

M1 V3 PRO

INSTRUCTION MANUAL






OMPHOBBY
SKY IS CALLING

Thank you for purchasing the OMPHOBBY M1 V3 PRO Helicopter. The M1 V3 PRO is the latest and most advanced 100-sized micro helicopter offering from OMPHOBBY today. Please read this manual carefully before flying and servicing the M1 V1 PRO. Keep this manual for future reference.

Thank you for purchasing the OMPHOBBY M1 V3 PRO. The M1 V3 PRO is designed to be an easy to use, fully featured micro R/C helicopter model. Please read this manual carefully before flying and servicing the model, and follow all warnings and recommendations located within the manual. Be sure to retain this manual for future reference, routine maintenance, and tuning.

The M1 V3 PRO is a 100-sized micro R/C helicopter developed by OMPHOBBY. It has been optimized for maximum flight performance, and features the highly regarded OMPHOBBY Flight System 3 (OFS3) flight controller.

WARNING LABEL LEGEND

 <p>WARNING</p>	<p>Mishandling due to failure to follow these instructions may result in damage or injury.</p>
 <p>CAUTION</p>	<p>Mishandling due to failure to follow these instructions may result in danger.</p>
 <p>FORBIDDEN</p>	<p>Do not attempt under any circumstances</p>

IMPORTANT NOTES

Remote Control Helicopters, including the M1 V3 PRO, are not toys. They are sophisticated precision models and must be used with caution. Read this manual carefully before using operating the M1 V3 PRO. Failure to use the M1 V3 PRO properly may result in property damage, serious injury, or even death. Make sure to be conscious of your own personal safety and the safety of others, as well as the environment around you when using OMPHOBBY products.

The manufacturer and seller assume no liability for the operation or use of this product. The M1 V3 PRO is intended for use only by adults that have familiarized themselves with the operation of R/C helicopters. After the sale of this product, the manufacturer and seller cannot maintain any control over its operation or usage.

R/C helicopters require skill to operate. It is recommended that you obtain the assistance of an experienced R/C helicopter pilot before attempting to fly your M1 V3 PRO for the first time. Damage or dissatisfaction of the product as a result of crashes, incorrect setup, modifications, or lack of necessary user skill is not covered by any warranty. Please contact our distributors for technical support and parts supply as necessary.

SAFETY NOTES

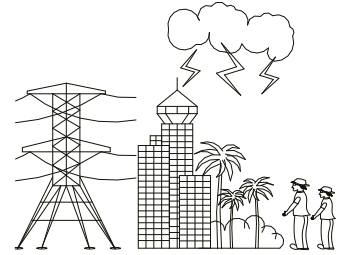


This product must only be used in safe and open areas, away from obstacles and people and other living beings. Do not operate R/C helicopters within the vicinity of homes or crowds of people. R/C helicopters may experience accidents, failures, and crashes due to a variety of reasons not limited to but including lack of maintenance, pilot error, or radio interference. Always ensure the model is flown in a way that such failures cannot result in harm to property or life. The pilot is solely responsible for their own actions and damage or injury occurring during or as a result of the usage of the M1 V3 PRO. Models must always be inspected before every usage for potential defects, issues or malfunctions.



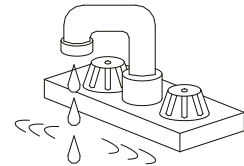
LOCATE AN APPROPRIATE LOCATION

To ensure the safety of yourself, others, and your model, do not fly near airports, buildings, roads, crowded areas, or high voltage cables. R/C helicopters can fly at high speed and have rotor blades spinning at high RPM, posing a certain degree of potential danger during operation. Choose a legal and safe flying field consisting of flat, smooth ground without obstacles, people, animals, etc. with ample clear space. Flying over long grass can reduce damage in the event of a crash. Do not fly your model in inclement weather such as rain, snow, darkness, or wind.



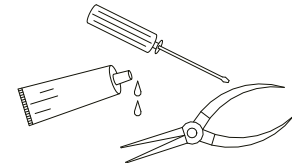
PREVENT MOISTURE

R/C models are composed of many precision electrical components. It is critical to keep the model and associated equipment away from moisture and other contaminants. The introduction or exposure to water or moisture in any form can cause the model to malfunction resulting in loss of use, or a crash. Do not operate or expose to rain or moisture!



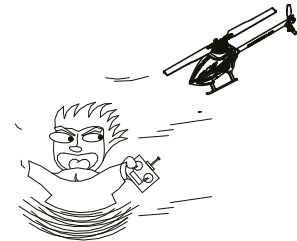
PREVENT OPETATION

Please only use genuine OMPHOBBY replacement parts to ensure correct and reliable operation. Using non-standard or damaged parts will void the product warranty and can cause danger, injury, or death. The product is designed for R/C modeling, and should not be used for other purposes.



OBTAIN THE ASSISTANCE OF AN EXPERIENCED PILOT

Before turning on your model and transmitter, check with other RC model users in the area to ensure that it is safe to fly. For inexperienced pilots, the guidance provided by an experienced pilot can be invaluable for the assembly, repair, setup, tuning, trimming, and first flight. It is recommended to use a computer-based simulator to practice before flying the model for the first time.



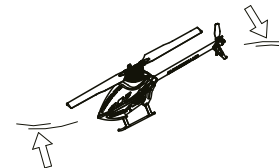
SAFE OPERATION

Operate this helicopter within your ability. Do not fly under the influence of perception-altering substances or when you are sleep deprived.



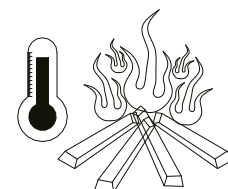
ALWAYS BE AWARE OF THE ROTATING BLADES

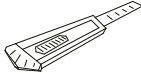

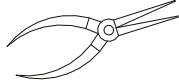
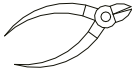
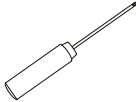
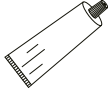


Special caution should be given to the main and tail rotor blades. During operation, the main and tail rotor blades spin at very high rotational speeds. Rotor blades are capable of inflicting serious injury/death and can cause damage to the surrounding environment.



KEEP AWAY FROM HEAT

R/C models are made of various forms of plastics. Plastic is very susceptible to damage due to extreme heat such as direct sunlight or a heater. It is best to store the model indoors in an climate-controlled room-temperature environment.



 <p>Cutter Knife</p>	 <p>Scissors</p>	 <p>Needle Nose Pliers</p>	 <p>Diagonal Cutting Pliers</p>	
 <p>Hexagon Screw Driver</p>		 <p>Oil</p>	 <p>CA</p>	 <p>AB Glue</p>

Please follow the guidance according to the legend provided.
Unless otherwise noted, all screws should be fully tightened.

 Apply BLUE Threadlock

 Apply Petroleum-Based,
Light Viscosity Lube

 Loosely Tighten

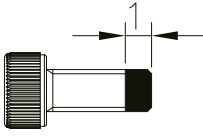
 Apply NO Threadlock

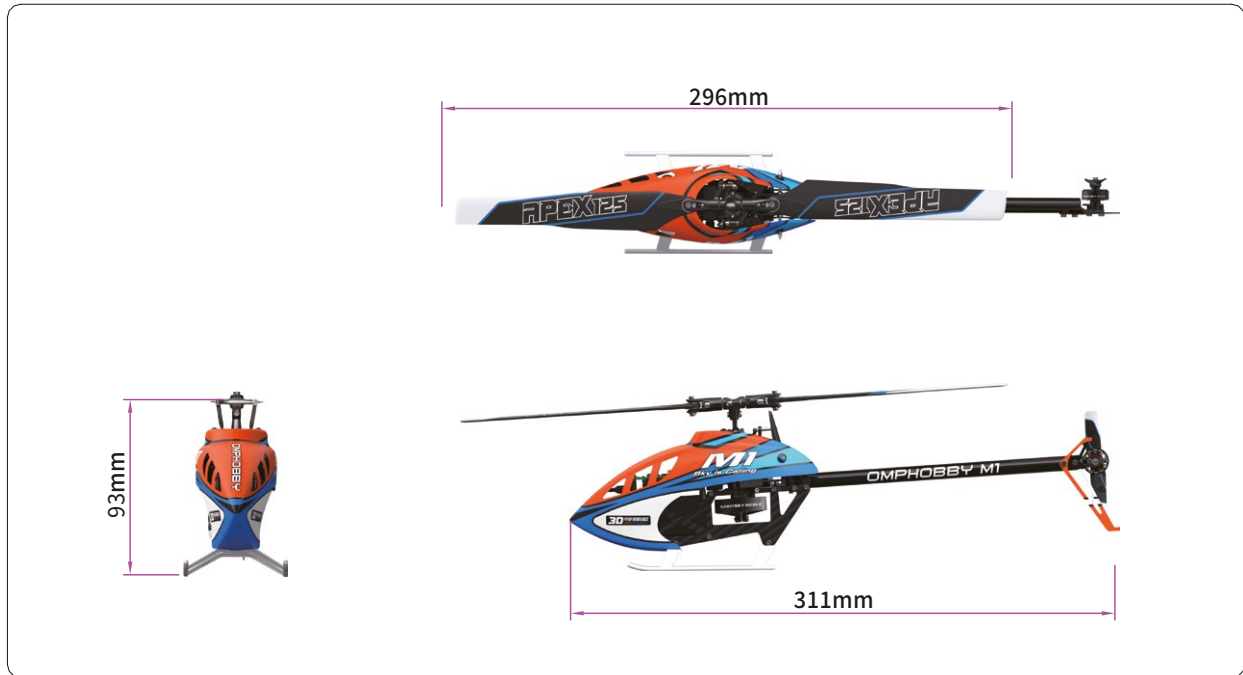
 Apply Synthetic
Grease

 Fully Tighten

 Apply MEDIUM CA

 Repeat Multiple Times

 BLUE Glue width: approx 1mm



Specifications

- Length: 311mm
- Height: 93mm
- Main Blade: 125mm
- Main Rotor Diameter: 296mm
- Tail Rotor Diameter: 54mm
- Flying Weight: 112g

Features

- Extreme featherlight breakthrough, redefining 100-class power standards
- OFS3+ control with integrated ExpressLRS
- 120° stepped featherlight frame
- Lightweight design of all carbon fiber body side panels and tailpipes.
- R23X-2 high-efficiency brushless motor
- 2S high-voltage LiPo battery

Radial Bearing $\Phi 2,5 \times \Phi 6 \times 2.6$ (x4)

$\Phi 2.5 \times \Phi 3.5 \times 0.2$ (x2) Spacer

$\Phi 2,5 \times 6 \times 3$ (x2) Thrust Bearing

Blade Grip

$\Phi 2,5 \times \Phi 6 \times 2.6$ (x4) Radial Bearing

CAUTION
Thrust bearings and spacers for radial bearings are wear items, and should be inspected for replacement at an interval of 20 flights.

Small inner Diameter
Obverse of bearing faces inside.

CAUTION
Thrust Bearing ($\Phi 3 \times \Phi 6 \times 2.8$)
(OUT) (IN)
Blade Grip

CAUTION
While this is a pre-assembled component, it is important to ensure the fasteners are secured before each flight.

Radial Bearing $\Phi 2,5 \times \Phi 6 \times 2.6$ (x4)

Spacer $\Phi 2.5 \times \Phi 3.5 \times 0.2$ (x2)

Thrust Bearing $\Phi 2,5 \times 6 \times 3$ (x2)

Blade Grip Assembly

Spindle Shaft

Head Damper (x2)

Blade Grip Spacer $\Phi 2.5 \times \Phi 4.8 \times 0.4$ (x2)

Blade Grip Assembly

$\Phi 1.6 \times \Phi 3.5 \times 0.4$ Washer

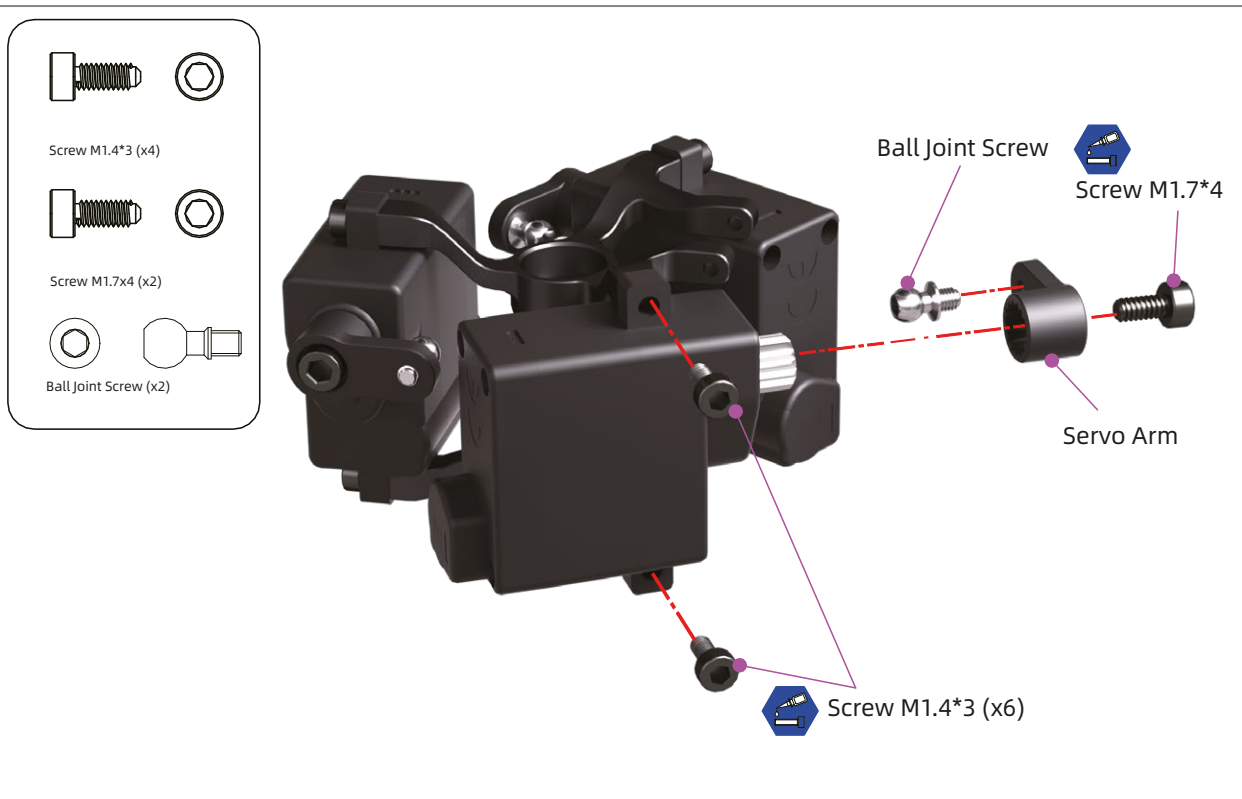
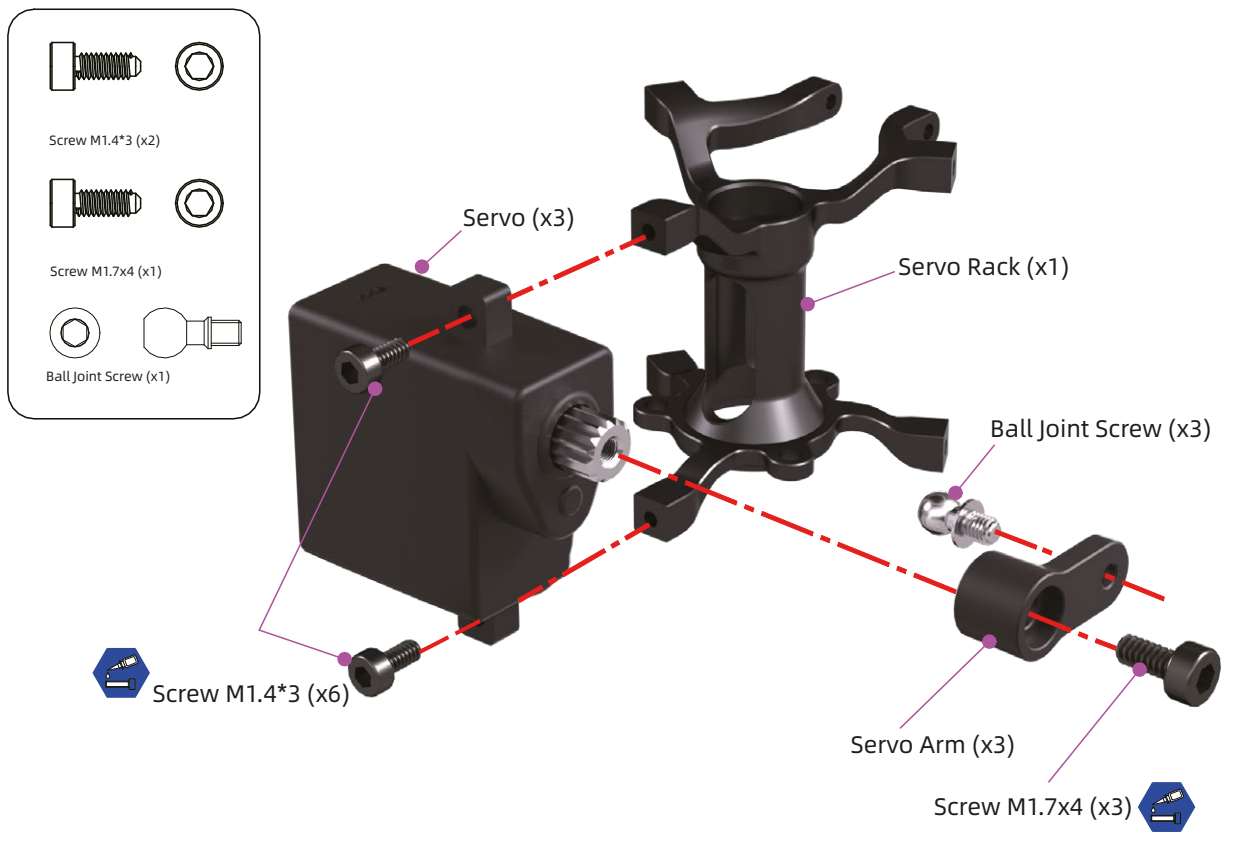
Screw M1.6x4 (x2)

Pay attention to the orientation of the blade grip spacer

Washer (x2)

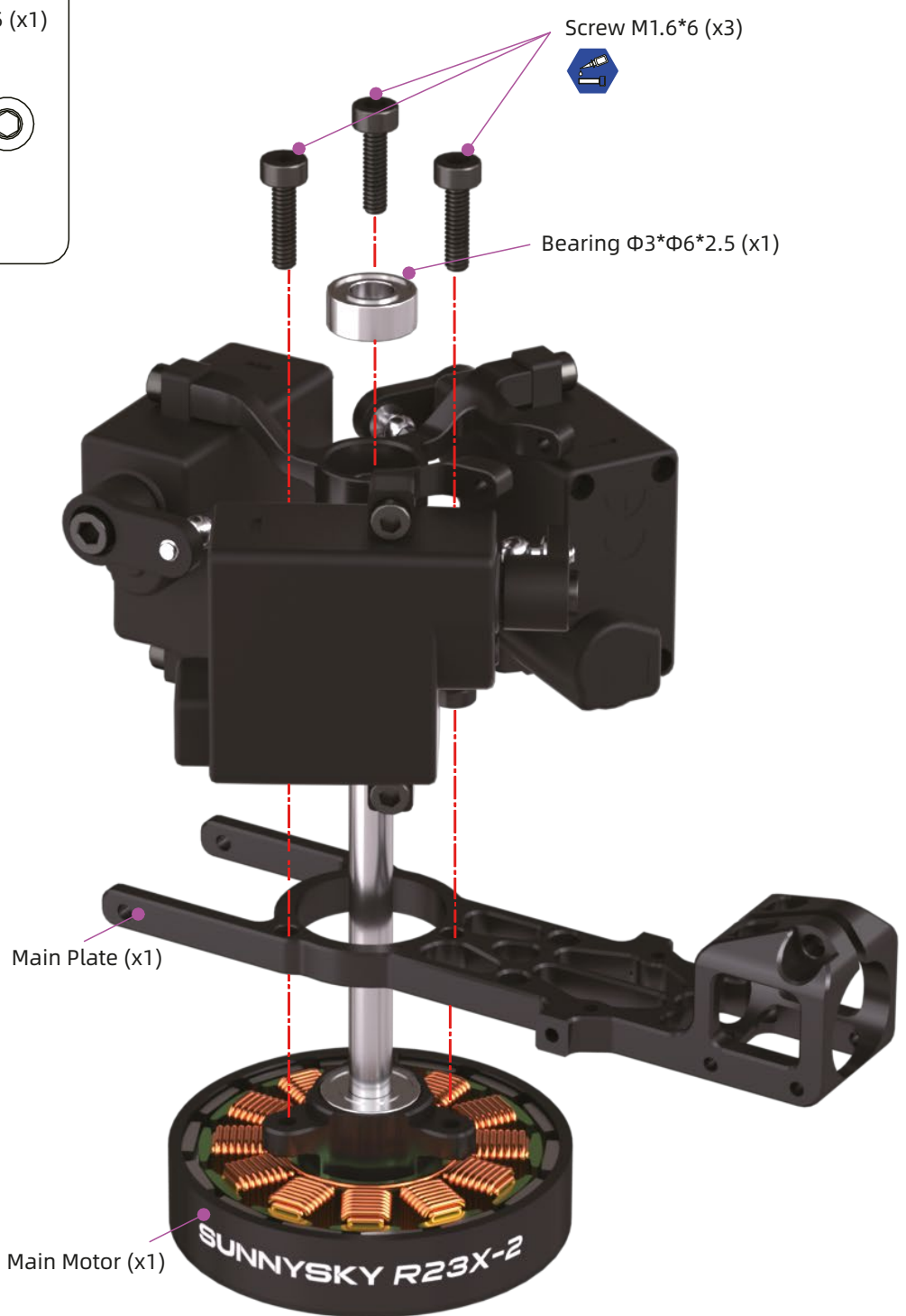
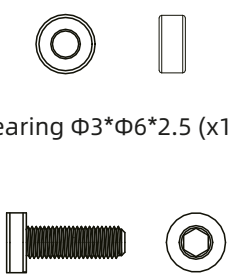
Head Damper (x2)

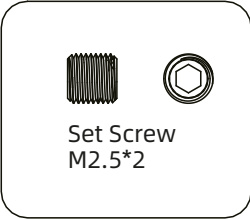
Hex Screw M1.6x4 (x2)



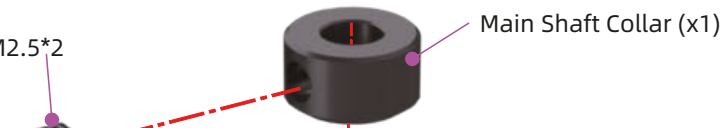
Bearing $\Phi 3 \times \Phi 6 \times 2.5$ (x1)

Screw M1.6*6 (x3)



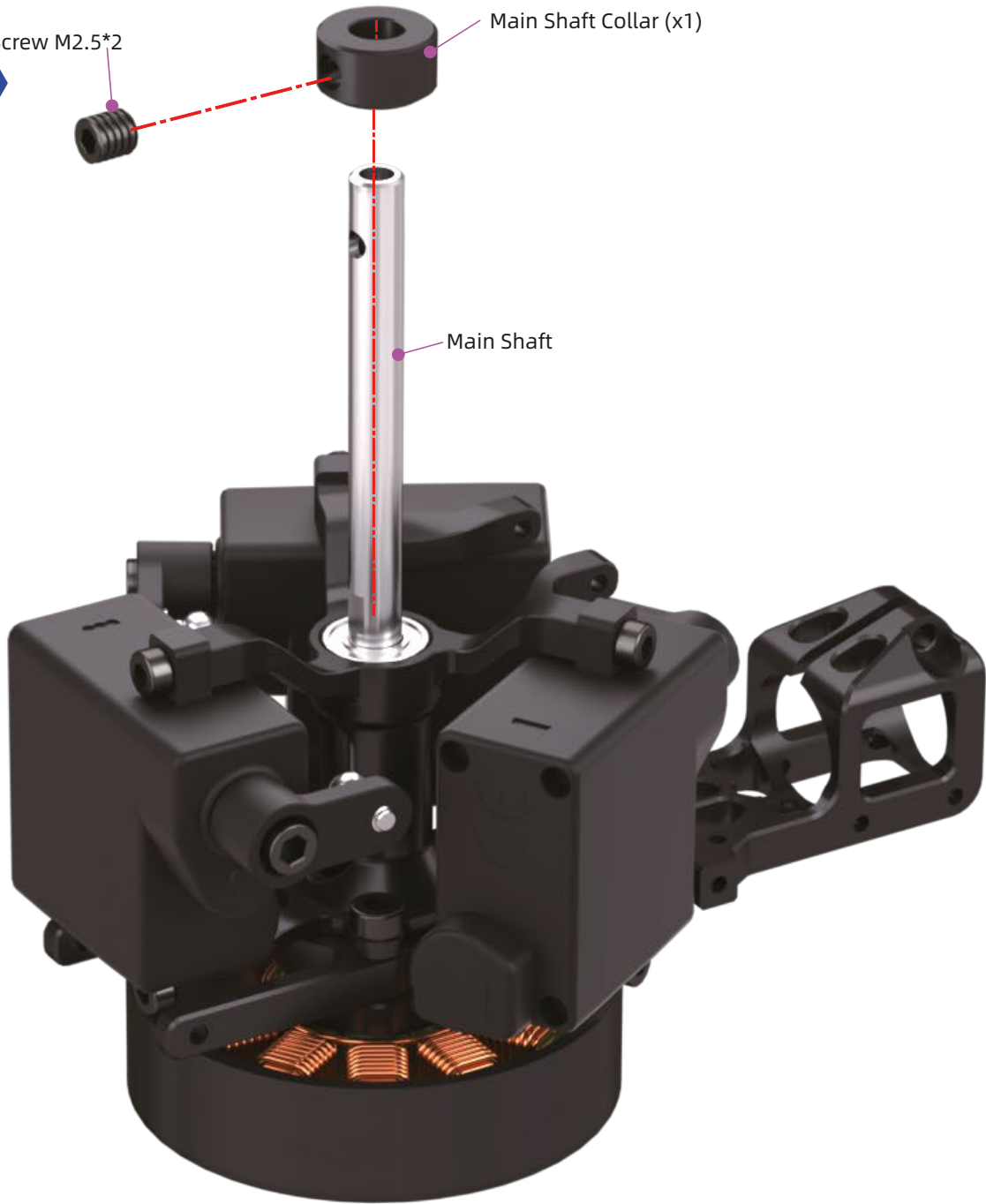


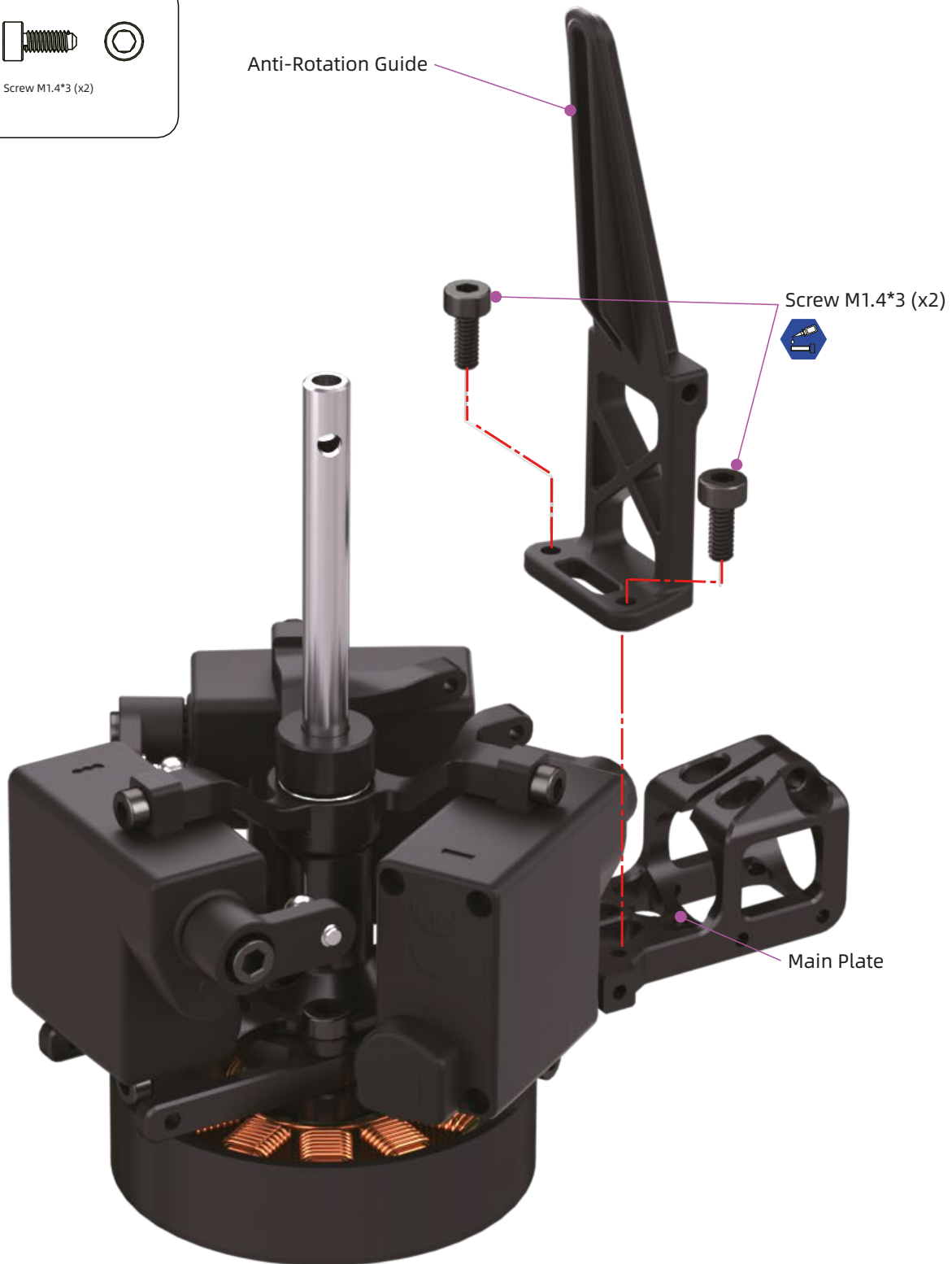
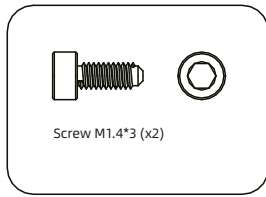
Set Screw M2.5*2

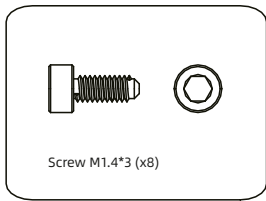
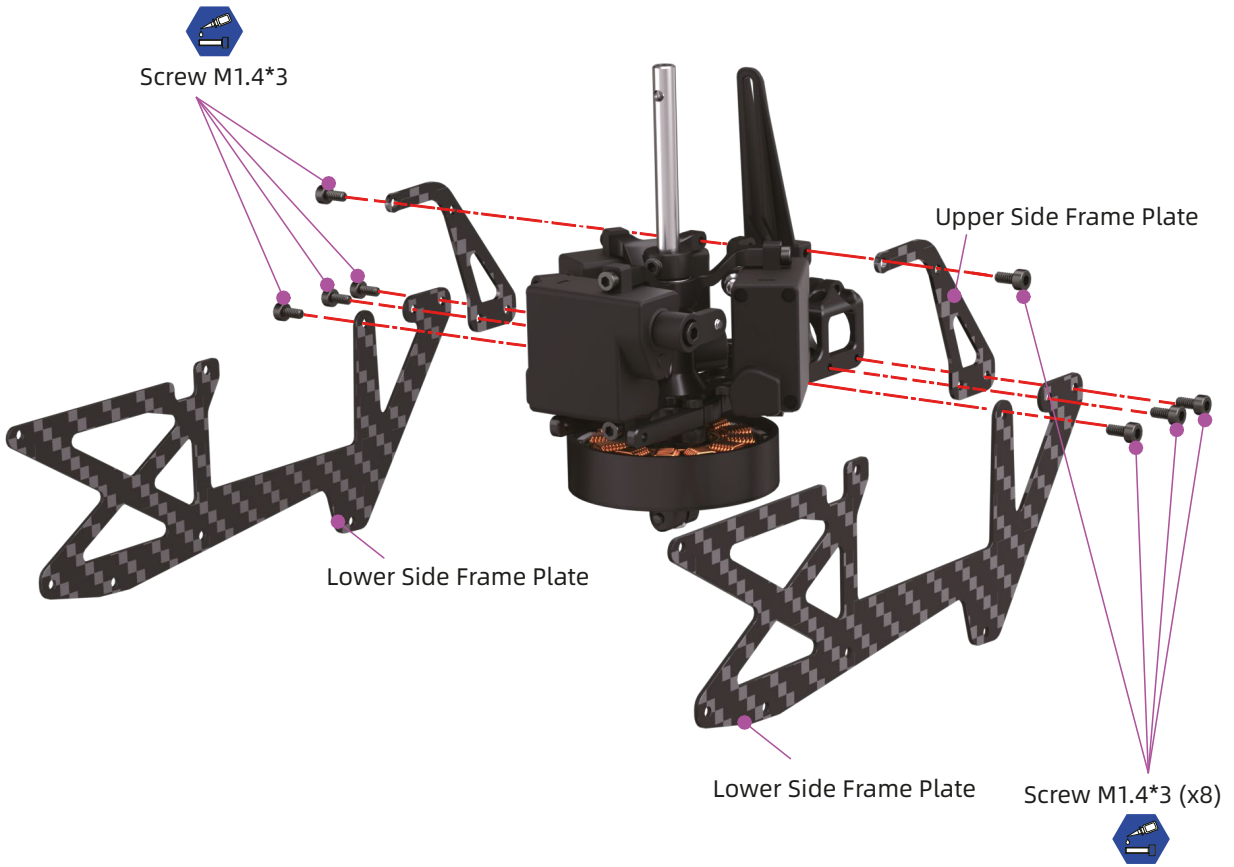


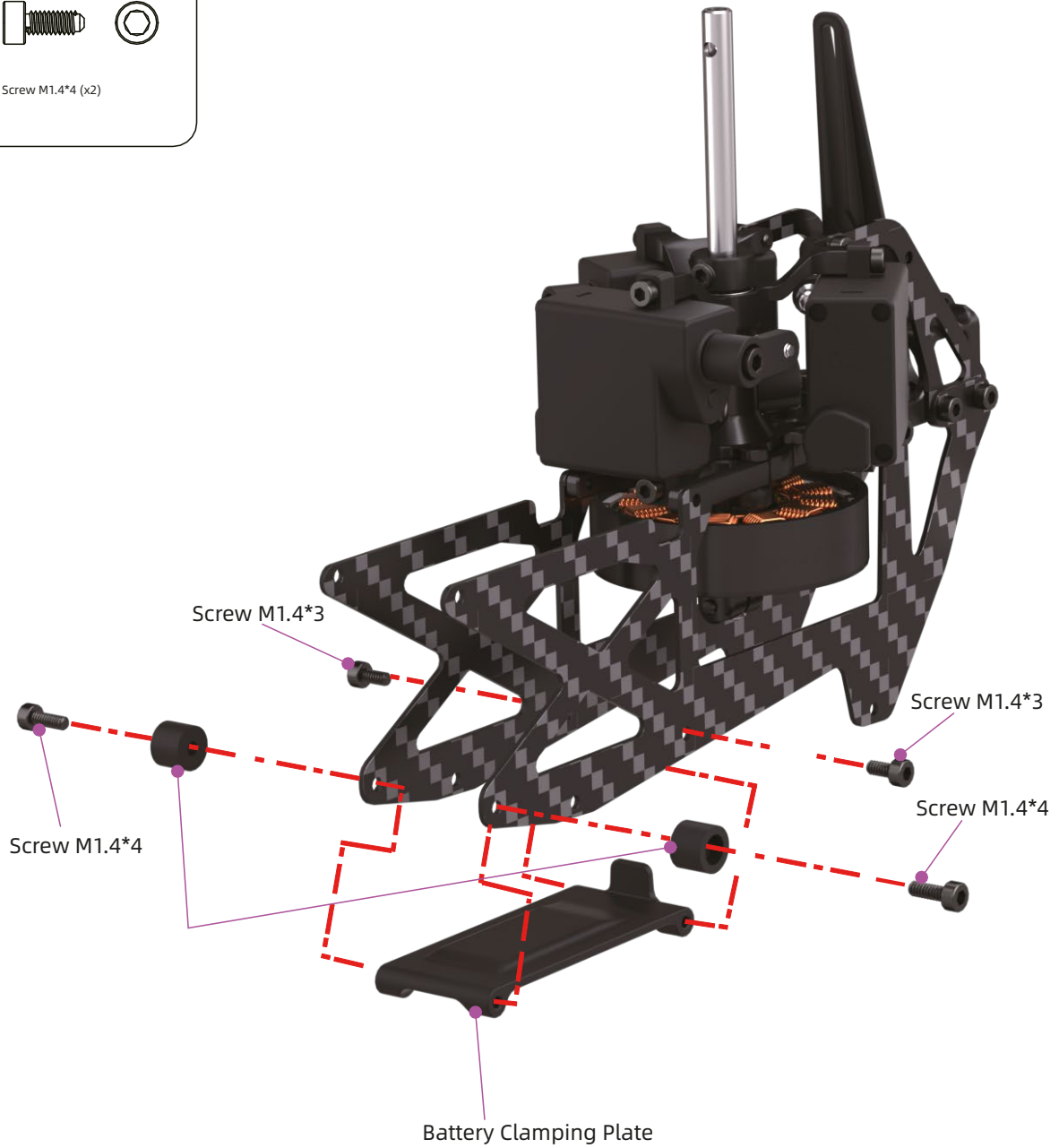
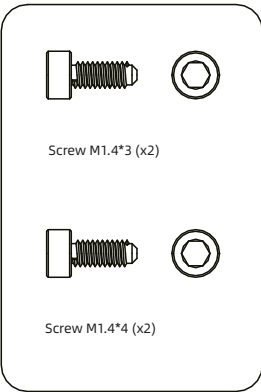
Main Shaft Collar (x1)

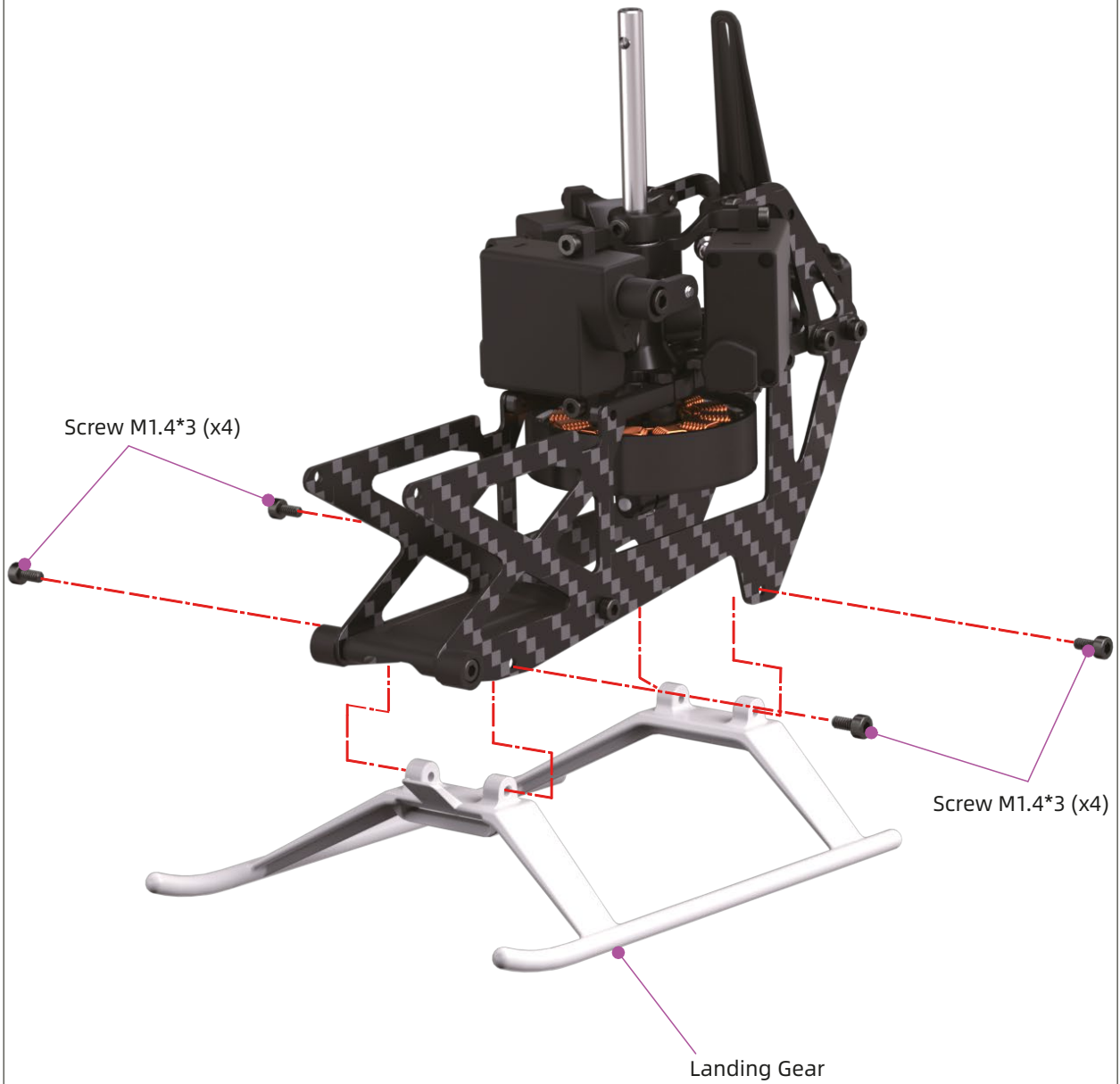
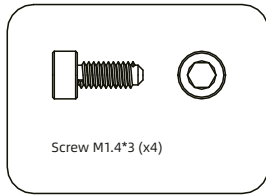
Main Shaft

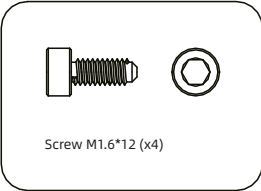
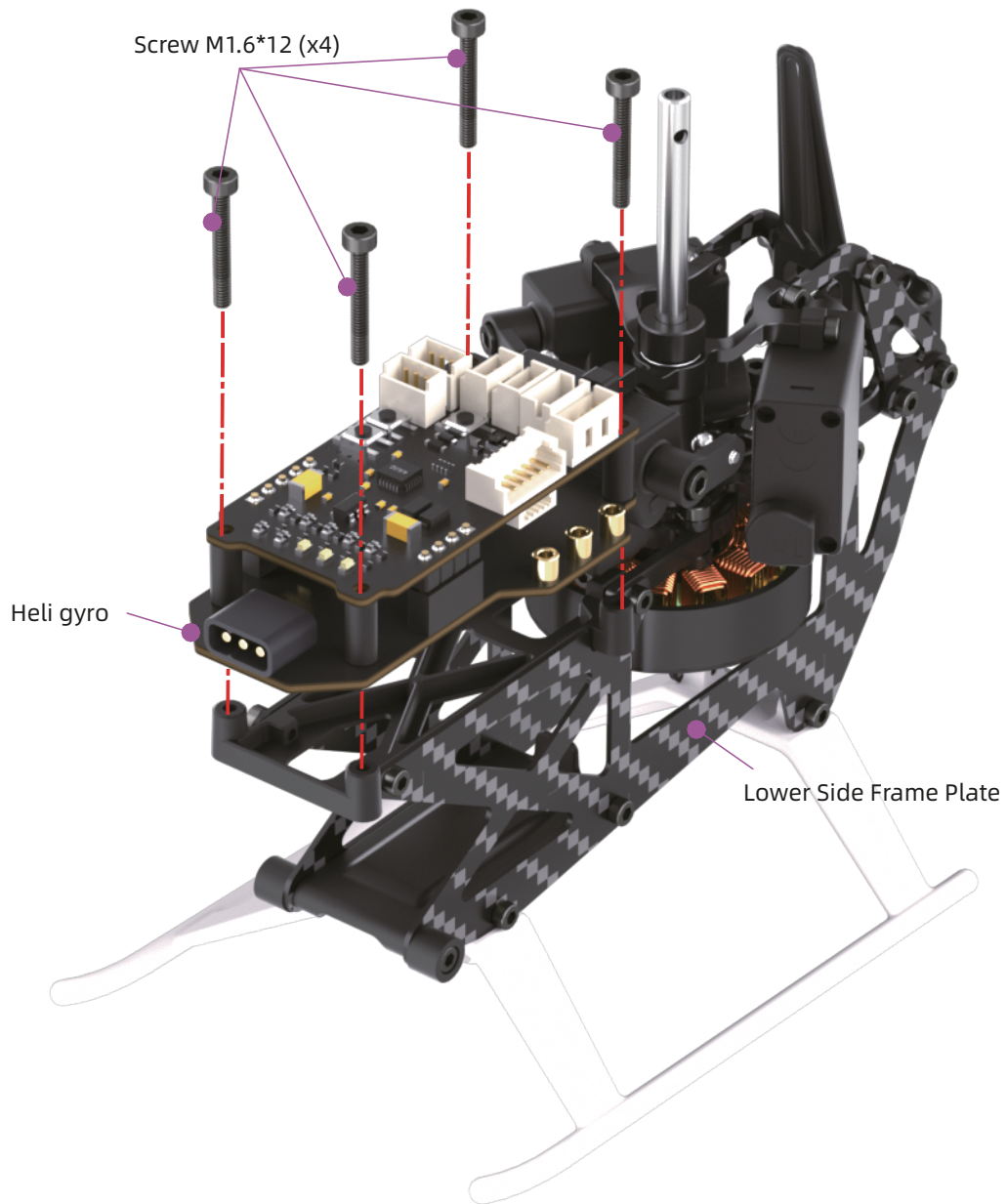


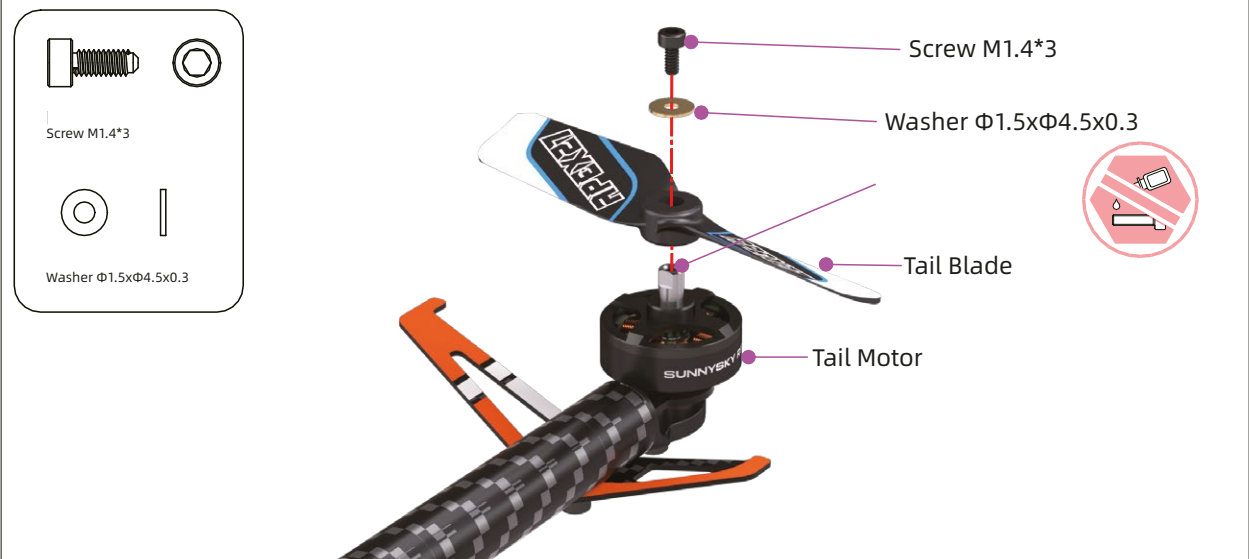
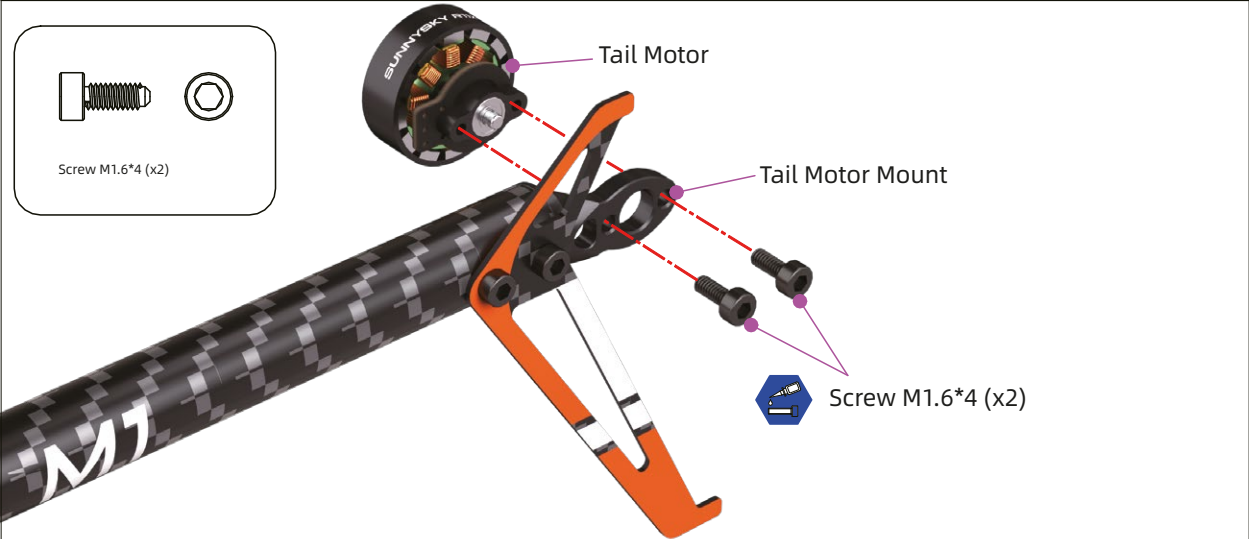
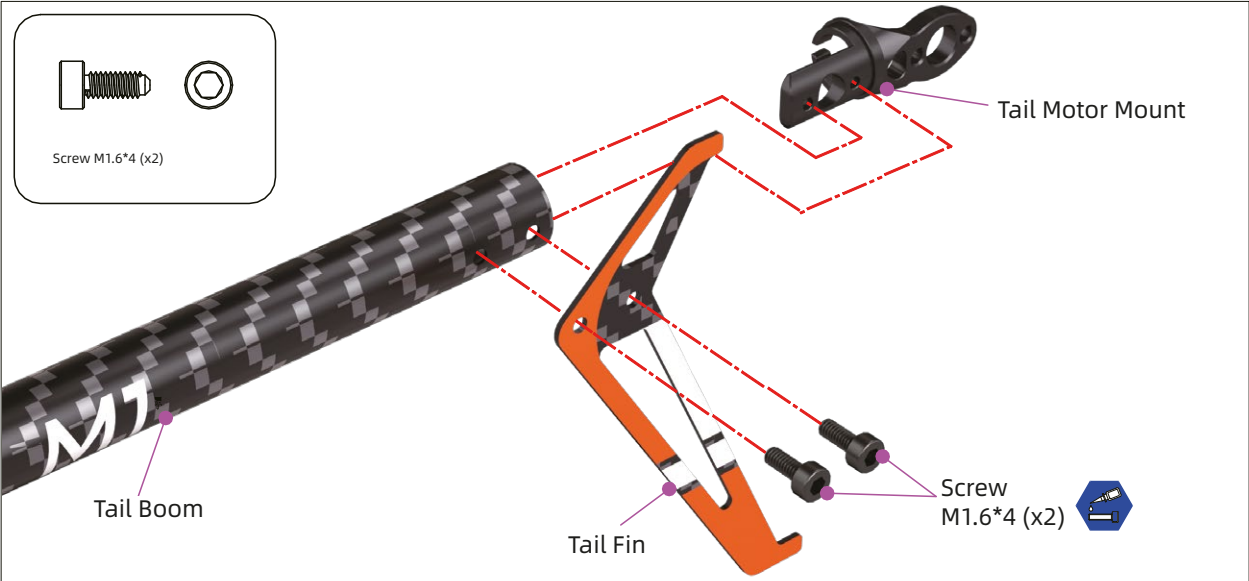


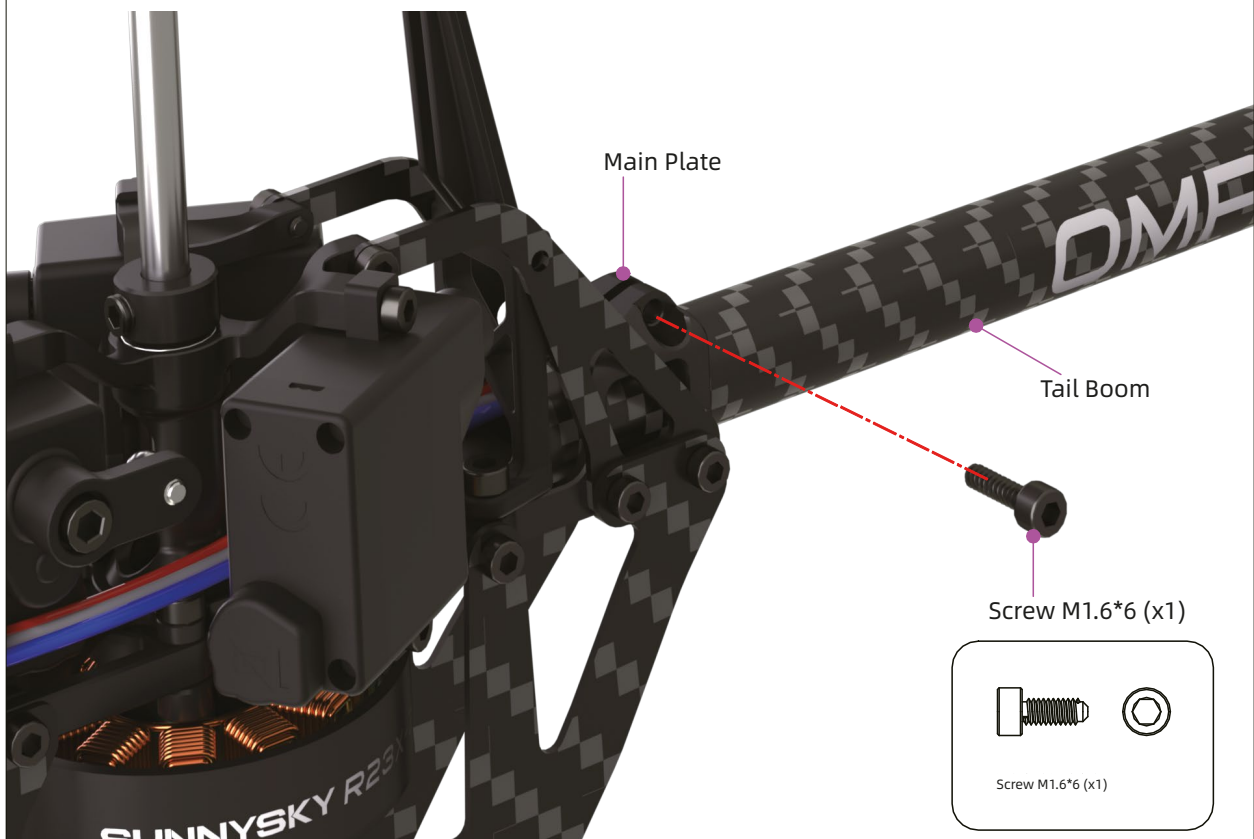
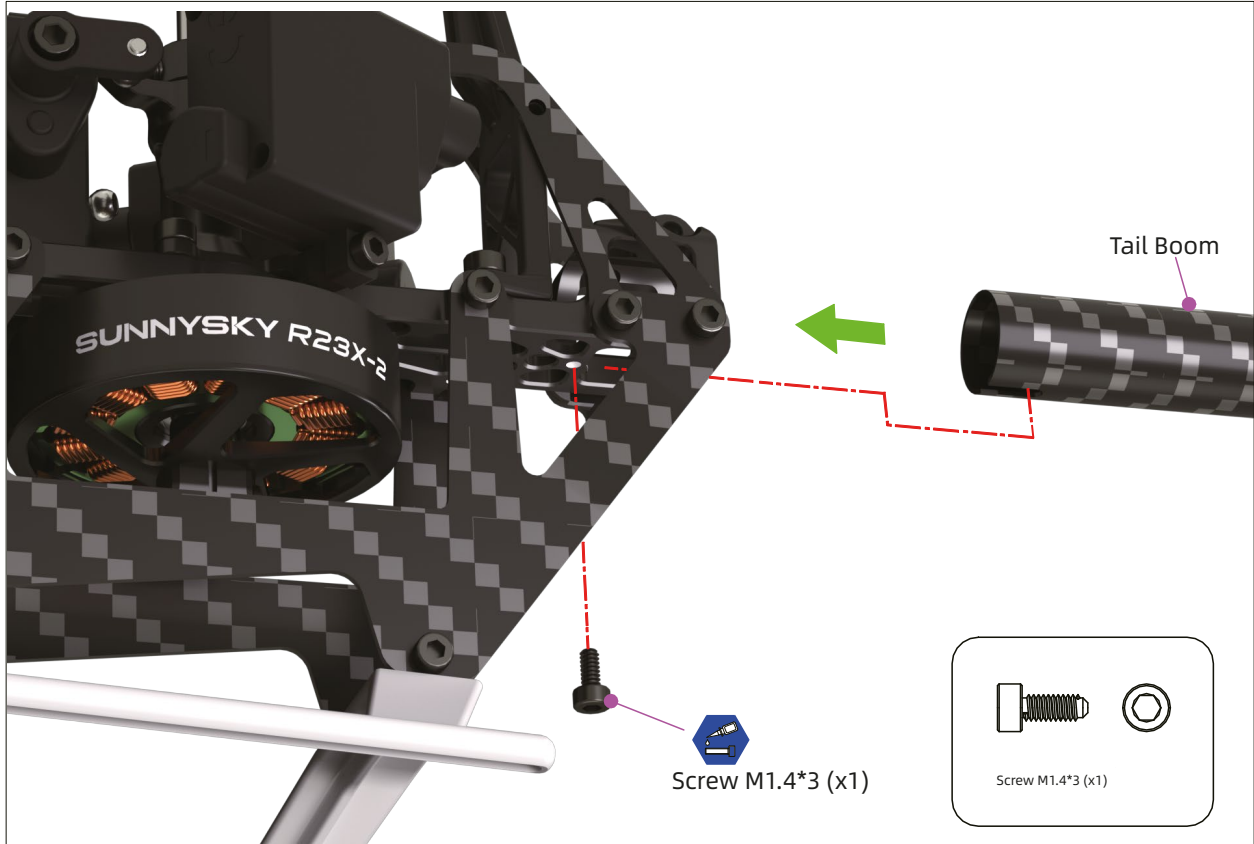




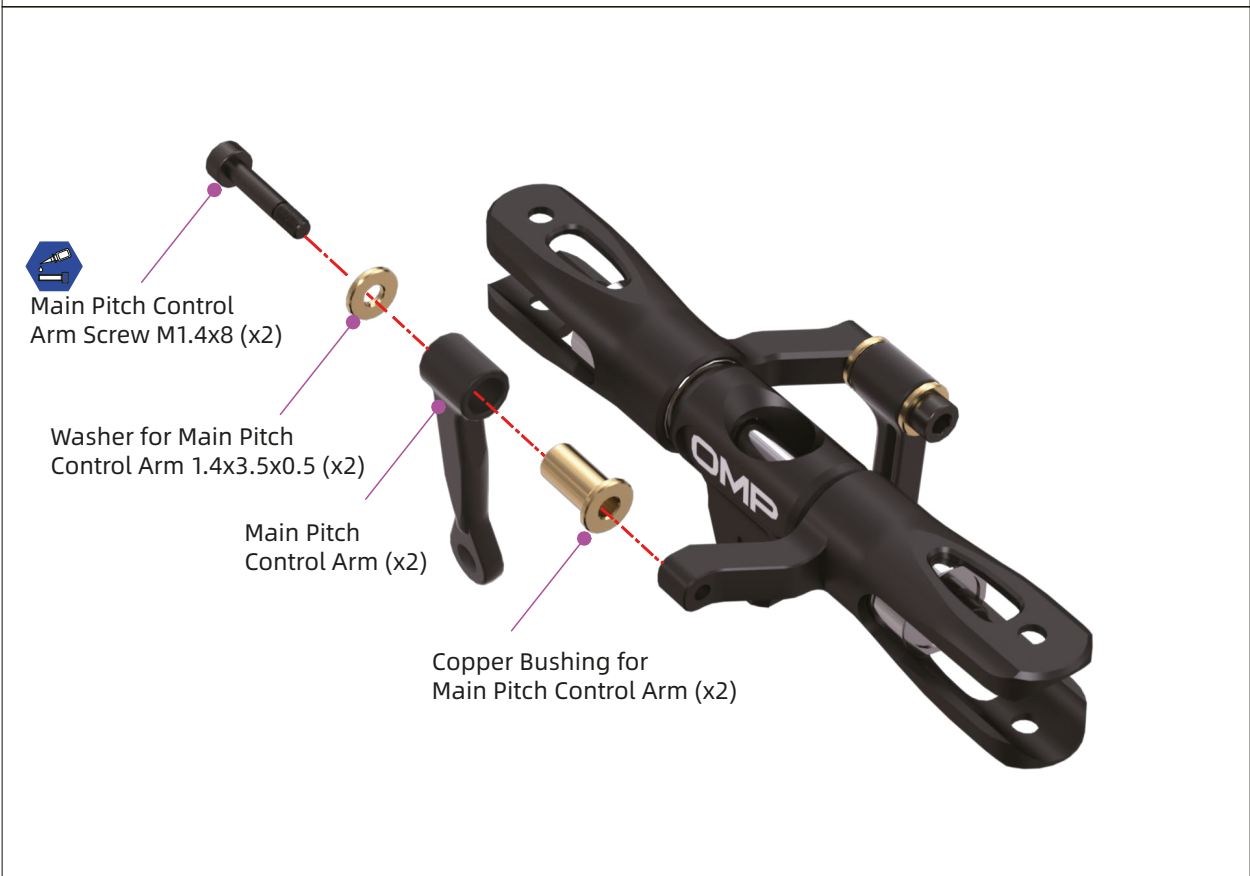
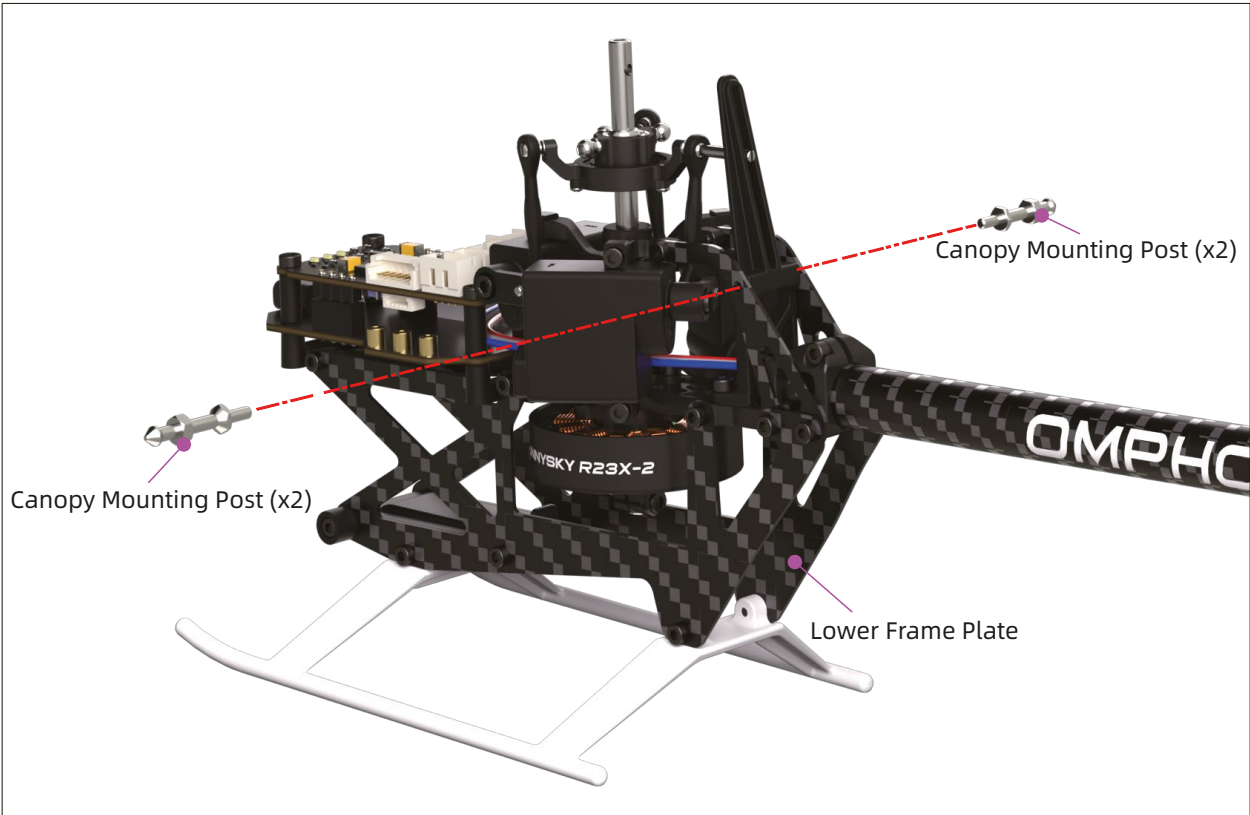


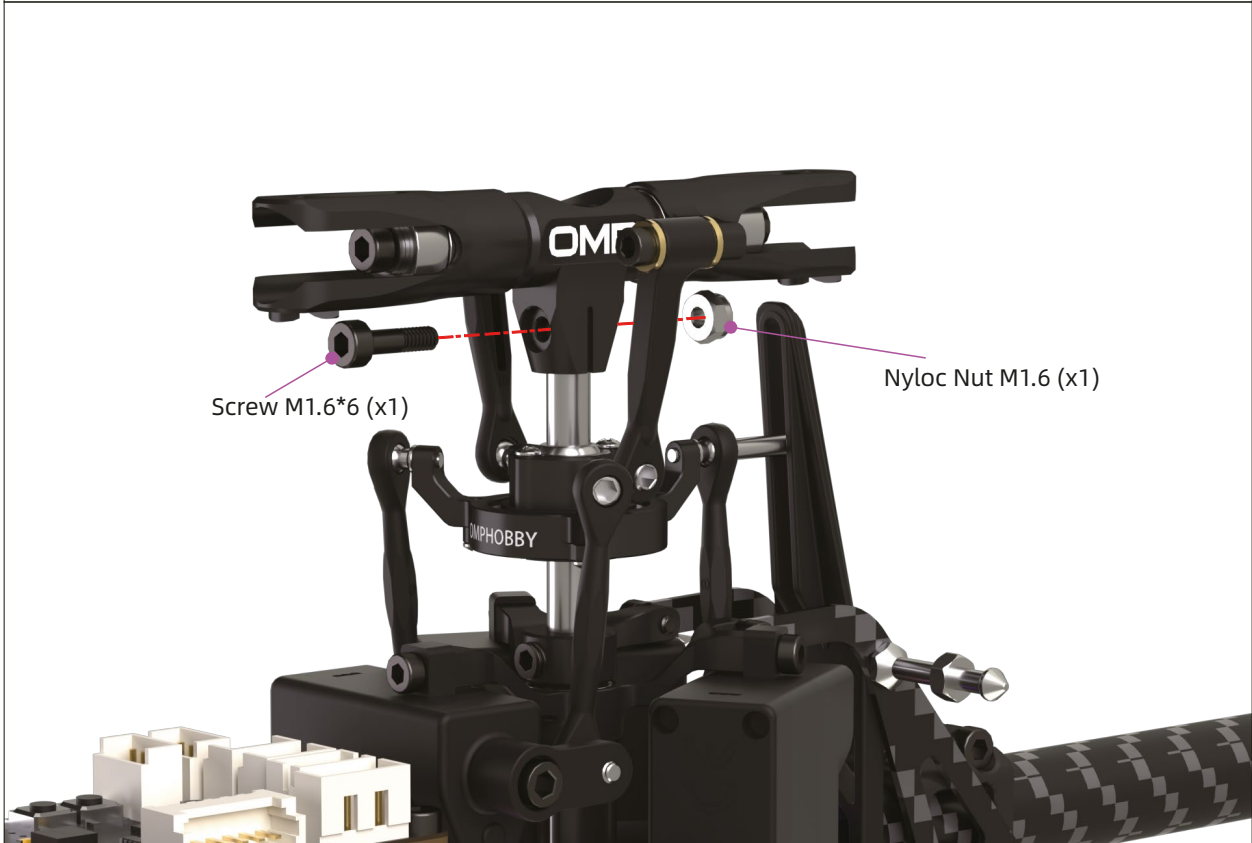
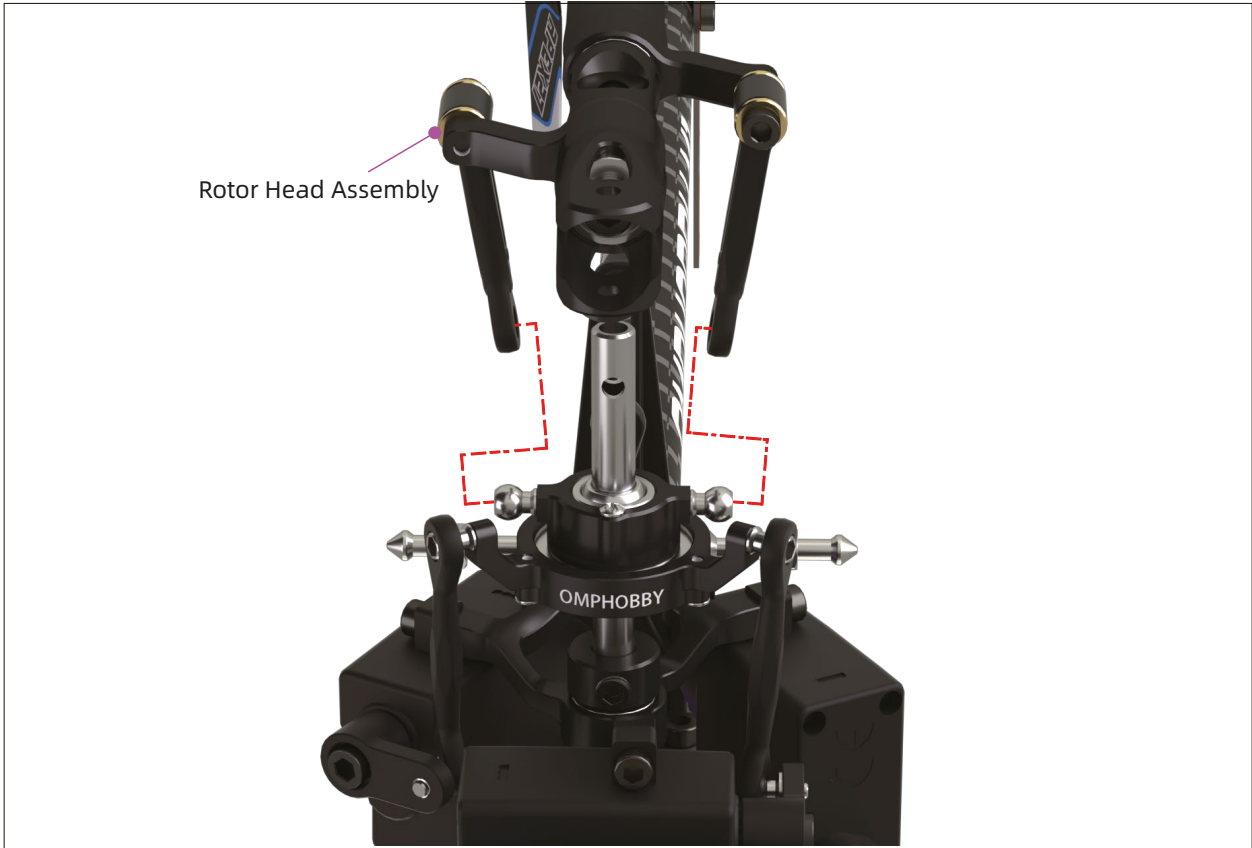


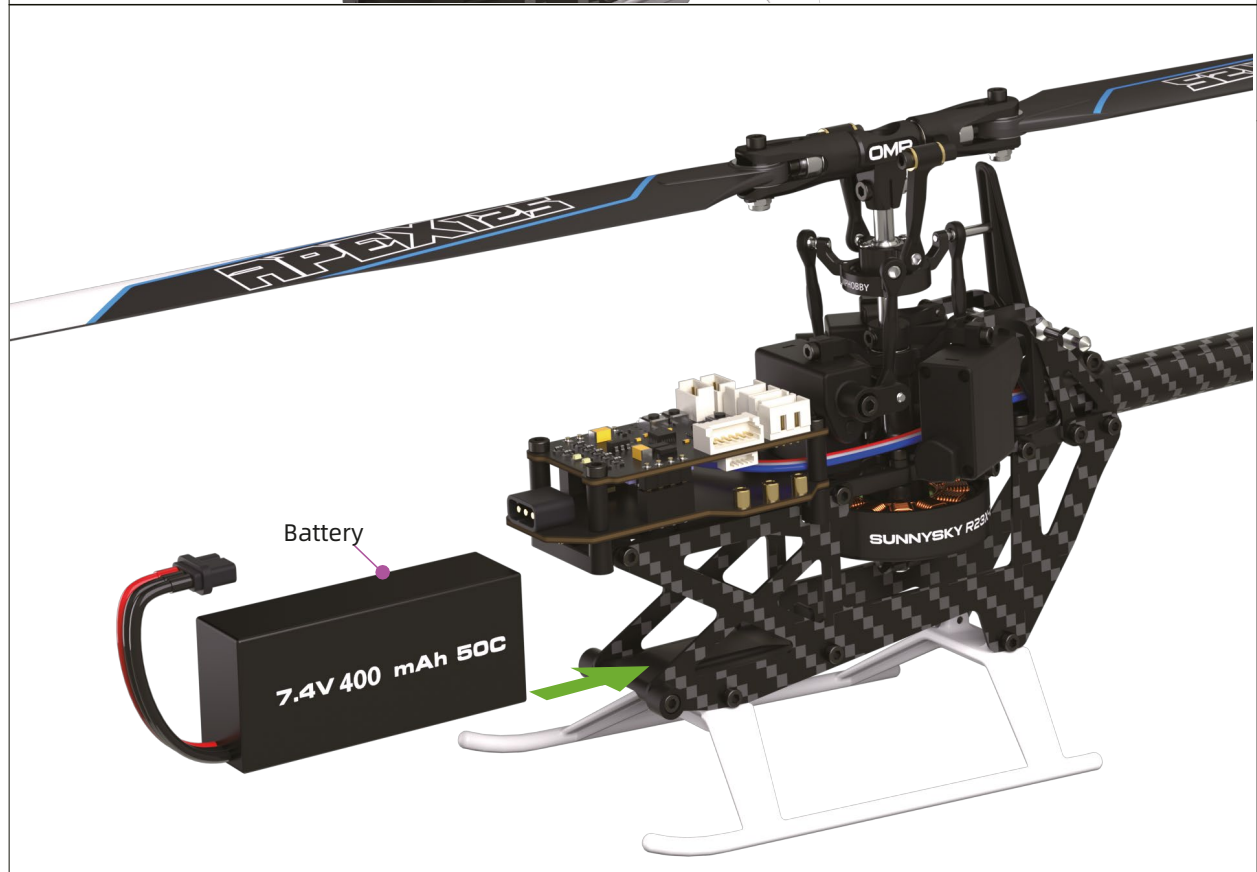
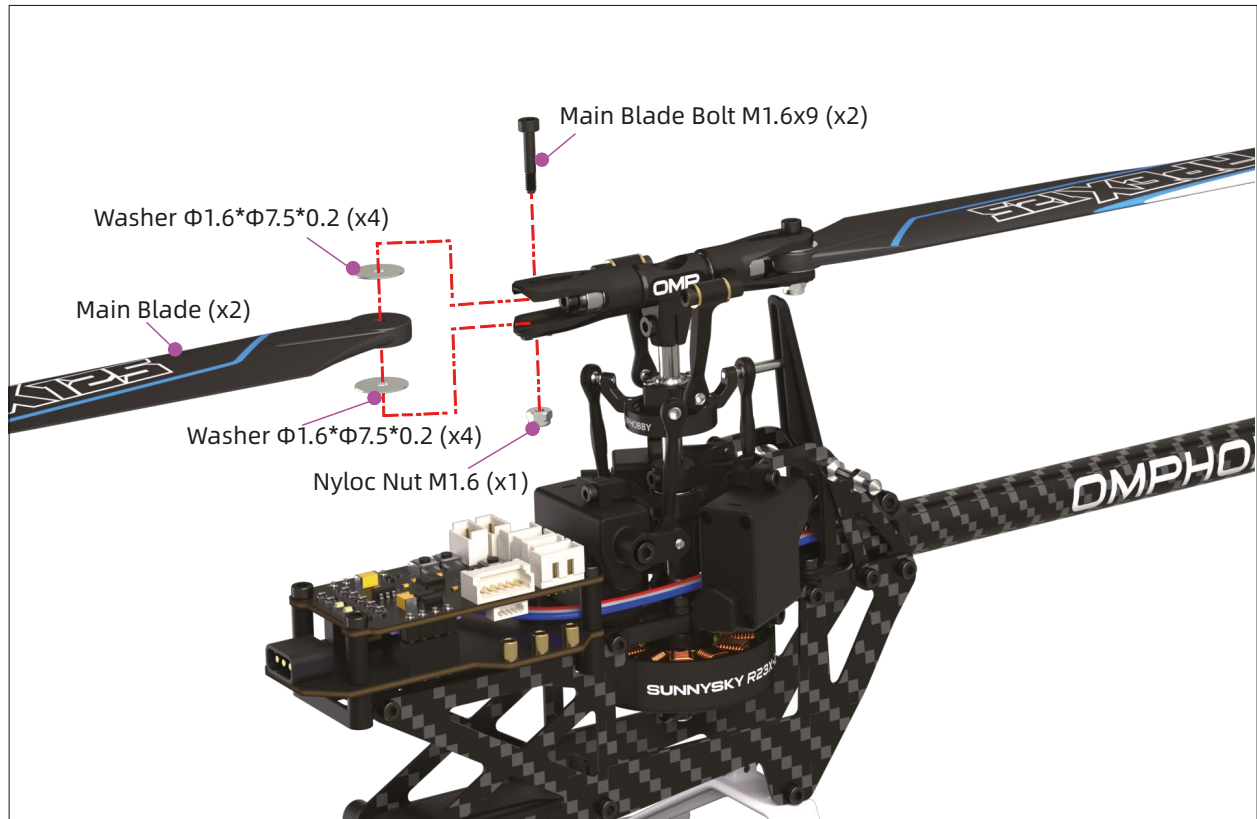


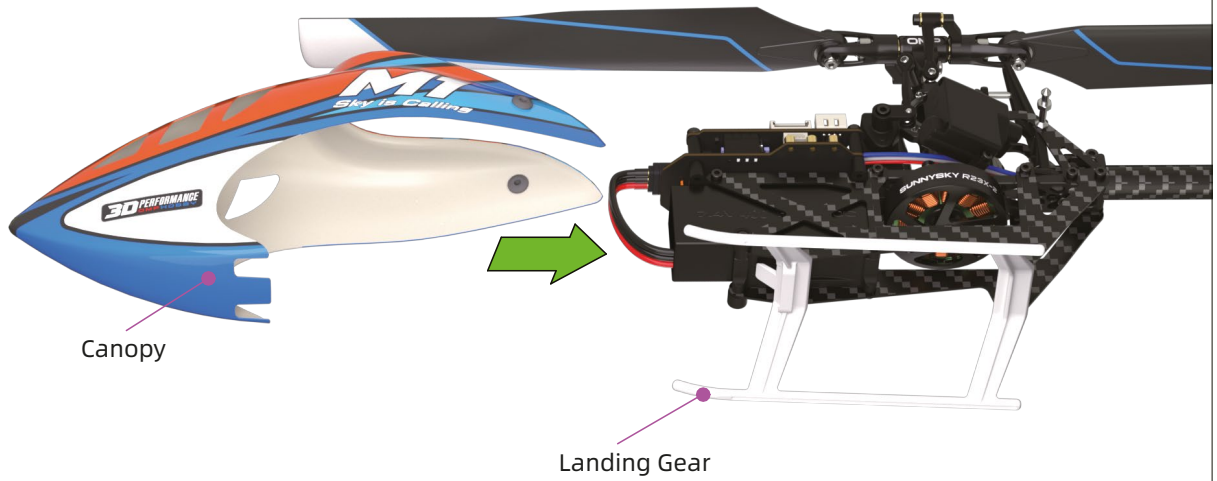
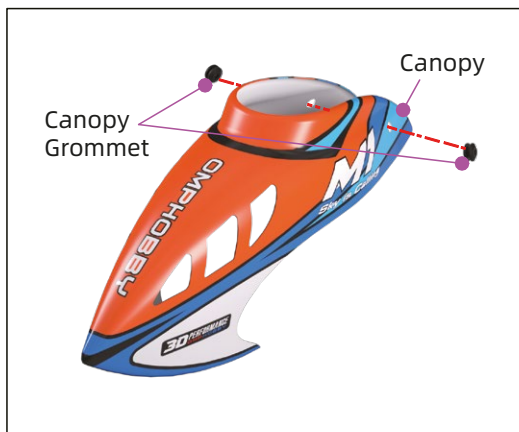






















<p>Model: OSHM1228 Product name: Main Rotor Yoke</p> 	<p>Model: OSHM1229 Product name: Main Rotor Yoke Screw Set</p> 	<p>Model: OSHM1230 Product name: Feathering Shaft Set</p> 	<p>Model: OSHM1231 Product name: Main Blade Grip</p> 
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<p>Model: OSHM1232 Product name: Main Rotor Blade Grip Bearing Set</p> 	<p>Model: OSHM1233 Product name: Spindle Shaft Screw Set M1.6x4</p> 	<p>Model: OSHM1234 Product name: Main Rotor Holder Screw Set</p> 	<p>Model: OSHM1235 Product name: Damper Rubber</p> 
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<p>Model: OSHM1236 Product name: Servo Mount Set</p> 	<p>Model: OSHM1237 Product name: Main Plate</p> 	<p>Model: OSHM1238 Product name: Collar Black</p> 	<p>Model: OSHM1239 Product name: FBL Linkage Rods</p> 
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<p>Model: OSHM1240 Product name: Pitch Control Arm Brass Bushing Set</p> 	<p>Model: OSHM1241 Product name: Swashplate</p> 	<p>Model: OSHM1242 Product name: Servo DS2045LW V2 Set</p> 	<p>Model: OSHM1243 Product name: Servo Linkage Set</p> 
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<p>Model: OSHM1244 Product name: Tail Blade</p> 	<p>Model: OSHM1245 Product name: Tail Blade Screw Set</p> 	<p>Model: OSHM1246 Product name: Tail Motor Mount Set</p> 	<p>Model: OSHM1247 Product name: Tail Boom</p> 
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Spare parts picture-2


M1V3Pro


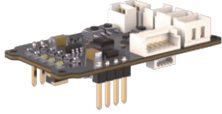
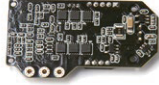

<p>Model: OSHM1248 Product name: Lower Frame Plate</p> 	<p>Model: OSHM1249 Product name: Upper Frame Plate</p> 	<p>Model: OSHM1250 Product name: Tail Fin Orange</p> 	<p>Model: OSHM1251 Product name: Tail Fin Purple</p> 
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<p>Model: OSHM1252 Product name: Tail Fin Green</p> 	<p>Model: OSHM1253 Product name: Tail Fin Yellow</p> 	<p>Model: OSHM1254 Product name: Anti-Rotation Guide</p> 	<p>Model: OSHM1255 Product name: Canopy Mounting Set</p> 
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<p>Model: OSHM1248 Product name: Lithium Battery 2s 400mAh 50C HV</p> 	<p>Model: OSHM1257 Product name: Heli gyro</p> 	<p>Model: OSHM1258 Product name: Main Motor</p> 	<p>Model: OSHM1259 Product name: Tail Motor</p> 
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<p>Model: OSHM1260 Product name: Main Blade</p> 	<p>Model: OSHM1261 Product name: Canopy Orange</p> 	<p>Model: OSHM1262 Product name: Canopy Purple</p> 	<p>Model: OSHM1263 Product name: Canopy Green</p> 
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<p>Model: OSHM1264 Product name: Canopy Yellow</p> 	<p>Model: OSHM1265 Product name: Landing Gear Set</p> 	<p>Model: OSHM1266 Product name: Battery Tray</p> 	<p>Model: OSHM1267 Product name: ESC Mounting Plate</p> 
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<p>Model: OSHM1268 Product name: Blade Caddy</p> 	<p>Model: OSHM1269 Product name: Heli gyro board</p> 	<p>Model: OSHM1270 Product name: ESC Board</p> 	<p>Model: OSHM1271 Product name: Main Shaft Set</p> 
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<p>Model: OSHM1274 Product name: Bearing Set MR63ZZ</p> 	<p>Model: OSHM1275 Product name: Ball Screw Set</p> 	<p>Model: OSHM1276 Product name: Blade Grip Arm Control Screw</p> 	<p>Model: OSHM1277 Product name: Screw M1.4x3</p> 
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<p>Model: OSHM1278 Product name: Screw M1.4x4</p> 	<p>Model: OSHM1279 Product name: Screw M1.7x4</p> 	<p>Model: OSHM1280 Product name: Screw M1.6x4</p> 	<p>Model: OSHM1281 Product name: Screw M1.6x6</p> 
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<p>Model: OSHM1282 Product name: Screw M1.6x12</p> 	<p>Model: OSHM1283 Product name: Bolt Screw M1.6x9</p> 	<p>Model: OSHM1284 Product name: Set Screw M2.5*2</p> 	<p>Model: OSHM1286 Product name: Servo Arm Set</p> 
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<p>Model: OSHM1287 Product name: Tail Boom Orange</p> 	<p>Model: OSHM1288 Product name: Tail Boom Yellow</p> 	<p>Model: OSHM1289 Product name: Tail Boom Green</p> 	<p>Model: OSHM1290 Product name: Tail Boom Purple</p> 	<p>Model: OSHM1291 Product name: Tail Boom White</p> 
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