Manual

GLOGO 690

Mikado
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Manual Mikado LOGO 690 SX

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Max. rotorhead rpm GLOGO 690: 2000
Max. collective range: +/- 11°
Max. rotor blade size: 690 mm
Max. tail rotor blade size: 105mm
Min. Engine Size:.91
Max. Engine Size:.1.20

The GLOGO 690 is not recommended for novices. This helicopter is a complex system. Basic knowledge of the function of a model helicopter is required to build and operate the The GLOGO 690 with the nitro engine.

We recommend a VBar NEO with Pro Version (required) as well as an external RPM Sensor (e.g. Spartan SRC-RPM), together with VBar Control Touch with VBar NEO Basice App, or VBar Control with VBar NEO Basic, VBar NEO Pro and VBar NEO Nitro Apps.

Legacy VBars black/Blueline/Silverline can be used, but the Governor will have to be set up manually.
A Mini VBar is not suitable, because of the missing Governor feature and and the missing connections.

Safety Instructions

OPERATING YOUR MODEL SAFELY
Operate the helicopter in spacious areas with no people nearby.
!Warning: Do NOT operate the helicopter in the following places and situations (or else you risk severe accidents):
- in places where children gather or people pass through
- in residential areas and parks
- indoors and in limited space
- in windy weather or when there is any rain, snow, fog or other precipitation

If you do not observe these instructions you may be held reliable for personal injury or property damage!
Always check the R/C system prior to operating your helicopter. When the R/C system batteries get weaker, the operational range of the R/C system decreases. Note that you may lose control of your model when operating it under such conditions.

Keep in mind that other people around you might also be operating a R/C model.

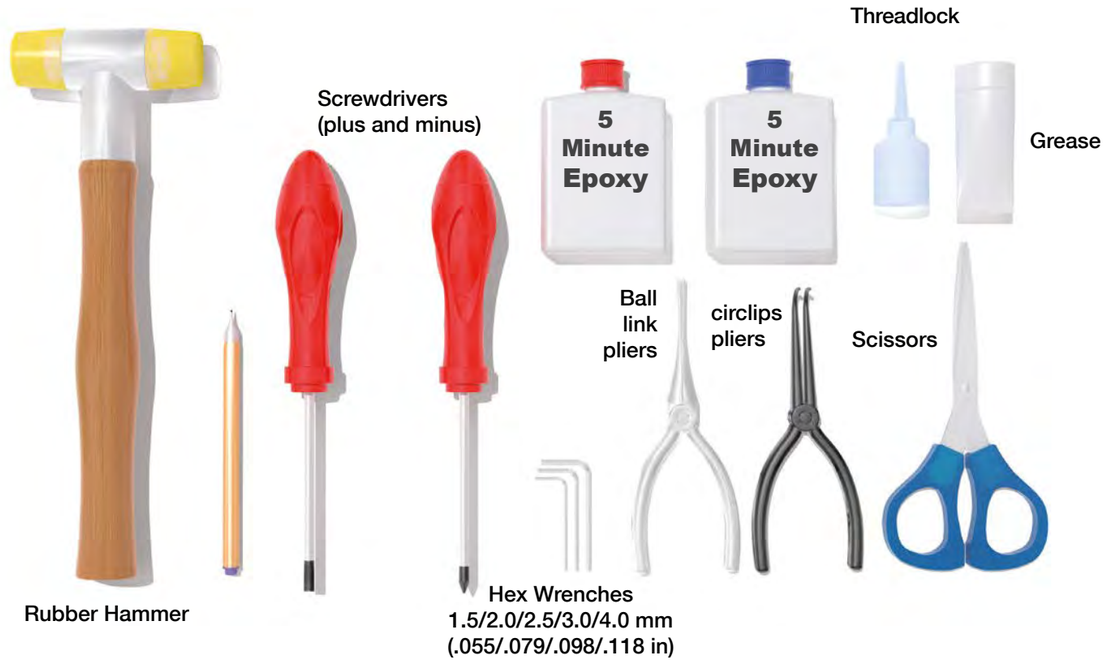
Never use a frequency which someone else is using at the same time. Radio signals will be mixed and you will lose control of your model.

If the model shows irregular behavior, bring the model to a halt immediately. Turn off all power switches and disconnect the batteries. Investigate the reason and fix the problem. Do not operate the model again as long as the problem is not solved, as this may lead to further trouble and unforeseen accidents.

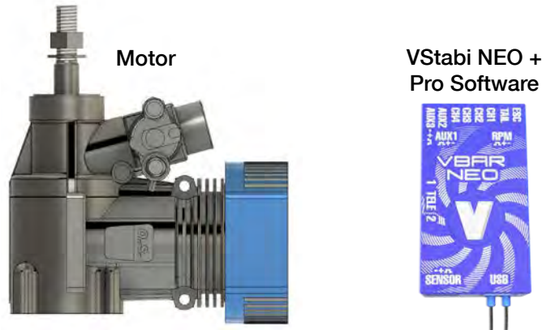
! Warning: In order to prevent accidents and personal injury, be sure to observe the following:
Before flying the helicopter, ensure that all screws are tightened. A single loose screw may cause a major accident.
Replace all broken or defective parts with new ones, as damaged parts lead to crashes.
Never approach a spinning rotor. Keep at least 10 meters/yards away from a spinning rotor blades.
Do not touch the motor immediately after use. It may be hot enough to cause burns.
Perform all necessary maintenance.

PRIOR TO ADJUSTING AND OPERATING YOUR MODEL, OBSERVE THE FOLLOWING
!Warning: Operate the helicopter only outdoors and out of people's reach as the main rotor operates at high rpm!
! Warning: While adjusting, stand at least 10 meters/yards away from the helicopter!
Novice R/C helicopter pilots should always seek advice from experienced pilots to obtain hints with assembly and for pre-flight adjustments. Note that a badly assembled or insufficiently adjusted helicopter is a safety hazard!
In the beginning, novice R/C helicopter pilots should always be assisted by an experienced pilot and never fly alone!

Tools for Assembly & R/C Equipment



All shown products are examples. You may use different brands.



RX Battery

Radio with Heli-Software

Servos

1 Tail Belt Tensioner Assembly

1.2 Main Frame Assembly

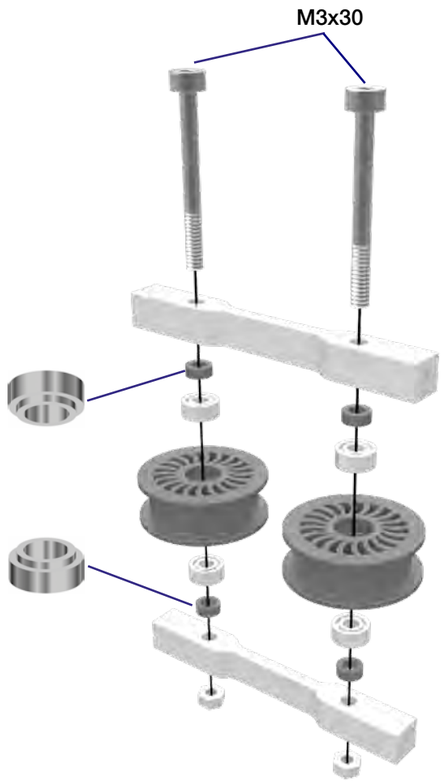
Bag 1

2x M3x30

4x 3x5x2,5

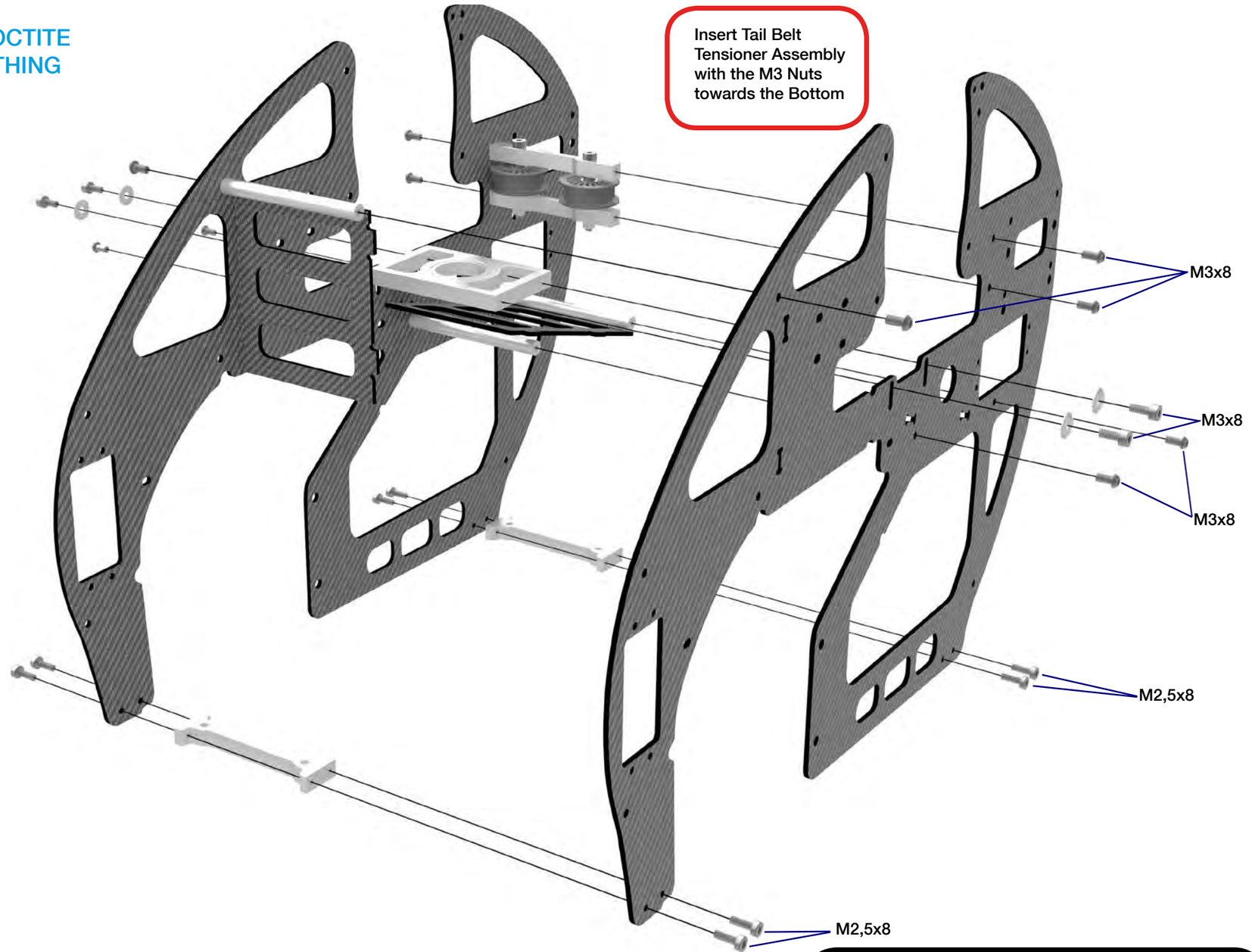
2x M3

4x 3x7x3



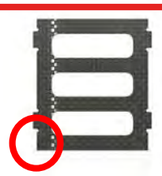
BLUE LOCTITE EVERYTHING

Insert Tail Belt Tensioner Assembly with the M3 Nuts towards the Bottom

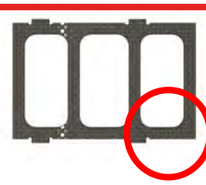


Notes:
- Put Blue Loctite into the Nuts
- Tighten till snug but not overly tight which
would cause the pulleys to not spin freely

- Vertical Plate -
Longer Carbon after Tab goes towards bottom



- Rear Plate -
Long Carbon after Tab goes towards rear



Bag 1

3 x

8 x M2,5x6

10x M3x8

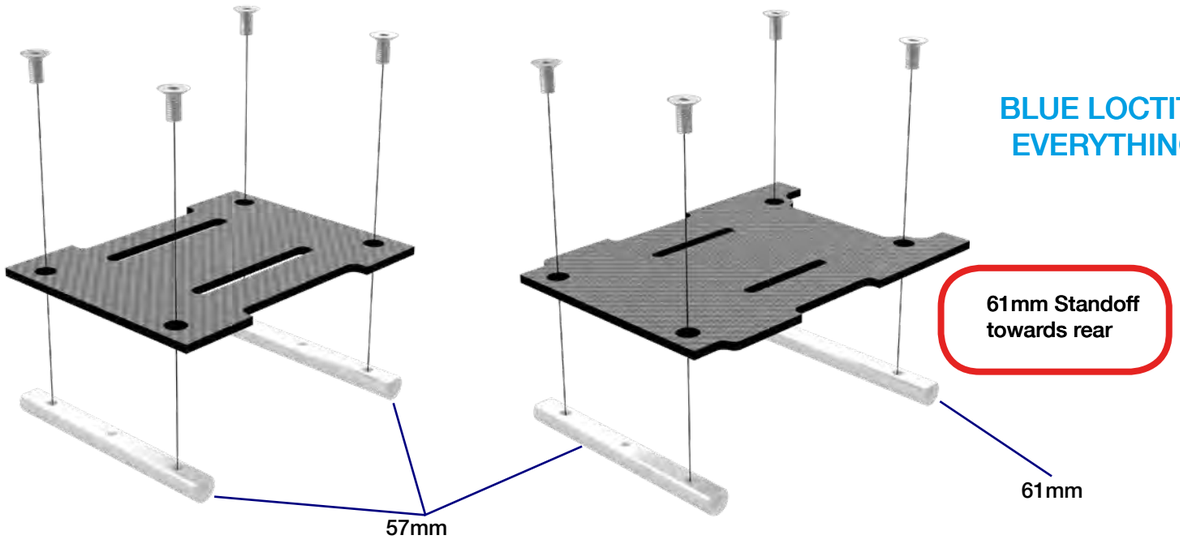
4 x M3x8

4 x

1.3 Front Frame Assembly

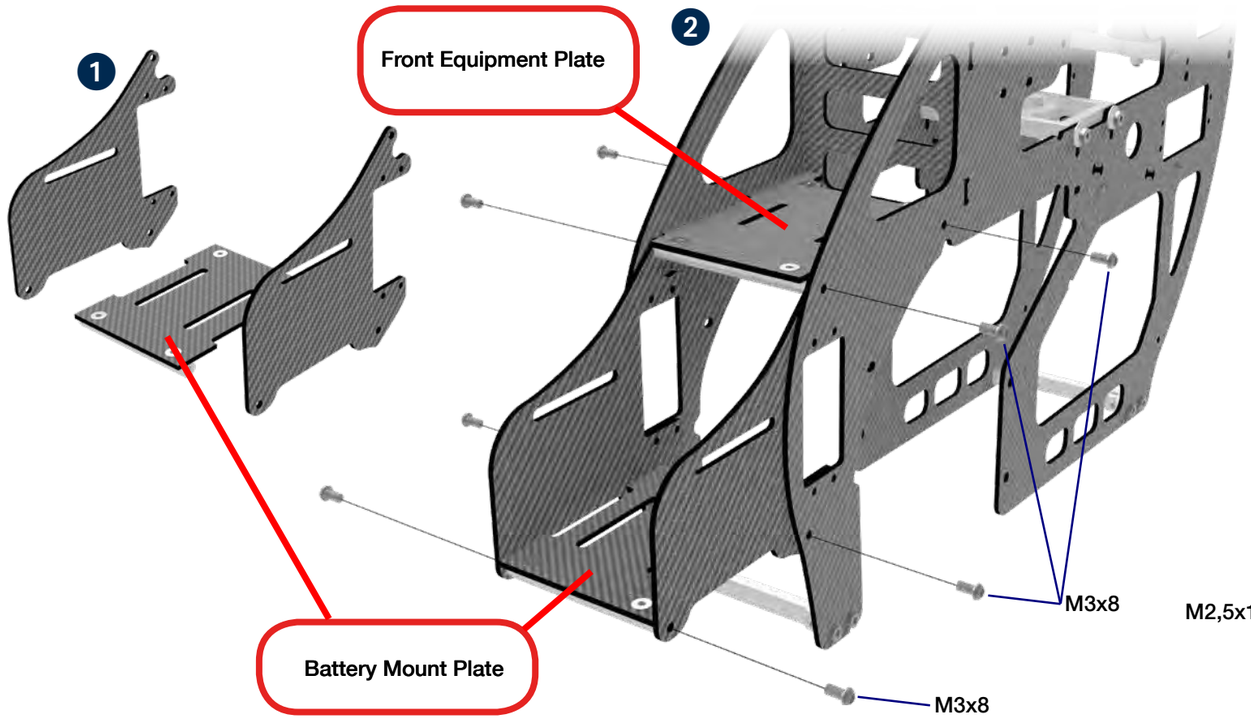
Bag 1

8 x	M3x6	
8 x	M3x8	
2 x	M3x6	
3 x		57
1 x		61



BLUE LOCTITE EVERYTHING

61mm Standoff towards rear

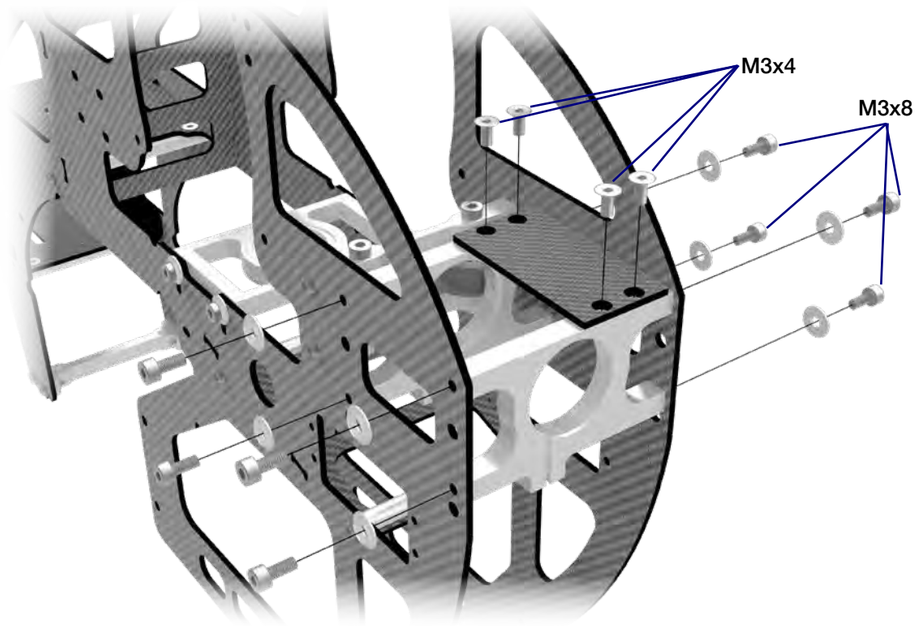


1.4 Tail Boom Mounts

Bag 1

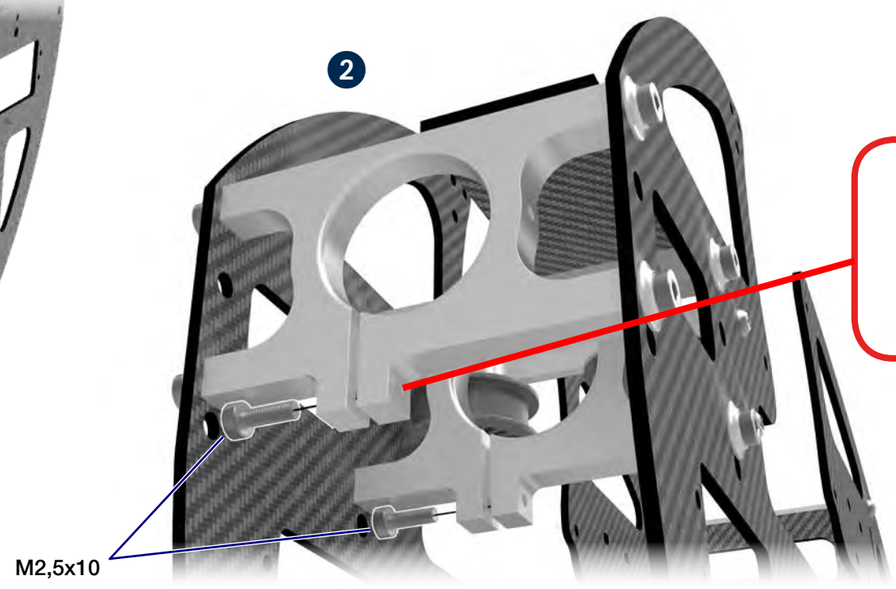
8 x	M3x8	
8 x		
4 x	M3x4	
2 x	M2,5x10	

1



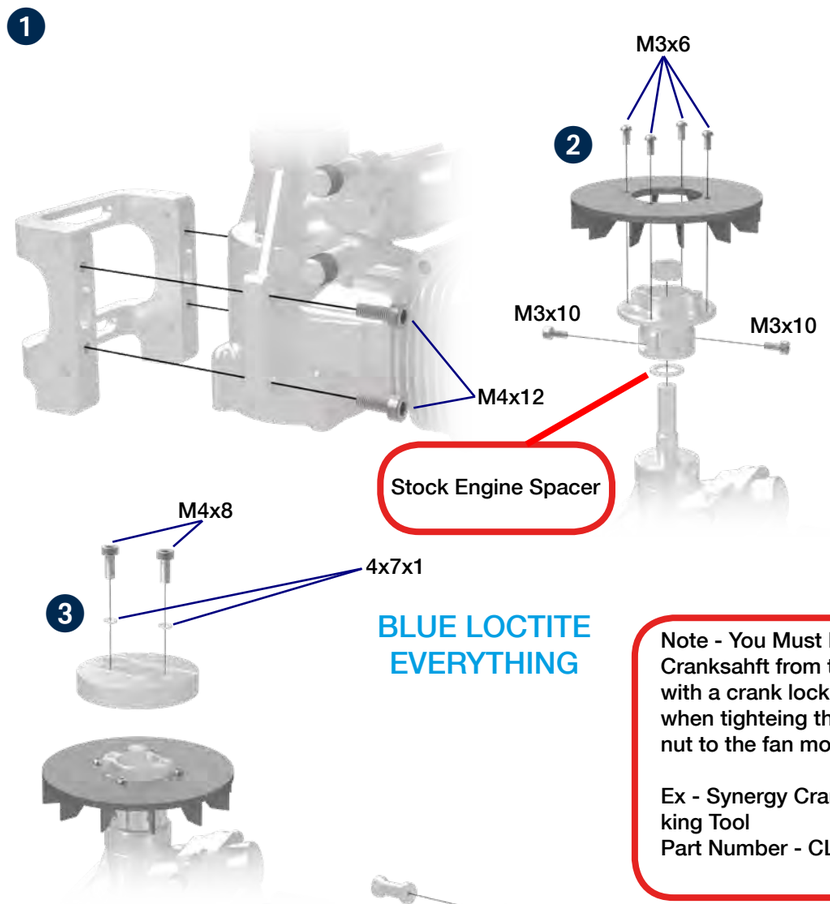
BLUE LOCTITE EVERYTHING

2



Ensure Boom Mounts are mounted with the Clamping Tabs to the left. Insert M2.5x10mm Bolt before installing in frame.

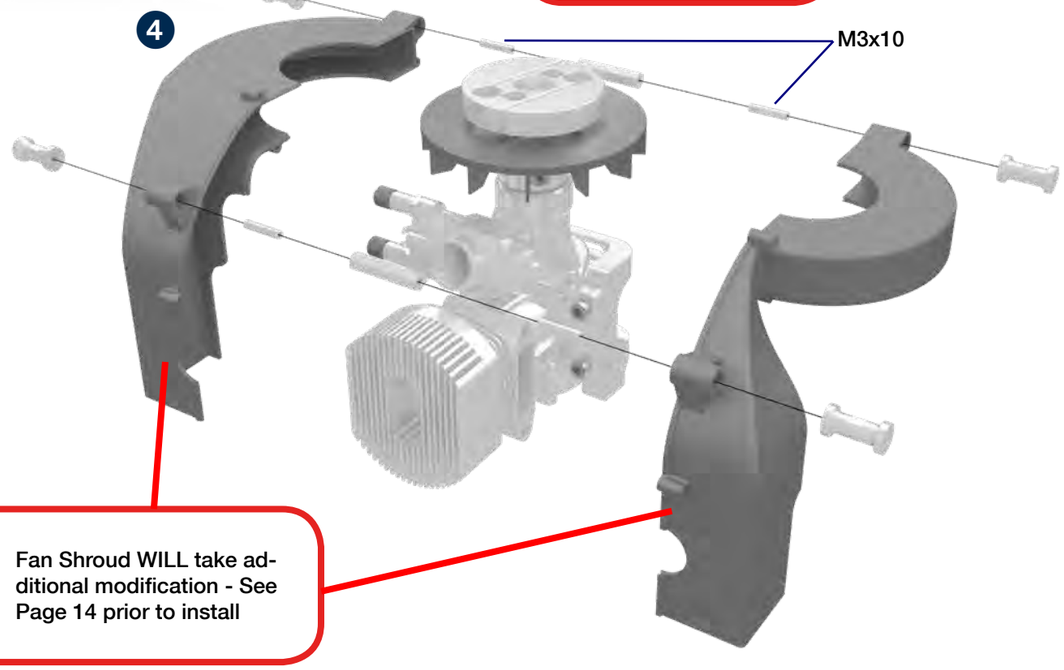
2 Motor Assembly



BLUE LOCTITE EVERYTHING

Note - You Must Block the Cranksahft from twisting with a crank locking tool when tighteing the engine nut to the fan mount

Ex - Synergy Crank Lok-king Tool
Part Number - CLT-001



Bag 2

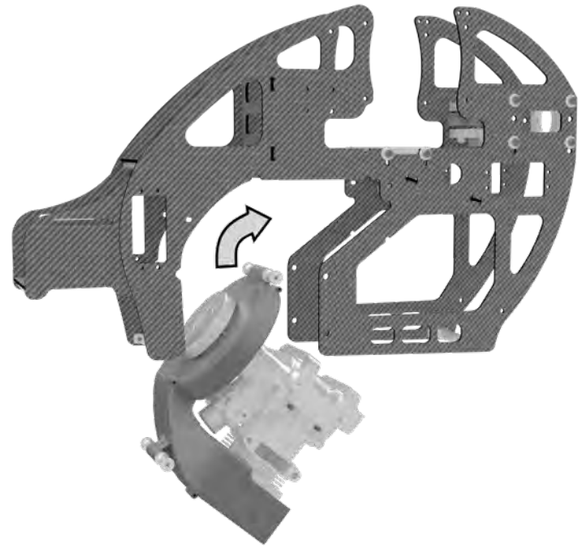
2 x		SW5x26
4 x		M3x10
6 x		M4x8
4 x		M4x12
8 x		M3x6
2 x		M3x10
2 x		4x7x1
4 x		

3 Engine/ Landing Gear Mounting

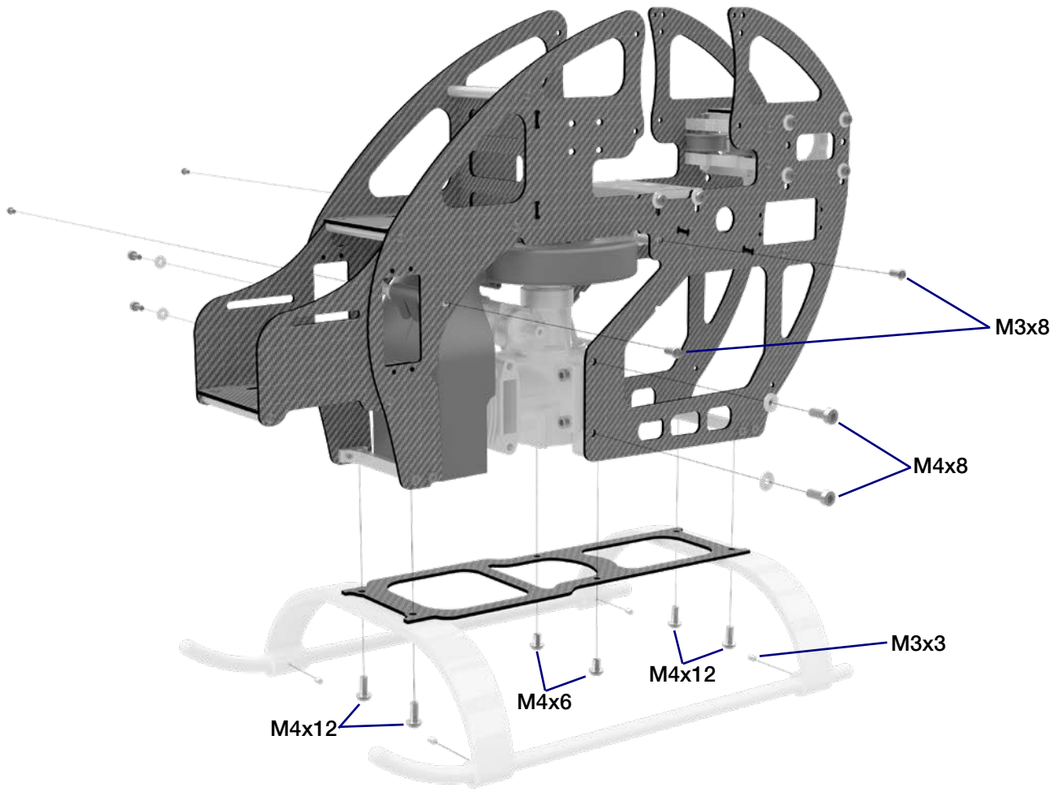
Bag 3

4 x		M4x12
2 x		M4x6
4 x		M3x5

Slide the Engine Assembly in from the bottom at an angle.



BLUE LOCTITE EVERYTHING

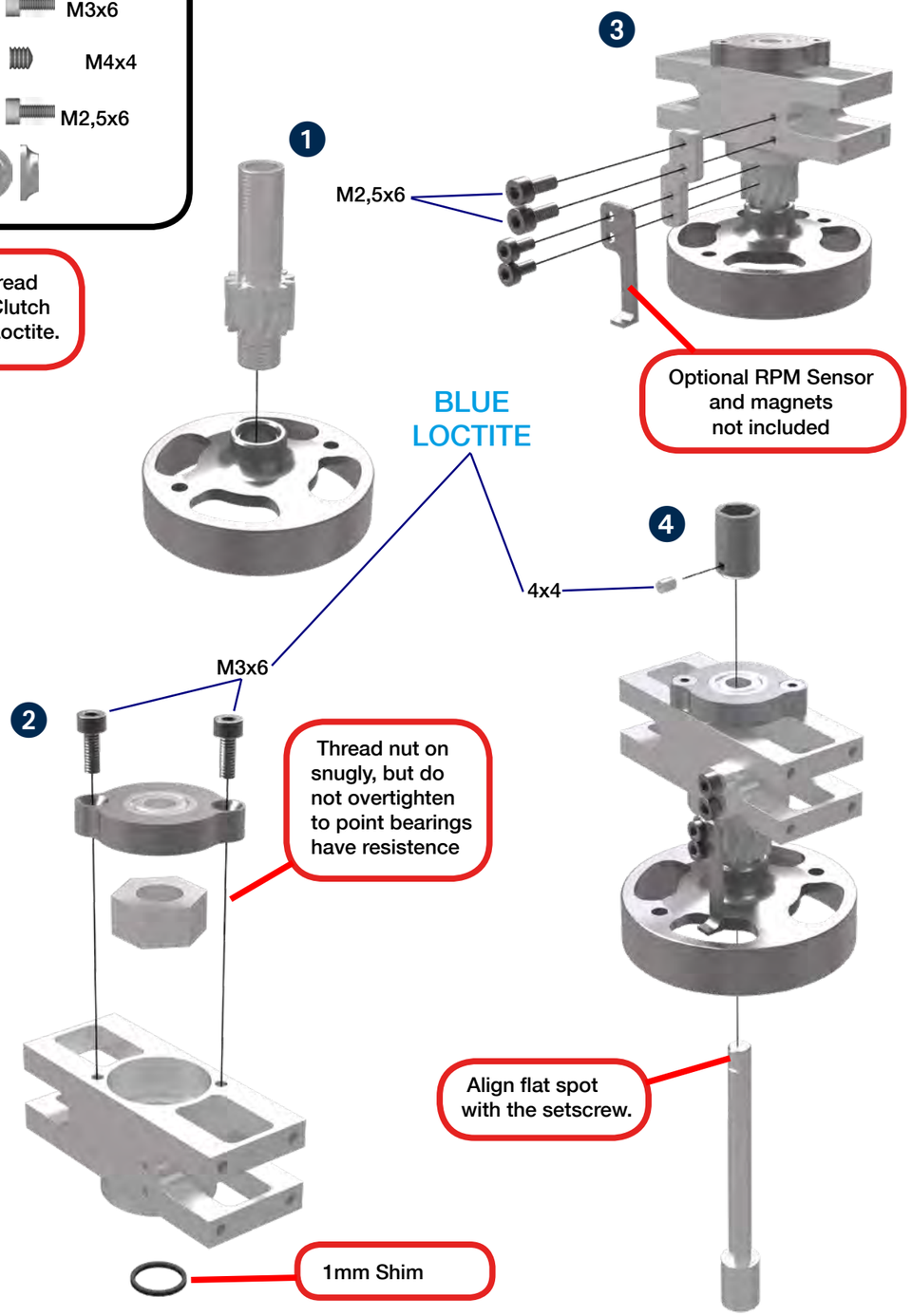


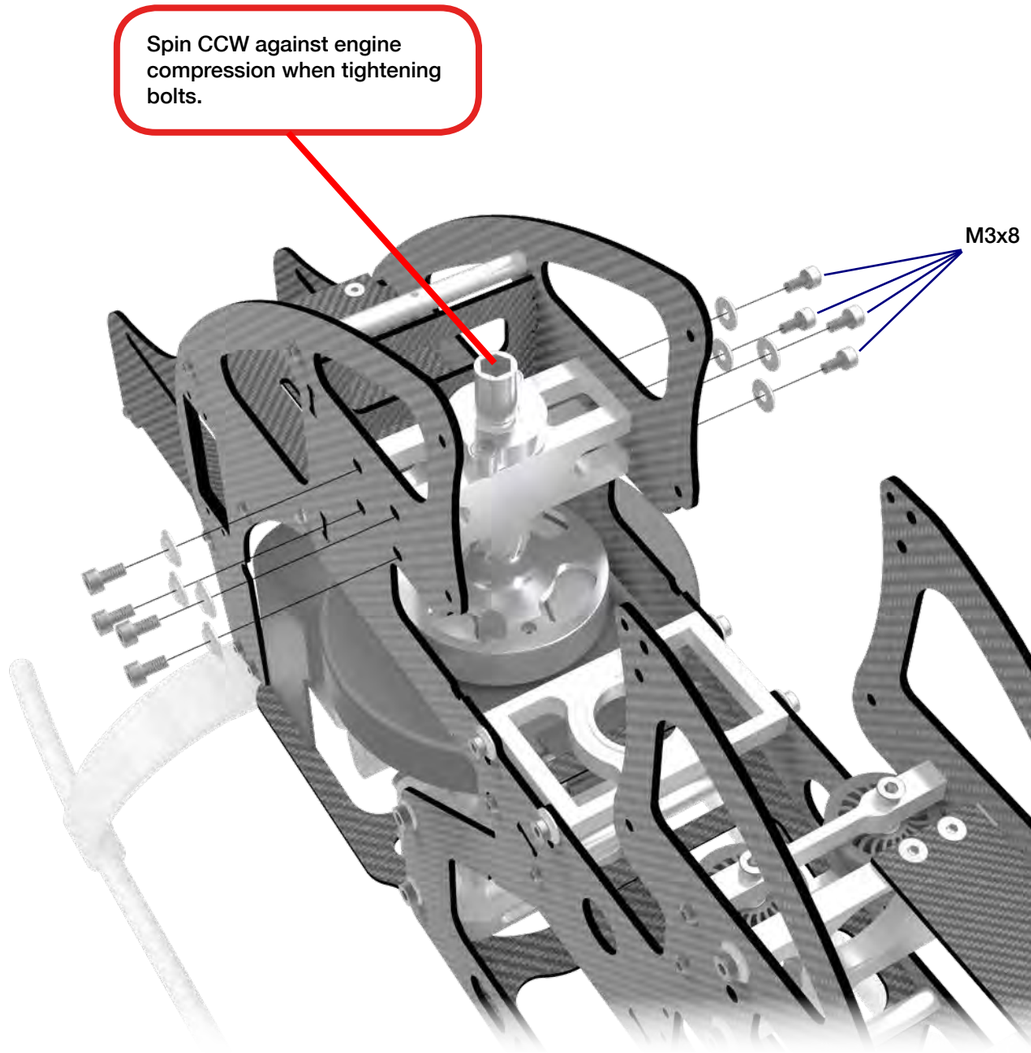
4 Clutch Stack Assembly

Bag 4

1 x		1mm
8 x		M3x8
2 x		M3x6
1 x		M4x4
2 x		M2,5x6
8 x		

Step 1: Thread Pinion to Clutch Bell. Use Loctite.



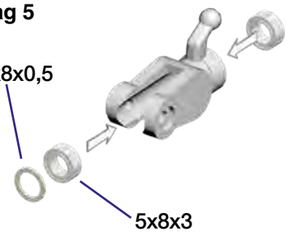


Note : When tightening the 8 x Clutch Stack Mounting Bolts, you must spin the start shaft counter clockwise against engine compression in order to lock the one way bearing in the clutch to take out slop which will properly align the clutch stack.

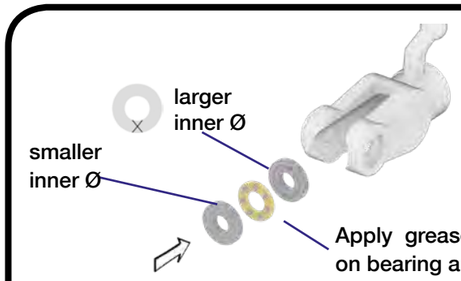
5 Tail Rotor

Bag 5

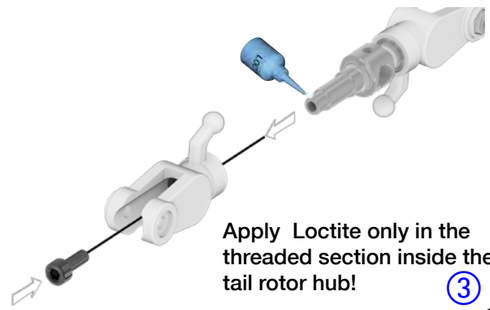
1 Bag 5



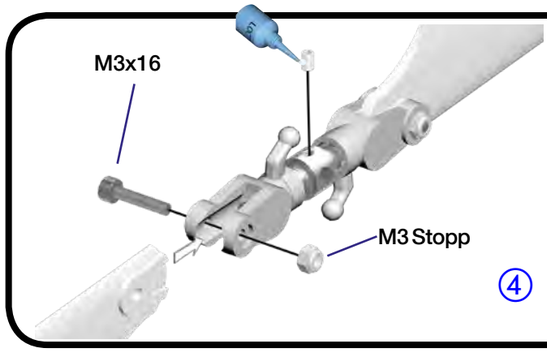
①



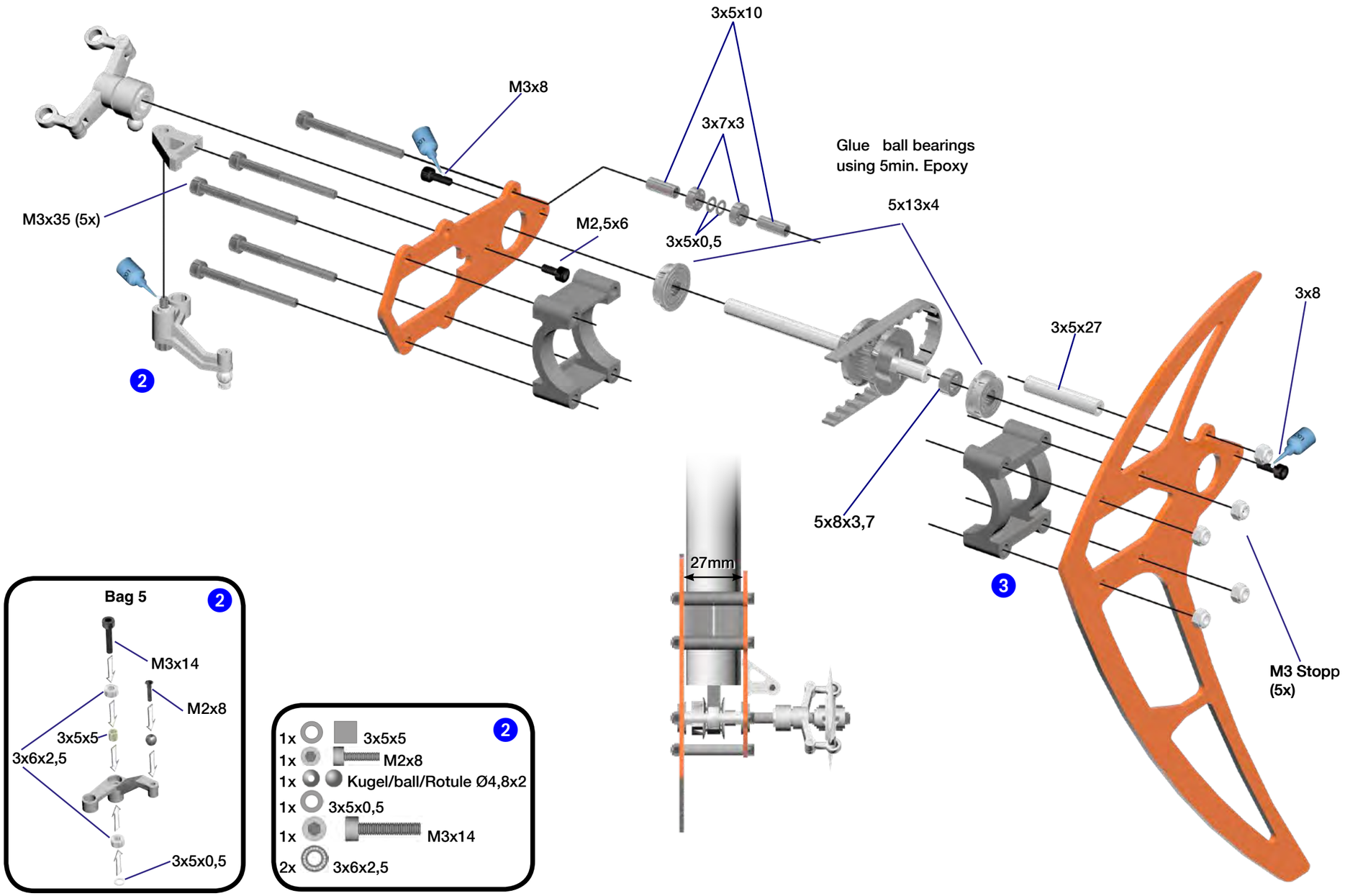
②



③



④



Bag 5 1

- 2x 6x8x0,5
- 2x M3x8
- 4x 5x8x3
- 2x M3x16
- 2x 4x8x3,5
- 2x M3
- 1x M3x3

Bag 5 2

2

- 1x 3x5x5
- 1x M2x8
- 1x Kugel/ball/Rotule Ø4,8x2
- 1x 3x5x0,5
- 1x M3x14
- 2x 3x6x2,5

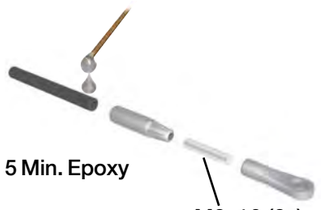
Bag 5 3

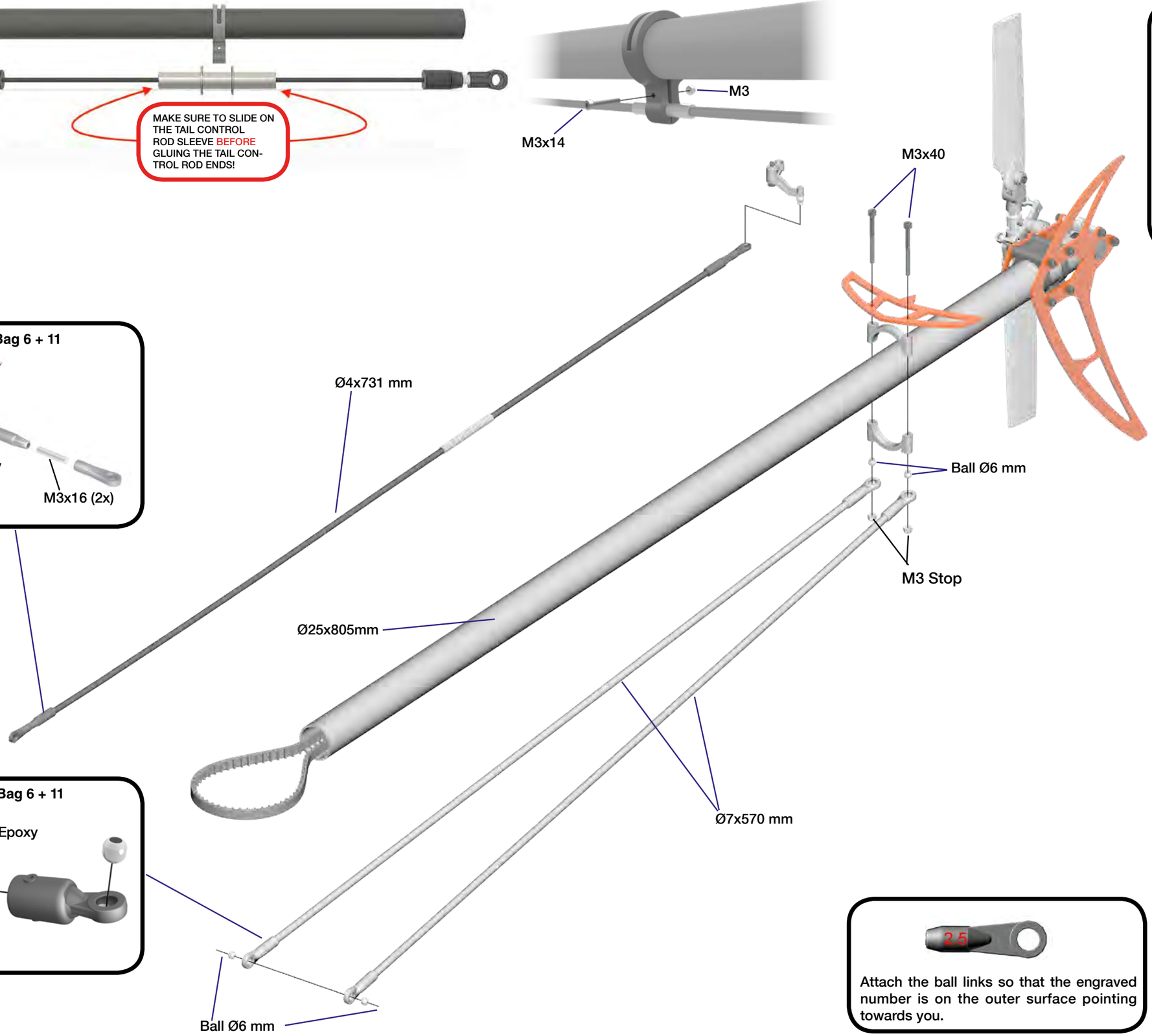
- 5x M3
- 1x M2,5x6
- 1x 3x5x27
- 2x M3x8
- 5x M3x35
- 2x 3x5x10
- 2x 3x7x3
- 2x 5x13x4
- 1x 5x8x3,7
- 2x 3x5x0,5

Bag 6

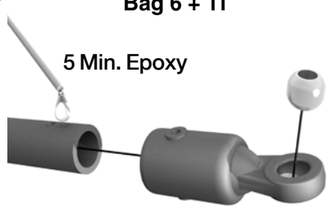
3x	M3
1x	M3x14
2x	M3x16
4x	Kugel/ball/Rotule Ø6x3
2x	M3x40
2x	3mm
2x	

Bag 6 + 11



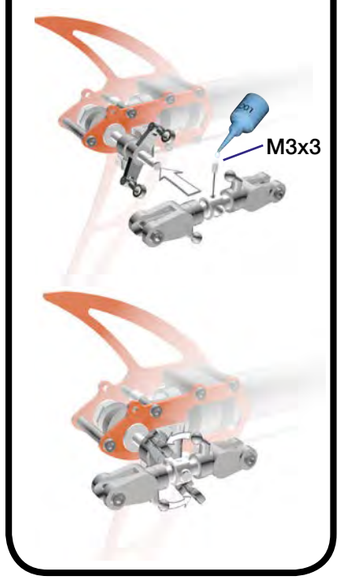


Bag 6 + 11



Attach the ball links so that the engraved number is on the outer surface pointing towards you.

Bag 5



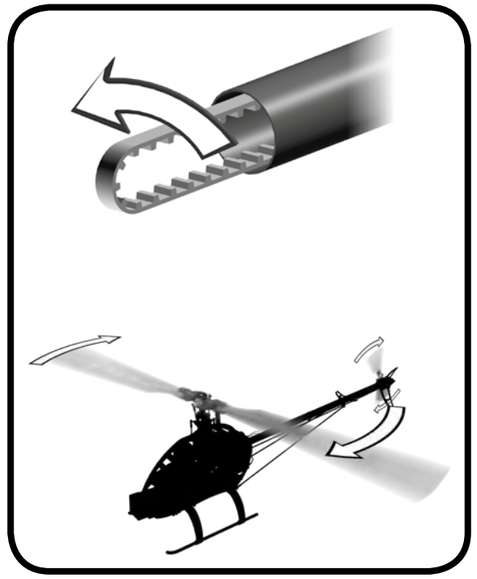
Bag 6

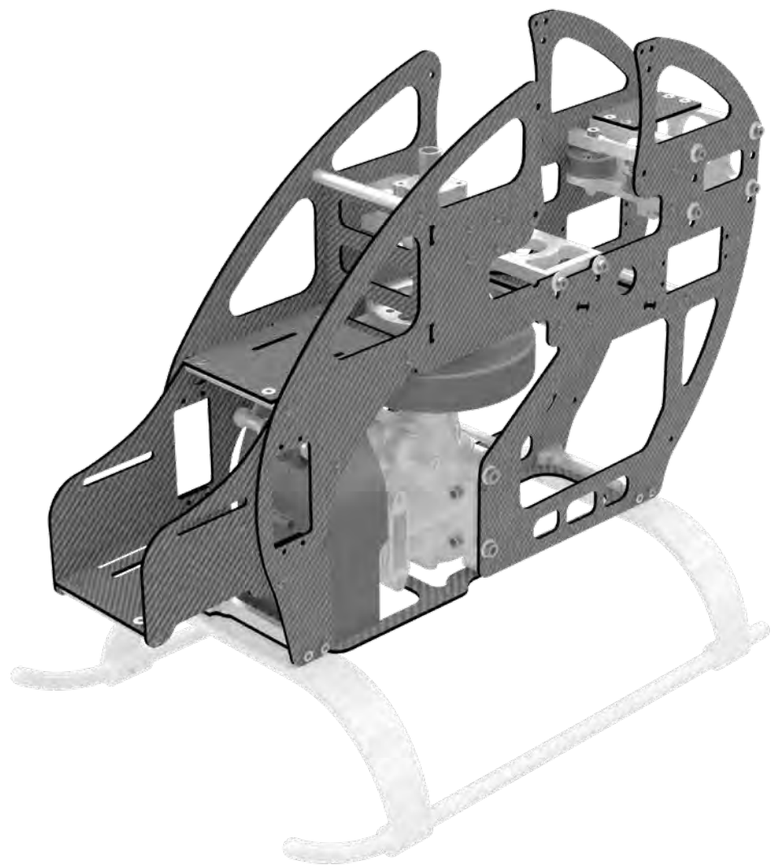
1 x 61

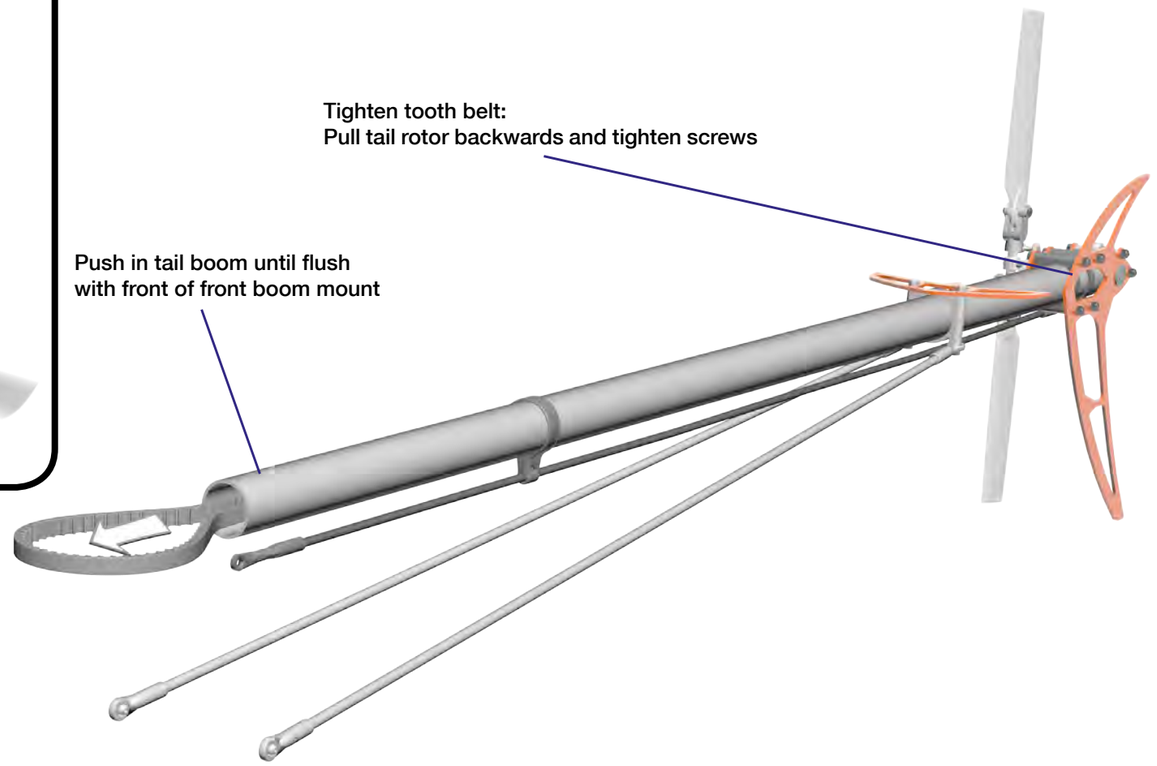
2 x 3x5x6

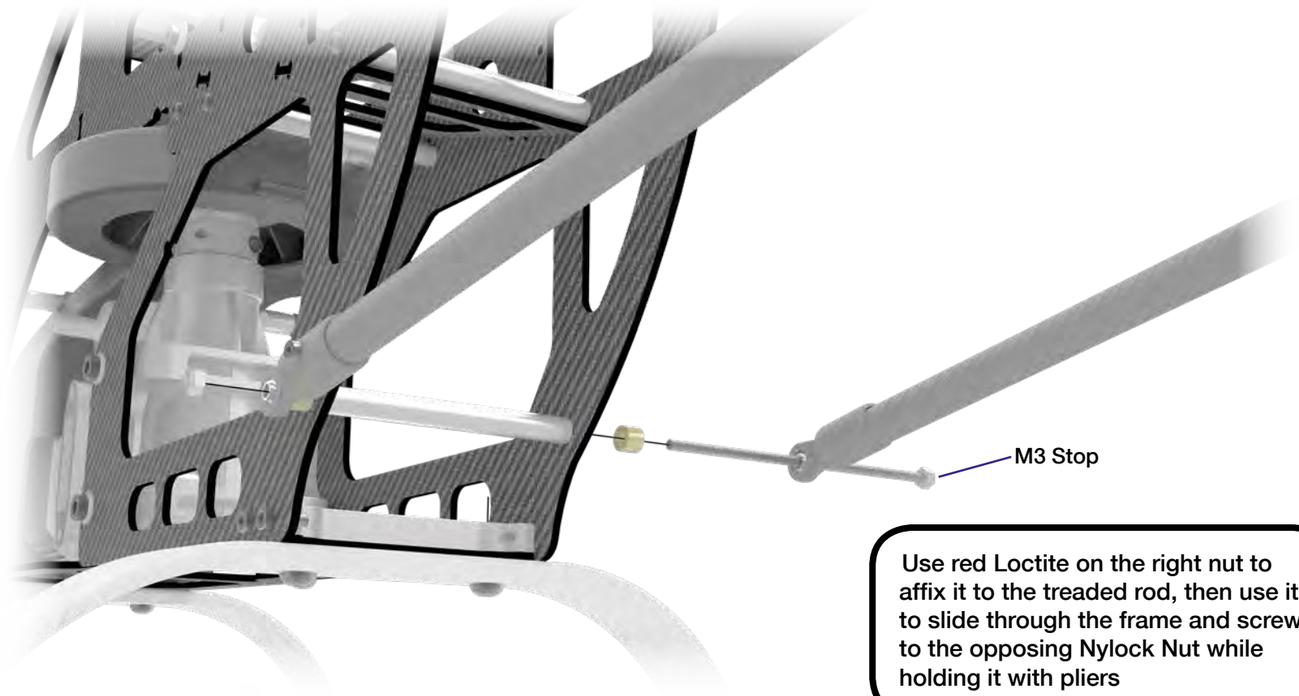
2 x M3

1 x M3x90





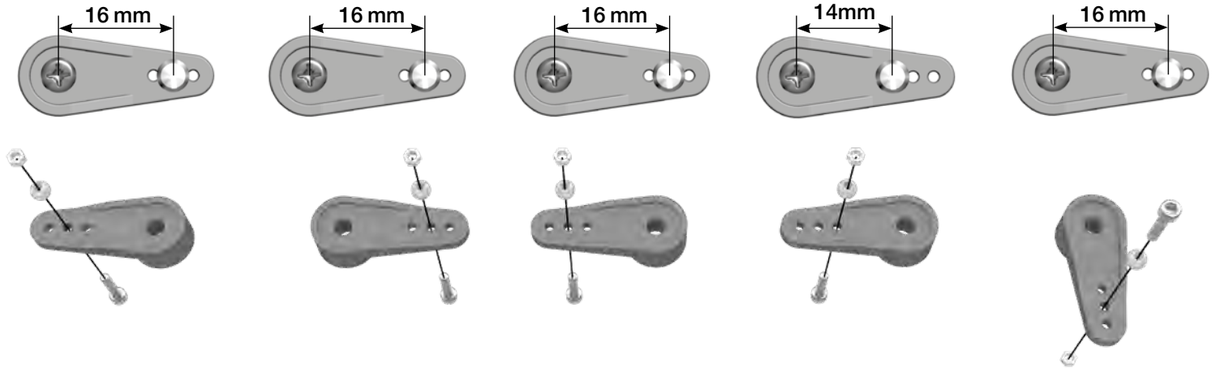




Use red Loctite on the right nut to affix it to the treaded rod, then use it to slide through the frame and screw to the opposing Nylock Nut while holding it with pliers

7 Servo Arm Setup

Bag 9



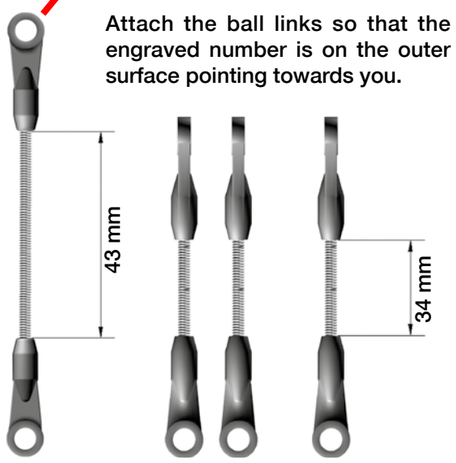
Aileron left | Aileron right | Elevator | Rudder | Throttle

Bag 9

5x M2x10
5x
5x M2

Throttle Linkage

Attach the ball links so that the engraved number is on the outer surface pointing towards you.



8 Main Bearing Block Assembly

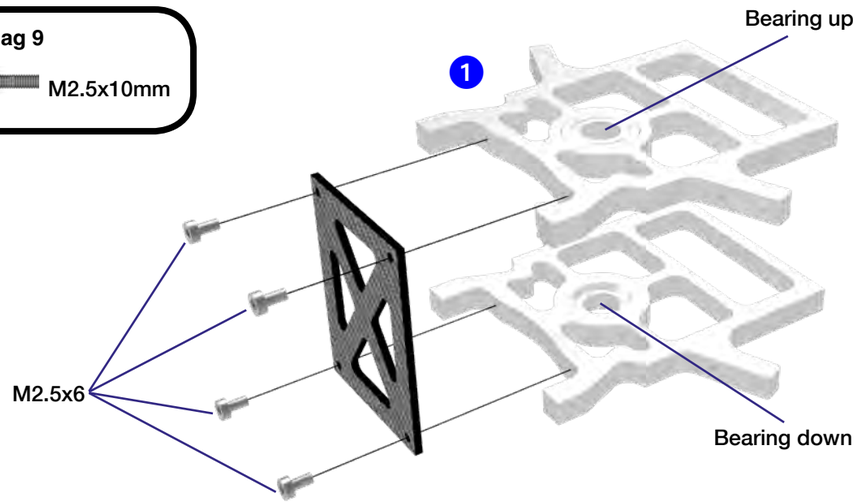
Bag 7

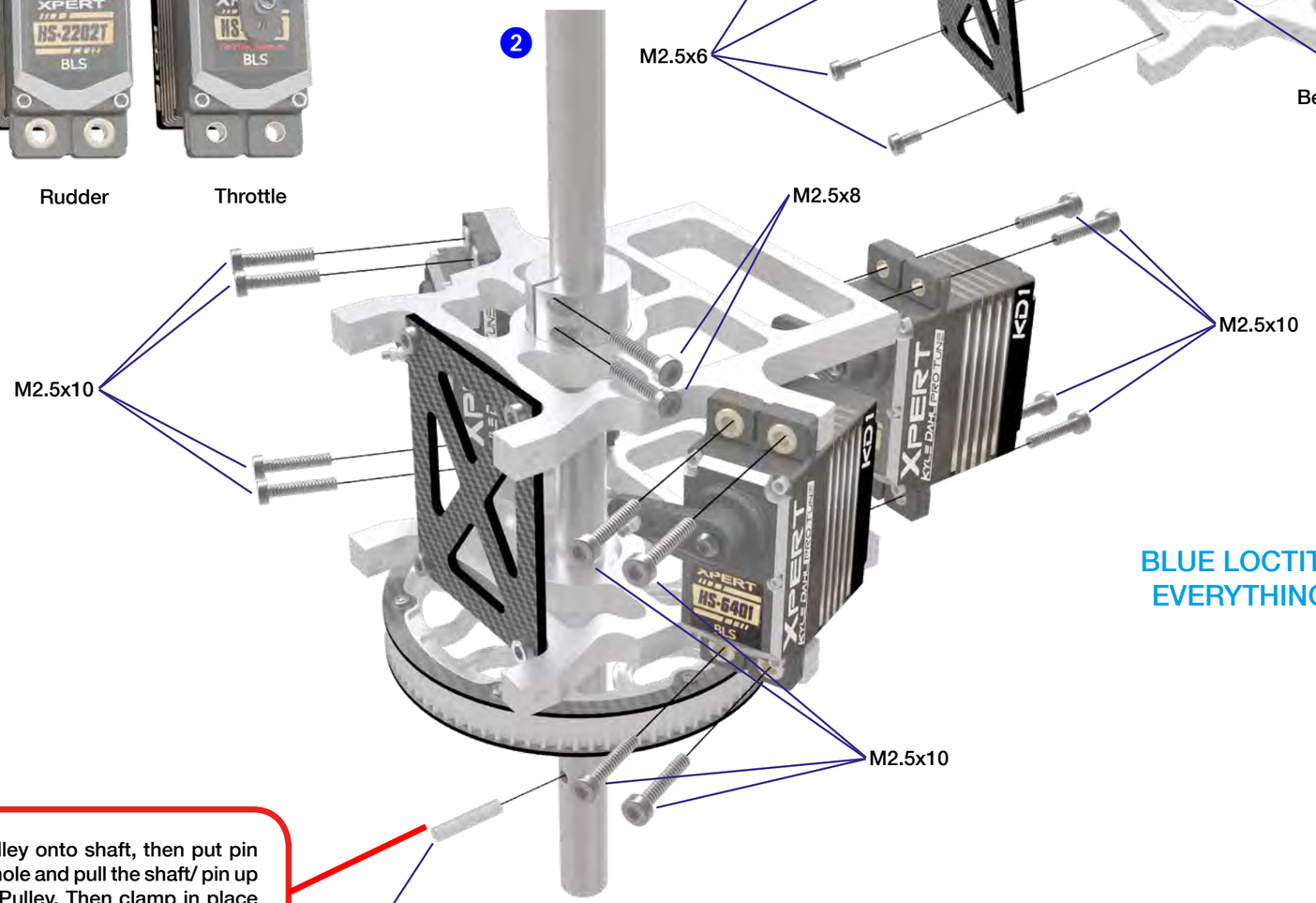
2 x M2.5x8mm
4 x M2.5x6mm
1 x 3x16

Bag 9

12 x M2.5x10mm

First mount Bearing Block Support Plate, then slide Main Sahft through the Bearing Blocks to align everything before mounting servos.





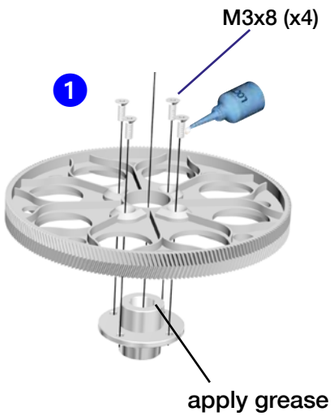
BLUE LOCTITE EVERYTHING

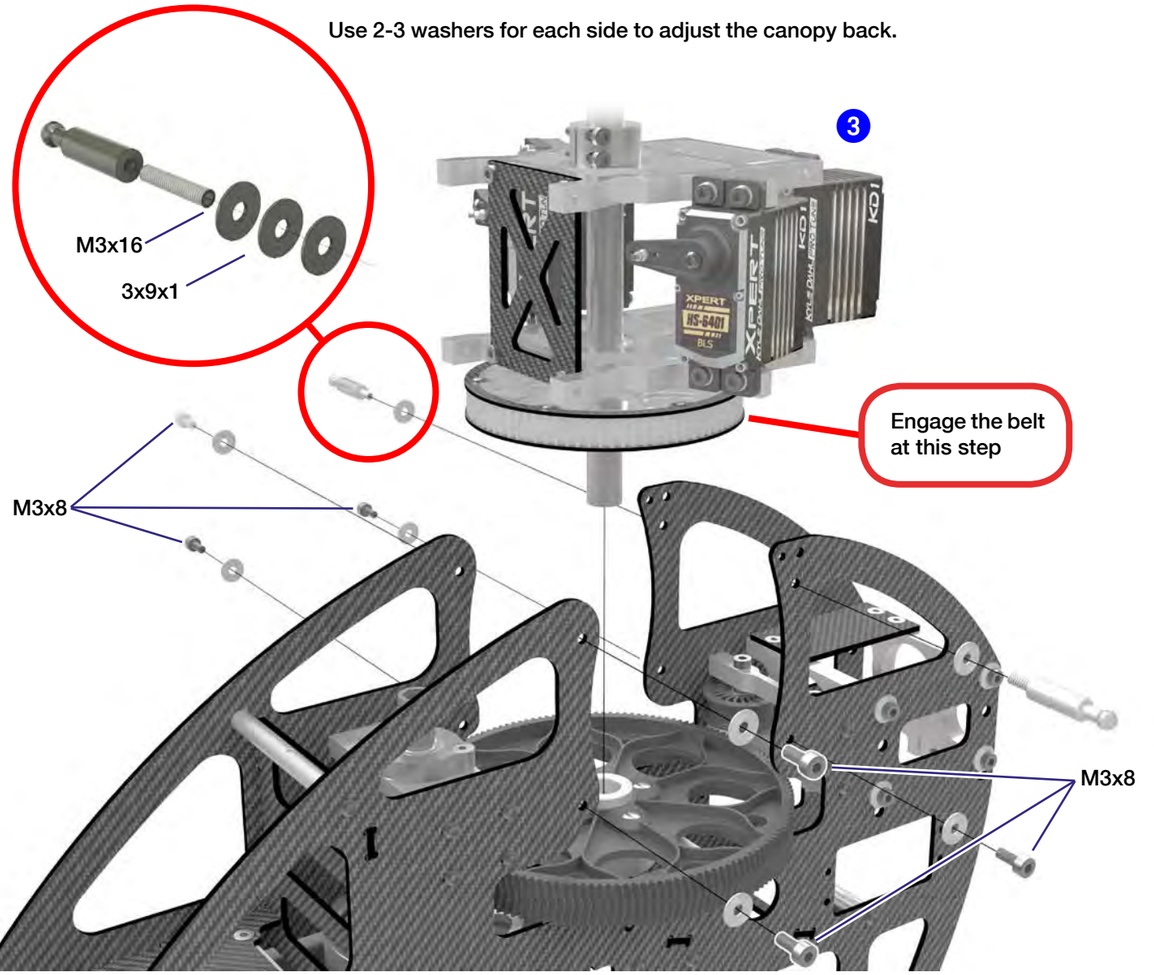
Slide Tail pulley onto shaft, then put pin through the hole and pull the shaft/ pin up into the Tail Pulley. Then clamp in place by tightening the main shaft collar down.
BEFORE MOUNTING SERVOS

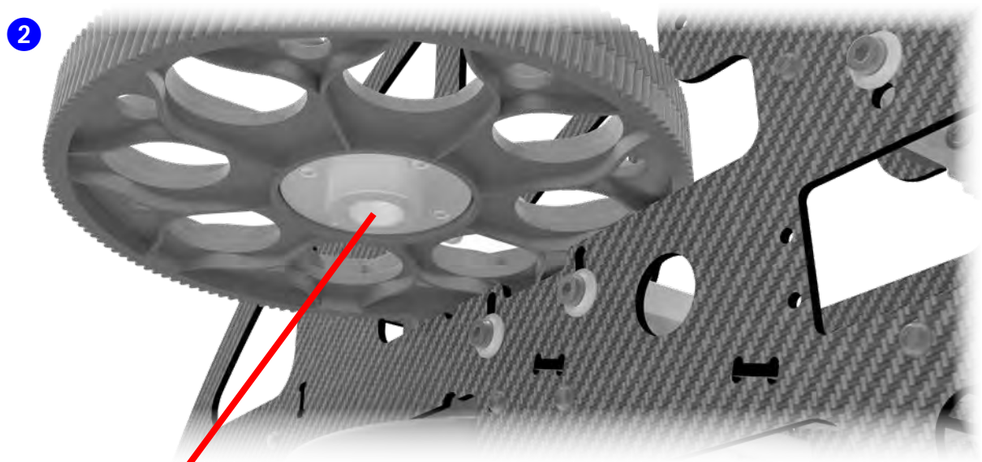
9 Main Gear Mounting

Bag 7

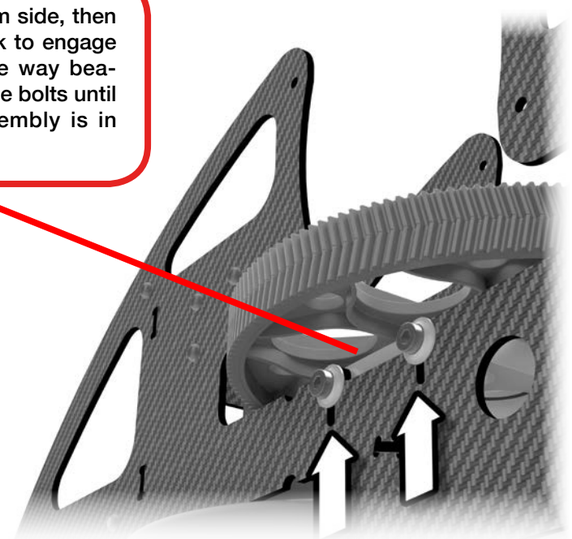
- 2 x 25x5
- 2 x M3x16
- 6 x 3x9x1
- 6 x M3x8
- 4 x M3x8
- 1 x M3x80
- 2 x M3
- 2 x M2.5x6mm
- 6 x



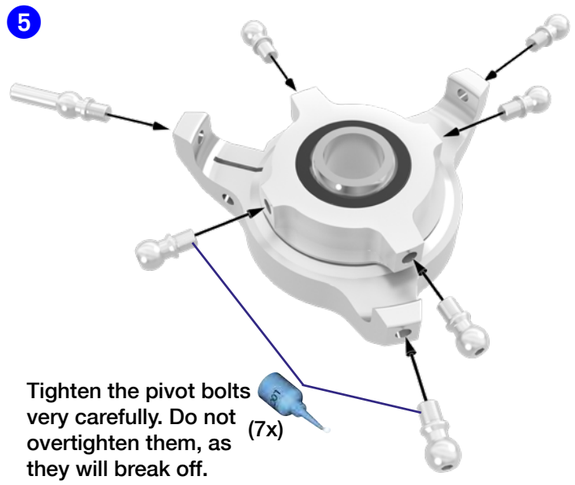


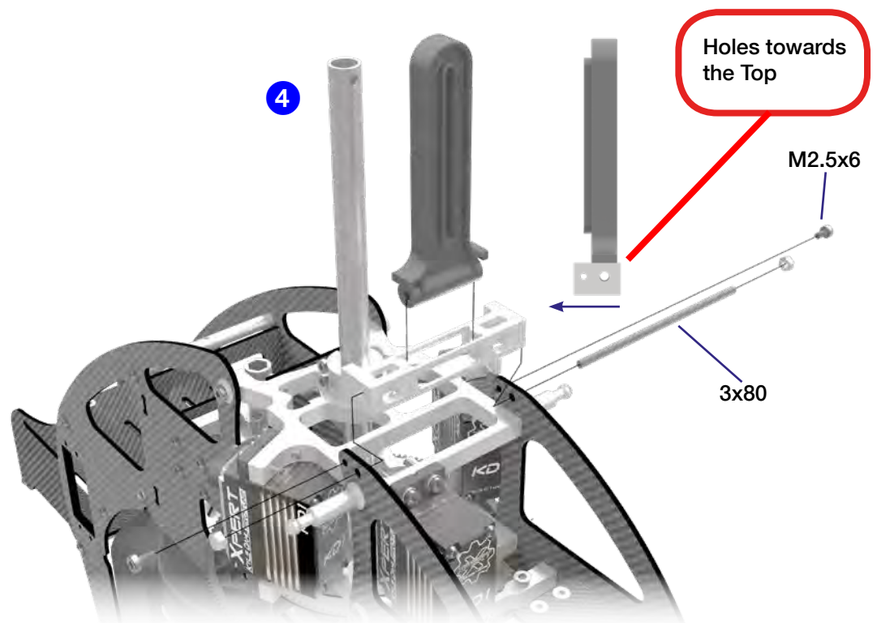


Slide Main Gear in from side, then raise 3rd bearing block to engage the bottom of the one way bearing. Loosely tighten the bolts until the bearig block assembly is in place,then tighten.

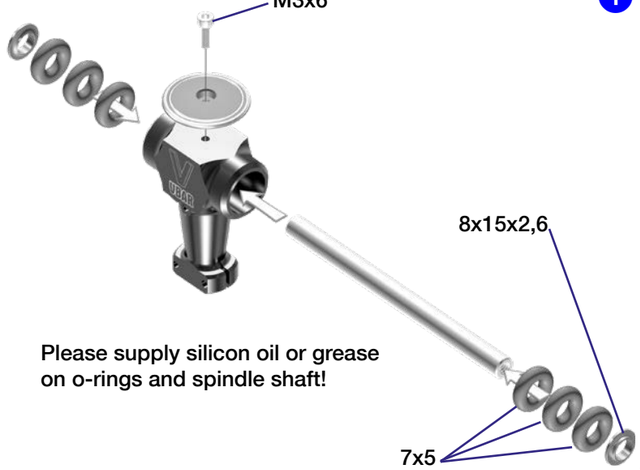


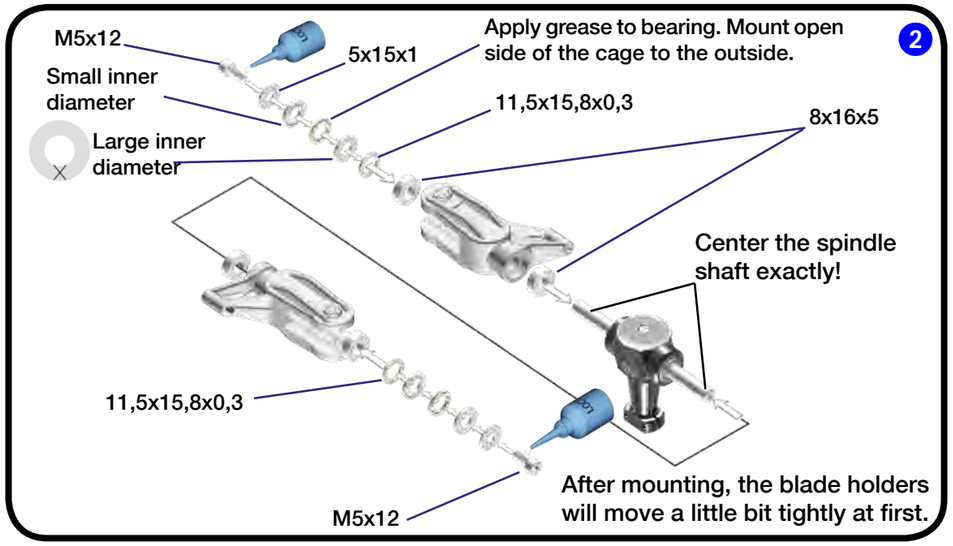
Swashplate

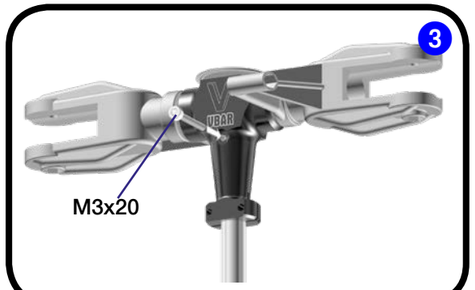


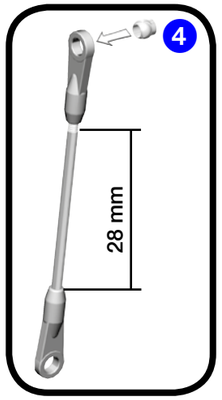


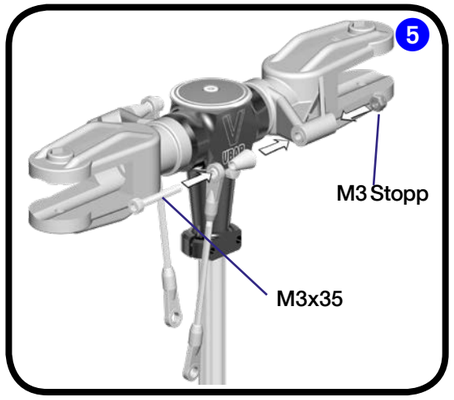
Bag 7

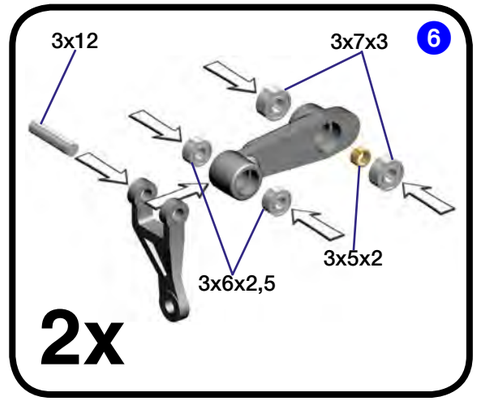


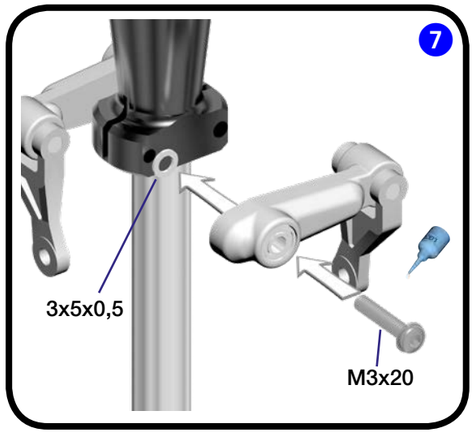


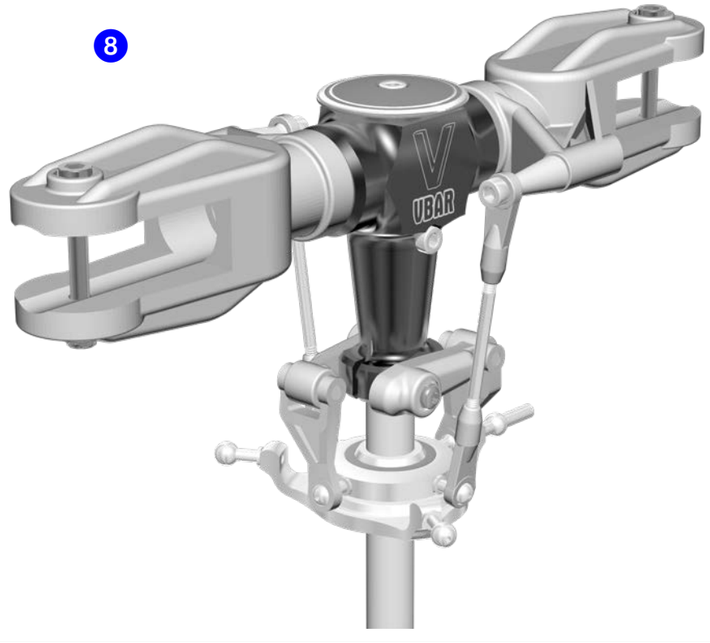












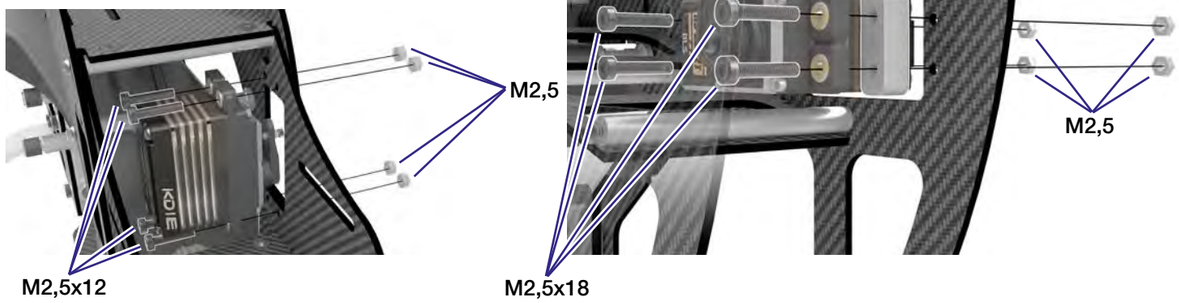
Bag 7

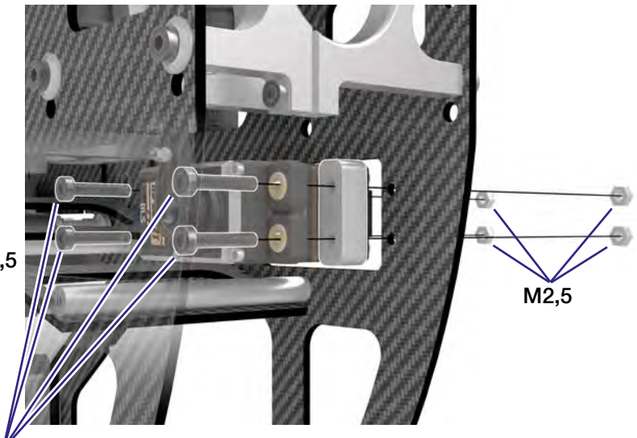
- 1x M3x6
- 4x
- 6x 7x5 O-Ring
- 2x 8x15x2,6
- 4x 8x16x5
- 2x 8x16x5
- 2x 11,5x15,8x0,3
- 1x M3x20
- 2x M3x35
- 2x M5x12
- 2x M5x36
- 2x 5x15x1
- 2x M3 Stop
- 2x M5 Stop
- 2x Ø4,8x3
- 2x 3x12
- 4x 3x7x3
- 4x 3x6x2,5
- 2x 3x5x2
- 2x M3x20
- 2x M2,5x40
- 4x

11 Throttle/ Tail Servo Mounting

Bag 9

4x M2,5x12
4x M2,5x18
8x M2,5 Stop

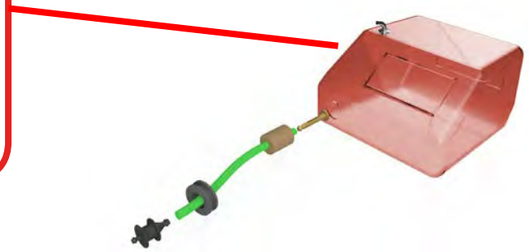




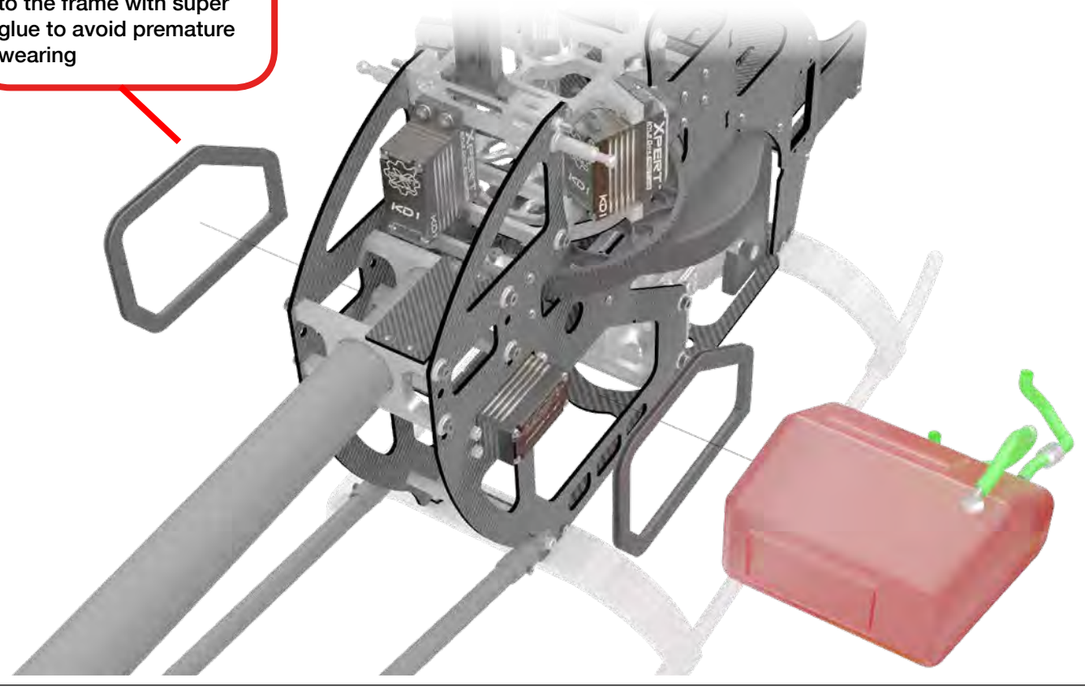
12 Fuel Tank Mounting

Bag 10

To Mount Vent Fitting, before instaling the main nipple and grommet thread a piece of wire through the vent fitting and string it through the main opening and through the vent openeing. Then slide the vent nipple up and secure with the nut on the outside.



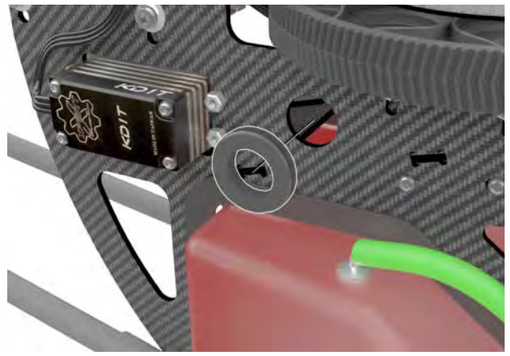
It is required to glue the fuel tank edge grommet to the frame with super glue to avoid premature wearing

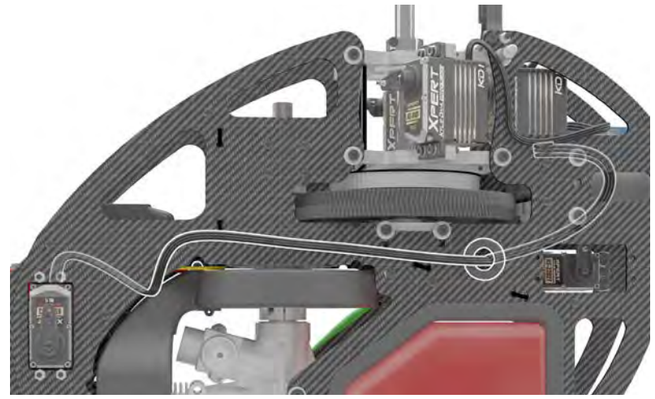


13 RC Equipment Mounting

Bag 10

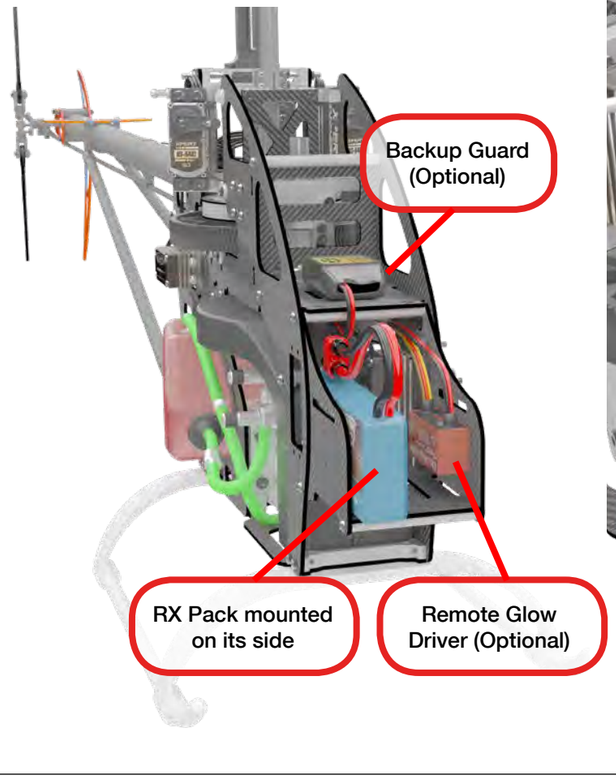
2 x Frame Grommets





Large RX Pack Recomended for proper CG.
Example = OptiPower 2s 5000mah

-Wire Length from Front of frame to Vbar Neo in rear = 17.5”- 18” (445mm - 460mm)
-Use extensions, or customize wires to this length for, Throttle Servo, Power Input Cables, Remote Glow (Optional), Back Up Guard (Optional).

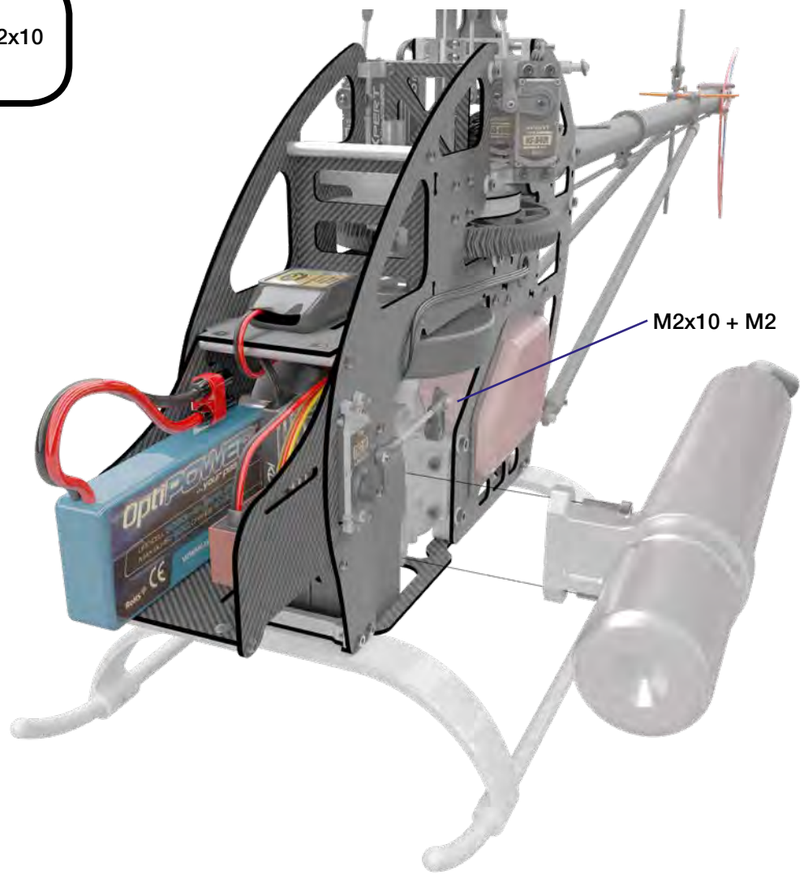


14 Exhaust Box Mounting

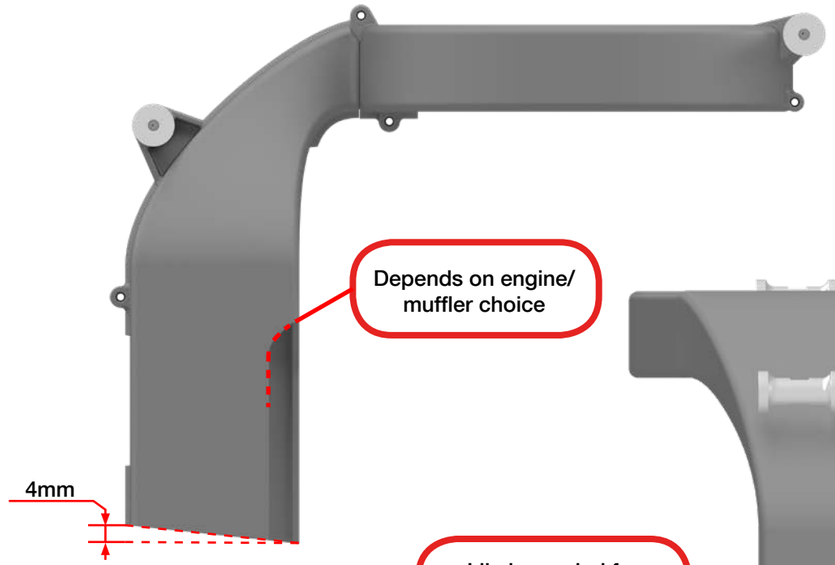
Bag 9

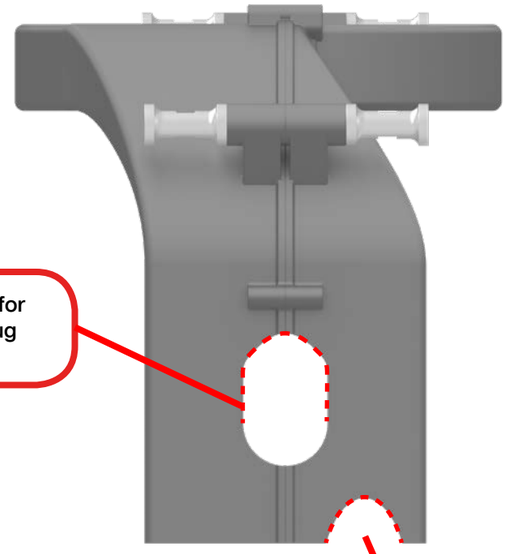
1x M2x10

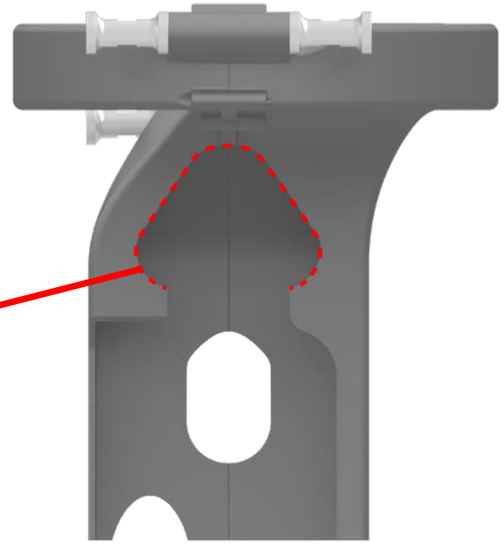
1x M2



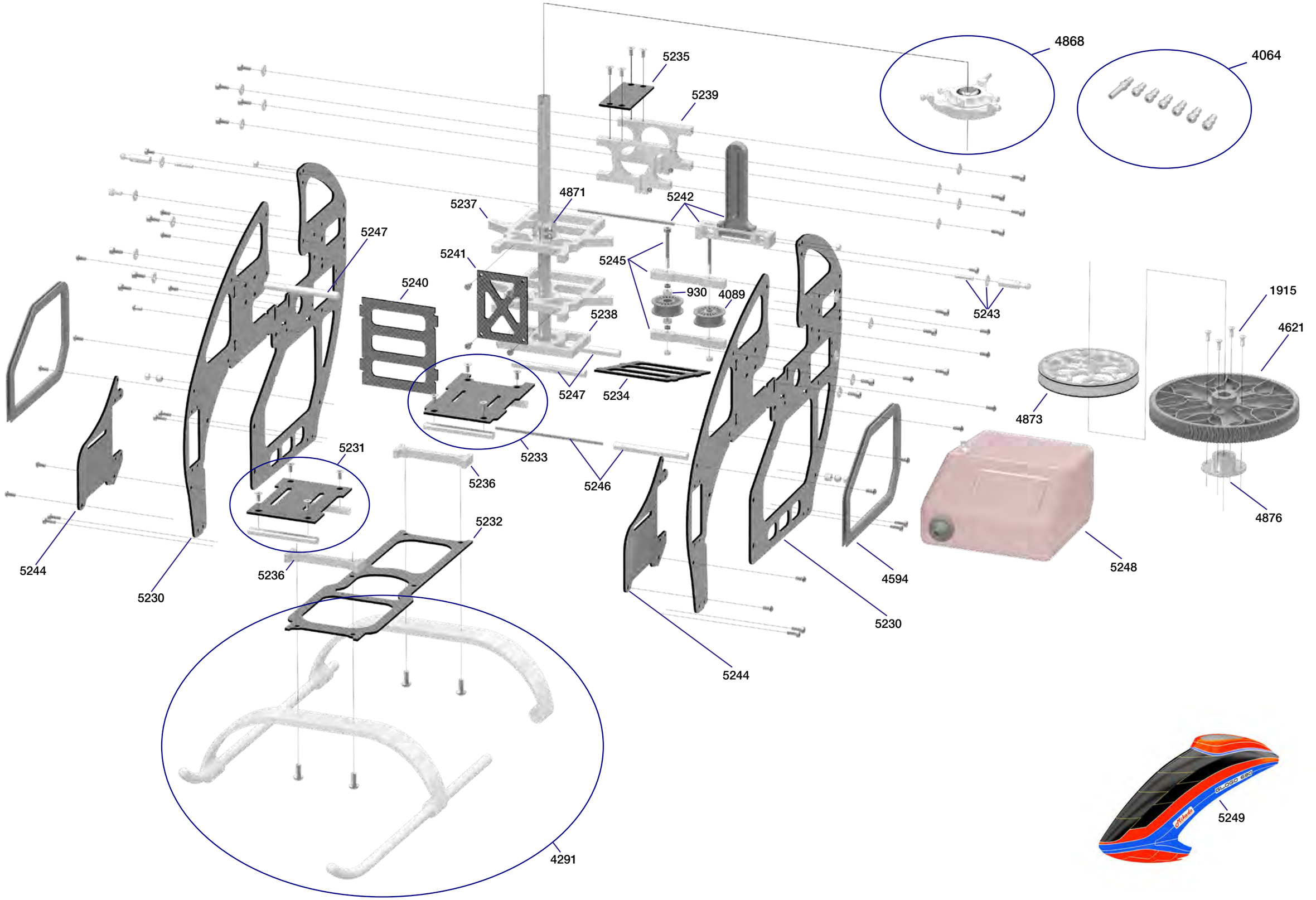
15 Fan Shroud Modification

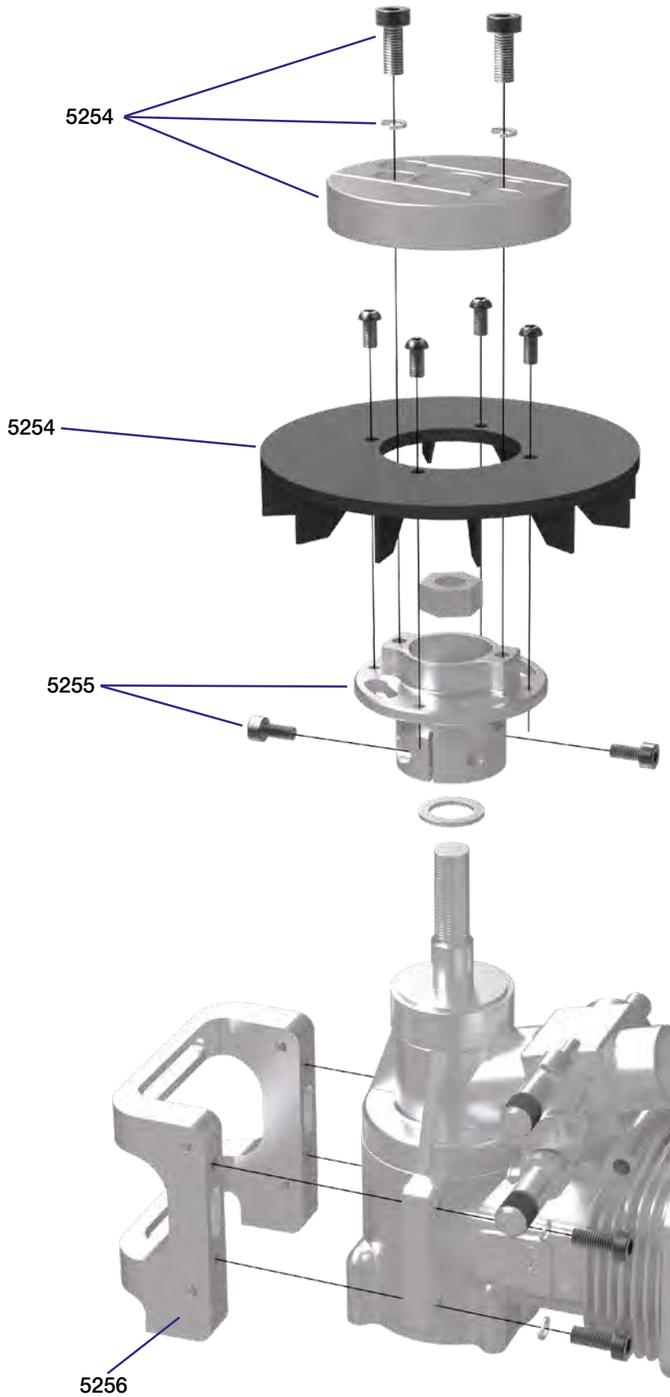






16 Overview Chassis

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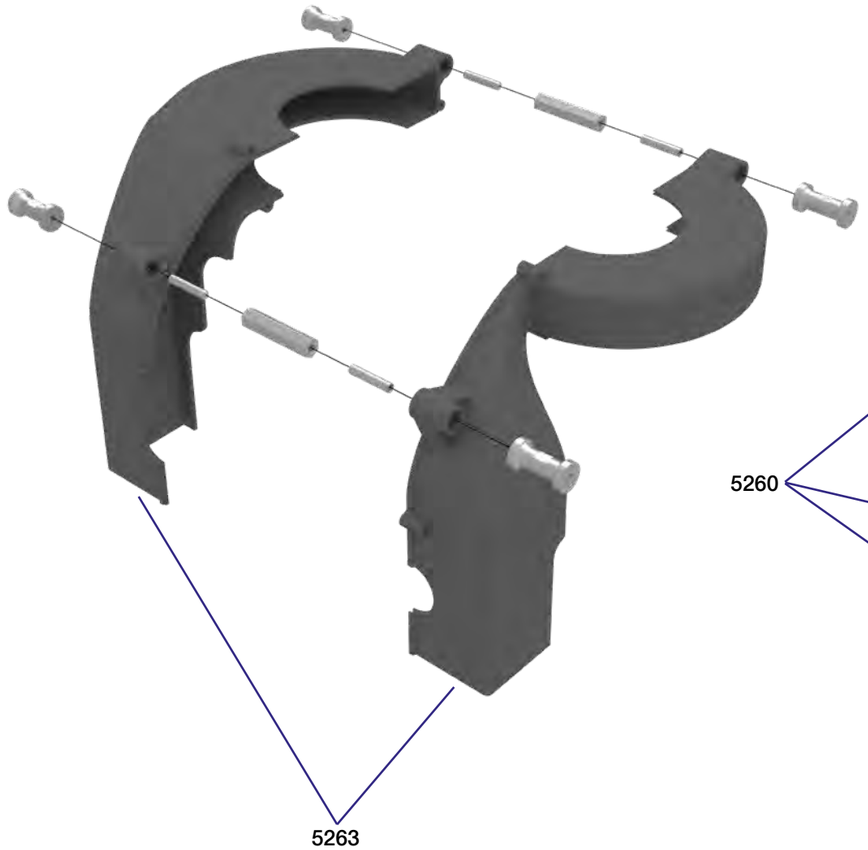
5256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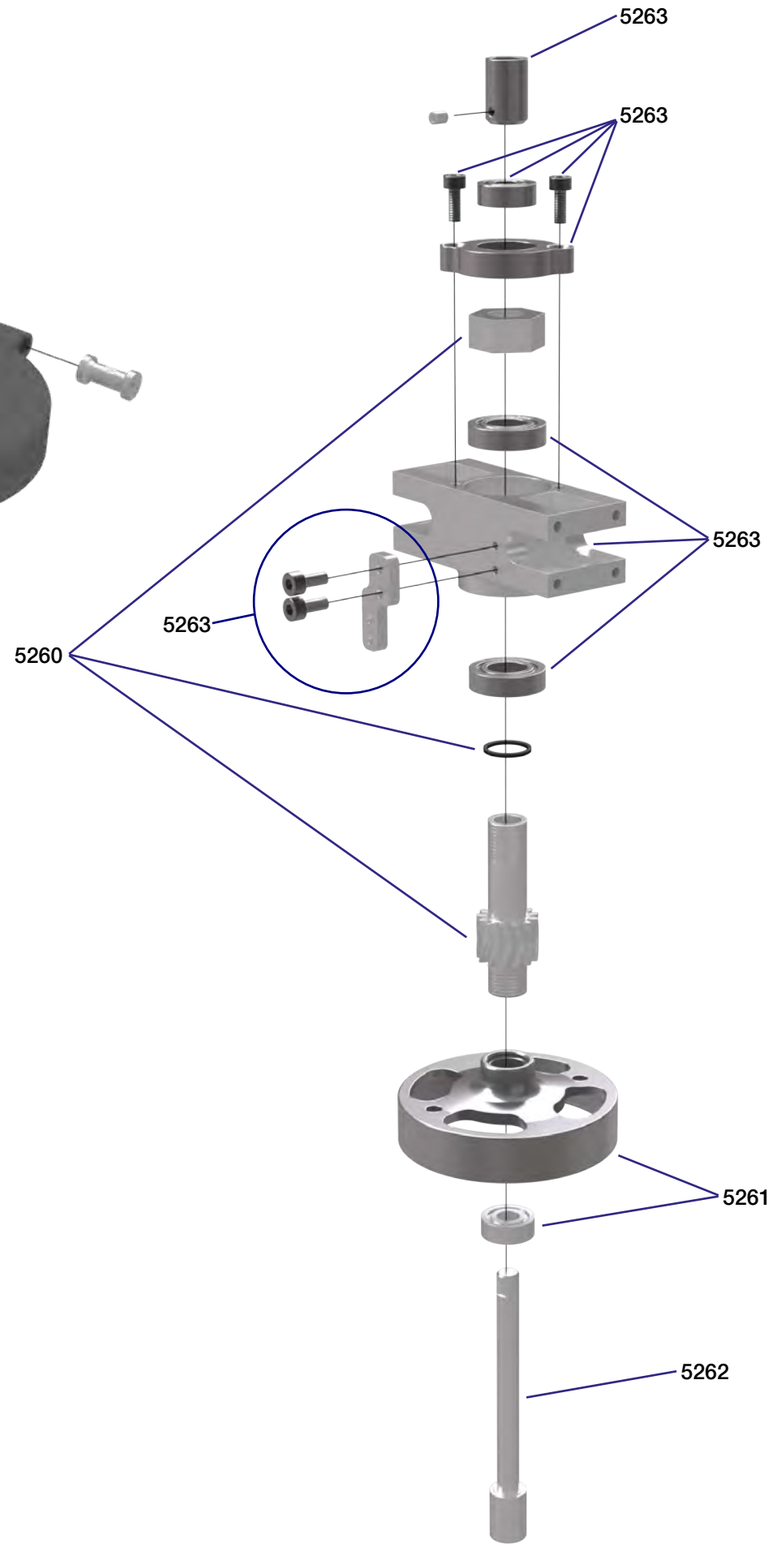
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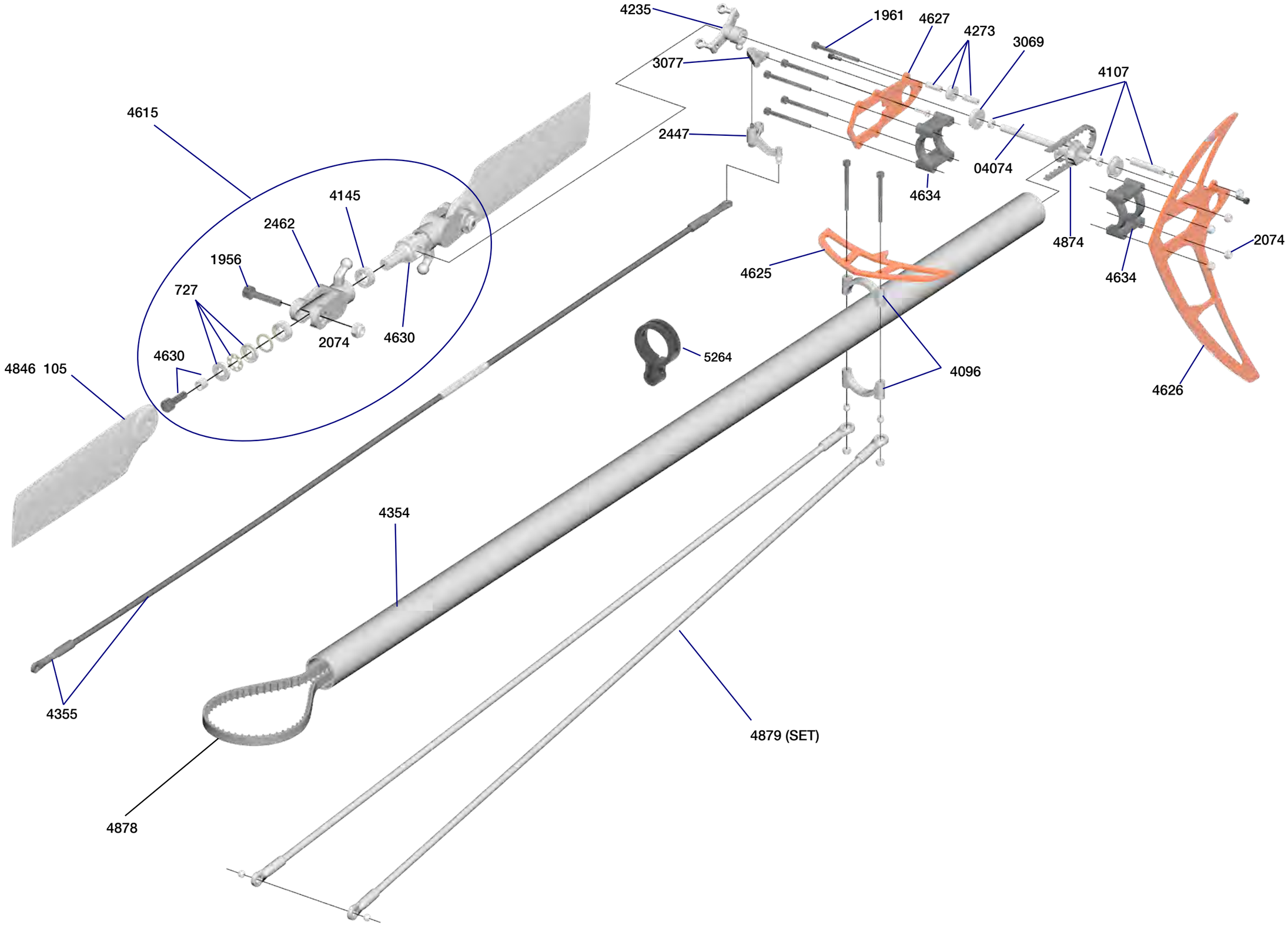
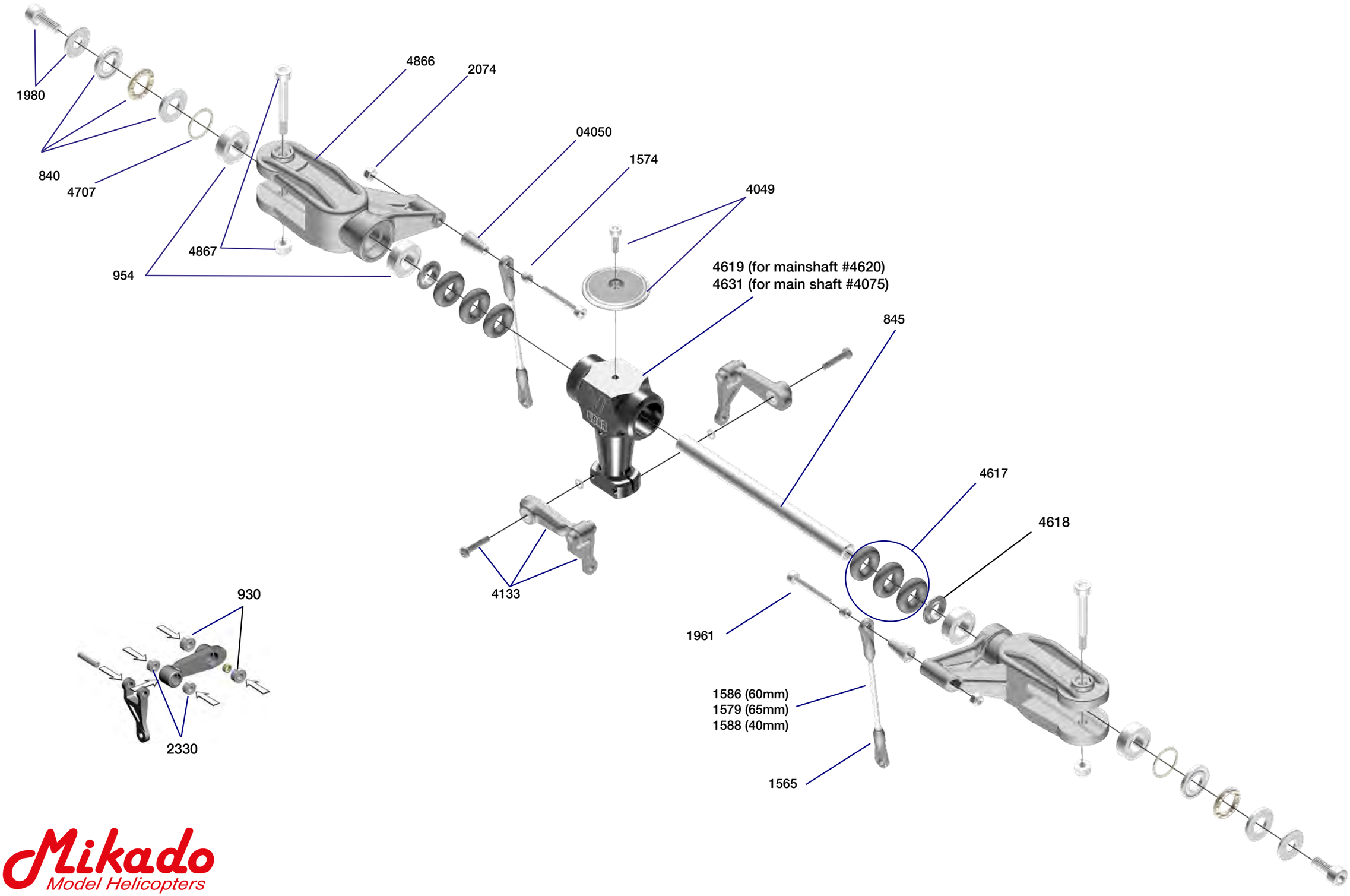
5262

17 Overview Tail Rotor





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