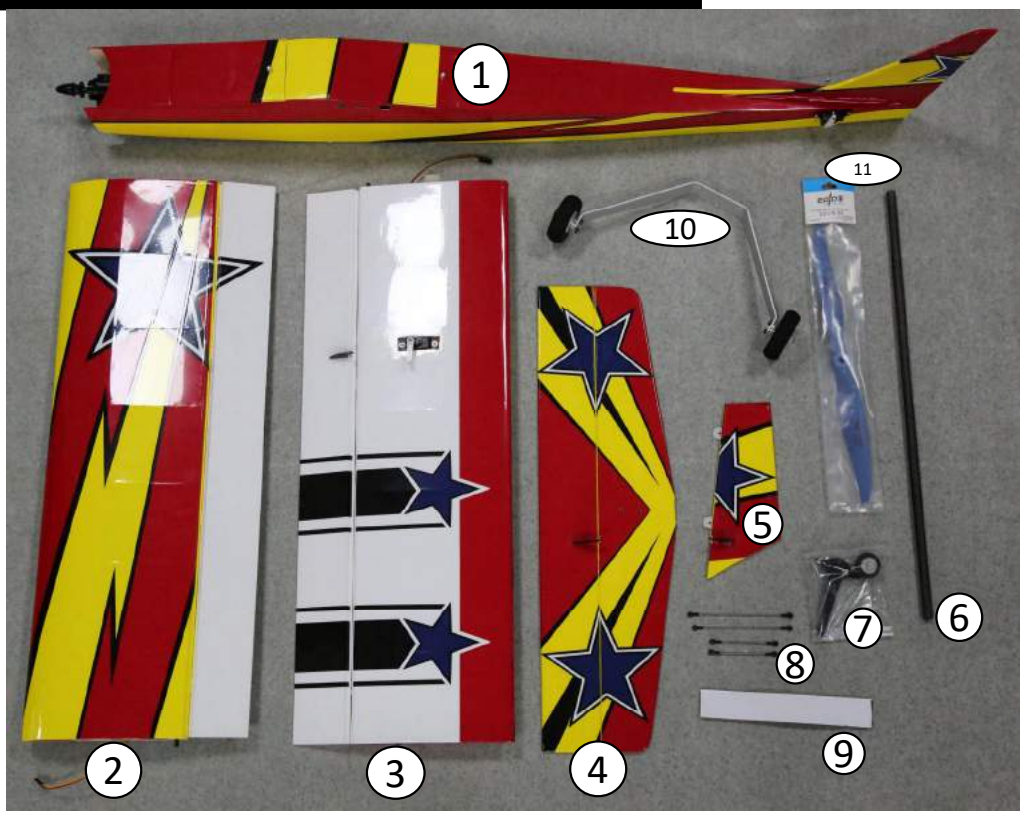
Parameter Specification

Prop Size Electromoto12X6.5/Dual bladest Electromoto10X60/Dual blades	Wingspan 49Inch(1250mm	Aileron Dual servos	Elevator Single Servo
Motor Electromotor:2820 KV1100 Fuel engine:Methanol level 25-36	Length 39.6Inch(1006mm)	ECS 40A (Bec 5V 3A)	Flying Weight Electromotor:1170g Fuel engine:1560g
Servo 17g Fuel engine version servo 9g	Wing area 28dm²	Orientation Single Servo	Wing flap No
Battery 3S 2200mAh	Wing Load 41.8g/dm² 55.7g/dm²		
Flight time Approx 4-10mins	Barycenter 62mm		
Undercarriage control No	Assembly time 10min (PNP) 2h (ARF)		



Package contents (receiver ready version)

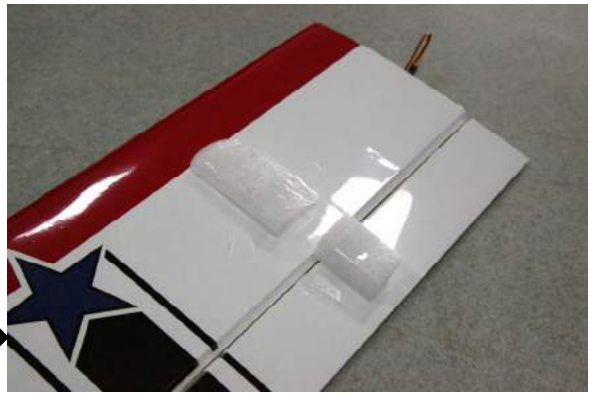


① Fuselage
② Left Wing Half
③ Right Wing Half
④ Horizontal Stabilizer
⑤ Rudder
⑥ Main wing carbon tube
⑦ Tail wheel assembly
⑧ Ball head pull rods
⑨ Two-sided Velcro
⑩ Main landing gear assembly
⑪ 12*6.5 Propeller

Installation Steps

- The main landing gear system has been installed in the factory;
- All ball head pull rods have been pre-assembled;
- All rudder angles have been bonded in place;
- All ball joints have been installed in place;

- The servo lines has been fixed in the receiver position with beauty glue;



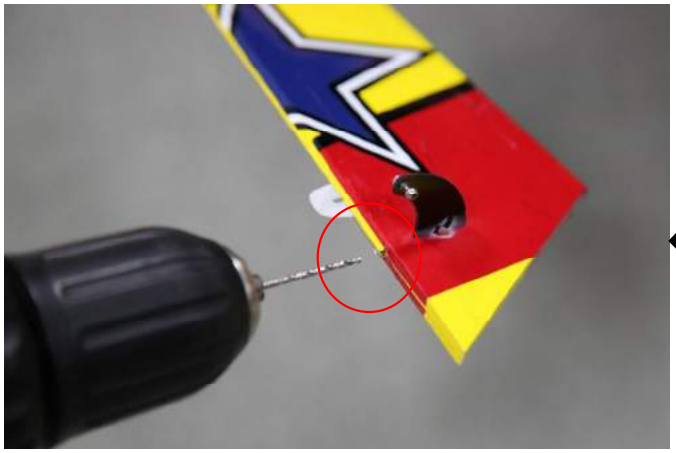
Horizontal Stabilizer installation procedure

1. Use a art knife cut open the hole which threading the tail wheel wire and located on horizontal stabilizer.

2. Align the horizontal stabilizer slot with the fuselage slot and clip it into the fuselage.

3. Stick the carbon plate to the horizontal stabilizer and screw on three cross-screws

Rudder and Tail wheel Installation procedure



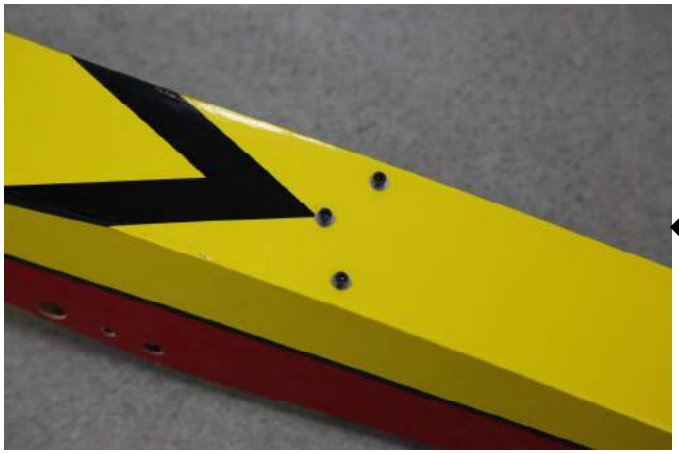
1. Punching the hole which threading the tail wheel wire to plug in rudder

2. Threading the tail wheel wire from the bottom to the top

3. Stick the rudder into the tail wheel wire, and insert the rudder hinge into fuselage hinge slot

4. Use 502 gluing and fixing it.

Main landing gear Installation procedure

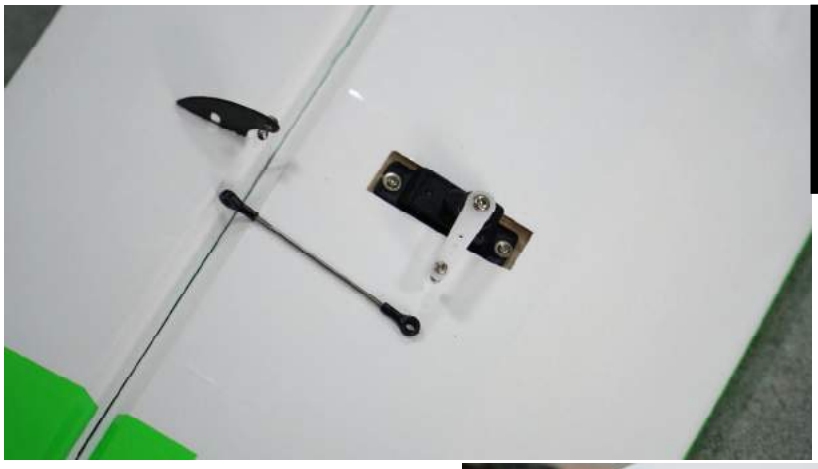


1. The main landing gear fixing screws have been pre-installed on the fuselage

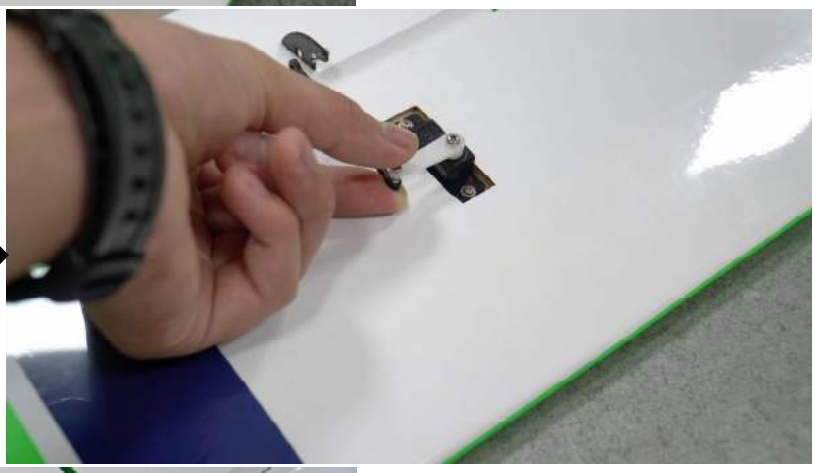
2. Use 2.5mm hexagon socket head screw driver remove the screws

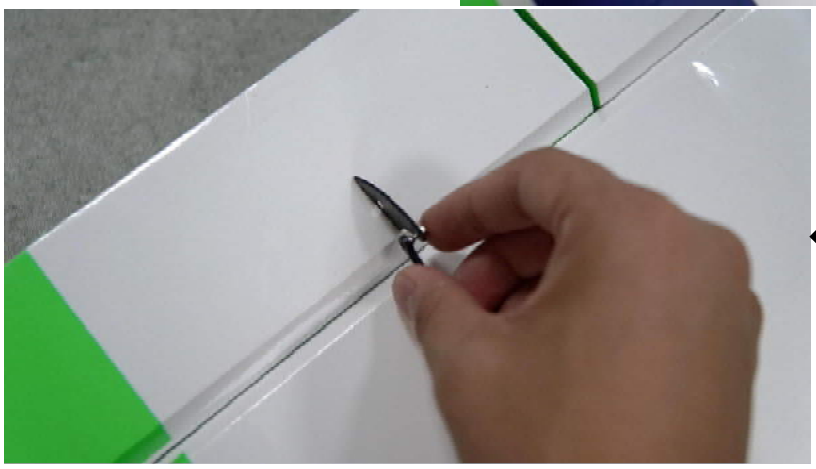
3. Align the landing gear according to the hole position and tighten the three screws

Ball head pull rods Installation procedure

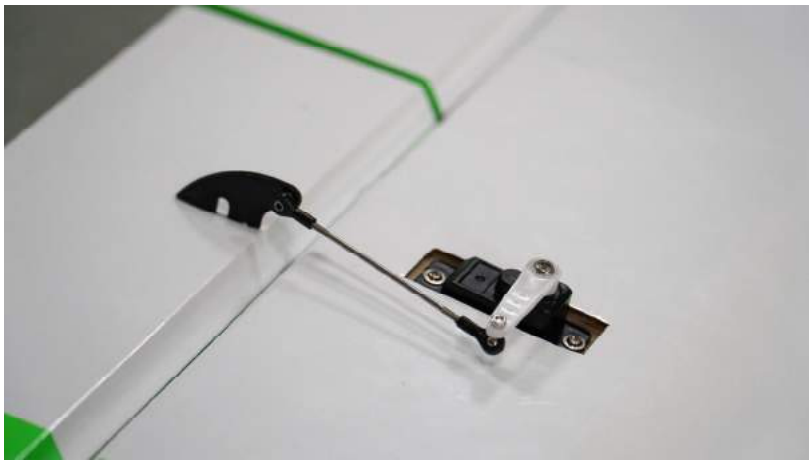


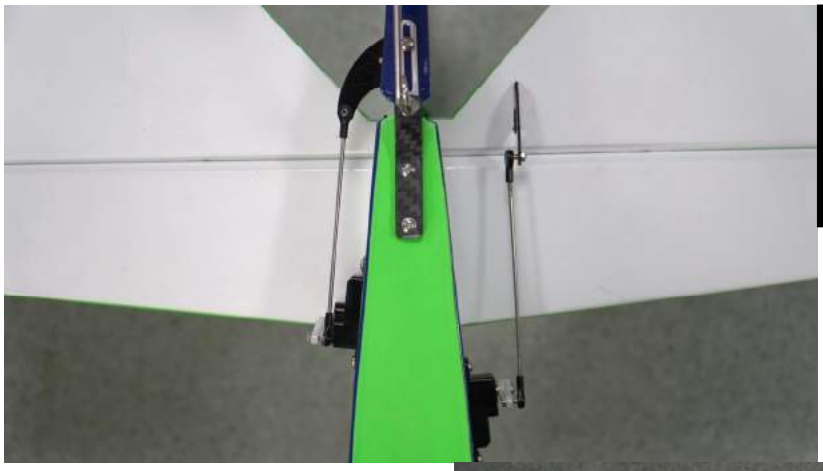
1. Put the rudder flat, servo arm is at 90 degrees against servo



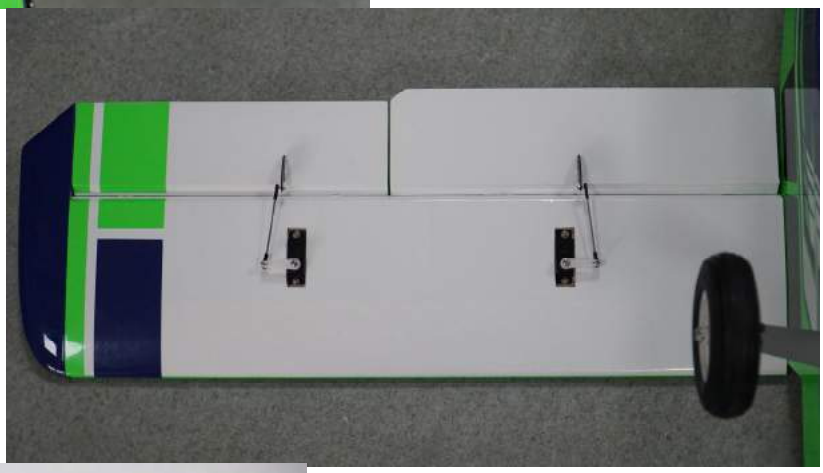


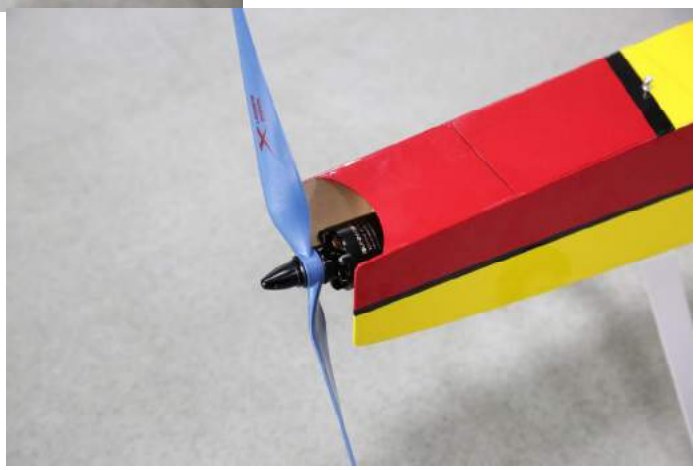
2. Adjust the ball head pull rods to proper length





Propeller **Installation procedure**





Installation sequence: aluminum alloy base → propeller → gasket → nut → fairing → two cross screws

Recommended Settings of Dual Rates and Exponentials of Control Surfaces

	Low rate	Low rate exp	High rate	High rate exp
Aileron servo	60	40%	100	40%
Elevator	50	30%	100	30%
Rudder	60	30%	100	30%
Flap	80	~	100	~

For customer support in the USA, please contact Ohio Model Products in Ohio.
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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 aircra ft.
- 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 foll owing link: www.modelaircraft.org/files/100.pdf