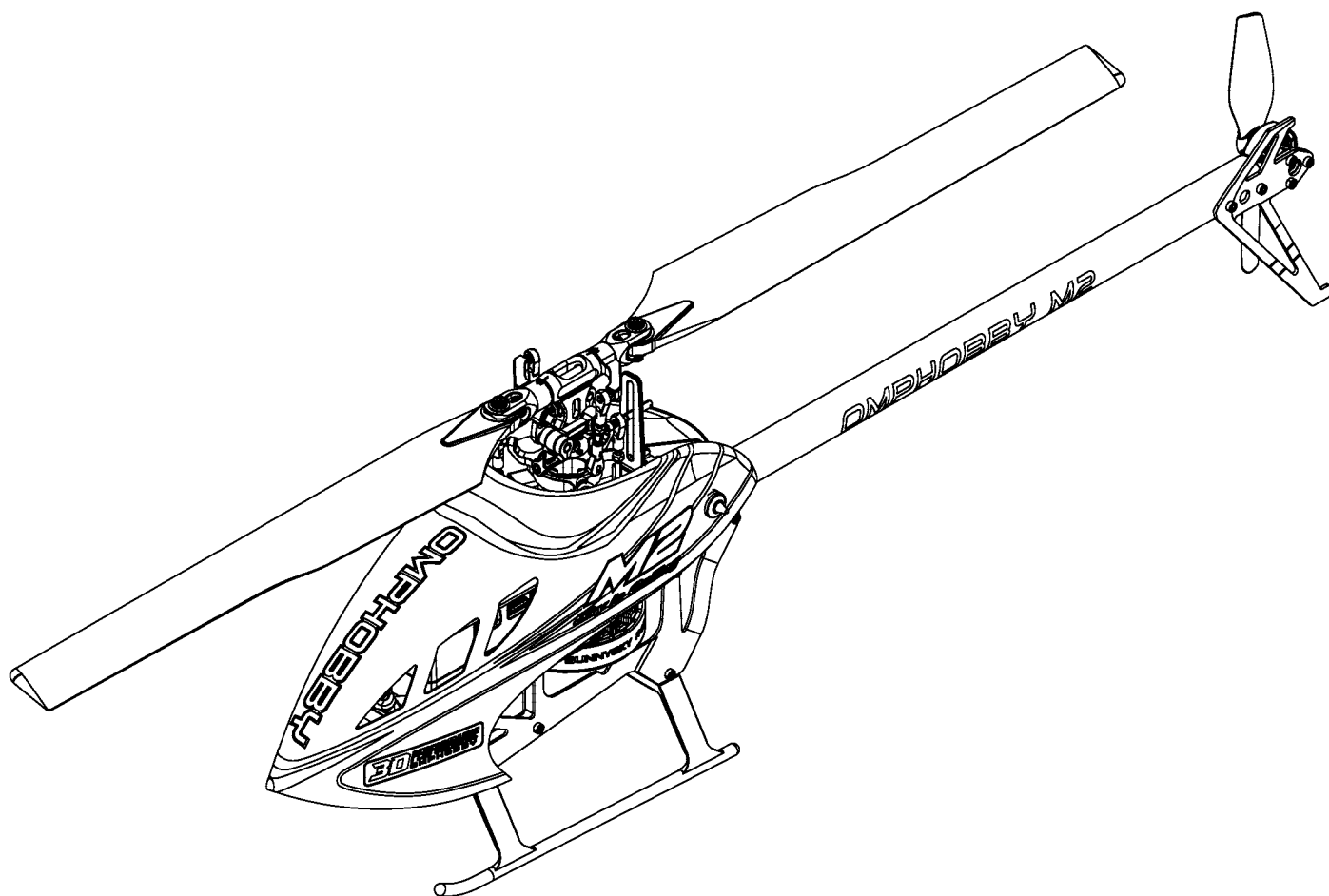


M2 V3 PRO

INSTRUCTION MANUAL



OMPHOBBY
SKY IS CALLING

Thank you for purchasing the OMPHOBBY M2 V3 PRO. The M2 V3 PRO is the latest and most advanced 200-sized micro helicopter offering from OMPHOBBY today. Please read this manual carefully before flying and servicing the M2 V3 PRO. Keep this manual for future reference.

Thank you for purchasing the OMPHOBBY M2 V3 PRO. The M2 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 M2 V3 PRO is a 200-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

 **WARNING** Special attention is required to prevent damage and/or injury.

 **CAUTION** Special attention is required to avoid potentially dangerous situations.

 **FORBIDDEN** Indicates a disallowed action or configuration.

IMPORTANT NOTES

Remote Control Helicopters, including the M2 V3 PRO, are not toys. They are sophisticated precision models and must be used with caution. Read this manual carefully before using operating the M2 V3 PRO. Failure to use the M2 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 M2 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 M2 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

 **CAUTION**

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 M2 V3 PRO. Models must always be inspected before every usage for potential defects, issues or malfunctions.



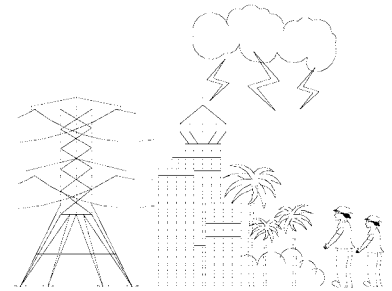
FORBIDDEN

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.



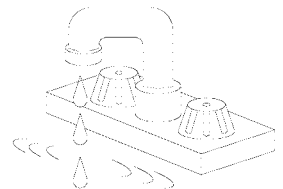
FORBIDDEN

AVOID 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.

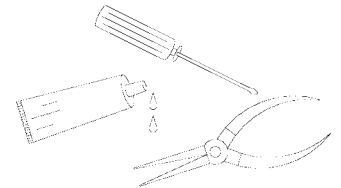
Do not operate or expose to rain or moisture!



FORBIDDEN

MALOPERATION

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.

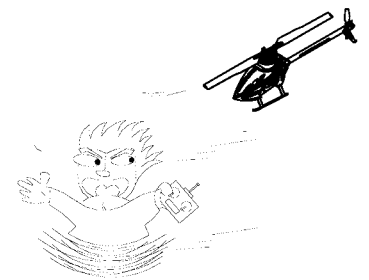


WARNING

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.

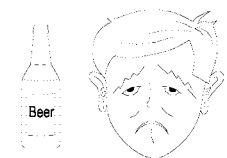
For inexperienced pilots, the guidance provided by an experienced pilot can be invaluable for the assembly, repair, setup, tuning, trimming, and first flight. It is recommended to use a computer-based simulator to practice before flying the model for the first time.



WARNING

SAFE OPERATION

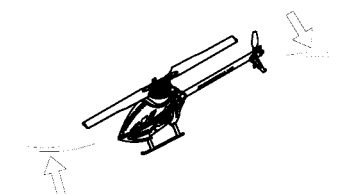
Operate this helicopter within your ability. Do not fly under the influence of perception-altering substances or when you are sleep deprived.



CAUTION

ALWAYS BE AWARE OF THE ROTATING BLADES

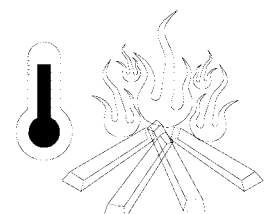
Special caution should be given to the main and tail rotor blades. During operation, the main and tail rotor blades spin at very high rotational speeds. Rotor blades are capable of inflicting serious injury/death and can cause damage to the surrounding environment.

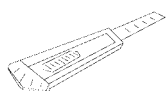


CAUTION

KEEP AWAY FROM HEAT

R/C models are made of various forms of plastics. Plastic is very susceptible to damage due to extreme heat and cold. Make sure not to store the model near any source of heat such as direct sunlight or a heater. It is best to store the model indoors in a climate-controlled room-temperature environment.





Utility Knife



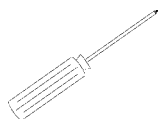
Scissors



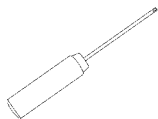
Needle Nose Pliers



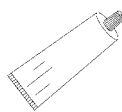
Diagonal Cutting Pliers



Phillips Screw Driver



Hexagon Screw Driver



Oil



CA Glue



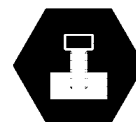
2-Part Epoxy

Adhesive usage method

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



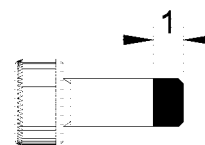
Fully Tighten

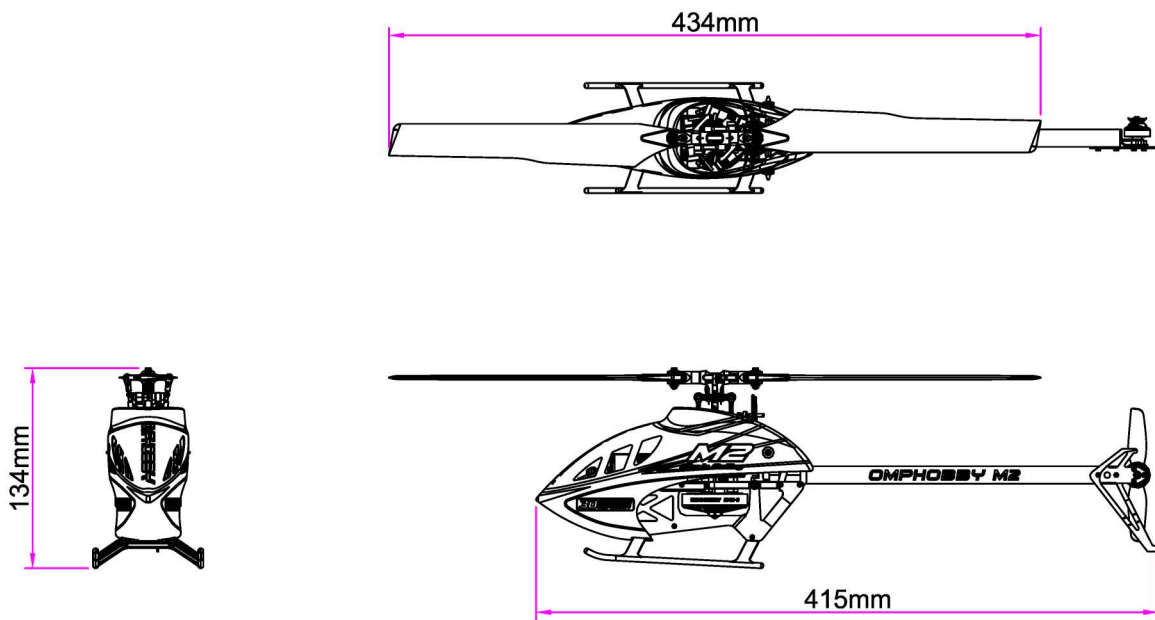


Apply MEDIUM CA



Repeat Multiple Times

Apply to the portion of threads
defined in the mark.
(Example, 1 mm)

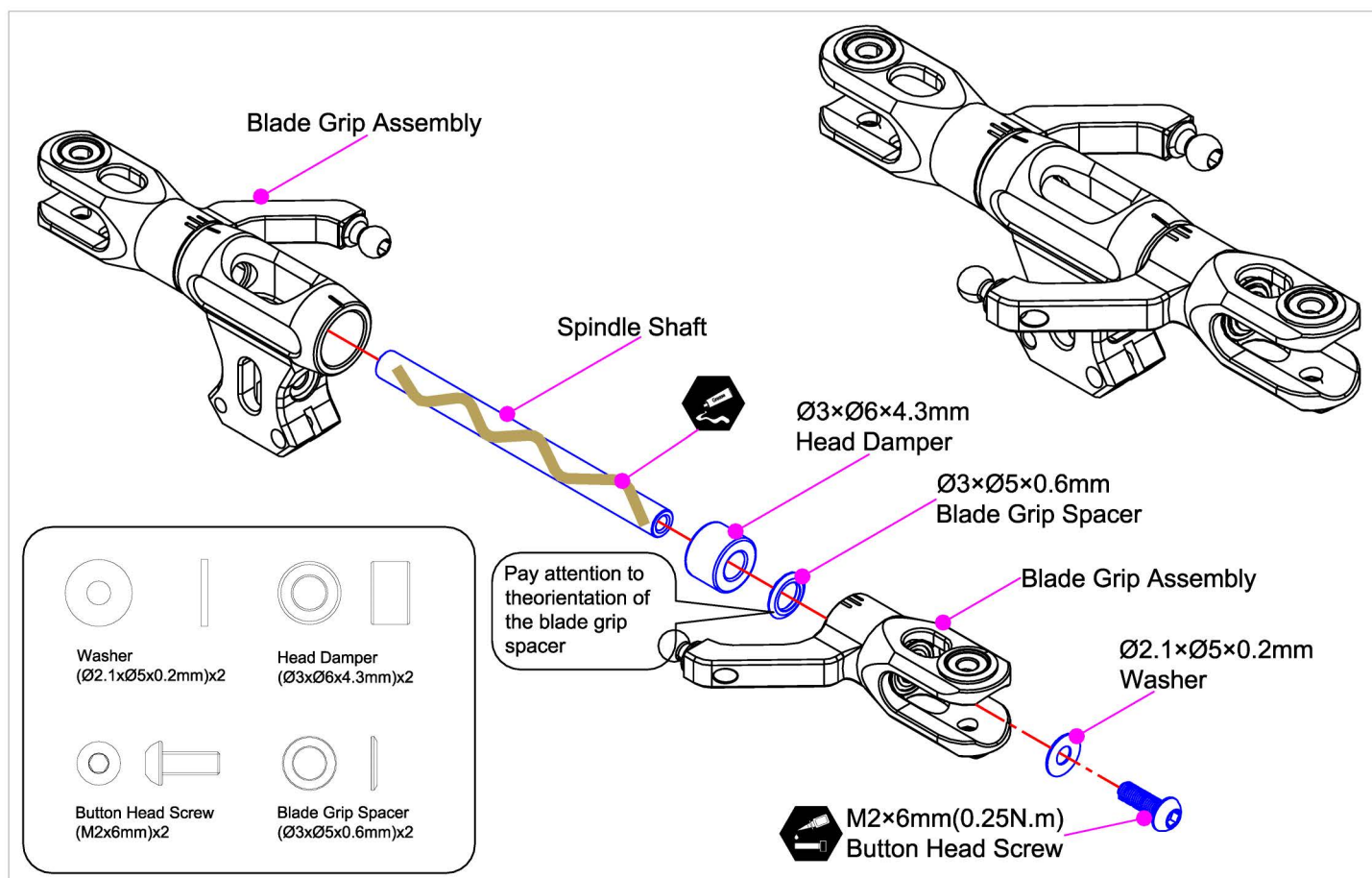
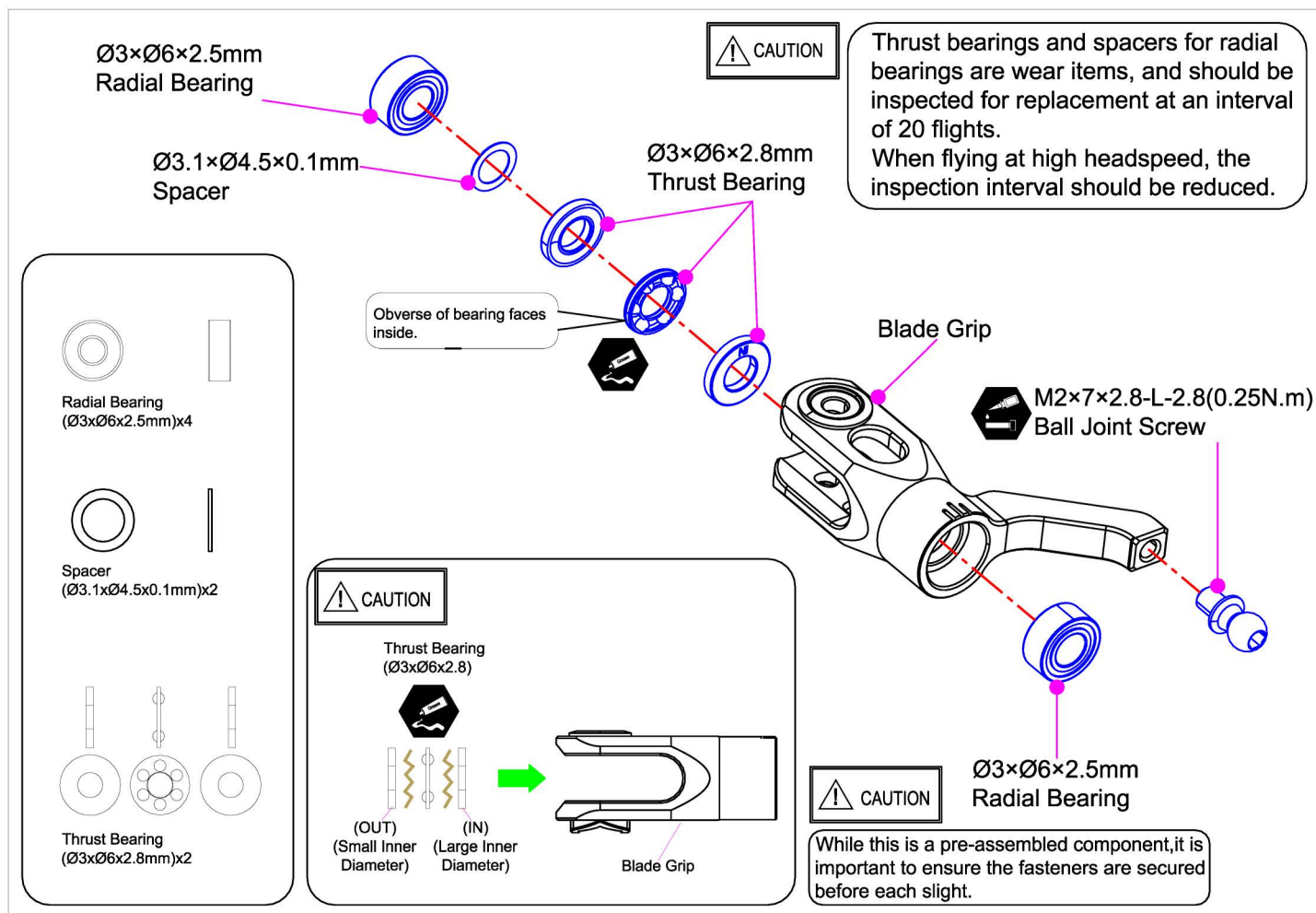


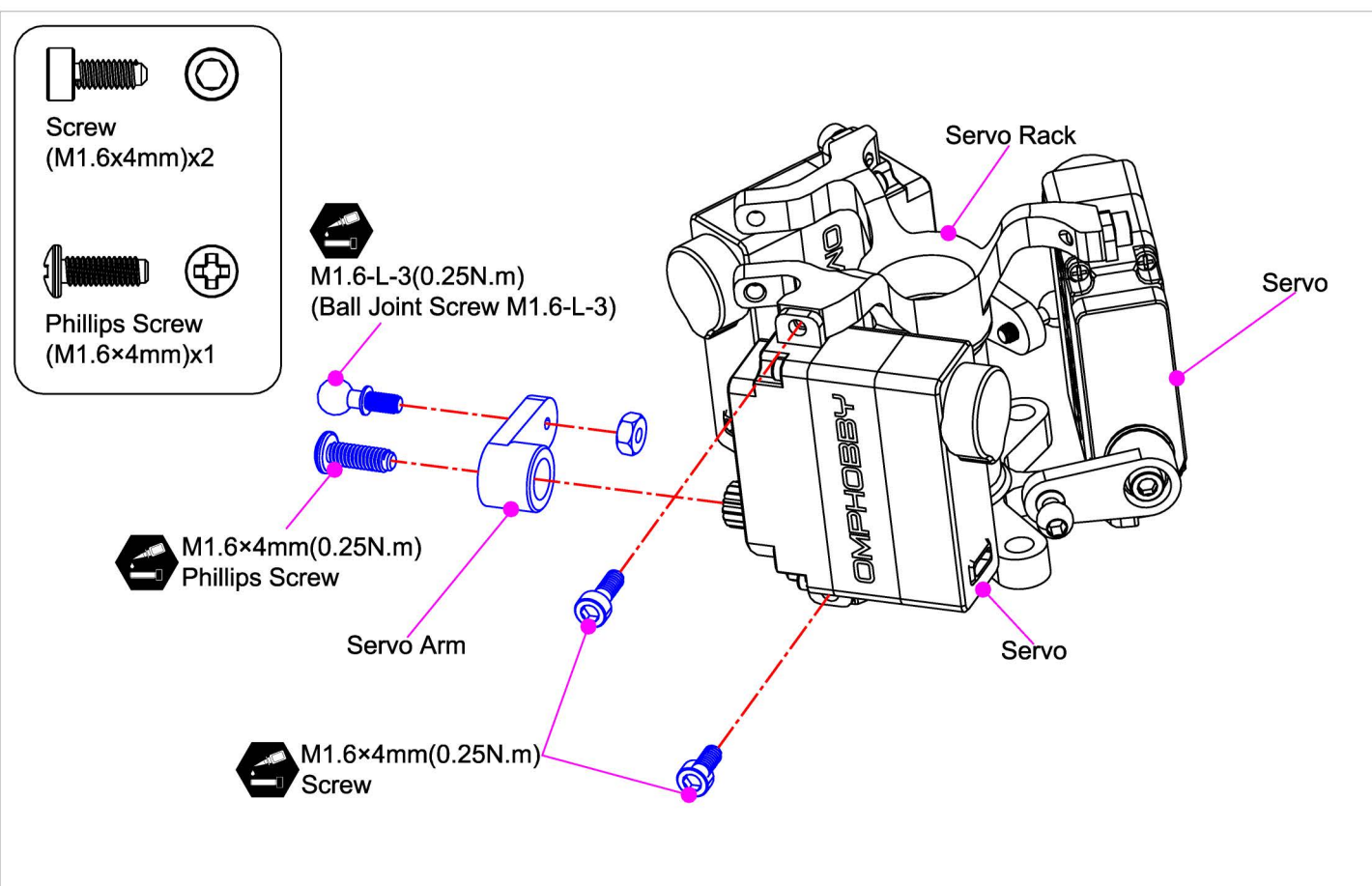
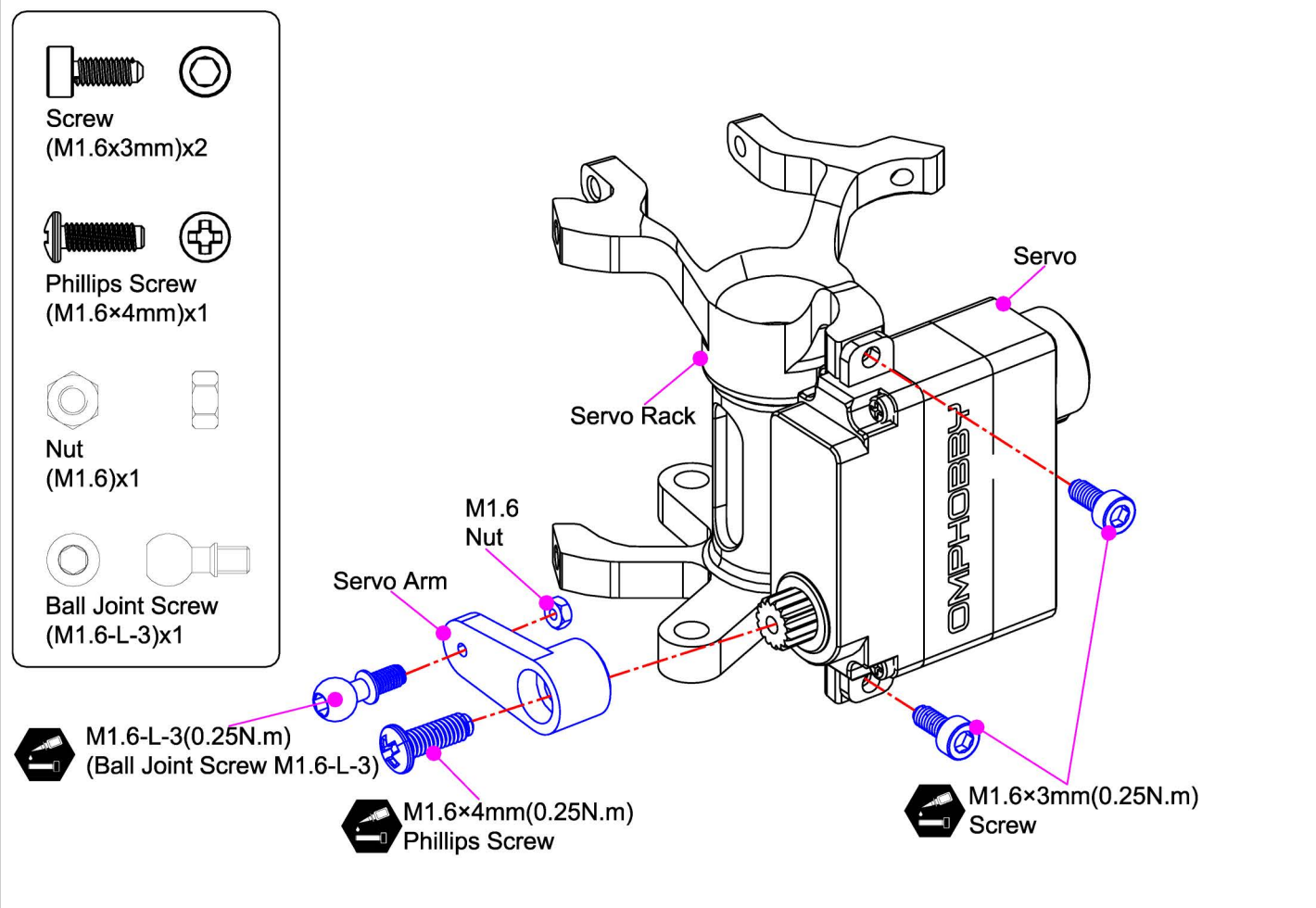
Specifications

- Length: 415mm
- Height: 134mm
- Main Blade: 190mm
- Main Rotor Diameter: 434mm
- Tail Rotor Diameter: 89mm
- Flying Weight: 320g

Features

- Direct drive main and tail rotor design with dual brushless motors.
- All metal 7075 aluminum alloy material flybarless head design.
- Lightweight design of all carbon fiber body side panels and tailpipes.
- Streamlined low wind resistance hood design.
- OFS Third Generation Flight Control System.
- Attitude stabillization mode and 3D lock mode switch freely.







Radial Bearing
($\varnothing 4 \times \varnothing 9 \times 4 \text{ mm}$)x1

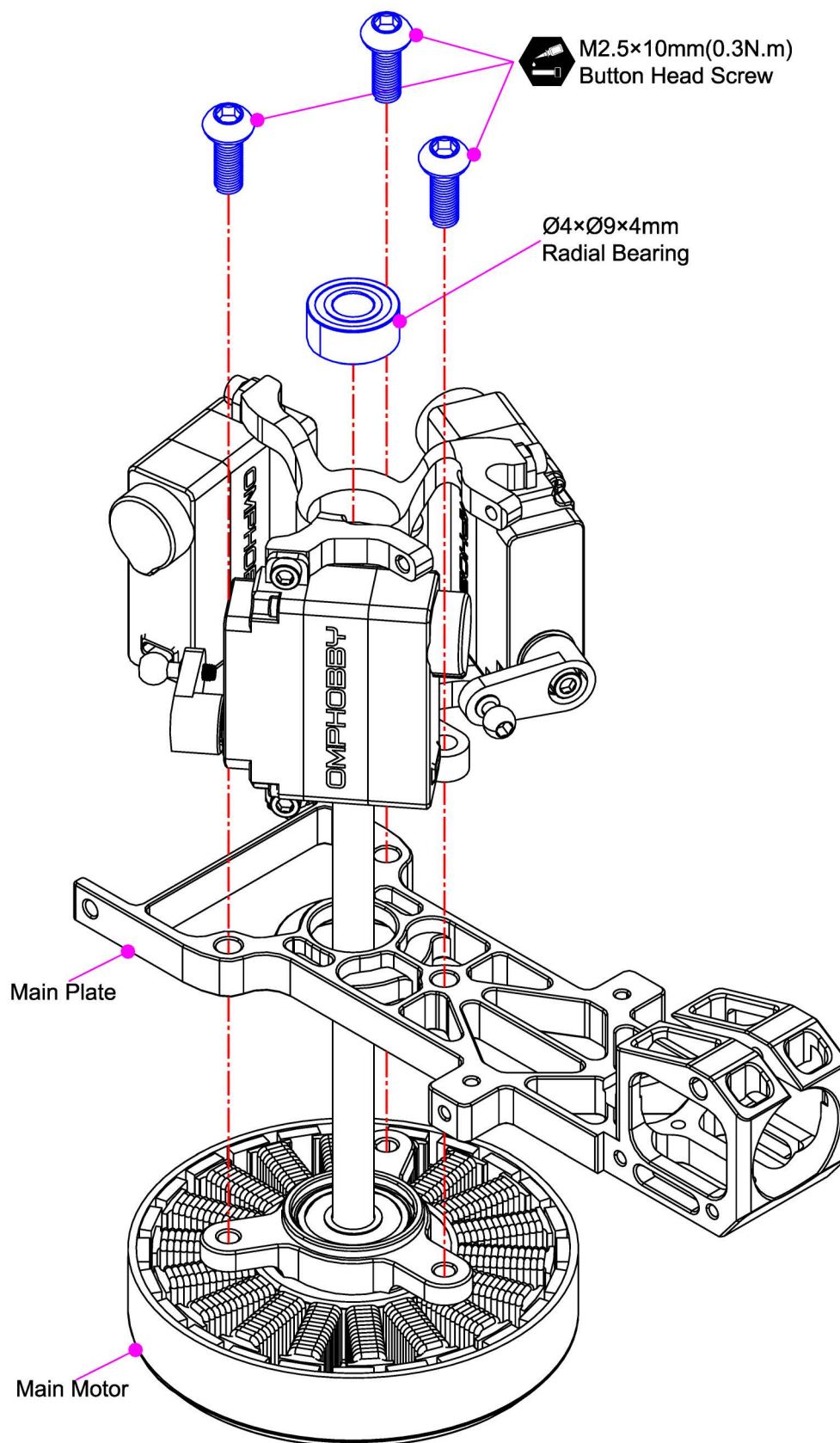


Button Head Screw
(M2.5 $\times$ 10mm)x3



M2.5 $\times$ 10mm(0.3N.m)
Button Head Screw

$\varnothing 4 \times \varnothing 9 \times 4 \text{ mm}$
Radial Bearing

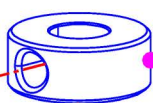




Set Screw
(M3×3)x1



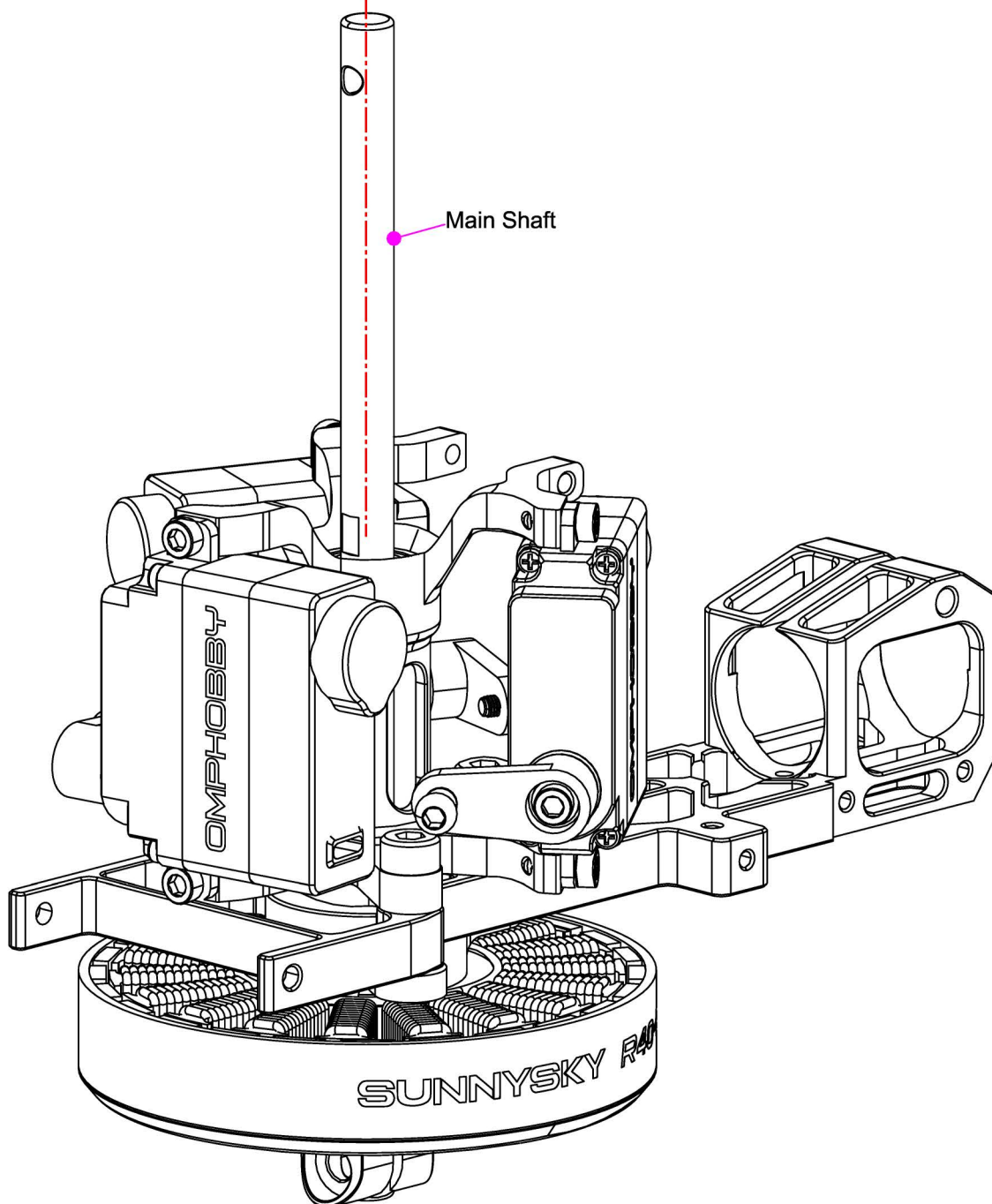
M3×3mm
Set Screw



Main Rotor Shaft Collar

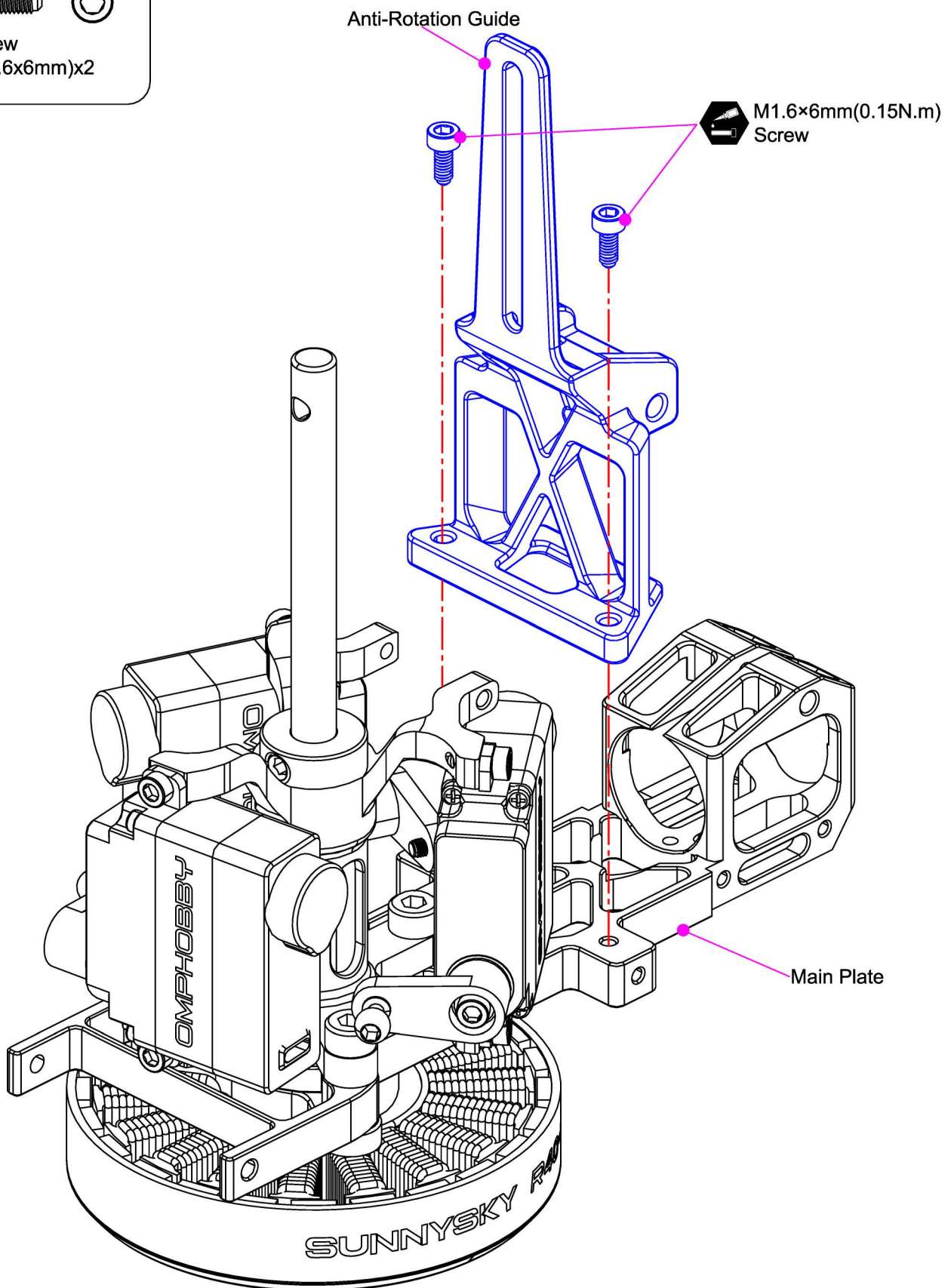


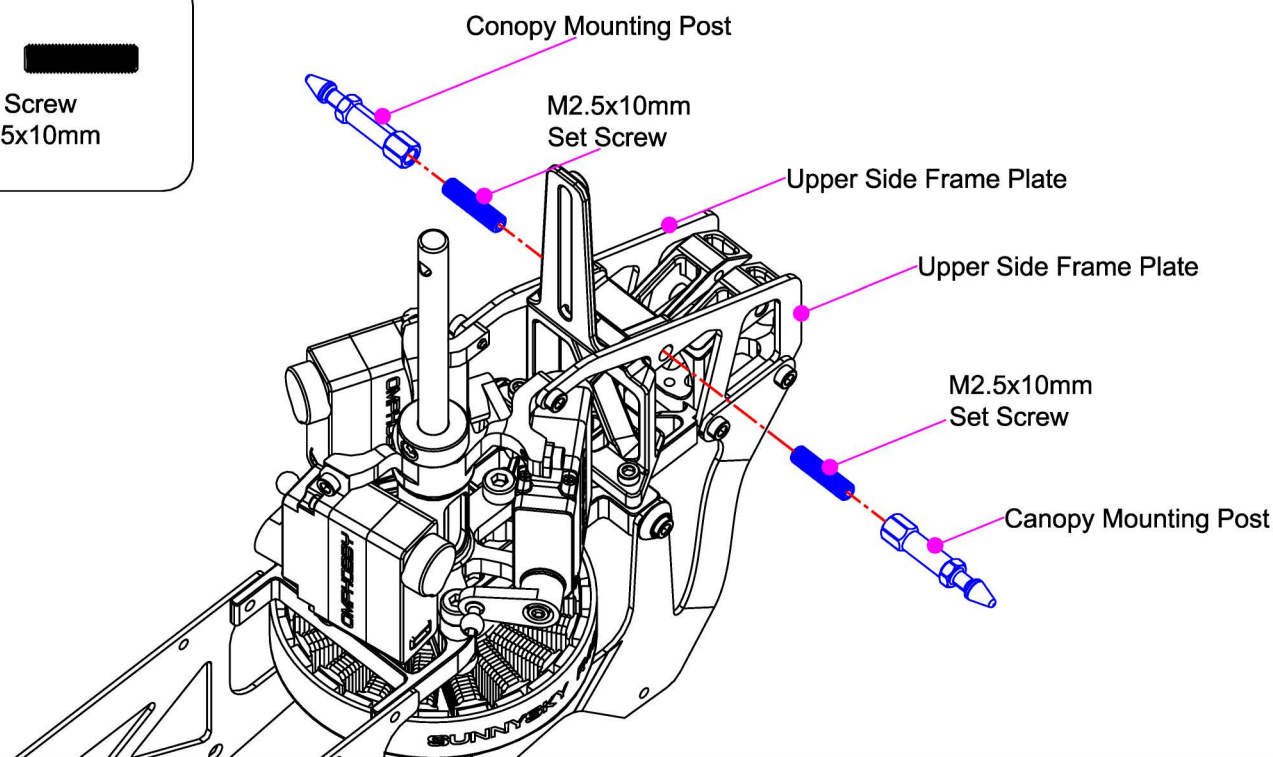
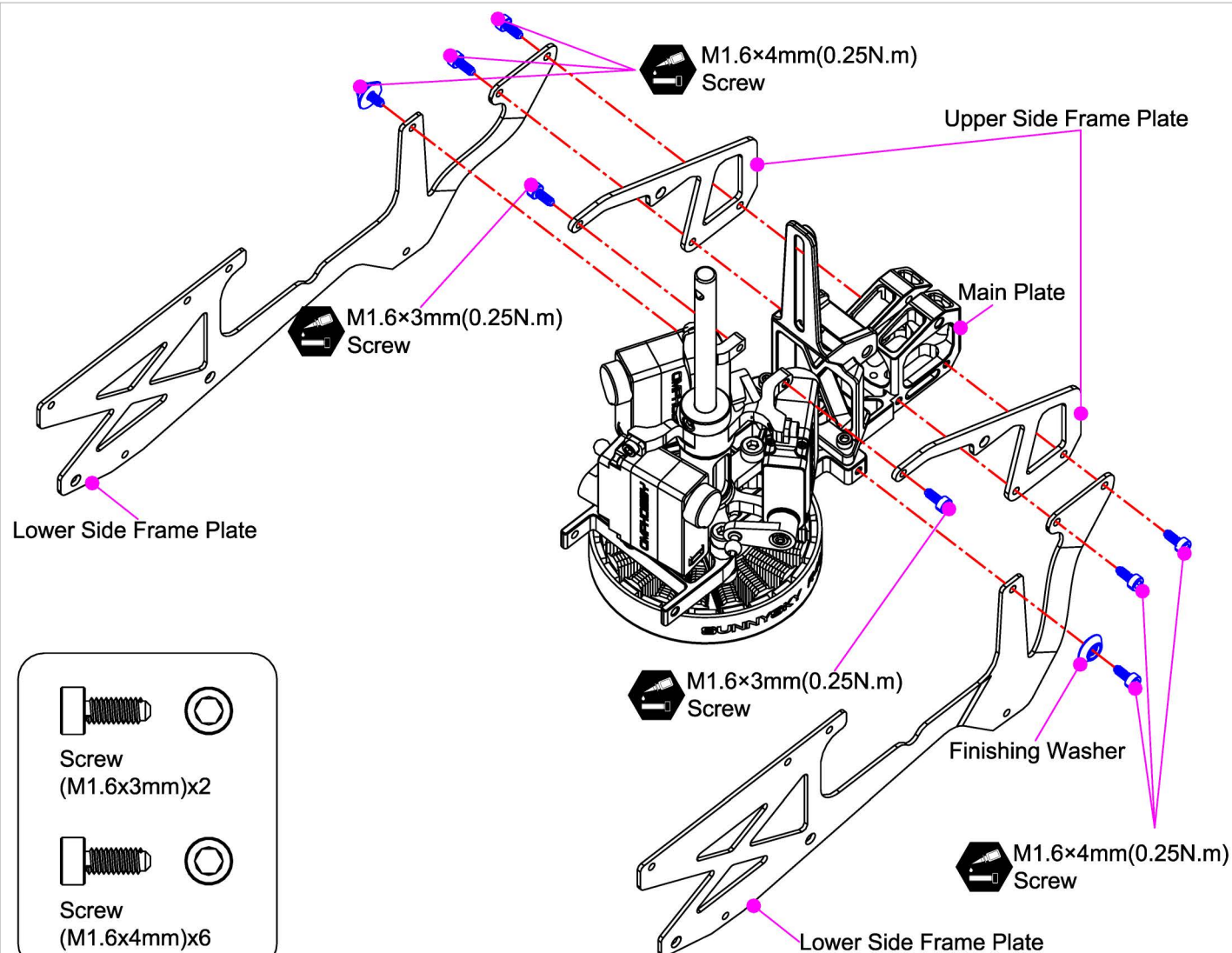
Main Shaft

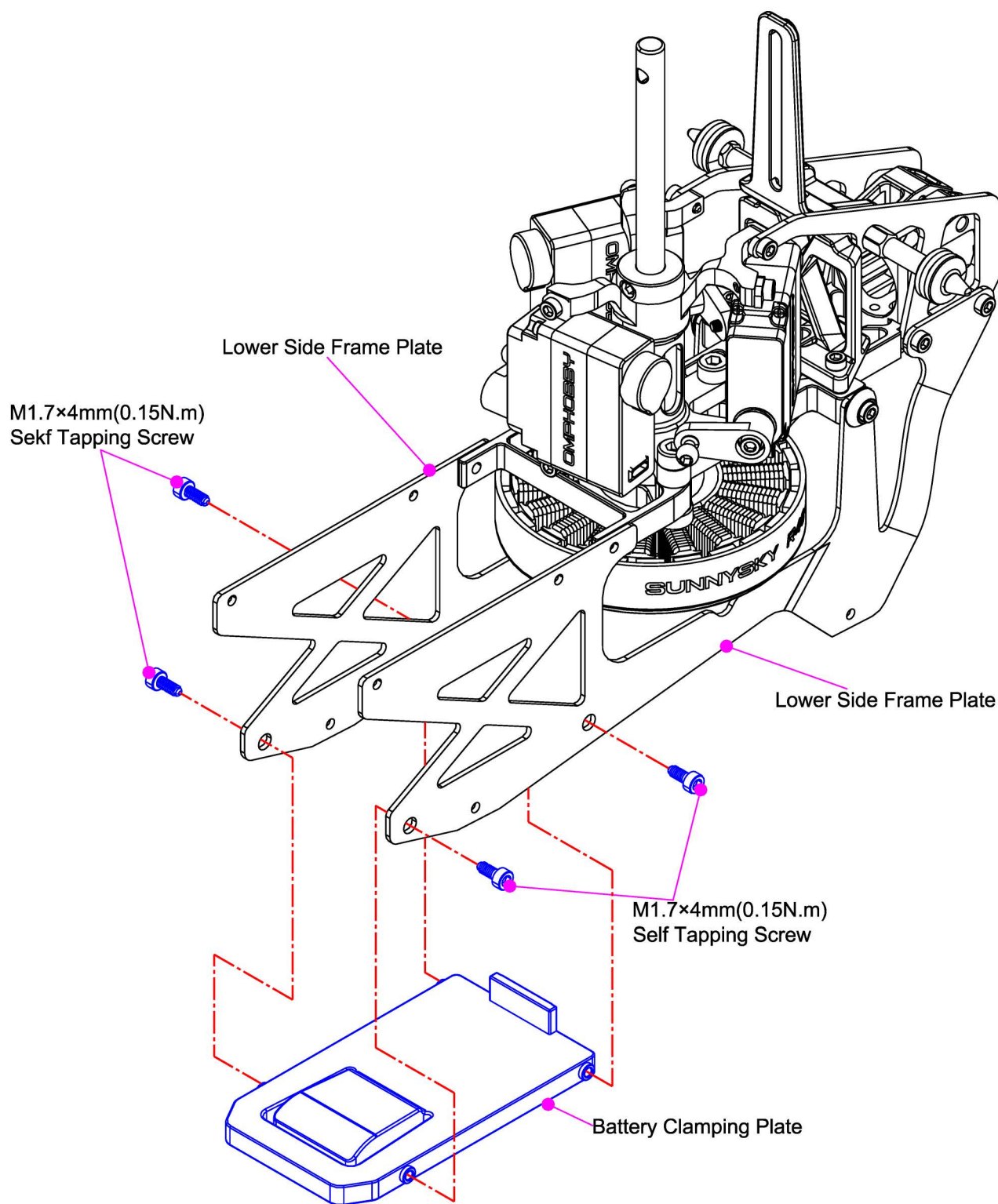




Screw
(M1.6x6mm)x2

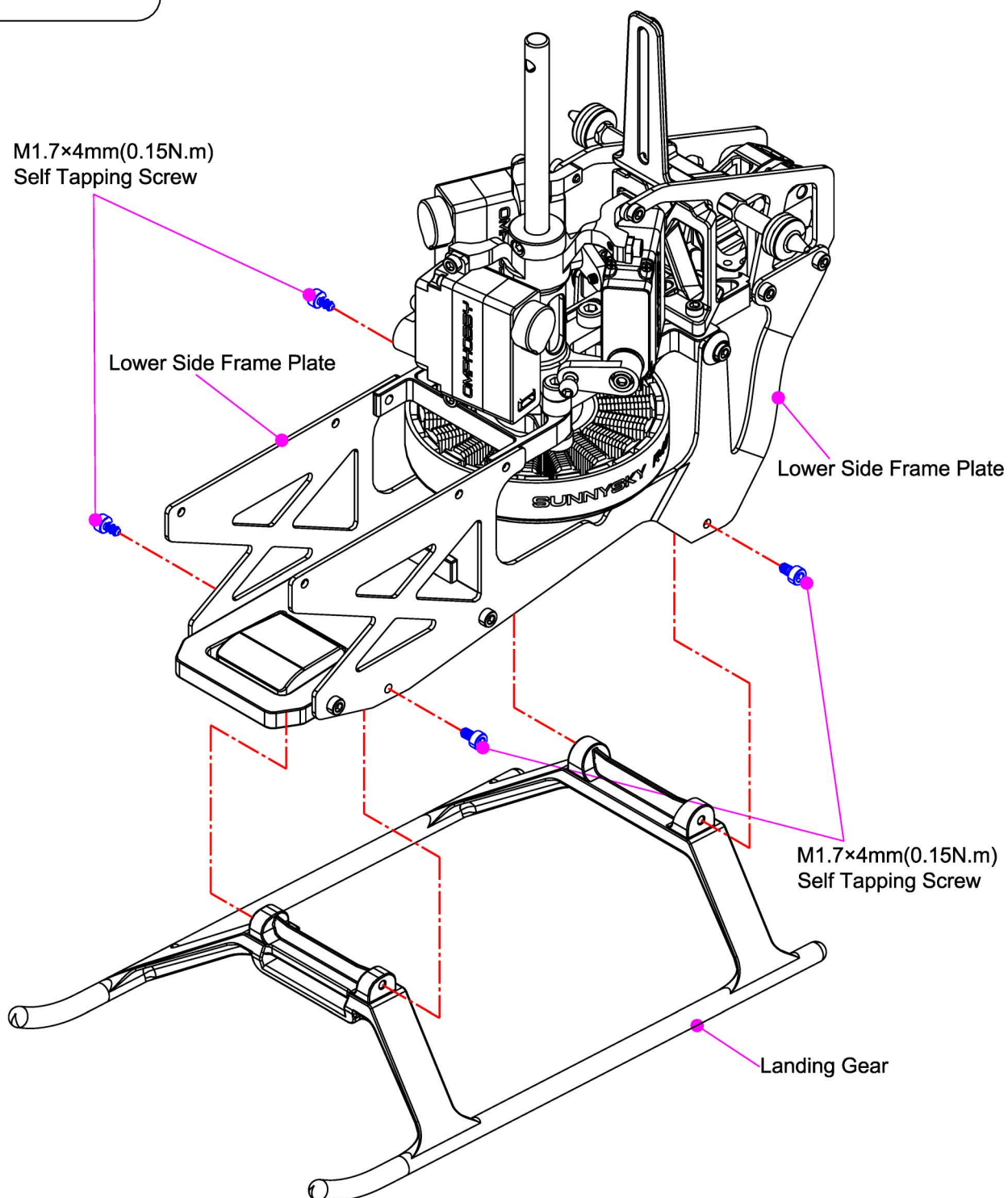


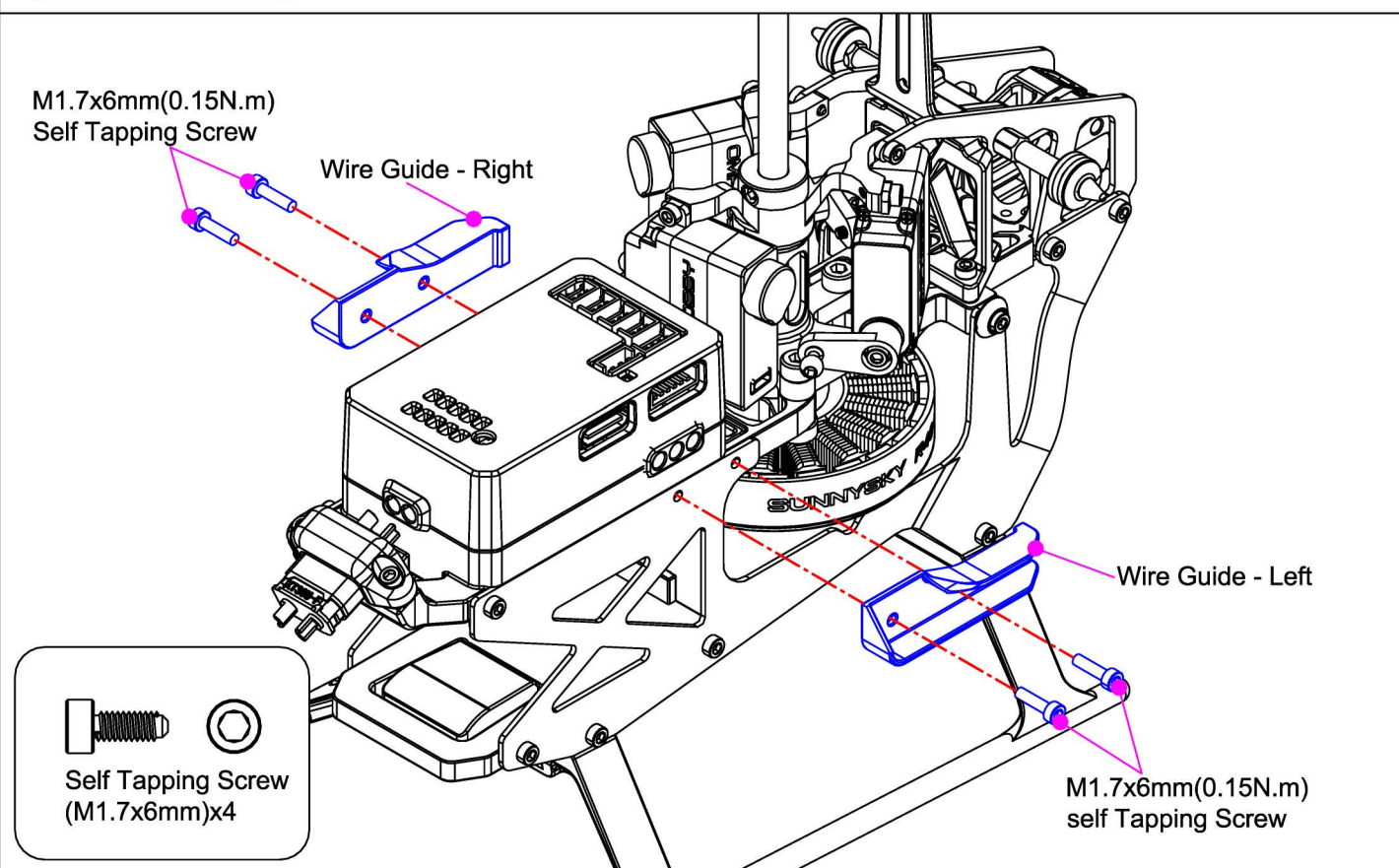
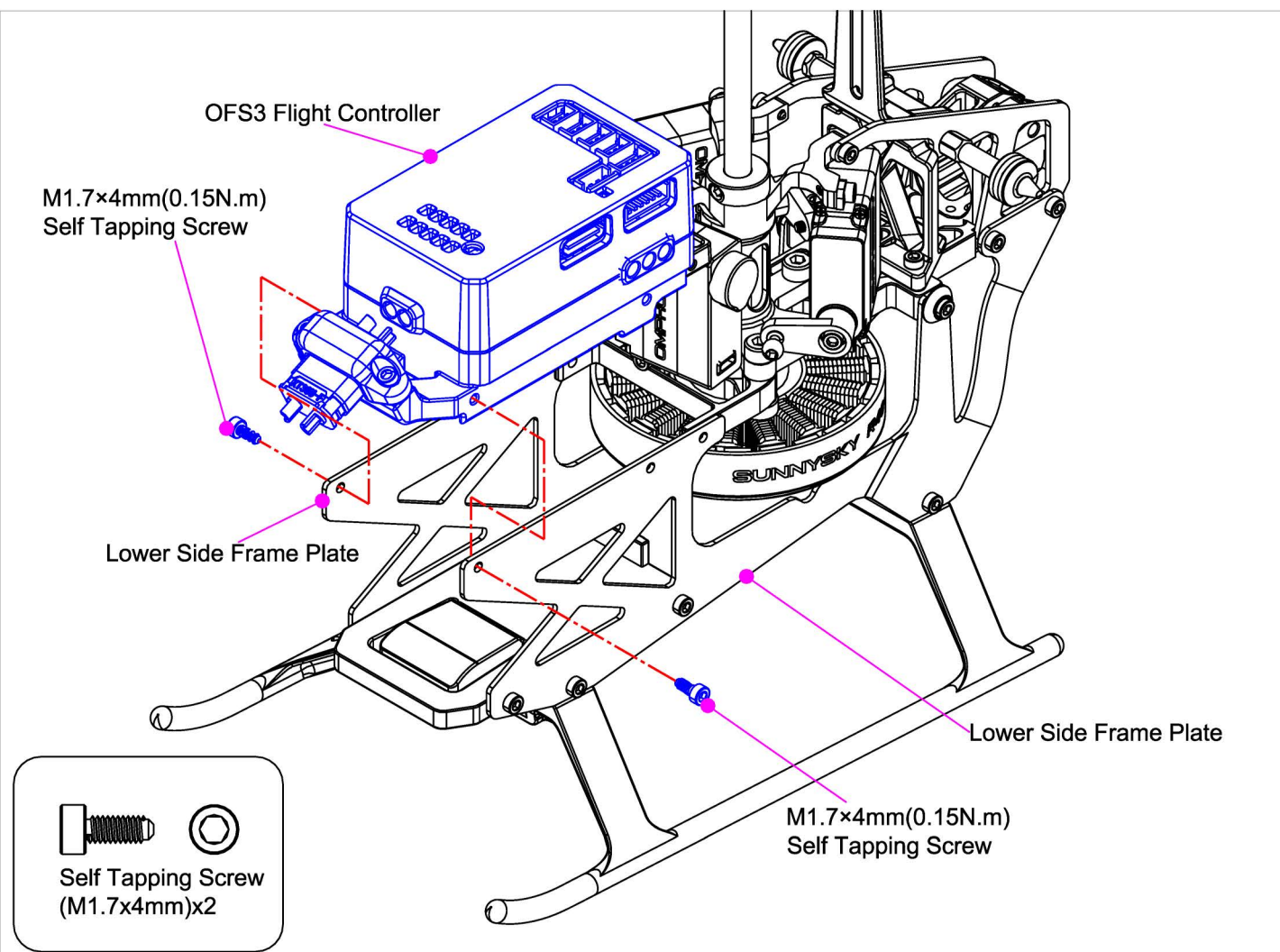






Self Tapping Screw
(M1.7x4mm)x4



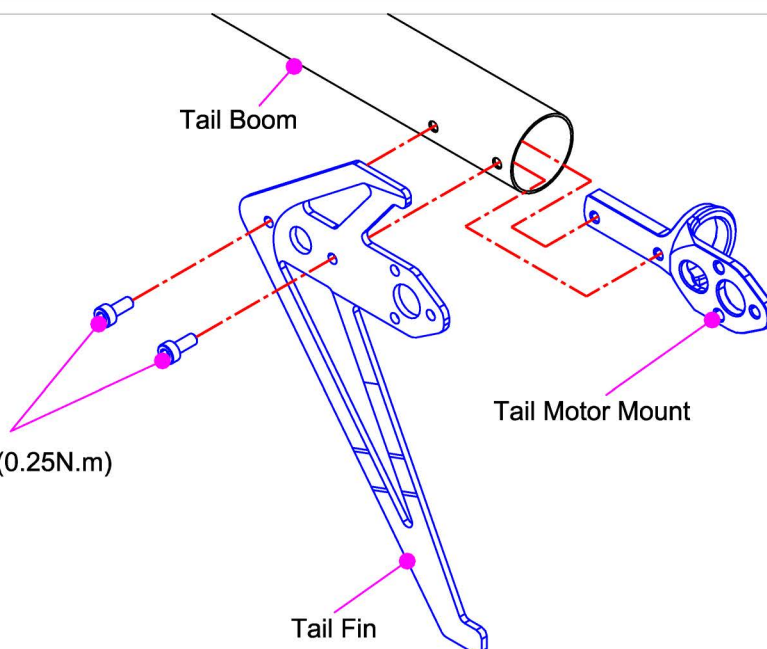




Screw
(M1.6x4mm)x2



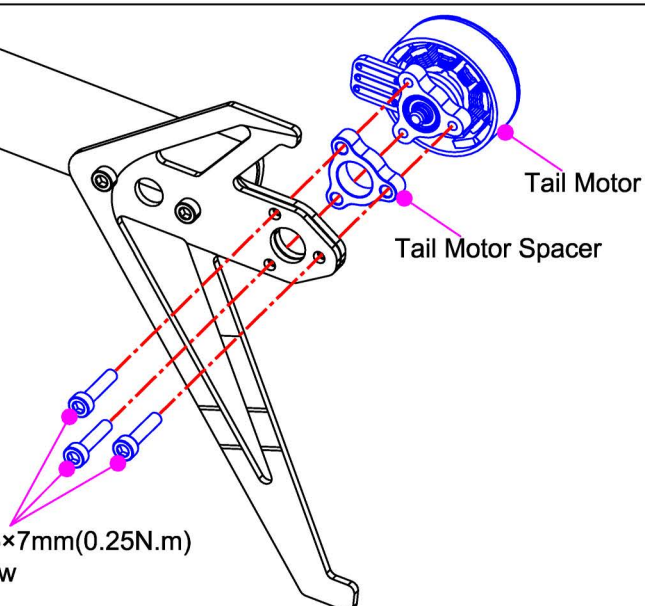
M1.6x4mm(0.25N.m)
Screw



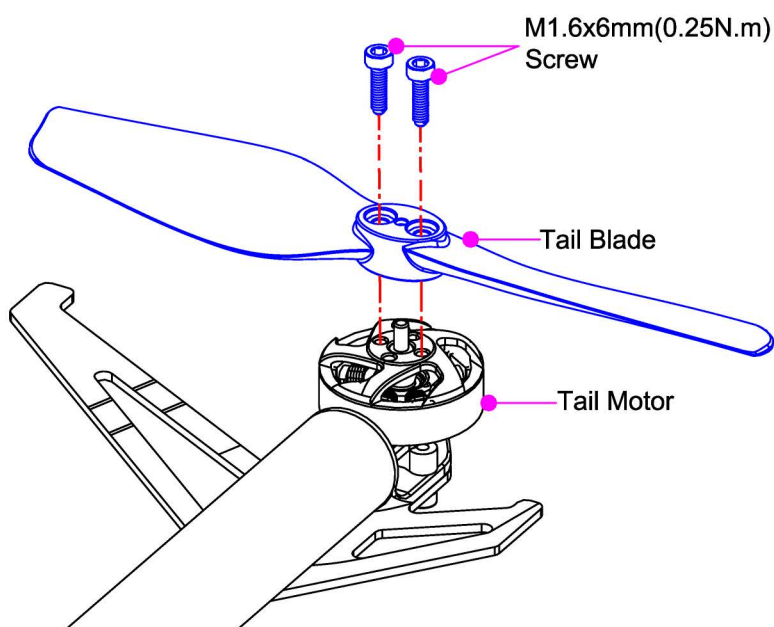
Screw
(M1.6x7mm)x3

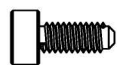


M1.6x7mm(0.25N.m)
Screw

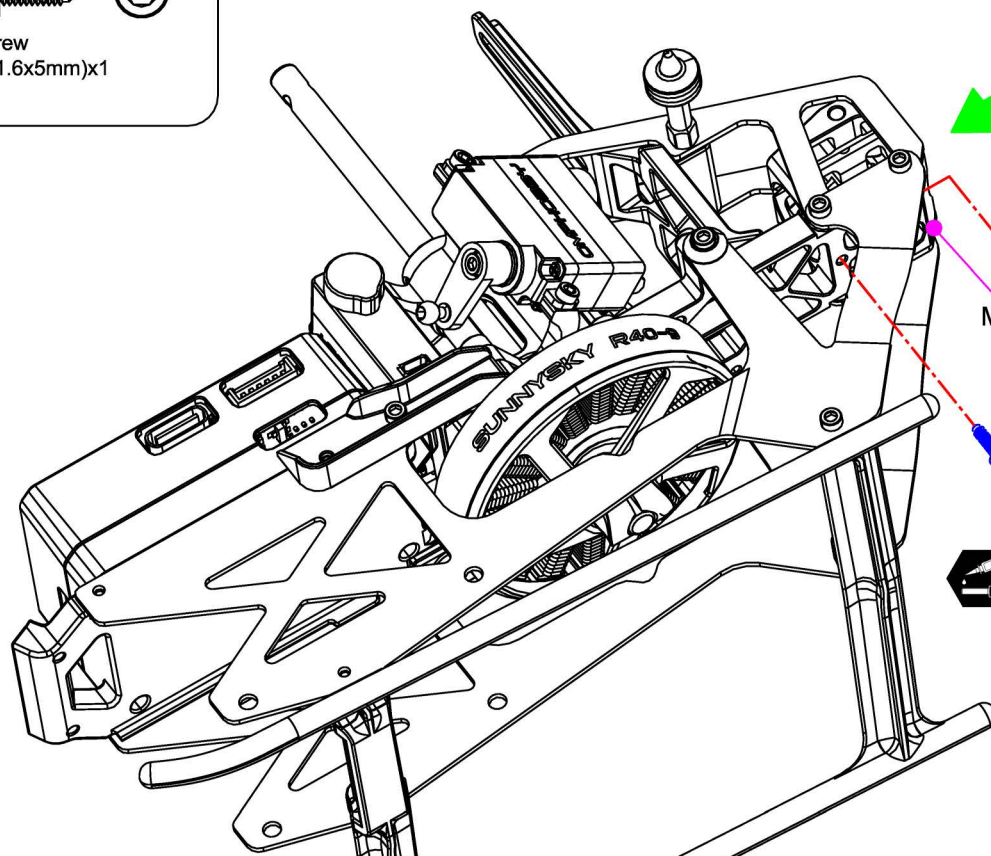


Screw
(M1.6x6mm)x2





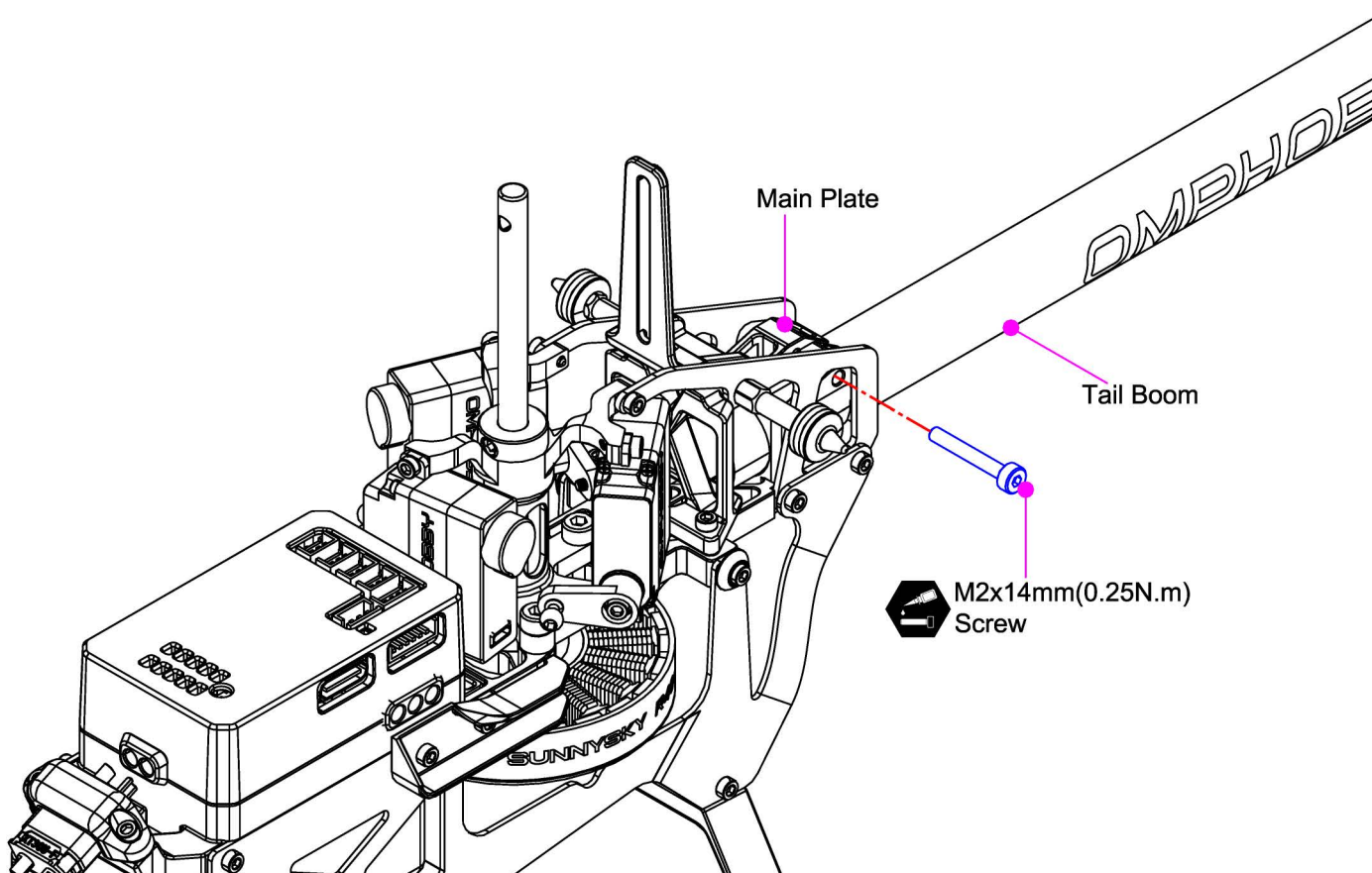
Screw
(M1.6x5mm)x1



Tail Boom

Main Plate

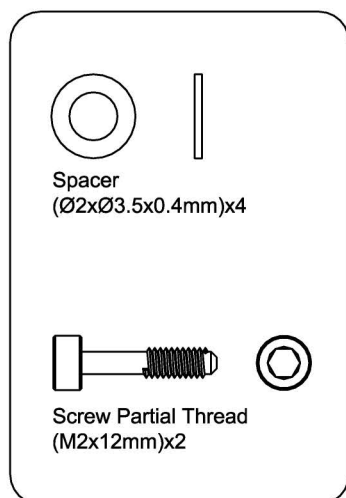
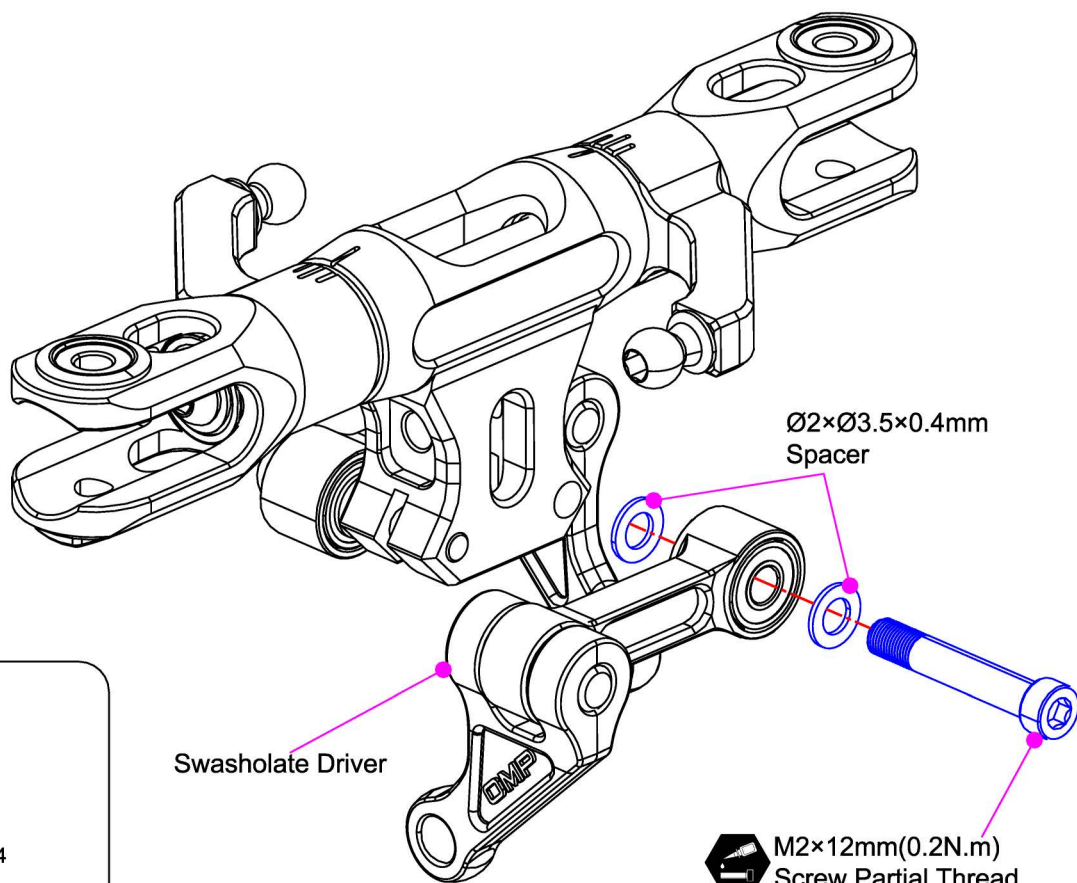
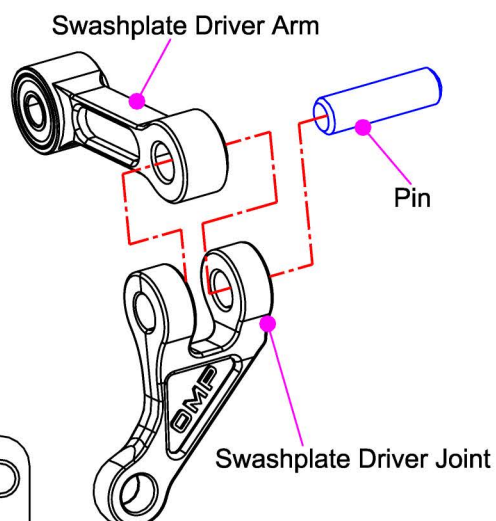
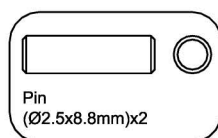
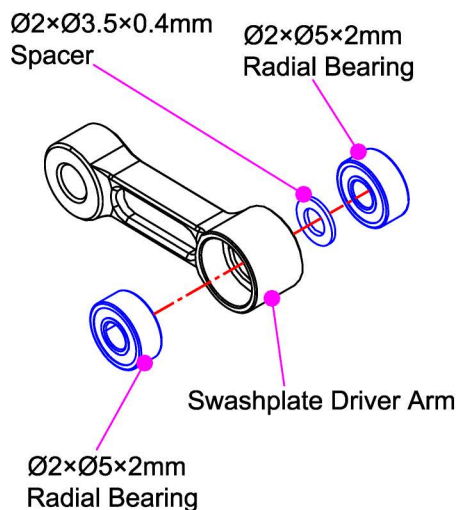
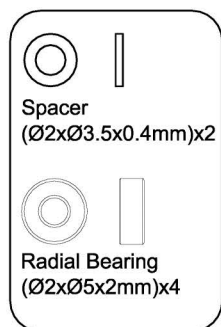
M1.6x5mm(0.25N.m)
Screw

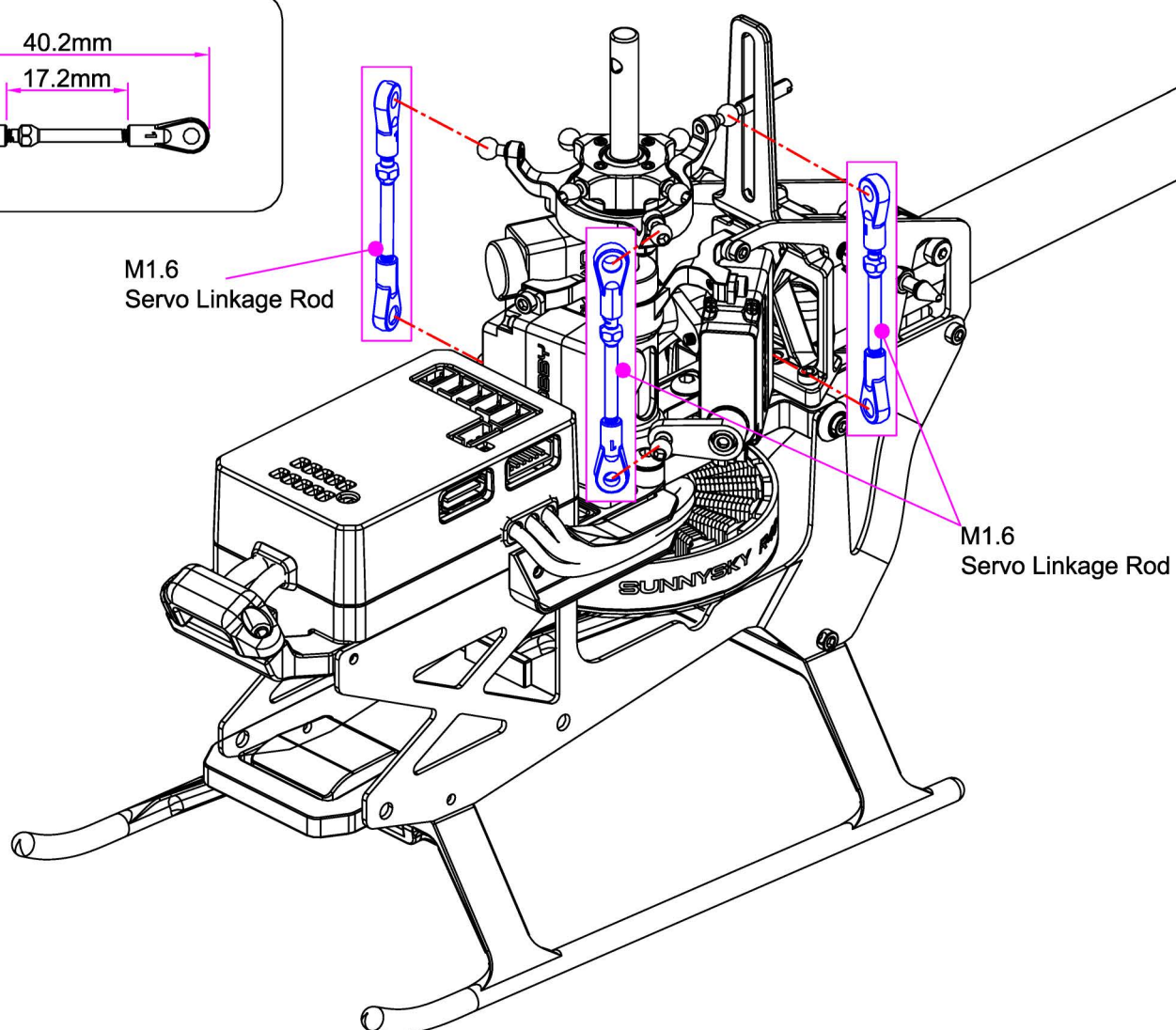
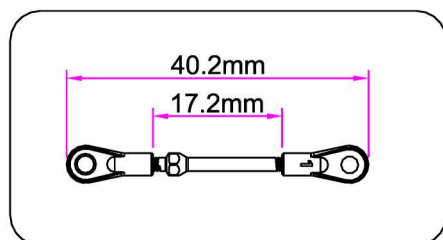
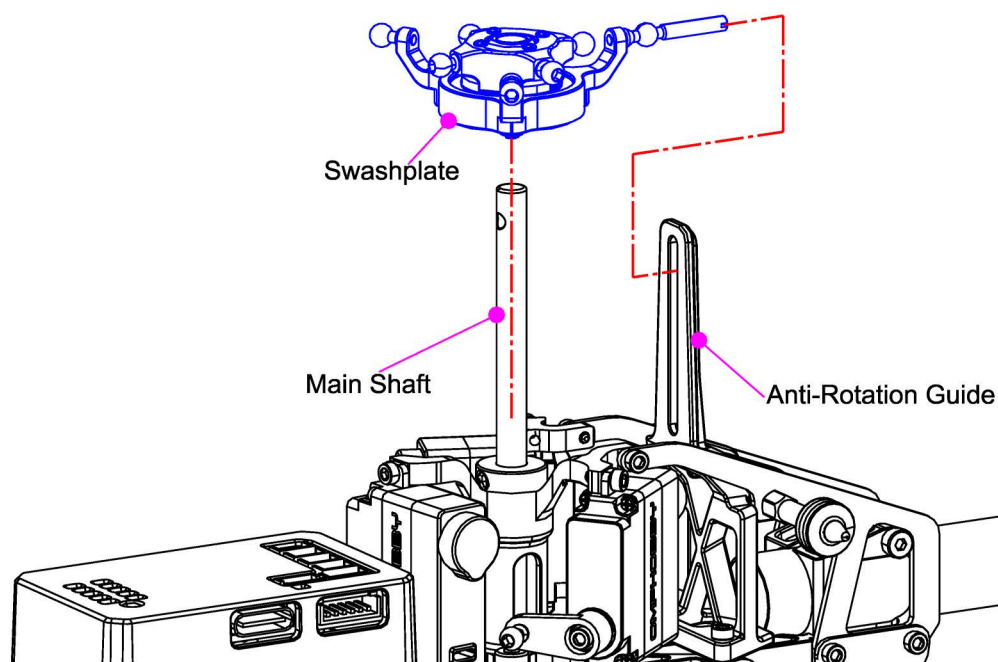


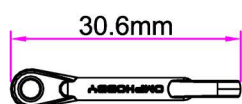
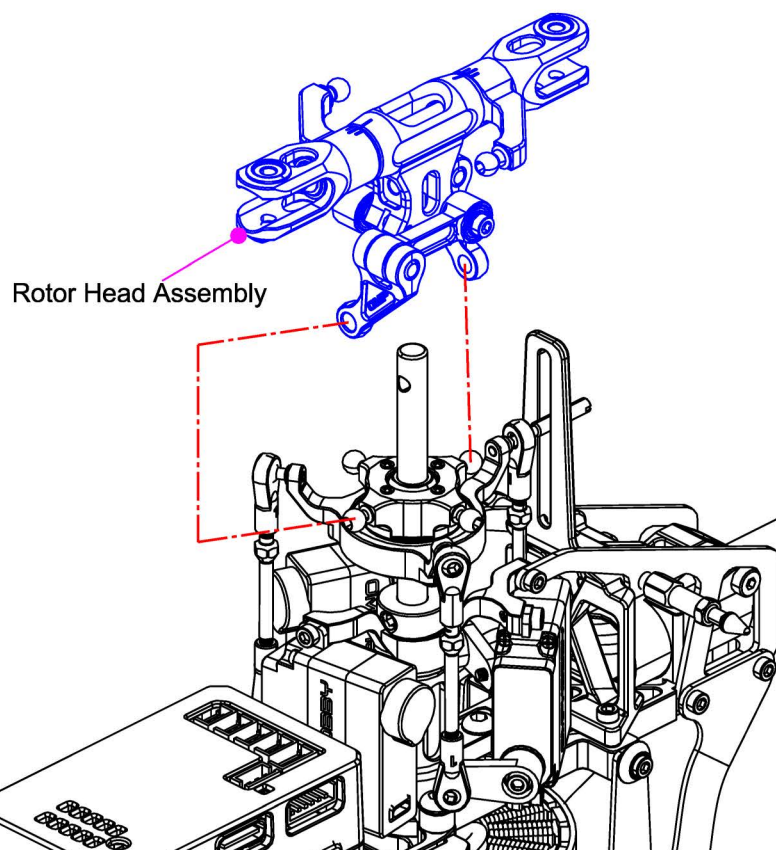
Main Plate

Tail Boom

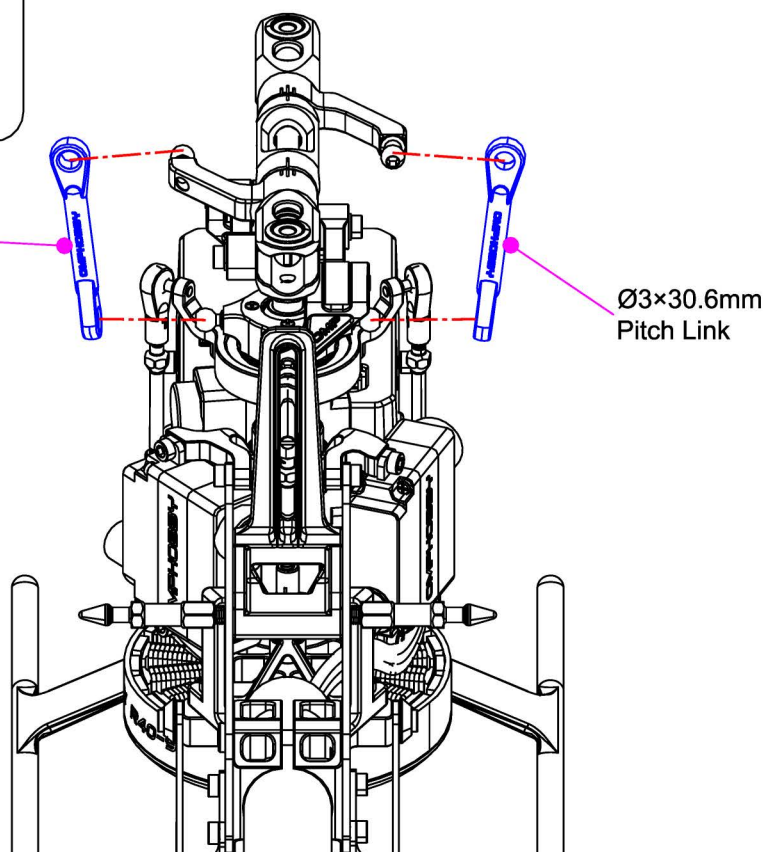
M2x14mm(0.25N.m)
Screw

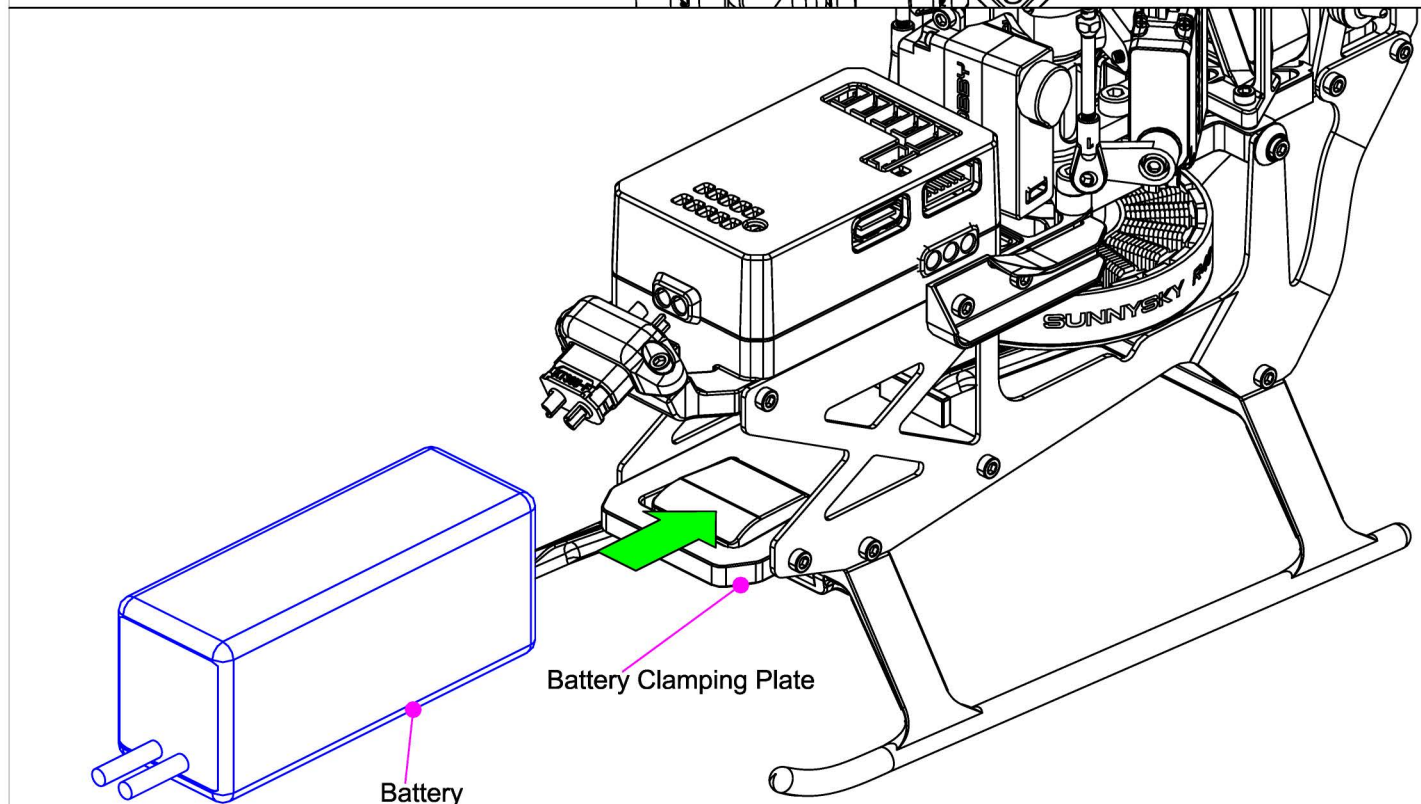
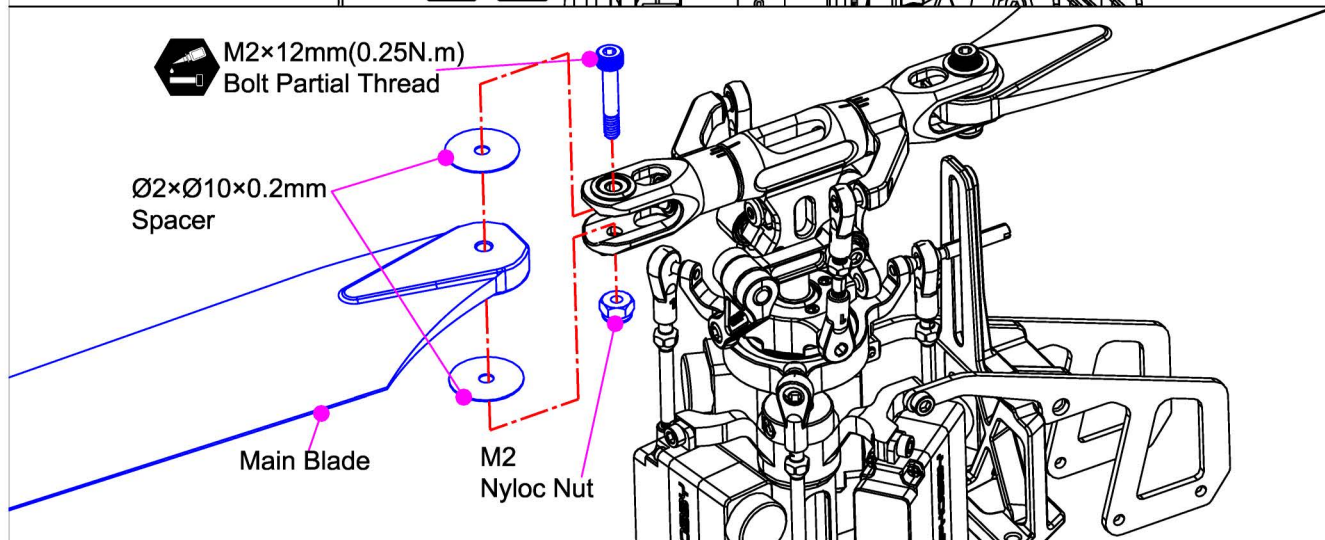
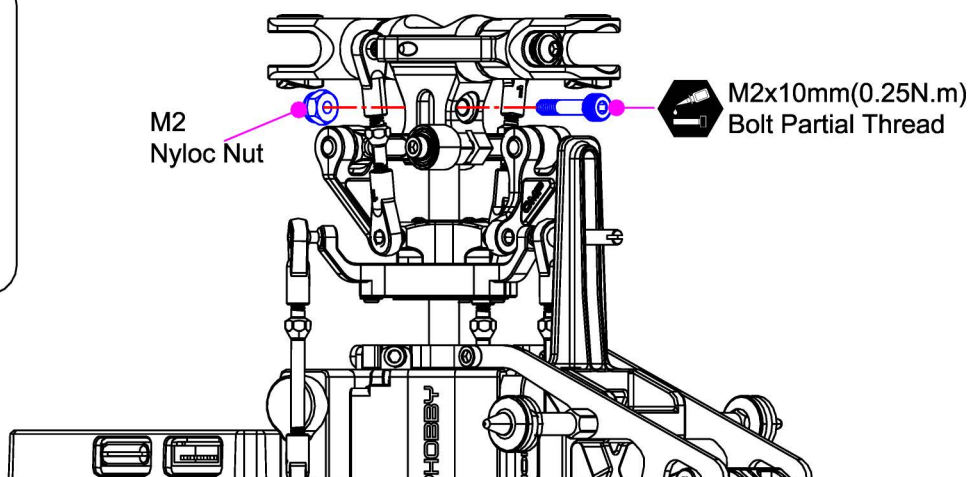
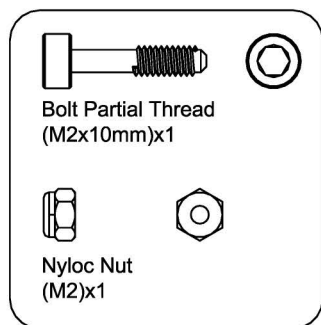


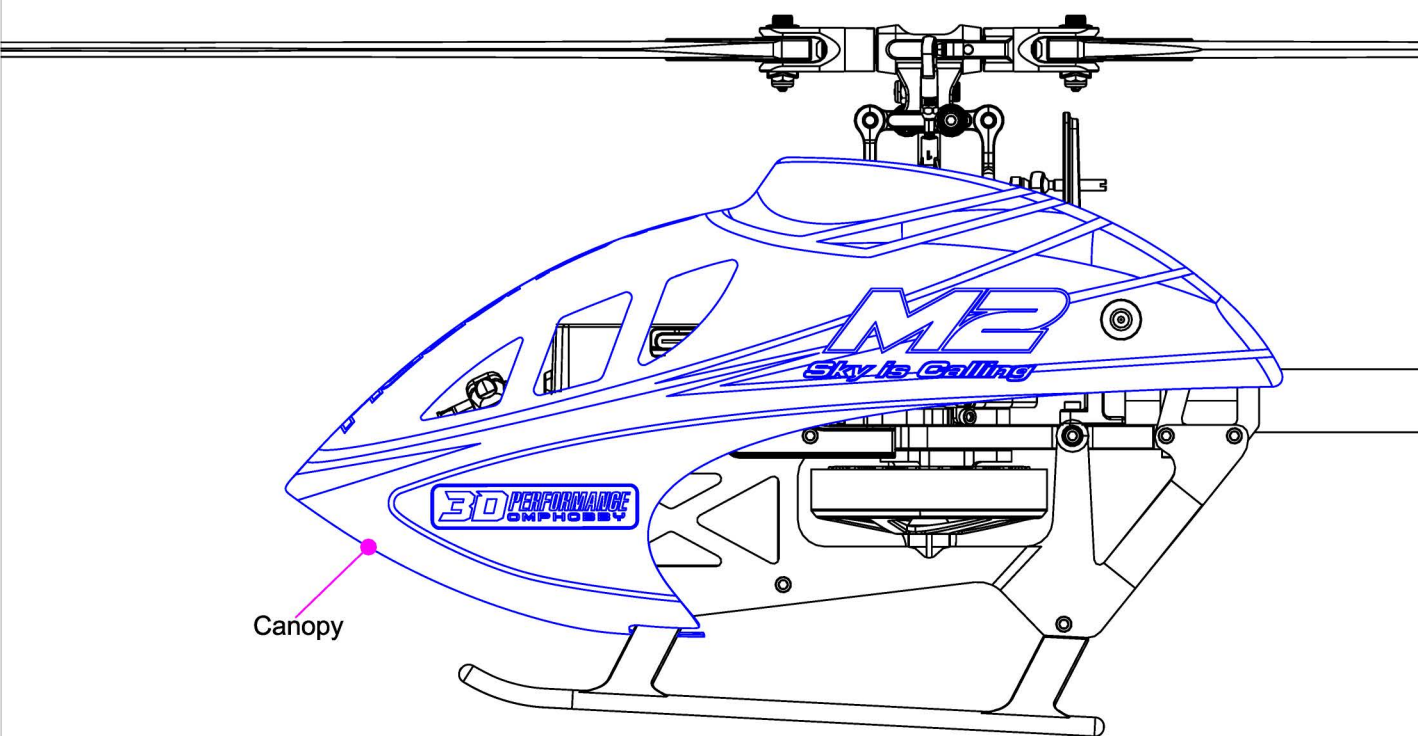
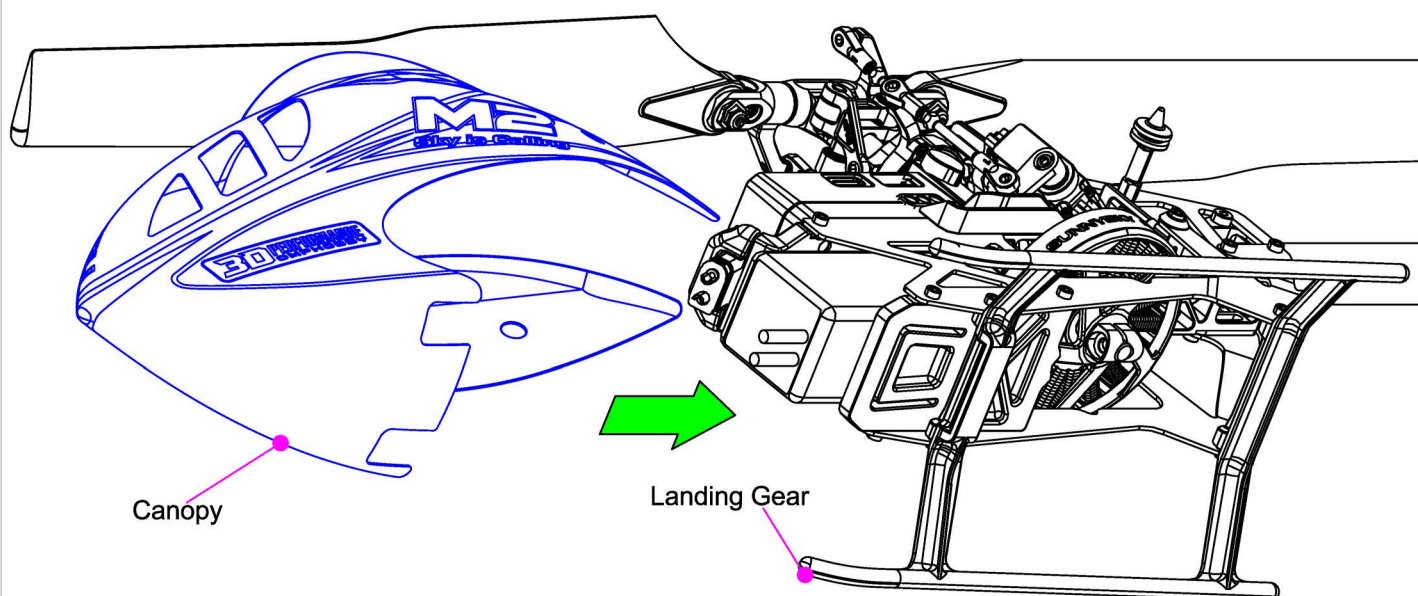
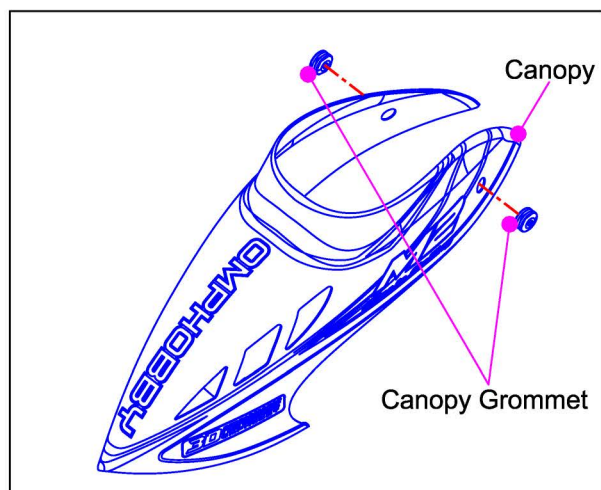


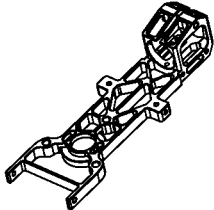
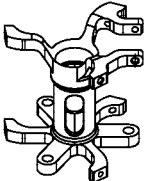
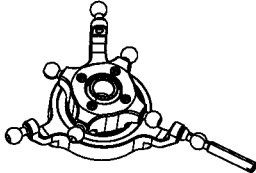
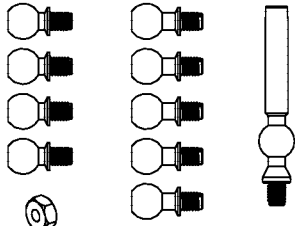
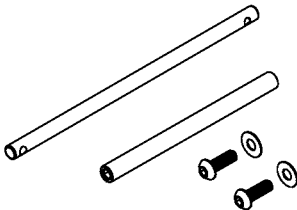
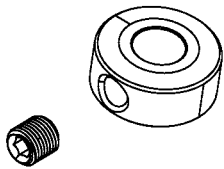
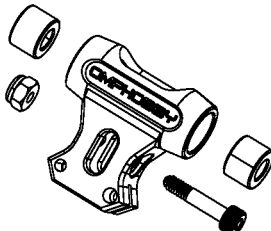
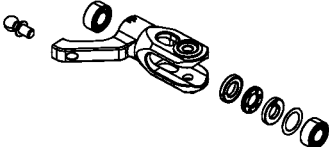
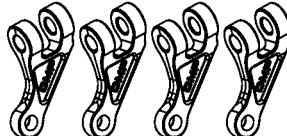
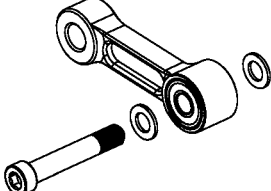
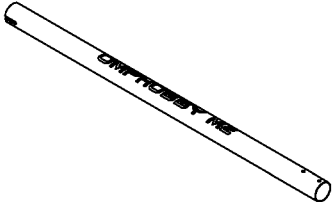
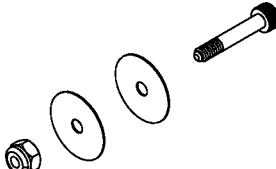
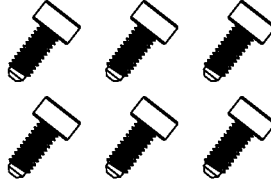
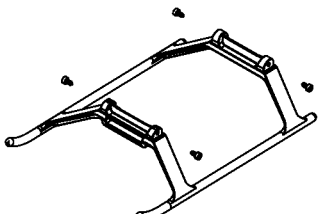
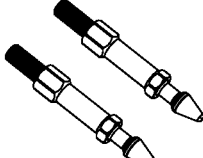
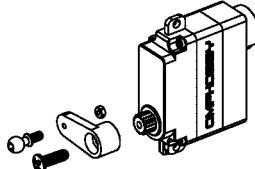


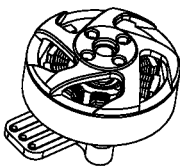
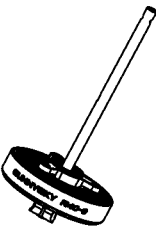
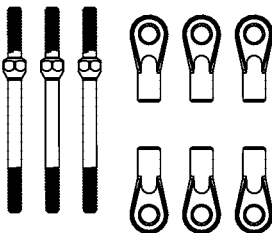
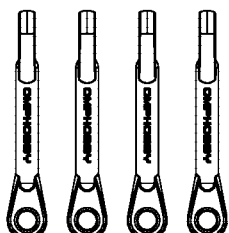
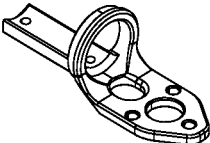
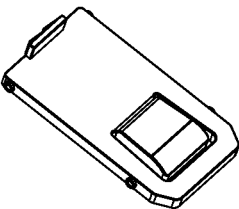
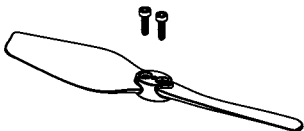
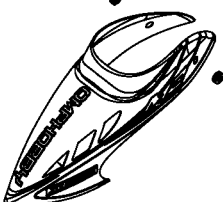
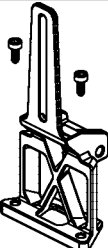
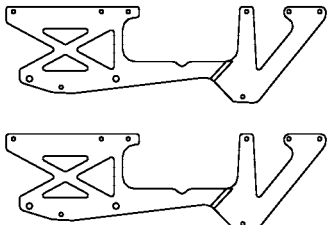
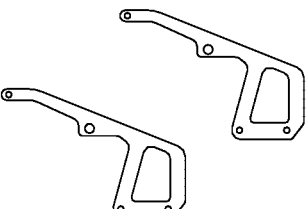
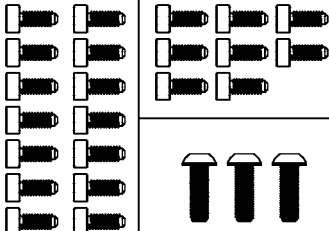
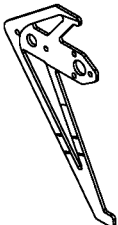
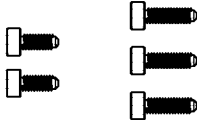
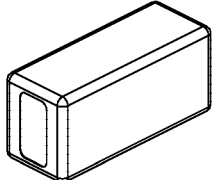
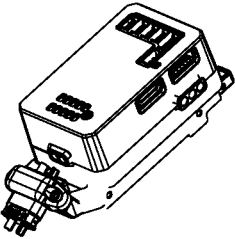
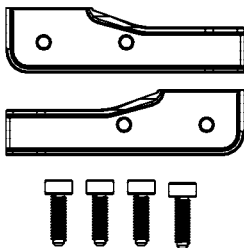
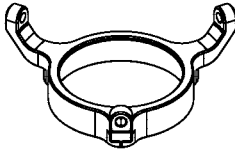
Ø3×30.6mm
Pitch Link

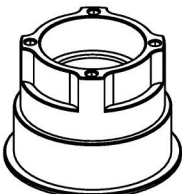
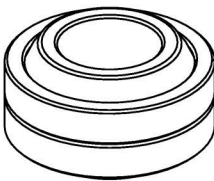
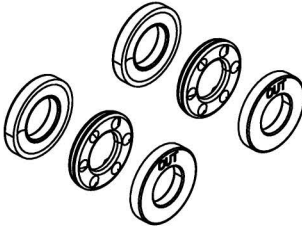


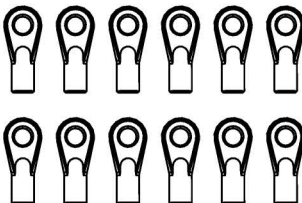
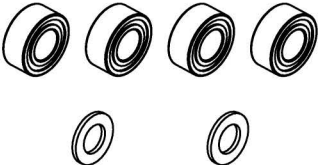
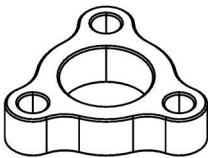
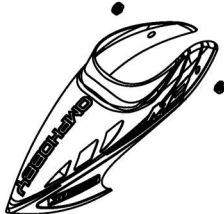


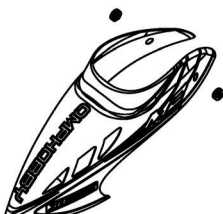
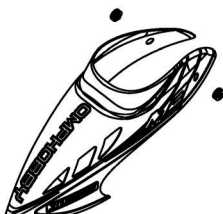


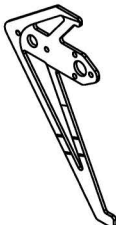
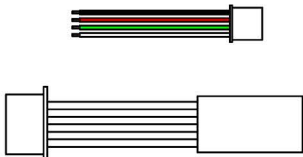
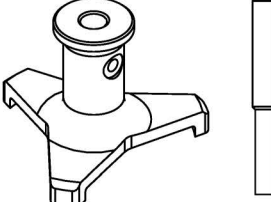
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Part Number: OSHM2405 Product name: Shaft Set 	Part Number: OSHM2406 Product name: Blade Grip Spacer 	Part Number: OSHM2407 Product name: Main Rotor Shaft Collar 	Part Number: OSHM2408 Product name: Main Rotor Yoke 
Part Number: OSHM2409 Product name: Main Rotor Blade Grip 	Part Number: OSHM2408 Product name: Main Rotor Blade Grip Bearing Set 	Part Number: OSHM2411 Product name: Swashplate Driver Joint Set 	Part Number: OSHM2412 Product name: Swashplate Driver Pin Set 
Part Number: OSHM2413 Product name: Swashplate Driver Arm 	Part Number: OSHM2414 Product name: Tail Boom 	Part Number: OSHM2129 Product name: Main Rotor Bolt Set 	Part Number: OSHM2416 Product name: Servo Screw Set 
Part Number: OSHM2417 Product name: Landing Gear 	Part Number: OSHM2418 Product name: Canopy Mounting Post Set 	Part Number: OSHM2058 Product name: Canopy Grommet Set 	Part Number: OSHM2122 Product name: Servo 

Part Number: OSHM2421 Product name: Tail Motor 	Part Number: OSHM2422 Product name: Main Motor 	Part Number: OSHM2423 Product name: Servo Linkage Set 	Part Number: OSHM2424 Product name: Pitch Link Set 
Part Number: OSHM2425 Product name: Tail Motor Mount 	Part Number: OSHM2426 Product name: Battery Clamping Plate 	Part Number: OSHM2427 Product name: Tail Blade 	Part Number: OSHM2428 Product name: APEX190 Main Blade Set 
Part Number: OSHM2429 Product name: Canopy - Orange 	Part Number: OSHM2430 Product name: Anti - Rotation Guide 	Part Number: OSHM2431 Product name: Lower Side Frame Plate Set 	Part Number: OSHM2432 Product name: Upper Side Frame Plate Set 
Part Number: OSHM2433 Product name: Screw Set 	Part Number: OSHM2434 Product name: Tail Fin - Orange 	Part Number: OSHM2435 Product name: Tail Assembly Screw Set 	Part Number: OSHM2329 Product name: Battery 
Part Number: OSHM2437 Product name: OFS3 Flight Controller 	Part Number: OSHM2438 Product name: Wire Guide Set 	Part Number: OSHM2439 Product name: Swashplate Outer Ring 	Part Number: OSHM2050 Product name: Swashplate Bearing 

Part Number: OSHM2441 Product name: Swashplate Inner Ring	Part Number: OSHM2442 Product name: Swashplate Hub	Part Number: OSHM2443 Product name: Spherical Bearing	Part Number: OSHM2005 Product name: Thrust Bearing
			

Part Number: OSHM2445 Product name: Ball Joint Socket Set	Part Number: OSHM2446 Product name: Swashplate Driver Bearing Set	Part Number: OSHM2447 Product name: Tail Motor Spacer	Part Number: OSHM2448 Product name: Canopy - Plasma Pink
			

Part Number: OSHM2449 Product name: Canopy - Viper Yellow	Part Number: OSHM2450 Product name: Canopy - Velocity Green	Part Number: OSHM2451 Product name: Tail Fin - Plasma Pink	Part Number: OSHM2452 Product name: Tail Fin - Viper Yellow
			

Part Number: OSHM2453 Product name: Tail Fin - Velocity Green	Part Number: OSHM2356 Product name: Bluetooth Module	Part Number: OSHM2454 Product name: Tilt Disk Phase Ball Screw	Part Number: OSHM2455 Product name: Leveller
			

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