OMPHOBBY®

M5 | Instruction Manual



Revision o


310mm
153mm


1178mm


1266mm

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General Information and Limitations

OMPHOBBY M5

OMPHOBBY M5 General Information

- Airframe weight: 1405 g
- Main Blade Length: 550 mm - 580 mm
- Tail Blade Length: 93 mm - 96 mm
- Battery Dimensions: 54 × 65 x 200 mm
- Swashplate Servo Size: 15 mm
- Tail Servo Size: 15 mm
- Tail Ratio: 95 / 20 = 4.75
- Flying Weight: ~2900 g - 3200 g

Gearing Options (Pinion marked with * included in kit)

M5-15 mm Cyclic Servos		
Main Gear	**Pinion**	**Gear Ratio**
115T	11t	10.45
	12t	9.58
	13t*	8.85
	14t	8.21
	15t	7.67

M5-20 mm Cyclic Servos		
Main Gear	**Pinion**	**Gear Ratio**
115T	13t*	8.85
	14t	8.21
	15t	7.67

Recommended Rotor Speeds and Collective Angles

Flying Style	Recommended RPM Range	Recommended Collective Pitch Range
Hovering	1300-1500 RPM	-5° ~ +12°
Low RPM 3D	1300-1500 RPM	±15°
Sport Flying	1500-1800 RPM	±14°
Aerobatics, Soft 3D	1600-2000 RPM	±14°
Hard 3D	2100-2300 RPM	±13°

Airframe Limitations

The OMPHOBBY M5 is engineered to meet the highest standards of 3D flight. Nonetheless, limitations apply to the airframe to guarantee safe operation and longevity of the model and its components. Operating the M5 outside these limitations will void any product warranty, and might endanger yourself and others. RC helicopters are not toys. Mishandling can lead to serious injury or death. The pilot assumes full responsibility over their usage of this product.

Limitations when using 560 mm main rotor blades
- Maximum Rotor Speed: 2500 RPM (Including all in-flight transients)
- Maximum Collective Pitch below 1800 RPM: ±15°
- Maximum Collective Pitch 1800 RPM - 2200 RPM: ±14°
- Maximum Collective Pitch above 2200 RPM: ±13°
- Recommended Rotor Blades: RotorTech 560mm Ultimate
- Minimum flight RPM with POM Dampers installed: 1500 RPM

Limitations when using 580 mm main rotor blades
- Maximum Rotor Speed: 2400 RPM (Including all in-flight transients)
- Maximum Collective Pitch below 1700 RPM: ±15°
- Maximum Collective Pitch 1700 RPM - 2100 RPM: ±14°
- Maximum Collective Pitch above 2100 RPM: ±13°
- Recommended Rotor Blades: RotorTech 580mm Ultimate
- Minimum flight RPM with POM Dampers installed: 1500 RPM

⚠Always obey the RPM limits of your rotor blades. Never fly with damaged or unbalanced rotor blades.⚠

Motor Selection and Limitations

Motor Shaft
M5 only supports motor shafts of **6 mm diameter, length 15-60 mm.** M5 uses the same pinions as M7.

Mounting Pattern
M5 supports both **M3×Ø25** mm and **M4×Ø30** mm motor screw patterns, in all orientations.

Canopy Clearance
For fully cylindrical motors with **40XX** stators, the **maximum motor height is 56.2 mm**, and the motor must be **no larger than height + diameter = 106 mm.**

For fully cylindrical motors with **45XX** stators, the **maxium motor height is 53 mm**, and the motor must be **no larger than height + diameter = 107 mm.**

Motors with chamfered impeller designs might be able to exceed these limitations slightly, fitment in such cases must be assessed individually, and cannot be guaranteed by OMPHOBBY. For fitting larger motors, M6 canopy can be used.

Recommended Motors
SUNNYSKY 4518 - 1100Kv (for 6S setups, 560 mm blades)
SUNNYSKY 4520 - 1120Kv (for 6S setups, 580 mm blades)
SUNNYSKY 4520 - 850Kv (for 8S setups, 580 mm blades)

Setup Data for Rotorflight 2

Mixer

•Swashplate Type	CCPM 120°
•Main Rotor Direction	Clockwise
•Cyclic Blade Pitch Limit	14.5°
•Collective Blade Pitch Limit	15.0°
•CW Yaw Blade Angle Limit	44.5°
•CCW Yaw Blade Angle Limit	28.5°
•Total Blade Pitch Limit	24.0°
•Swashplate Phase Angle	0.0°

Motors

•Main Rotor Gear Ratio	[13] : [115]
•Tail Rotor Gear Ratio	[20] : [95]
• Main Motor Pole Count	[10]

(Pole Count applicable to all SUNNYSKY motors. Check your motor's data if using a different brand.)

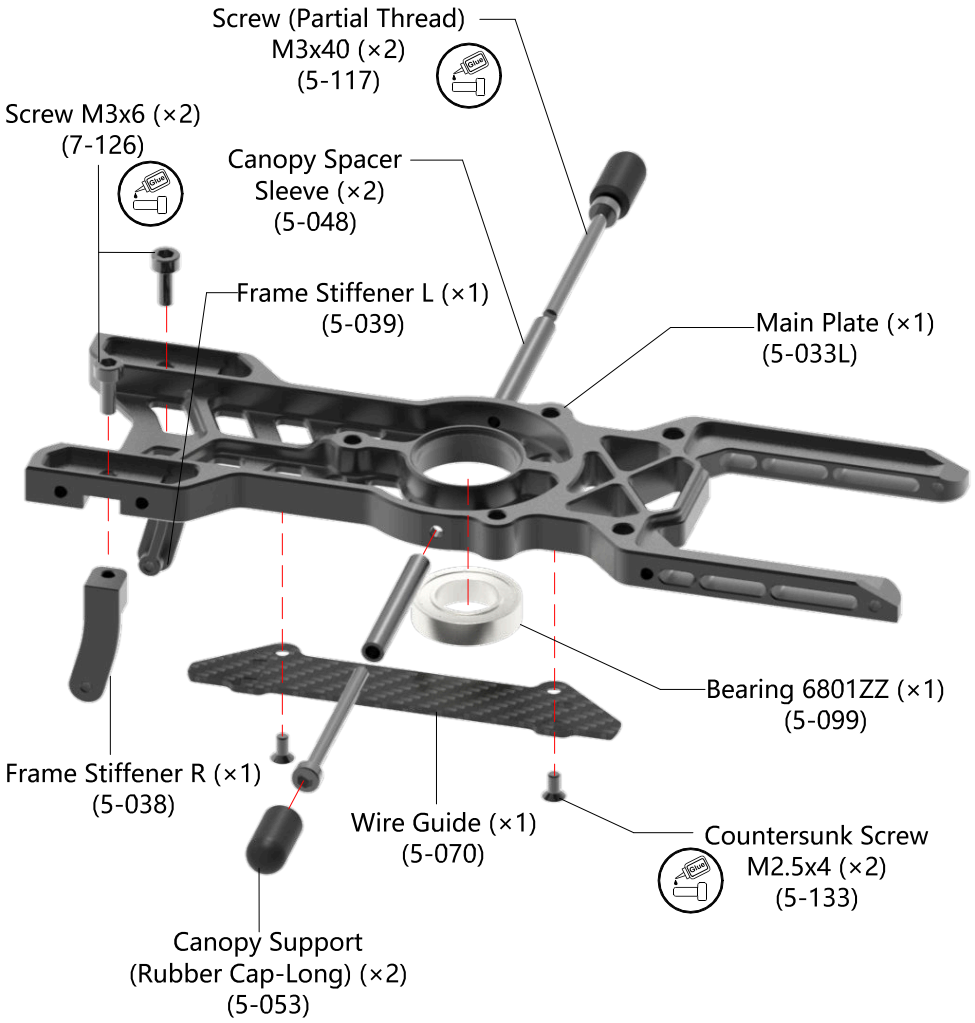
Symbol Guide

Note
Use 2 Part Epoxy
Use Grease
Use Threadlocker

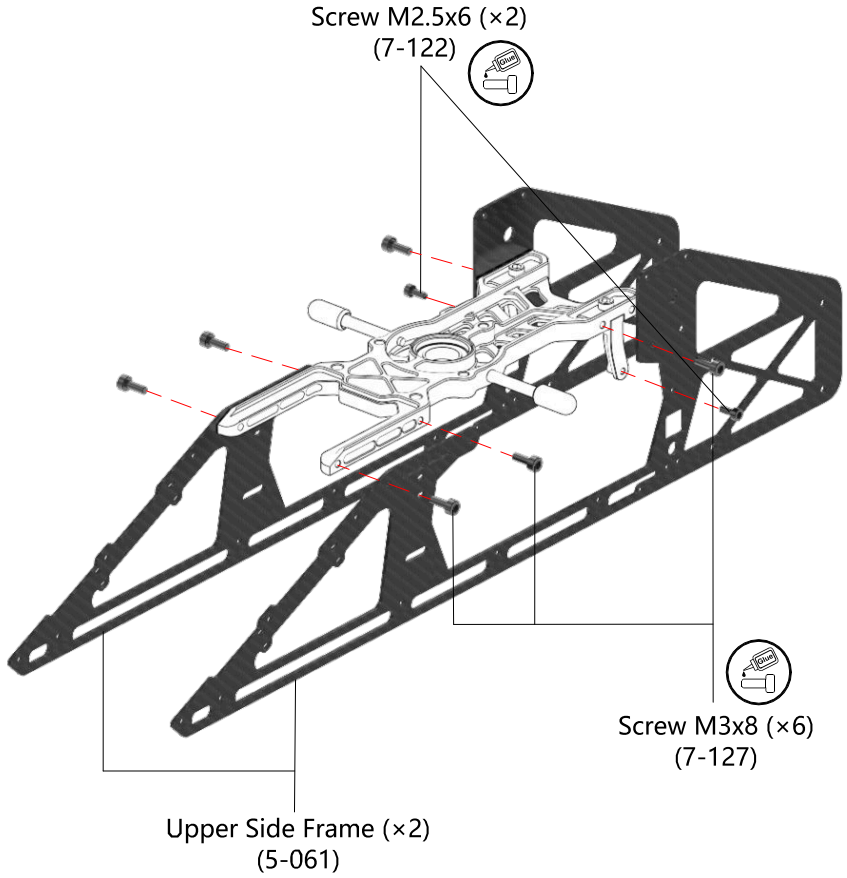
※ The color of parts in the images contained within this manual may vary slightly from the actual parts.

Upper Side Frame Assembly

01 Main Plate Assembly



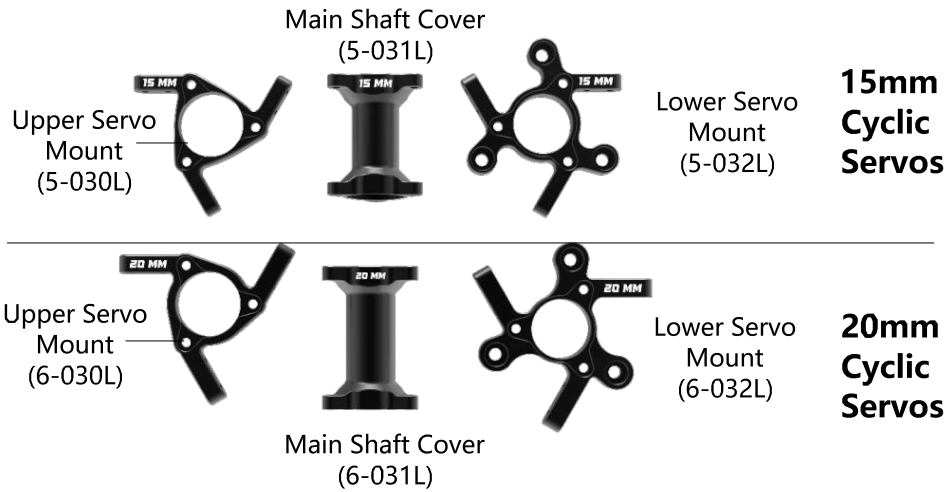
02 Upper Side Panel Assembly

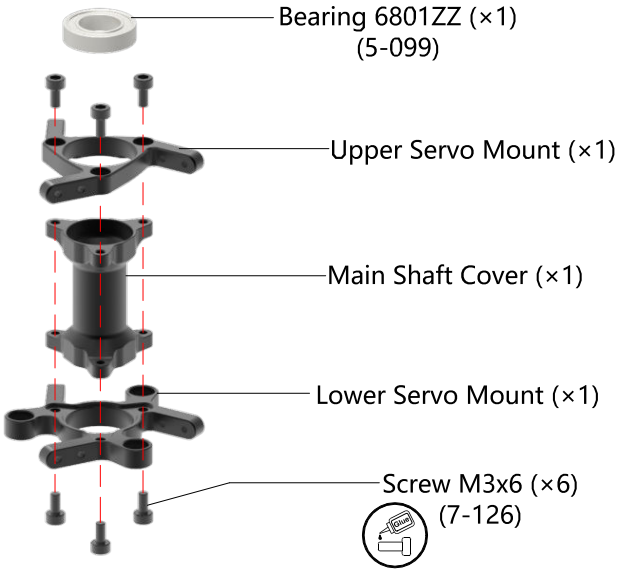


Upper Frame Assembly

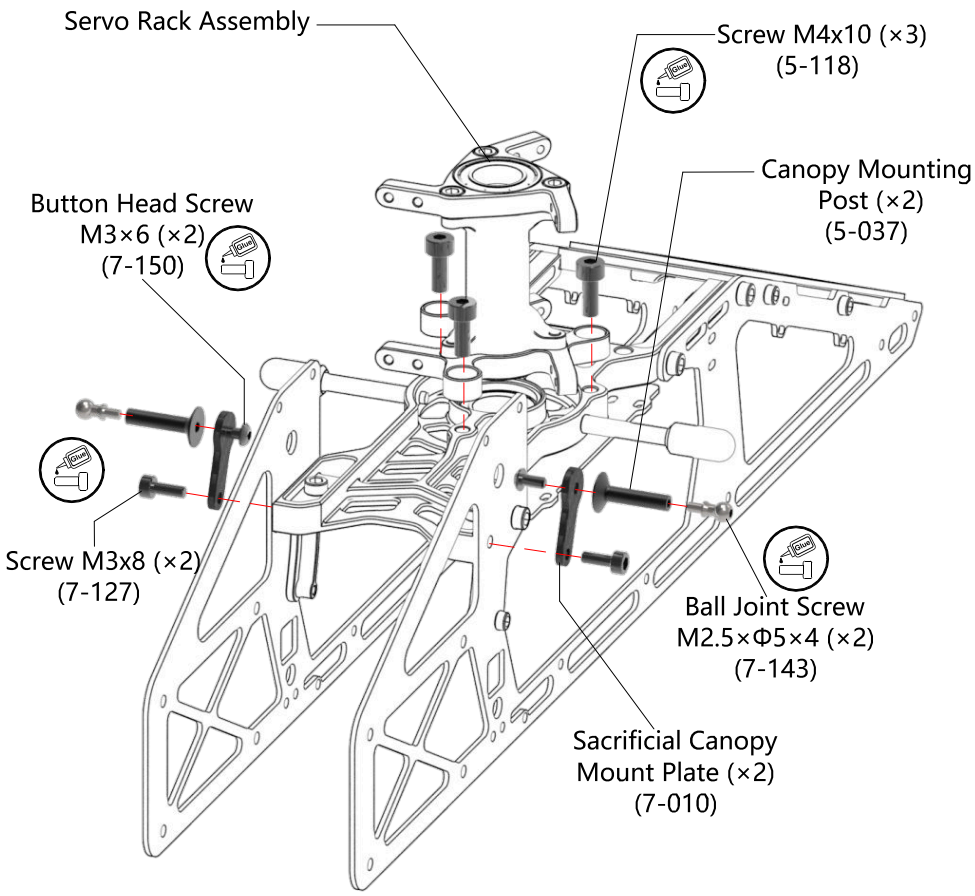
01 Servo Rack Assembly

The servo rack parts (OSHM6002/OSHM6003/OSHM6004) compatible with 20mm cyclic servos are included in the optional conversion kit.

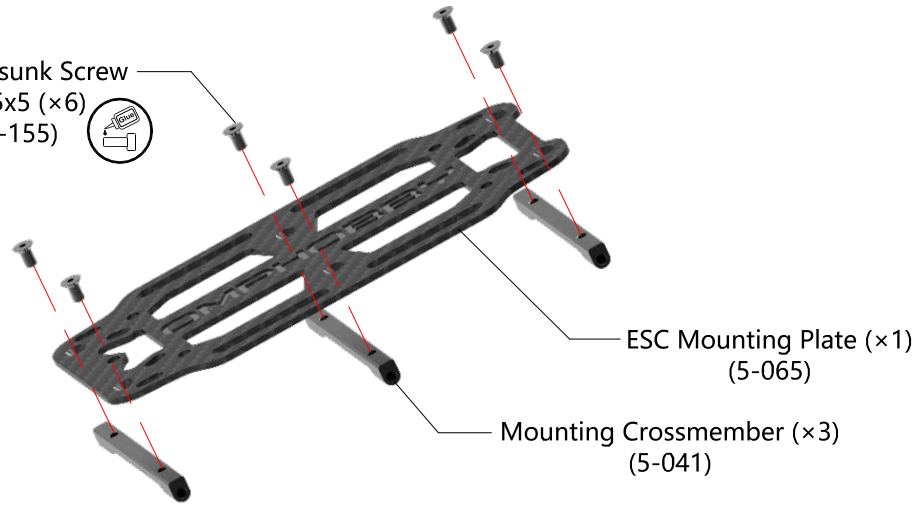


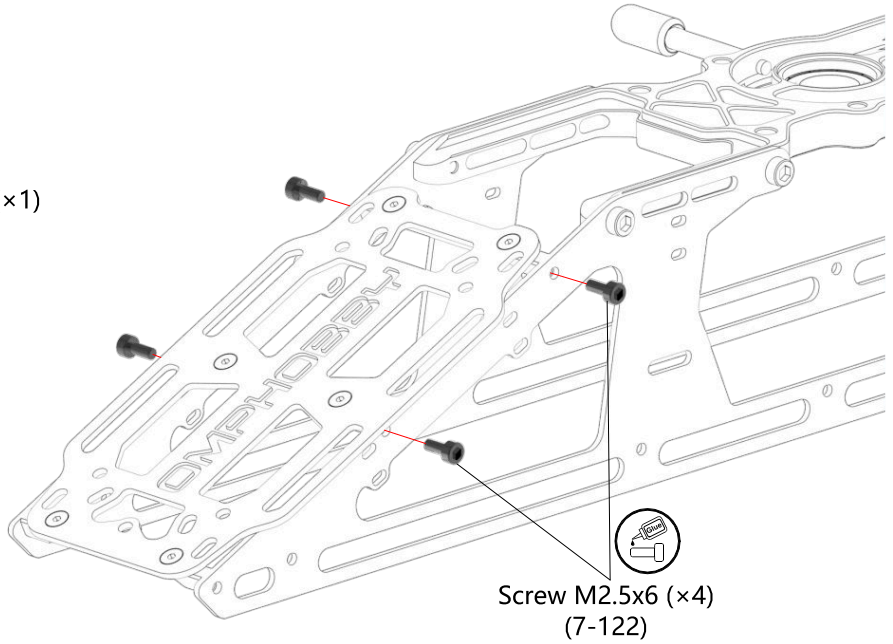


02 Canopy Mount and Servo Rack Assembly



Installation of the ESC Mounting Plate



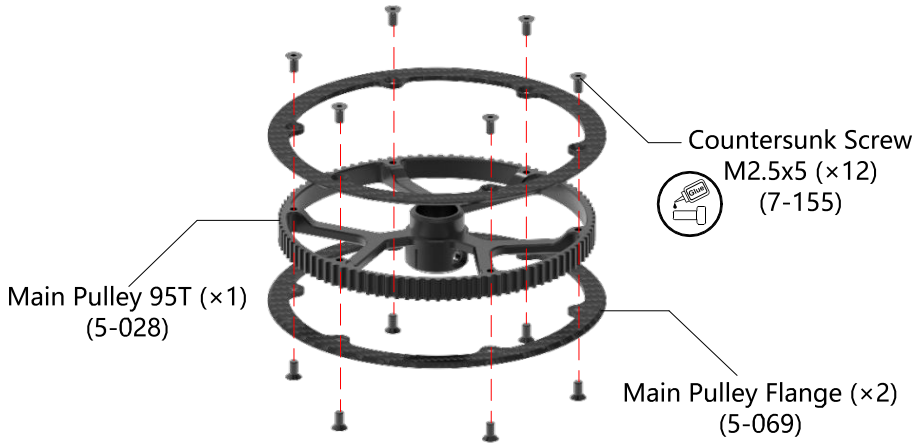


The ESC Plate can accommodate a variety of ESCs for direct mounting with M3 screws and nyloc nuts, such as Sunnysky, Scorpion, Hobbywing, YGE, Kontronik.

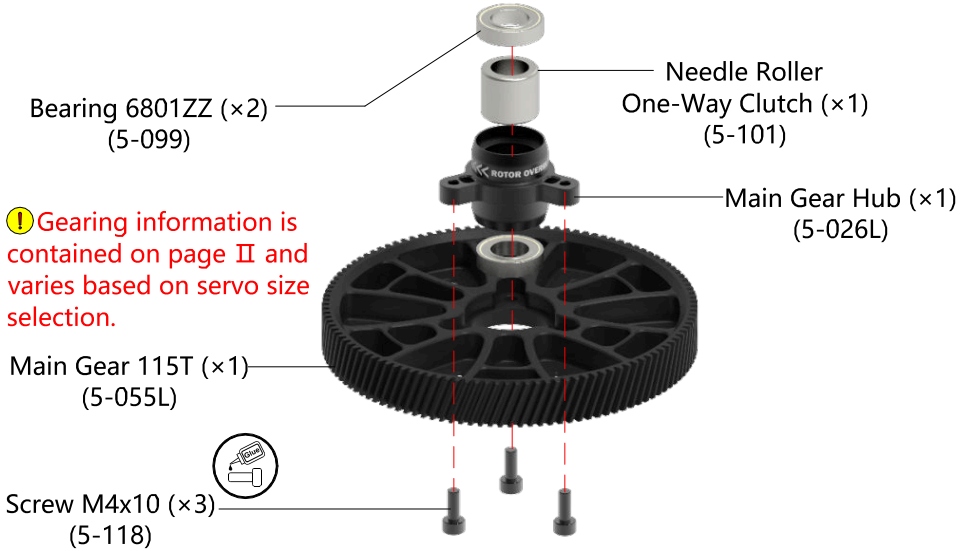
Main Gear Assembly

OMPHOBBY M5

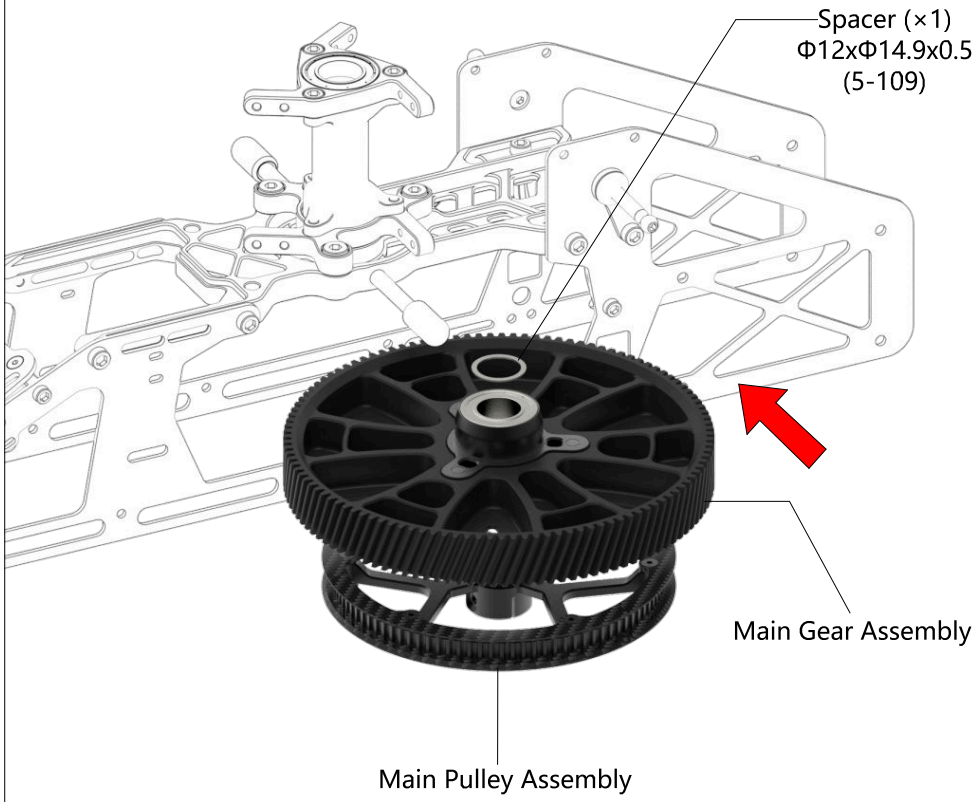
01 Main Pulley Assembly



02 Main Gear Assembly

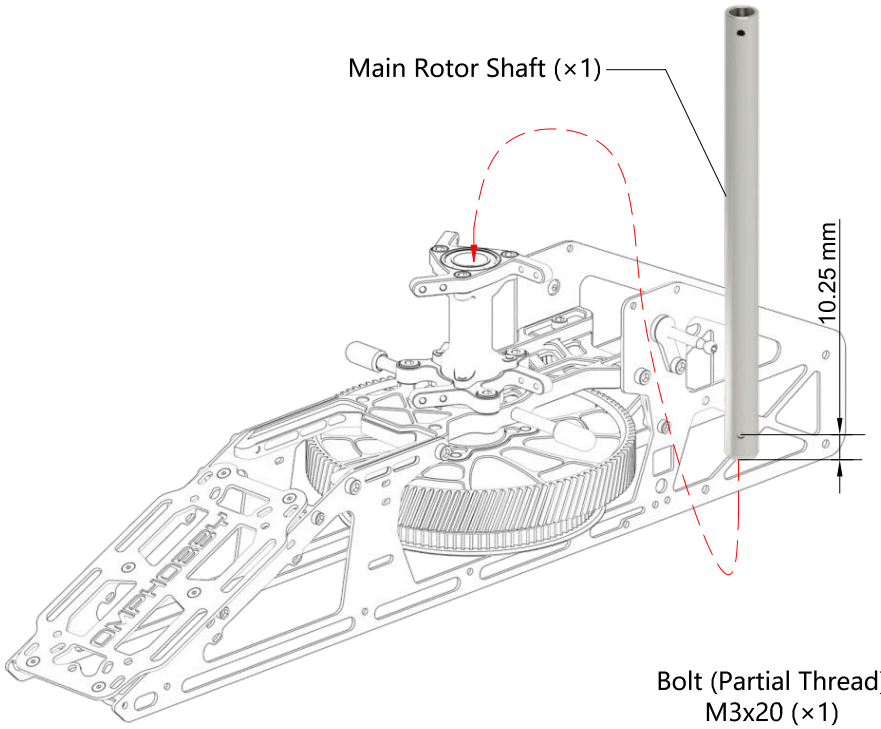


03 Installation of the Main Gear Assembly

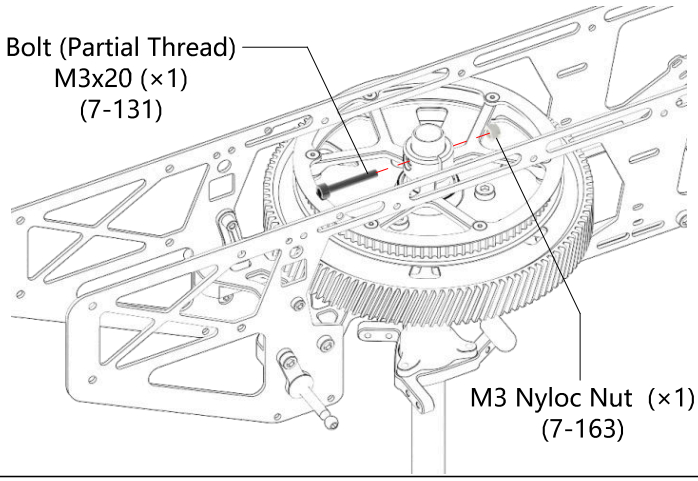


Pay attention to the orientation of the main gear and main pulley assembly. Ensure the spacer is located between the main gear assembly and the bearing in the main plate.

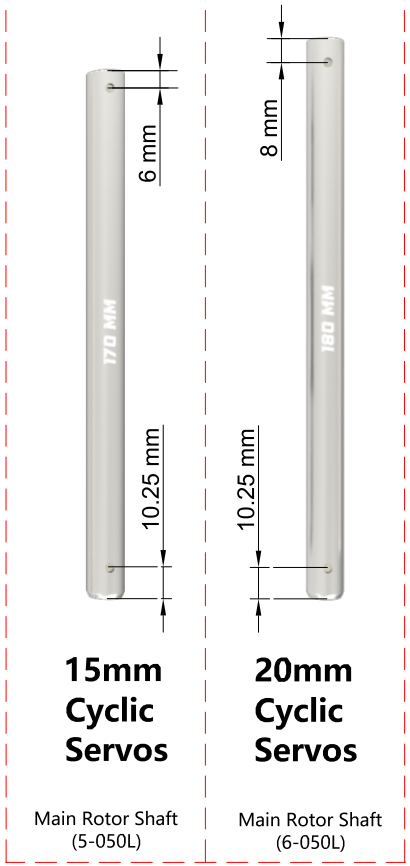
Main Shaft Installation



⚠Different main shaft lengths are used for 15mm and 20mm servos. Please pay attention to shaft orientation when installing.



⚠The main shaft (OSHM6005) required to use 20mm cyclic servos is included in the optional conversion kit.



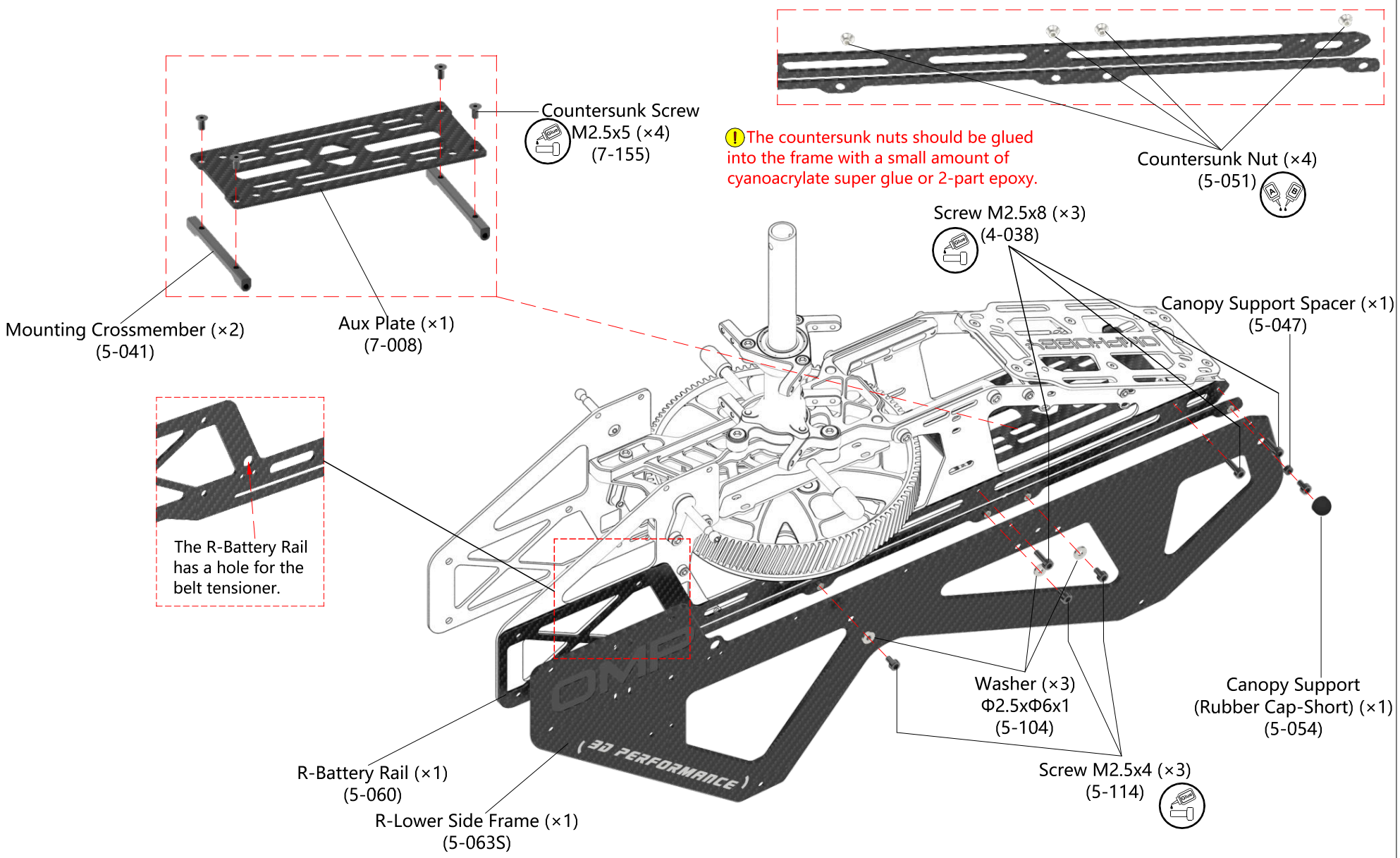
15mm Cyclic Servos

Main Rotor Shaft (5-050L)

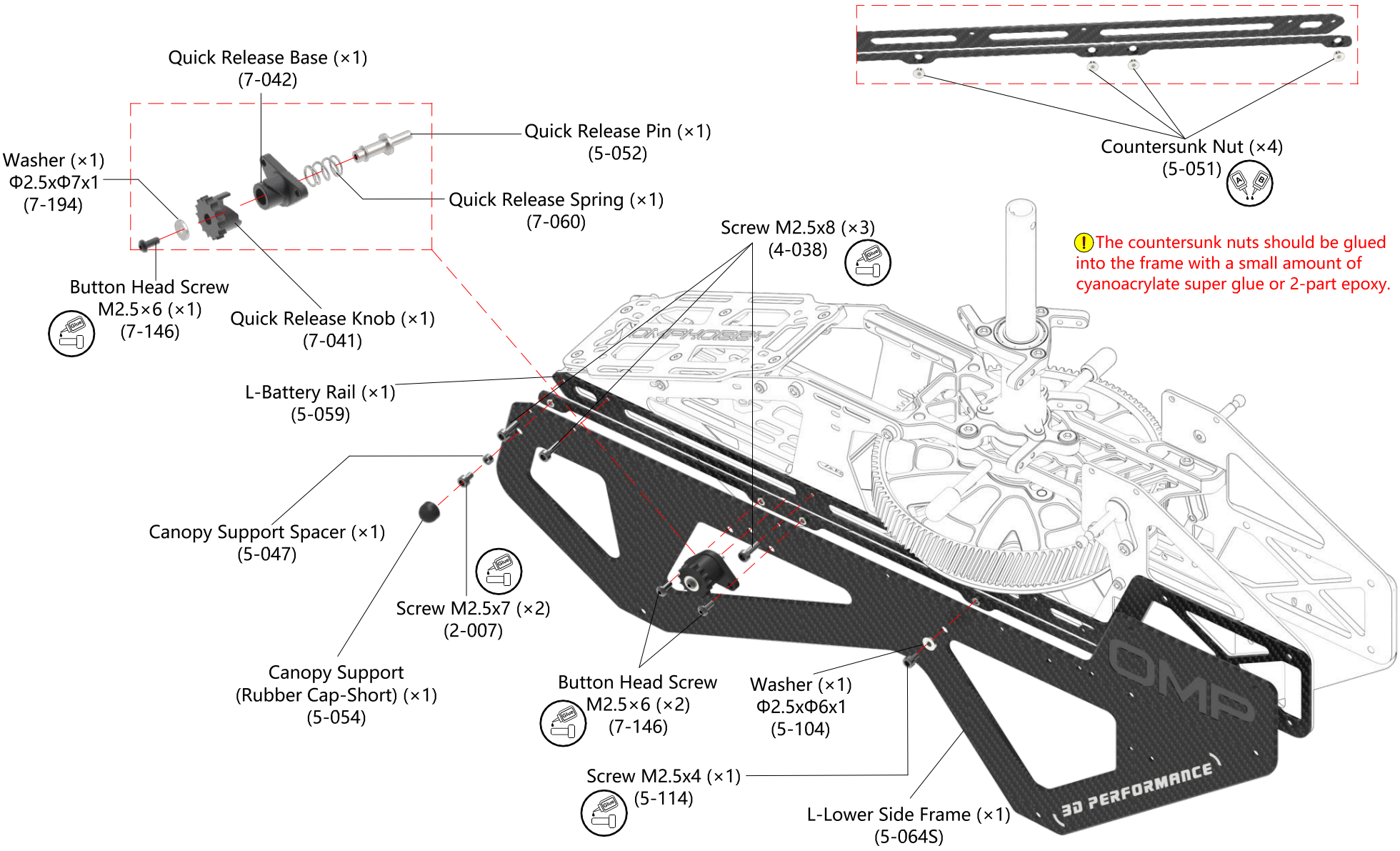
20mm Cyclic Servos

Main Rotor Shaft (6-050L)

Right Lower Carbon Panel Installation



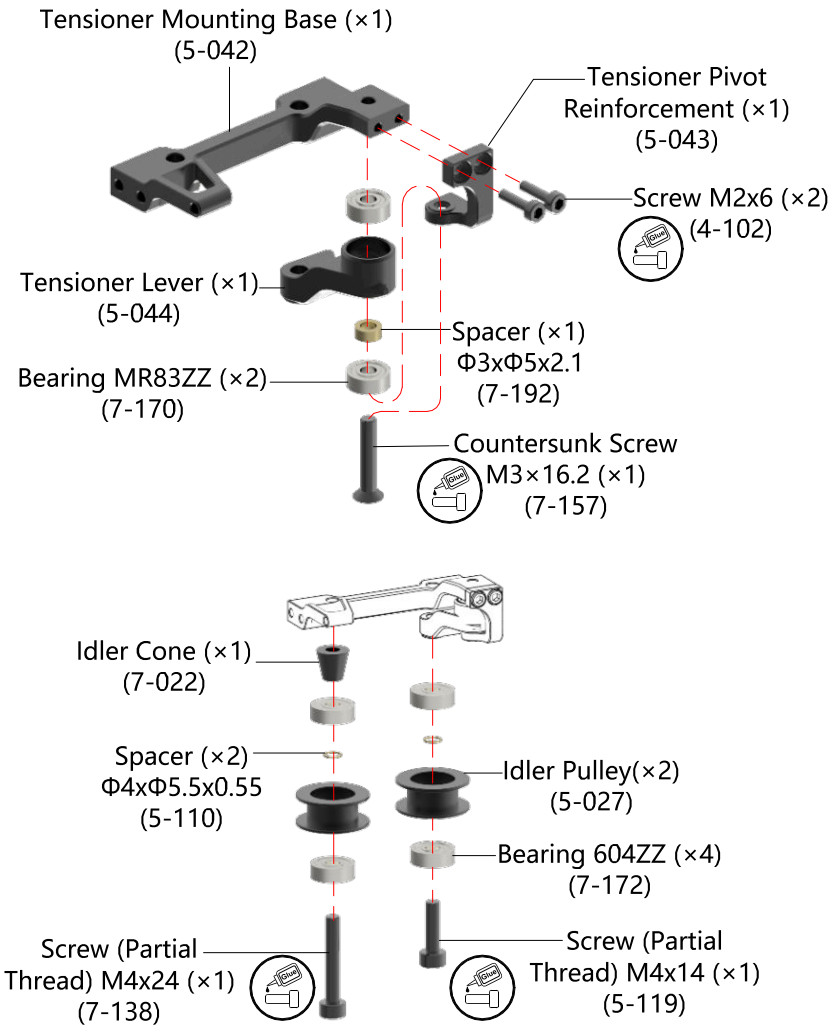
Left Lower Carbon Panel Installation



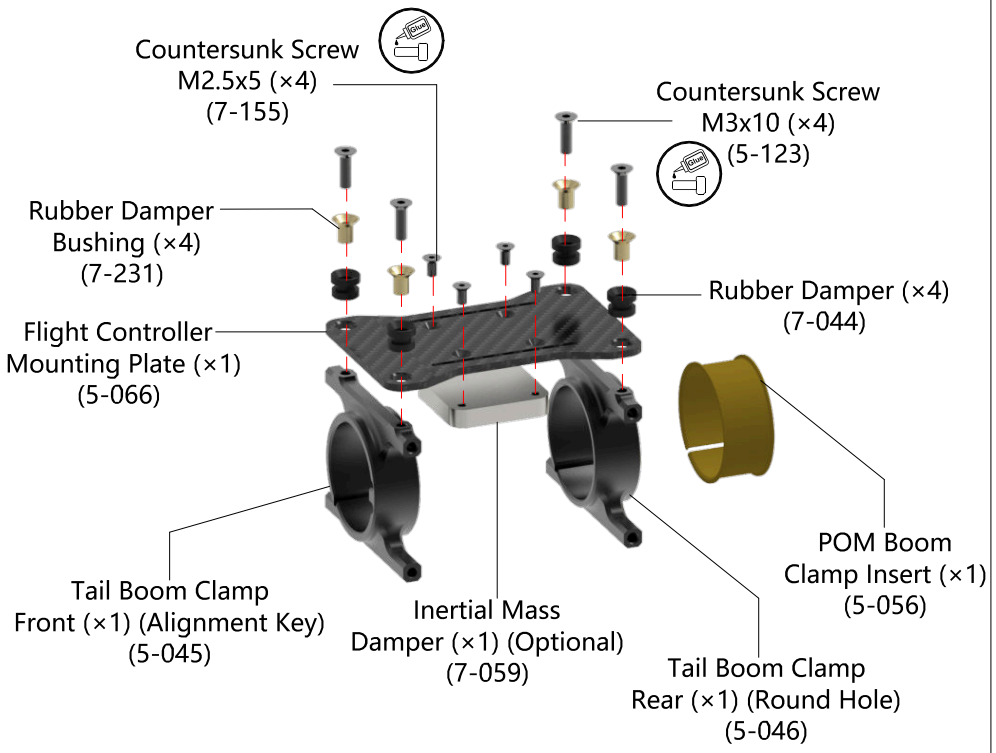
Belt Tensioner and Tail Boom Mount Assembly

OMPHOBBY M5

01 Tensioner Idler Pulley Assembly

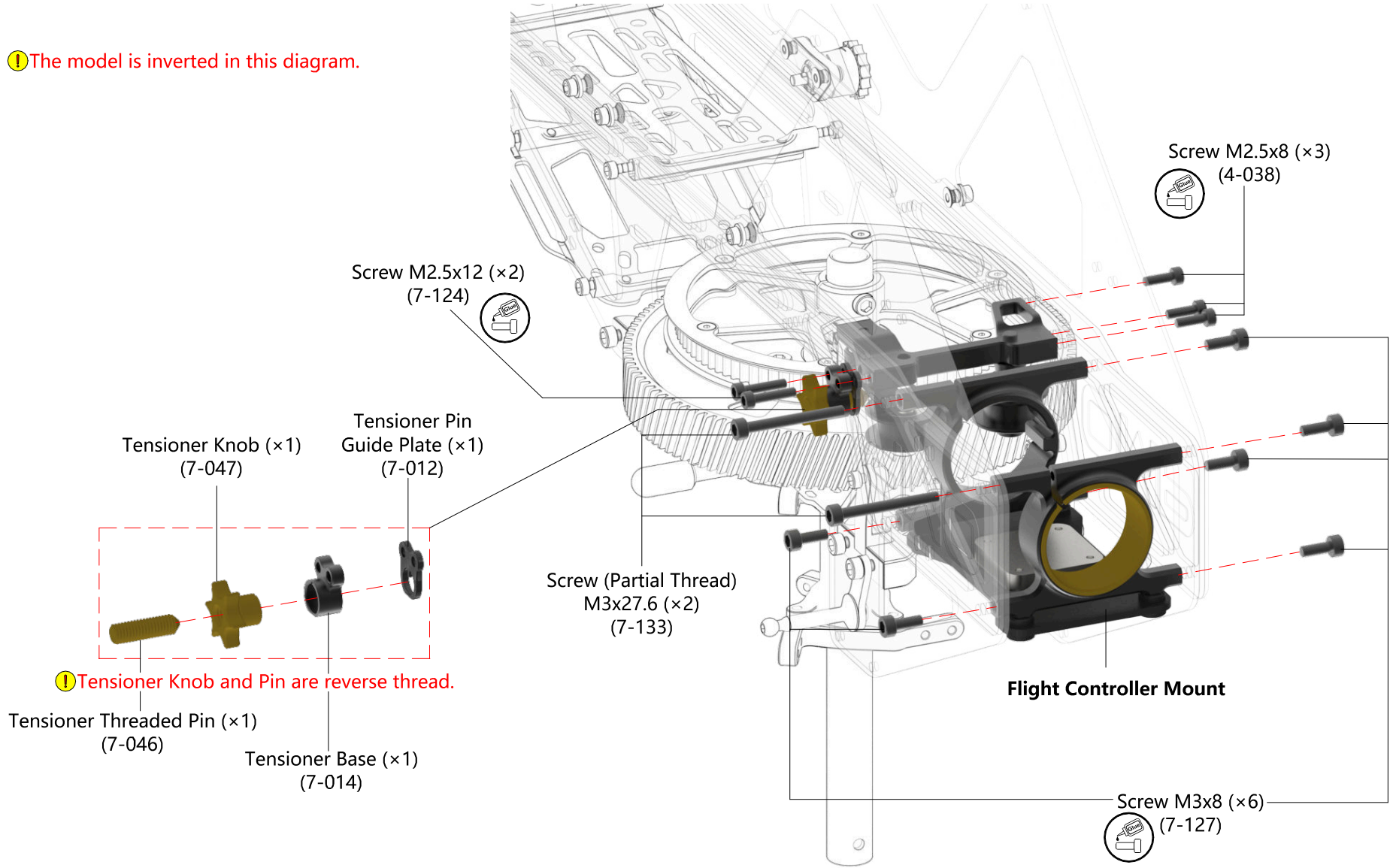


02 Flight Controller Mount and Boom Clamps



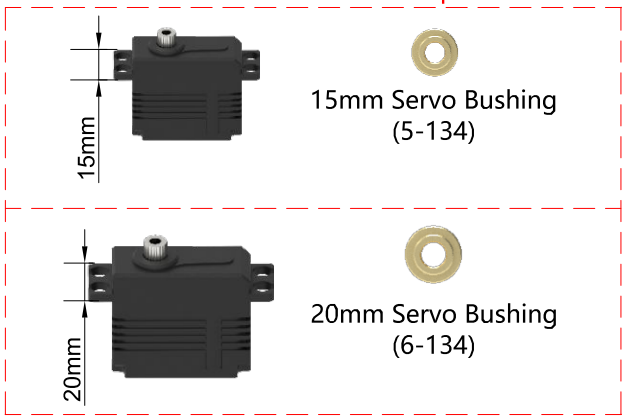
⚠ The tail boom clamps must be installed in the corrected orientation. The front tail boom clamp has a key for tail boom alignment, and the clamping split is on the right side of the helicopter.

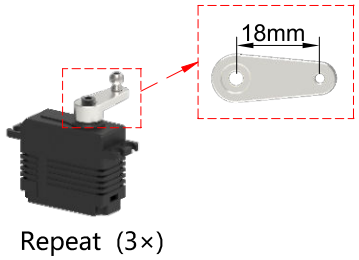
Belt Tensioner and Tail Boom Mount Installation



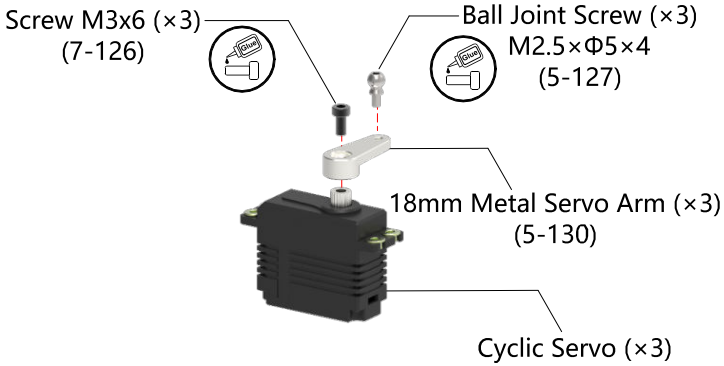
01 Swashplate Servo Assembly

⚠Servo bushings (OSHM6022) compatible with most 20mm servos are included with the optional conversion kit.

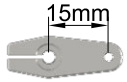


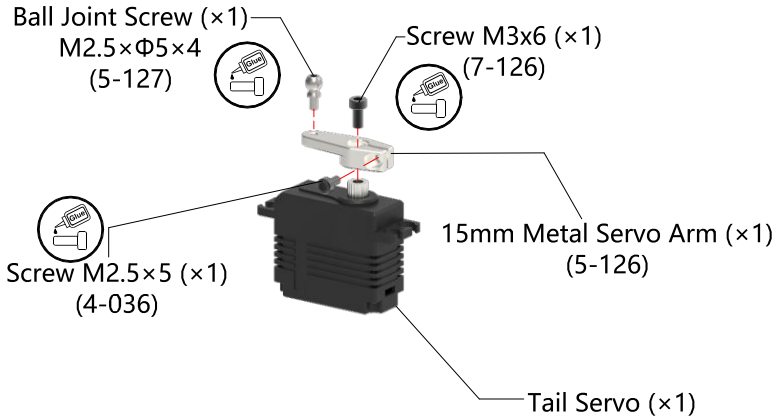


⚠The servo horn direction is identical for all 3 cyclic servos.



02 Tail Servo Assembly

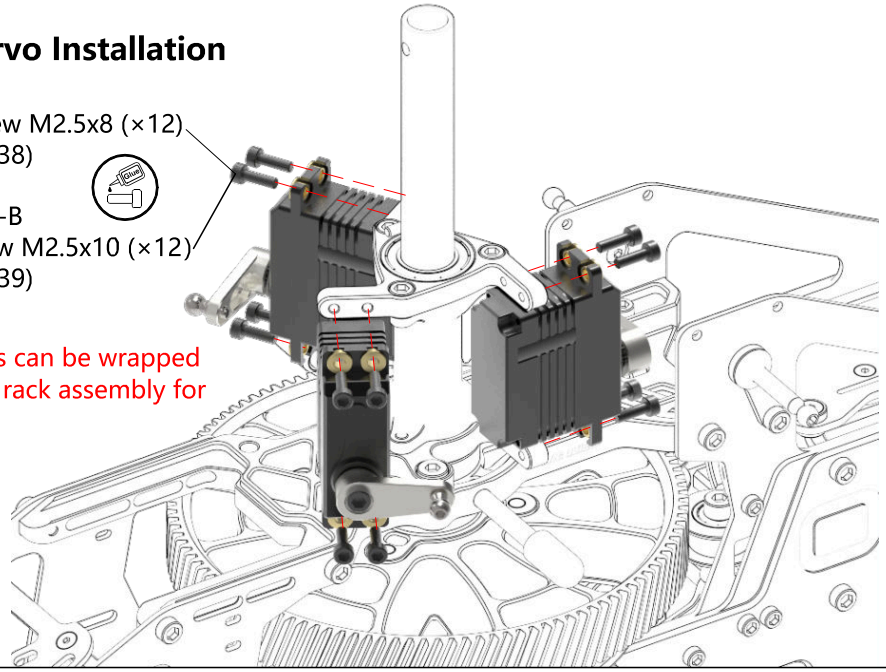




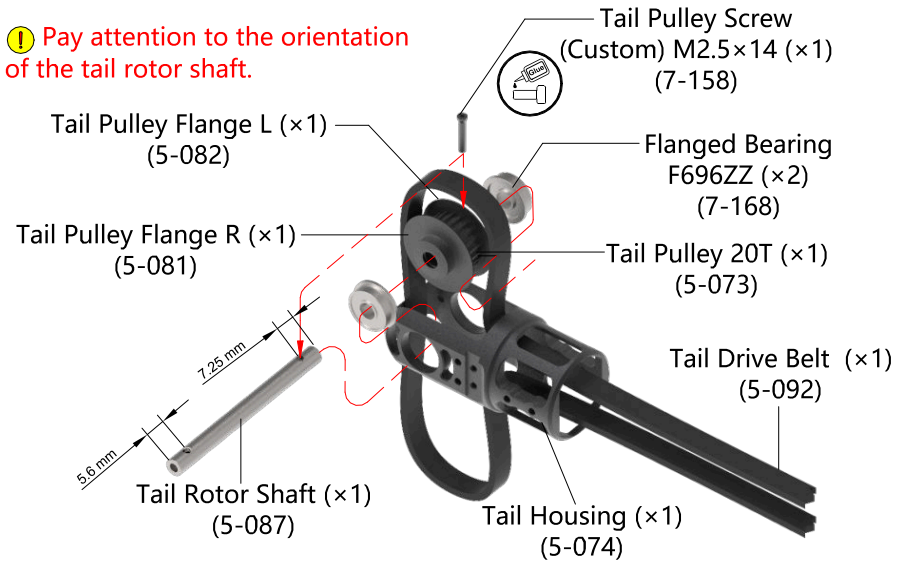
03 Cyclic Servo Installation

15mm Servo Screw M2.5x8 (×12)
(4-038)
M5-B
20mm Servo Screw M2.5x10 (×12)
(4-039)

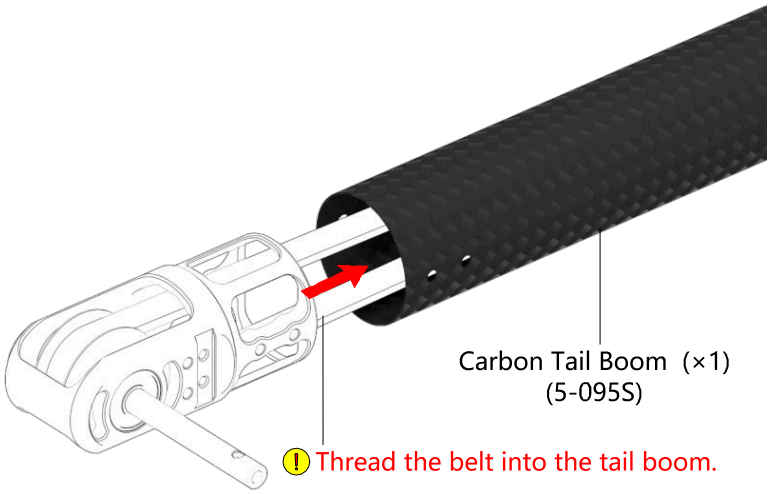
⚠The servo wires can be wrapped around the servo rack assembly for neater wiring.



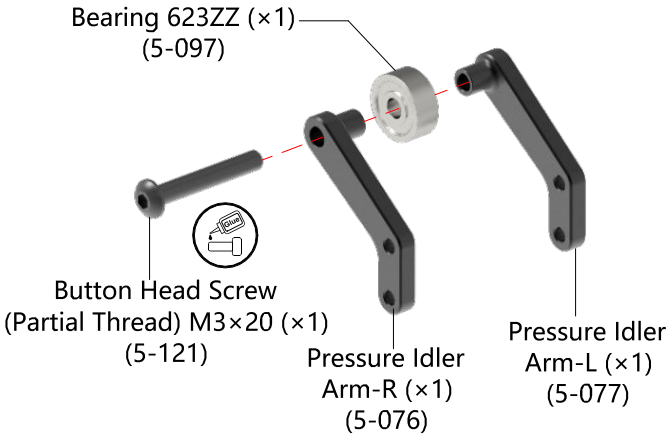
01 Tail Gearbox Assembly



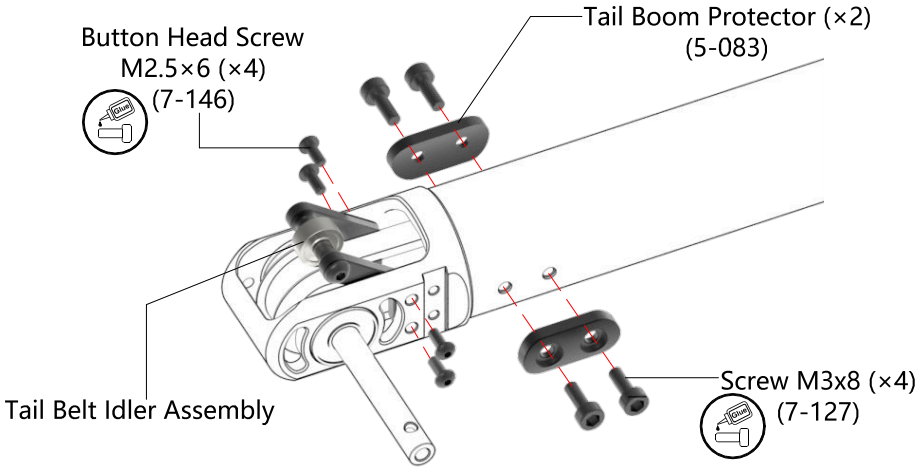
02 Tail Gearbox Installation



03 Tail Belt Idler Assembly



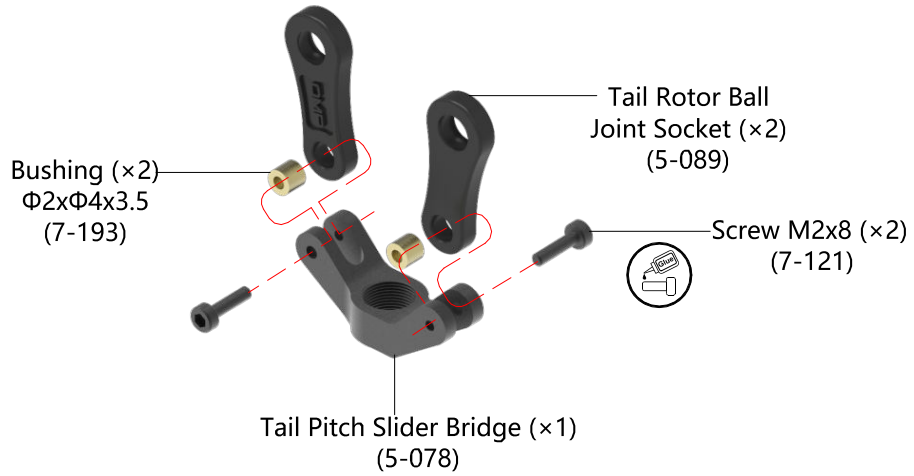
04 Tail Belt Idler Installation



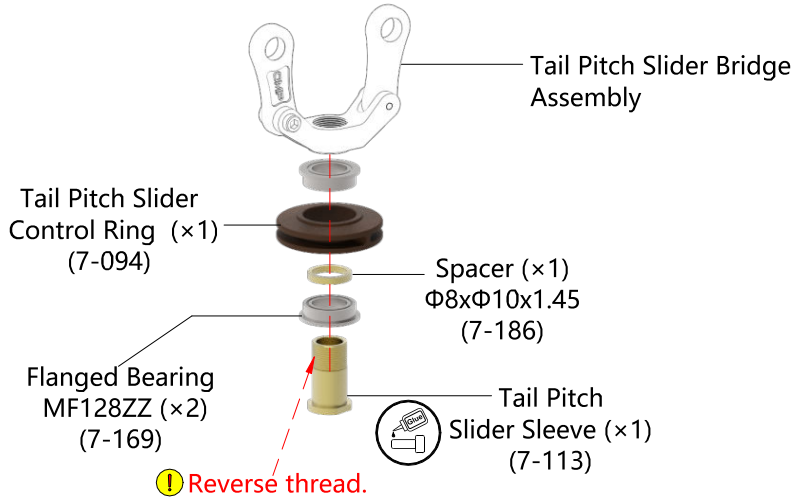
Tail Pitch Slider and Bellcrank Assembly

OMPHOBBY M5

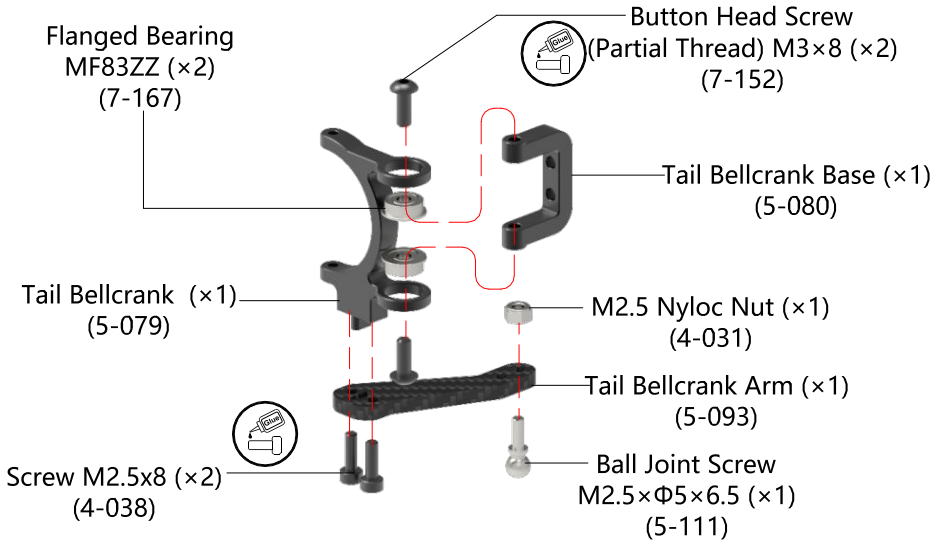
01 Tail Pitch Slider Bridge Assembly



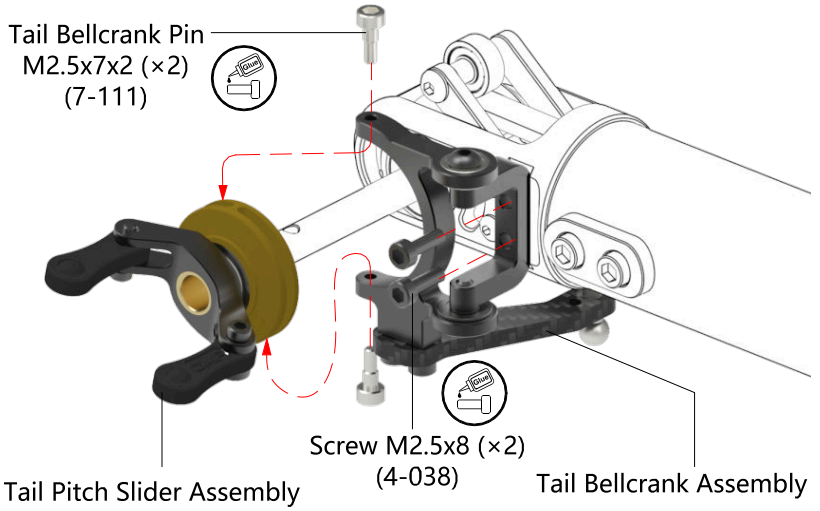
02 Tail Pitch Slider Ring Assembly



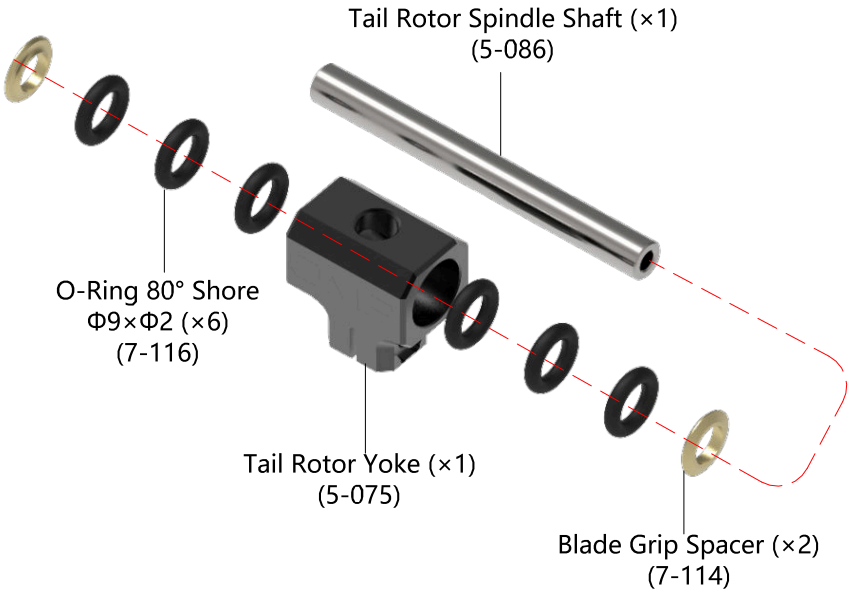
03 Tail Bellcrank Assembly



04 Tail Pitch Slider Installation

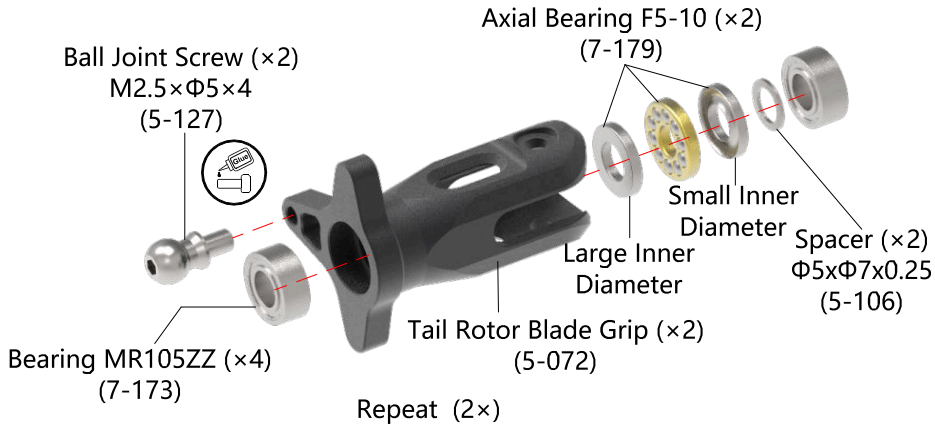


01 Tail Rotor Hub Assembly



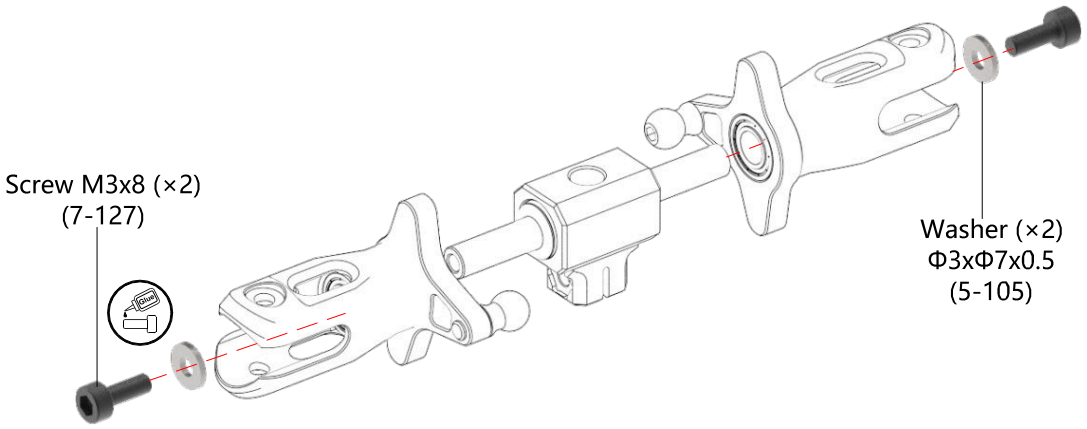
02 Tail Rotor Blade Grip Assembly

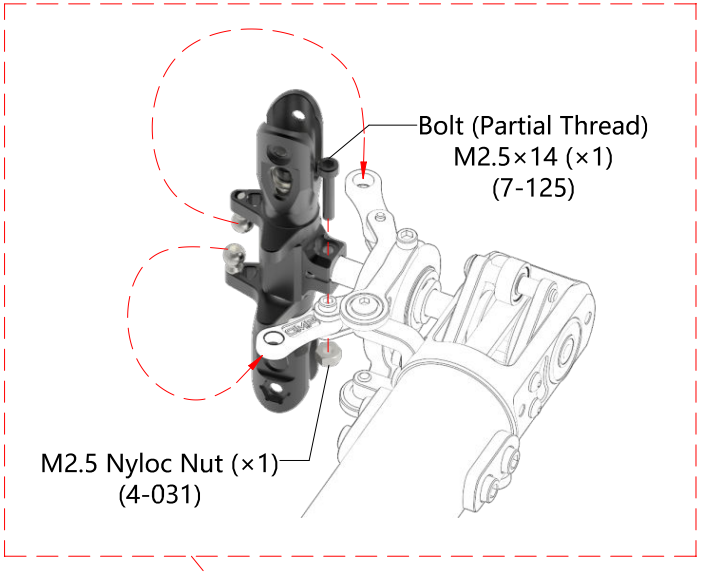
⚠ The open side of the axial bearing cage must face outward towards the rotor blade to prevent premature axial bearing failure.

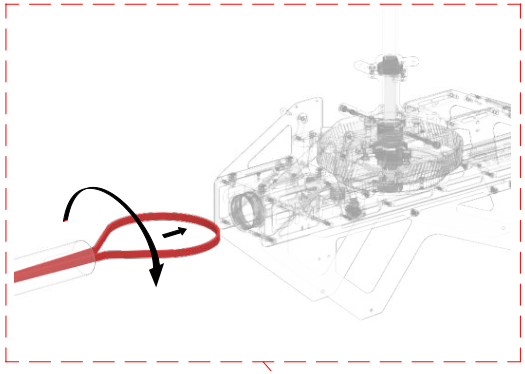


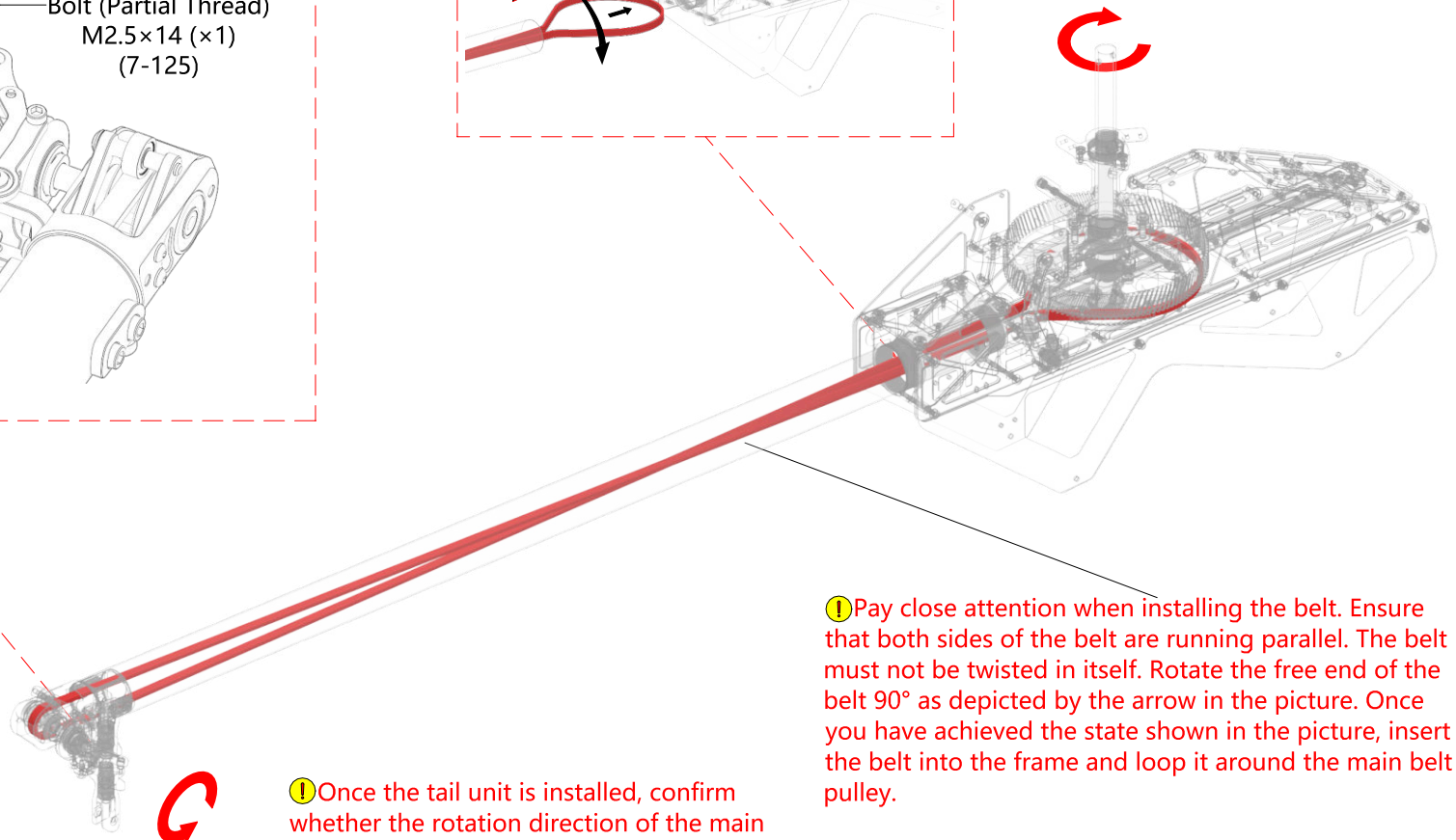
⚠ The bearing stack may be tricky to align with the bore in the blade grip. Assembling the stack on the spindle shaft and pushing it in that way can make the installation easier.

03 Tail Rotor Head Assembly









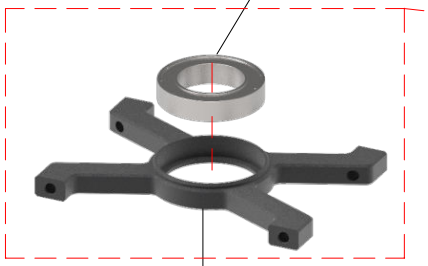
⚠Pay close attention when installing the belt. Ensure that both sides of the belt are running parallel. The belt must not be twisted in itself. Rotate the free end of the belt 90° as depicted by the arrow in the picture. Once you have achieved the state shown in the picture, insert the belt into the frame and loop it around the main belt pulley.

⚠Once the tail unit is installed, confirm whether the rotation direction of the main shaft and tail rotor is correct, as indicated by the arrows in the picture.

Main Shaft Support Installation

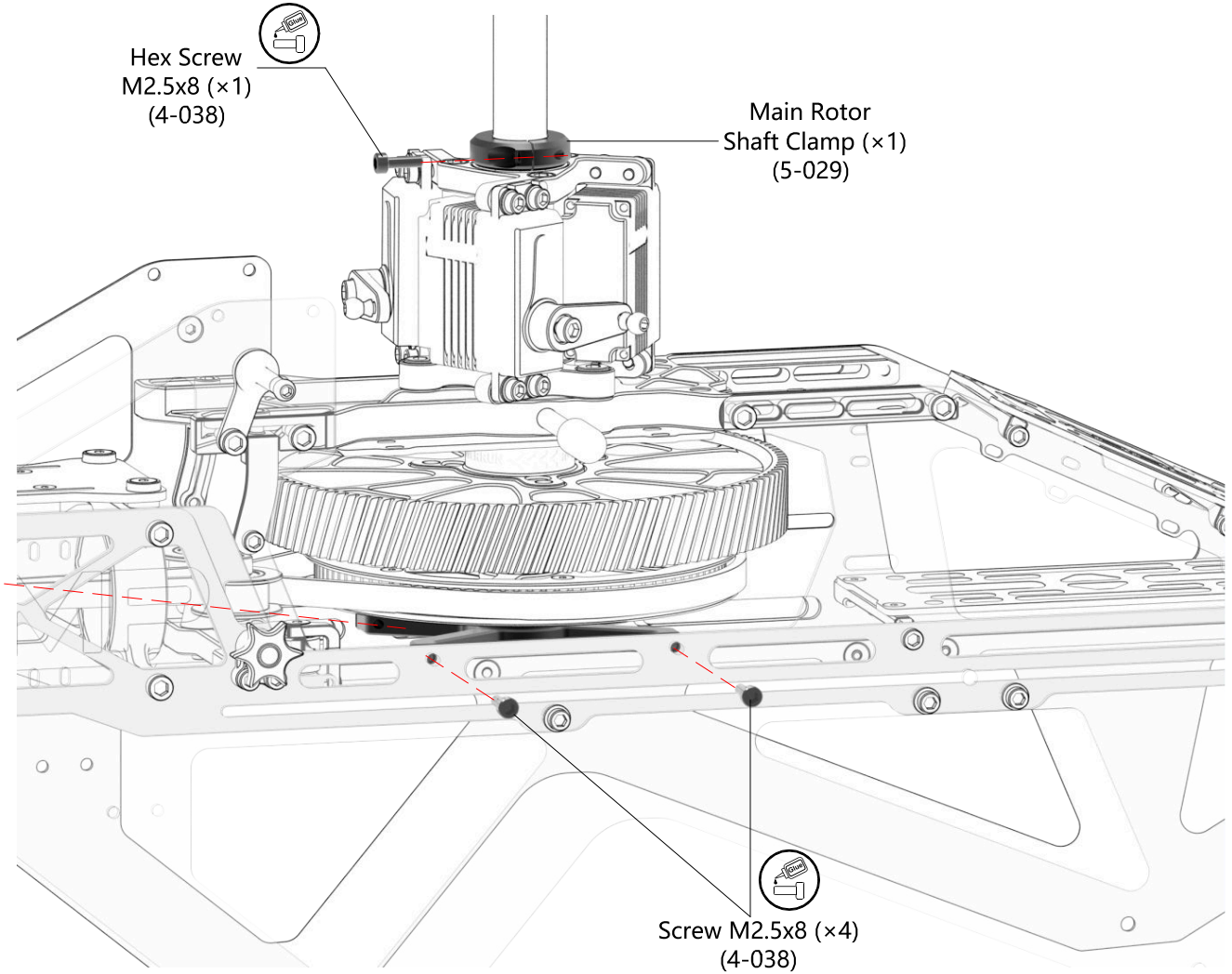


⚠The flange of the clamp ring should face downwards and contact the bearing. Ensure there is no vertical play in the main shaft after installation.



Bearing 6801ZZ (×1)
(5-099)

Lower Bearing Block (×1)
(5-040)



Hex Screw
M2.5x8 (×1)
(4-038)

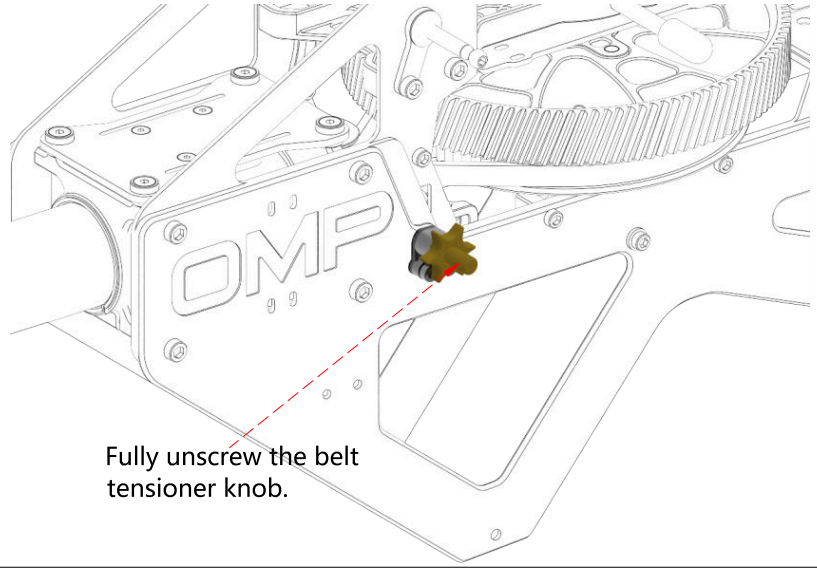
Main Rotor
Shaft Clamp (×1)
(5-029)

Screw M2.5x8 (×4)
(4-038)

Belt Tensioning Procedure

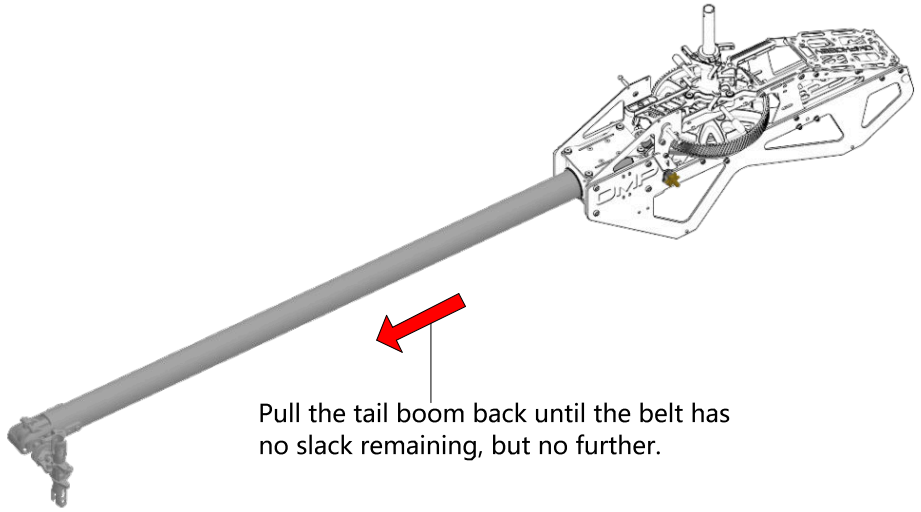
OMPHOBBY M5

Step 1



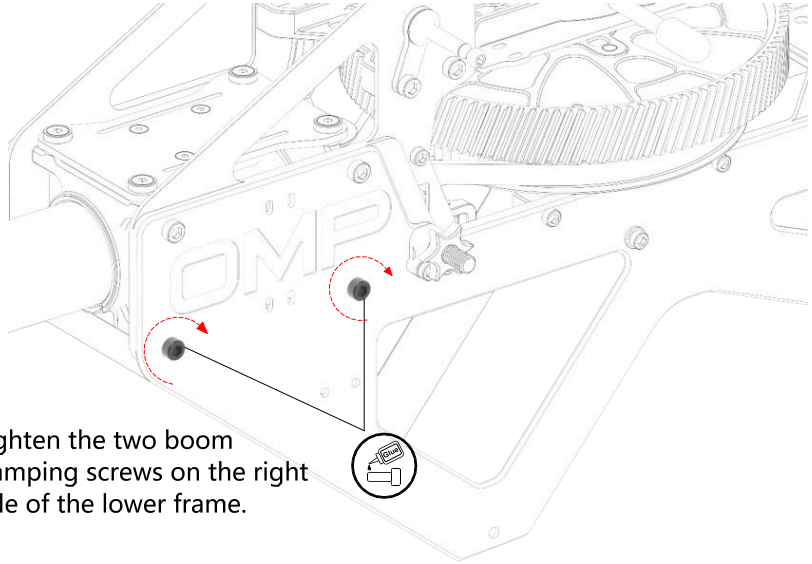
Fully unscrew the belt tensioner knob.

Step 2



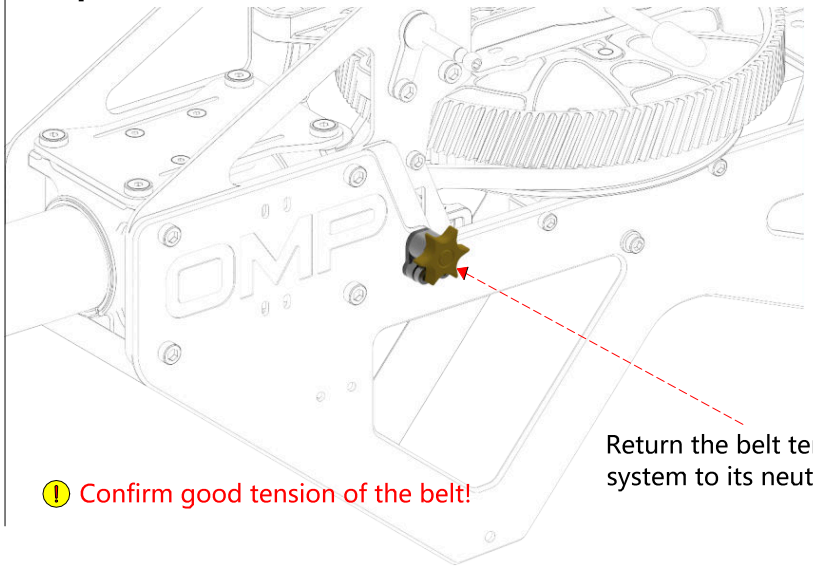
Pull the tail boom back until the belt has no slack remaining, but no further.

Step 3



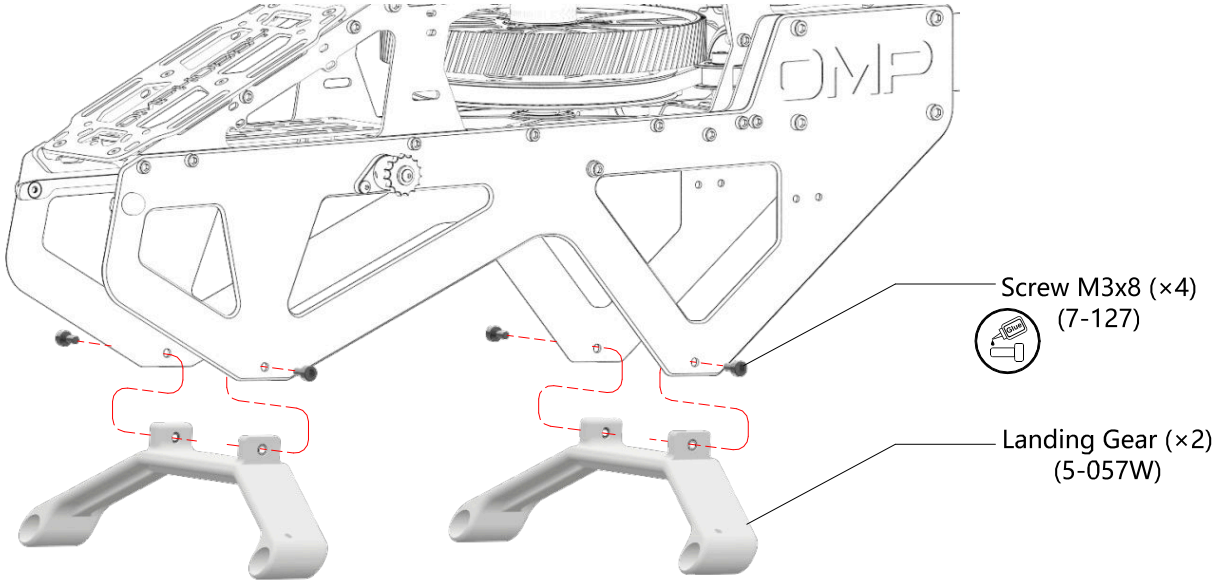
Tighten the two boom clamping screws on the right side of the lower frame.

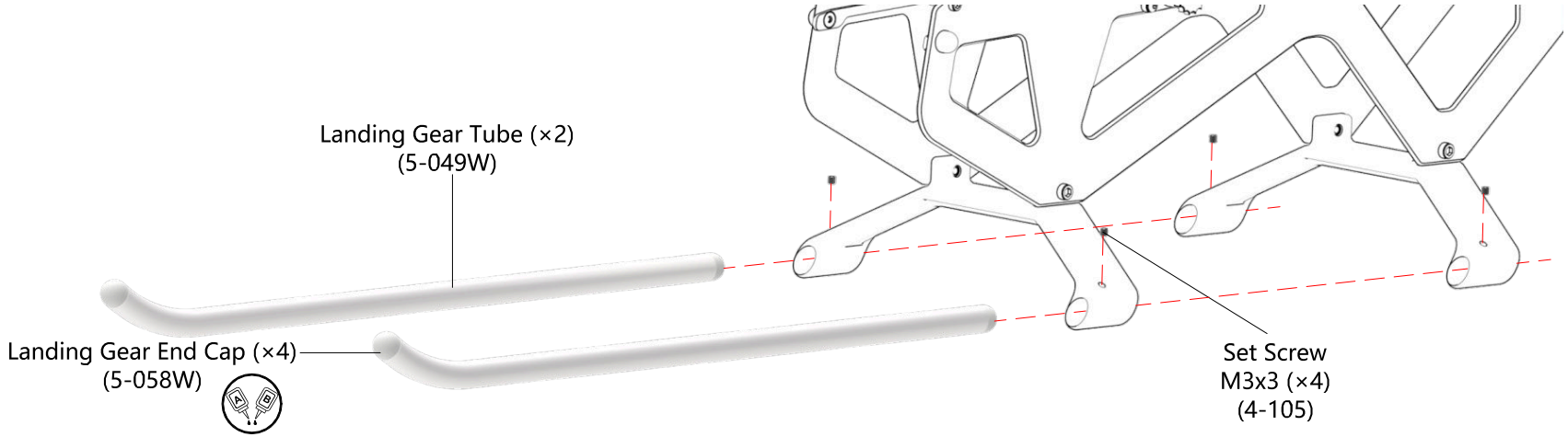
Step 4



Return the belt tensioner system to its neutral position.

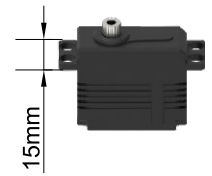
⚠ Confirm good tension of the belt!


Screw M3x8 (×4)
(7-127)
Landing Gear (×2)
(5-057W)


Landing Gear Tube (×2)
(5-049W)
Landing Gear End Cap (×4)
(5-058W)
Set Screw
M3x3 (×4)
(4-105)

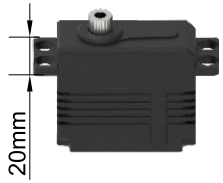
01 Tail Servo Installation

The tail servo mounting blocks (OSHM6085) required to use a 20mm tail servo are included in the optional conversion kit.



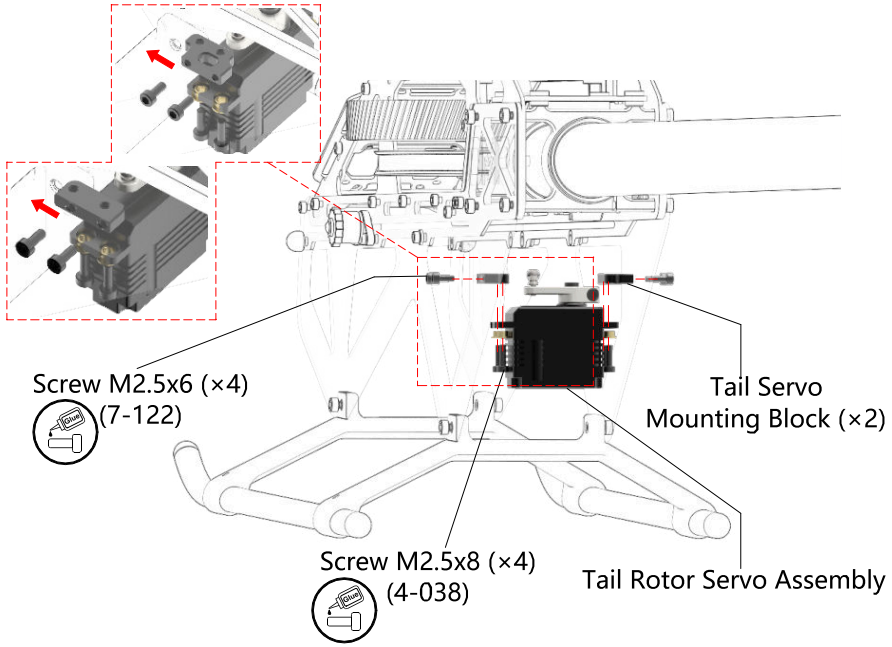


Tail Servo
Mounting Block (×2)
(5-085)

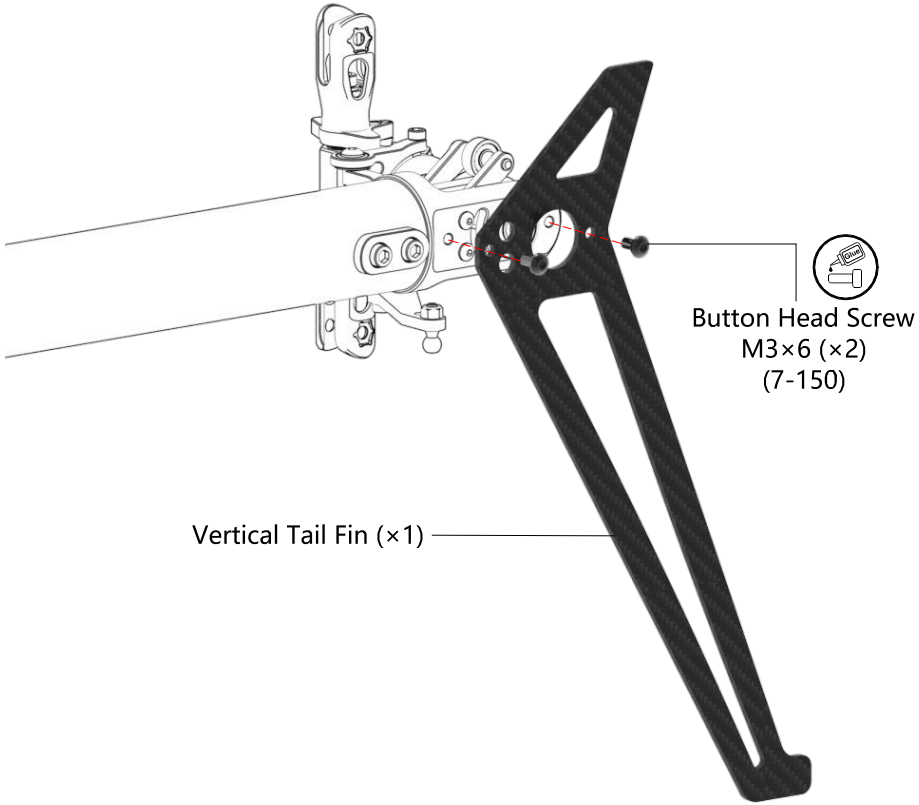




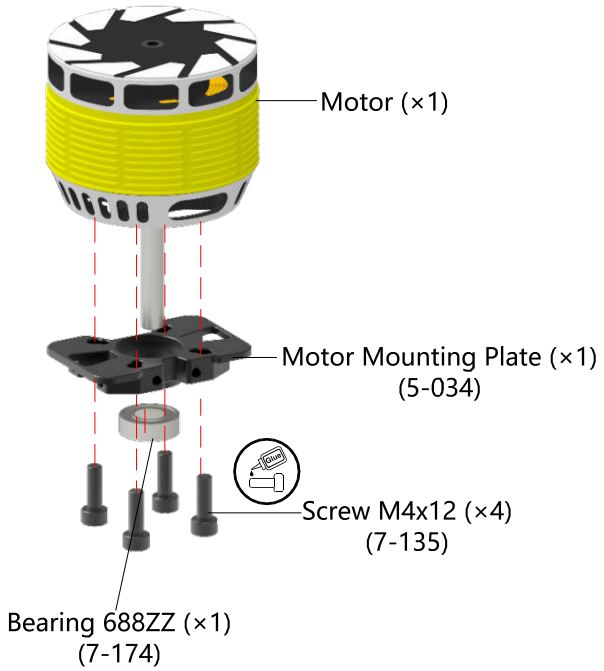
Tail Servo
Mounting Block (×2)
(6-085)

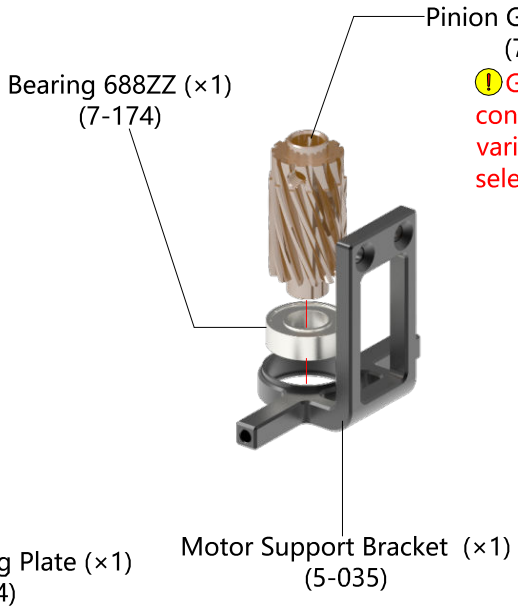


02 Tail Fin Installation

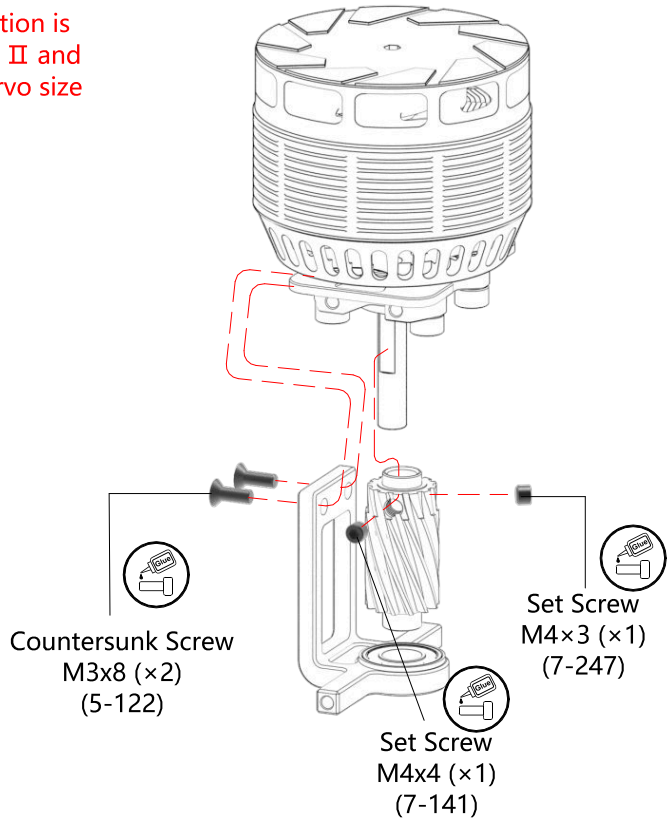


Motor Mount Assembly



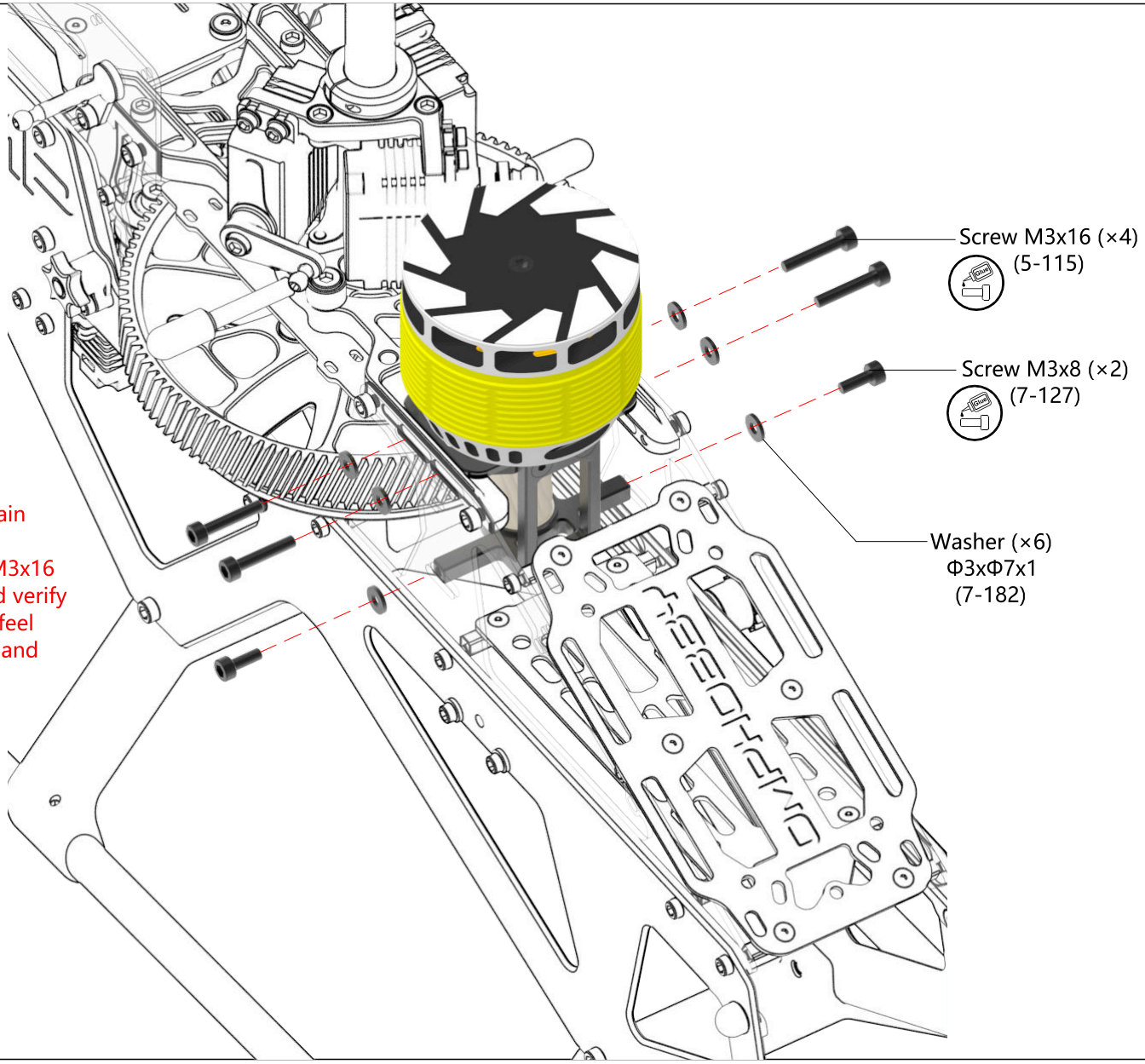


Gearing information is contained on page Ⅱ and varies based on servo size selection.



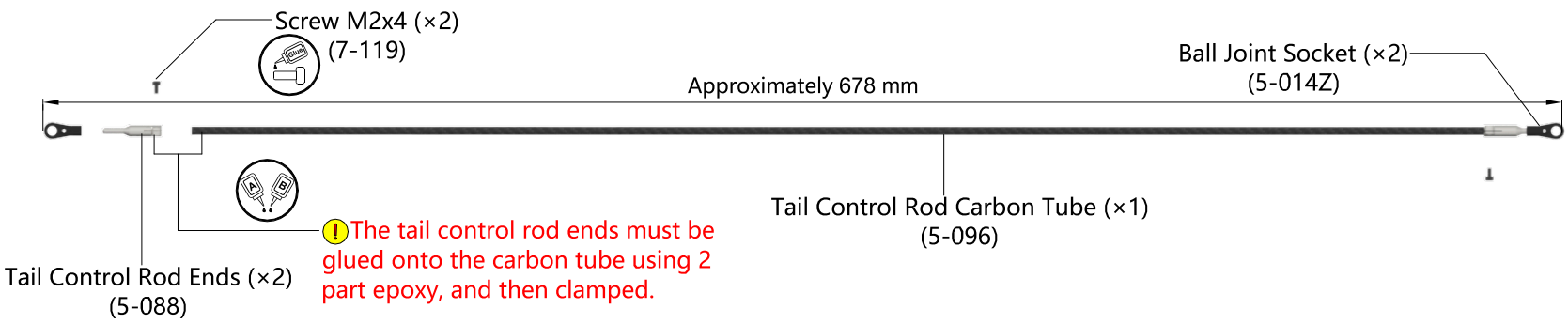
If using a non-Sunnysky motor, ensure the motor screws do not make contact with the motor windings.

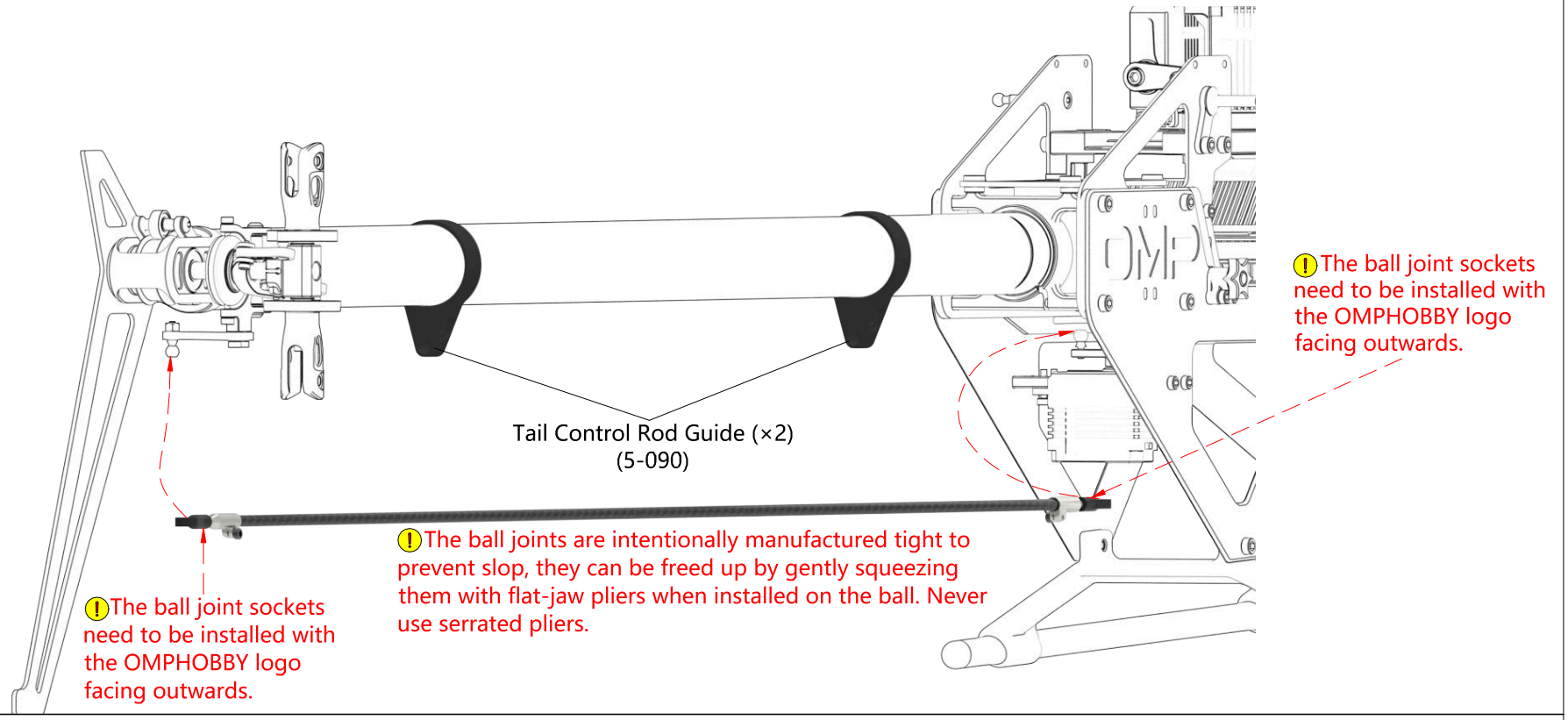
Pay attention to the length of the set screws. Ensure the set screws do not protrude from the pinion once tightened.



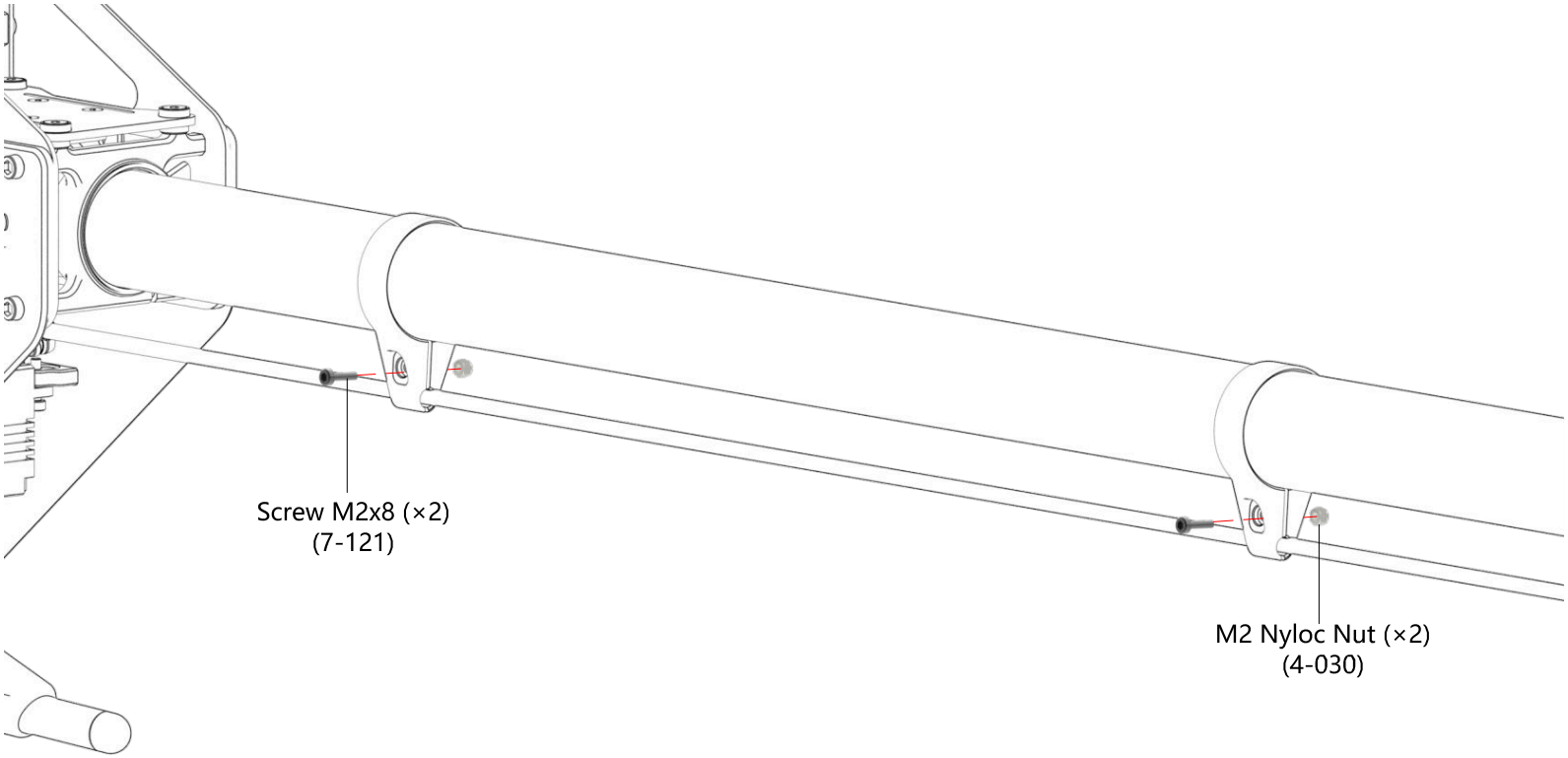
⚠ Push the pinion all the way against the main gear, then back it off again so that it has 0.05mm ~ 0.1mm backlash. Tighten the M3x16 screws first, and the M3x8 screws last, and verify that the mesh didn't change. You should feel the backlash when moving the gear back and forth, but it should not visibly move.

Tail Control Rod Installation





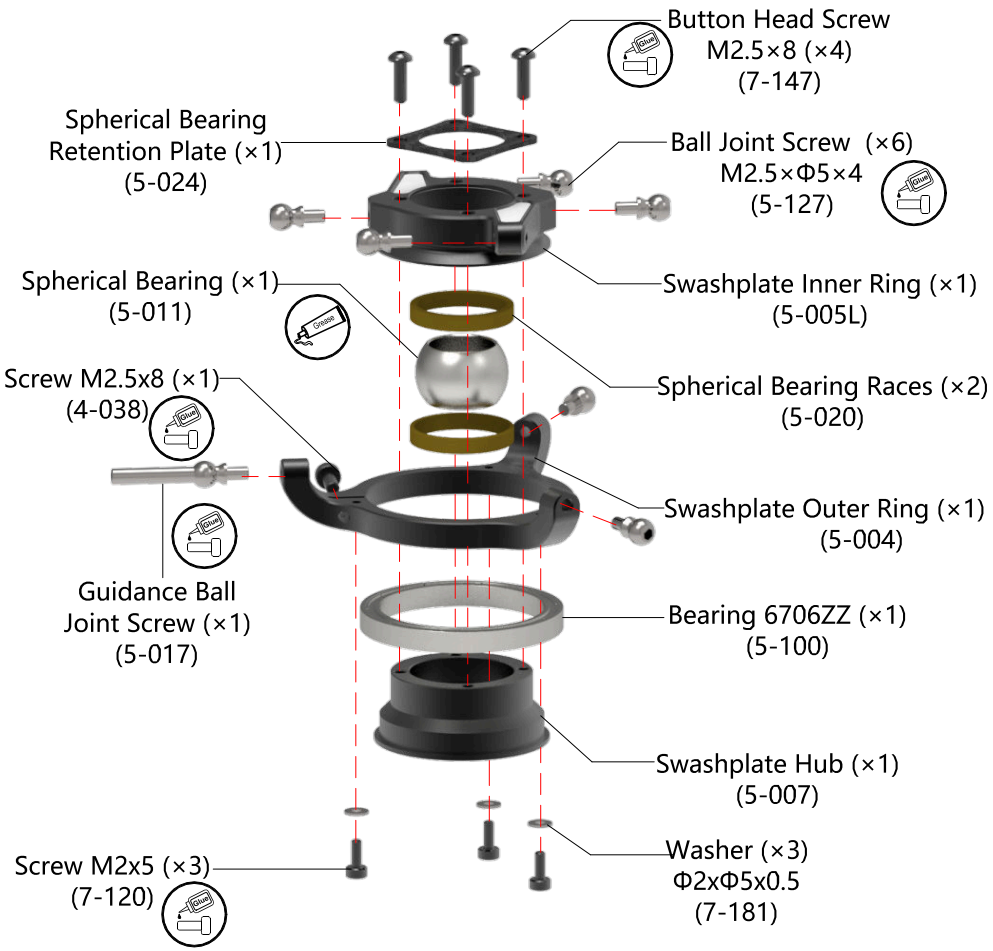

OMPHOBBY M5


Screw M2x8 (×2)
(7-121)
M2 Nyloc Nut (×2)
(4-030)

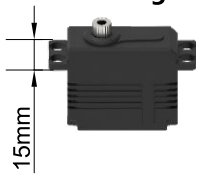
Swashplate and Swash Linkage Assembly

01 Swashplate Assembly

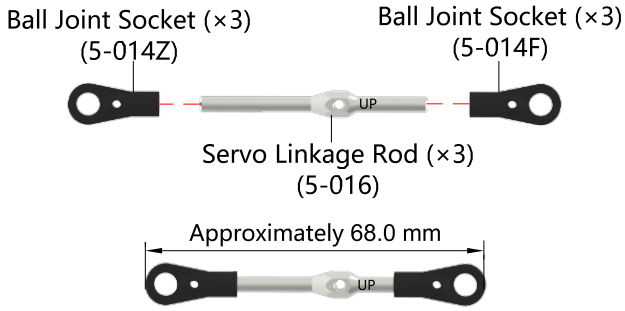
⚠ The Swashplate is preassembled with Threadlock except for the ball joint screws.



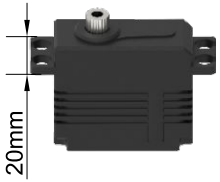
02 Servo Linkage Rod Assembly



Servo Linkage Rod Assembly for 15mm Cyclic Servos

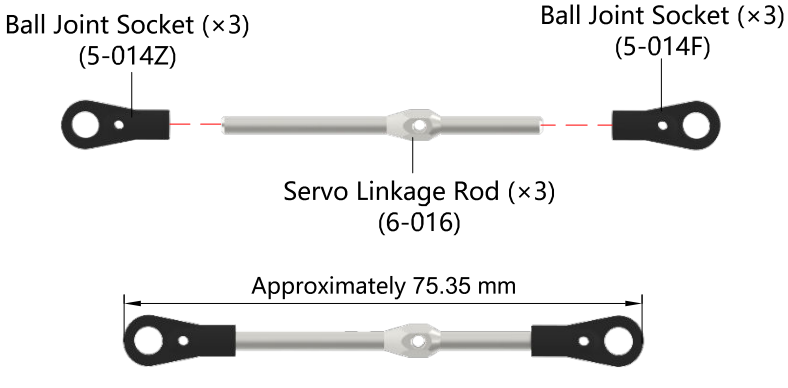


Repeat (3×)

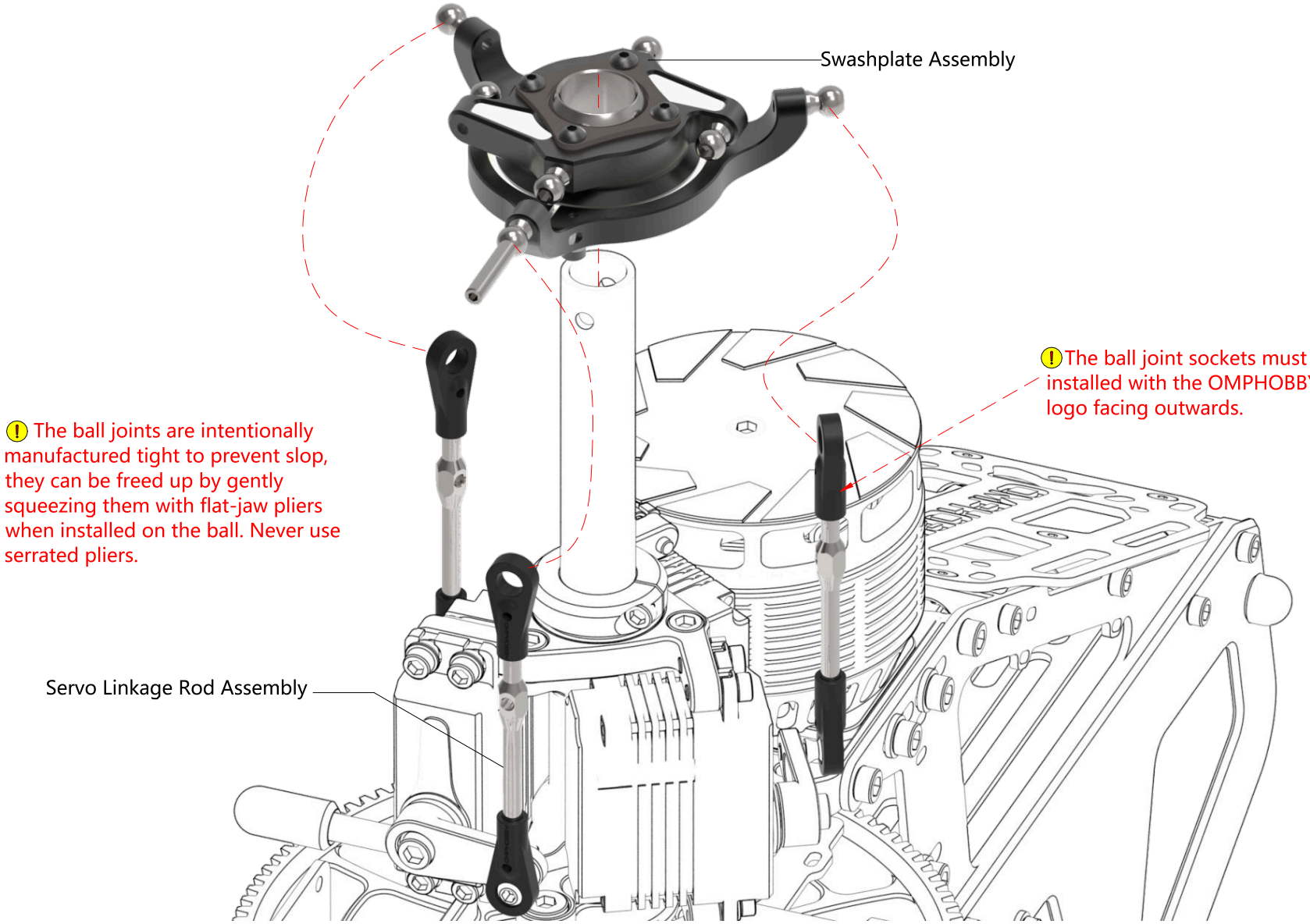


⚠ The servo linkage rods (OSHM6001) required to use 20mm cyclic servos are included in the optional conversion kit.

Servo Linkage Rod Assembly for 20mm Cyclic Servos

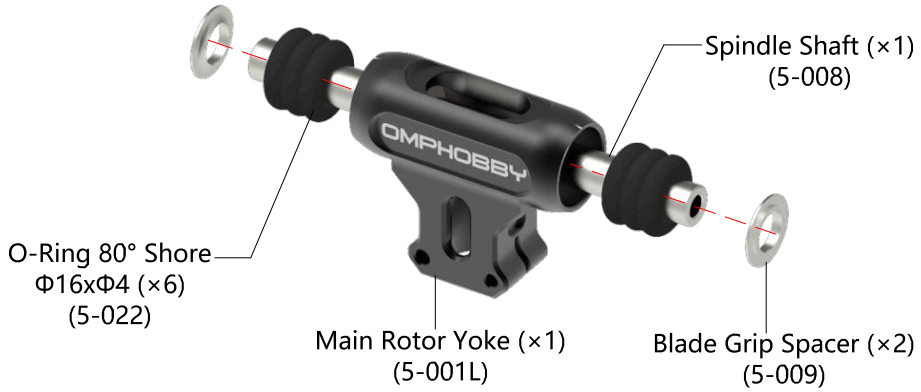


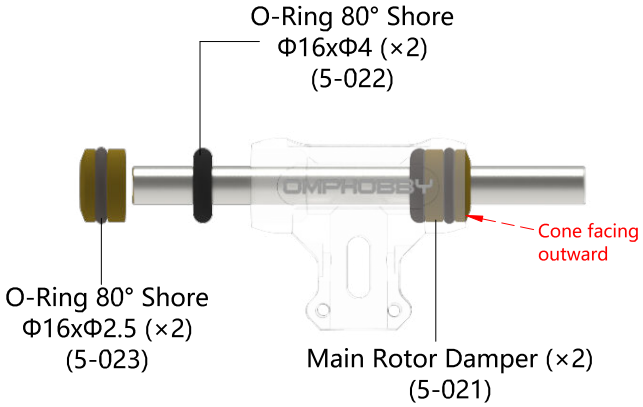
Repeat (3×)


Swashplate Assembly
The ball joint sockets must be installed with the OMPHOBBY logo facing outwards.
The ball joints are intentionally manufactured tight to prevent slop, they can be freed up by gently squeezing them with flat-jaw pliers when installed on the ball. Never use serrated pliers.
Servo Linkage Rod Assembly

Main Rotor Head Assembly

01 Main Rotor Hub Assembly

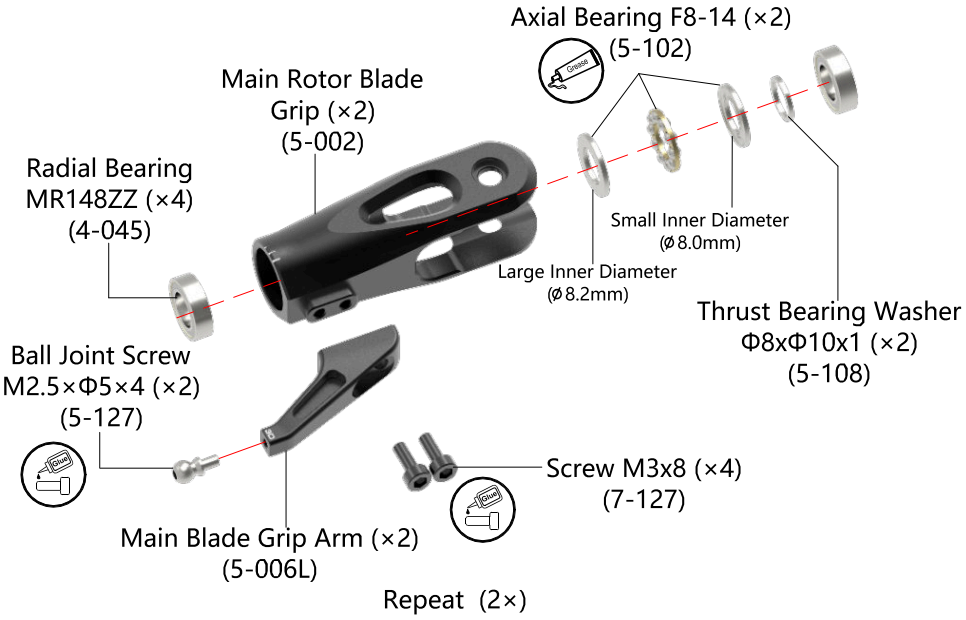




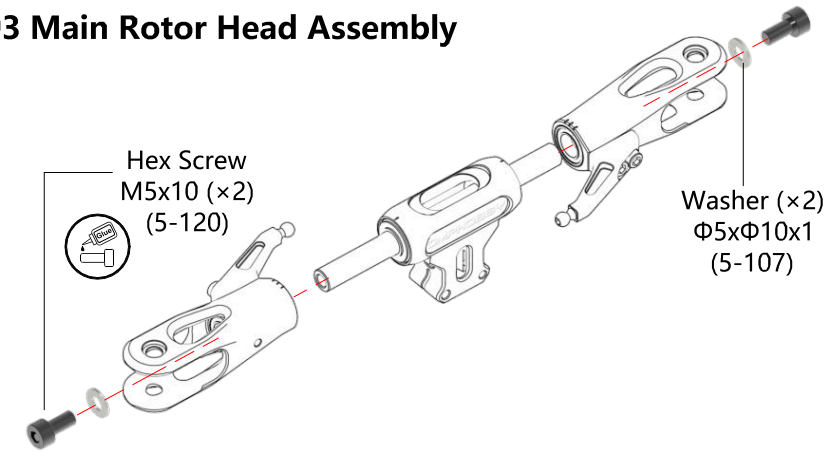
! Your M5 comes with optional POM dampers for extremely hard response. POM dampers are made for high headspeeds and may cause adverse effects at medium to lower RPM, such as excessive control cross coupling, wobbling and in-flight resonance. Do not fly below 1500RPM with POM dampers installed. POM dampers are to be installed as shown. Do not use Blade Grip Spacer 5-009!

02 Main Rotor Blade Grip Assembly

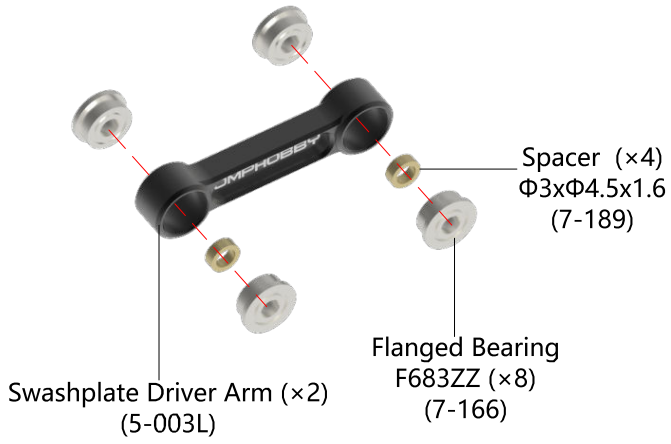
! The open side of the axial bearing cage must face outward towards the rotor blade to prevent premature axial bearing failure.



03 Main Rotor Head Assembly

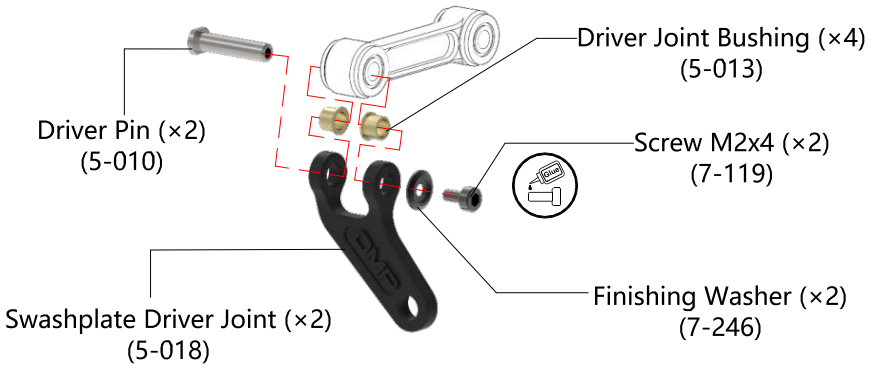


01 Swashplate Driver Arm Assembly



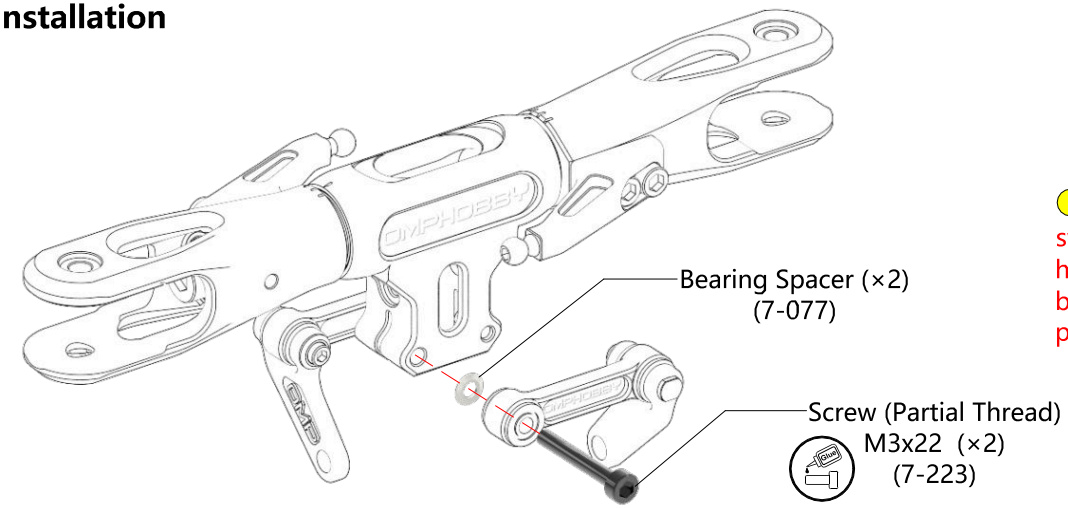
Repeat (2×)

02 Swashplate Driver Joint Assembly



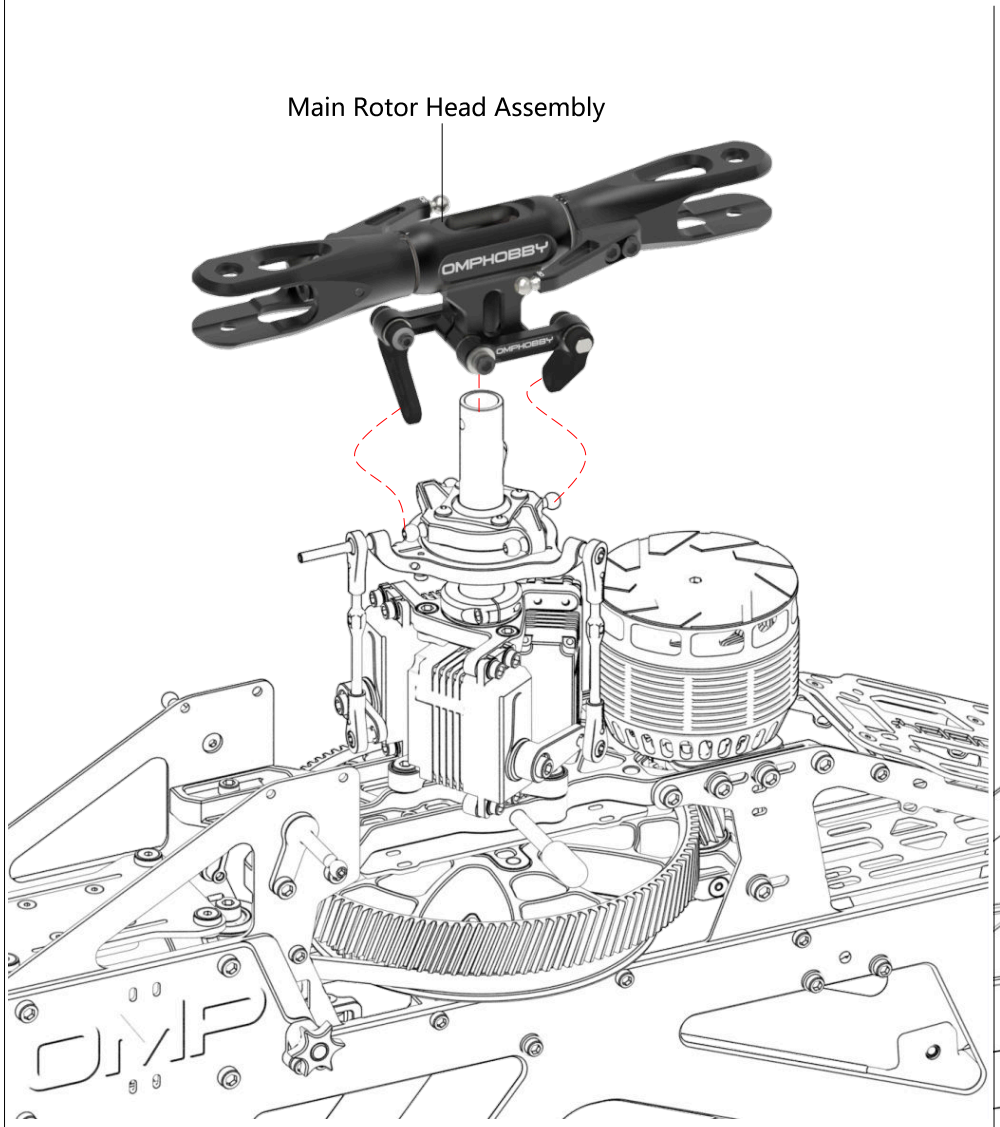
Repeat (2×)

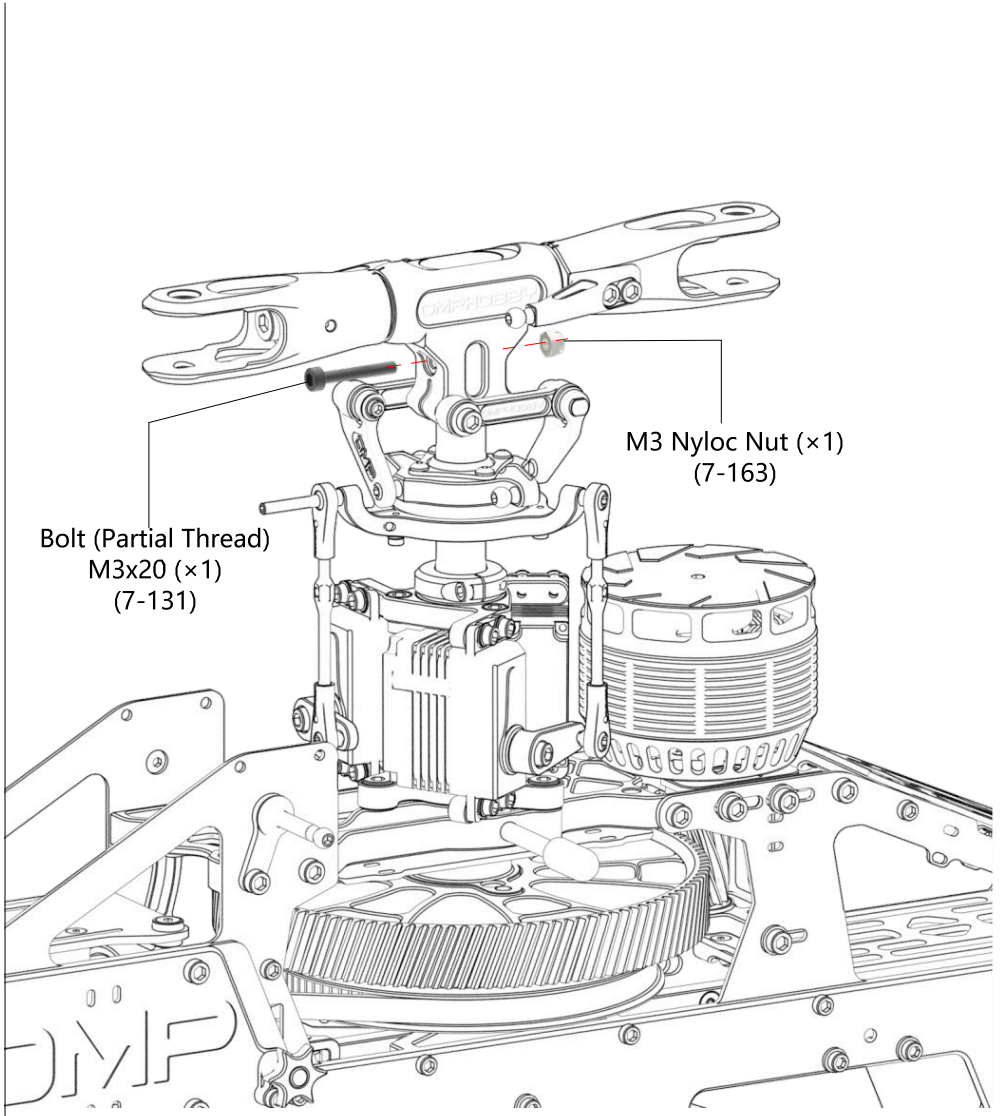
03 Swashplate Driver Installation



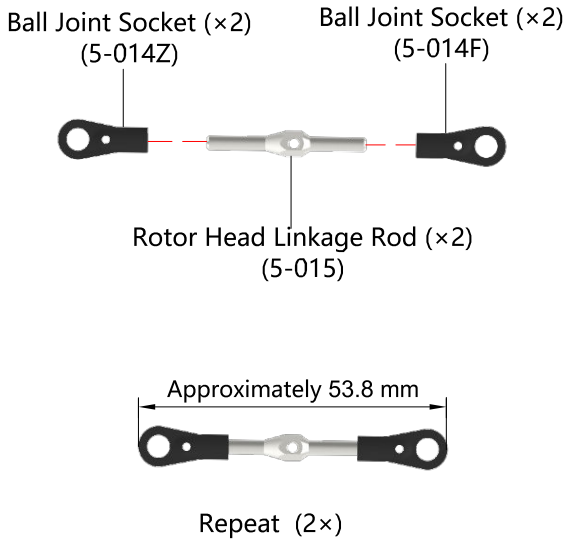
⚠ Apply Loctite, but do not tighten the swashplate driver screws until the rotor head is firmly connected to the main shaft by the M3x20 bolt, as shown on the next page.

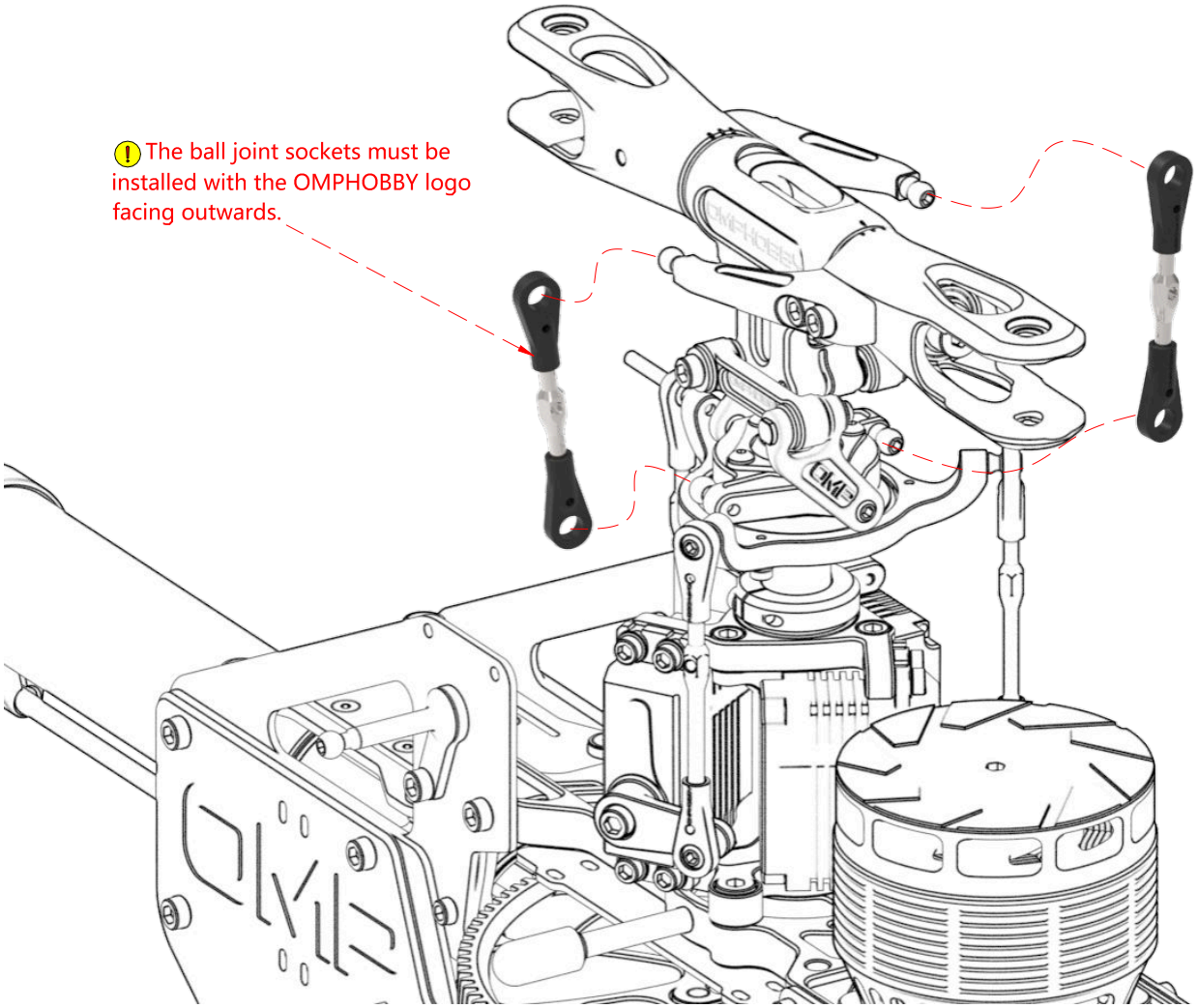
Main Rotor Head Installation



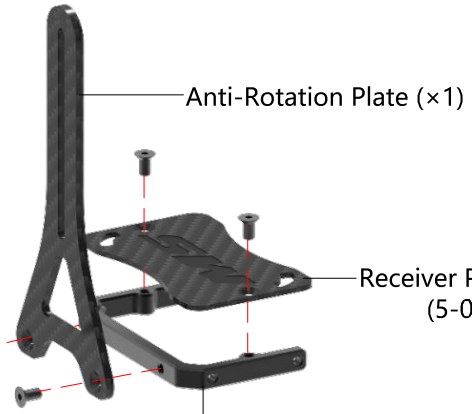


Main Rotor Linkage Installation





Anti-Rotation Guide Assembly



Anti-Rotation Plate (×1)

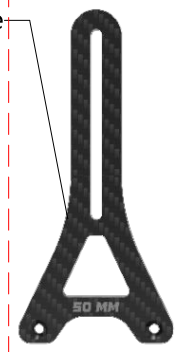
Receiver Plate (×1)
(5-067)

Countersunk Screw
M2.5x5 (×4)
(7-155)

Anti-Rotation
Mounting Bracket (×1)
(5-036)

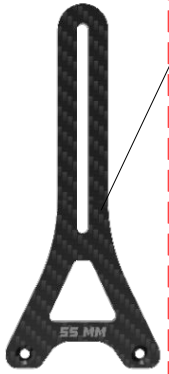
⚠ The anti-rotation plate (OSHM6006) required to use 20mm cyclic servos is included in the optional conversion kit.

Anti-Rotation Plate
(5-068L)

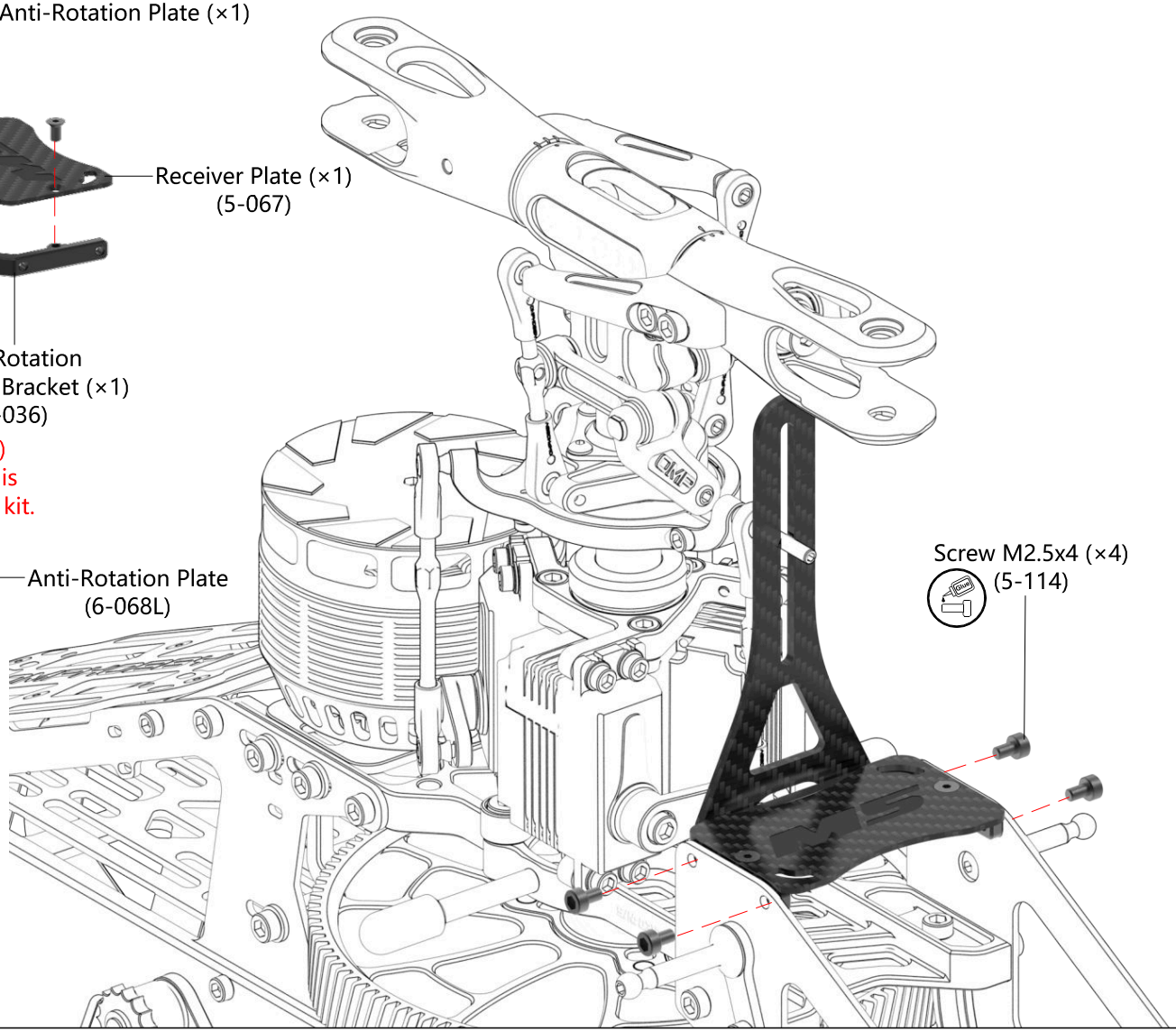


15mm Cyclic Servos

Anti-Rotation Plate
(6-068L)

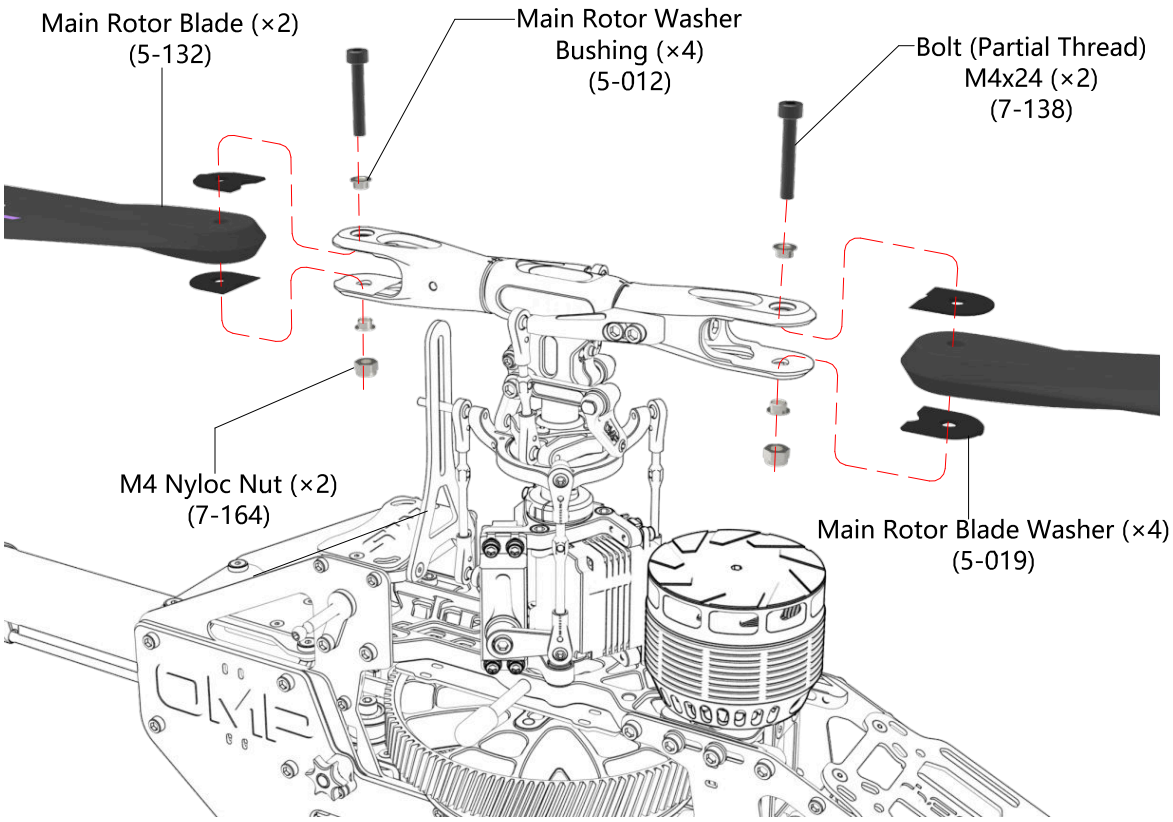


20mm Cyclic Servos

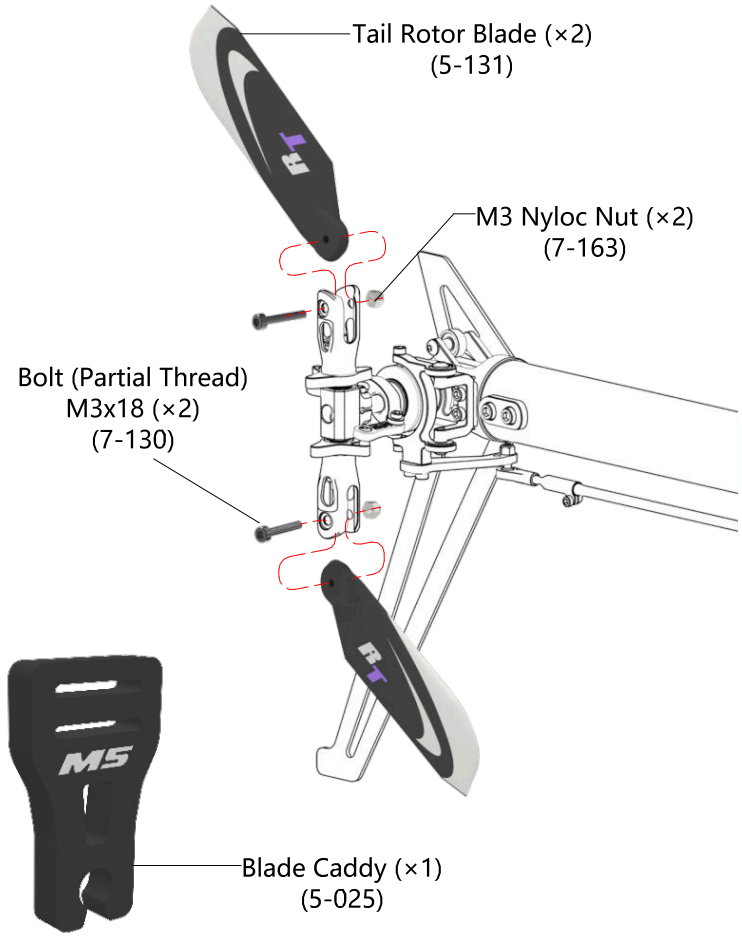


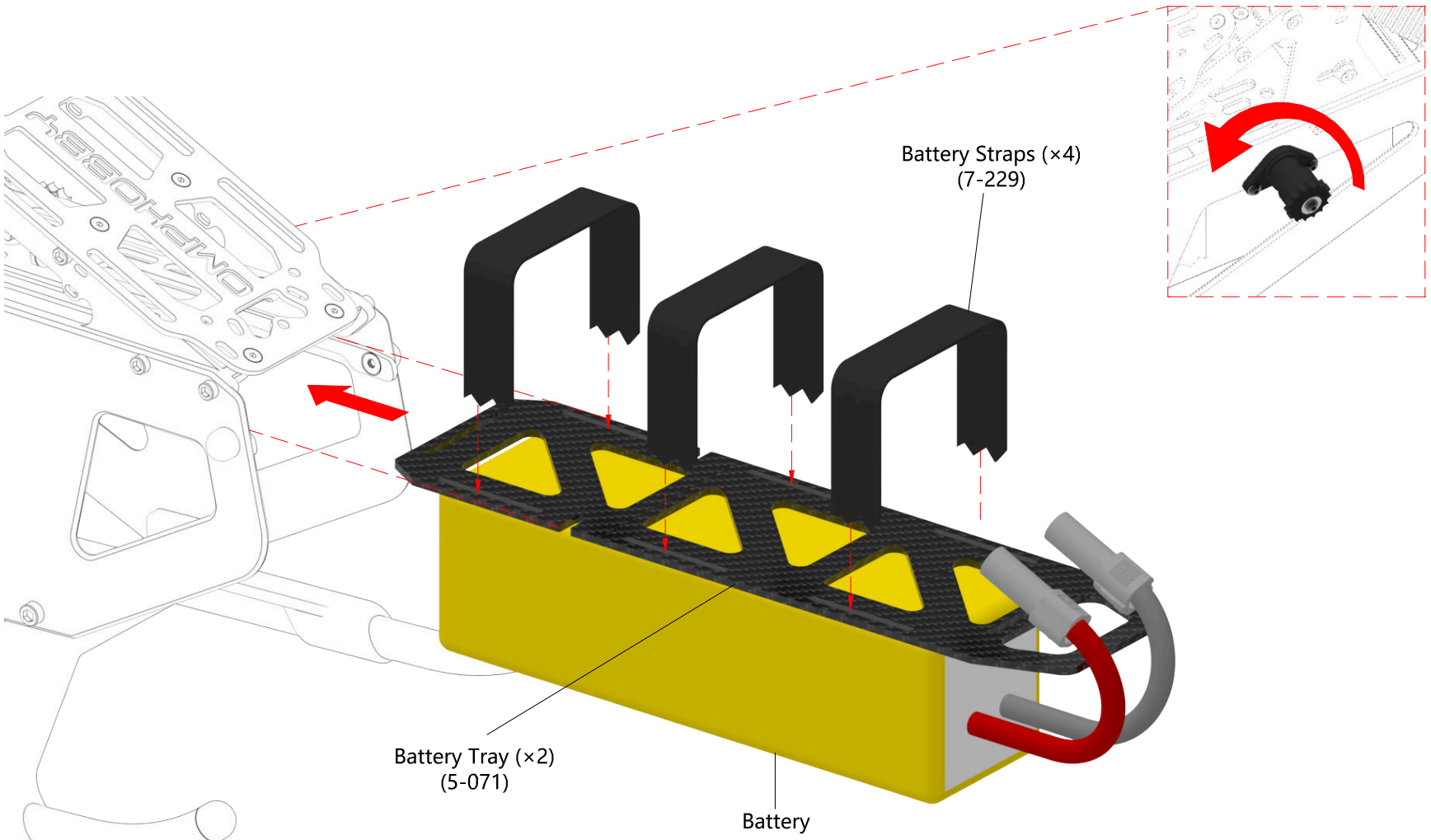
Screw M2.5x4 (×4)
(5-114)

01 Main Rotor Blade Installation

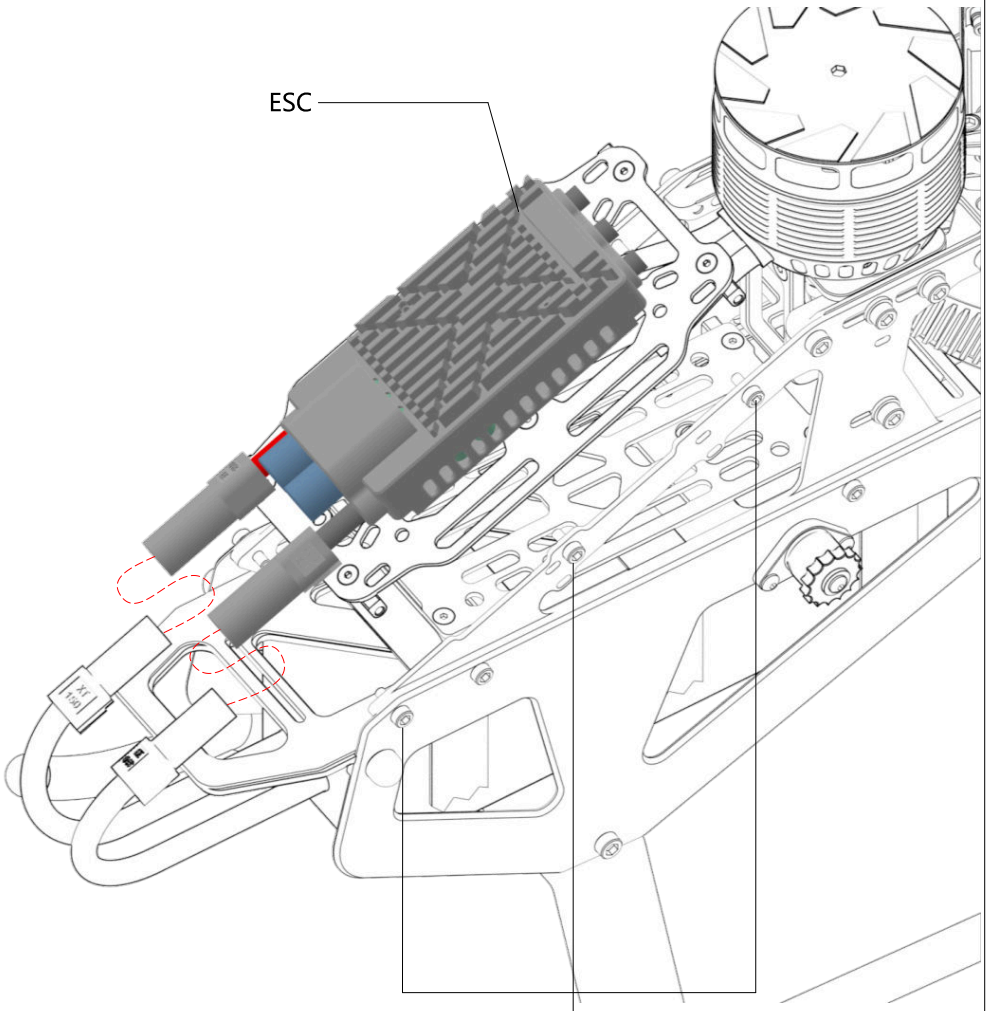


02 Tail Rotor Blade Installation

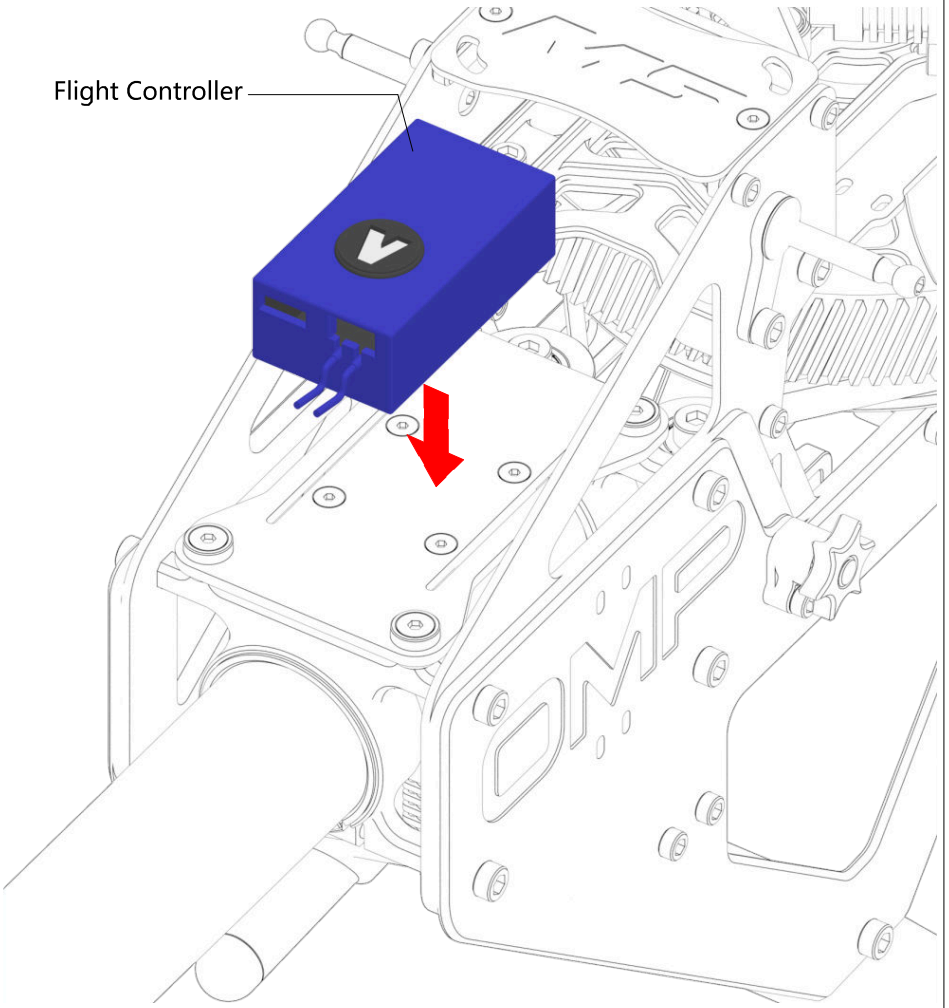



Battery Straps (×4)
(7-229)
Battery Tray (×2)
(5-071)
Battery

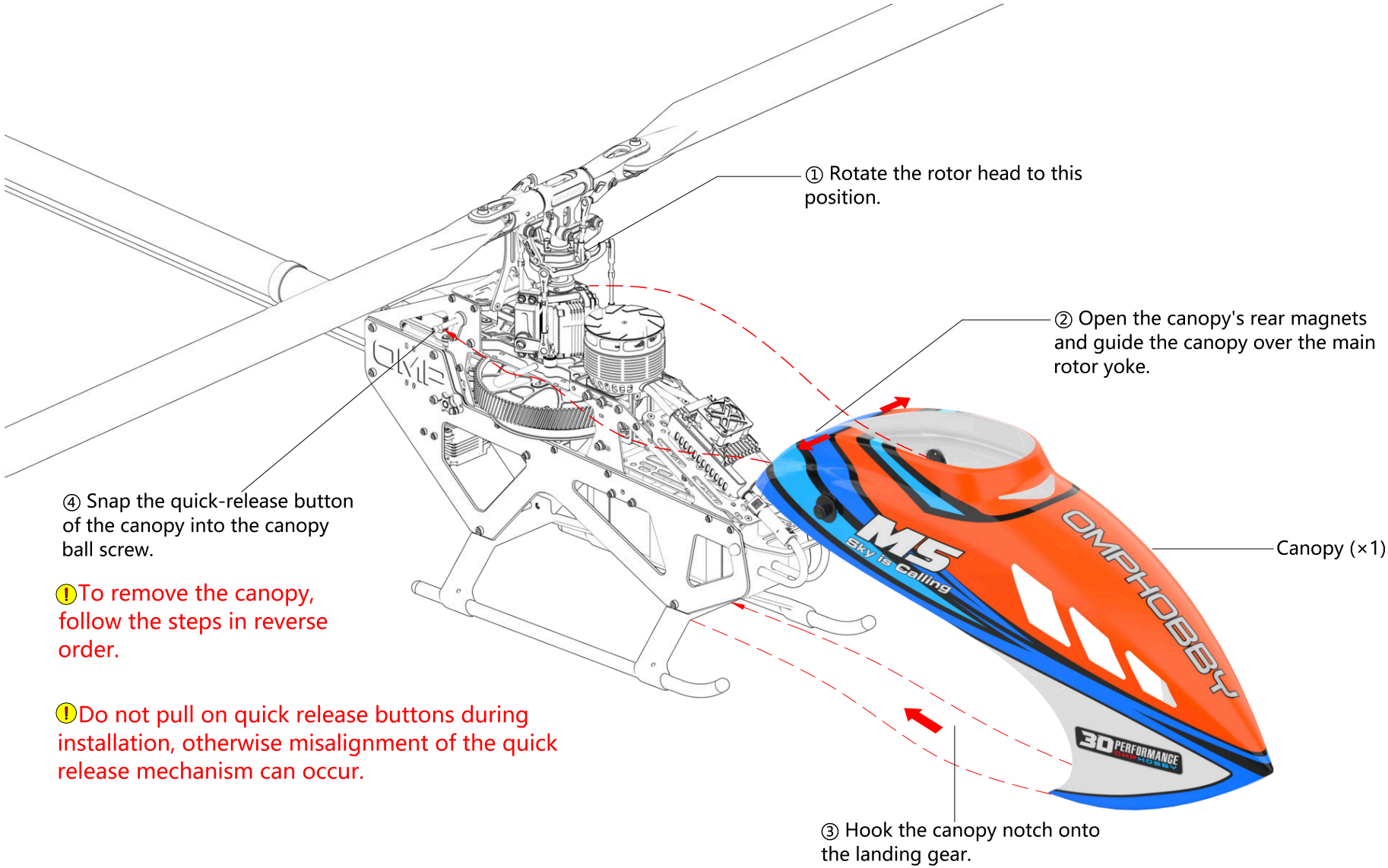
ESC and Flight Controller Installation



⚠ These six screws can be removed when installing the ESC for easier installation.



Canopy Installation



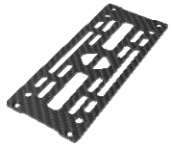
⚠ To remove the canopy, follow the steps in reverse order.

⚠ Do not pull on quick release buttons during installation, otherwise misalignment of the quick release mechanism can occur.

Configuration table

This table outlines the three possible configurations for the M5 and M6 airframe. M5-A designates the regular M5 kit for 15mm servos, with M5-B being a 20mm servo conversion kit for M5-A. M6 is only available for 20mm servos.

Configuration/Kit	M5-A	M5-B	M6
Availability	Kit Kit + Blades	Conversion Kit for M5-A	Kit Kit + Blades
Rotor Blades	OSHM5121 (560U) OSHM5120 (96U)	OSHM5121 (560U) OSHM5120 (96U)	OSHM5119 (610U) OSHM5120 (96U)
	Spec: 560-580, 93-106	Spec: 560-580, 93-106	Spec: 600-610, 96-106
Pinion	OSHM7171 (13 t)* OSHM7172 (11 t) OSHM7173 (12 t) OSHM7174 (14 t) OSHM7175 (15 t)	- - OSHM7171 (13 t)* OSHM7174 (14 t) OSHM7175 (15 t)	OSHM7171 (13 t)* OSHM7172 (11 t) OSHM7173 (12 t) OSHM7174 (14 t) OSHM7175 (15 t)
Main Shaft	OSHM5021 (170mm)	OSHM6005 (180mm)	OSHM6005 (180mm)
Main Gear	OSHM5019 (115 t)	OSHM5019 (115 t)	OSHM6008 (121 t)
Servo Mounts (Main Rotor)	OSHM5012 (15mm) OSHM5013 (15mm) OSHM5014 (15mm) OSHM5122 (15mm)	OSHM6002 (20mm) OSHM6003 (20mm) OSHM6004 (20mm) OSHM6022 (20mm)	OSHM6002 (20mm) OSHM6003 (20mm) OSHM6004 (20mm) OSHM6022 (20mm)
Servo Mounts (Tail Rotor)	OSHM5042 (15mm)	OSHM6007 (20mm)	OSHM6007 (20mm)
Canopy	OSHM5116 (Orange) OSHM5117 (Yellow) OSHM5118 (Green) OSHM5119 (Pink)	OSHM5116 (Orange) OSHM5117 (Yellow) OSHM5118 (Green) OSHM5119 (Pink)	OSHM6018 (Orange) OSHM6019 (Yellow) OSHM6020 (Green) OSHM6021 (Pink)
Swashplate Guide	OSHM5037 (50mm)	OSHM6006 (55mm)	OSHM6006 (55mm)
Canopy Spacer	OSHM5004 (34mm)	OSHM5004 (34mm)	OSHM6023 (36mm)
Servo Linkage Rod	OSHM5071 (44mm)	OSHM6001 (52mm)	OSHM6001 (52mm)
Tail Components	OSHM5048 (Boom) OSHM5047 (Belt) OSHM5050 (Linkage)	OSHM5048 (Boom) OSHM5047 (Belt) OSHM5050 (Linkage)	OSHM6009 (Boom) OSHM6012 (Belt) OSHM6014 (Linkage)
Battery Tray	OSHM5110 (6S - 8S)	OSHM5110 (6S - 8S)	OSHM6011 (10S - 12S)

Part Number: OSHM5001	Part Number: OSHM5002	Part Number: OSHM5003	Part Number: OSHM5004	Part Number: OSHM5005	Part Number: OSHM5006
					
Frame Stiffener R (×1) (5-038) Frame Stiffener L (×1) (5-039)	Main Plate (×1) (5-033L)	Wire Guide (×1) (5-070)	Canopy Spacer Sleeve (×2) (5-048) Canopy Support (Rubber Cap-Long) (×2) (5-053) Screw (Partial Thread) M3x40 (×2) (5-117)	Motor Mounting Plate (×1) (5-034)	Motor Support Bracket (×1) (5-035)
Part Number: OSHM5007	Part Number: OSHM5008	Part Number: OSHM5009	Part Number: OSHM5010	Part Number: OSHM5011	Part Number: OSHM5012
					
Upper Side Frame (×1) (5-061)	R-Battery Rail (×1) (5-060)	L-Battery Rail (×1) (5-059)	R-Lower Side Frame (×1) (5-063S)	L-Lower Side Frame (×1) (5-064S)	Upper Servo Mount (5-030L)
Part Number: OSHM5013	Part Number: OSHM5014	Part Number: OSHM5015		Part Number: OSHM5016	Part Number: OSHM5017
			Sacrificial Canopy Mount Plate (×2) (7-010) Canopy Mounting Posts (×2) (5-037) Screw M3x8 (×2) (7-127) Ball Joint Screw M2.5×Φ5×4 (×2) (7-143) Button Head Screw M3×6 (×2) (7-150)		
Lower Servo Mount (5-032L)	Main Shaft Cover (5-031L)			ESC Mounting Plate (×1) (5-065)	Mounting Crossmember (×2) (5-041)
Part Number: OSHM5018		Part Number: OSHM5019	Part Number: OSHM5020	Part Number: OSHM5021	Part Number: OSHM5022
	Main Pulley 95T (×1) (5-028) Main Pulley Flange (×2) (5-069) Hex Bolt (Partial Thread) M3x20 (×1) (7-131) Countersunk Screw M2.5x5 (×12) (7-155) M3 Nyloc Nut (×1) (7-163)				
		Main Gear 115T (×1) (5-055L)	Main Gear Hub (×1) (5-026L) Bearing 6801ZZ (×2) (5-099) Needle Roller One-Way Clutch (×1) (5-101)	Main Shaft (15mm Servos) (×1) (5-050L)	Aux Plate (×1) (7-008)
Part Number: OSHM5023	Part Number: OSHM5024	Part Number: OSHM5025		Part Number: OSHM5026	Part Number: OSHM5027
			Quick Release Knob (×1) (7-041) Quick Release Base (×1) (7-042) Quick Release Pin (×1) (5-052) Quick Release Spring (×1) (7-060) Button Head Screw M2.5×6 (×1) (7-146) Washer Φ2.5xΦ7x1 (×1) (7-194)		
Canopy Support (Rubber Cap-Short) (×4) (5-054)	Canopy Support Spacer (×4) (5-047)			Flight Controller Mounting Plate (×1) (5-066)	Rubber Damper (×4) (7-044)

Part Number: OSHM5028



Rubber Damper Bushing (×4) (7-231)

Part Number: OSHM5029



Inertial Mass Damper (×1) (7-059)

Part Number: OSHM5030



Tail Boom Clamp Front (×1) (Alignment Key) (5-045)

Part Number: OSHM5031



Tail Boom Clamp Rear (×1) (Round Hole) (5-046)
POM Boom Clamp Insert (×1)(5-056)

Part Number: OSHM5032



Tensioner Pin Guide Plate (×1) (7-012)
Tensioner Base (×1) (7-014)
Tensioner Threaded Pin (×1) (7-046)
Tensioner Knob (×1) (7-047)
Screw M2.5x12 (×2) (7-124)

Part Number: OSHM5033



Tensioner Mounting Base (×1) (5-042)
Tensioner Pivot Reinforcement (×1) (5-043)
Tensioner Lever (×1) (5-044)
Screw M2x8 (×2) (7-121)
Countersunk Screw M3×16.2 (×1) (7-157)
Bearing MR83ZZ (×2) (7-170)
Spacer Φ3xΦ5x2.1 (×1) (7-192)

Part Number: OSHM5034



Idler Cone (×1) (7-022)
Idler Pulley (×2) (5-027)
Spacer Φ4xΦ5.5x0.55 (×2) (5-110)
Screw (Partial Thread) M4x14 (×1) (5-119)
Screw (Partial Thread) M4x24 (×1) (7-138)
Bearing 604ZZ (×4) (7-172)

Part Number: OSHM5035



15mm Metal Servo Arm (×1) (5-126)
Screw M2.5×5 (×1) (4-036)
Screw M3x6 (×1) (7-126)
Ball Joint Screw M2.5×Φ5×4 (×1) (5-127)

Part Number: OSHM5036



18mm Metal Servo Arm (×3) (5-130)
Screw M3x6 (×3) (7-126)
Ball Joint Screw M2.5×Φ5×4 (×3) (5-127)

Part Number: OSHM5037



Anti-Rotation Plate (×1) (5-068L)
Countersunk Screw M2.5x5 (×2) (7-155)

Part Number: OSHM5038



Anti-Rotation Mounting Bracket (×1) (5-036)

Part Number: OSHM5039



Receiver Plate (×1) (5-067)

Part Number: OSHM5040



Main Rotor Shaft Clamp (×1) (5-029)
Hex Screw M2.5x8 (×1) (4-038)

Part Number: OSHM5041



Lower Bearing Block (×1) (5-040)

Part Number: OSHM5042



Tail Servo Mounting Block (×2) (5-085)
Screw M2.5x6 (×4) (7-122)

Part Number: OSHM5043



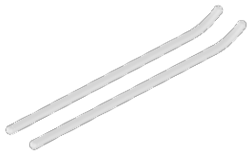
Landing Gear (×2) (5-057W)
Set Screw M3x3 (×4) (4-105)

Part Number: OSHM5044



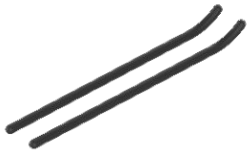
Landing Gear (×2) (5-057B)
Set Screw M3x3 (×4) (4-105)

Part Number: OSHM5045



Landing Gear Tube (×2) (5-049W)
Landing Gear End Cap (×4) (5-058W)

Part Number: OSHM5046



Landing Gear Tube (×2) (5-049B)
Landing Gear End Cap (×4) (5-058B)

Part Number: OSHM5047



Tail Drive Belt (×1) (5-092)

Part Number: OSHM5048



Carbon Tail Boom (×1) (5-095S)

Part Number: OSHM5049



Tail Control Rod Guide (×2) (5-090)
M2 Nyloc Nut (×2) (4-030)
Screw M2x8 (×2) (7-121)

Part Number: OSHM5050



Tail Control Rod Ends (×2) (5-088)
Tail Control Rod Carbon Tube (×1) (5-096)
Screw M2x4 (×2) (7-119)
Ball Joint Socket (×2) (5-014Z)

Part Number: OSHM5051



Tail Pitch Slider Bridge (×1) (5-078)
Tail Rotor Ball Joint Socket (×2) (5-089)
Tail Pitch Slider Control Ring (×1) (7-094)
Tail Pitch Slider Sleeve (×1) (7-113)
Screw M2x8 (×2) (7-121)
Flanged Bearing MF128ZZ (×2) (7-169)
Spacer Φ8xΦ10x1.45 (×1) (7-186)
Bushing Φ2xΦ4x3.5 (×6) (7-193)

Part Number: OSHM5052



Tail Bellcrank Base (×1) (5-080)

Part Number: OSHM5053



Tail Bellcrank (×1) (5-079)

Part Number: OSHM5054



Tail Bellcrank Arm (×1) (5-093)
Screw M2.5x8 (×2) (4-038)
M2.5 Nyloc Nut (×1) (4-031)
Ball Joint Screw M2.5×Φ5×6.5 (×1) (5-111)

Part Number: OSHM5055



Tail Boom Protector (×2) (5-083)

Part Number: OSHM5056



Tail Rotor Yoke (×1) (5-075)
Bolt (Partial Thread) M2.5×14 (×1) (7-125)
M2.5 Nyloc Nut (×1) (4-031)

Part Number: OSHM5057



Tail Rotor Blade Grip (×1) (5-072)

Part Number: OSHM5058



Tail Rotor Shaft (×1) (5-087)

Part Number: OSHM5059



Tail Rotor Spindle Shaft (×1) (5-086)
Washer Φ3xΦ7x0.5 (×2) (5-105)
Screw M3x8 (×2) (7-127)

Part Number: OSHM7088



Blade Grip Spacer (×2) (7-114)
O-Ring 80° Shore Φ9×Φ2 (×6) (7-116)

Part Number: OSHM5060



Tail Housing (×1) (5-074)

Part Number: OSHM5061



Pressure Idler Arm-R (×1) (5-076)
Pressure Idler Arm-L (×1) (5-077)
Bearing 623ZZ (×1) (5-097)
Button Head Screw (Partial Thread) M3×20 (×1) (5-121)
Button Head Screw M2.5×6 (×4) (7-146)

Part Number: OSHM5062



Tail Pulley 20T (×1) (5-073)
Tail Pulley Flange R (×1) (5-081)
Tail Pulley Flange L (×1) (5-082)
Tail Pulley Screw (Custom) M2.5×14 (×1) (7-158)

Part Number: OSHM5063



Main Rotor Yoke (×1) (5-001L)
Bolt (Partial Thread) M3x20 (×1) (7-131)
M3 Nyloc Nut (×1) (7-163)

Part Number: OSHM5064



Blade Grip Spacer (×2) (5-009)
O-Ring 80° Shore Φ16xΦ4 (×6) (5-022)

Part Number: OSHM5065



Main Rotor Damper (×2) (5-021)
O-Ring 80° Shore Φ16xΦ4 (×2) (5-022)
O-Ring 80° Shore Φ16xΦ2.5 (×2) (5-023)

Part Number: OSHM5066



Main Rotor Blade Grip (×1) (5-002)

Part Number: OSHM5067



Spindle Shaft (×1) (5-008)
Washer Φ5xΦ10x1 (×2) (5-107)
Hex Screw M5x10 (×2) (5-120)

Part Number: OSHM5068



Main Blade Grip Arm (×2) (5-006L)
Screw M3x8 (×4) (7-127)
Ball Joint Screw M2.5×Φ5×4 (×2) (5-127)

Part Number: OSHM5069



Swashplate Driver Arm (×2) (5-003L)
Bearing Spacer (×2) (7-077)
Flanged Bearing F683ZZ (×8) (7-166)
Spacer Φ3xΦ4.5x1.6 (×4) (7-189)
Screw (Partial Thread) M3x22 (×2) (7-223)

Part Number: OSHM5070



Driver Pin (×2) (5-010)
Driver Joint Bushing (×4) (5-013)
Swashplate Driver Joint (×2) (5-018)
Screw M2x4 (×2) (7-119)
Finishing Washer (×2) (7-246)

Part Number: OSHM5071



Servo Linkage Rod (×3) (5-016)
Ball Joint Socket (×3) (5-014Z)
Ball Joint Socket (×3) (5-014F)

Part Number: OSHM5072



Rotor Head Linkage Rod (×2) (5-015)
Ball Joint Socket (×2) (5-014Z)
Ball Joint Socket (×2) (5-014F)

Part Number: OSHM5073



Ball Joint Socket (×4) (5-014Z)
Ball Joint Socket (×4) (5-014F)

Part Number: OSHM5074



Swashplate Outer Ring (×1) (5-004)
Swashplate Inner Ring (×1) (5-005L)
Swashplate Hub (×1) (5-007)
Spherical Bearing (×1) (5-011)
Guidance Ball Joint Screw (×1) (5-017)
Spherical Bearing Races (×2) (5-020)
Spherical Bearing Retention Plate (×1) (5-024)
Bearing 6706ZZ (×1) (5-100)
Ball Joint Screw (×6) M2.5×Φ5×4 (5-127)
Screw M2.5x8 (×1) (4-038)
Button Head Screw M2.5×8 (×4) (7-147)
Screw M2x5 (×3) (7-120)
Washer Φ2xΦ5x0.5 (×3) (7-181)

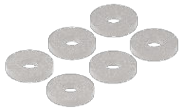
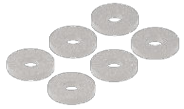
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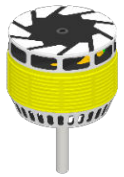
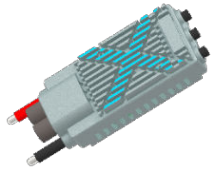


Swashplate Outer Ring (×1) (5-004)

Part Number: OSHM5076	Part Number: OSHM5077	Part Number: OSHM5078	Part Number: OSHM5079	Part Number: OSHM5080	Part Number: OSHM7182
					
Swashplate Inner Ring (×1) (5-005L)	Swashplate Hub (×1) (5-007)	Guidance Ball Joint Screw (×2) (5-017)	Spherical Bearing (×1) (5-011) Spherical Bearing Races (×2) (5-020)	Driver Pin (×4) (5-010)	Screw M2x4 (×8) (7-119)
Part Number: OSHM7103	Part Number: OSHM4074	Part Number: OSHM7104	Part Number: OSHF5081	Part Number: OSHM4078	Part Number: OSHM7105
					
Screw M2x5 (×8) (7-120)	Screw M2x6 (×8) (4-102)	Screw M2x8 (×8) (7-121)	Screw M2.5x4 (×8) (5-114)	Screw M2.5×5 (×8) (4-036)	Screw M2.5x6 (×8) (7-122)
Part Number: OSHM7106	Part Number: OSHM4081	Part Number: OSHM7107	Part Number: OSHM7108	Part Number: OSHM7109	Part Number: OSHM7110
					
Screw M2.5x8 (×8) (4-038)	Screw M2.5x10 (×8) (4-039)	Screw M2.5x12 (×8) (7-124)	Bolt (Partial Thread) M2.5×14 (×8) (7-125)	Screw M3x6 (×8) (7-126)	Screw M3x8 (×8) (7-127)
Part Number: OSHF5082	Part Number: OSHM7114	Part Number: OSHM7115	Part Number: OSHM7117	Part Number: OSHF5083	Part Number: OSHF5084
					
Screw M3x16 (×8) (5-115)	Bolt (Partial Thread) M3x20 (×8) (7-131)	Screw (Partial Thread) M3x22 (×8) (7-223)	Screw (Partial Thread) M3x27.6 (×8) (7-133)	Screw (Partial Thread) M3x40 (×8) (5-117)	Screw M4x10 (×8) (5-118)
Part Number: OSHM7119	Part Number: OSHF5085	Part Number: OSHF5086	Part Number: OSHF5087	Part Number: OSHF5088	Part Number: OSHM7093
					
Screw M4x12 (×8) (7-135)	Screw (Partial Thread) M4x14 (×8) (5-119)	Hex Screw M5x10 (×8) (5-120)	Bolt (Partial Thread) M3x18 (×4) (7-130) M3 Nyloc Nut (×4) (7-163)	Screw (Partial Thread) M4x24 (×8) (7-138) M4 Nyloc Nut (×8) (7-164)	Button Head Screw M2.5×6 (×8) (7-146)

Part Number: OSHM7094	Part Number: OSHM7097	Part Number: OSHM7099	Part Number: OSHF5089	Part Number: OSHM5090	Part Number: OSHF5091
					
Button Head Screw M2.5×8 (×8) (7-147)	Button Head Screw M3×6 (×8) (7-150)	Button Head Screw (Partial Thread) M3×8 (×8) (7-152)	Button Head Screw (Partial Thread) M3×20 (×8) (5-121)	Countersunk Screw M2.5x4 (×8) (5-133)	Countersunk Screw M2.5x5 (×8) (7-155)
Part Number: OSHF5092	Part Number: OSHF5093	Part Number: OSHF5094	Part Number: OSHM7125	Part Number: OSHF5095	Part Number: OSHM4108
					
Countersunk Screw M3x8 (×8) (5-122)	Countersunk Screw M3x10 (×8) (5-123)	Countersunk Screw M3×16.2 (×8) (7-157)	Tail Pulley Screw (Custom) M2.5×14 (×4) (7-158)	Tail Bellcrank Pin M2.5x7x2 (×4) (7-111)	Set Screw M3x3 (×8) (4-105)
Part Number: OSHM7127	Part Number: OSHM7184	Part Number: OSHM7133	Part Number: OSHM7134	Part Number: OSHM7135	Part Number: OSHF5096
					
Set Screw M4x4 (×8) (7-141)	Set Screw M4×3 (×8) (7-247)	M2 Nyloc Nut (×8) (4-030)	M2.5 Nyloc Nut (×8) (4-031)	M3 Nyloc Nut (×8) (7-163)	Countersunk Nut (×4) (5-051)
Part Number: OSHF5097	Part Number: OSHM7130	Part Number: OSHF5098	Part Number: OSHM7152	Part Number: OSHM7153	Part Number: OSHM7154
					
Ball Joint Screw M2.5×Φ5×4 (×8) (5-127)	Ball Joint Screw M2.5×Φ5×4 (×4) (7-143)	Ball Joint Screw M2.5×Φ5×6.5 (×4) (5-111)	Flanged Bearing F683ZZ (×2) (7-166)	Flanged Bearing MF83ZZ (×2) (7-167)	Flanged Bearing F696ZZ (×2) (7-168)
Part Number: OSHM7155	Part Number: OSHM7156	Part Number: OSHB5099	Part Number: OSHM7158	Part Number: OSHB5100	Part Number: OSHM7159
					
Flanged Bearing MF128ZZ (×2) (7-169)	Axial Bearing F5-10 (×2) (7-179)	Axial Bearing F8-14 (×2) (5-102)	Bearing MR83ZZ (×2) (7-170)	Bearing 623ZZ (×2) (5-097)	Bearing 604ZZ (×2) (7-172)

Part Number: OSHM7160	Part Number: OSHM4086	Part Number: OSHM7161	Part Number: OSHB5101	Part Number: OSHB5102	Part Number: OSHM7139
					
Bearing MR105ZZ (×2) (7-173)	Radial Bearing MR148ZZ (×2) (4-045)	Bearing 688ZZ (×2) (7-174)	Bearing 6801ZZ (×2) (5-099)	Bearing 6706ZZ (×2) (5-100)	Washer Φ2xΦ5x0.5 (×6) (7-181)
Part Number: OSHM5103	Part Number: OSHM7140	Part Number: OSHM5104	Part Number: OSHM7144	Part Number: OSHM5105	Part Number: OSHM5106
					
Washer Φ2.5xΦ6x1 (×6) (5-104)	Spacer Φ2.5xΦ7x1 (×6) (7-194)	Washer Φ3xΦ7x0.5 (×6) (5-105)	Washer Φ3xΦ7x1 (×6) (7-182)	Spacer Φ5xΦ7x0.25 (×6) (5-106)	Washer Φ5xΦ10x1 (×6) (5-107)
Part Number: OSHM5107	Part Number: OSHM5108	Part Number: OSHM7138	Part Number: OSHM7141	Part Number: OSHM7142	Part Number: OSHM5109
					
Thrust Bearing Washer Φ8xΦ10x1 (×6) (5-108)	Spacer Φ12xΦ14.9x0.5 (×6) (5-109)	Bushing Φ2xΦ4x3.5 (×6) (7-193)	Spacer Φ3xΦ4.5x1.6 (×6) (7-189)	Spacer Φ3xΦ5x2.1 (×6) (7-192)	Spacer Φ4xΦ5.5x0.55 (×6) (5-110)
Part Number: OSHM7149	Part Number: OSHM5110	Part Number: OSHM7051	Part Number: OSHM5111	Part Number: OSHM5112	Part Number: OSHM5113
					
Spacer Φ8xΦ10x1.45 (×6) (7-186)	Battery Tray (×1) (5-071) Battery Straps (×4) (7-229)	Battery Straps (×4) (7-229)	Blade Caddy (×1) (5-025)	Vertical Tail Fin (×1) (5-094O)	Vertical Tail Fin (×1) (5-094Y)
Part Number: OSHM5114	Part Number: OSHM5115	Part Number: OSHM5116	Part Number: OSHM5117	Part Number: OSHM5118	Part Number: OSHM5119
					
Vertical Tail Fin (×1) (5-094G)	Vertical Tail Fin (×1) (5-094P)	Canopy (×1) (5-128O)	Canopy (×1) (5-128Y)	Canopy (×1) (5-128G)	Canopy (×1) (5-128P)

Part Number: OSHM7171	Part Number: OSHM5120	Part Number: OSHM5121	Part Number: OSHM5122	Part Number:OSHM5124	Part Number: OSHM5125
 Pinion Gear 13T (×1) (7-055) Set Screw M4×3 (×1) (7-247) Set Screw M4x4 (×1) (7-141)	 Tail Rotor Blade (×2) (5-131)	 Main Rotor Blade (×2) (5-132)	 15mm Servo Bushing (×16) (5-134)	 SUNNYSKY 4518 motor	 SUNNYSKY 155A ESC
Part Number: OSHM7104	Part Number:	Part Number:	Part Number:	Part Number:	Part Number:
 Screw M2x7 (×2) (5-121)					

M5 - 20mm Cyclic Servo Conversion Parts

Part Number: OSHM6001	Part Number: OSHM6002	Part Number: OSHM6003	Part Number: OSHM6004	Part Number: OSHM6005	Part Number: OSHM6006
 Servo Linkage Rod (×3) (6-016) Ball Joint Socket (×3) (5-014Z) Ball Joint Socket (×3) (5-014F)	 Upper Servo Mount (6-030L) Screw M3x6 (×6) (7-126)	 Lower Servo Mount (6-032L) Screw M3x6 (×6) (7-126)	 Coaxiality Dome (6-031L)	 Main Rotor Shaft (6-050L)	 Anti-Rotation Plate (×1) (6-068L) Countersunk Screw M2.5x5 (×2) (7-155)
Part Number: OSHM6007	Part Number: OSHM6022	Part Number: OSHM5123	Part Number:	Part Number:	Part Number:
 Tail Servo Mounting Block (×2) (6-085) Screw M2.5x6 (×4) (7-122)	 20mm Servo Bushing (×16) (6-134)	 Screw M2.5x10 (×12) (4-039)			

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Carefully check your model before each flight to ensure it is airworthy.

Consider flying only in areas dedicated to the use of model helicopters.

Check and inspect the flying area to ensure it is clear of people and obstacles.

Rotor blades can rotate at very high speeds! Be aware of the danger they pose.

Always keep the model at a safe distance from other pilots and spectators.

Avoid maneuvers with trajectories towards a crowd.

Always maintain a safe distance from the model.

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