

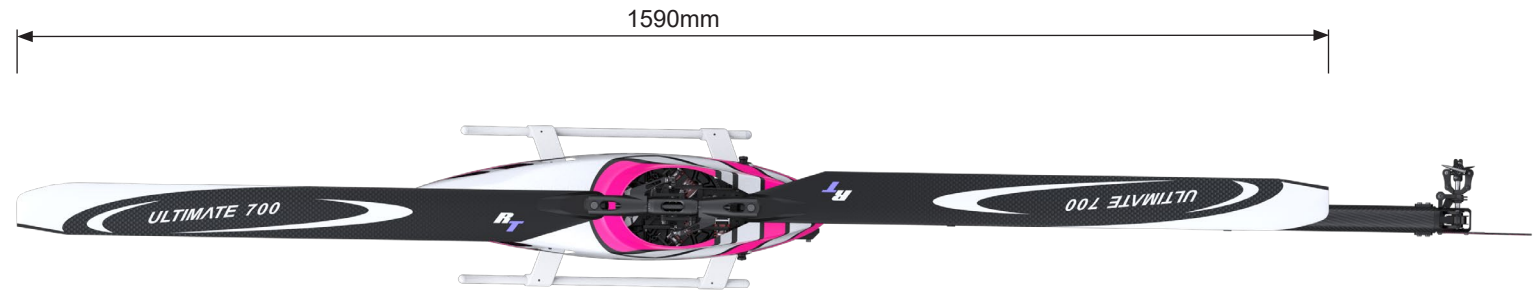
OMP HOBBY®

M7R

*Instruction  
Manual*



**REVISION III**



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## Symbol Guide

 **Important Note**

 **Assembly Requires AB Glue (Two-Part Epoxy)**

 **Assembly Requires Grease**

 **Middle Strength Thread Locker Required**

 **High Strength Thread Locker/Bearing Retaining Compound Required**

## OMPHOBBY M7R General Information

- Airframe Weight: 2070 ±15 g \*
- Main Blade Length: 690-716 mm
- Tail Blade Length: 105-116 mm
- Battery Bay Dimensions: 355 x 69 x 68 mm (l x w x h)
- Swashplate Servo Size: 20 mm
- Tail Servo Size: 20 mm
- Tail Ratio: 110/22 = 5.0
- Flying Weight: ~5100 - 5500 g

\*Including Canopy, 13T pinion, servo/motor/blade mounting hardware, battery tray, Excluding FBL mass damper, velcro straps, servo arms

## Gearing Options (Pinion marked with \* included in the kit)

Main Gear	Pinion	Gear Ratio
122T	11t	11.091
	12t	10.167
	13t*	9.385
	14t	8.714
	15t	8.133

## Recommended Rotor Speeds and Collective Angles

Flying Style	Recommended RPM Range	Recommended Collective Pitch Range
Hovering	1300-1500 RPM	-5° ~ +12°
Low RPM 3D	1200-1400 RPM	±15°
Sport Flying	1400-1700 RPM	±14°
Aerobatics/Soft 3D	1700-2000 RPM	±14°
Hard 3D	2100-2250 RPM	±13°

## Airframe Limitations

The OMPHOBBY M7R is engineered to meet the highest standards of 3D flight. However, certain limitations apply to the airframe to guarantee safe operation and longevity of the model and its components. Operating the M7R outside these limitations, or modifying any parts, 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 for the use of this product.

### Limitations when flying 700 mm main rotor blades

- Maximum Rotor Speed: 2300 RPM (Including all in-flight transients)
- Maximum Collective Pitch below 1700 RPM: ±15°
- Maximum Collective Pitch 1700 - 2100 RPM: ±14°
- Maximum Collective Pitch above 2100 RPM: ±13°
- Minimum Flight RPM: 1100 RPM
- Recommended Rotor Blades: RotorTech 700mm Ultimate

### Limitations when flying 715 mm main rotor blades

- Maximum Rotor Speed: 2250 RPM (Including all in-flight transients)
- Maximum Collective Pitch below 1650 RPM: ±15°
- Maximum Collective Pitch 1650 - 2050 RPM: ±14°
- Maximum Collective Pitch above 2050 RPM: ±13°
- Minimum Flight RPM: 1100 RPM
- Recommended Rotor Blades: RotorTech 715mm Ultimate

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

**! If using the optional 1:1 geometry, the pilot must electronically limit the helicopter to a maximum cyclic pitch deflection of 14.5° in any direction. Cyclic angles larger than 14.5° must not be used under any circumstances. !**

## Motor Selection and Limitations

### Motor Shaft

M7R only supports motor shaft of 6mm diameter, length 15 - 65 mm.

### Mounting Pattern

M7R only supports motors with a M4 x Ø 30mm motor screw pattern, in all orientations.

### Canopy Clearance

For fully cylindrical motors with 45xx stators, the maximum motor height is 61 mm.

For fully cylindrical motors with 50xx stators, the maximum motor height is 59 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.

## Additional Setup Data

### Main Rotor

- Swashplate Type: CCPM 120°
- Main Rotor Direction: Clockwise
- Cyclic Blade Pitch Limit: 14.4°
- Collective Blade Pitch Limit: 14°
- Total Blade Pitch Limit: 22°-24°
- Swashplate Phase Angle: 0°

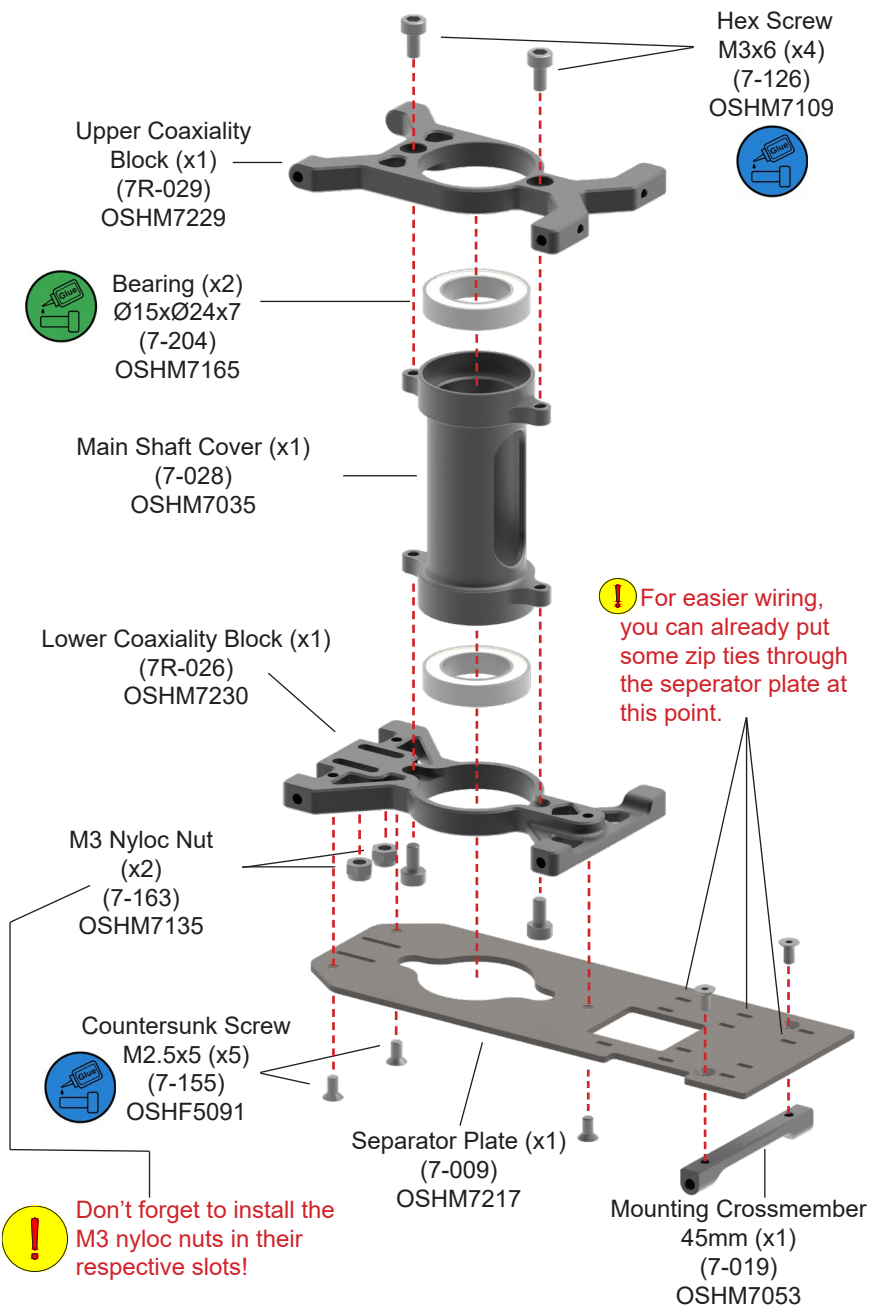
### Tail Rotor

- CW Yaw Blade Angle Limit: 44.5°
- CCW Yaw Blade Angle Limit: 31.2°

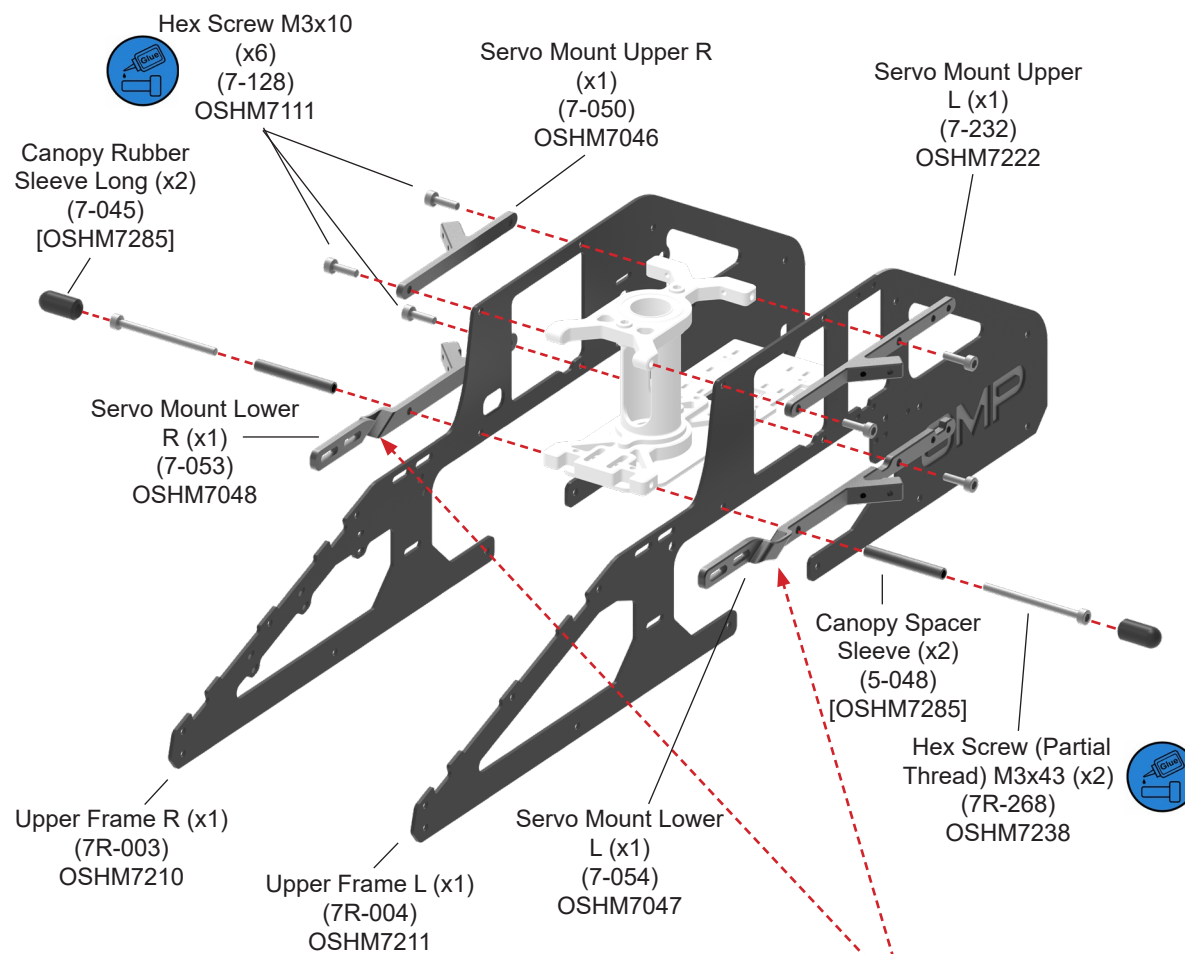
### Gear Ratios

- Tail Ratio: [22] : [110]
- Main Gear Ratio: [13] : [122]

### 01 Central Dome Assembly

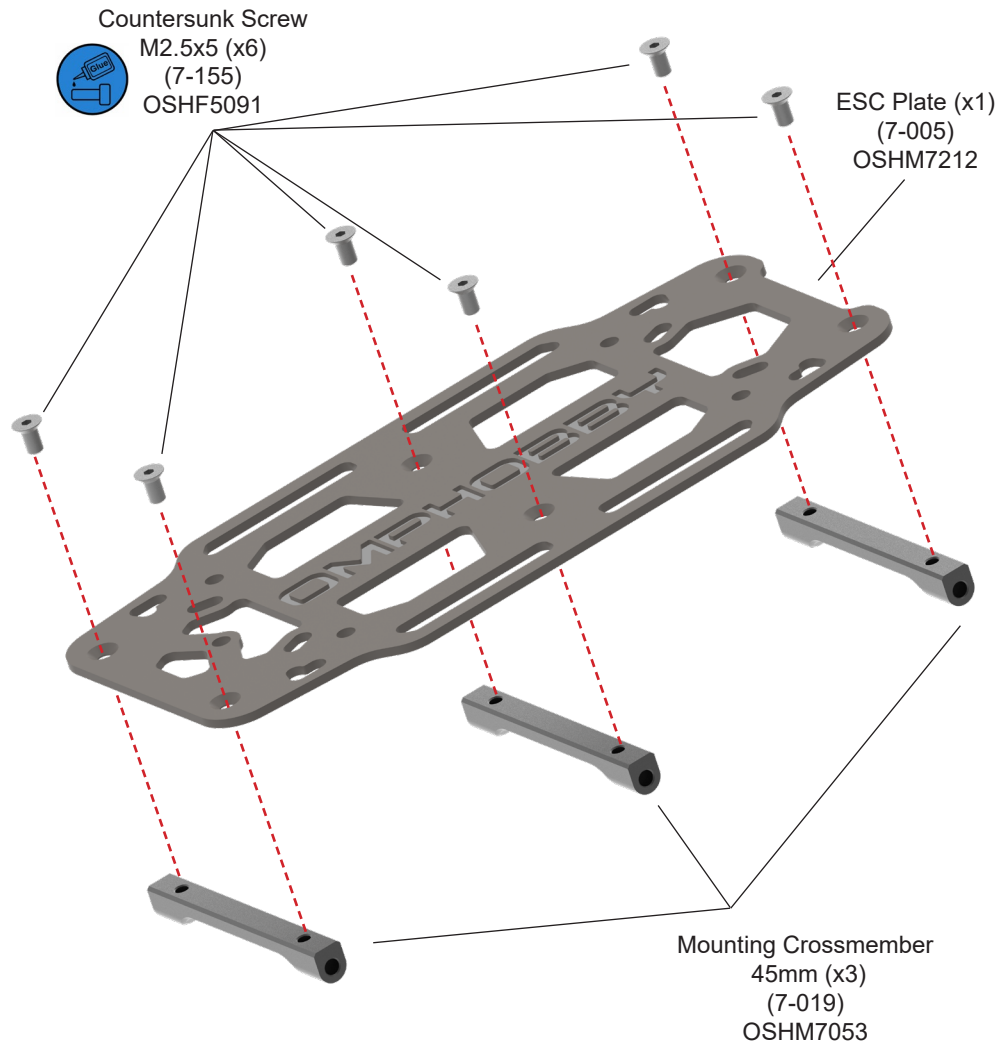


### 02 Upper Side Panel Assembly



**!** If you wish to route the ESC wires through the slots in the servo mounts, it is recommended to do so at this step, or to not apply thread locker to the screws of the respective mount yet.

### 01 ESC Plate Assembly



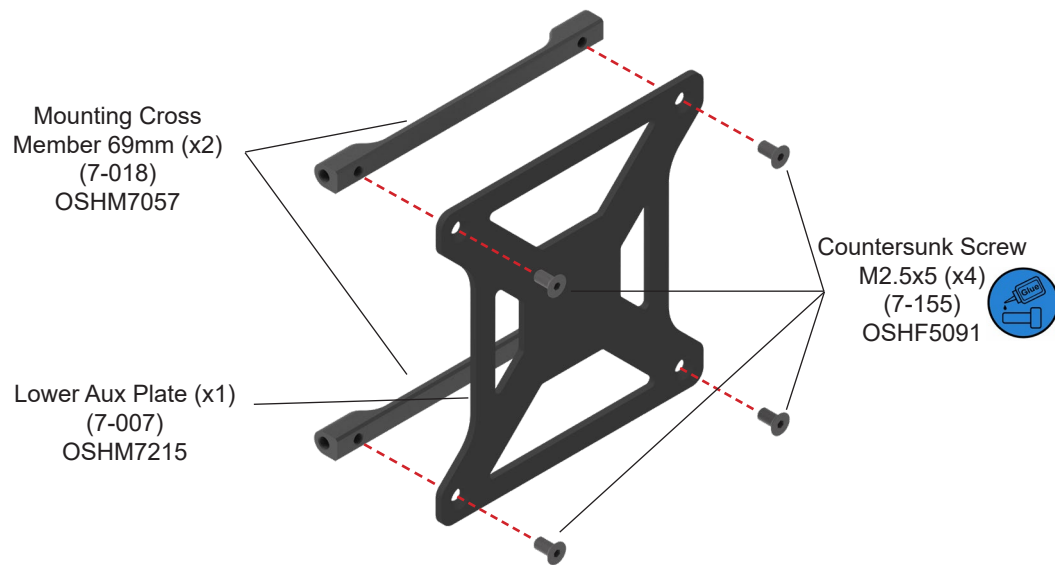
### 02 ESC Plate Installation

Hex Screw M3x5 (x6)  
(7R-269)  
OSHM7236

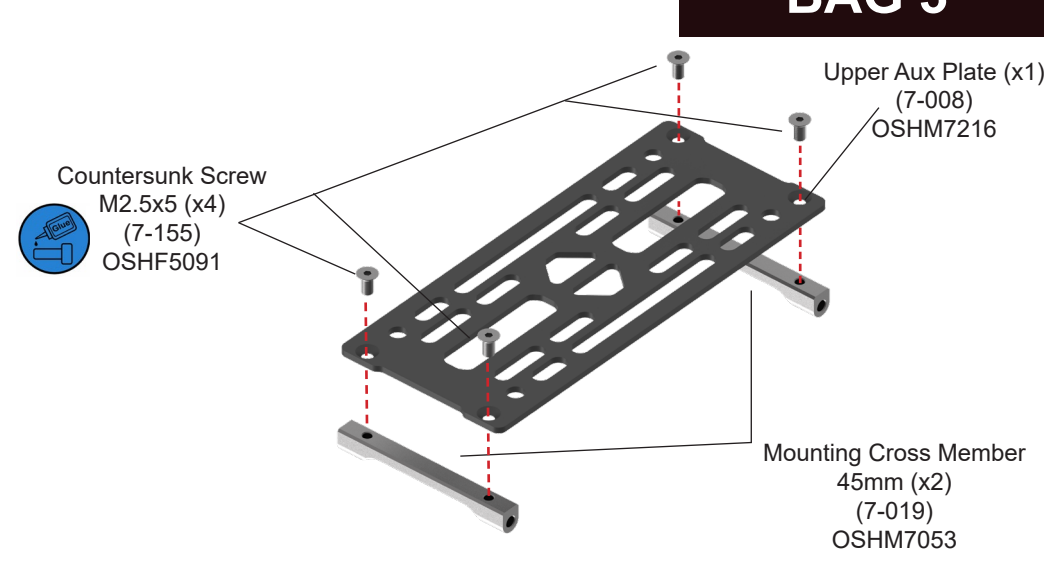
This diagram shows the ESC plate being installed onto the chassis. Six hex screws are used to secure the plate to the chassis frame. Red dashed lines indicate the placement of the screws. The chassis is shown in a light grey, semi-transparent view to show the internal components.

**BAG 3**

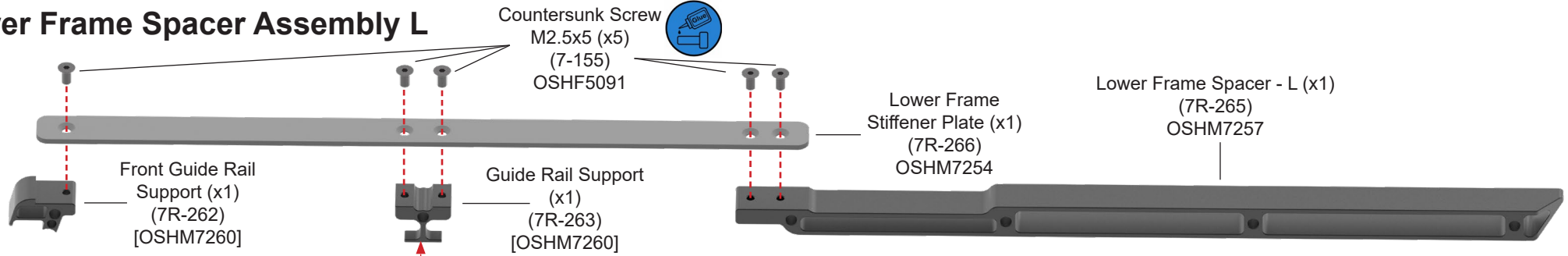
## 01 Lower Aux Plate Assembly



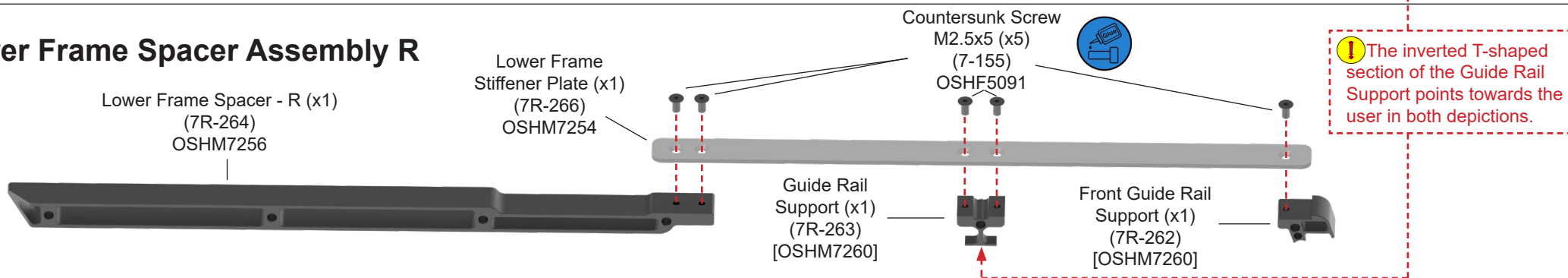
## 02 Upper Aux Plate Assembly



## 03 Lower Frame Spacer Assembly L

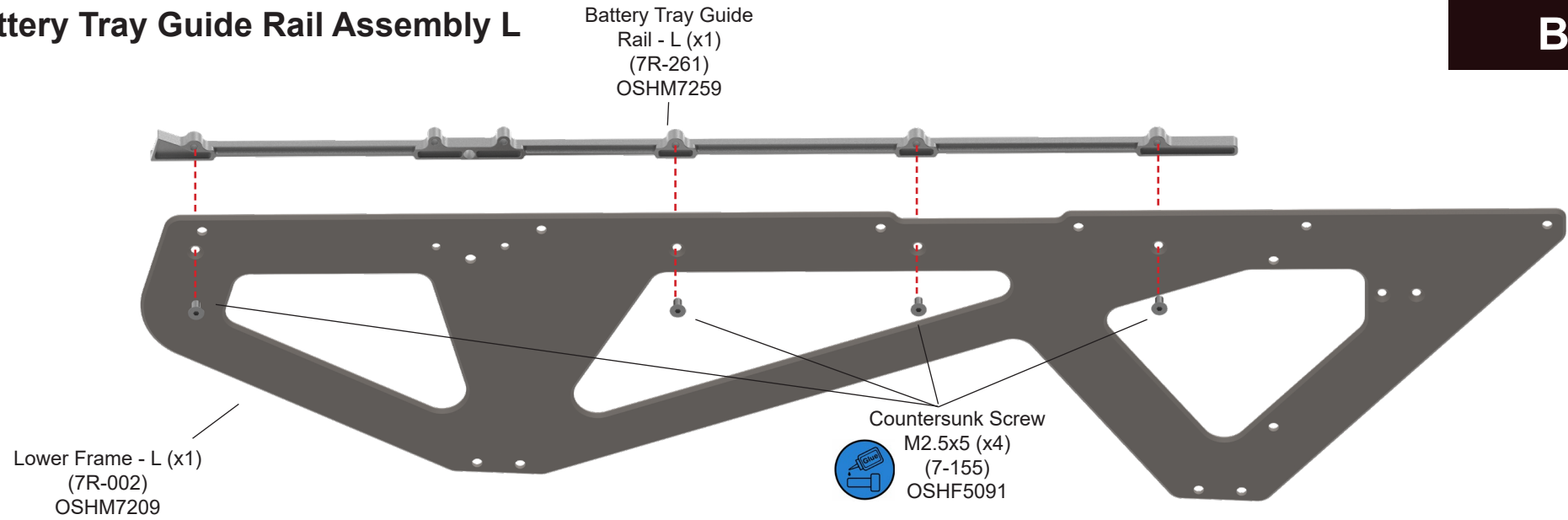


## 04 Lower Frame Spacer Assembly R

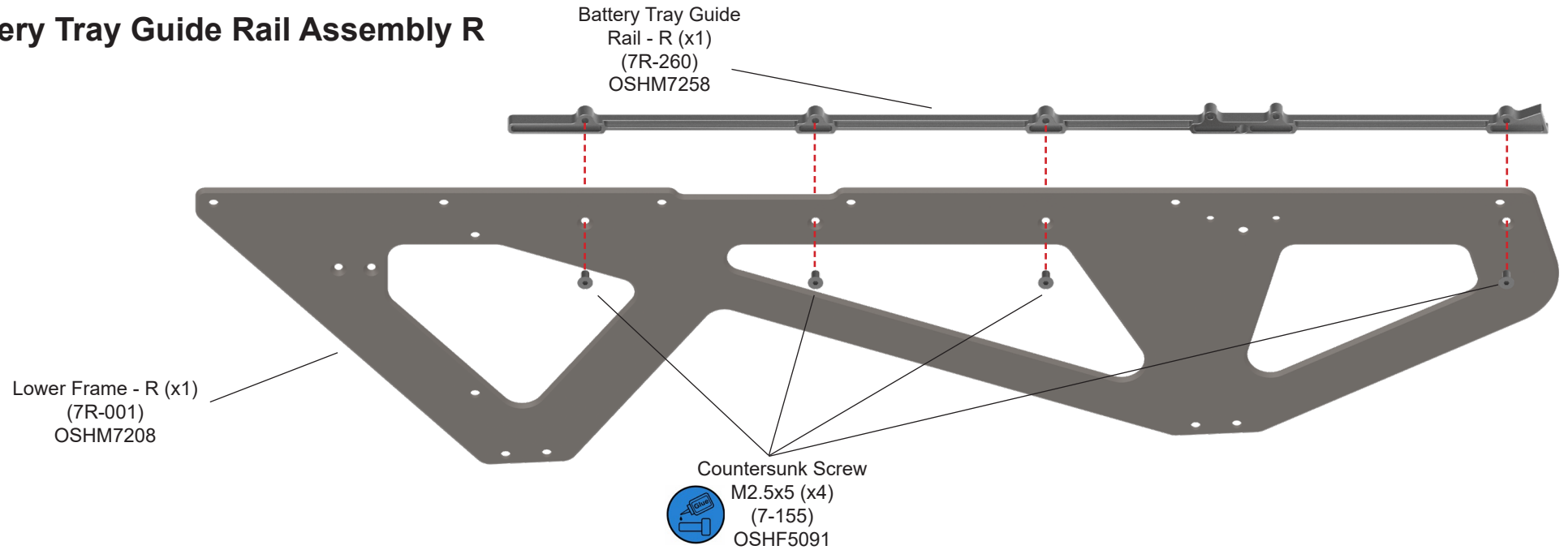


**BAG 4**

**01 Battery Tray Guide Rail Assembly L**

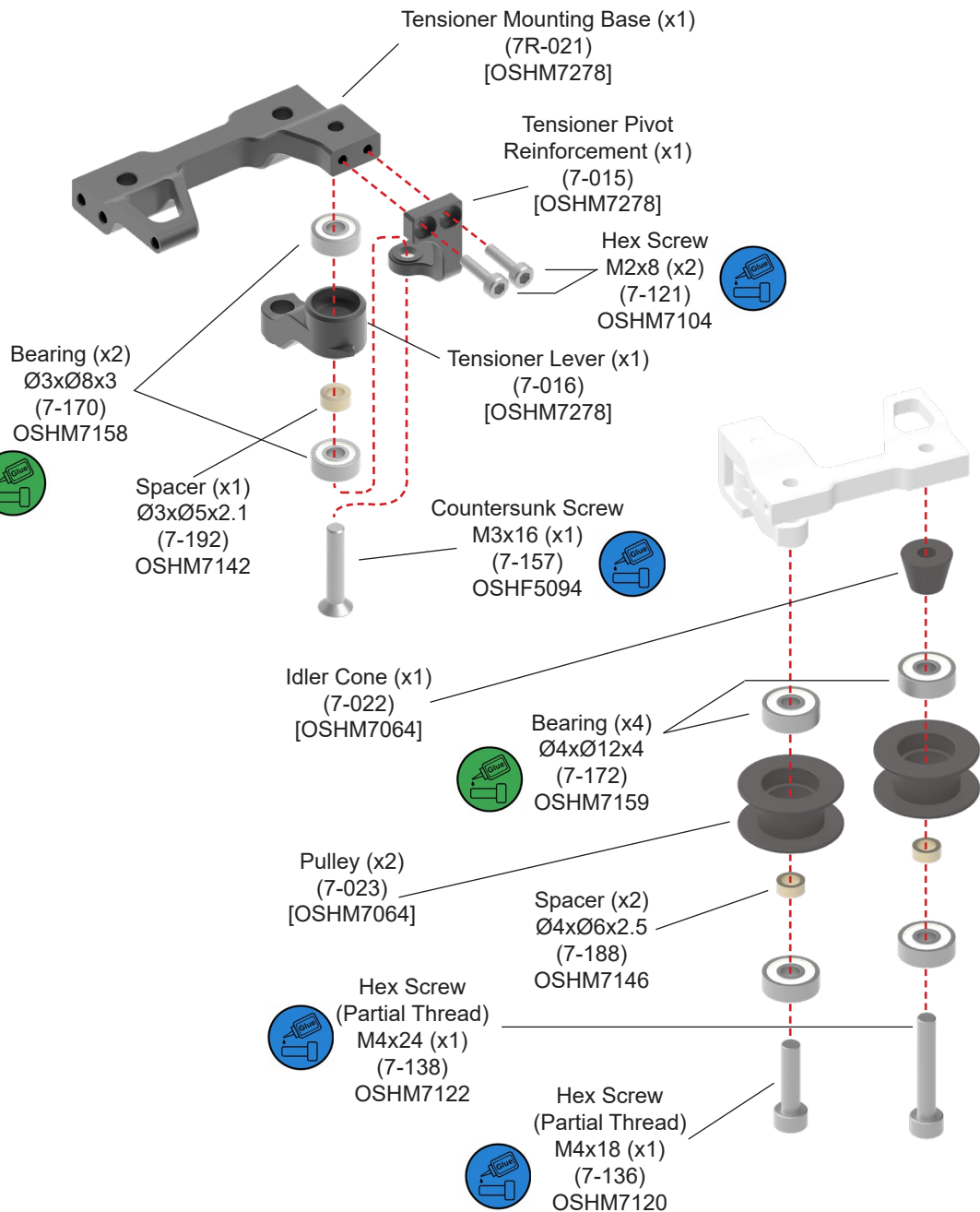


**02 Battery Tray Guide Rail Assembly R**

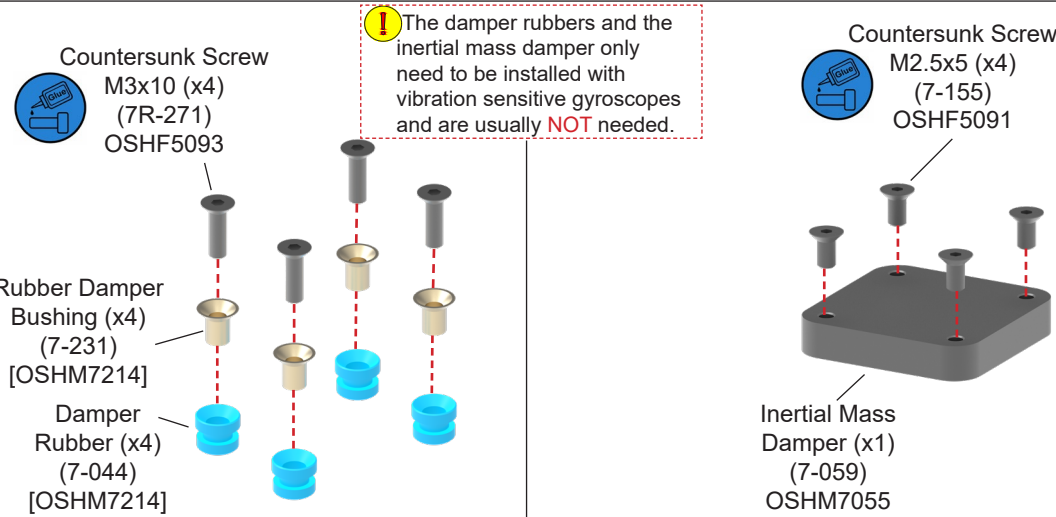
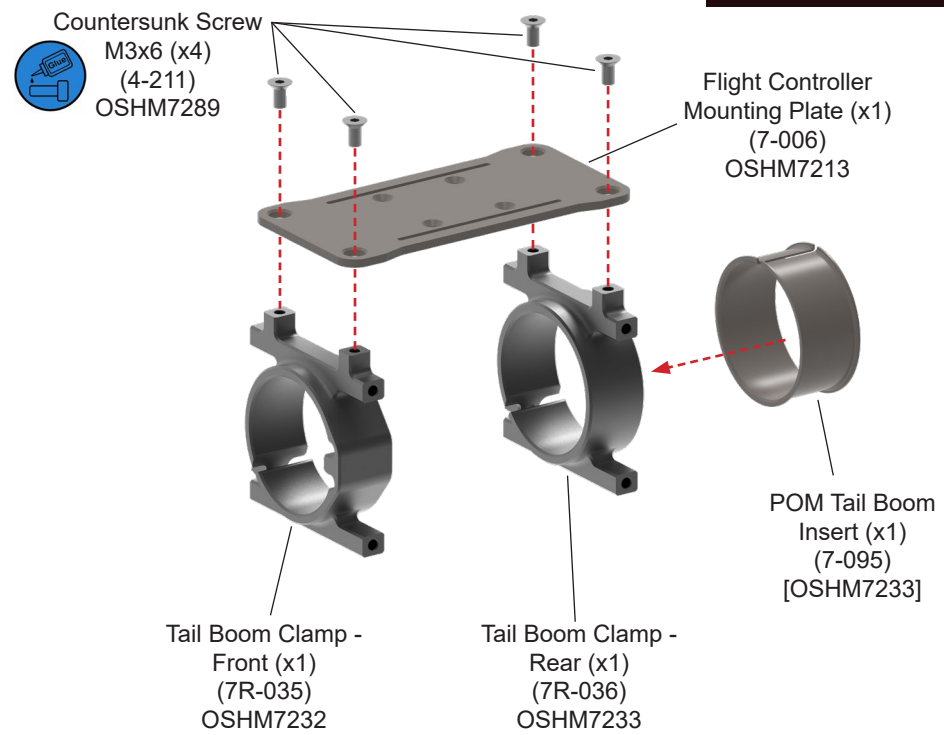


## BAG 5

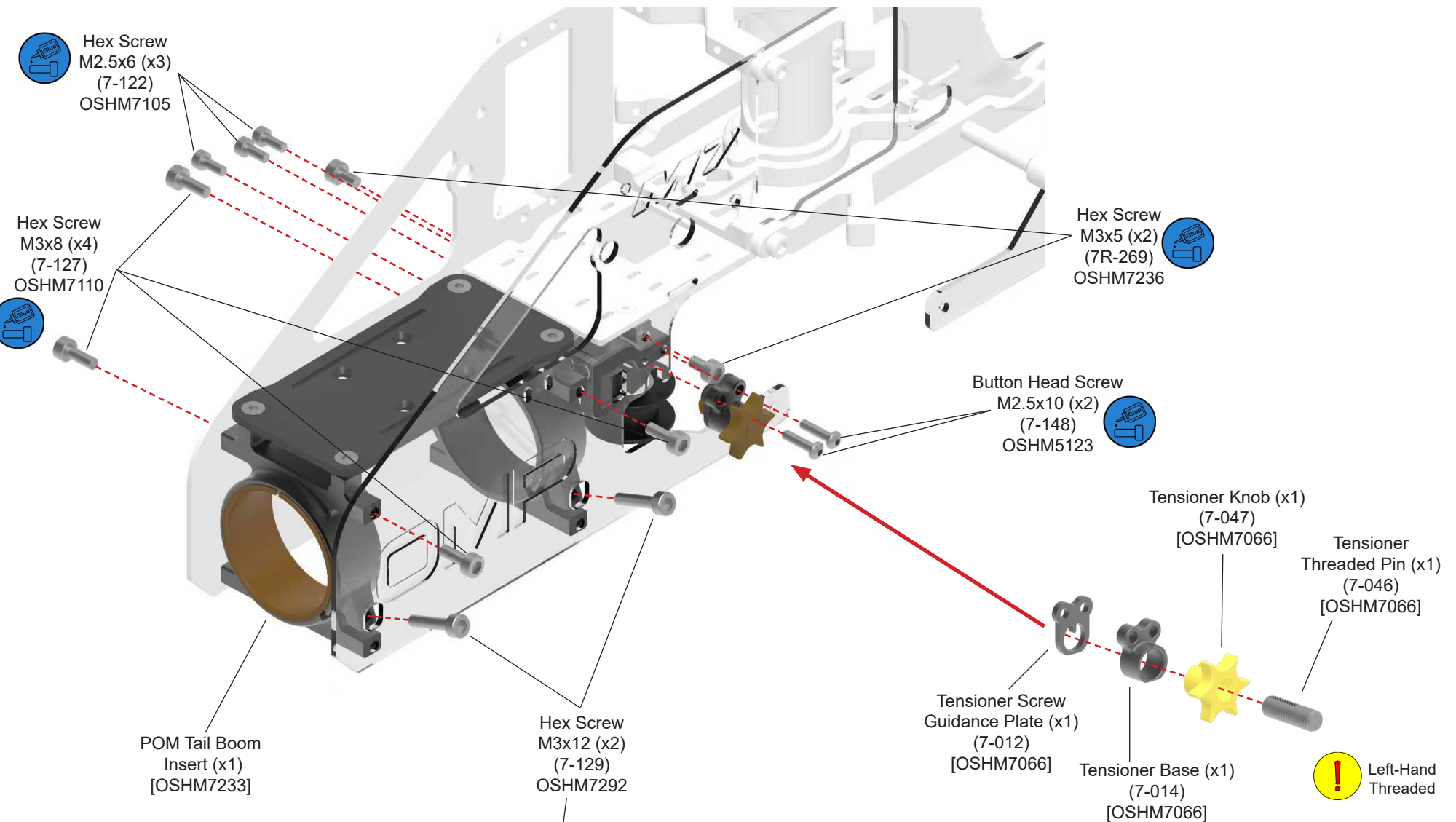
### 01 Tensioner Idler Pulley Assembly



### 02 Boom Clamp & FC Plate Assembly

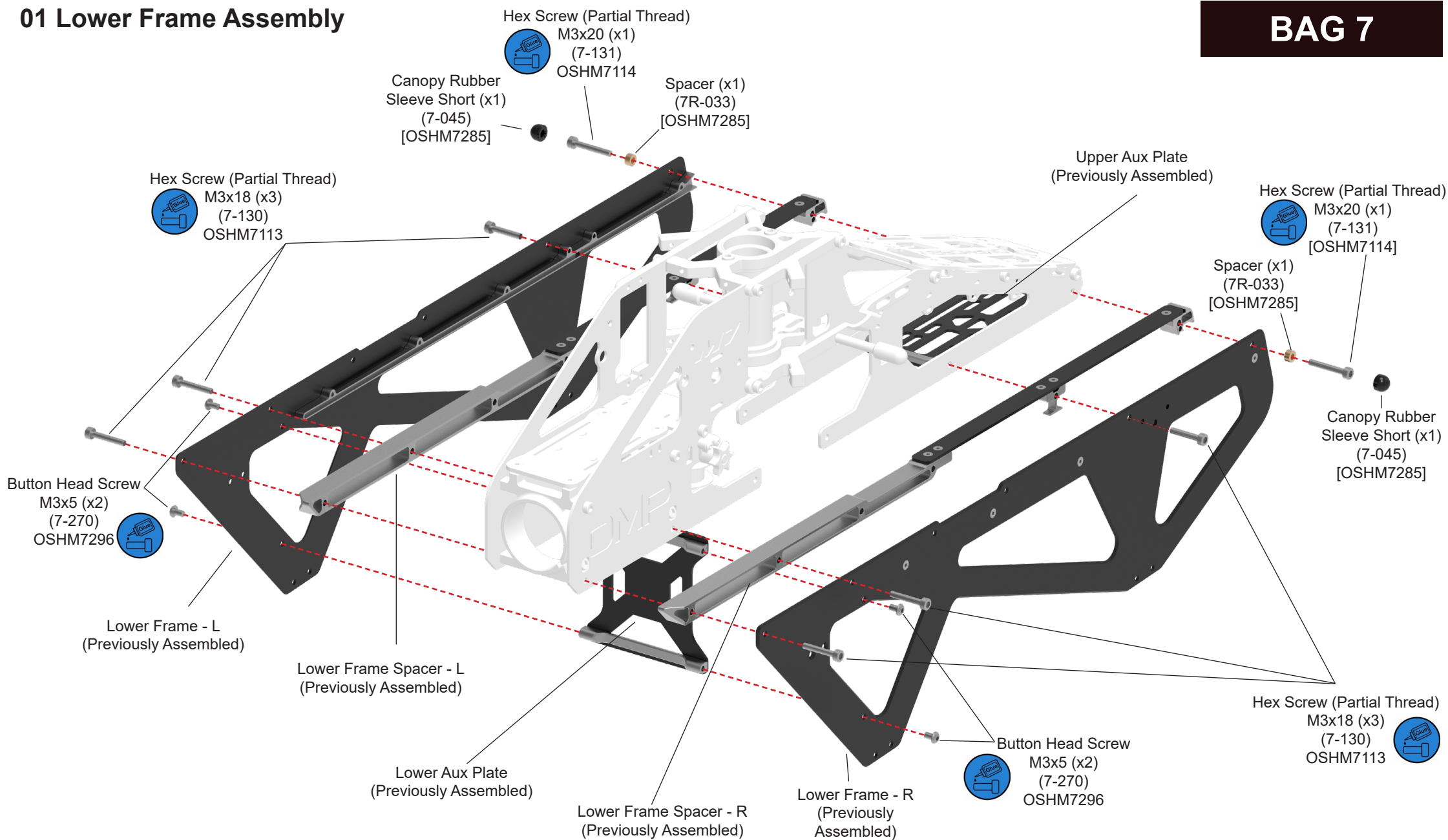


02 Tensioner and Boom Clamp Assembly



**!** The 2x M3x12 screws should be dry-fit and will be fully tightened at a later step in the assembly process.

### 01 Lower Frame Assembly

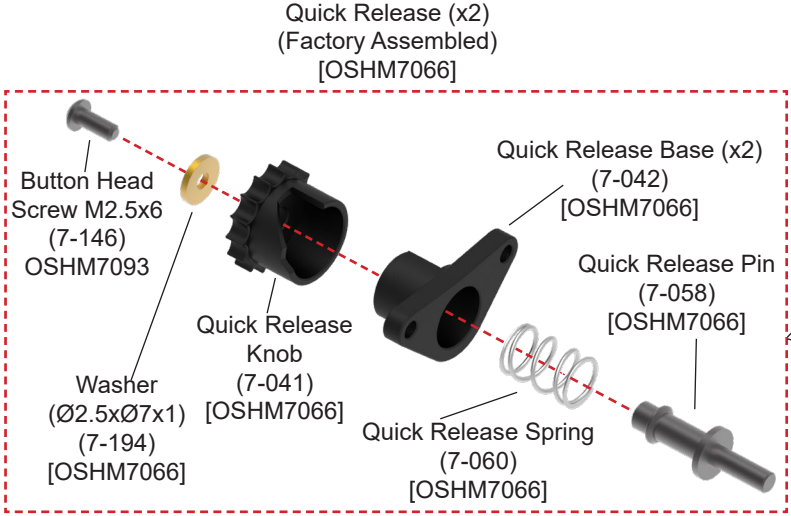


## 01 Battery Quick Release Assembly

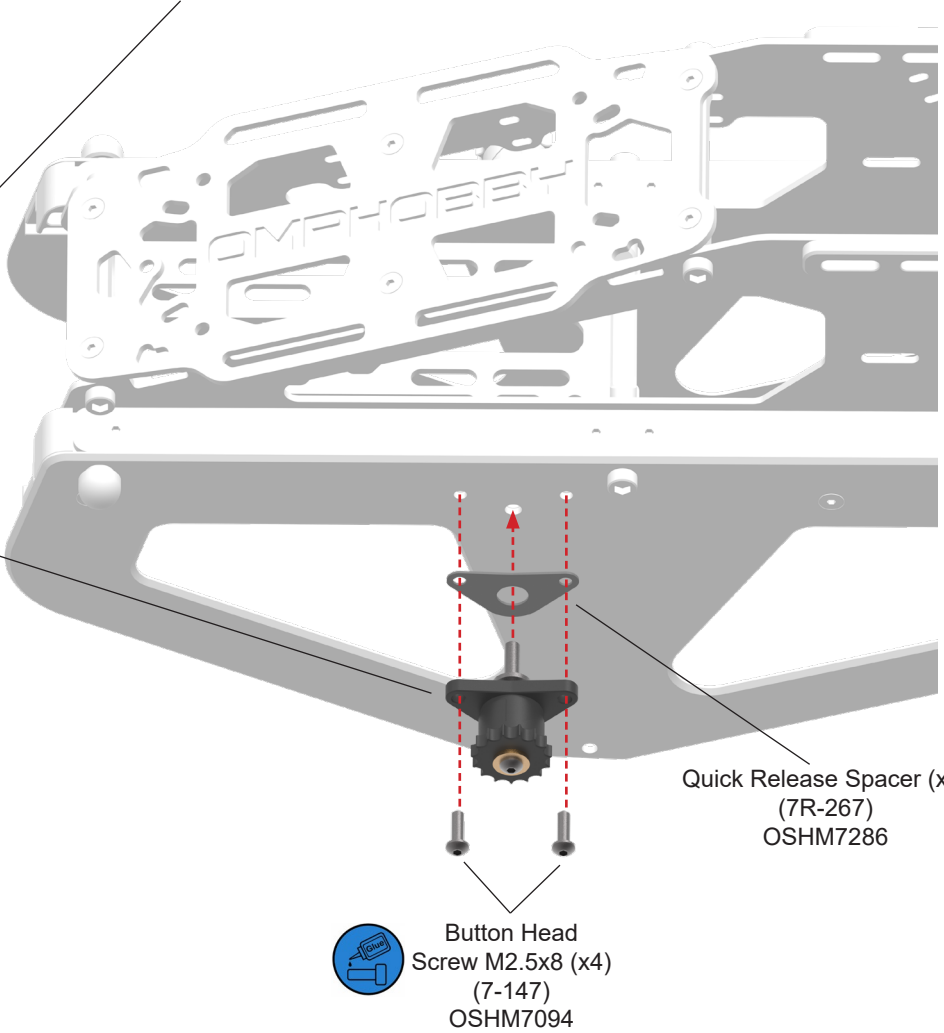
**BAG 8**



2x Quick release mechanism should be installed on both sides of the M7R. Installation procedure is identical on both sides.



The Quick Release Mechanism is pre-assembled at the factory. Its assembly is illustrated here for maintenance purposes.



## BAG 9

### 01 Servo Assembly and Installation

⚠ Your M7R comes with two types of servo alignment hardware. Choose the ones appropriate for your servo.  
**This affects only servos 2+3!**

Servo Bushing (x8)  
(6-134)  
OSHM6022

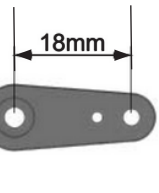
Metal Servo Arm - R  
(x1)  
(7-256)  
OSHM7194

Ball Screw  
M3xØ6x4.2  
(x3) (7-144)  
OSHM7131

Hex Screw M3x8  
(x3) (7-127)  
OSHM7110



Hex Screw M2.5x6  
(x3) (7-122)  
OSHM7105



**x2**  
Servos 1 and 3

**x1**  
Servo 2

Hex Screw M2.5x10  
(x8)  
(4-039)  
OSHM5123



Servo Spacer (x4)  
(7-038)  
OSHM7044

Metal Servo Arm - L  
(x1)  
(7-255)  
OSHM7193

Hex Screw M2.5x10  
(x4)  
(4-039)  
OSHM5123



**2**

**1**

⚠ We recommend applying thread locker directly to the threaded bore. This prevents loss of thread locker inside the servo spacers.

**3**

Metal Servo Arm - R  
(x1)  
(7-256)  
OSHM7194

Servo Nut CNC  
4mm (x2)  
(7-209)  
OSHM7043

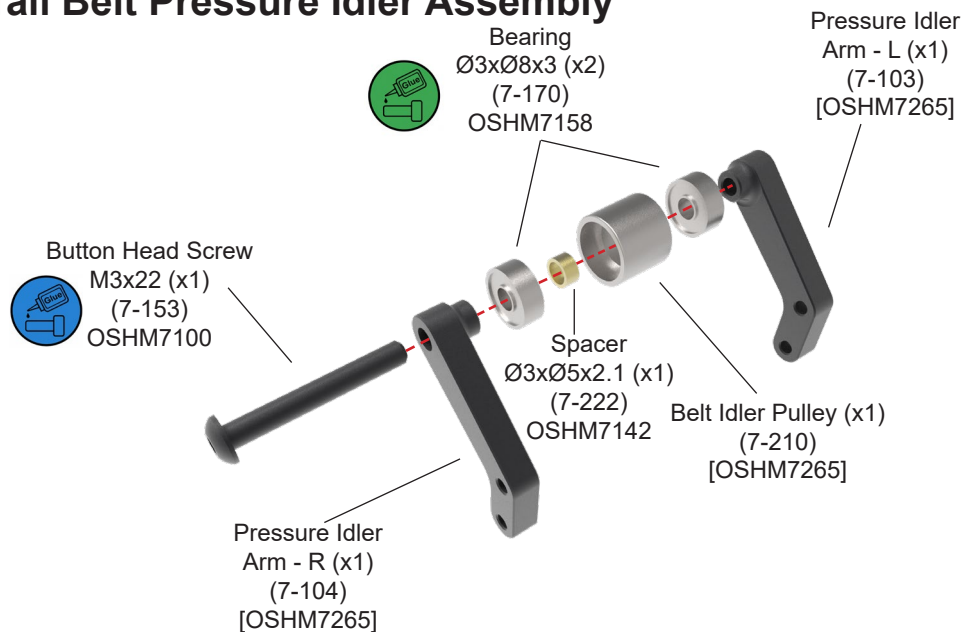
Servo Nut CNC  
5mm (x2)  
(7-037)  
OSHM7045

⚠ Your M7R comes with two sets of CNC servo alignment nuts, featuring 4mm studs (marked with a triangle) and 5mm studs. Choose the ones appropriate for your servo.  
**This affects only servo 1!**

⚠ For easier installation, you may assemble the servo horn of the rear servo (1) after installing the servo into the frame.

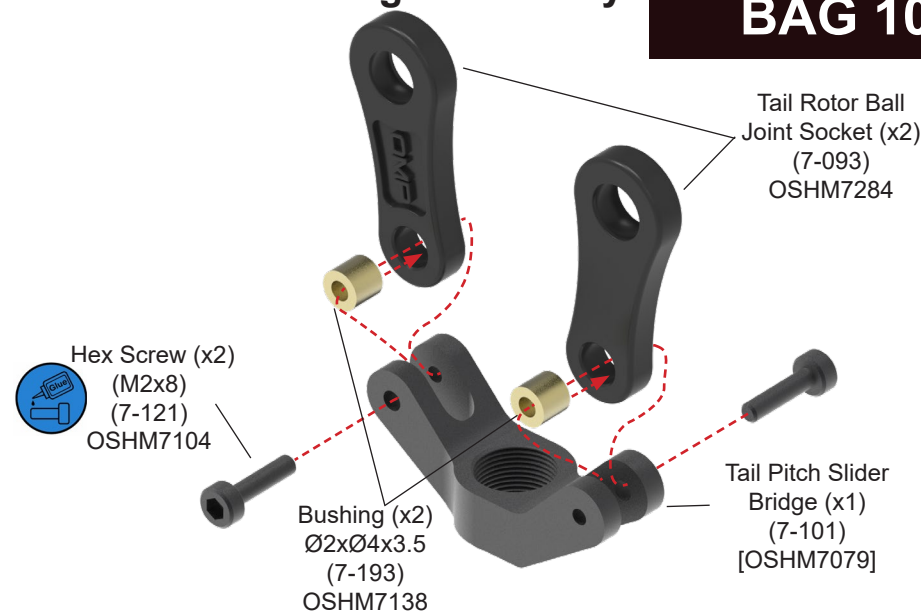
⚠ The shown Servos are an optional part.

## 01 Tail Belt Pressure Idler Assembly

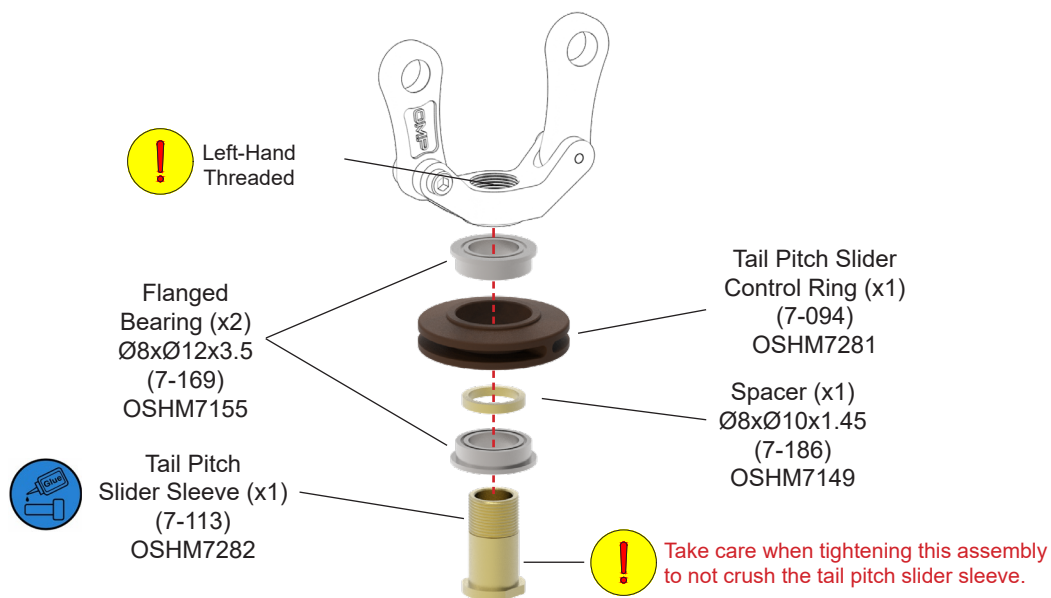


## 02 Tail Pitch Slider Bridge Assembly

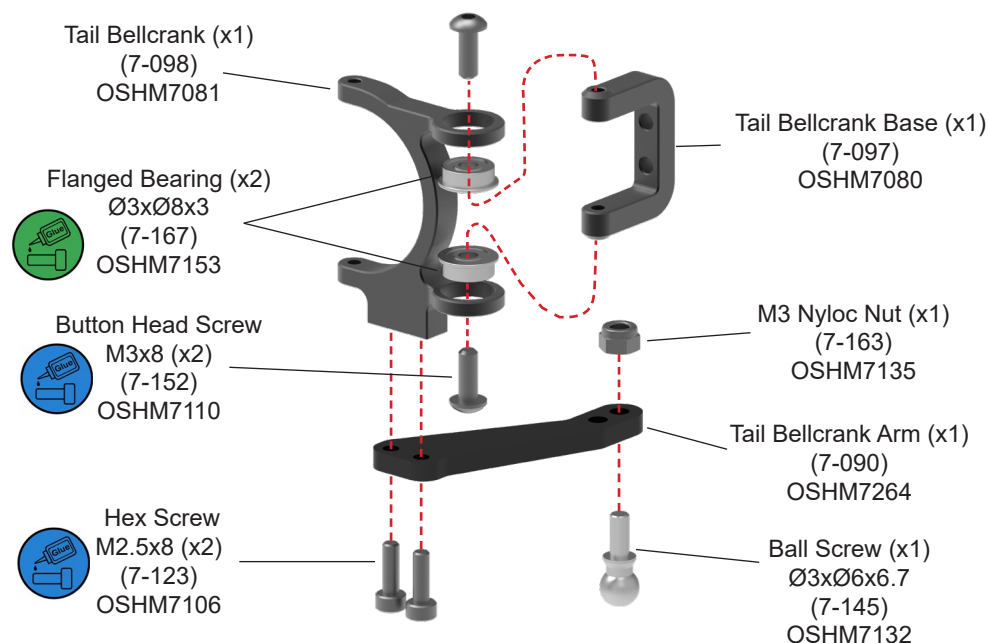
**BAG 10**



## 03 Tail Pitch Slider Ring Assembly

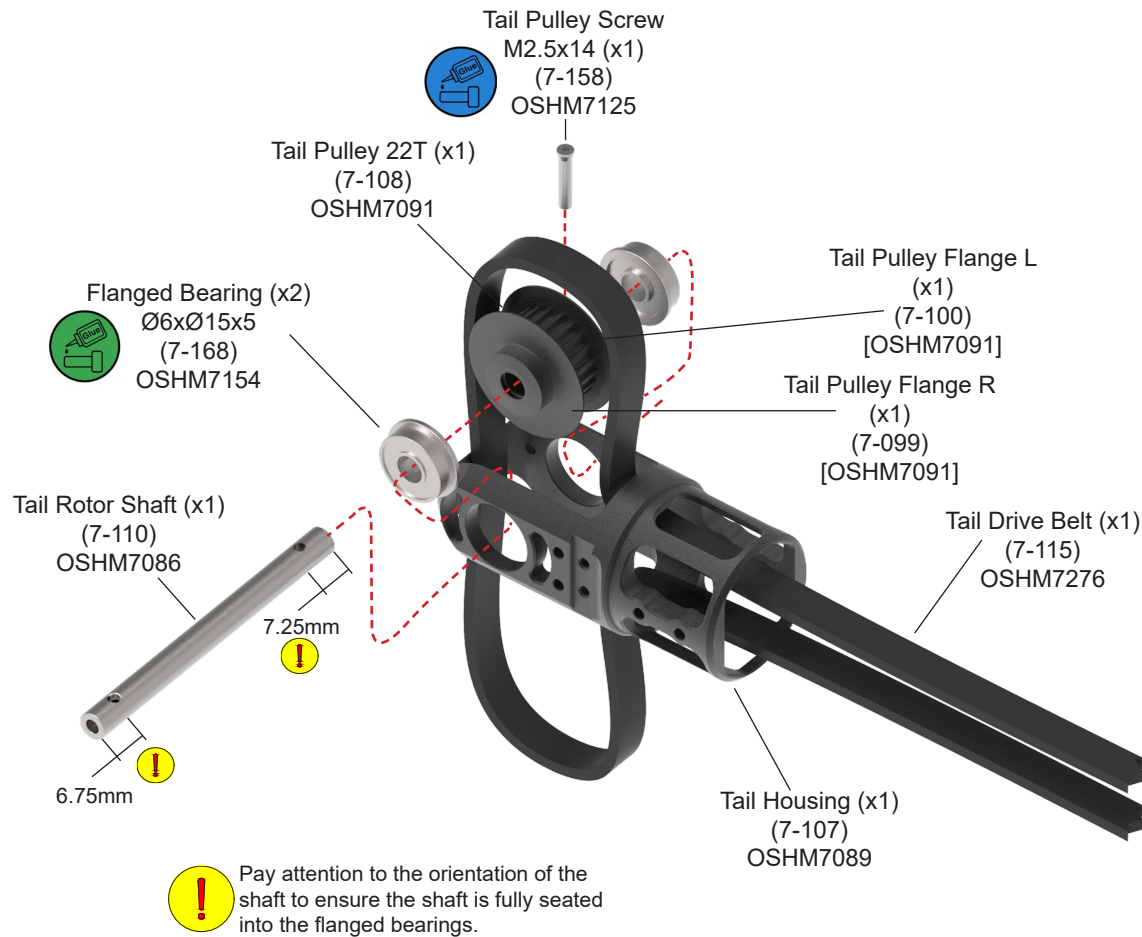


## 04 Tail Bellcrank Assembly

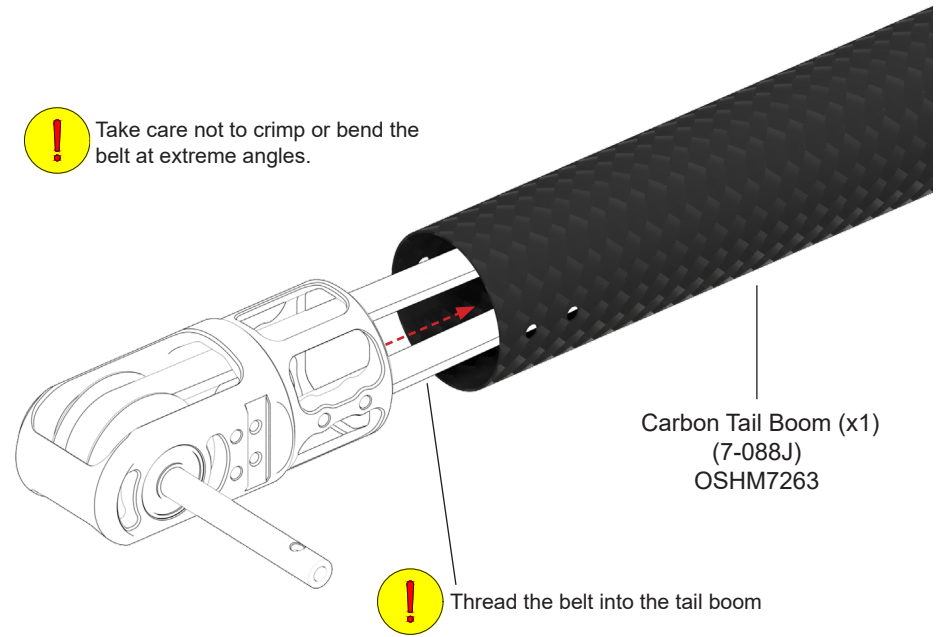


**BAG 11**

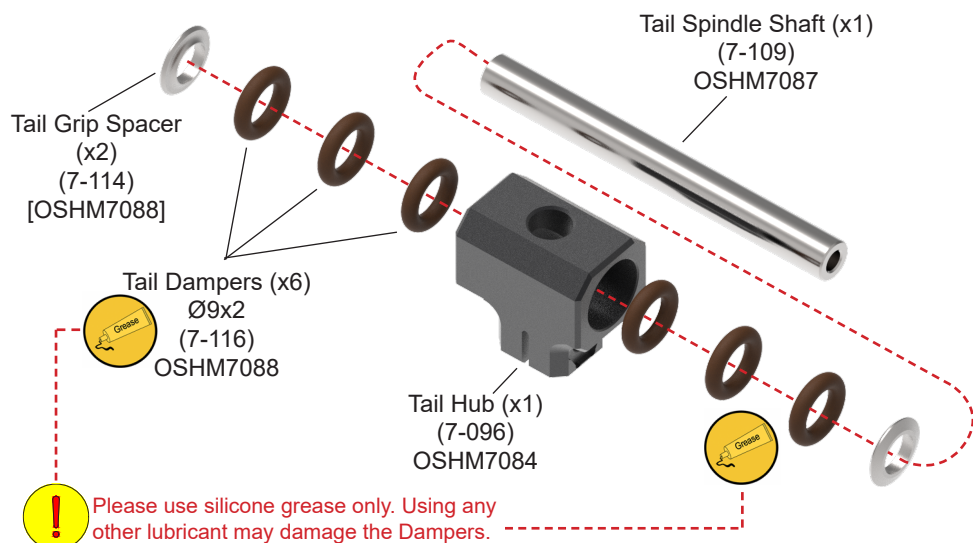
**01 Tail Gearbox Assembly**



**02 Tail Gearbox Installation**

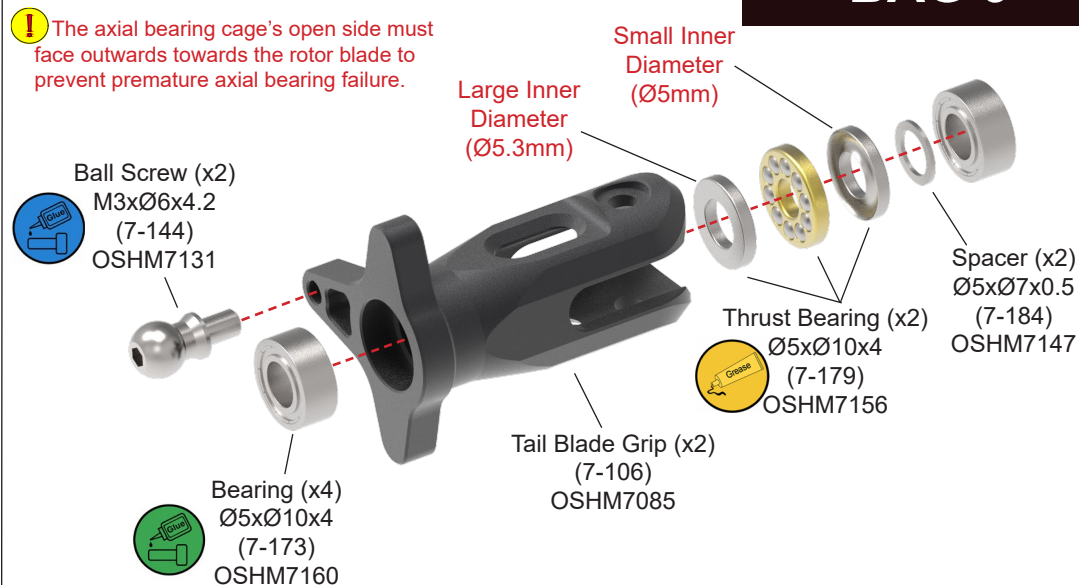


## 01 Tail Rotor Hub Assembly

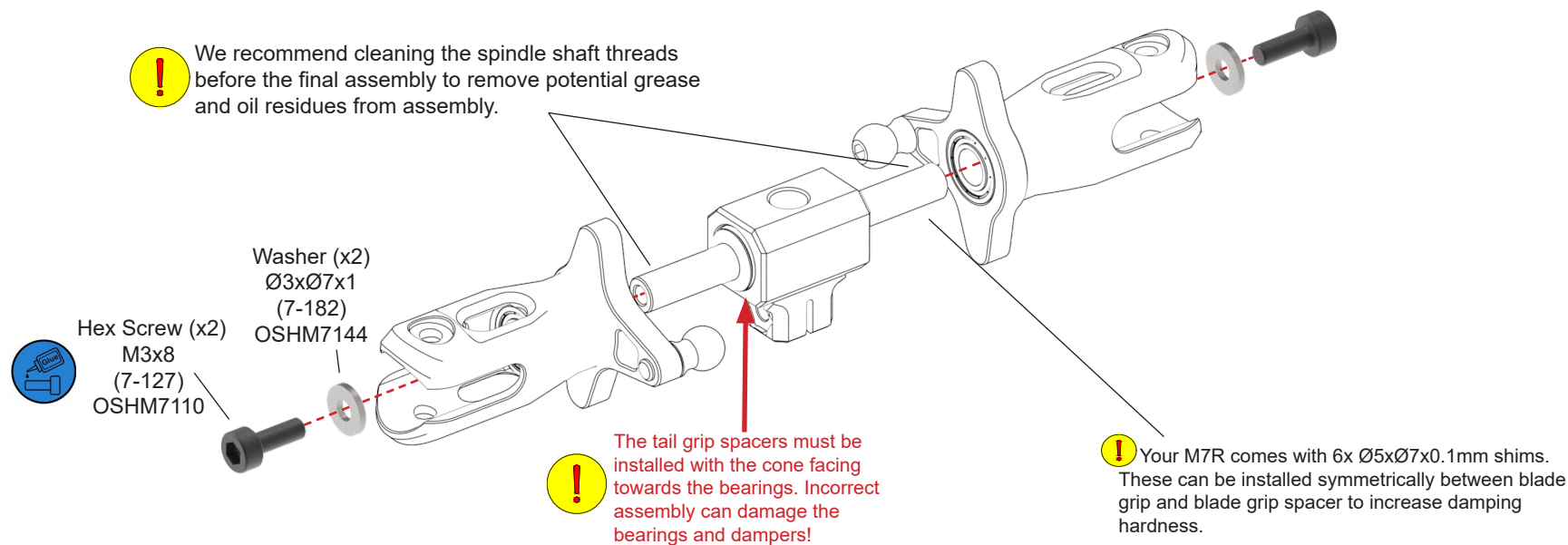


## 02 Tail Rotor Blade Grip Assembly

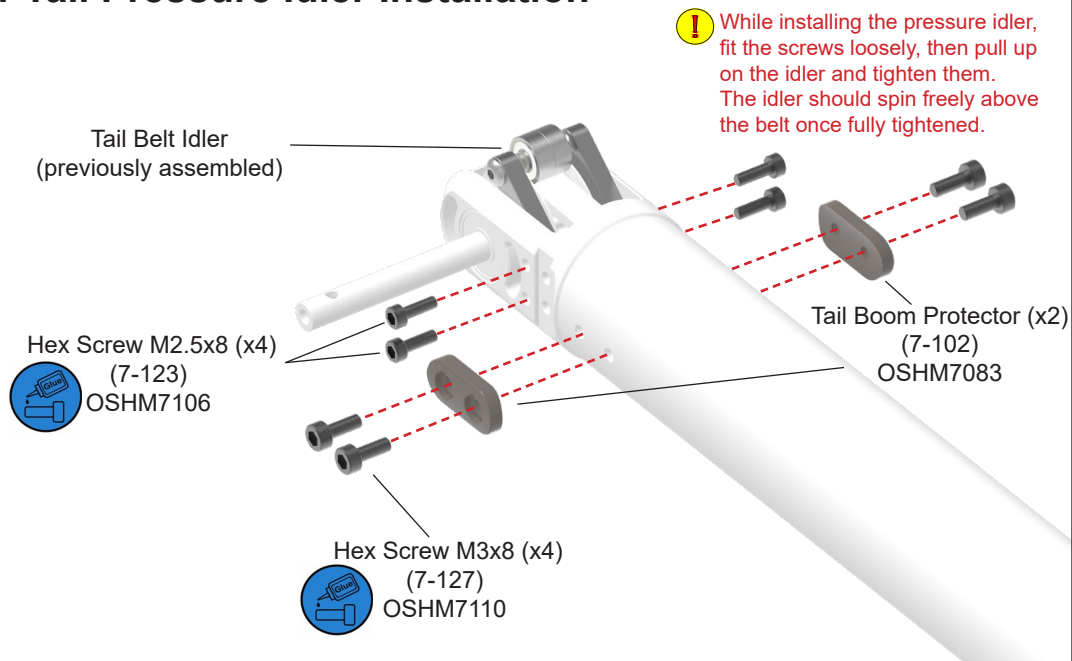
**BAG 9**



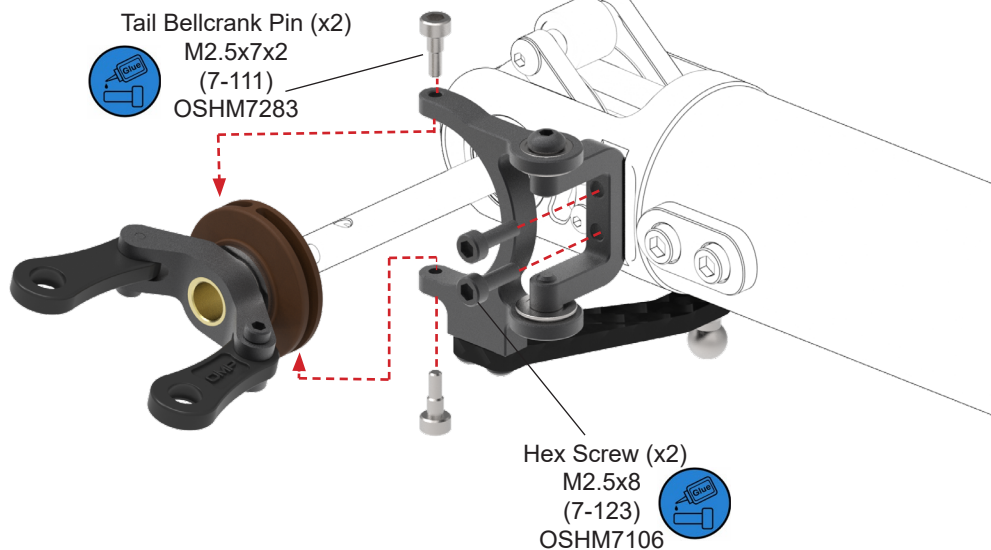
## 03 Tail Rotor Head Assembly



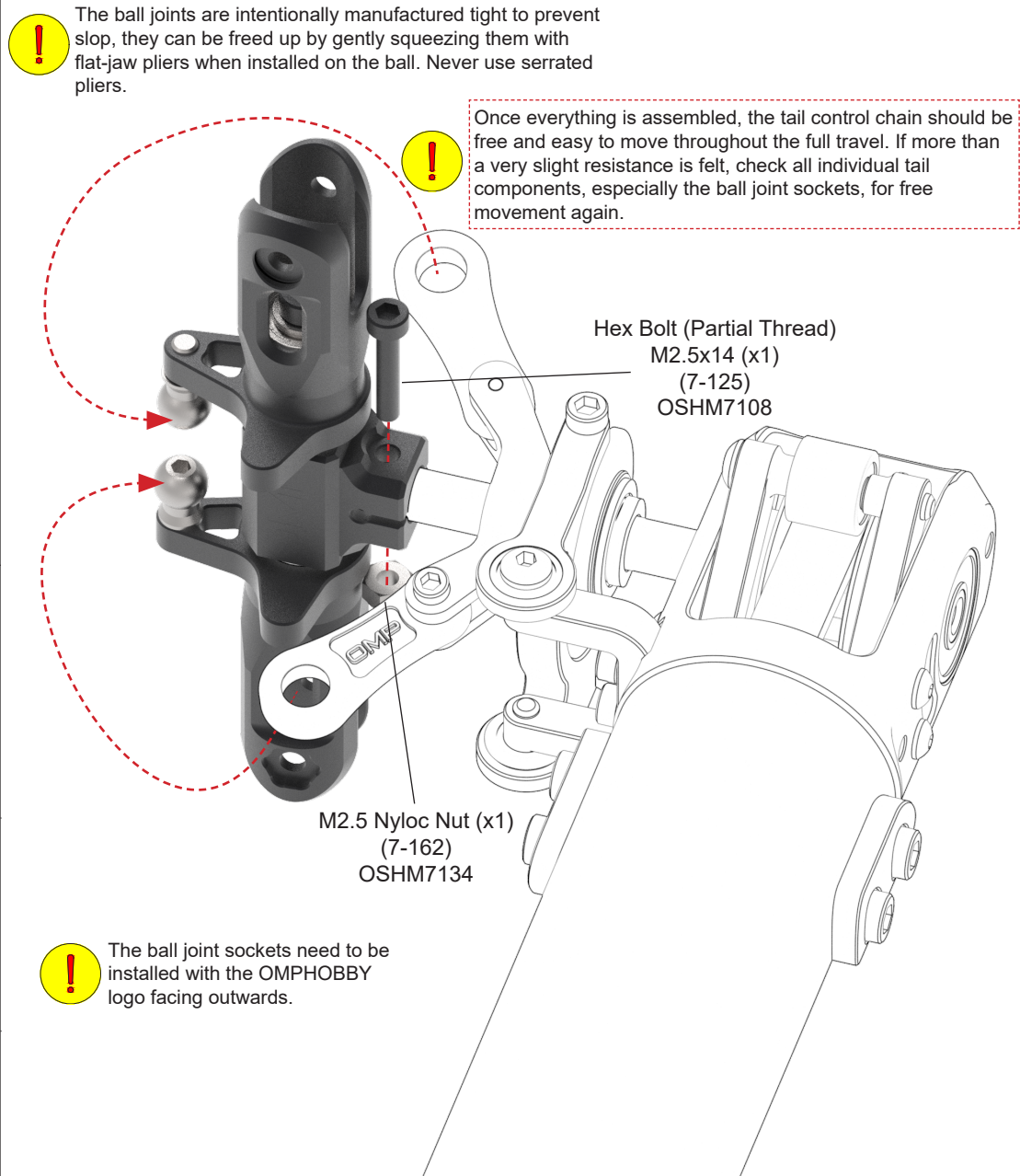
### 01 Tail Pressure Idler Installation



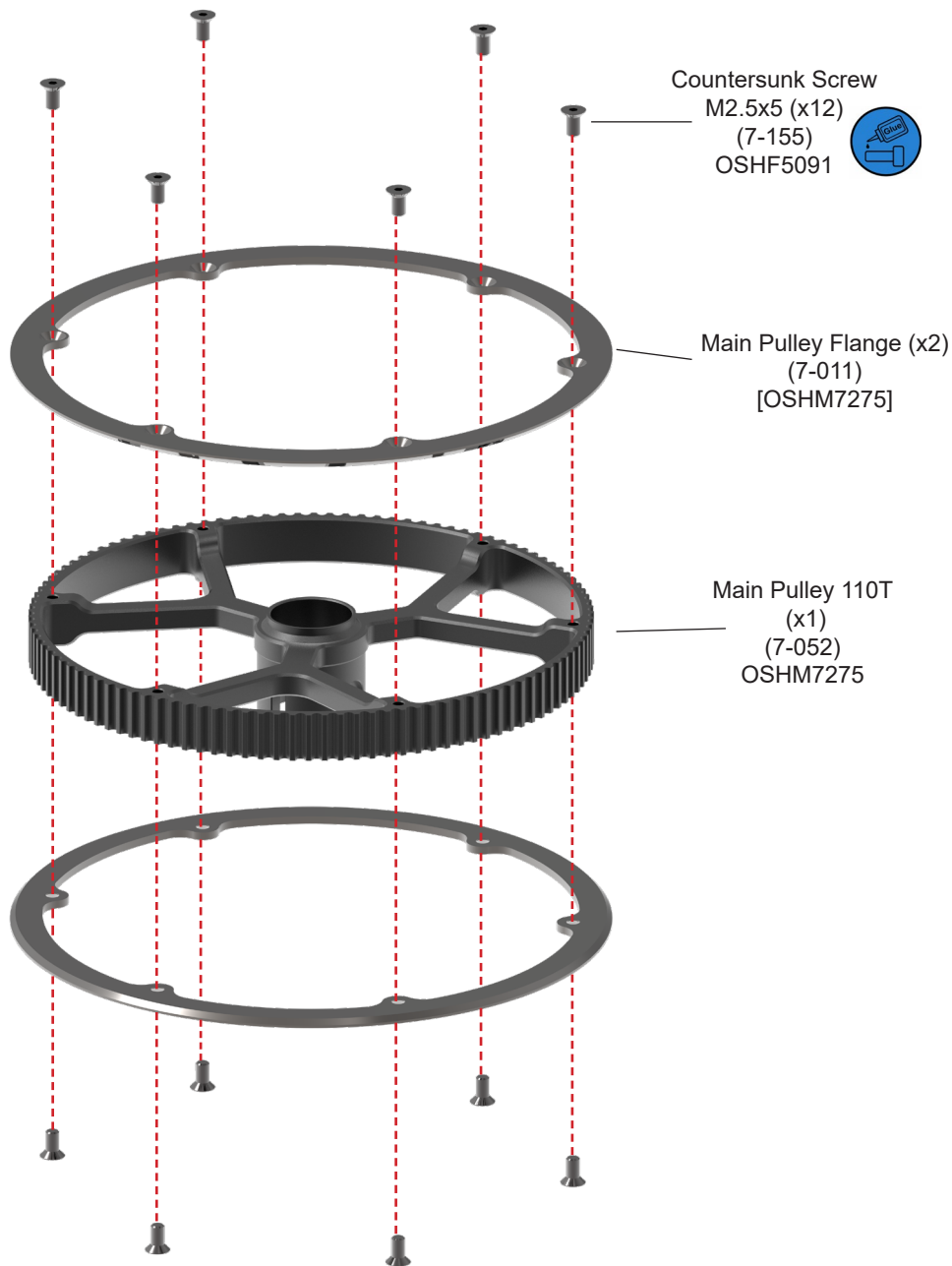
### 02 Tail Pitch Slider Installation



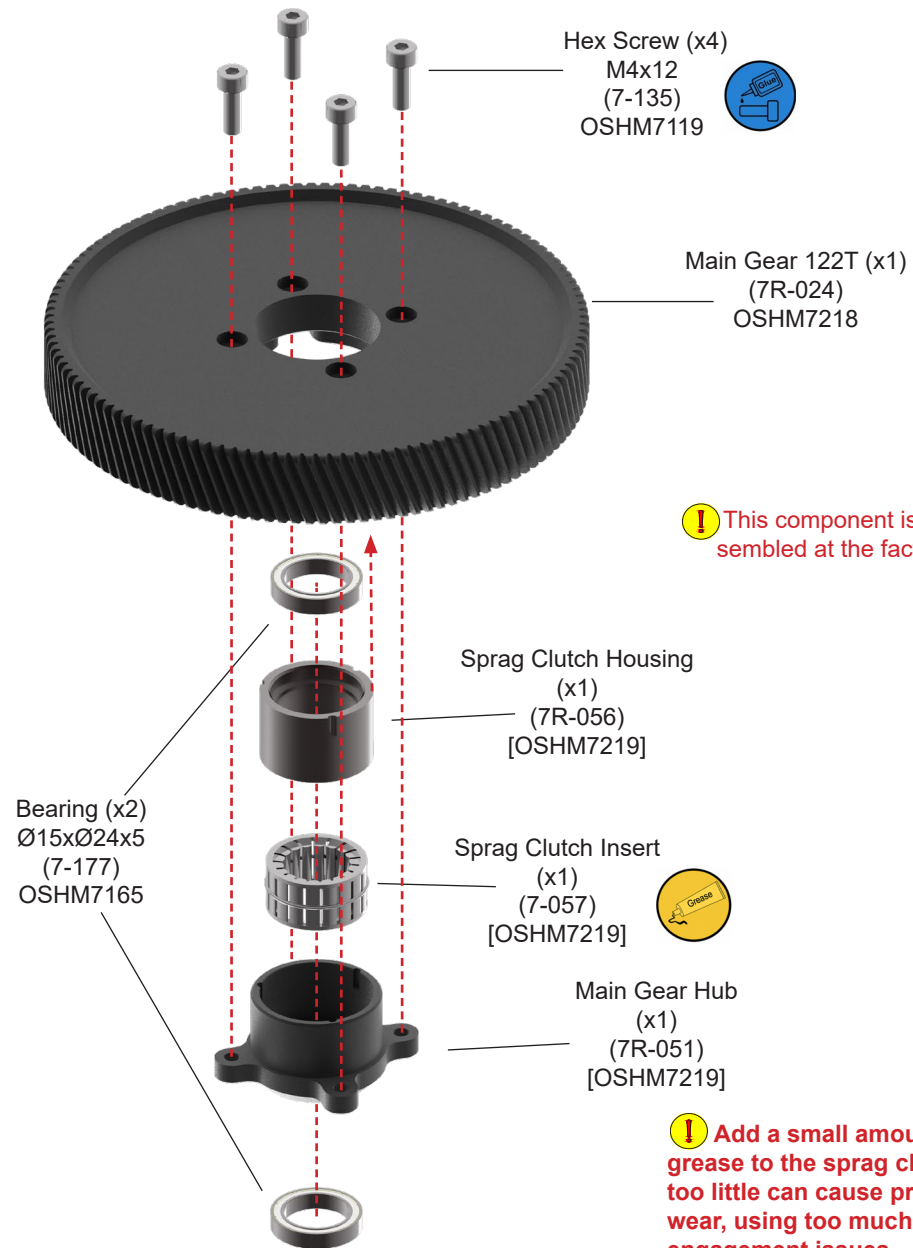
### 03 Tail Rotor Installation



**01 Main Pulley Assembly**



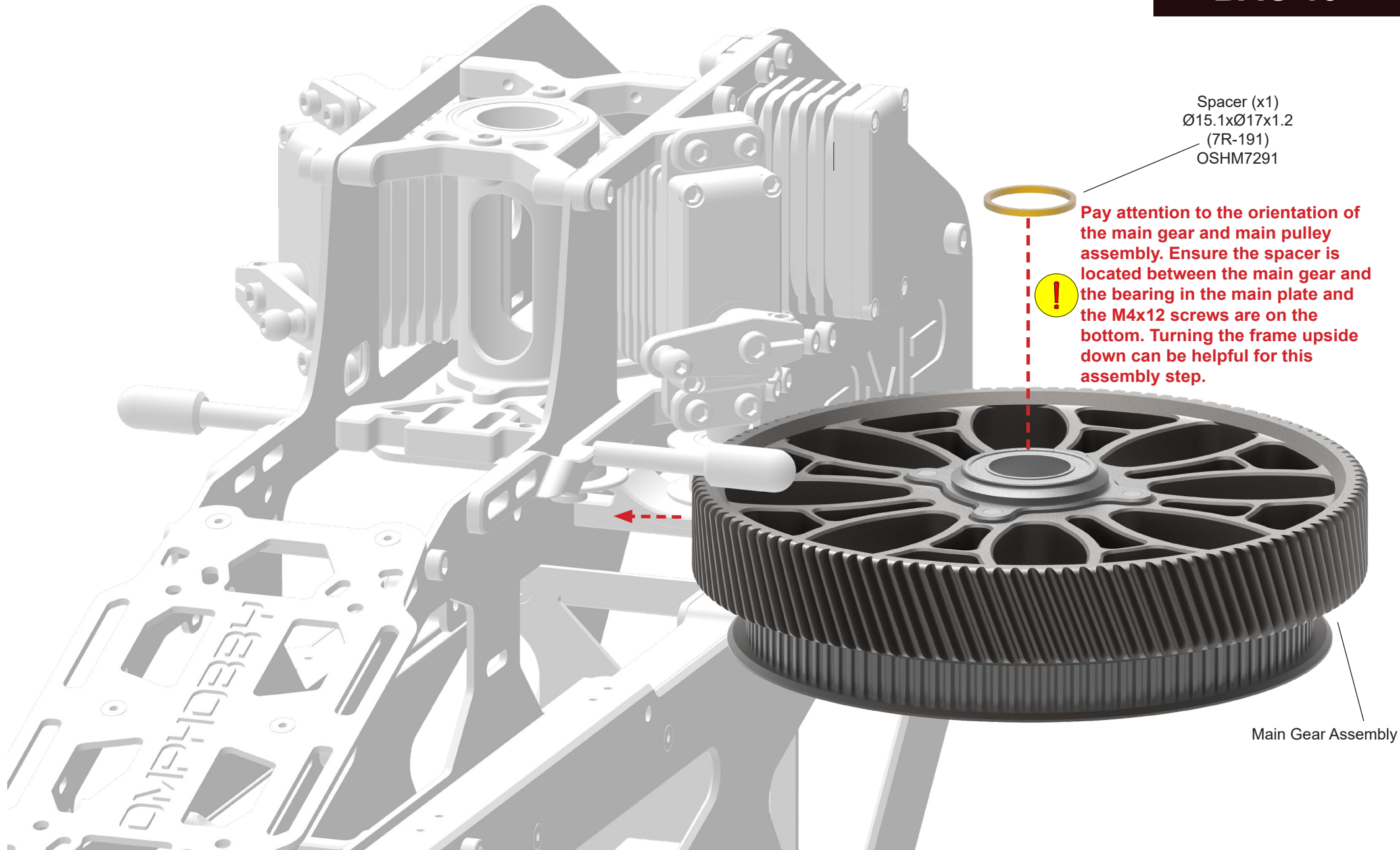
**02 Main Gear Assembly**



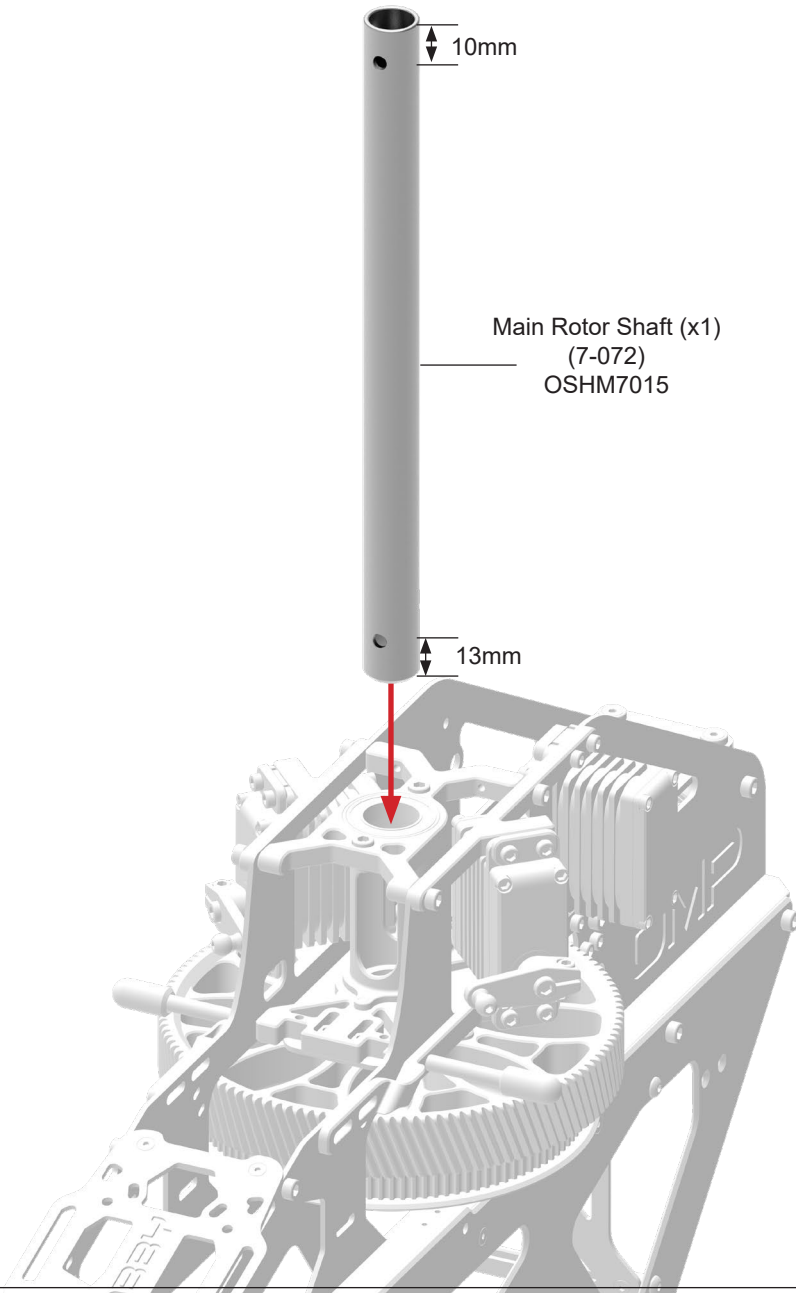
! This component is assembled at the factory

! Add a small amount of bearing grease to the sprag clutch. Using too little can cause premature sprag wear, using too much can cause engagement issues.

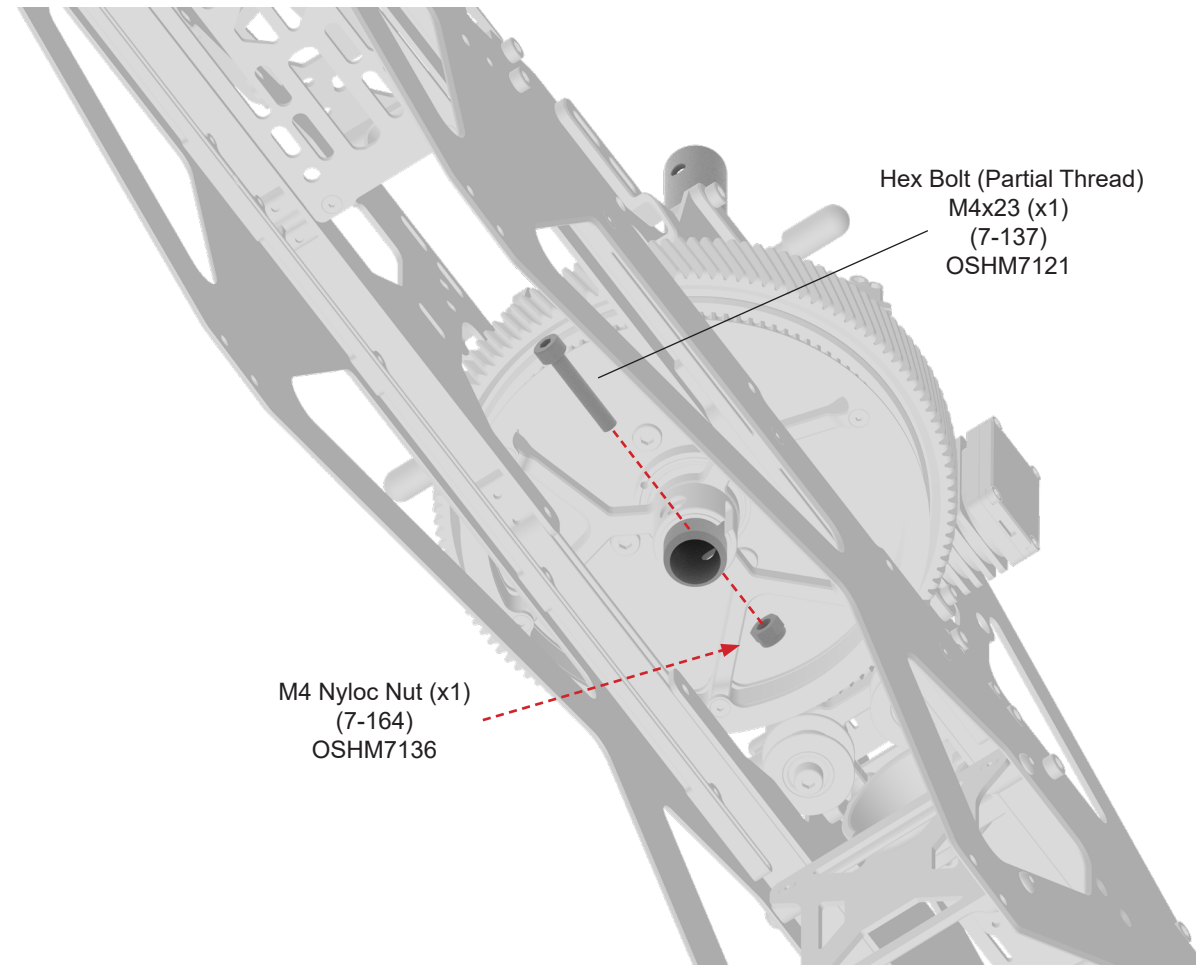
### 01 Pre-installation of the Main Gear



### 01 Main Rotor Shaft Installation



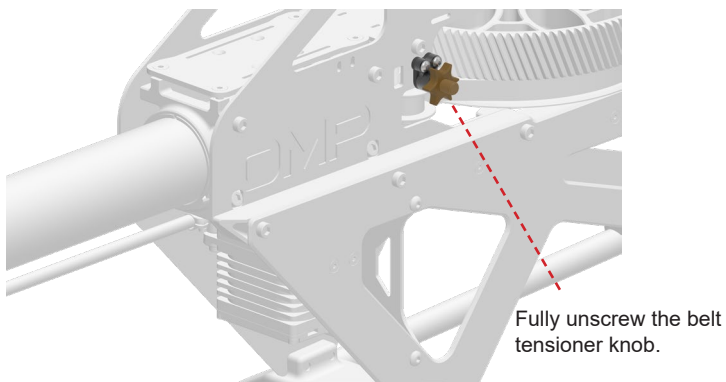
### 02 Lower Main Shaft Bolt Installation



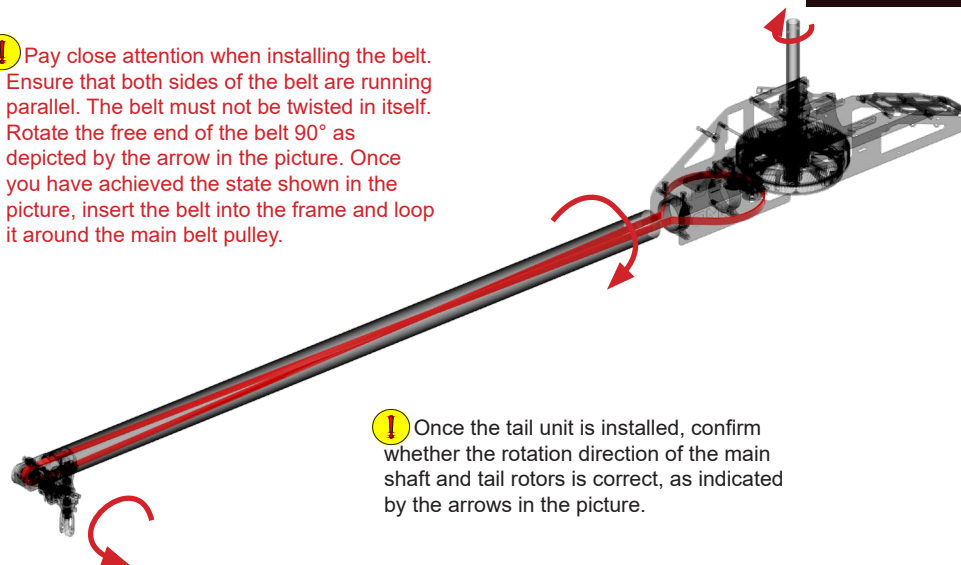
### 01 Attach the Tail Boom Assembly to the Frame

### 02 Belt Tensioning Procedure

#### Step 1

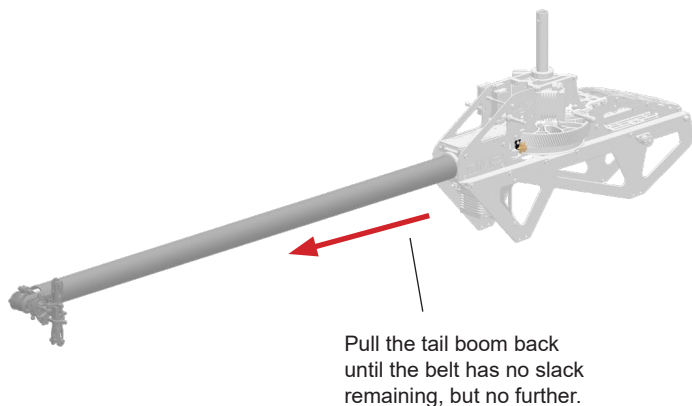


! Pay close attention when installing the belt. Ensure that both sides of the belt are running parallel. The belt must not be twisted in itself. Rotate the free end of the belt 90° as depicted by the arrow in the picture. Once you have achieved the state shown in the picture, insert the belt into the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

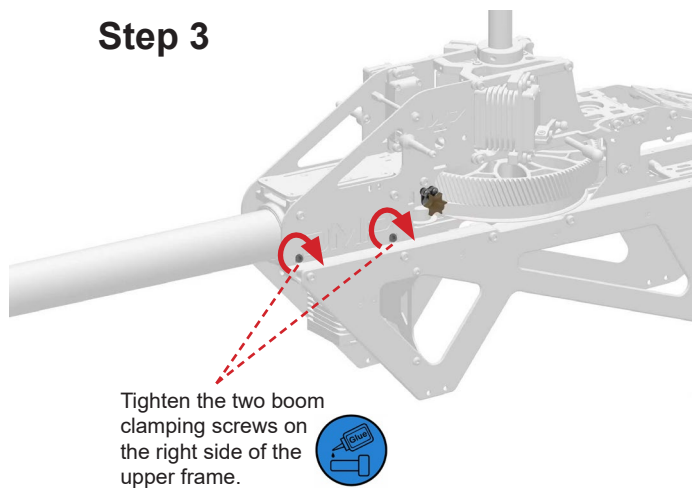


! Once the tail unit is installed, confirm whether the rotation direction of the main shaft and tail rotors is correct, as indicated by the arrows in the picture.

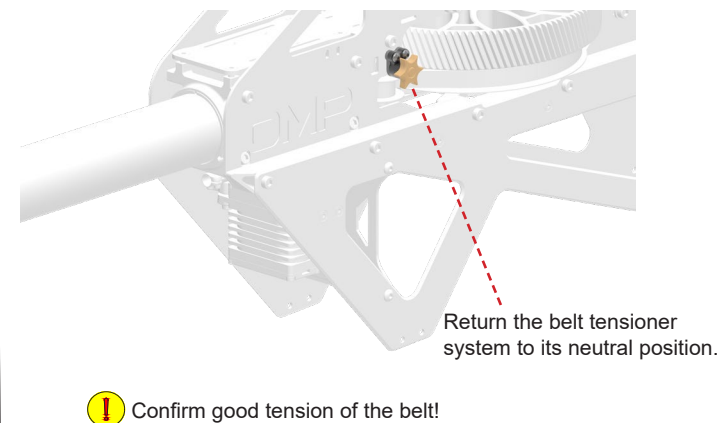
#### Step 2



#### Step 3



#### Step 4



**01 Main Rotor Shaft Clamp Installation**

Before tightening the main rotor shaft clamp, pull up the main rotor shaft and push down the rotor shaft clamp to eliminate play in the drivetrain assembly. The flange of the clamp ring must face downwards and contact the bearing.



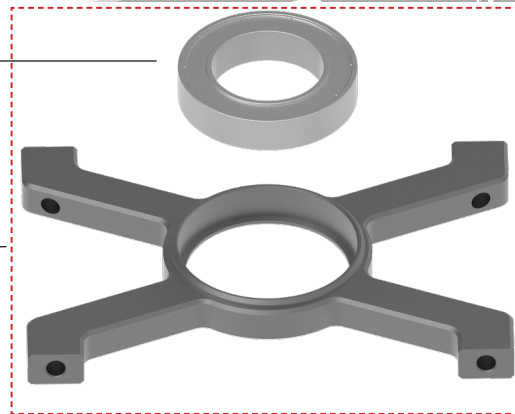
Main Rotor Shaft Clamp (x1)  
(7-031)  
OSHM7032

Hex Screw (x1)  
M3x14  
(7-224)  
OSHM7237



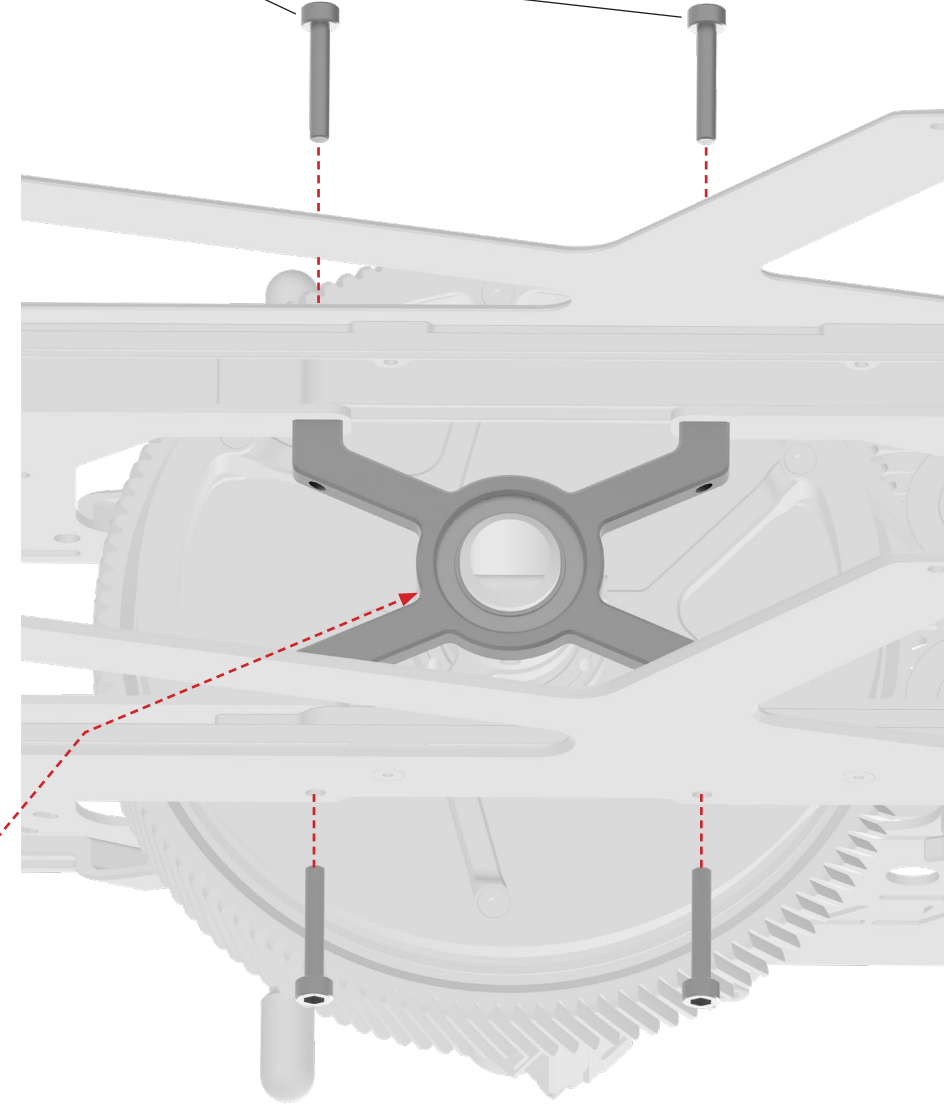
Bearing (x1)  
Ø15xØ24x7  
(7-177)  
OSHM7165

Third Bearing Block (x1)  
(7-020)  
OSHM7231

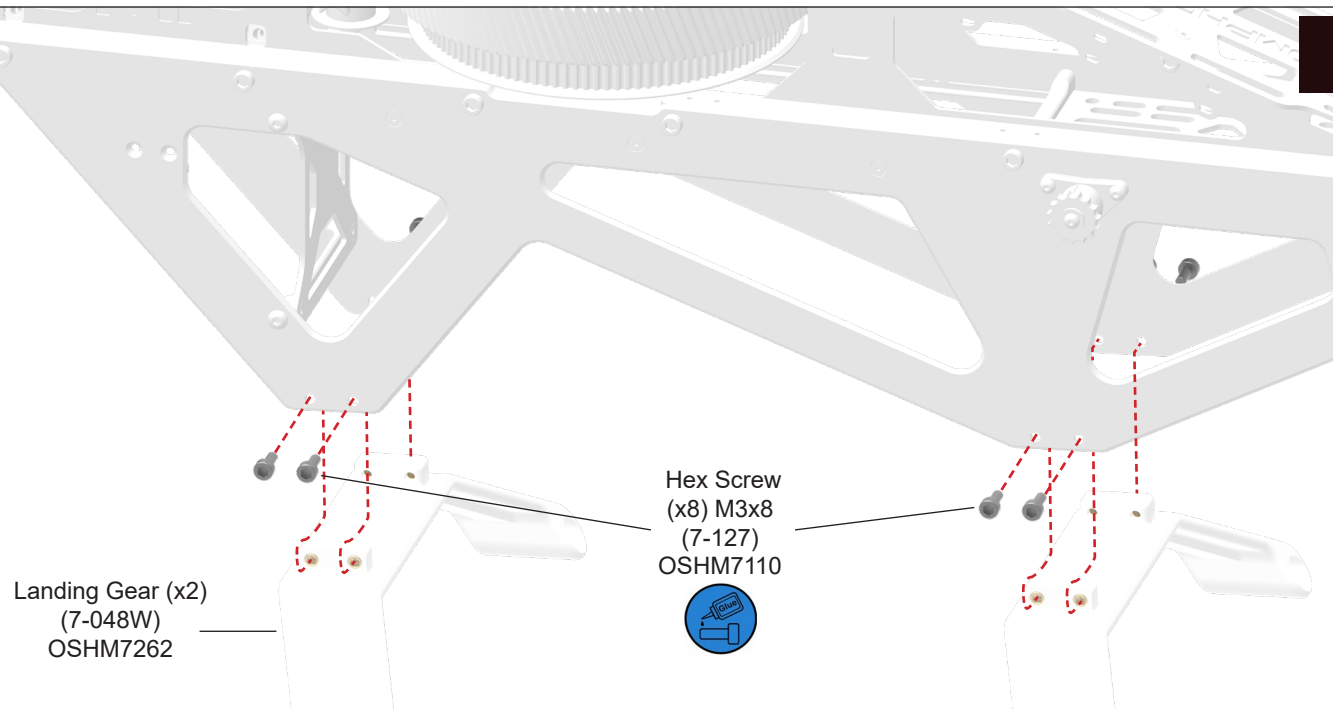


**02 3rd Main Shaft Bearing Block**

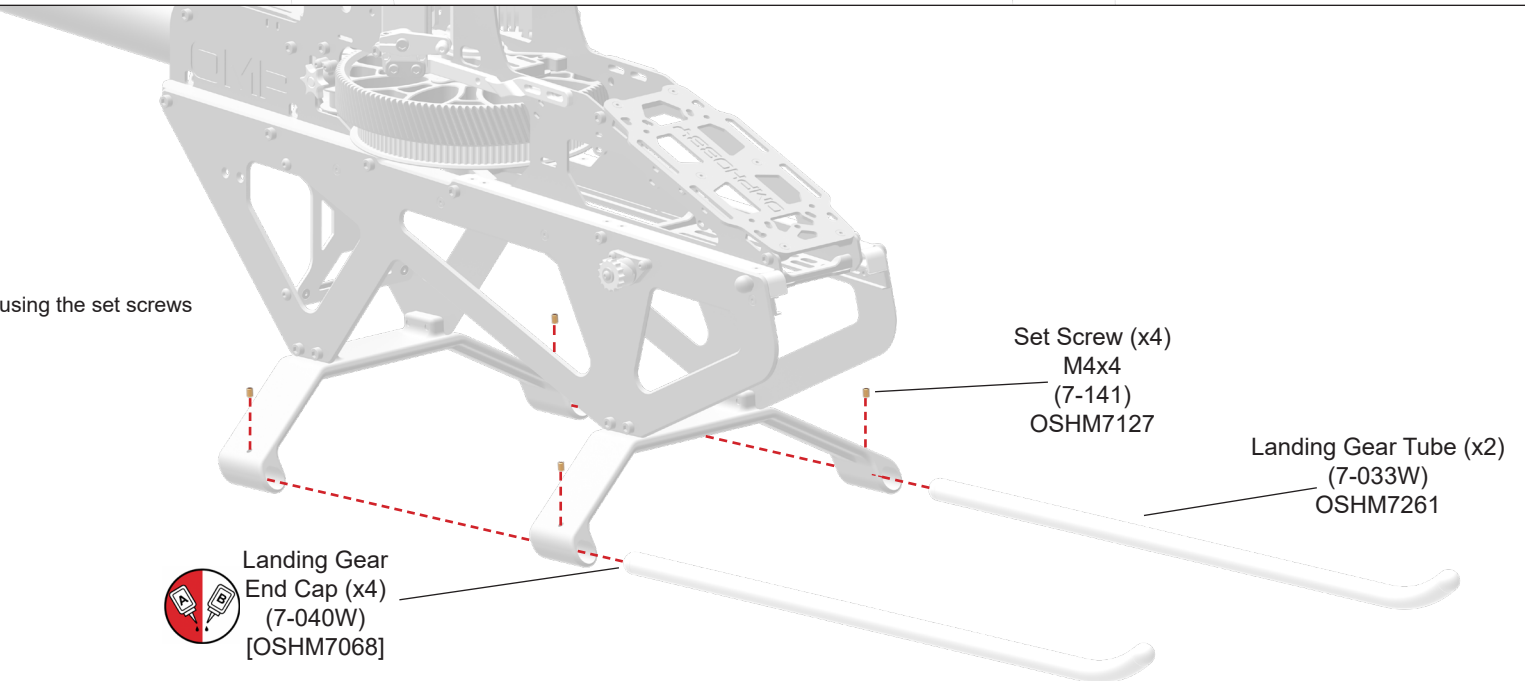
Hex Screw (Partial Thread)  
M3x18 (x4)  
(7-130)  
OSHM7113



**01 Landing Gear Installation**



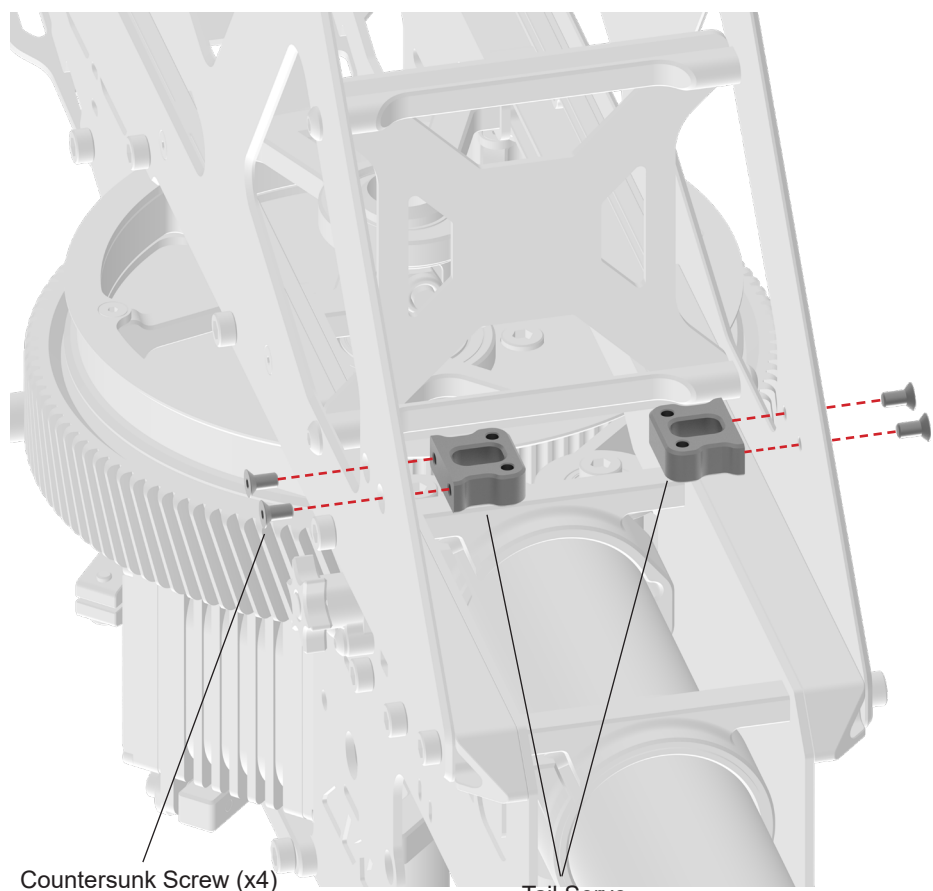
**02 Landing Gear Installation**



It can be helpful to pre-tap the landing gear using the set screws before installing the landing gear tube.

## BAG 20

### 01 Tail Rotor Servo Mount Installation



- Countersunk Screw (x4)  
M2.5x5 (7-155)  
OSHF5091
- Tail Servo Mounting Block (x2)  
(7R-030)  
OSHM7235

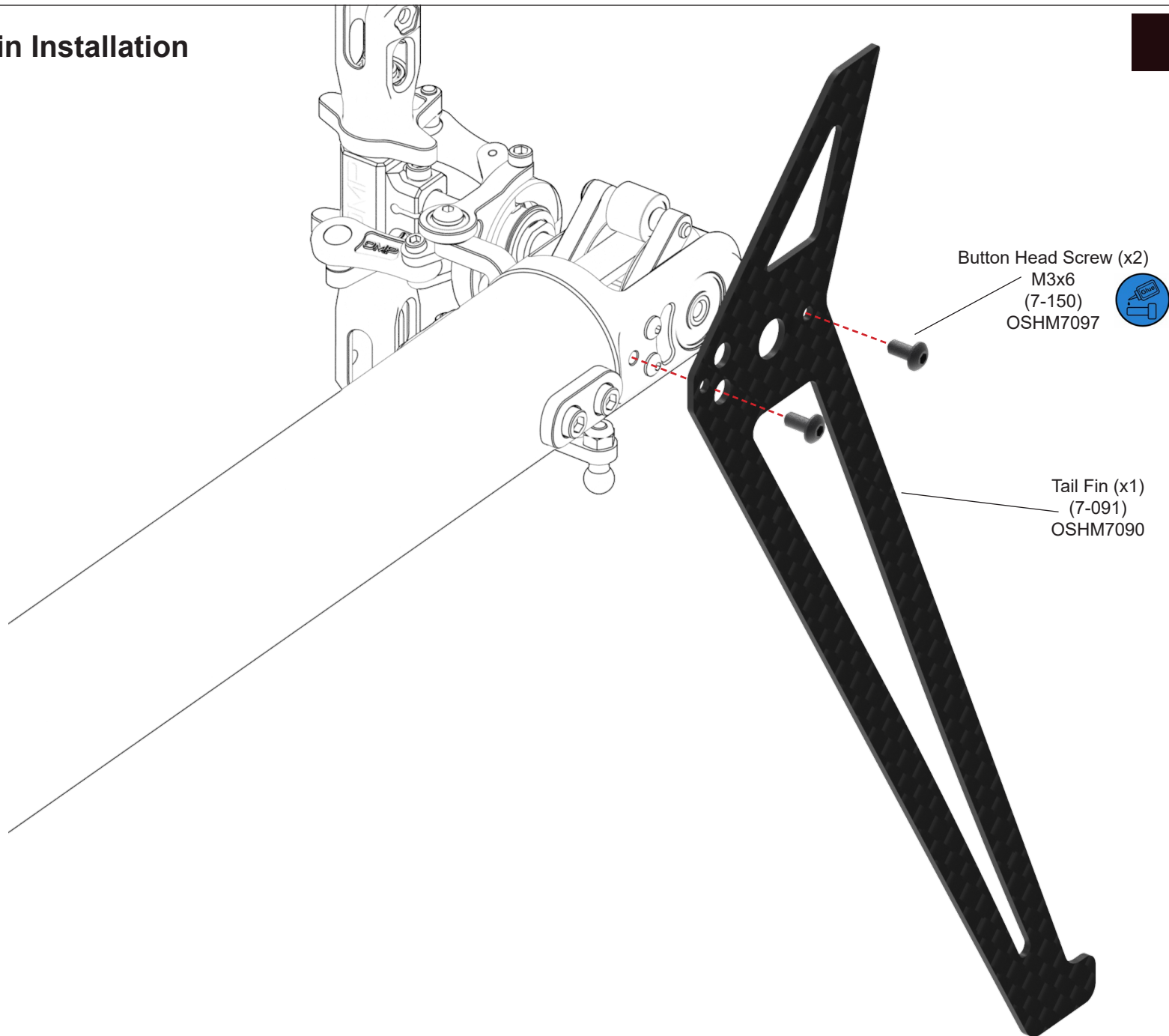
**!** After finding the neutral position with your flight controller, assemble the tail rotor servo. The angle of the arm relative to the servo body should be 180°

Tail Rotor Servo Ch4 (x1)

### 02 Tail Rotor Servo Installation

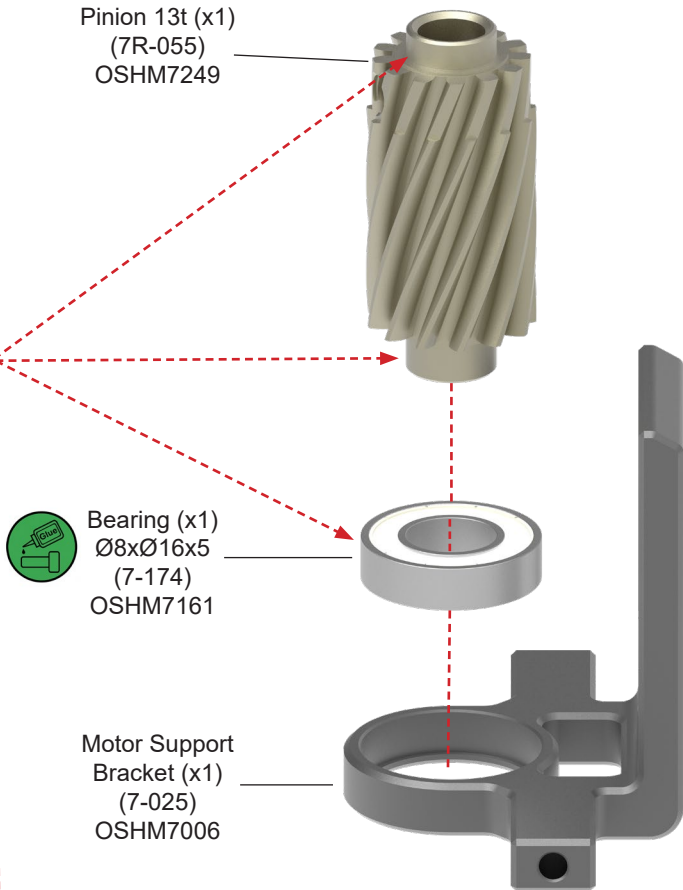
- Servo Alignment Spacer (x2) (7-038) OSHM7044
- Hex Screw (x4) M2.5x10 (4-039) OSHM5123
- Tail Servo
- Servo Bushing (x4) (6-134) OSHM6022
- !** Your M7R comes with two types of servo alignment hardware. Choose the ones appropriate for your servo.
- !** We recommend applying thread locker directly to the threaded bore. This prevents loss of thread locker inside the servo spacers
- Metal Servo Arm - R (x1) (7-256) OSHM7194
- Ball Screw (x1) M3x6x4.2 (7-144) OSHM7131
- Hex Screw M3x8 (x1) (7-127) OSHM7110
- Hex Screw M2.5x6 (x1) (7-122) OSHM7105
- !** The shown Tail Servo is an optional part.

**01 Vertical Tail Fin Installation**



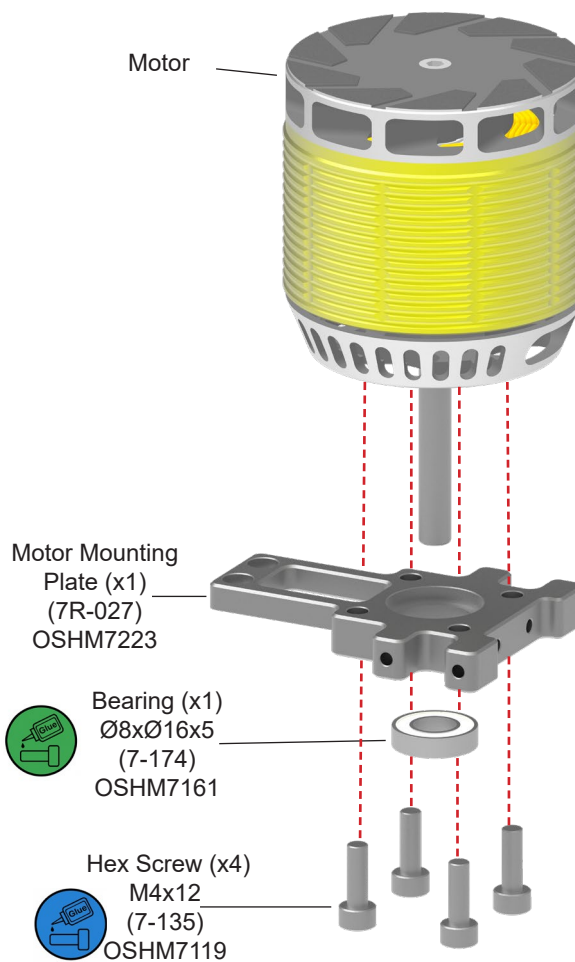
### 01 Counterbearing Assembly

Pinion 13t (x1)  
(7R-055)  
OSHM7249



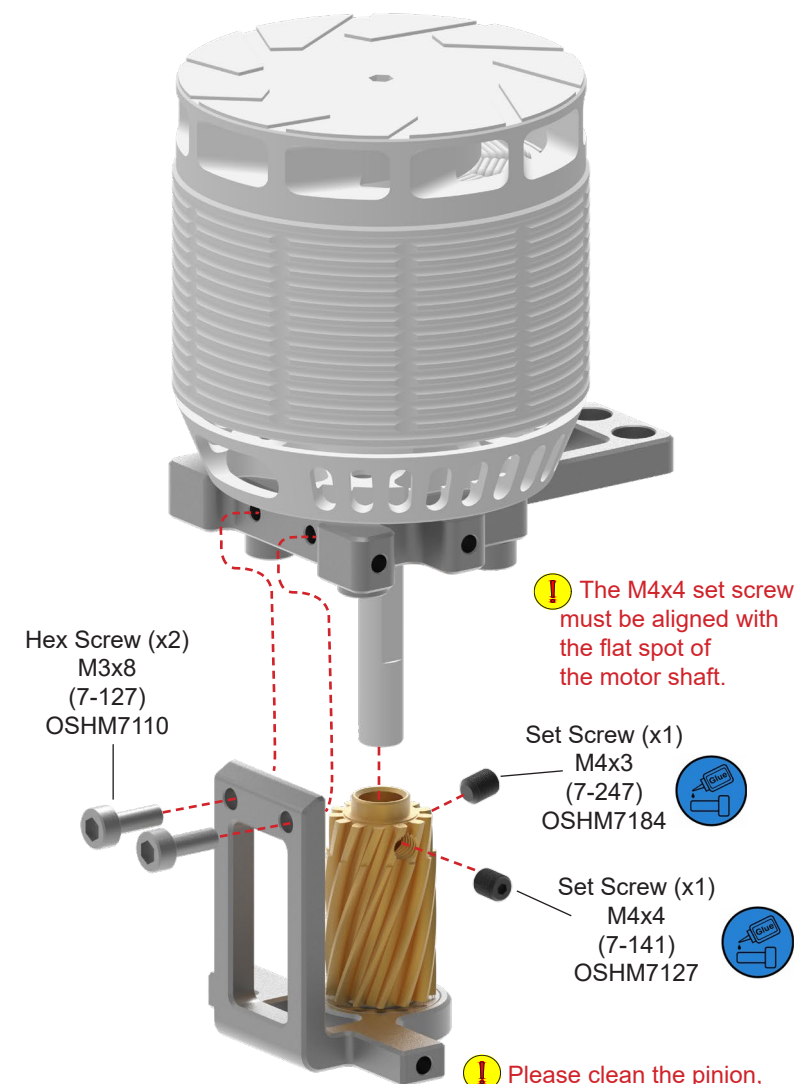
! We highly recommend cleaning the marked pinion parts, inner and outer bearing races and bearing seat of the motor support bracket, and to apply a very small amount of high strength LOCTITE® (e.g. 638) to prevent wear in these areas.

### 02 Motor Installation



! The shown Motor is an optional part.

### 03 Motor Mount Assembly

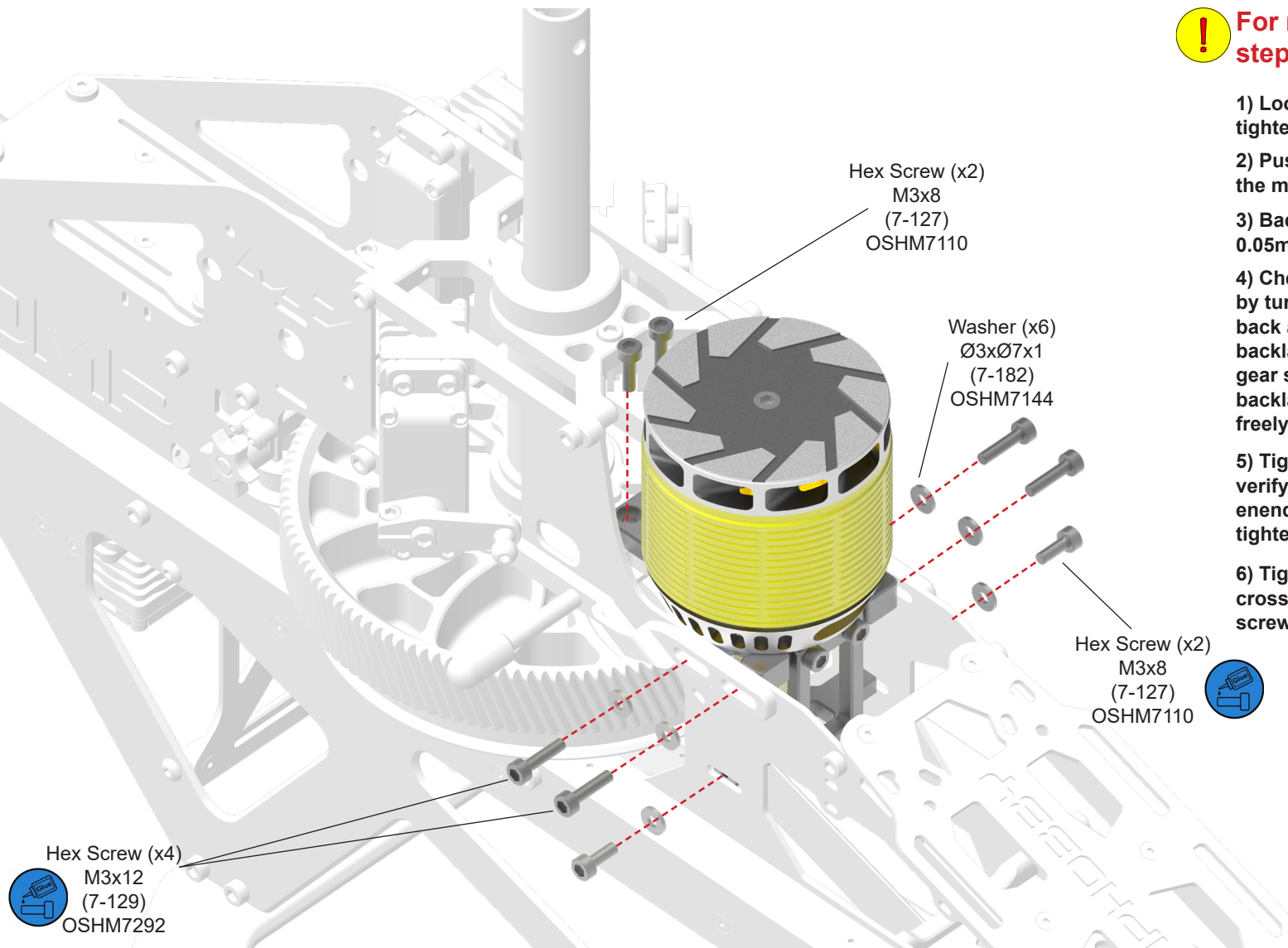


! Please clean the pinion, set screws and pinion threads with isopropyl alcohol before assembly.

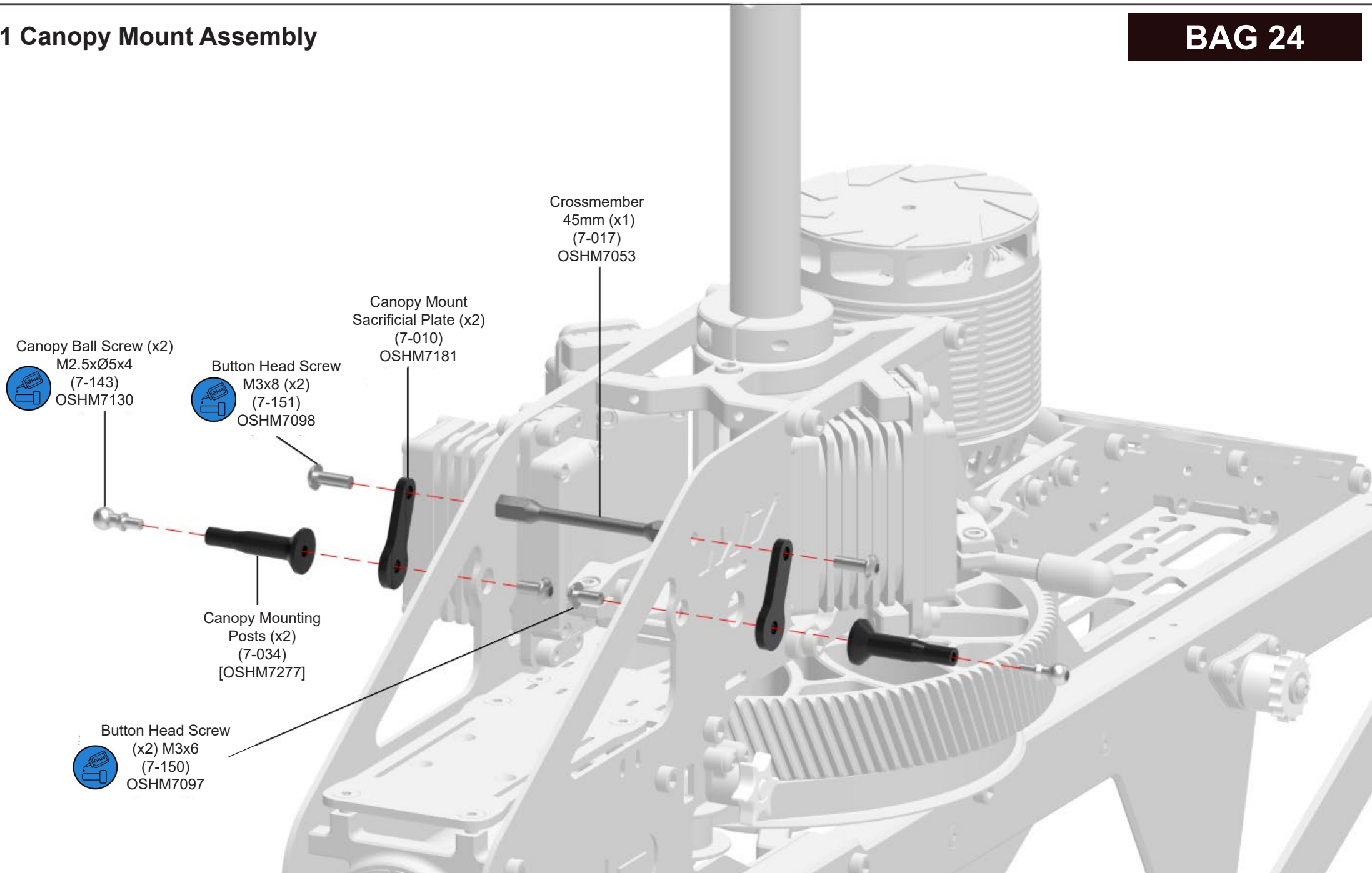
### 01 Motor Mount Installation and Clamping

**!** For mounting the motor, follow these steps:

- 1) Loosely engage all screws in their threads, do not tighten them yet.
- 2) Push motor and pinion all the way backward against the main gear.
- 3) Back the motor off slightly so that the main gear has 0.05mm ~ 0.1mm backlash.
- 4) Check the backlash in 8 points around the rotation by turning the gear 45° at a time and gently wiggling it back and forth. In the loosest spots, you should feel the backlash when moving the gear back and forth, but the gear should not visibly move. In the tightest spots, zero backlash is acceptable, as long as the gear train rotates freely and sounds smooth.
- 5) Tighten the M3x8 screws behind the motor first and verify that the mesh hasn't changed once fully tightened. If it changed, loosen them again, adjust and tighten them again.
- 6) Tighten all remaining motor carrier screws in a crosswise pattern, starting at the top with the M3x12 screws, and ending with the M3x8 screws at the bottom.

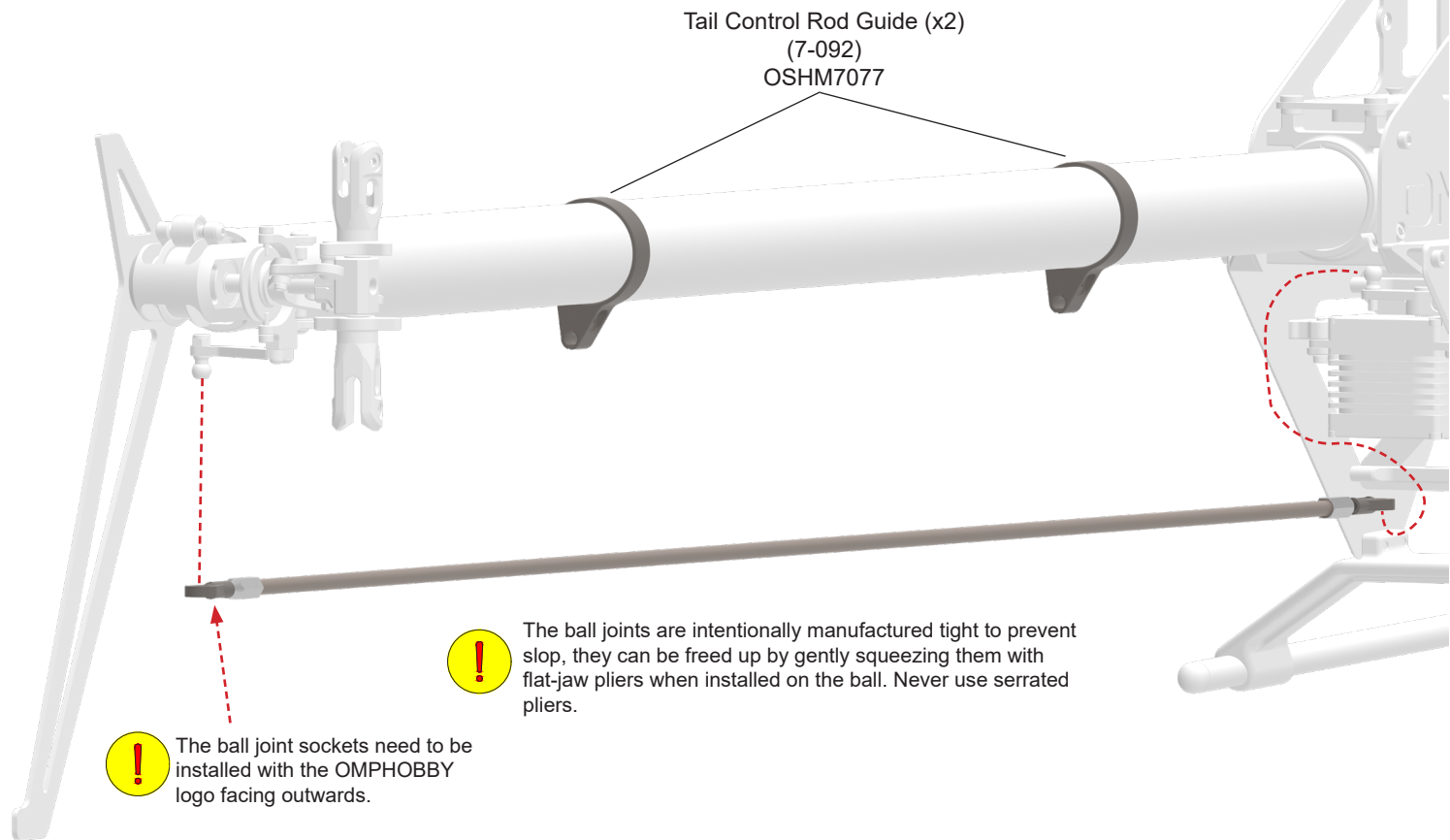
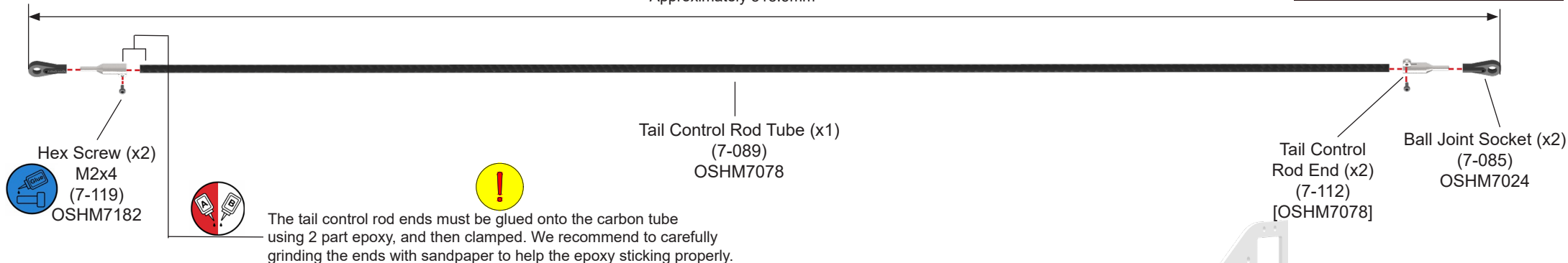


### 01 Canopy Mount Assembly



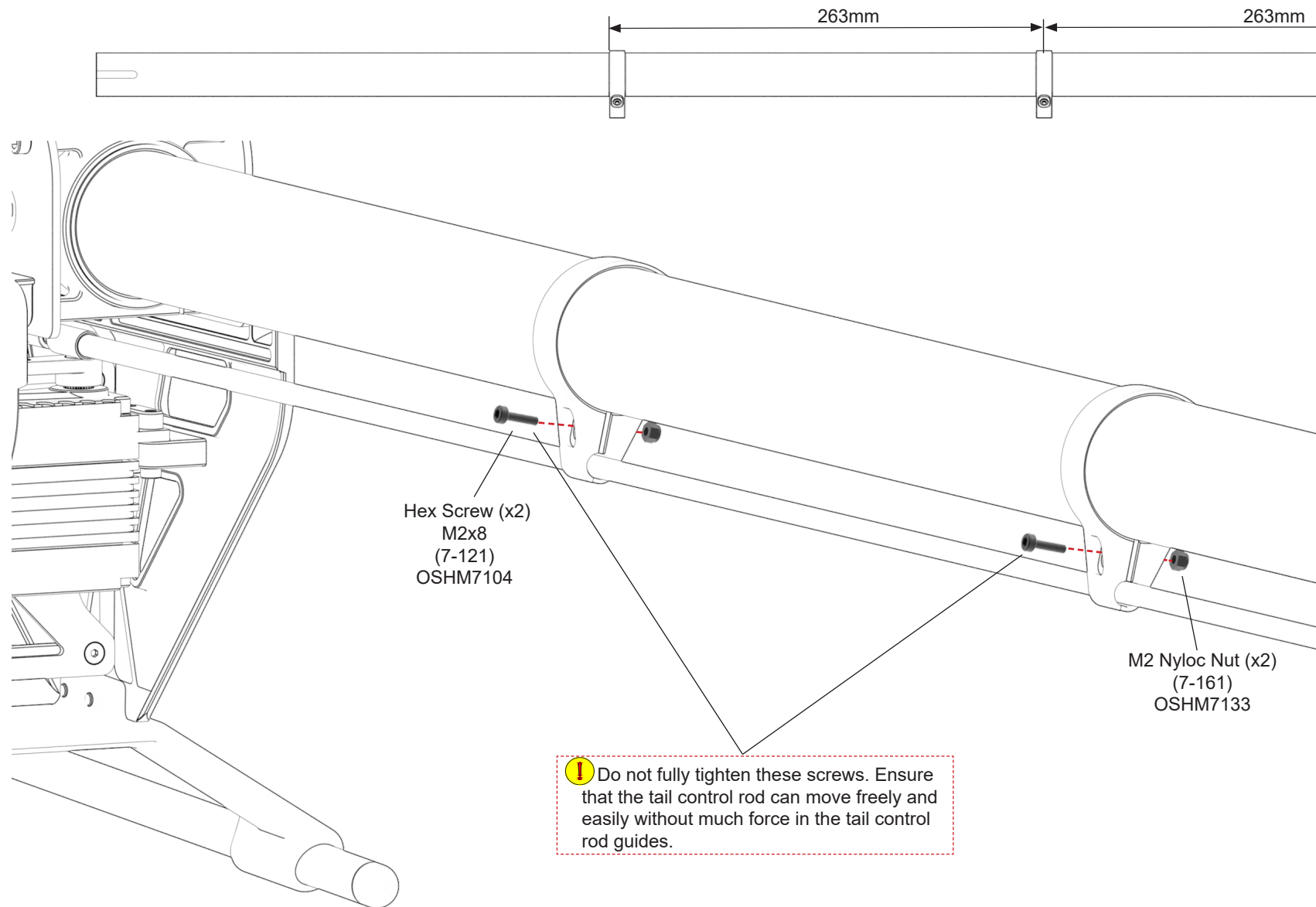
### 01 Tail Control Rod Assembly

Approximately 818.5mm

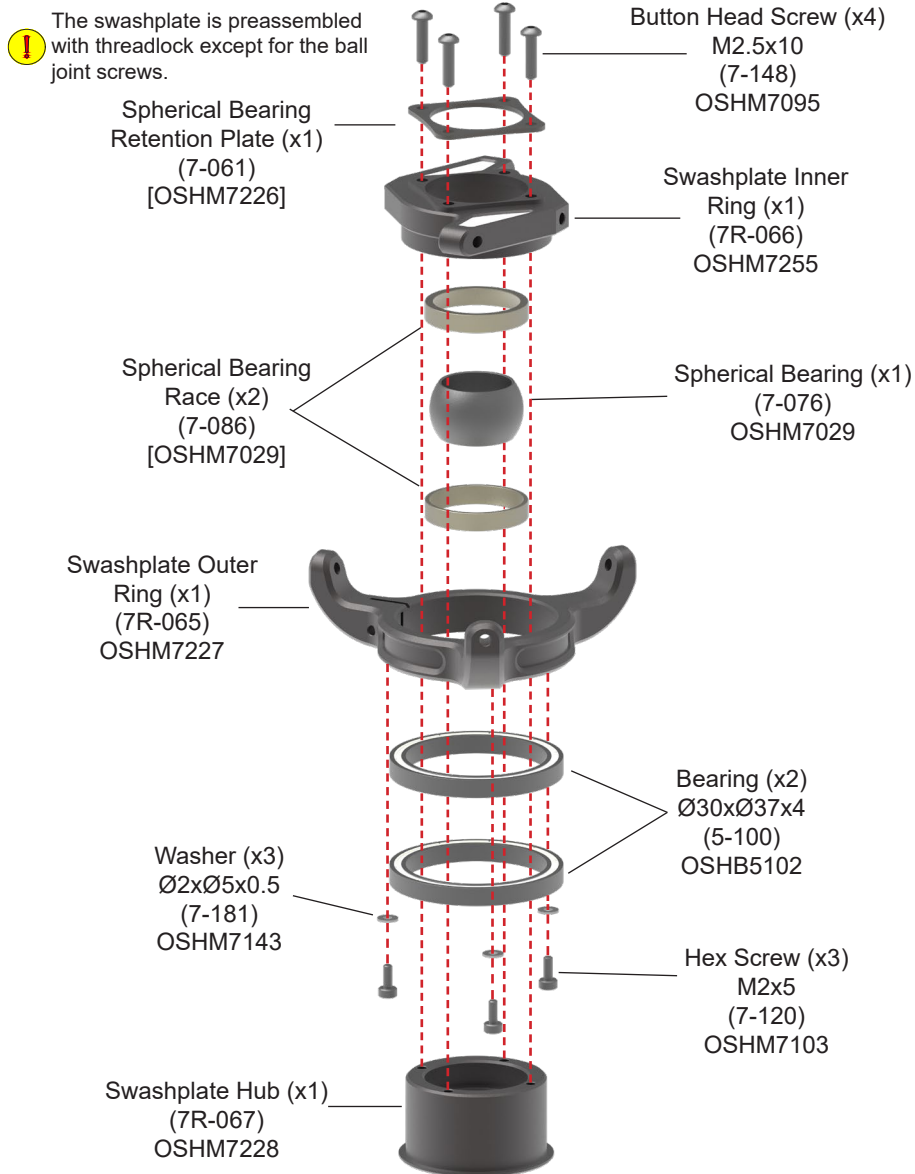


## 01 Tail Control Rod Guides Installation and Alignment

BAG 26

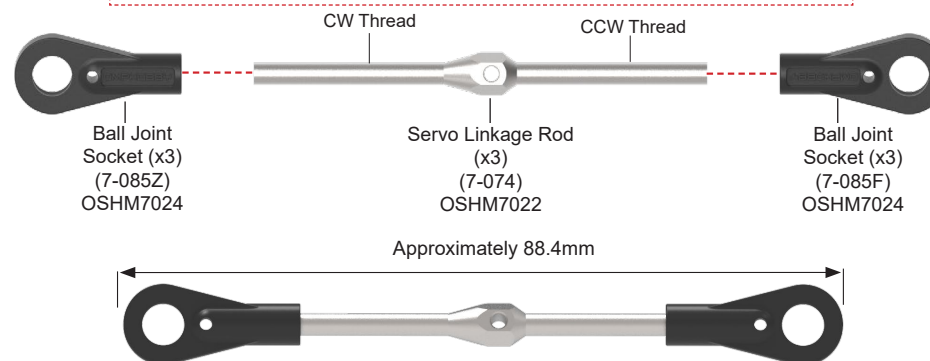


### 01 Swashplate Assembly



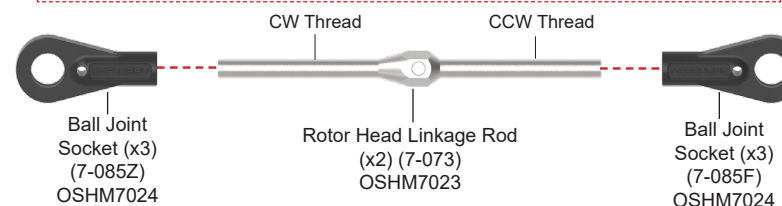
### 02 Servo Linkage Assembly

**!** When assembling, pay attention to the CW thread and CCW thread connections between the connecting rod and the ball joint socket. Ball joint sockets are pre-threaded, bags with the letter "Z" are CW threaded and bags with the letter "F" are CCW threaded.



### 03 Rotor Head Linkage Assembly

**!** When assembling, pay attention to the CW thread and CCW thread connections between the connecting rod and the ball joint socket. Ball joint sockets are pre-threaded, bags with the letter "Z" are CW threaded and bags with the letter "F" are CCW threaded.



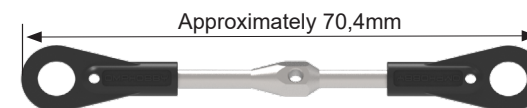
Choose the correct length for your blade grip arms.



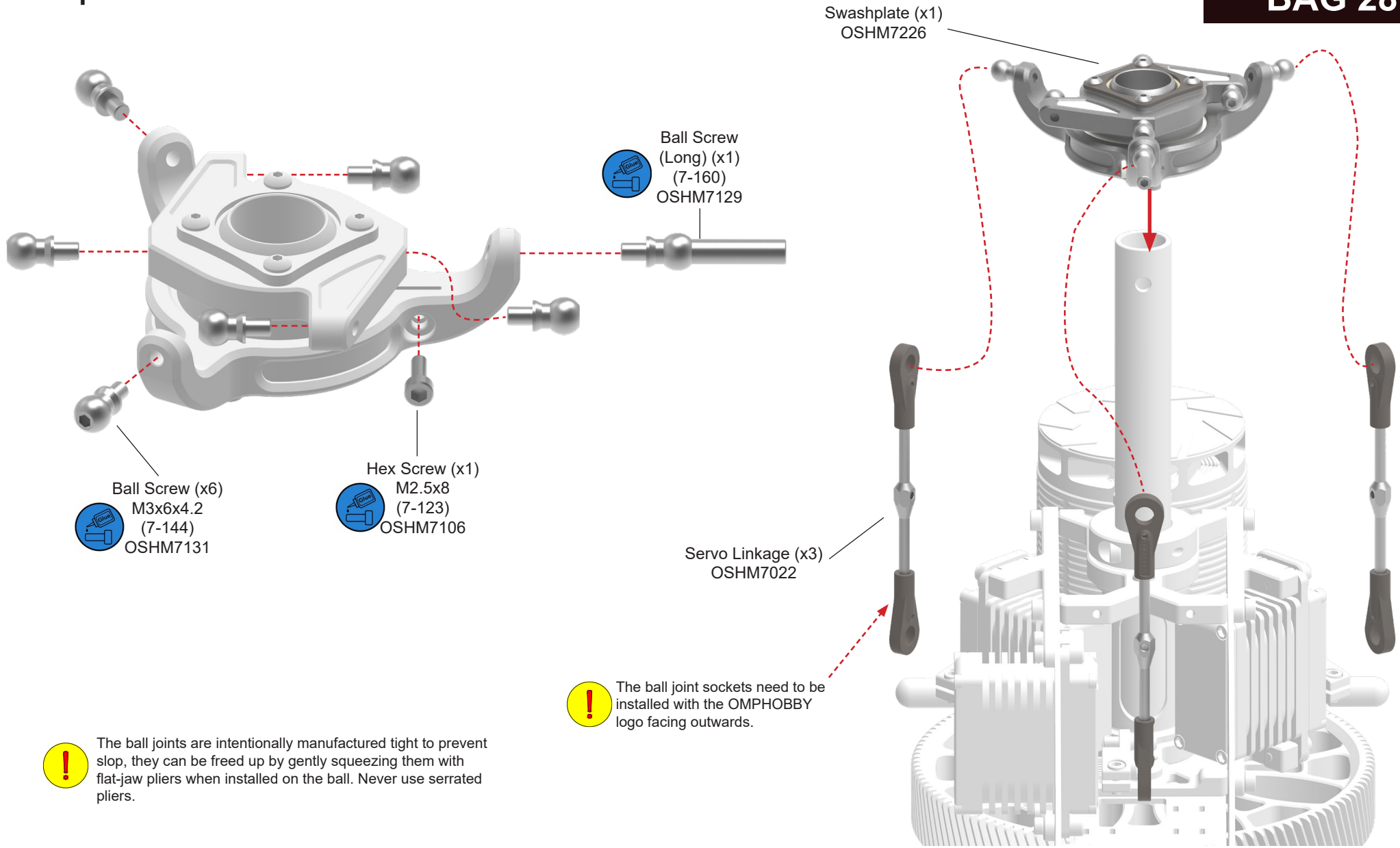
32mm Blade Grip Arm



1:1 Blade Grip Arm (optional)

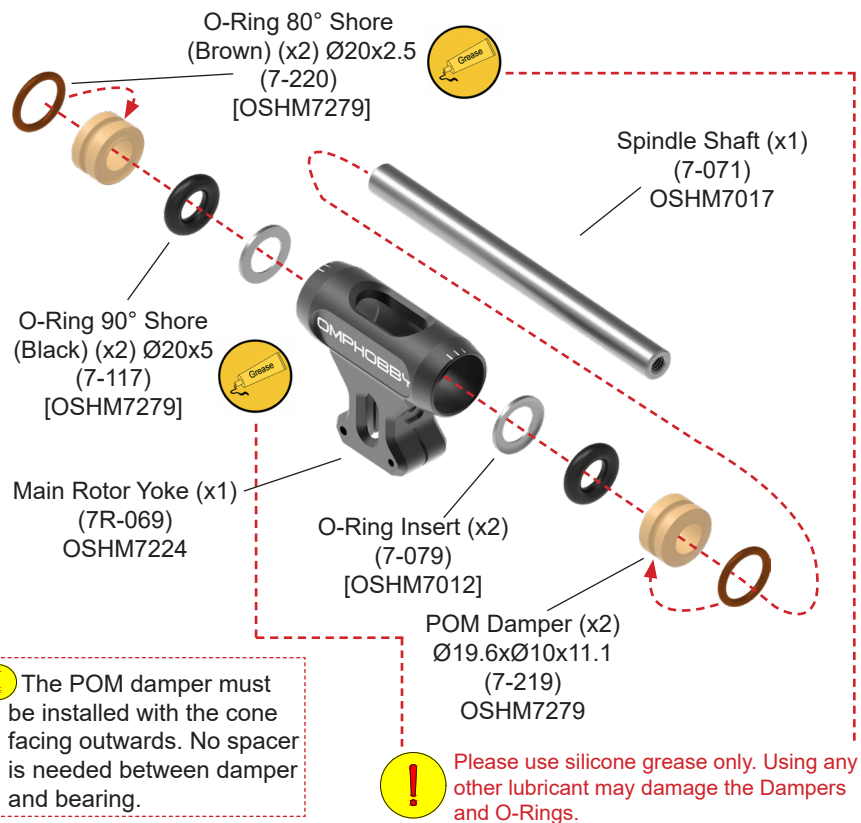


### 01 Swashplate Installation

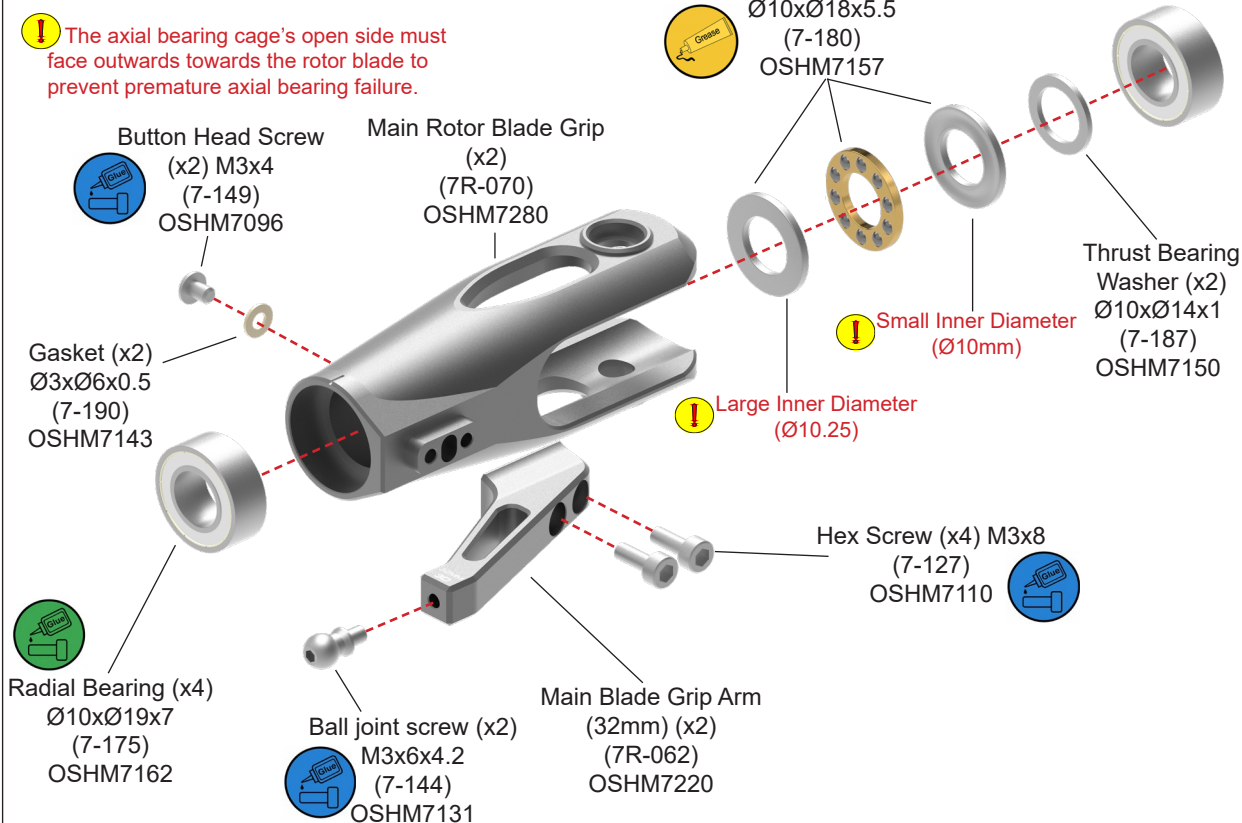


**BAG 29**

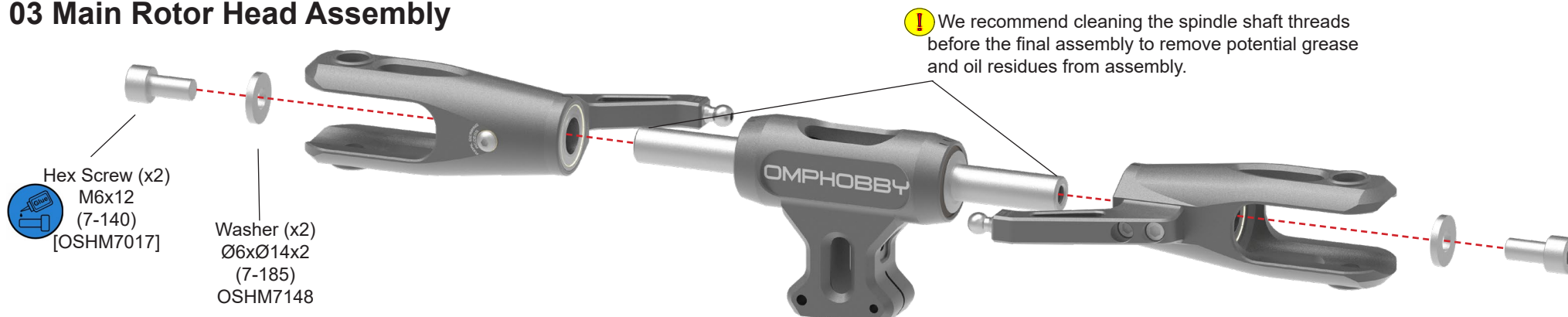
## 01 Main Rotor Hub Assembly



## 02 Main Rotor Blade Grip Assembly

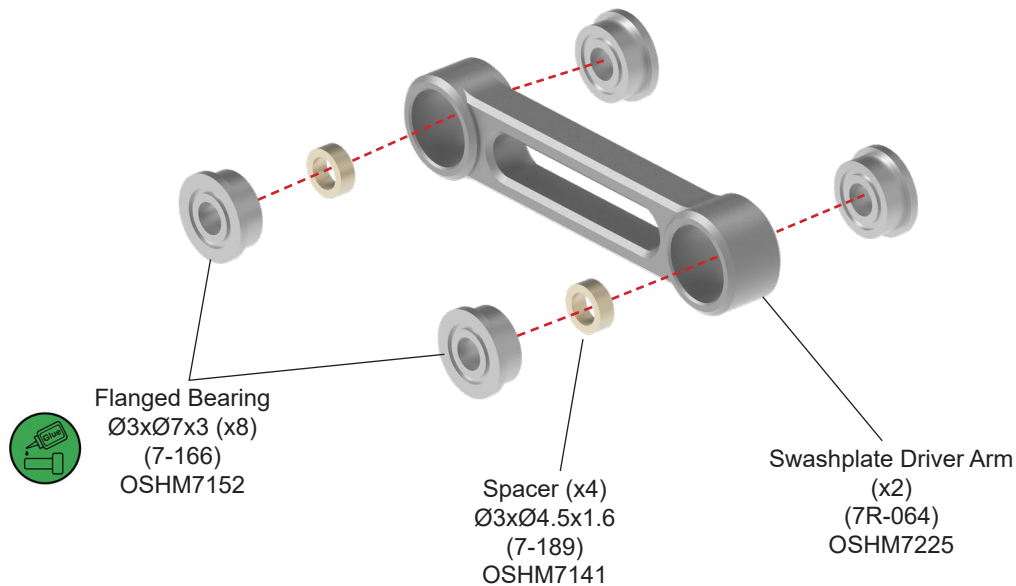


## 03 Main Rotor Head Assembly

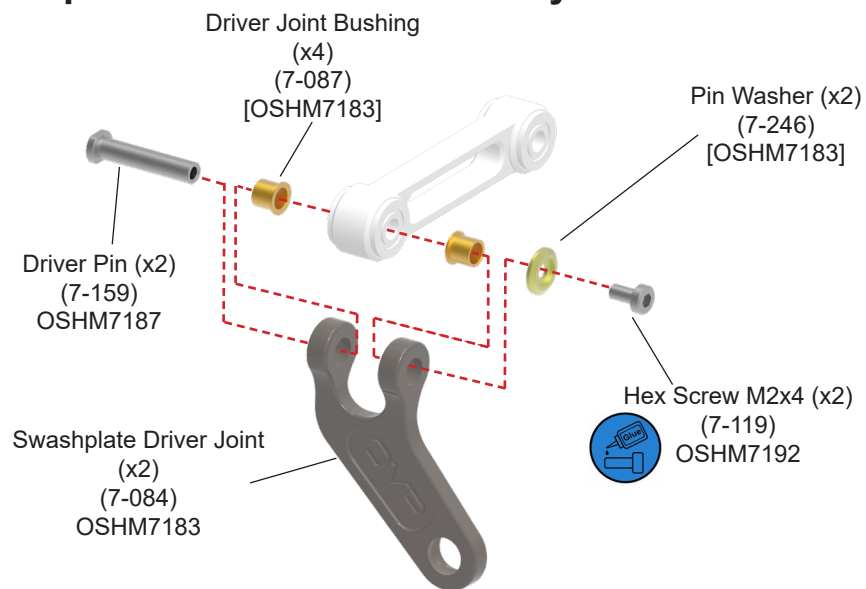


**BAG 30**

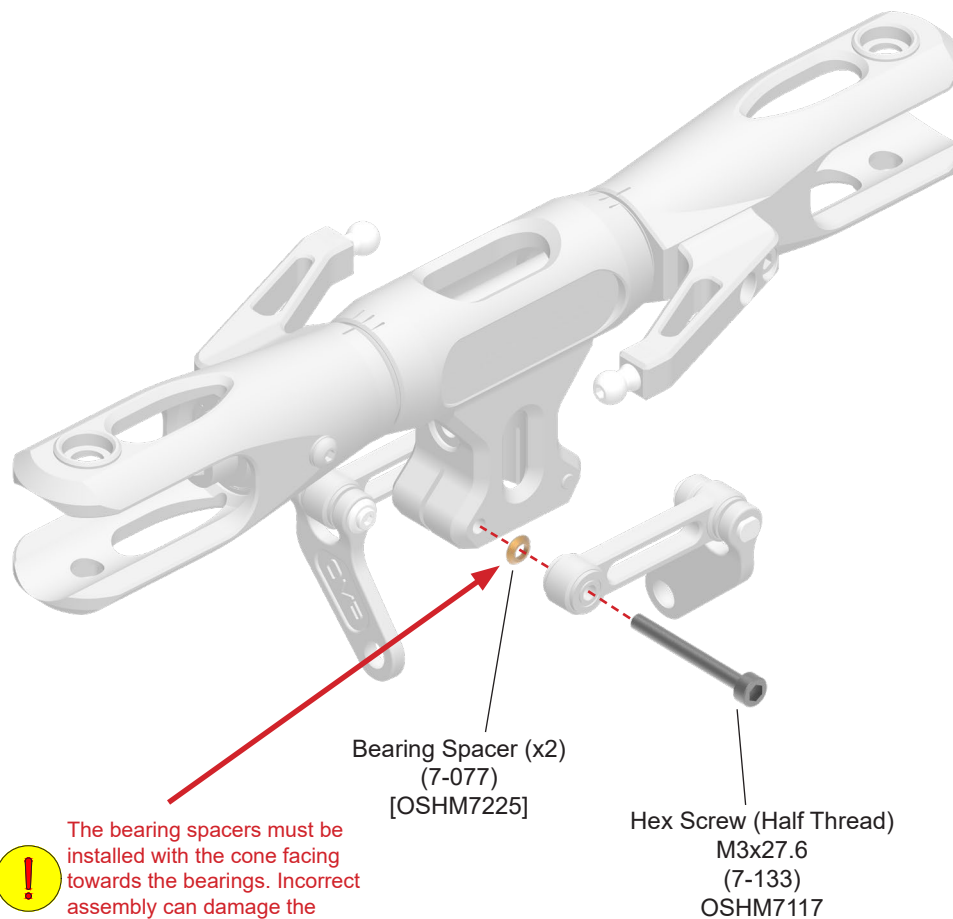
**01 Swashplate Driver Arm Assembly**



**02 Swashplate Driver Arm Assembly**



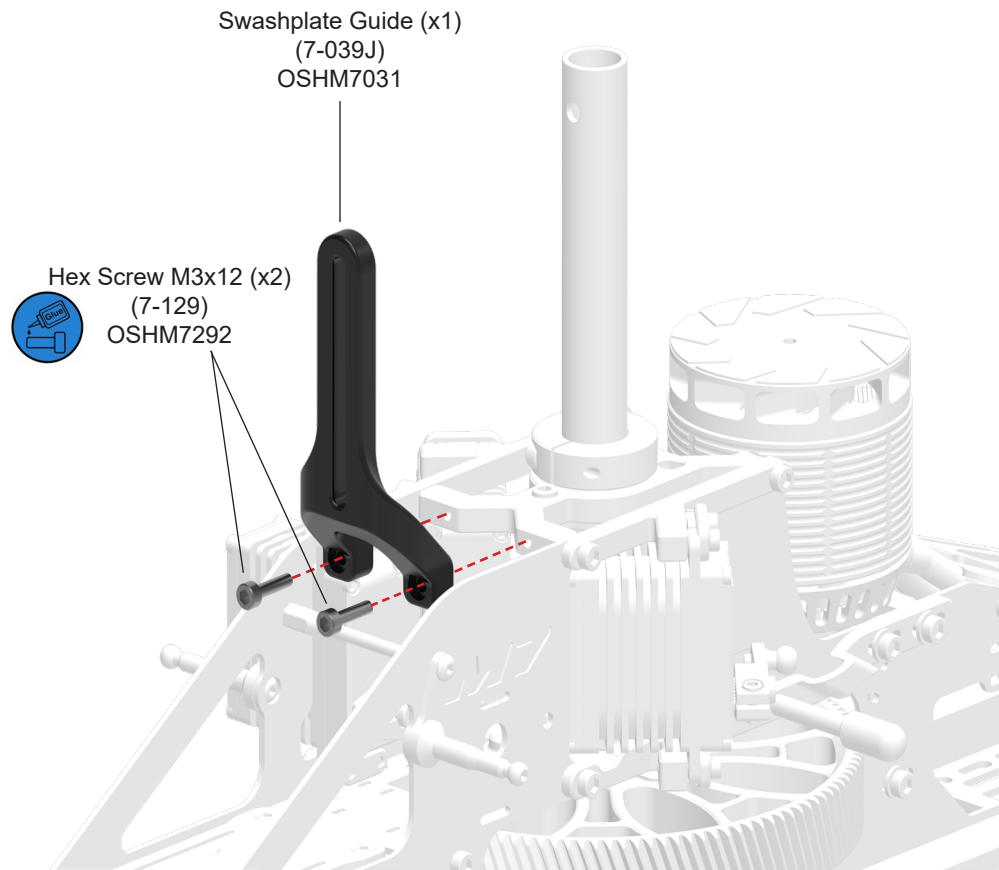
**03 Swashplate Driver Installation**



**!** The bearing spacers must be installed with the cone facing towards the bearings. Incorrect assembly can damage the bearings!

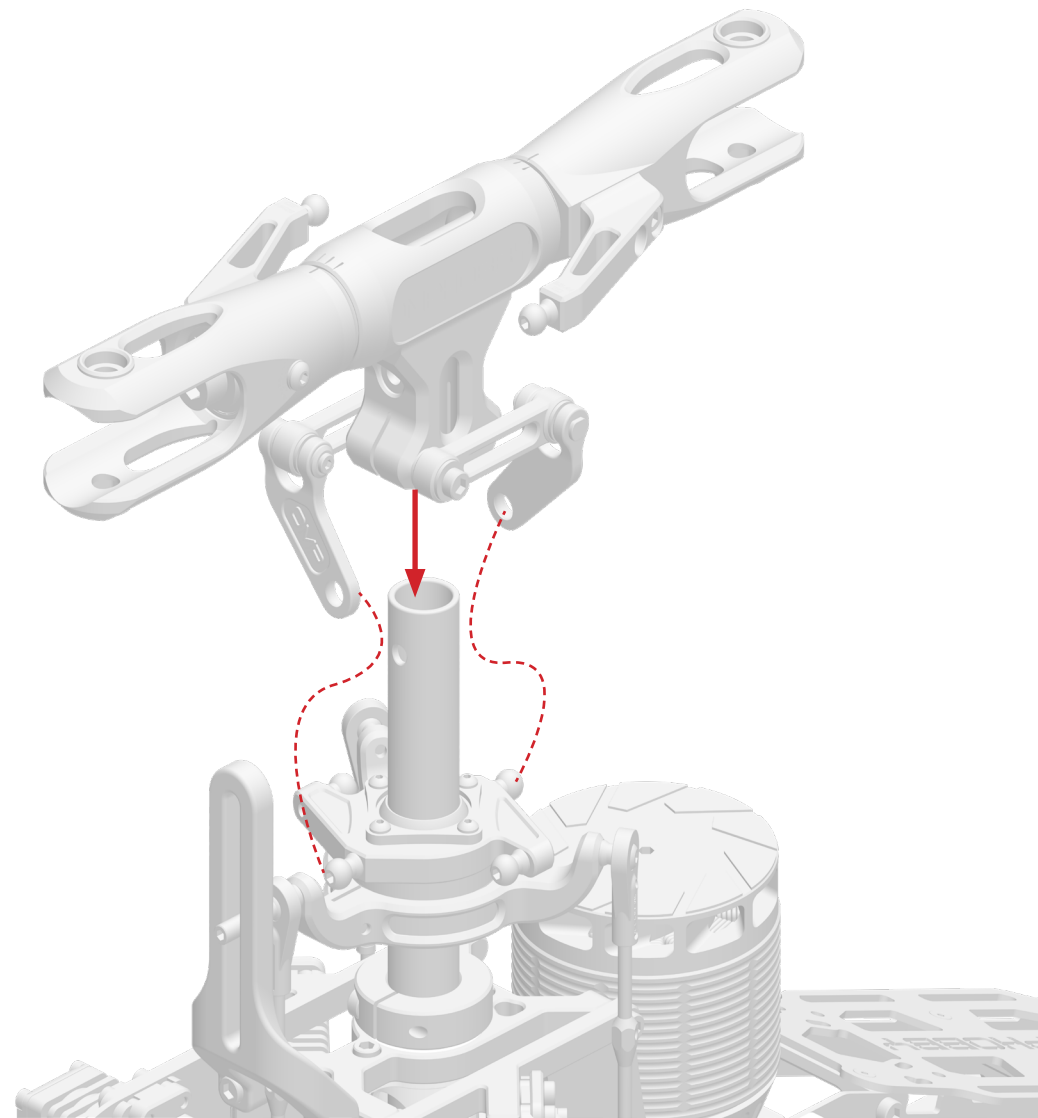
**!** Loosely assemble without thread locker! The swashplate driver screws may only be tightened with thread locker once the main rotor assembly is installed on the main shaft.

## 01 Swashplate Guide Installation

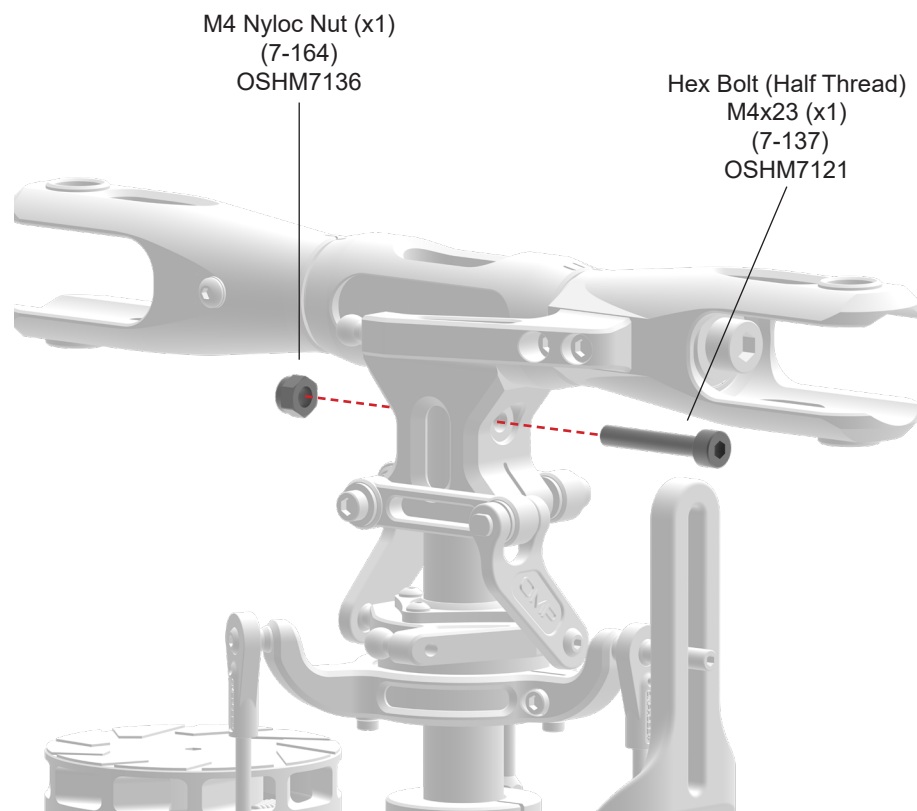


## 02 Main Rotor Head Installation

**BAG 31**



### 01 Main Rotor Installation



M4 Nyloc Nut (x1)  
(7-164)  
OSH7136

Hex Bolt (Half Thread)  
M4x23 (x1)  
(7-137)  
OSH7121

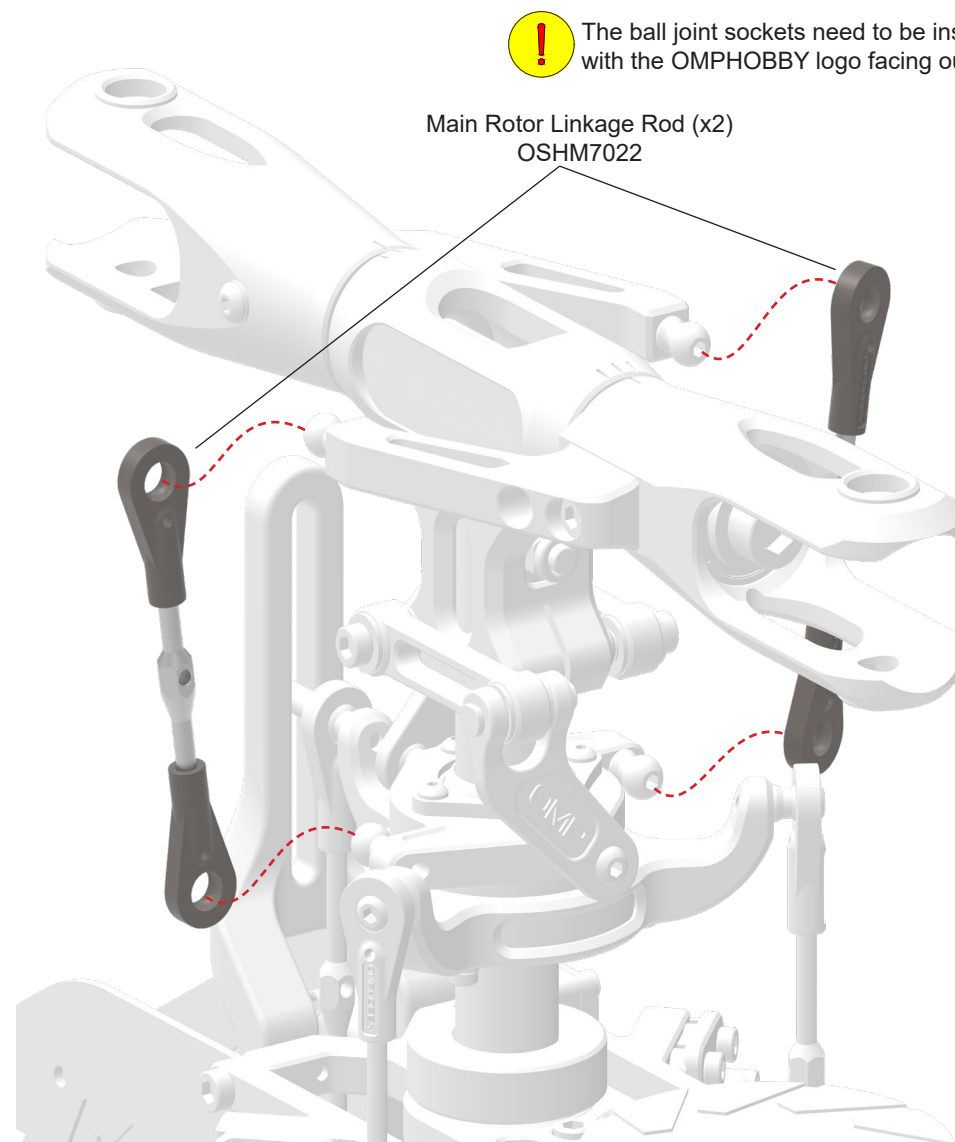


The swashplate driver arm screws must be tightened in this step to clamp the main rotor yoke onto the main shaft. To ensure proper alignment, first install the M4x23 hex bolt, but don't fully tighten yet, and then tighten the swashplate driver arm screws with thread locker evenly and in small steps. After that, don't forget to fully tighten the M4x23 hex bolt.



Do not overtighten the swashplate driver arm screws. Excessive torque can damage the bearings and yoke!

### 02 Main Rotor Linkage Installation



The ball joint sockets need to be installed with the OMPHOBBY logo facing outwards.

Main Rotor Linkage Rod (x2)  
OSH7022

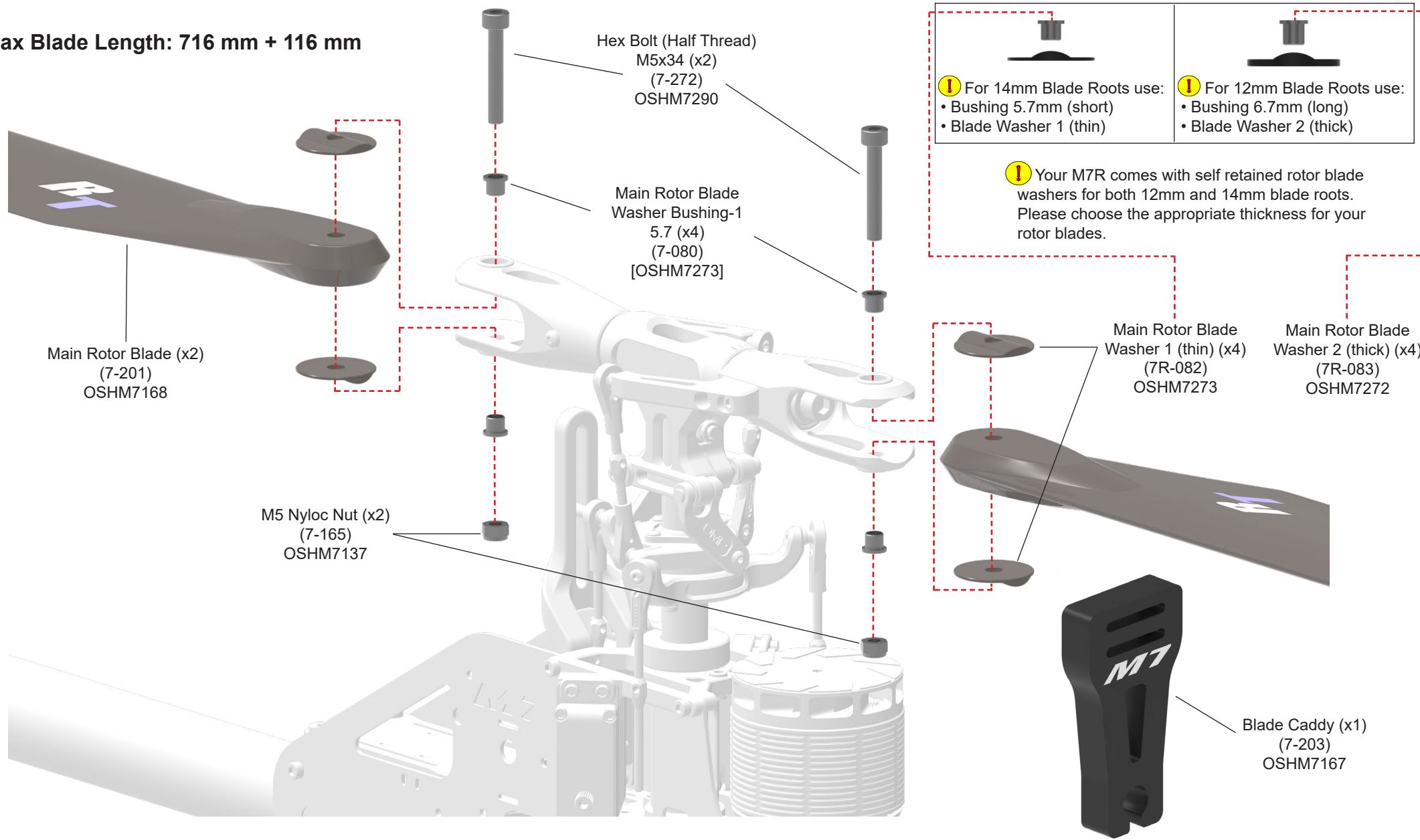


The ball joints are intentionally manufactured tight to prevent slop, they can be freed up by gently squeezing them with flat-jaw pliers when installed on the ball. Never use serrated pliers.

## BAG 33

### 01 Main Rotor Blade Installation

**!** Max Blade Length: 716 mm + 116 mm



Main Rotor Blade (x2)  
(7-201)  
OSHM7168

Hex Bolt (Half Thread)  
M5x34 (x2)  
(7-272)  
OSHM7290

Main Rotor Blade  
Washer Bushing-1  
5.7 (x4)  
(7-080)  
[OSHM7273]

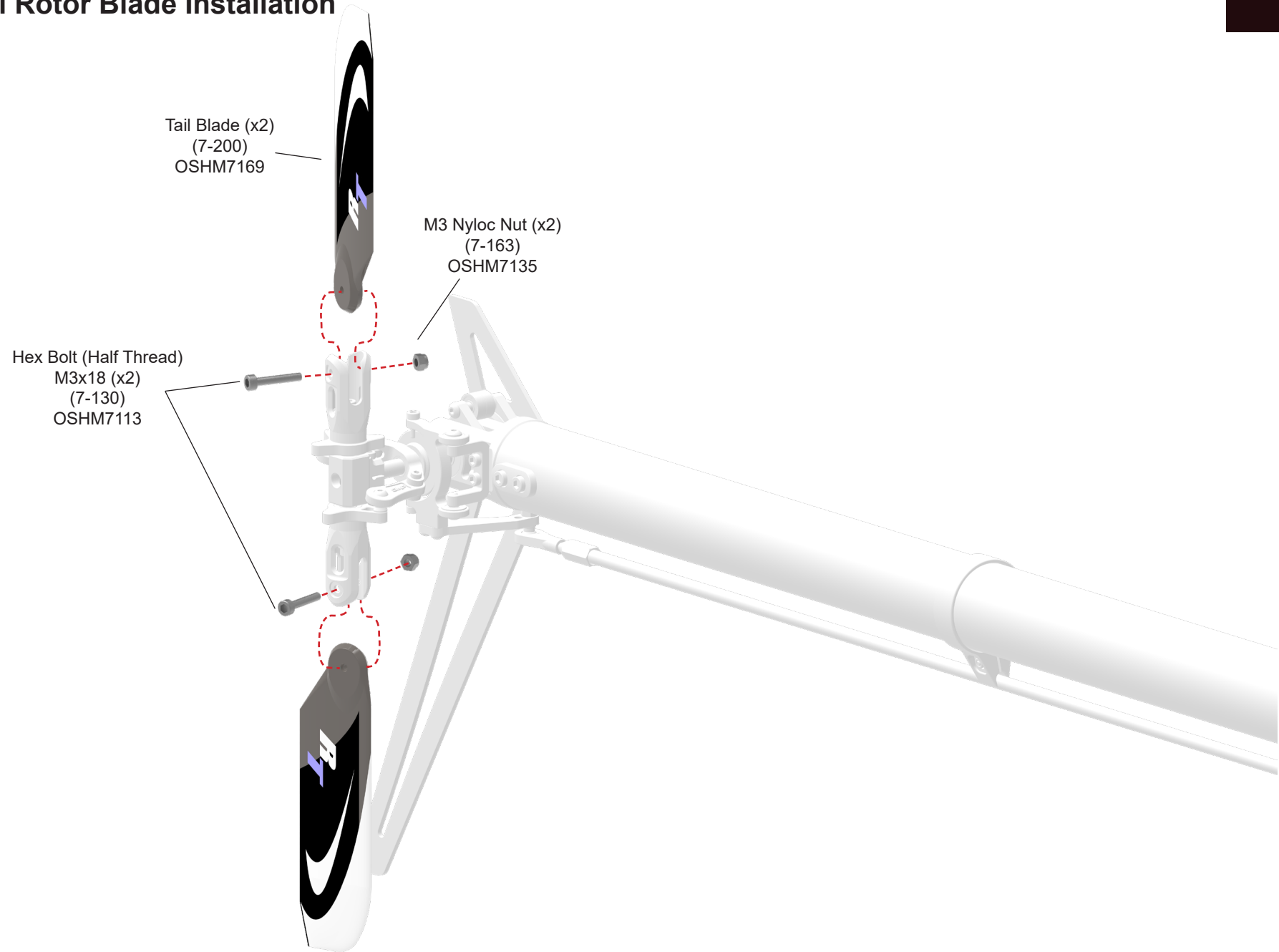
M5 Nyloc Nut (x2)  
(7-165)  
OSHM7137

Main Rotor Blade  
Washer 1 (thin) (x4)  
(7R-082)  
OSHM7273

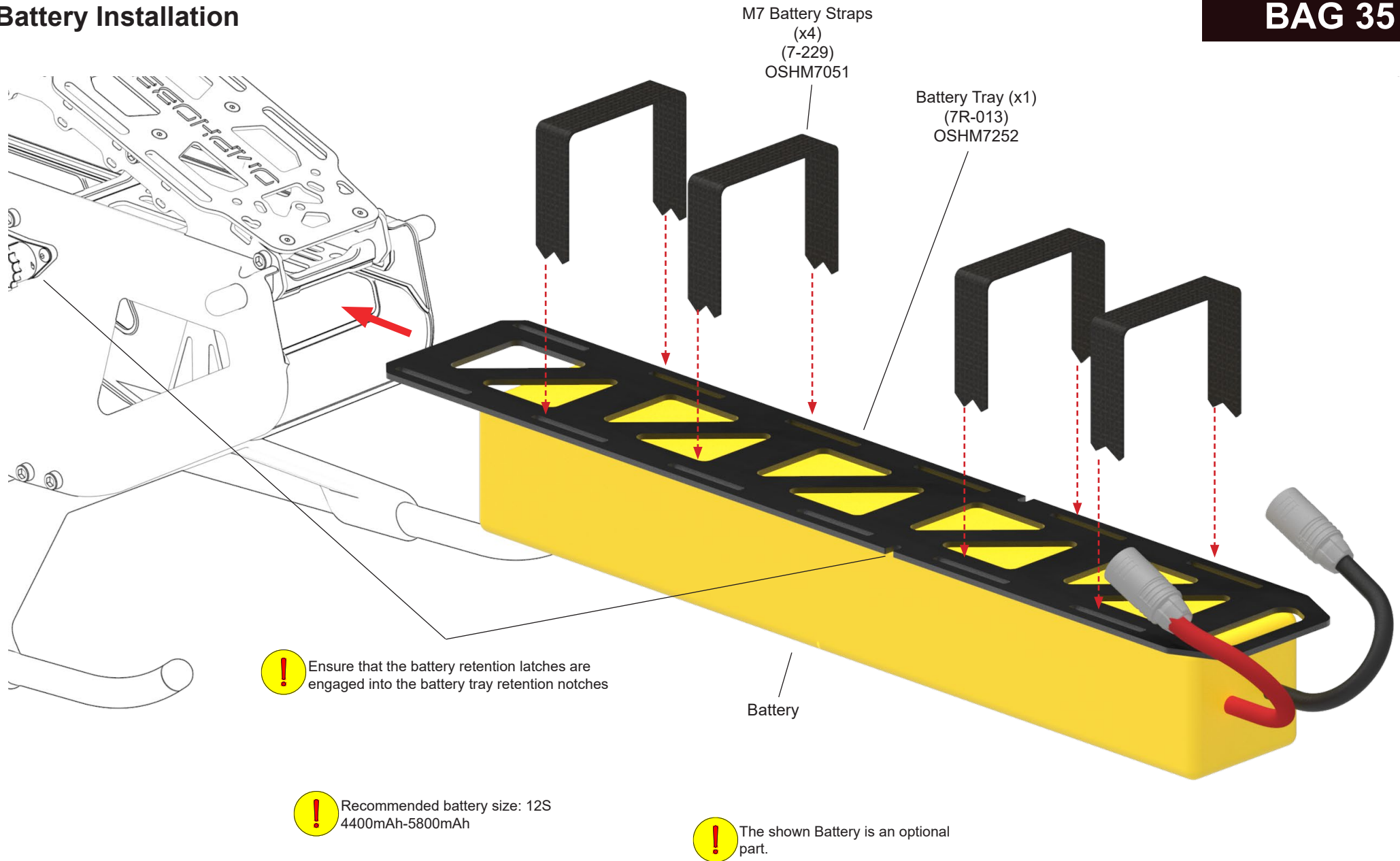
Main Rotor Blade  
Washer 2 (thick) (x4)  
(7R-083)  
OSHM7272

Blade Caddy (x1)  
(7-203)  
OSHM7167

**01 Tail Rotor Blade Installation**



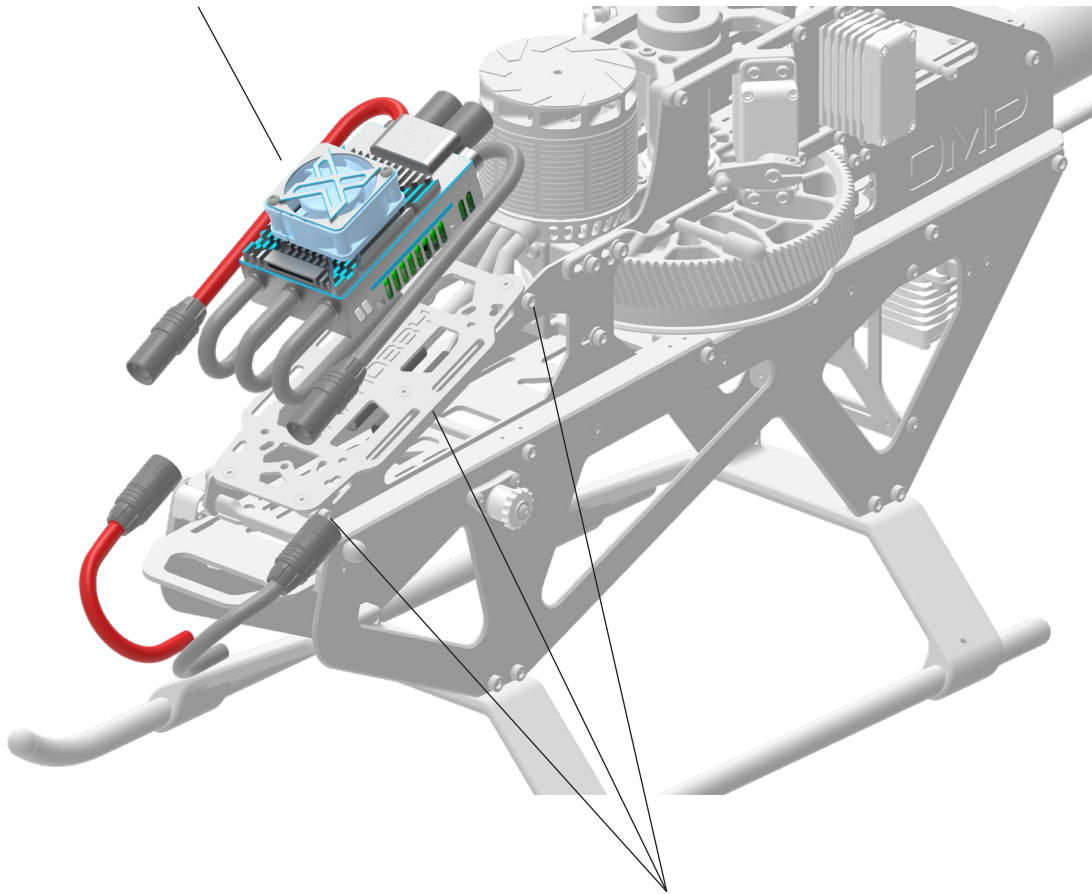
### 01 Battery Installation



**01 ESC Installation**

**!** The shown ESC is an optional part.

ESC

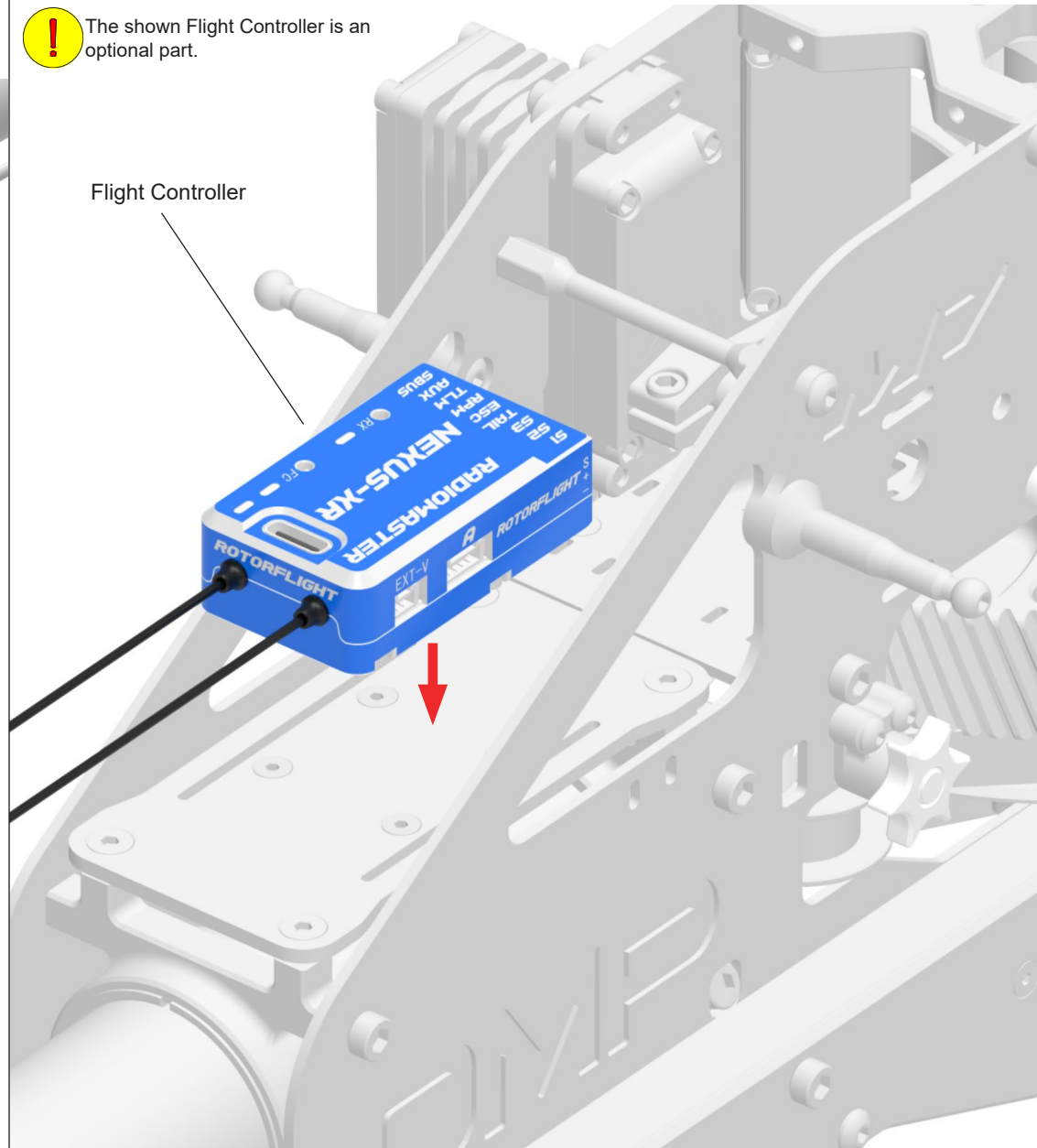


**!** These 6 screws used to secure the ESC plate assembly to the upper frames can be removed when installing the ESC for easier installation.

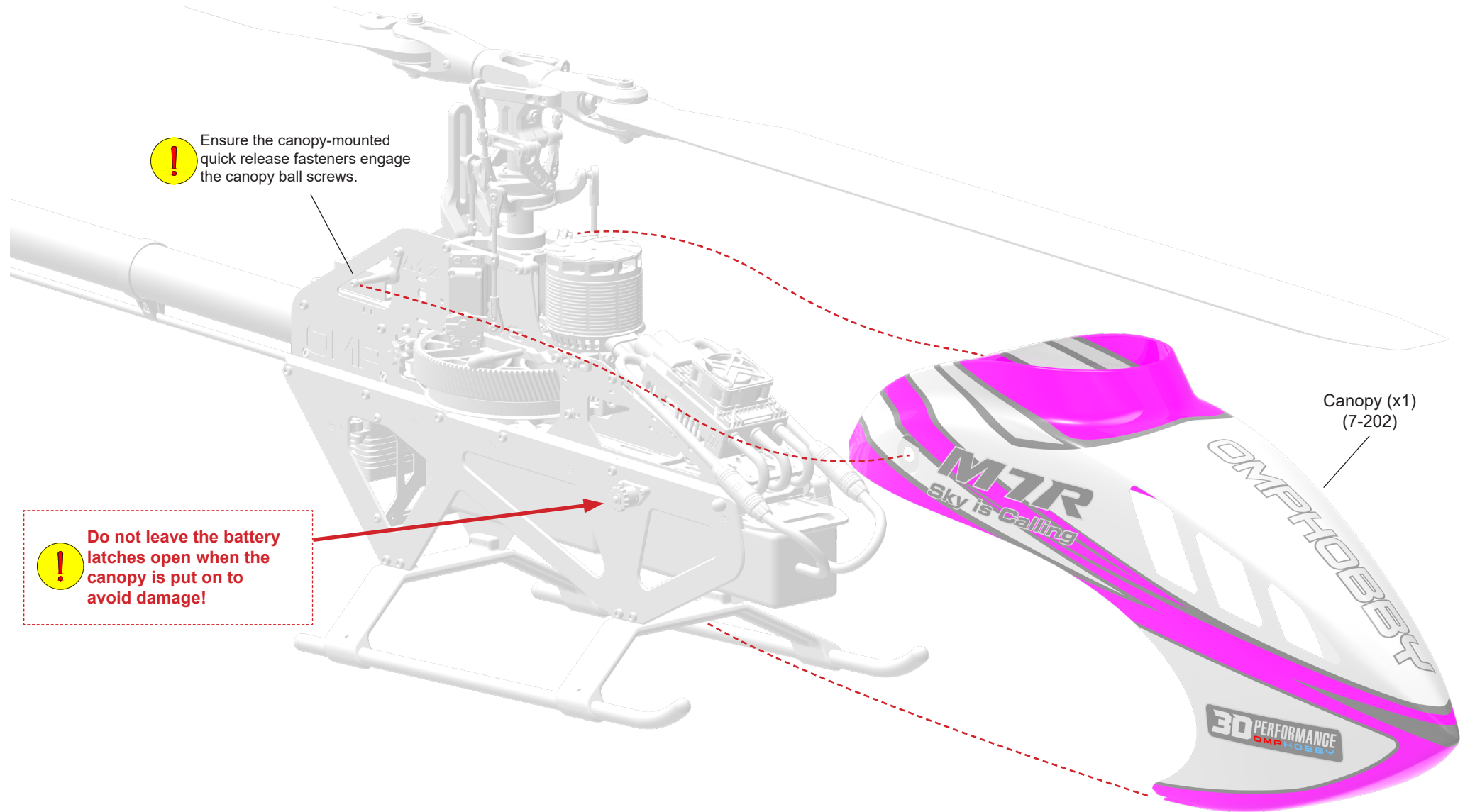
**02 Flight Controller Installation**

**!** The shown Flight Controller is an optional part.

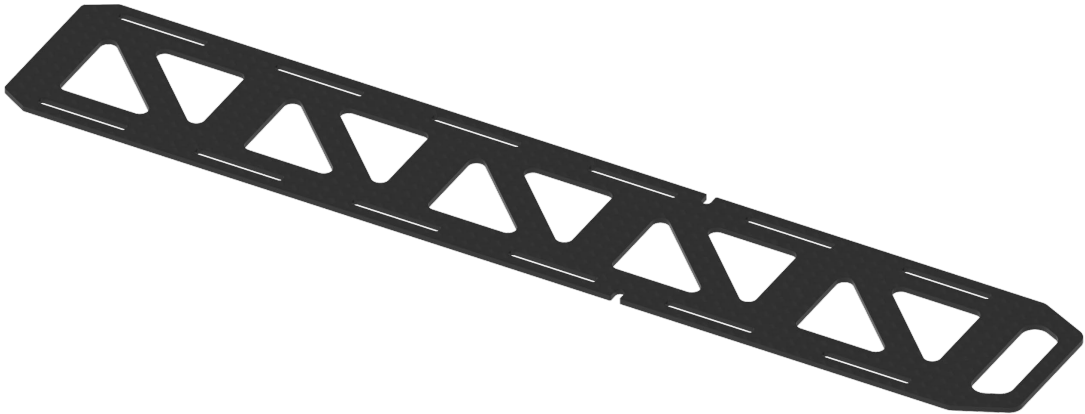

Flight Controller





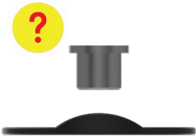
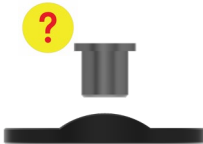









## 01 Canopy Installation











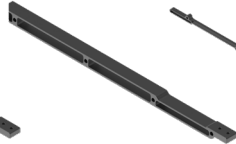













**Additional Accessories**

Item	Image	Quantity
M7R Battery Tray		1
Zip Ties		4















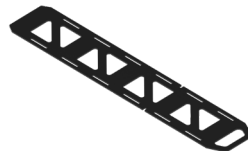
**!** All parts in a single box must be upgraded together. The **?** Symbol denotes several options, from which you should choose one.





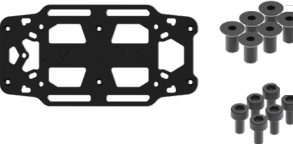
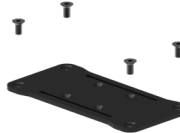

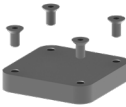


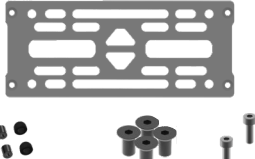
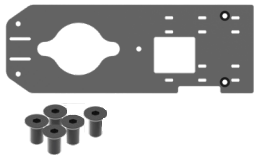


















Build Group	Parts					
Main Rotor Head	 <p>Main Rotor Yoke OSHM7224 Quantity: x1</p>	 <p>Main Rotor Blade Grip OSHM7280 Quantity: x2</p>	 <p>Main Rotor Blade Washer Set 1 (14mm) OSHM7273 Quantity: x1</p>	 <p>Main Rotor Blade Washer Set 2 (12mm) OSHM7272 Quantity: x1</p>	 <p>Main Blade Grip Arm 32mm OSHM7220 Quantity: x1</p>	 <p>Main Blade Grip Arm 1:1 OSHM7295 Quantity: x1</p>
Swashplate	 <p>Swashplate (Assembled) OSHM7226 Quantity: x1</p>	 <p>Swashplate Driver Arm Set OSHM7225 Quantity: x1</p>				
Main Frame 1	 <p>Upper Coaxiality Block OSHM7229 Quantity: x1</p>	 <p>Lower Coaxiality Block OSHM7230 Quantity: x1</p>	 <p>Motor Mounting Plate OSHM7223 Quantity: x1</p>	 <p>Tensioner Assembly OSHM7278 Quantity: x1</p>	 <p>Landing Gear Tube OSHM7261 Quantity: x1</p>	



























**!** All parts in a single box must be upgraded together. The **?** Symbol denotes several options, from which you should choose one.































Build Group	Parts							
<b>Drivetrain</b>	 Main Pulley 110T OSHM7275 Quantity: x1	 Main Gear 122T-L OSHM7218 Quantity: x1	 ? Motor Pinion 11T-L OSHM7247 Quantity: x1	 ? Motor Pinion 12T-L OSHM7248 Quantity: x1	 ? Motor Pinion 13T-L OSHM7249 Quantity: x1	 ? Motor Pinion 14T-L OSHM7250 Quantity: x1	 ? Motor Pinion 15T-L OSHM7251 Quantity: x1	
<b>Main Frame 2</b>	 Lower Frame Spacer L OSHM7257 Quantity: x1	 Lower Frame Spacer R OSHM7256 Quantity: x1	 Battery Rail R OSHM7258 Quantity: x1	 Battery Rail L OSHM7259 Quantity: x1	 Lower Frame Stiffener Plate OSHM7254 Quantity: x2	 Battery Rail Support Blocks OSHM7260 Quantity: x2	 Tail Servo Mounting Block OSHM7235 Quantity: x1	 Battery Latch Spacer Set OSHM7286 Quantity: x1
<b>Required Screw Sets:</b> <ul style="list-style-type: none"> <li>- OSHF5091 (4 PCS)</li> <li>- OSHM7236 (1 PCS)</li> <li>- OSHM4X033 (1 PCS)</li> <li>- OSHM7113 (1 PCS)</li> <li>- OSHM7094 (1 PCS)</li> <li>- OSHM5123 (1 PCS)</li> </ul>	 Tail Boom Clamp Front OSHM7232 Quantity: x1	 Tail Boom Clamp Rear OSHM7233 Quantity: x1	 Upper Frame Plate L OSHM7211 Quantity: x1	 Upper Frame Plate R OSHM7210 Quantity: x1	 Lower Frame Plate L OSHM7209 Quantity: x1	 Lower Frame Plate R OSHM7208 Quantity: x1	 Canopy Spacer Set OSHM7285 Quantity: x1	




















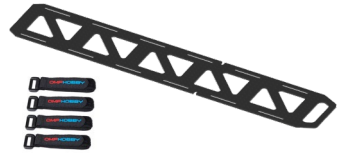










**!** All parts in a single box must be upgraded together. The **?** Symbol denotes several options, from which you should choose one.

Build Group	Parts				
Tail 1	 <p>Carbon Tail Boom Orange OSHM7266 Quantity: x1</p>	 <p>Carbon Tail Boom Yellow OSHM7267 Quantity: x1</p>	 <p>Carbon Tail Boom Pink OSHM7268 Quantity: x1</p>	 <p>Carbon Tail Boom Green OSHM7269 Quantity: x1</p>	 <p>Carbon Tail Boom White OSHM7270 Quantity: x1</p>
Tail 2	 <p>Tail Fin Orange OSHM7243 Quantity: x1</p>	 <p>Tail Fin Yellow OSHM7244 Quantity: x1</p>	 <p>Tail Fin Pink OSHM7245 Quantity: x1</p>	 <p>Tail Fin Green OSHM7246 Quantity: x1</p>	 <p>Tail Rotor Damper OSHM7088 Quantity: x1</p>
Canopy	 <p>Canopy Cosmic Orange OSHM7239 Quantity: x1</p>	 <p>Canopy Solar Yellow OSHM7240 Quantity: x1</p>	 <p>Canopy Nebula Pink OSHM7241 Quantity: x1</p>	 <p>Canopy Aurora Green OSHM7242 Quantity: x1</p>	 <p>Battery Tray M7R OSHM7252 Quantity: x1</p>

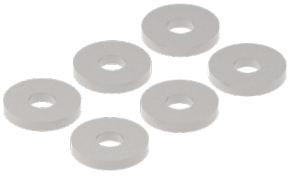
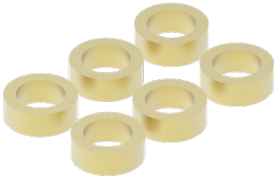
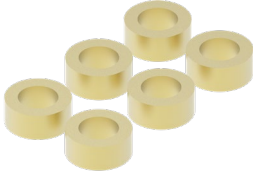
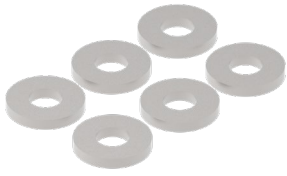
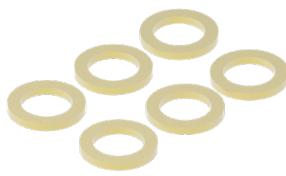

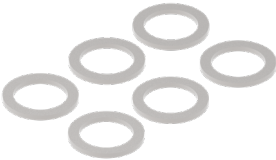


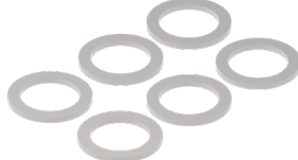




















<p>Part Number: OSHM7208</p>  <p>Lower Frame Plate R</p>	<p>Part Number: OSHM7209</p>  <p>Lower Frame Plate L</p>	<p>Part Number: OSHM7210</p>  <p>Upper Frame Plate R</p>	<p>Part Number: OSHM7211</p>  <p>Upper Frame Plate L</p>	<p>Part Number: OSHM7212</p>  <p>ESC Plate</p>	<p>Part Number: OSHM7213</p>  <p>FBL Mounting Plate</p>
<p>Part Number: OSHM7214</p>  <p>FBL Dampers</p>	<p>Part Number: OSHM7055</p>  <p>Inertial Mass Damper</p>	<p>Part Number: OSHM7215</p>  <p>Lower Aux Plate</p>	<p>Part Number: OSHM7057</p>  <p>Mounting Cross Member 69mm</p>	<p>Part Number: OSHM7216</p>  <p>Upper Aux Plate</p>	<p>Part Number: OSHM7217</p>  <p>Separator Plate</p>
<p>Part Number: OSHM7053</p>  <p>Mounting Crossmember 45mm</p>	<p>Part Number: OSHM7218</p>  <p>Main Gear 122T-L</p>	<p>Part Number: OSHM7219</p>  <p>Sprag Clutch Assembly</p>	<p>Part Number: OSHM7275</p>  <p>Main Pulley 110T</p>	<p>Part Number: OSHM7276</p>  <p>Tail Belt</p>	<p>Part Number: OSHM7035</p>  <p>Main Shaft Cover</p>
<p>Part Number: OSHM7277</p>  <p>Canopy Mounts</p>	<p>Part Number: OSHM7064</p>  <p>Tensioner Idler Pulley</p>	<p>Part Number: OSHM7221</p>  <p>Battery Quick Release Assembly</p>	<p>Part Number: OSHM7286</p>  <p>Battery Latch Spacer Set</p>	<p>Part Number: OSHM7278</p>  <p>Belt Tensioner Mounting Base</p>	<p>Part Number: OSHM7066</p>  <p>Belt Tensioner Knob</p>
<p>Part Number: OSHM7254</p>  <p>Lower Frame Stiffener Plate</p>	<p>Part Number: OSHM7256</p>  <p>Lower Frame Spacer R</p>	<p>Part Number: OSHM7257</p>  <p>Lower Frame Spacer L</p>	<p>Part Number: OSHM7258</p>  <p>Battery Rail R</p>	<p>Part Number: OSHM7259</p>  <p>Battery Rail L</p>	<p>Part Number: OSHM7285</p>  <p>Canopy Spacer Set</p>

<p>Part Number: OSHM7046</p>  <p>Upper Servo Mount R</p>	<p>Part Number: OSHM7222</p>  <p>Upper Servo Mount L</p>	<p>Part Number: OSHM7048</p>  <p>Lower Servo Mount R</p>	<p>Part Number: OSHM7047</p>  <p>Lower Servo Mount L</p>	<p>Part Number: OSHM7260</p>  <p>Battery Rail Support Blocks</p>	<p>Part Number: OSHM7223</p>  <p>Motor Mounting Plate</p>
<p>Part Number: OSHM7006</p>  <p>Motor Mounting Bracket</p>	<p>Part Number: OSHM7279</p>  <p>Main Rotor Damper POM</p>	<p>Part Number: OSHM7280</p>  <p>Main Rotor Blade Grip</p>	<p>Part Number: OSHM7224</p>  <p>Main Rotor Yoke</p>	<p>Part Number: OSHM7015</p>  <p>Main Shaft</p>	<p>Part Number: OSHM7017</p>  <p>Spindle Shaft</p>
<p>Part Number: OSHM7220</p>  <p>Main Blade Grip Arm 32mm</p>	<p>Part Number: OSHM7032</p>  <p>Main Rotor Shaft Clamp</p>	<p>Part Number: OSHM7225</p>  <p>Swashplate Driver Arm</p>	<p>Part Number: OSHM7183</p>  <p>Swashplate Driver Joint</p>	<p>Part Number: OSHM7031</p>  <p>Swashplate Guide</p>	<p>Part Number: OSHM7024</p>  <p>Ball Joint Sockets</p>
<p>Part Number: OSHM7022</p>  <p>Servo Linkage Rod</p>	<p>Part Number: OSHM7023</p>  <p>Rotor Head Linkage Rod</p>	<p>Part Number: OSHM7226</p>  <p>Swashplate</p>	<p>Part Number: OSHM7227</p>  <p>Swashplate Outer Ring</p>	<p>Part Number: OSHM7255</p>  <p>Swashplate Inner Ring</p>	<p>Part Number: OSHM7228</p>  <p>Swashplate Hub</p>
<p>Part Number: OSHM7029</p>  <p>Spherical Bearing</p>	<p>Part Number: OSHM7232</p>  <p>Tail Boom Clamp Front</p>	<p>Part Number: OSHM7233</p>  <p>Tail Boom Clamp Rear</p>	<p>Part Number: OSHM7231</p>  <p>Lower Bearing Block</p>	<p>Part Number: OSHM7229</p>  <p>Upper Coaxiality Block</p>	<p>Part Number: OSHM7230</p>  <p>Lower Coaxiality Block</p>

<p>Part Number: OSHM7235</p>  <p>Tail Rotor Servo Mounting Block</p>	<p>Part Number: OSHM7077</p>  <p>Tail Control Rod Guide</p>	<p>Part Number: OSHM7078</p>  <p>Tail Control Rod</p>	<p>Part Number: OSHM7262</p>  <p>Landing Gear Skids</p>	<p>Part Number: OSHM7261</p>  <p>Landing Gear Skid Pipes</p>	<p>Part Number: OSHM7263</p>  <p>Carbon Tail Boom</p>
<p>Part Number: OSHM7269</p>  <p>Carbon Tail Boom Green</p>	<p>Part Number: OSHM7266</p>  <p>Carbon Tail Boom Orange</p>	<p>Part Number: OSHM7268</p>  <p>Carbon Tail Boom Pink</p>	<p>Part Number: OSHM7267</p>  <p>Carbon Tail Boom Yellow</p>	<p>Part Number: OSHM7270</p>  <p>Carbon Tail Boom White</p>	<p>Part Number: OSHM7090</p>  <p>Tail Fin</p>
<p>Part Number: OSHM7246</p>  <p>Tail Fin Green</p>	<p>Part Number: OSHM7243</p>  <p>Tail Fin Orange</p>	<p>Part Number: OSHM7245</p>  <p>Tail Fin Pink</p>	<p>Part Number: OSHM7244</p>  <p>Tail Fin Yellow</p>	<p>Part Number: OSHM7091</p>  <p>Tail Pulley 22T</p>	<p>Part Number: OSHM7265</p>  <p>Tail Idler Pulley</p>
<p>Part Number: OSHM7079</p>  <p>Tail Pitch Slider</p>	<p>Part Number: OSHM7282</p>  <p>Tail Pitch Slider Sleeve</p>	<p>Part Number: OSHM7281</p>  <p>Tail Pitch Slider Control Ring</p>	<p>Part Number: OSHM7284</p>  <p>Tail Pitch Slider Ball Joint Sockets</p>	<p>Part Number: OSHM7283</p>  <p>Tail Pitch Slider Bellcrank Pin</p>	<p>Part Number: OSHM7083</p>  <p>Tail Boom Protector</p>
<p>Part Number: OSHM7084</p>  <p>Tail Rotor Yoke</p>	<p>Part Number: OSHM7085</p>  <p>Tail Blade Grip</p>	<p>Part Number: OSHM7080</p>  <p>Tail Bellcrank Base</p>	<p>Part Number: OSHM7081</p>  <p>Tail Bellcrank</p>	<p>Part Number: OSHM7264</p>  <p>Tail Bellcrank Arm</p>	<p>Part Number: OSHM7089</p>  <p>Tail Case</p>

<p>Part Number: OSHM7086</p>  <p>Tail Rotor Shaft</p>	<p>Part Number: OSHM7087</p>  <p>Tail Rotor Spindle Shaft</p>	<p>Part Number: OSHM7088</p>  <p>Tail Rotor Damper</p>	<p>Part Number: OSHM7044</p>  <p>Servo Alignment Spacer</p>	<p>Part Number: OSHM7045</p>  <p>Servo Alignment Nut CNC 5mm</p>	<p>Part Number: OSHM7043</p>  <p>Servo Alignment Nut CNC 4mm (V)</p>
<p>Part Number: OSHM7247</p>  <p>Motor Pinion 11T-L</p>	<p>Part Number: OSHM7248</p>  <p>Motor Pinion 12T-L</p>	<p>Part Number: OSHM7249</p>  <p>Motor Pinion 13T-L</p>	<p>Part Number: OSHM7250</p>  <p>Motor Pinion 14T-L</p>	<p>Part Number: OSHM7251</p>  <p>Motor Pinion 15T-L</p>	<p>Part Number: OSHM6022</p>  <p>Servo Bushing</p>
<p>Part Number: OSHM7234</p>  <p>Metal Servo Arm Set 25T</p>	<p>Part Number: OSHM7272</p>  <p>Main Blade Washer Set 2 (12mm)</p>	<p>Part Number: OSHM7273</p>  <p>Main Blade Washer Set 1 (14mm)</p>	<p>Part Number: OSHM7167</p>  <p>Blade Caddy</p>	<p>Part Number: OSHM7168</p>  <p>Main Rotor Blades (RT-700U)</p>	<p>Part Number: OSHM7169</p>  <p>Tail Rotor Blades (RT-106U)</p>
<p>Part Number: OSHM7039</p>  <p>Servo Arm Plastic</p>	<p>Part Number: OSHM7252</p>  <p>Battery Tray M7R</p>	<p>Part Number: OSHM7239</p>  <p>Canopy Cosmic Orange</p>	<p>Part Number: OSHM7240</p>  <p>Canopy Solar Yellow</p>	<p>Part Number: OSHM7241</p>  <p>Canopy Nebula Pink</p>	<p>Part Number: OSHM7242</p>  <p>Canopy Aurora Green</p>
<p>Part Number: OSHM7094</p>  <p>Button Head Screw M2.5x8</p>	<p>Part Number: OSHM7095</p>  <p>Button Head Screw M2.5x10</p>	<p>Part Number: OSHM7296</p>  <p>Button Head Screw M3x5</p>	<p>Part Number: OSHM7098</p>  <p>Button Head Screw M3x8</p>	<p>Part Number: OSHM7100</p>  <p>Button Head Screw M3x22</p>	<p>Part Number: OSHM7122</p>  <p>Button Head Screw M4x24</p>

<p>Part Number: OSHM7182</p>  <p>Hex Screw M2x4</p>	<p>Part Number: OSHM7103</p>  <p>Hex Screw M2x5</p>	<p>Part Number: OSHM7104</p>  <p>Hex Screw M2x8</p>	<p>Part Number: OSHM7105</p>  <p>Hex Screw M2.5x6</p>	<p>Part Number: OSHM5123</p>  <p>Hex Screw M2.5x10</p>	<p>Part Number: OSHM7292</p>  <p>Hex Screw M3x12</p>
<p>Part Number: OSHM7236</p>  <p>Hex Screw M3x5</p>	<p>Part Number: OSHM7109</p>  <p>Hex Screw M3x6</p>	<p>Part Number: OSHM7110</p>  <p>Hex Screw M3x8</p>	<p>Part Number: OSHM7111</p>  <p>Hex Screw M3x10</p>	<p>Part Number: OSHM7237</p>  <p>Hex Screw M3x14</p>	<p>Part Number: OSHM4X033</p>  <p>Hex Screw M3x16 (Partial Thread)</p>
<p>Part Number: OSHM7113</p>  <p>Hex Screw M3x18 (Partial Thread)</p>	<p>Part Number: OSHM7114</p>  <p>Hex Screw M3x20 (Partial Thread)</p>	<p>Part Number: OSHM7117</p>  <p>Hex Screw M3x27.6 (Partial Thread)</p>	<p>Part Number: OSHM7238</p>  <p>Hex Screw M3x43 (Partial Thread)</p>	<p>Part Number: OSHM7119</p>  <p>Hex Screw M4x12</p>	<p>Part Number: OSHM7120</p>  <p>Hex Screw M4x18 (Partial Thread)</p>
<p>Part Number: OSHF5091</p>  <p>Countersunk Screw M2.5x5</p>	<p>Part Number: OSHM7289</p>  <p>Countersunk Screw M3x6</p>	<p>Part Number: OSHM7112</p>  <p>Countersunk Screw M3x12</p>	<p>Part Number: OSHF5094</p>  <p>Countersunk Screw M3x16</p>	<p>Part Number: OSHM7184</p>  <p>Set Screw M4x3</p>	<p>Part Number: OSHM7127</p>  <p>Set Screw M4x4</p>
<p>Part Number: OSHM7129</p>  <p>Guidance Ball Joint Screw</p>	<p>Part Number: OSHM7130</p>  <p>Ball Joint Screw M2.5x5x4</p>	<p>Part Number: OSHM7131</p>  <p>Ball Joint Screw M3x6x4.2</p>	<p>Part Number: OSHM7132</p>  <p>Ball Joint Screw M3x6x6.7</p>	<p>Part Number: OSHM7138</p>  <p>Bushing 2x4x3.5</p>	<p>Part Number: OSHM7139</p>  <p>Washer 2x5x0.5</p>

<p>Part Number: OSHM7140</p>  <p>Washer 2.5x7x1</p>	<p>Part Number: OSHM7141</p>  <p>Bushing 3x4.5x1.6</p>	<p>Part Number: OSHM7142</p>  <p>Bushing 3x5x2.1</p>	<p>Part Number: OSHM7143</p>  <p>Washer 2x5x0.5</p>	<p>Part Number: OSHM7145</p>  <p>Washer 4x6x0.65</p>	<p>Part Number: OSHM7146</p>  <p>Spacer 4x6x2.5</p>
<p>Part Number: OSHM7147</p>  <p>Washer 5x7x0.5</p>	<p>Part Number: OSHM7148</p>  <p>Washer 6x14x2</p>	<p>Part Number: OSHM7149</p>  <p>Spacer 8x10x1.45</p>	<p>Part Number: OSHM7150</p>  <p>Thrust Bearing Washer 10x14x1</p>	<p>Part Number: OSHM7291</p>  <p>Spacer 15.1x17x1.2</p>	<p>Part Number: OSHM7152</p>  <p>Flanged Bearing 3x7x3</p>
<p>Part Number: OSHM7153</p>  <p>Flanged Bearing 3x8x3</p>	<p>Part Number: OSHM7154</p>  <p>Flanged Bearing 6x15x5</p>	<p>Part Number: OSHM7158</p>  <p>Bearing 3x8x3</p>	<p>Part Number: OSHM7159</p>  <p>Bearing 4x12x4</p>	<p>Part Number: OSHM7156</p>  <p>Axial Bearing 5x10x4</p>	<p>Part Number: OSHM7157</p>  <p>Axial Bearing 10x18x5.5</p>
<p>Part Number: OSHM7160</p>  <p>Bearing 5x10x4</p>	<p>Part Number: OSHM7161</p>  <p>Bearing 8x16x5</p>	<p>Part Number: OSHM7162</p>  <p>Bearing 10x19x7</p>	<p>Part Number: OSHM7163</p>  <p>Bearing 15x21x4</p>	<p>Part Number: OSHM7164</p>  <p>Bearing 12x24x5</p>	<p>Part Number: OSHM7165</p>  <p>Bearing 15x24x7</p>
<p>Part Number: OSHB5102</p>  <p>Bearing 30x37x4</p>	<p>Part Number: OSHM7155</p>  <p>Bearing 8x12x3.5</p>	<p>Part Number: OSHM7121</p>  <p>Hex Bolt M4x23, M4 Nyloc Nut</p>	<p>Part Number: OSHM7290</p>  <p>Hex Bolt M5x34, M5 Nyloc Nut</p>	<p>Part Number: OSHM7125</p>  <p>Tail Pulley Screw M2.5x14 (custom)</p>	<p>Part Number: OSHM7187</p>  <p>Driver Pin</p>

<p>Part Number: OSHM7133</p>  <p>M2 Nyloc Nut</p>	<p>Part Number: OSHM7134</p>  <p>M2.5 Nyloc Nut</p>	<p>Part Number: OSHM7135</p>  <p>M3 Nyloc Nut</p>	<p>Part Number: OSHM7136</p>  <p>M4 Nyloc Nut</p>	<p>Part Number: OSHM7137</p>  <p>M5 Nyloc Nut</p>	<p>Part Number: OSHM7051</p>  <p>M7 Battery Straps</p>
<p>Part Number: OSHM7185</p>  <p>Backup Capacitor 25F 8.4V</p>	<p>Part Number: OSHM7186</p>  <p>Backup Capacitor 25F 12V</p>	<p>Part Number: OSHM7181</p>  <p>Canopy Mount Sacrificial Plate</p>	<p>Part Number: OSHM7193</p>  <p>Metal Servo Arm 25T Lock-Left</p>	<p>Part Number: OSHM7194</p>  <p>Metal Servo Arm 25T Lock-Right</p>	<p>Part Number: OSHM7295</p>  <p>Main Blade Grip Arm 1:1</p>



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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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W W W . O M P H O B B Y . C O M

## Endnotes