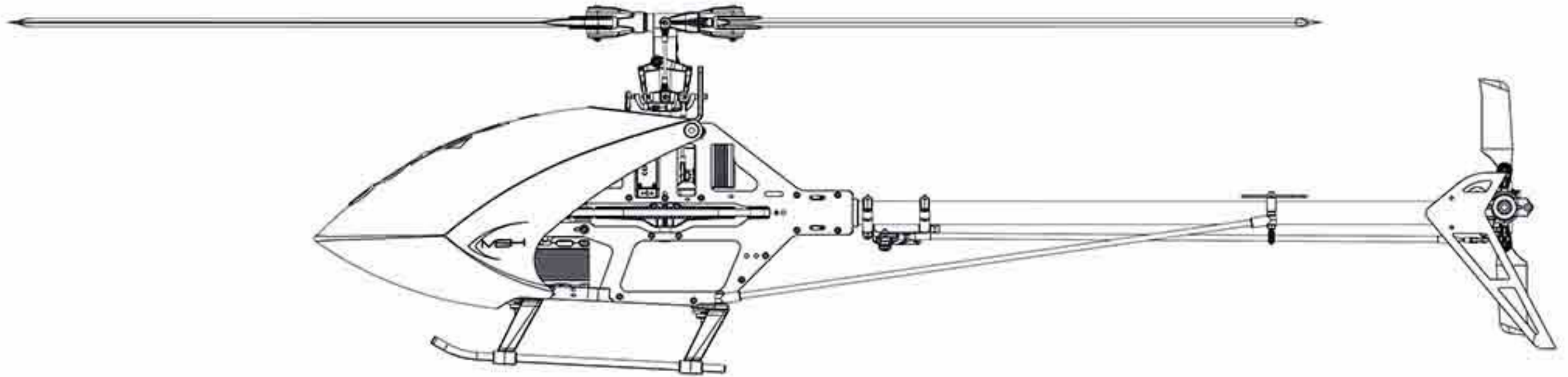


PRÔTOS

480



LENGHT:	928MM
HEIGHT:	270MM
WIDTH:	148MM
MAIN BLADE SIZE:	425MM — 480MM
TAILBLADE SIZE:	68MM
MOTOR PINION:	15T — 20T 5MM DIAMETER(15T INCLUDED)
MAIN GEAR:	108T
TAIL PINION:	22T
MAIN TO TAIL GEAR RATIO:	4.9
RTF WEIGHT:	1800G
MAX BATTERY SIZE:	44*47*140MM



Always follow these rules for safety

Operate the helicopter in open areas with no people nearby.

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 rain, snow, fog or other precipitation

If you do not observe these instructions you may be held liable 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 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.

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

Operate the helicopter only outdoors and out of people's reach as the main rotor operates at high rpm!

While adjusting, stand at least 10 meters

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!

Bag 1

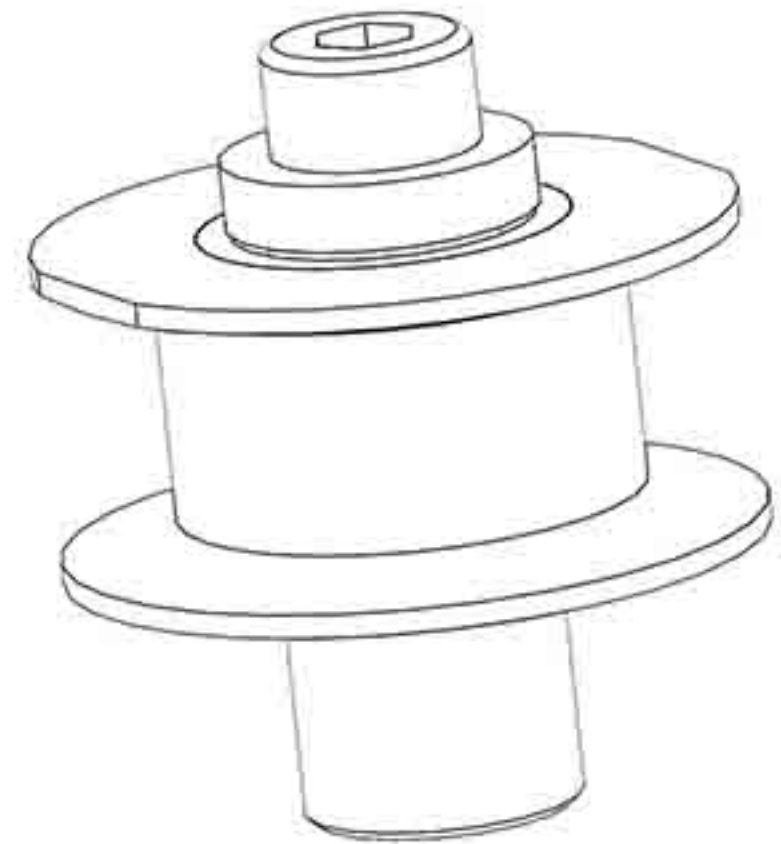
Hex Screw M2*4 (Add Loctite 243)
ART.MSH41141

Washer 2*5*0.3
ART.XL48A01

Bearing 3*8*3
ART.MSH51072

Guide pulley
ART.MSH51034

Guide pulley Mount
ART.XL48B01

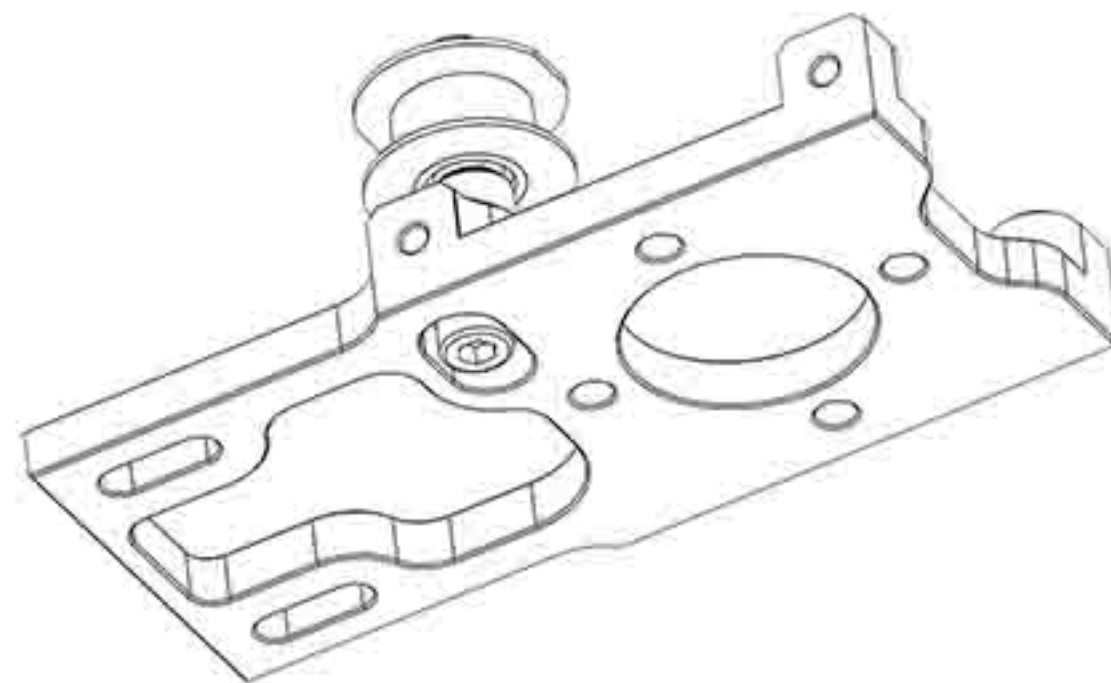
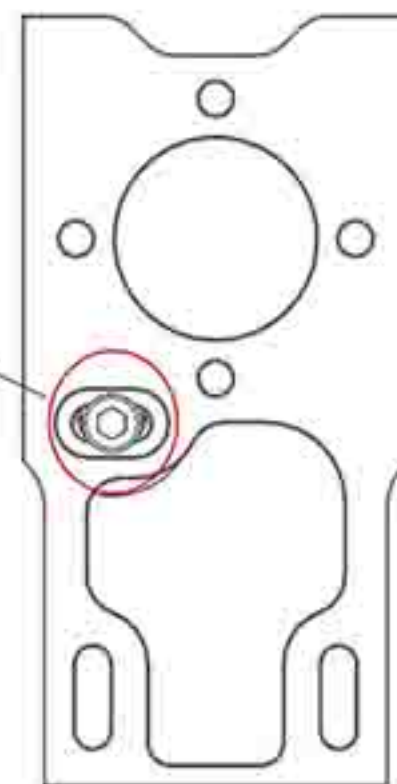
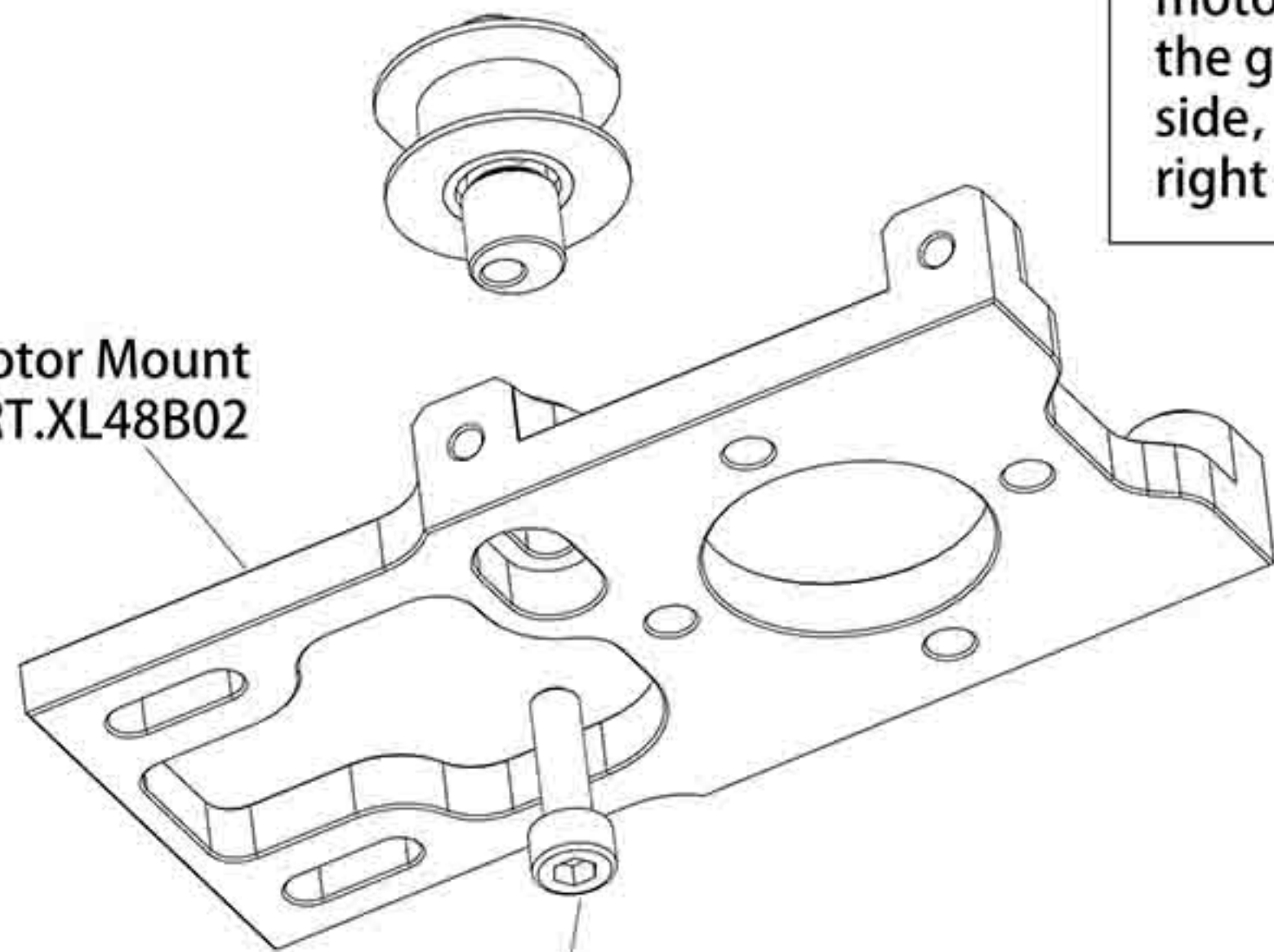


Bag 1

Motor Mount
ART.XL48B02

Screw M3*8 (Add Loctite 243)
ART.MSH51152

When use bigger
motor pinion move
the guide pulley left
side, smaller pinion
right side



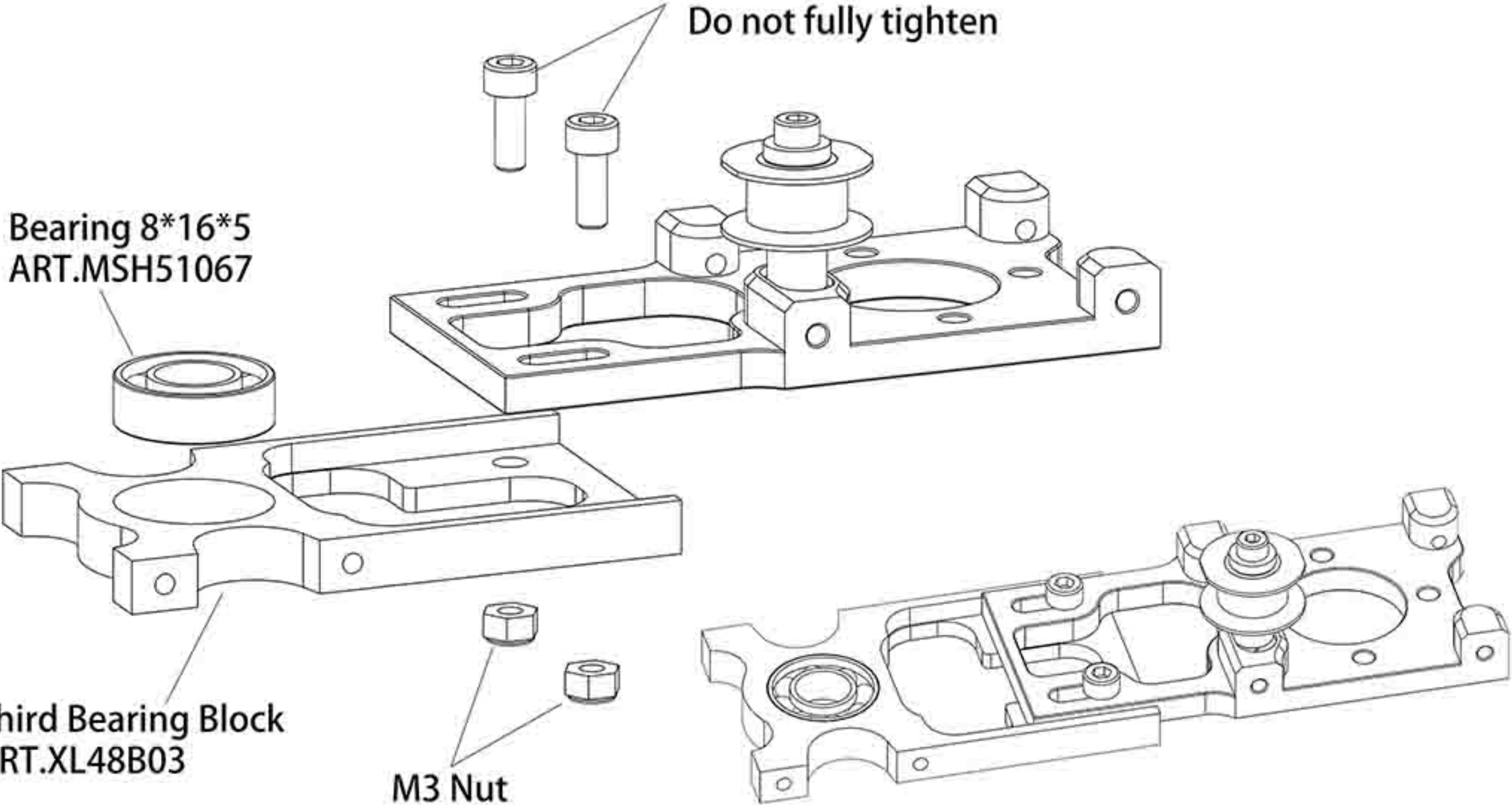
Bag 1

Screw M3*10
ART.MSH71114
Do not fully tighten

Bearing 8*16*5
ART.MSH51067

Third Bearing Block
ART.XL48B03

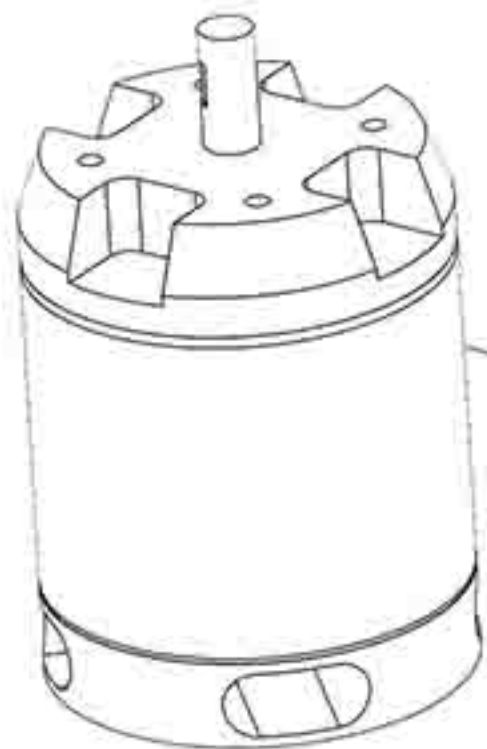
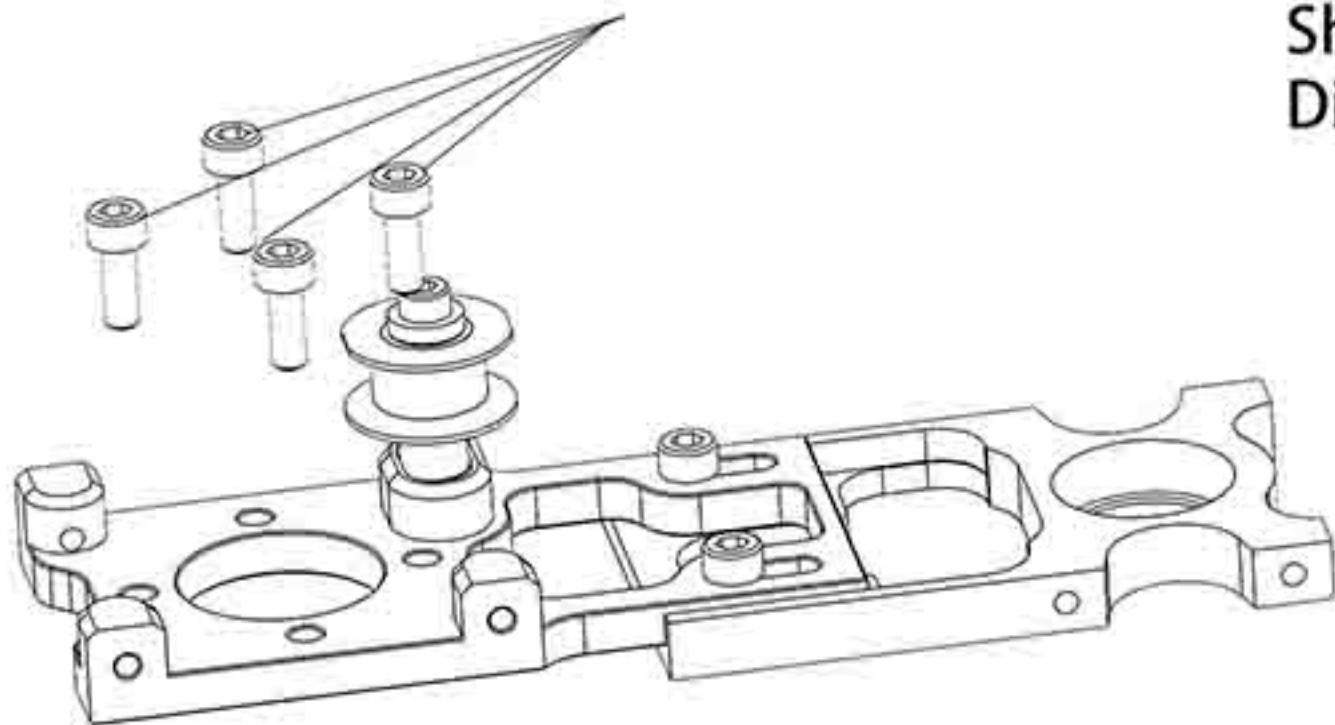
M3 Nut
ART.MSH51138



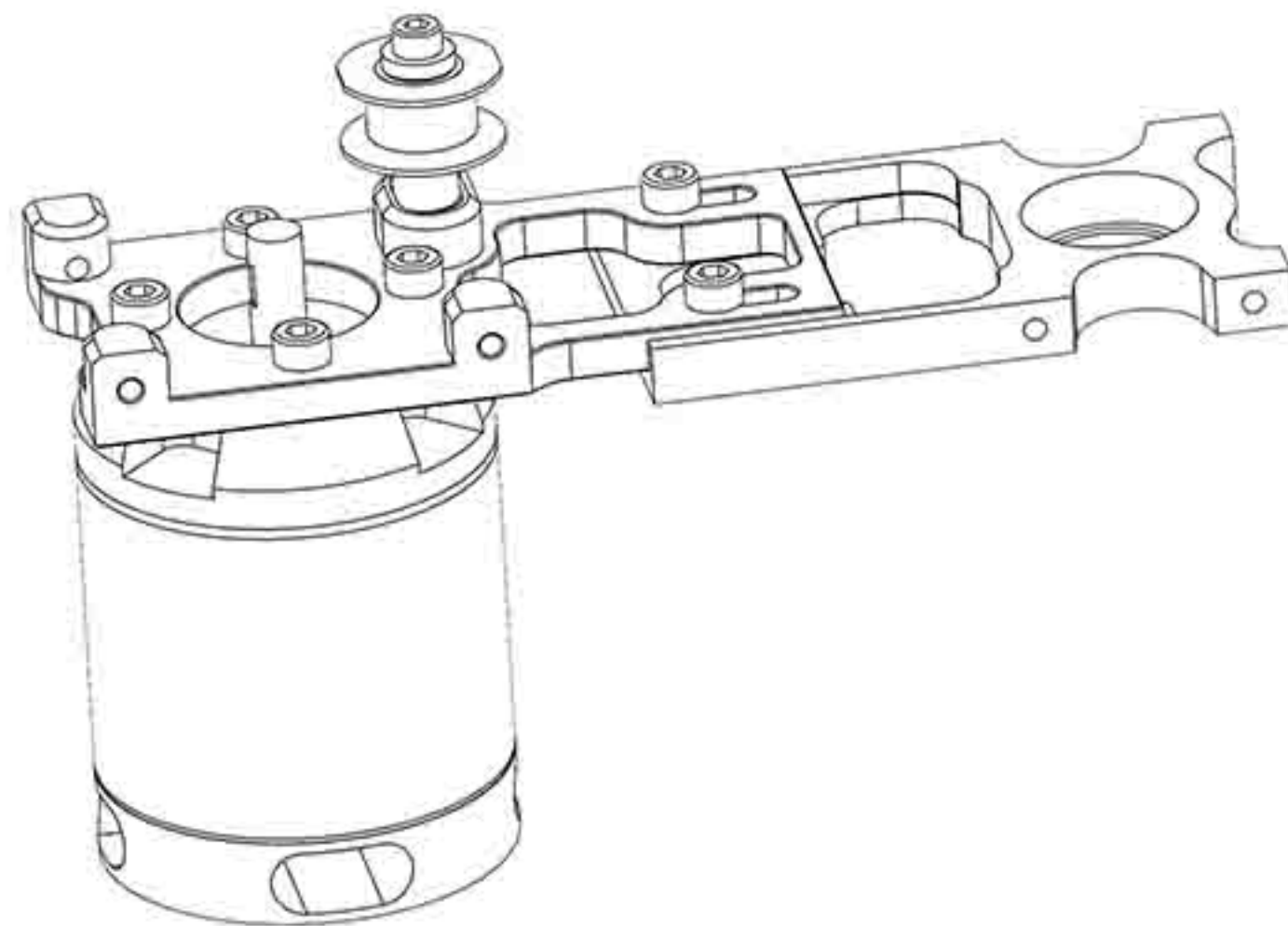
Bag 1

Screw M3*8(Add Loctite 243)
MSH51152

Shaft Length:10.5mm
Diameter: 5mm



Motor suggestion
3026/3220/3226/4015
800KV-1000KV
5mm shaft
Not included in the kit



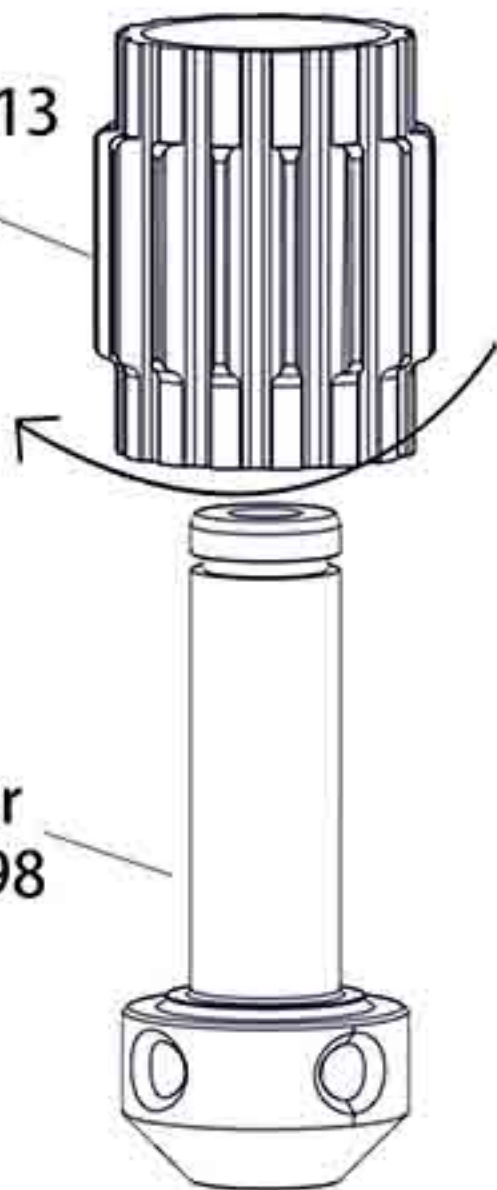
Bag 1

Washer 6*8*0.1
ART.XL48A02

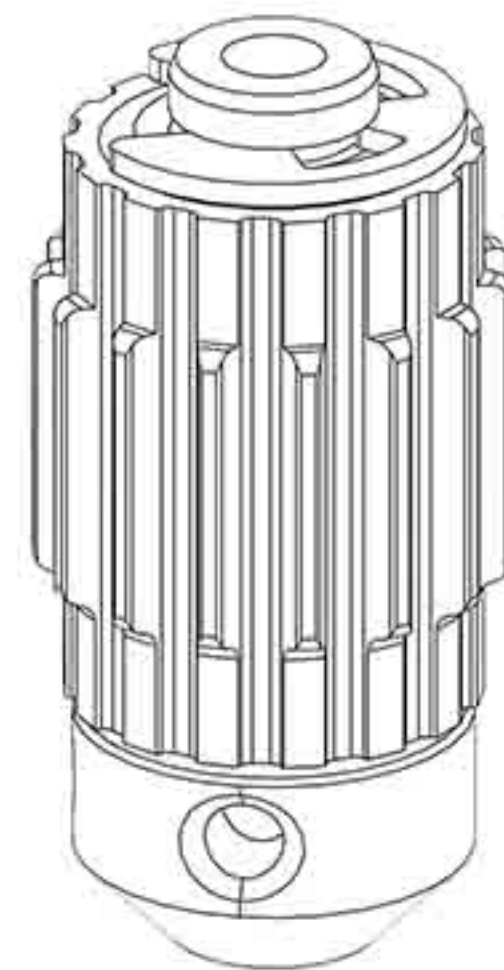
Seeger RS 5
ART.MSH51013

Pinion 15T
ART.MSH51013

Motor adapter
ART.MSH51098

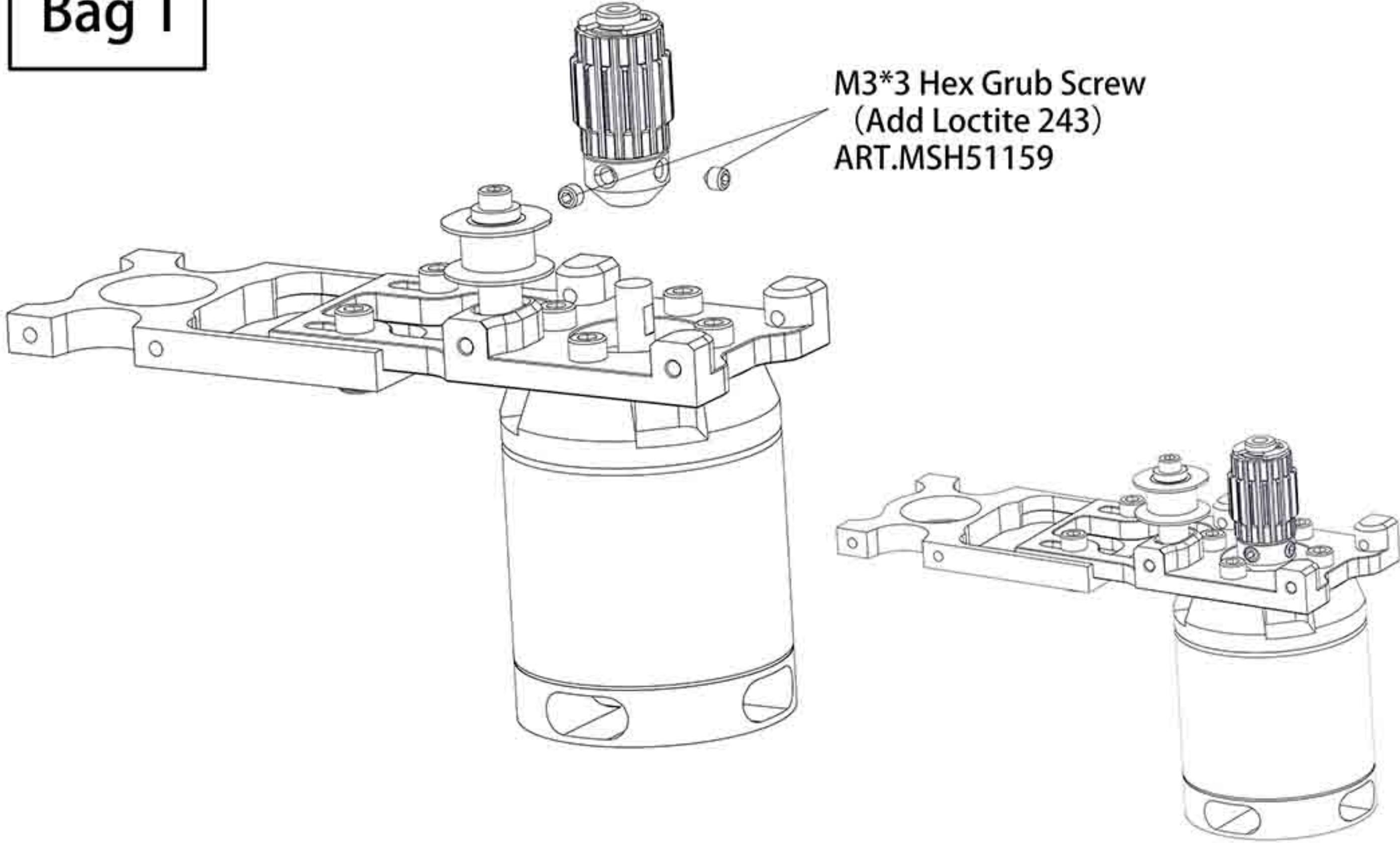


While inserting make
sure that the pinion
spins freely clockwise
looking from above



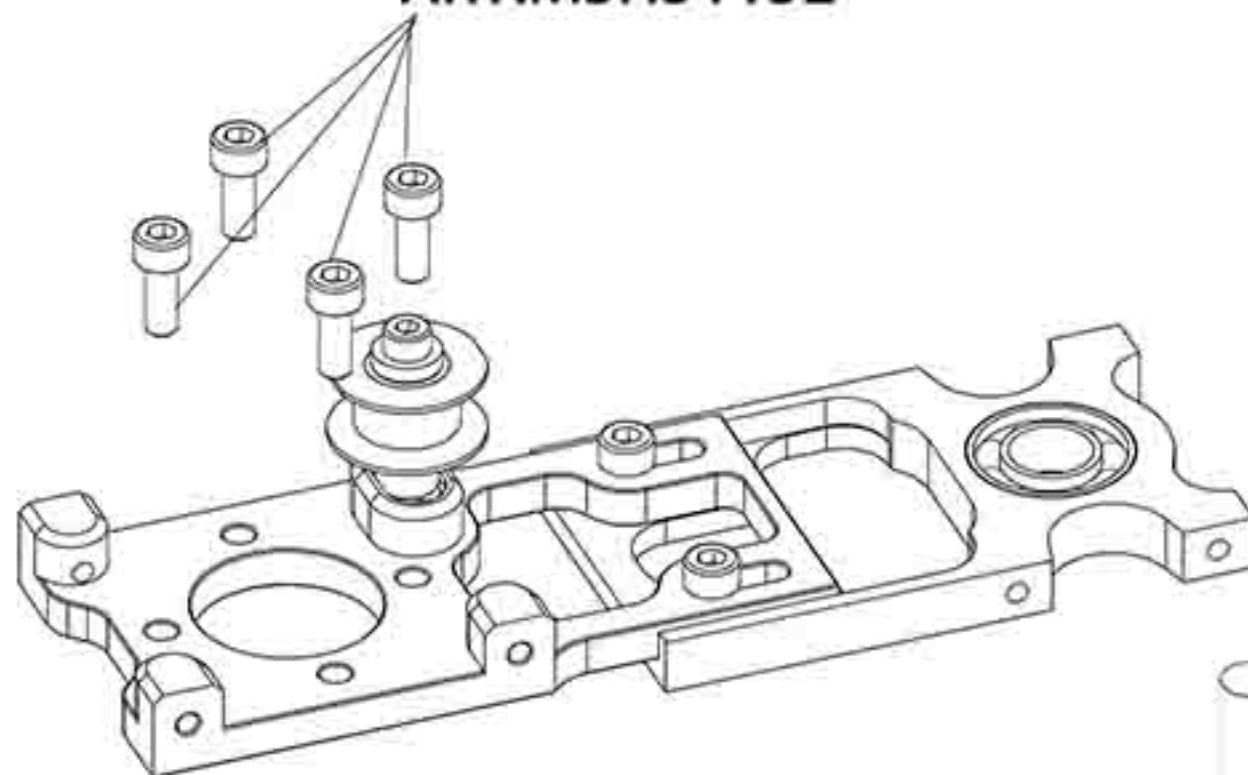
Bag 1

M3*3 Hex Grub Screw
(Add Loctite 243)
ART.MSH51159

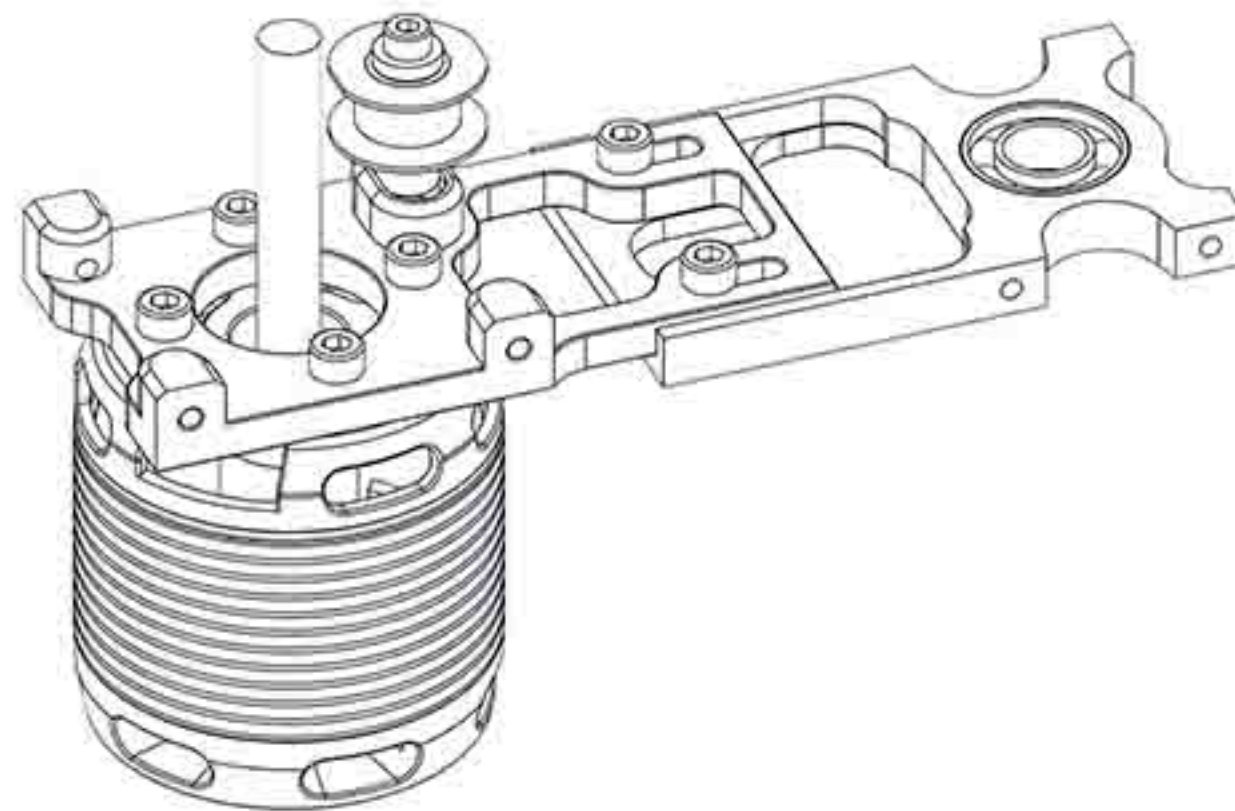
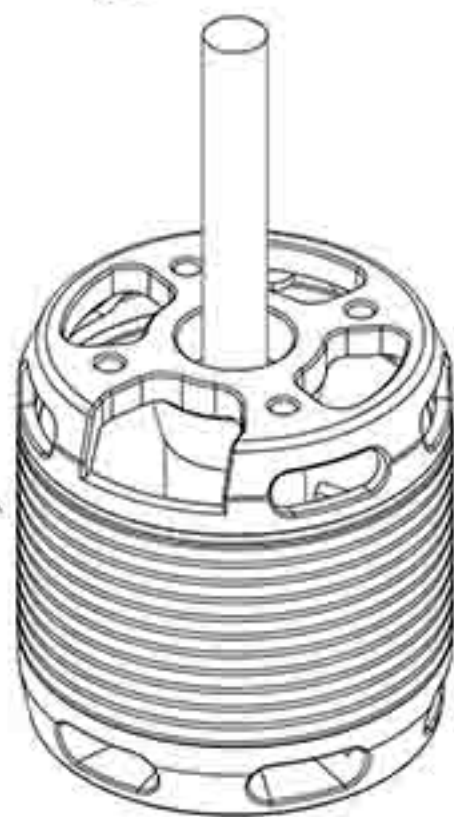


Bag 1

Screw M3*8 (Add Loctite 243)
ART.MSH51152



Motor (Special Shaft)
ART.XL48M01
Not included in the kit



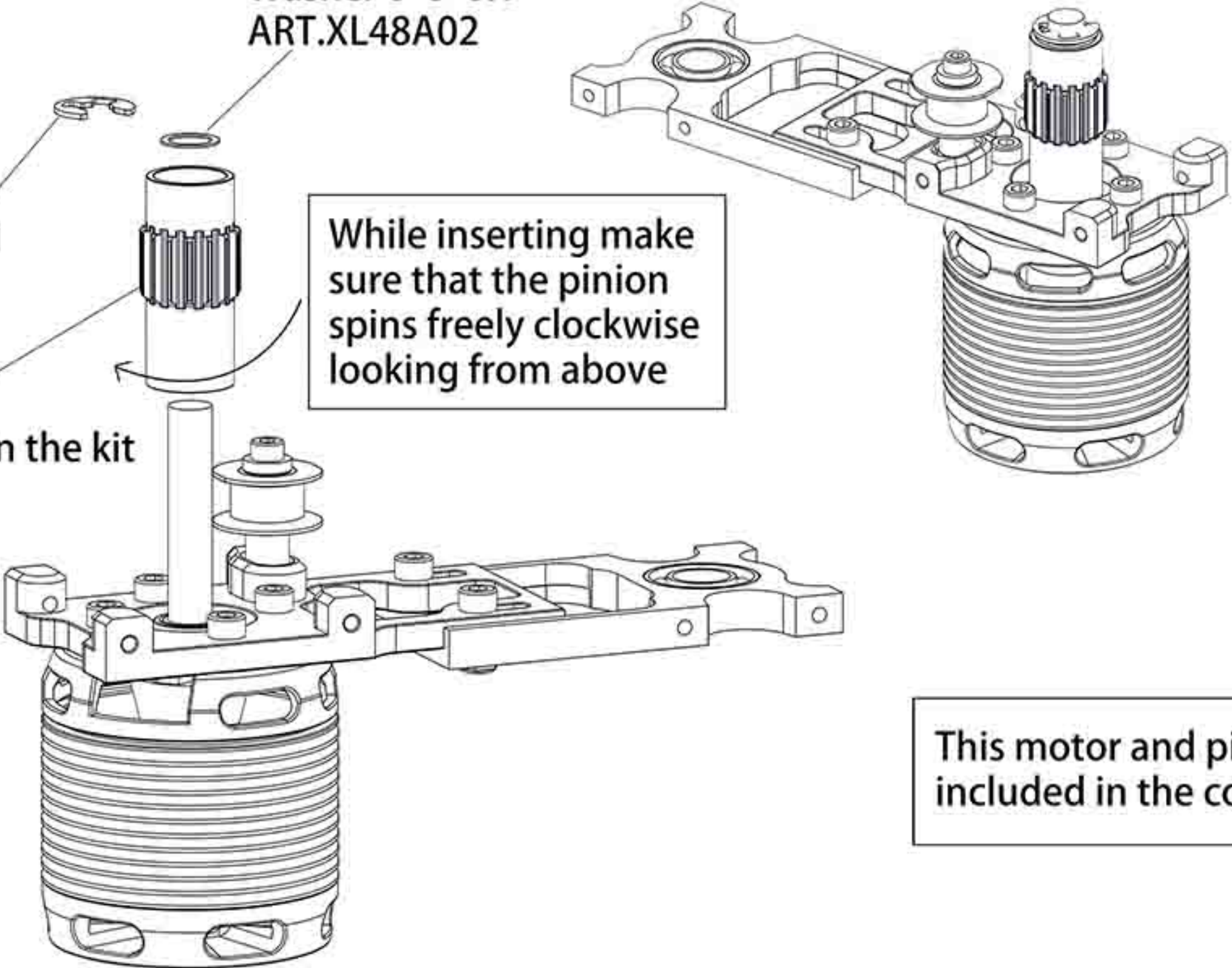
Bag 1

Washer 6*8*0.1
ART.XL48A02

Seeger RS 5
ART.XL48G01

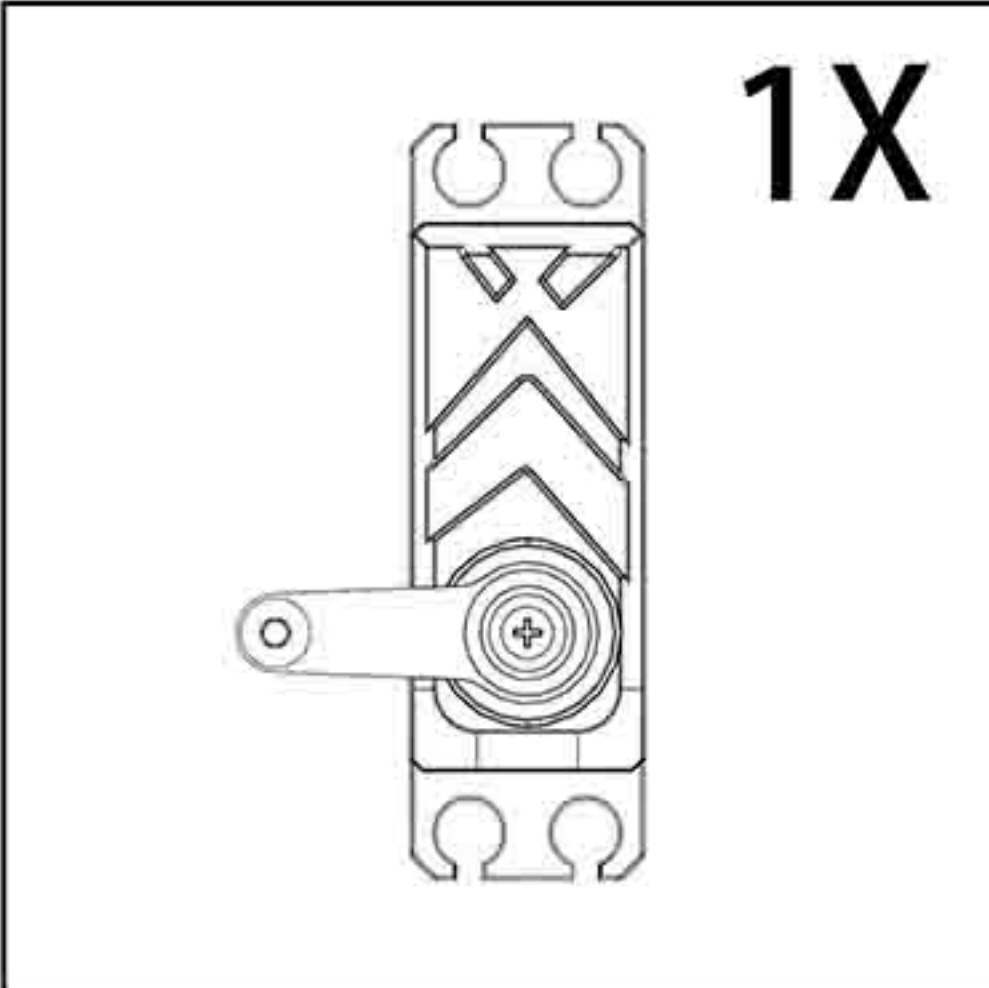
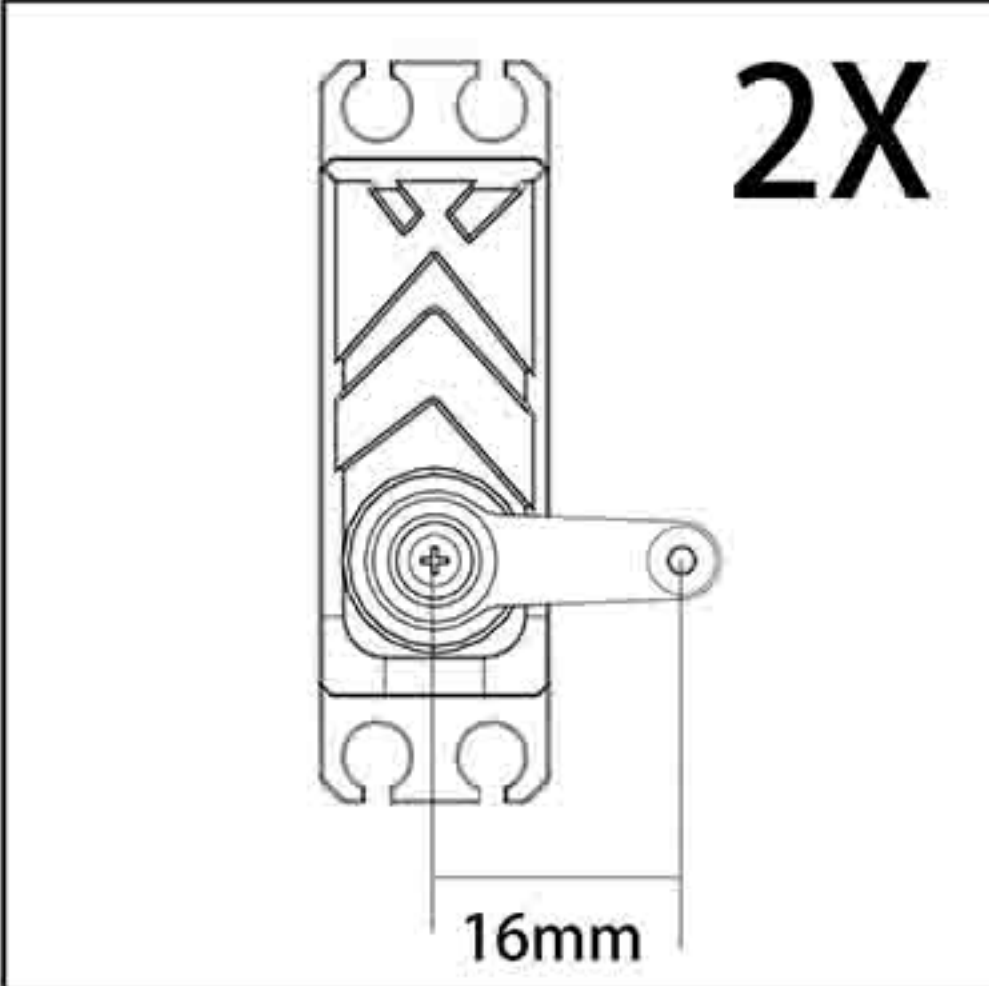
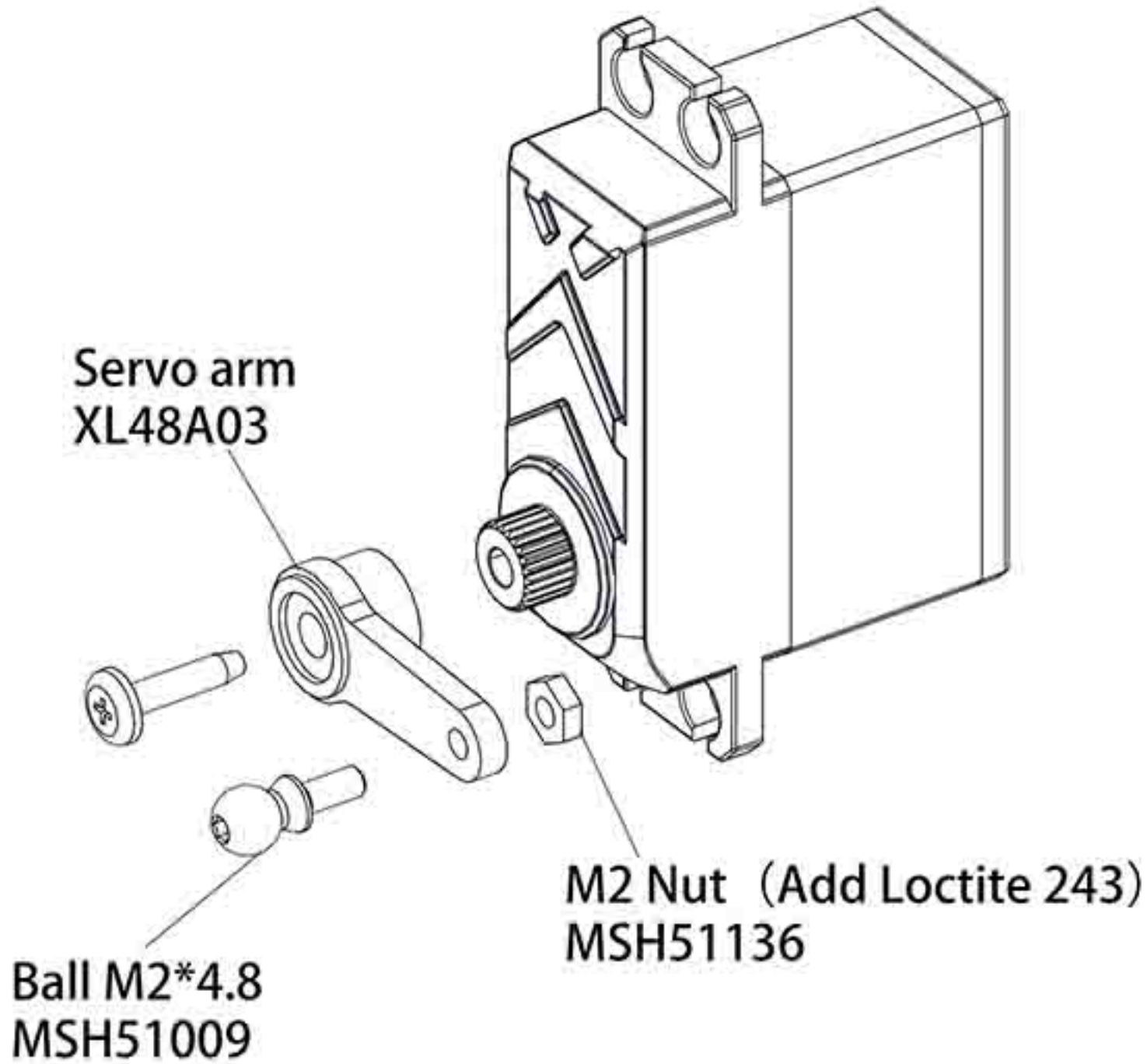
Pinion 15T L
ART.XL48G01
Not included in the kit

While inserting make
sure that the pinion
spins freely clockwise
looking from above



This motor and pinion is
included in the combo

Bag 2

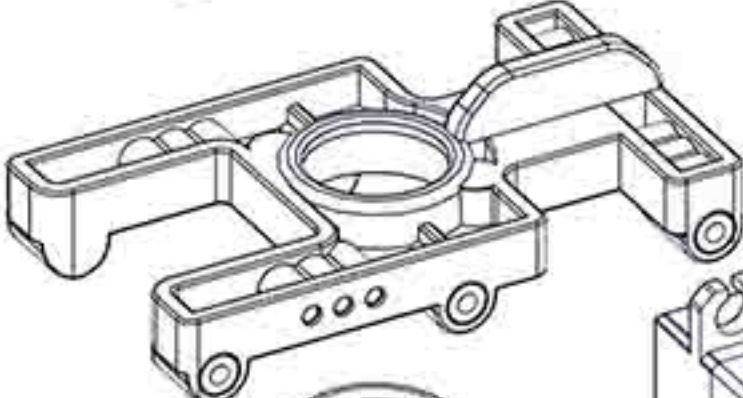
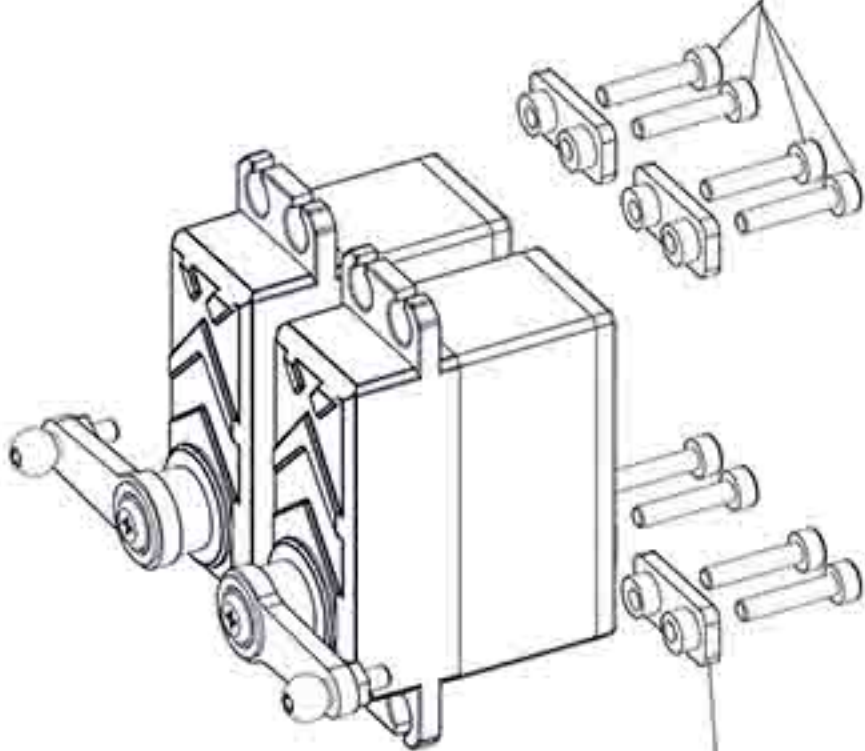


Bag 2

Bearing 8*16*5
ART.MSH51067

Servo Frame
ART.MSH51082

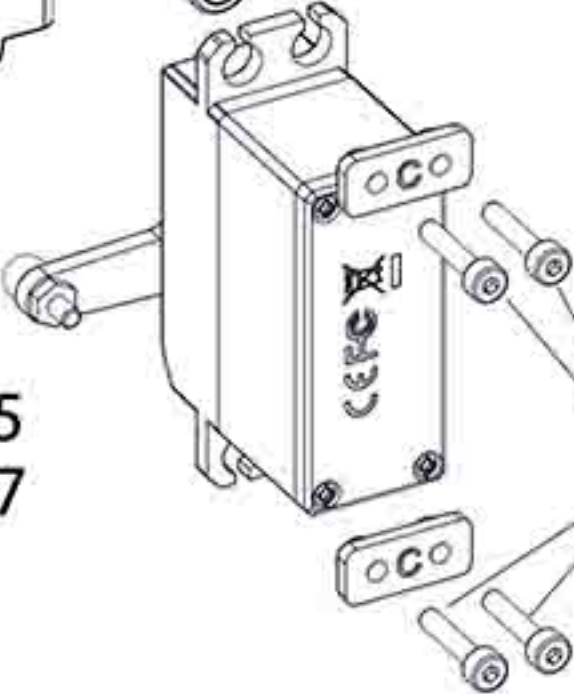
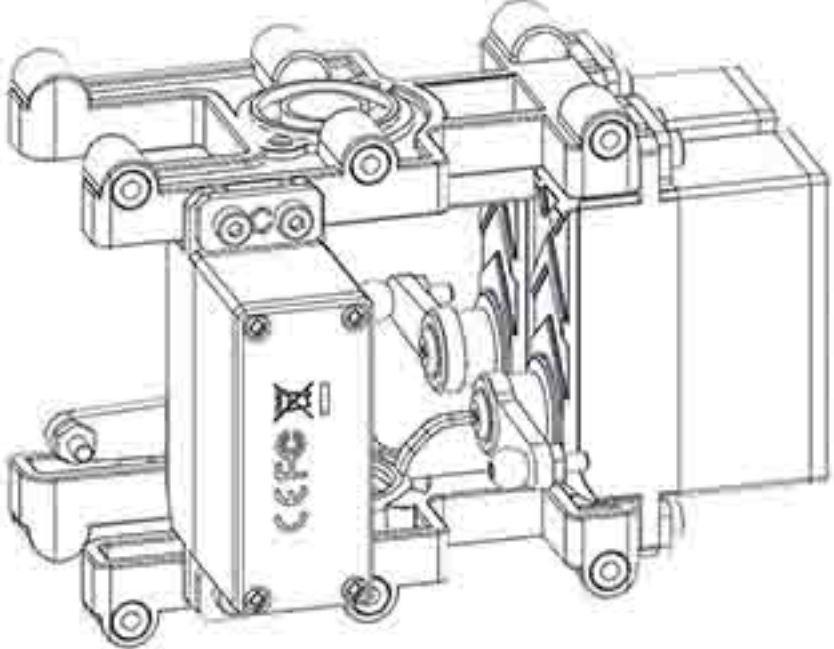
Screw M2*10
ART.MSH51141



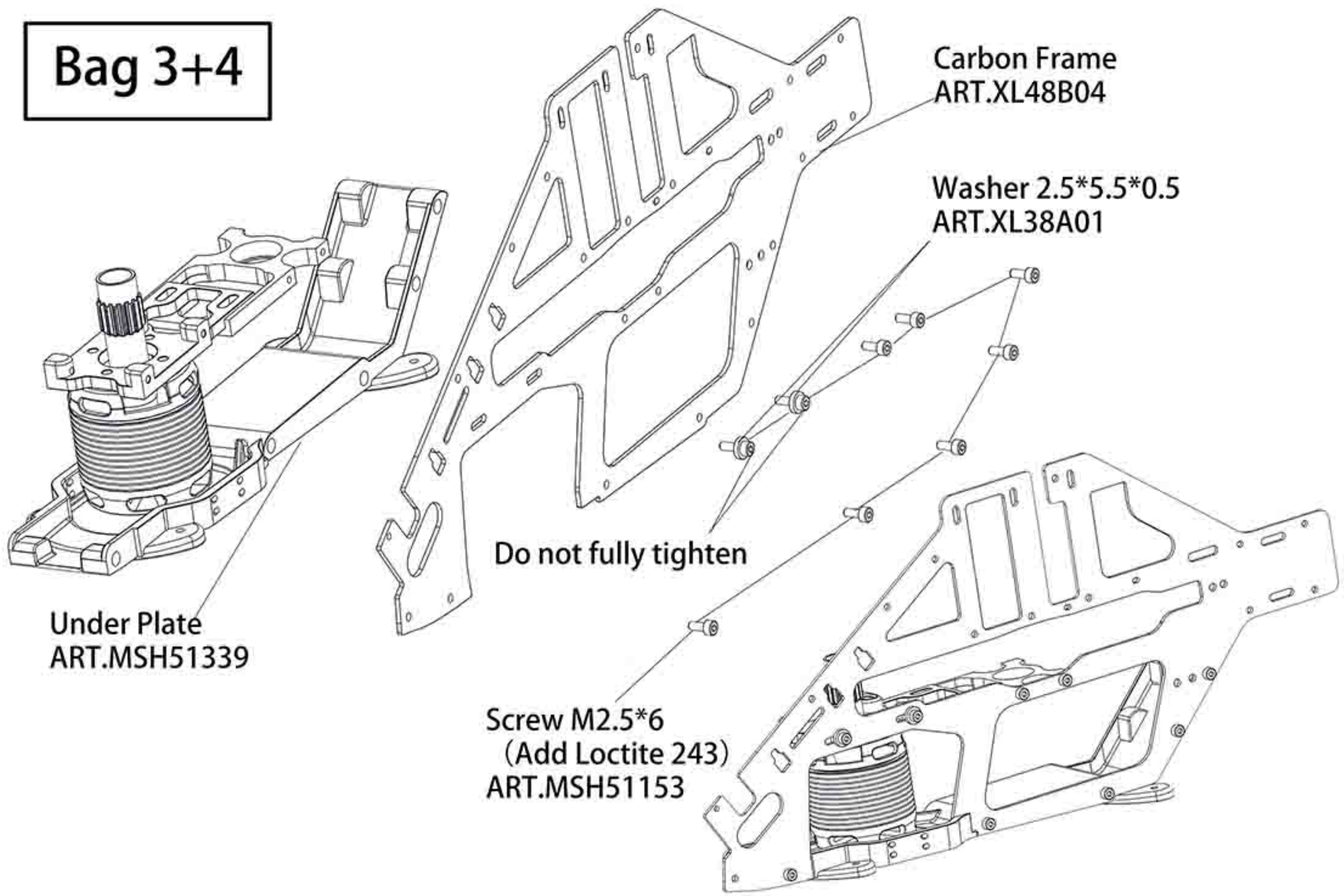
Servo Adapter
ART.MSH51037

Bearing 8*16*5
ART.MSH51067

Screw M2*10
ART.MSH51141



Bag 3+4



Carbon Frame
ART.XL48B04

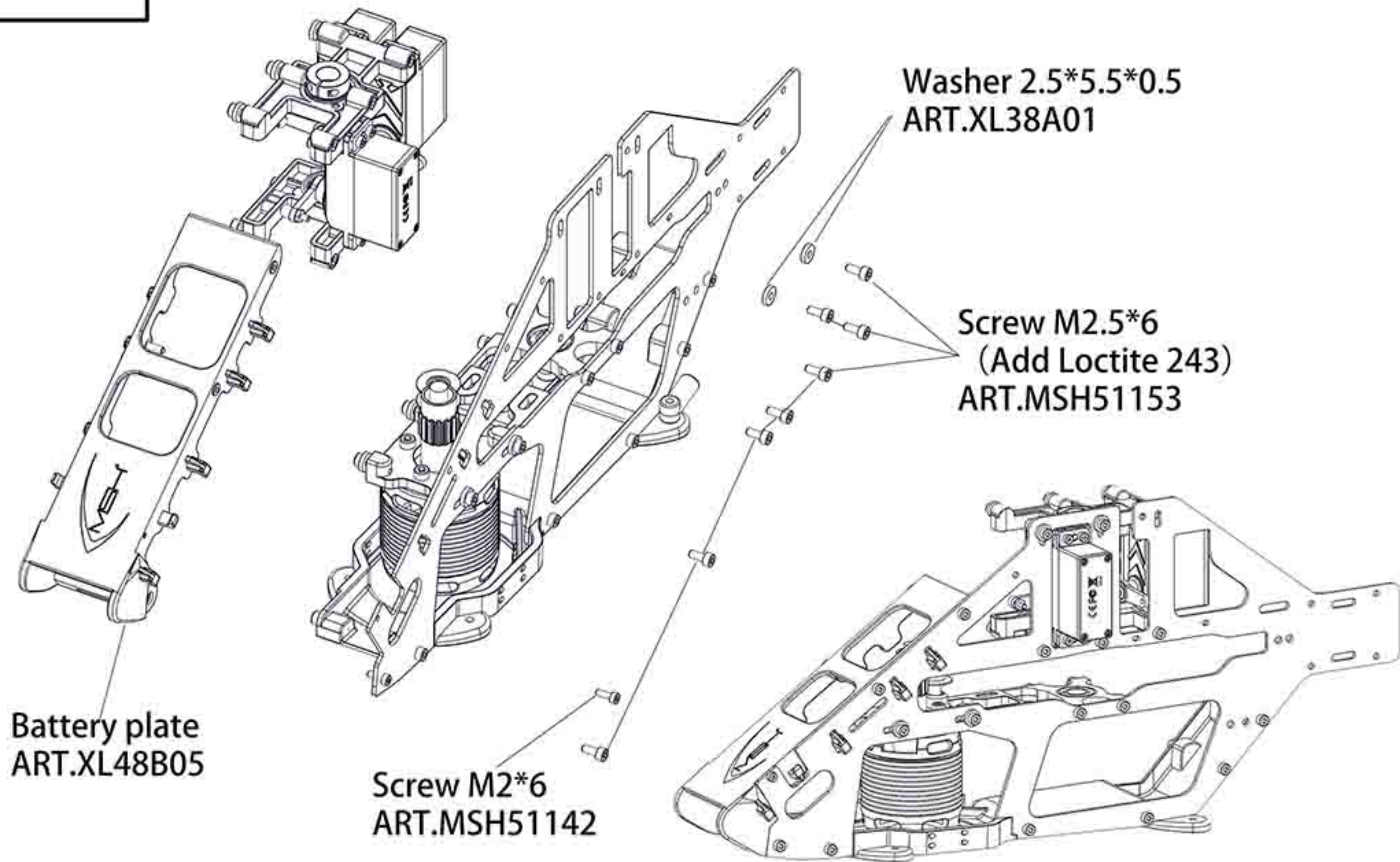
Washer 2.5*5.5*0.5
ART.XL38A01

Under Plate
ART.MSH51339

Do not fully tighten

Screw M2.5*6
(Add Loctite 243)
ART.MSH51153

Bag 4



Battery plate
ART.XL48B05

Washer 2.5*5.5*0.5
ART.XL38A01

Screw M2.5*6
(Add Loctite 243)
ART.MSH51153

Screw M2*6
ART.MSH51142

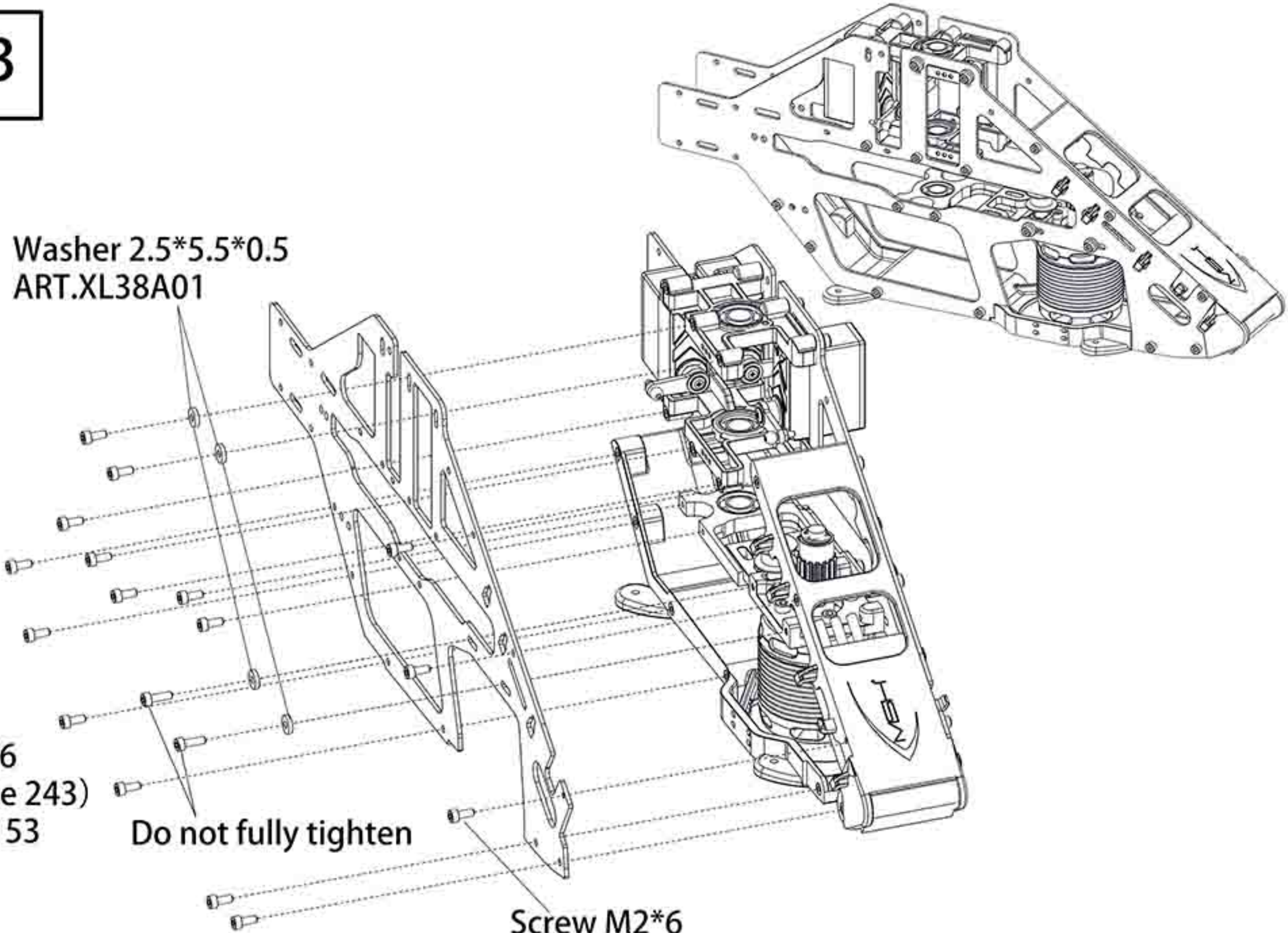
Bag 3

Washer 2.5*5.5*0.5
ART.XL38A01

Screw M2.5*6
(Add Loctite 243)
ART.MSH51153

Do not fully tighten

Screw M2*6
ART.MSH51142



Bag 4

Screw M2.5*16 (Do not fully tighten)
ART.MSH51145

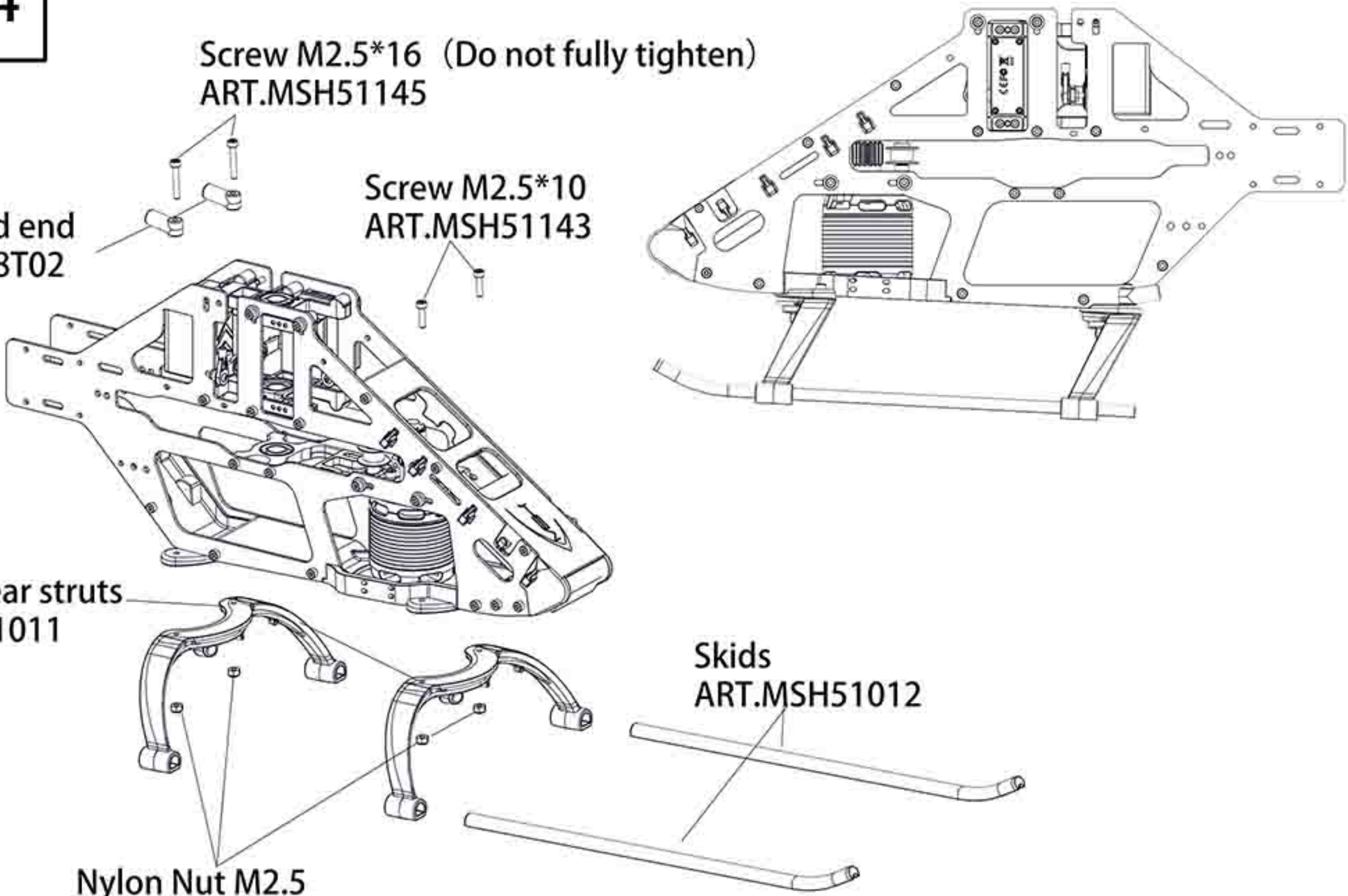
Screw M2.5*10
ART.MSH51143

Brace rod end
ART.XL48T02

Landing gear struts
ART.MSH51011

Nylon Nut M2.5
ART.MSH51137

Skids
ART.MSH51012



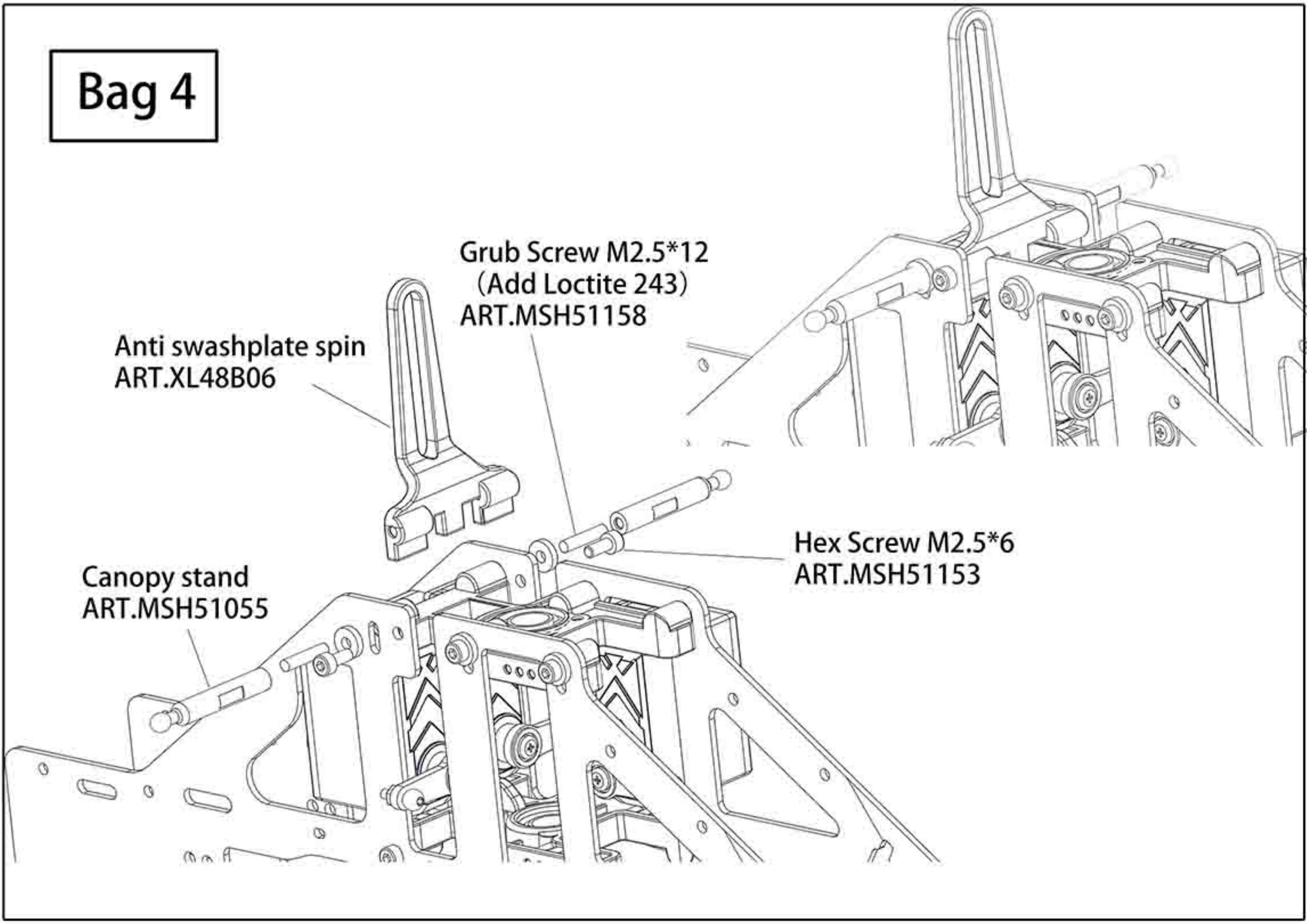
Bag 4

Grub Screw M2.5*12
(Add Loctite 243)
ART.MSH51158

Anti swashplate spin
ART.XL48B06

Canopy stand
ART.MSH51055

Hex Screw M2.5*6
ART.MSH51153



Bag 5

Hex screw M2*6
(Add Loctite 243)
Pull up main shaft
and fully tighten
MSH51142

Main shaft
XL48B07

Main shaft lock
MSH51005

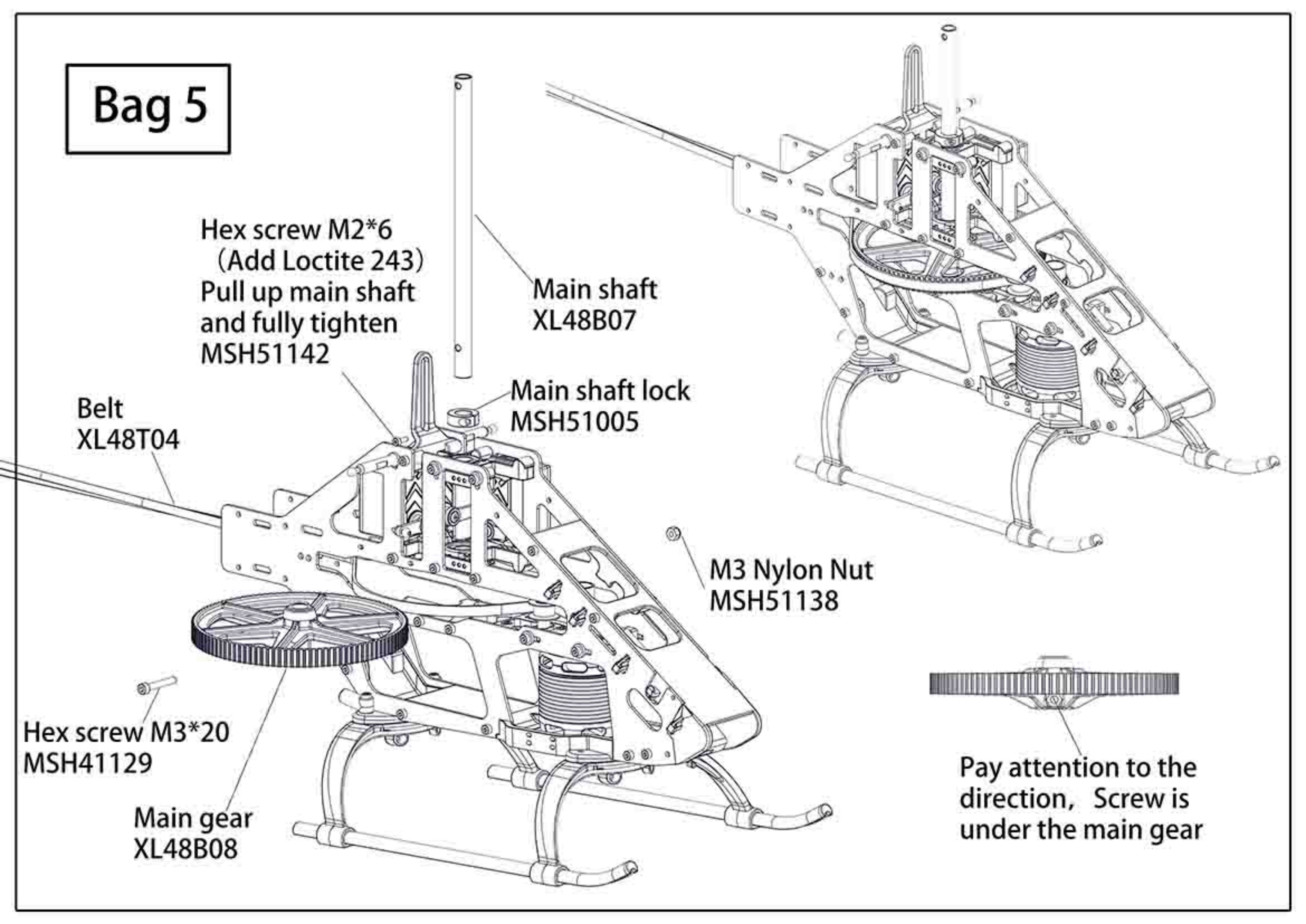
Belt
XL48T04

M3 Nylon Nut
MSH51138

Hex screw M3*20
MSH41129

Main gear
XL48B08

Pay attention to the
direction, Screw is
under the main gear

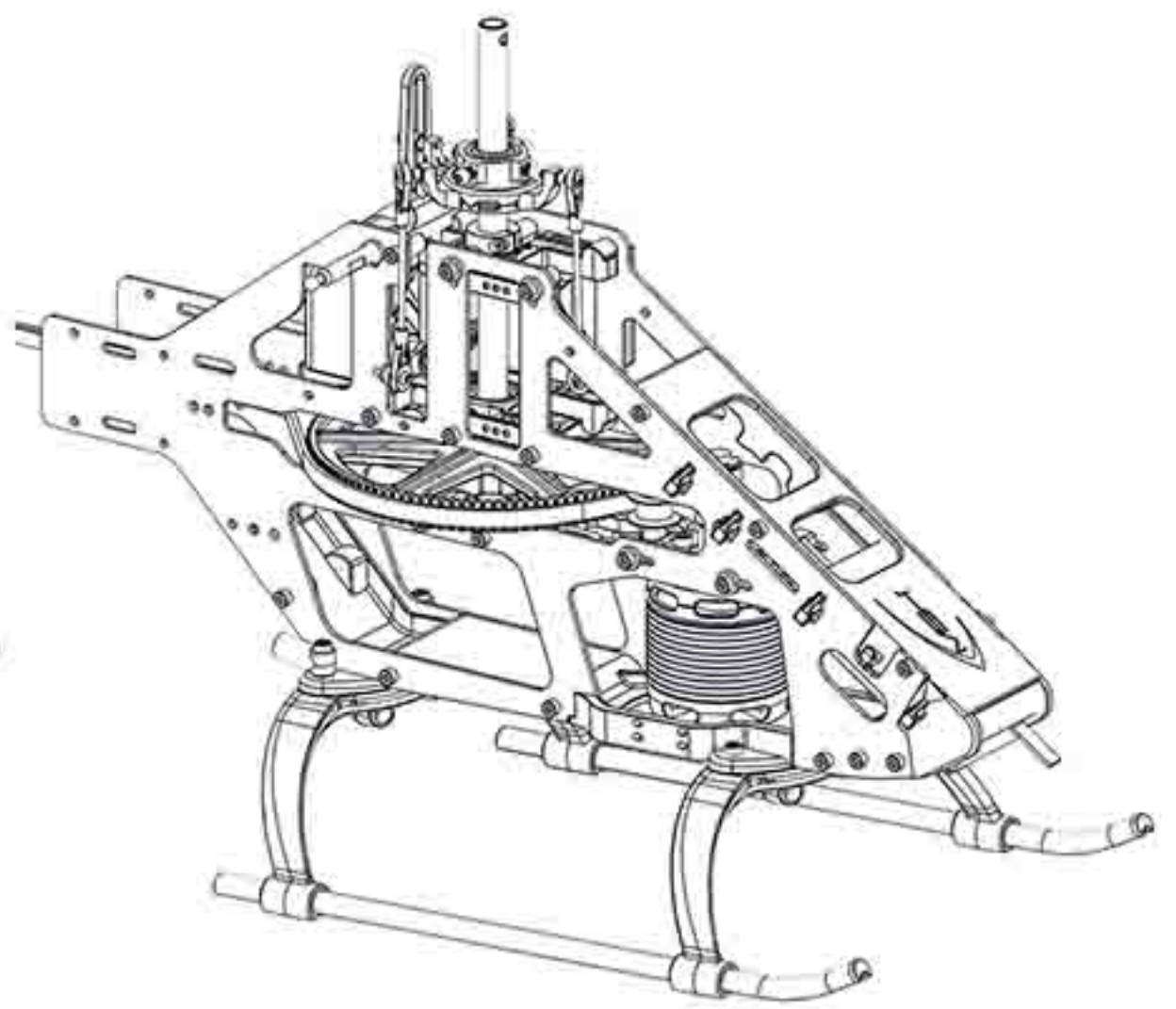
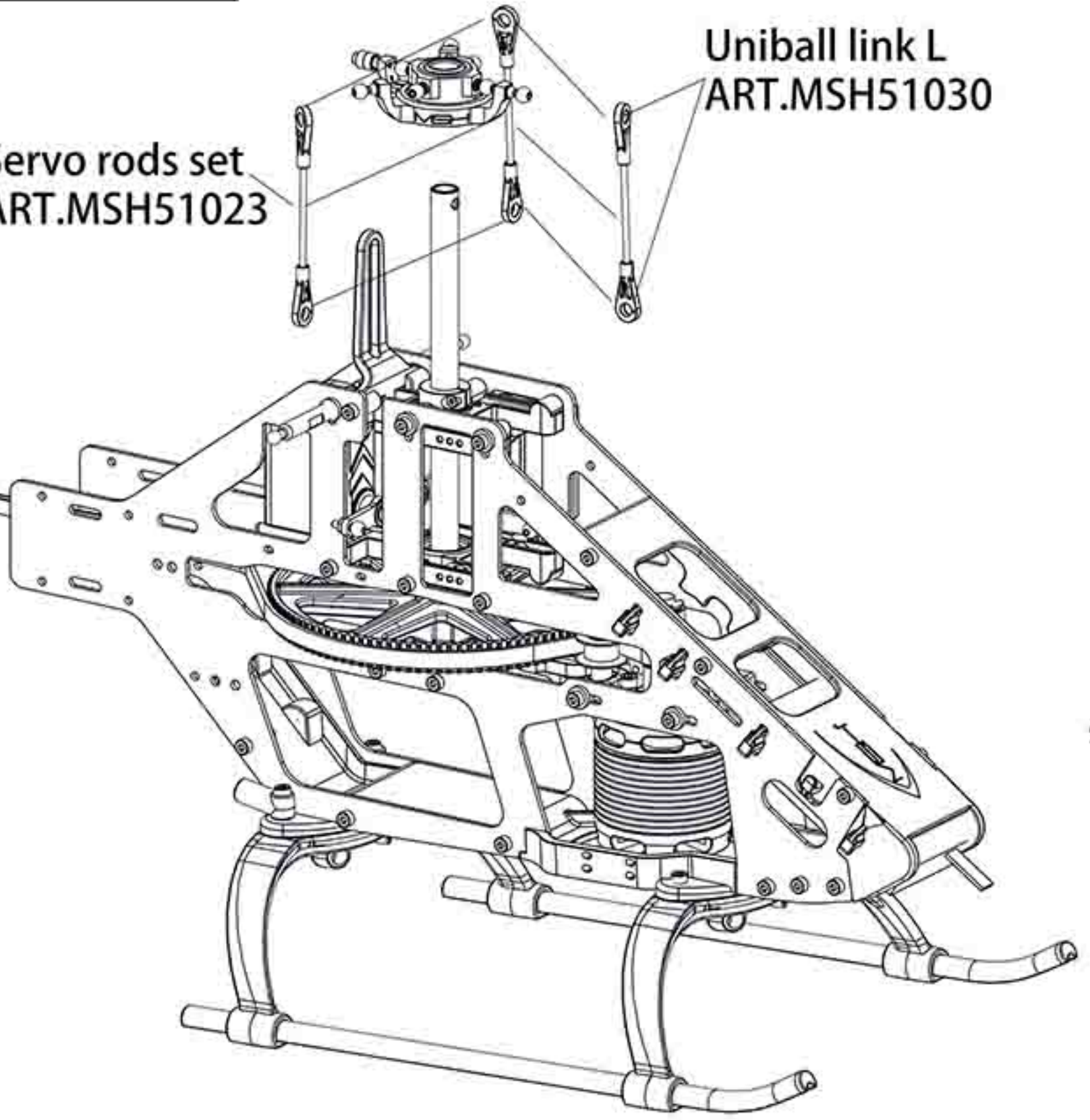


Bag 6

Servo rods set
ART.MSH51023

Uniball link L
ART.MSH51030

28mm



Bag 6

Wash out uniball arm
ART.MSH51336

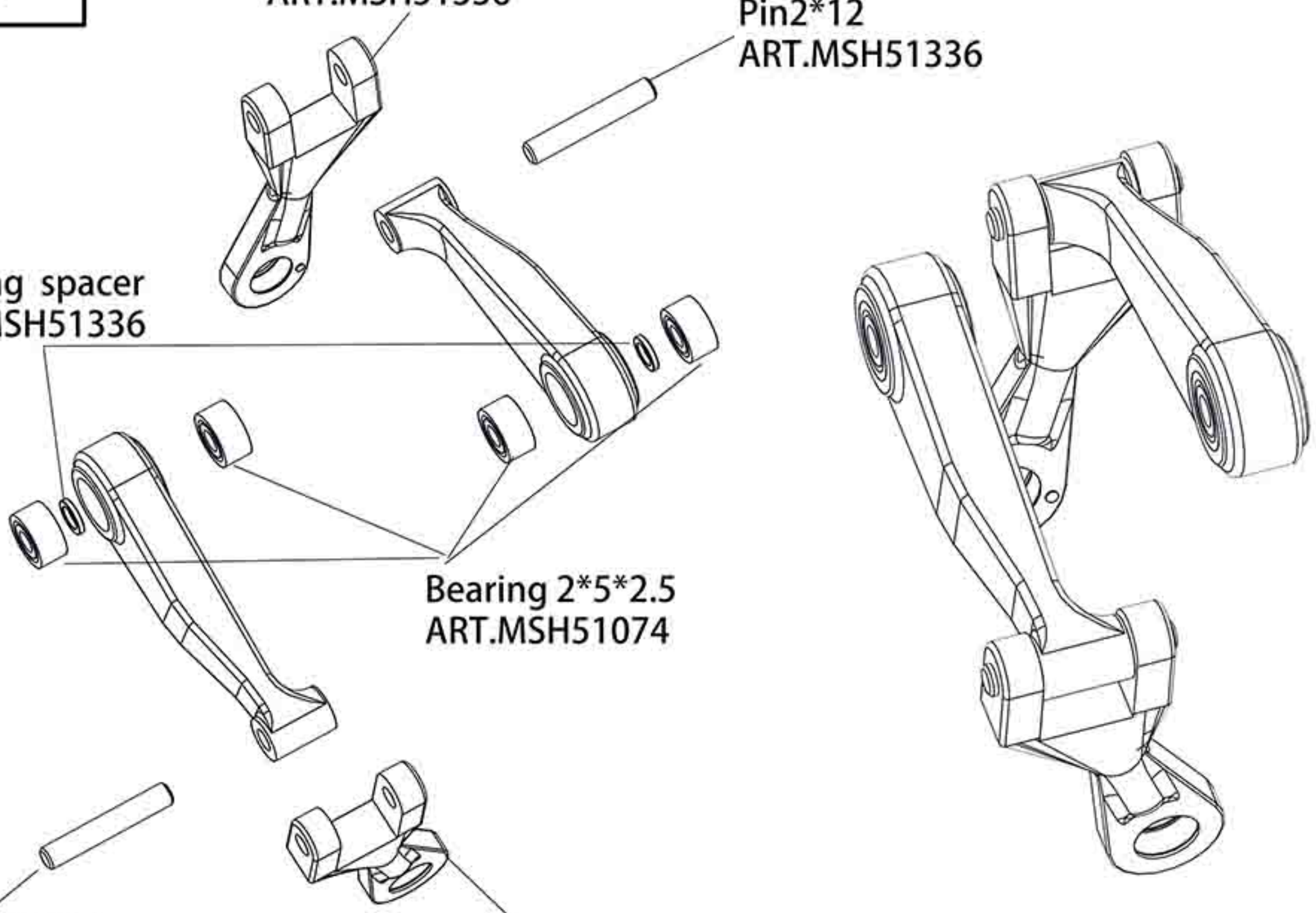
Pin2*12
ART.MSH51336

Bearing spacer
ART.MSH51336

Bearing 2*5*2.5
ART.MSH51074

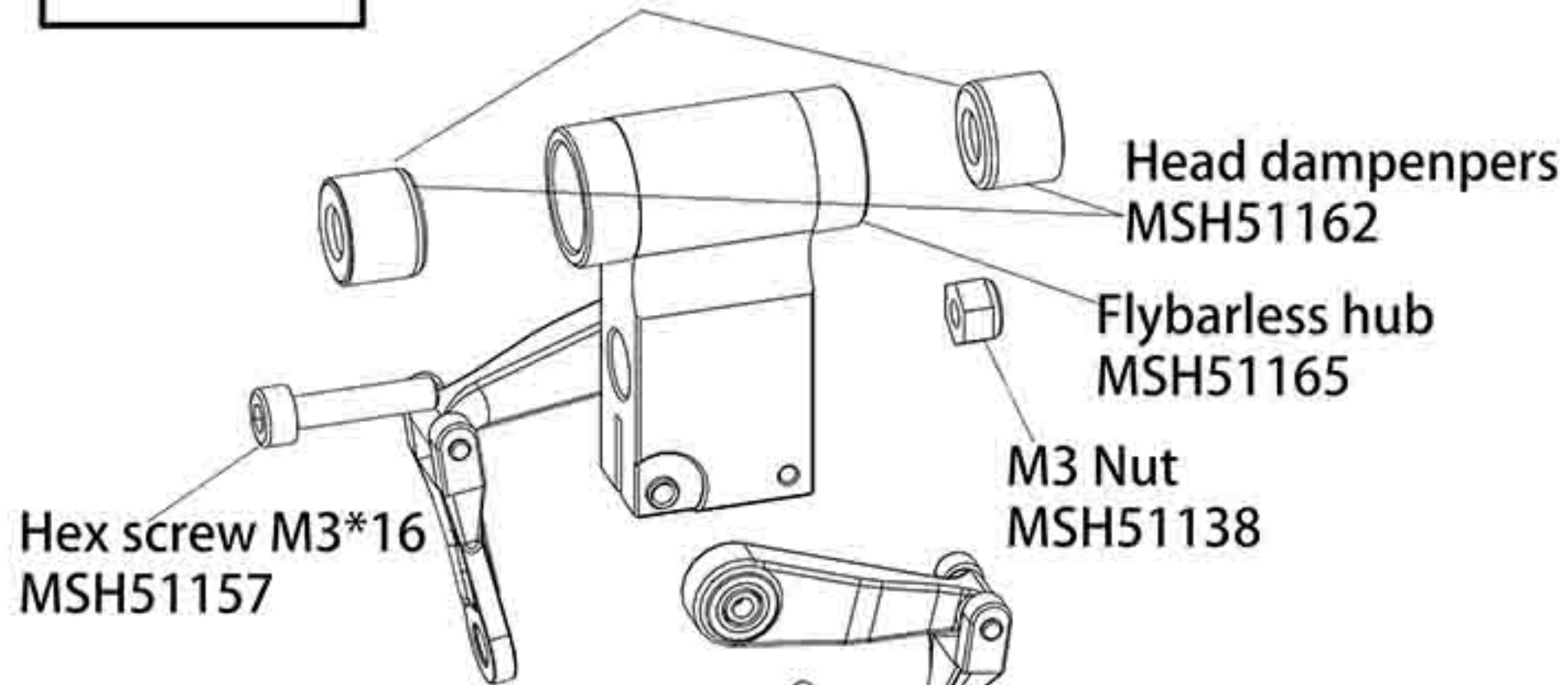
Pin2*12
ART.MSH51336

Wash out uniball arm
ART.MSH51336



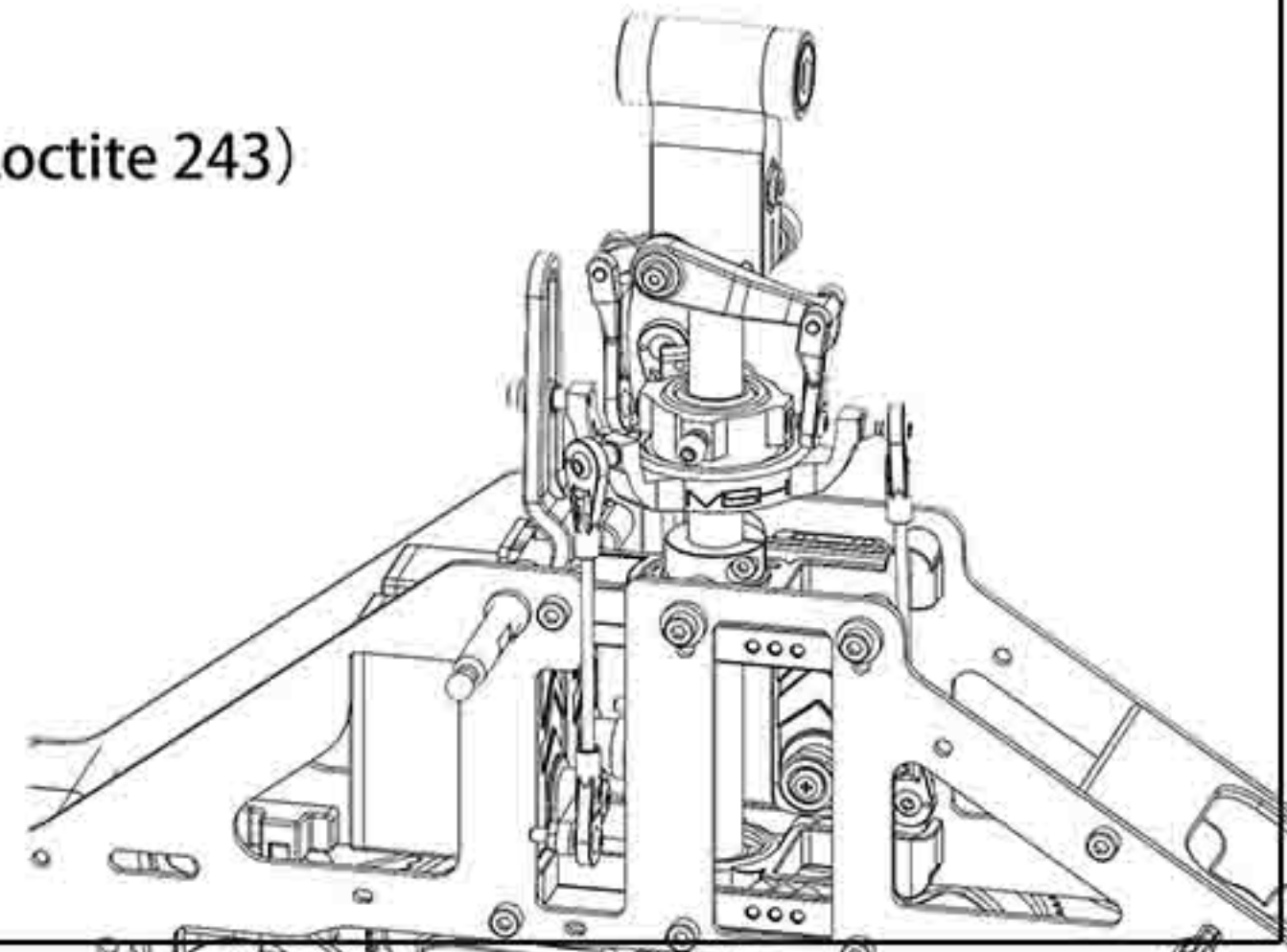
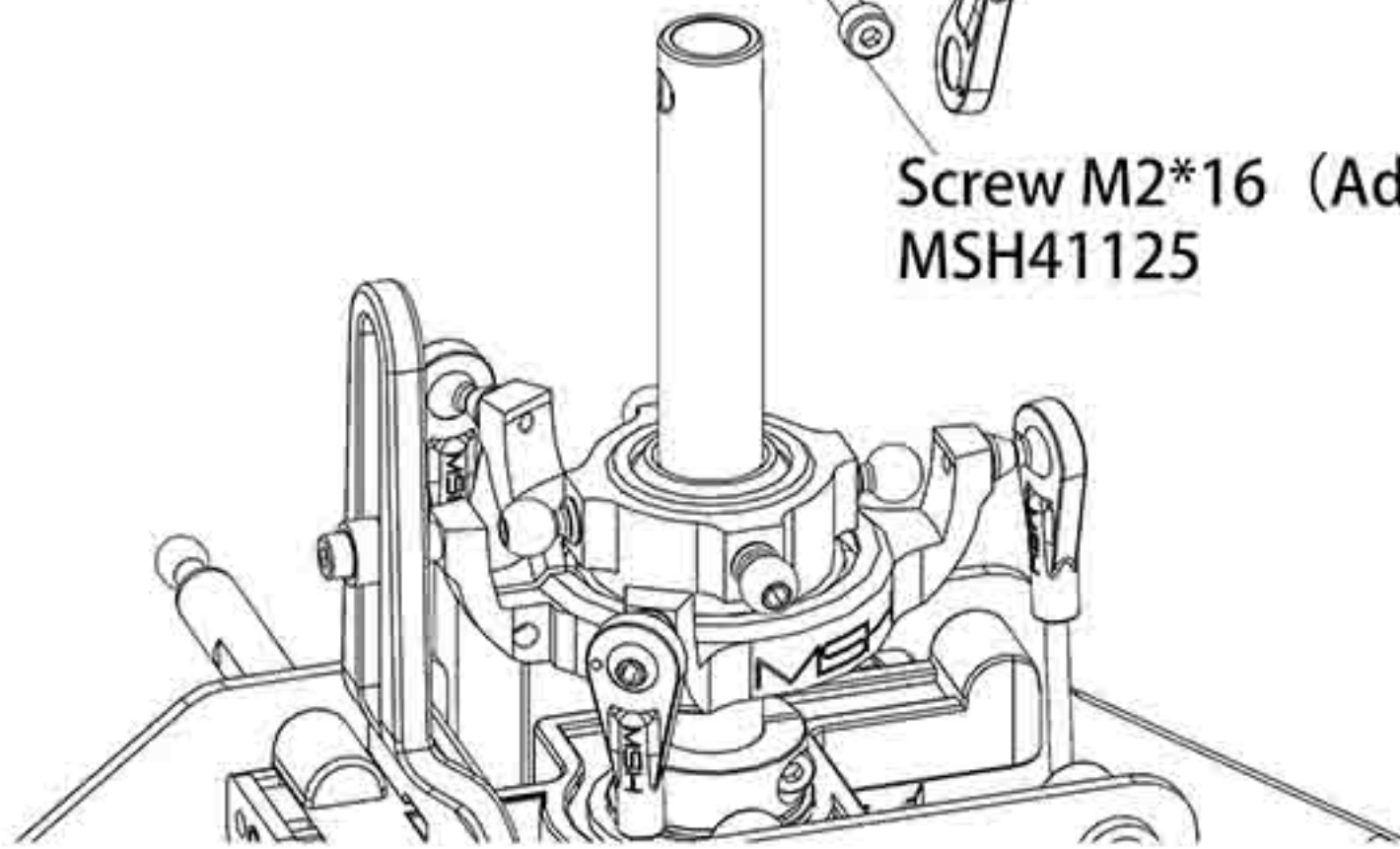
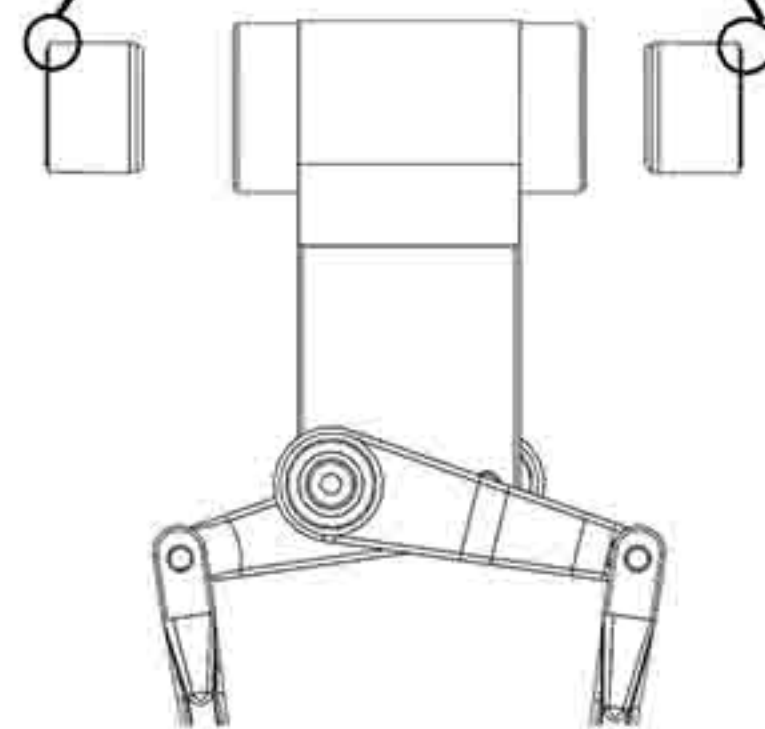
Bag 6

Optional
MSH51163 for hard 3D

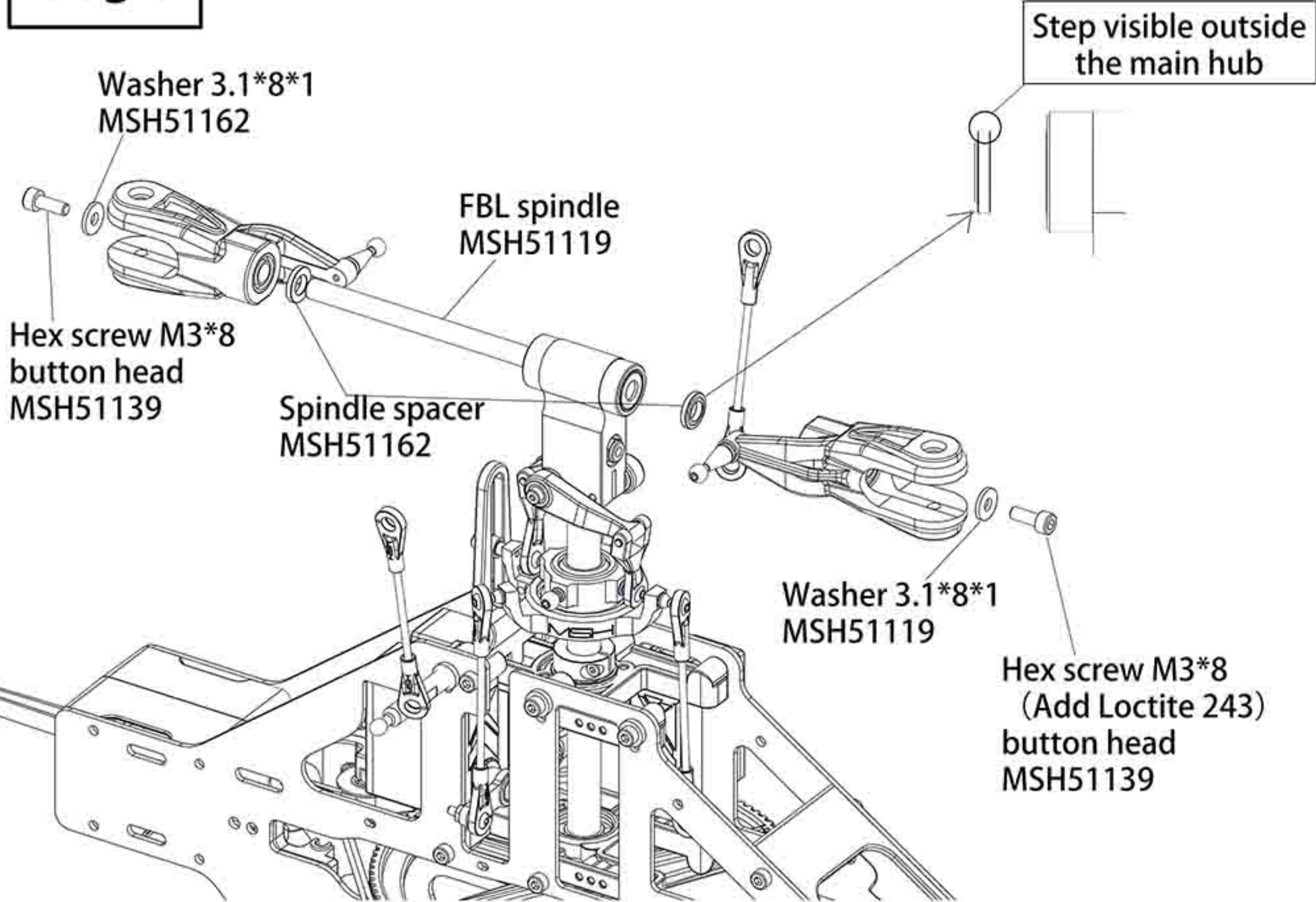


Screw M2*16 (Add Loctite 243)
MSH41125

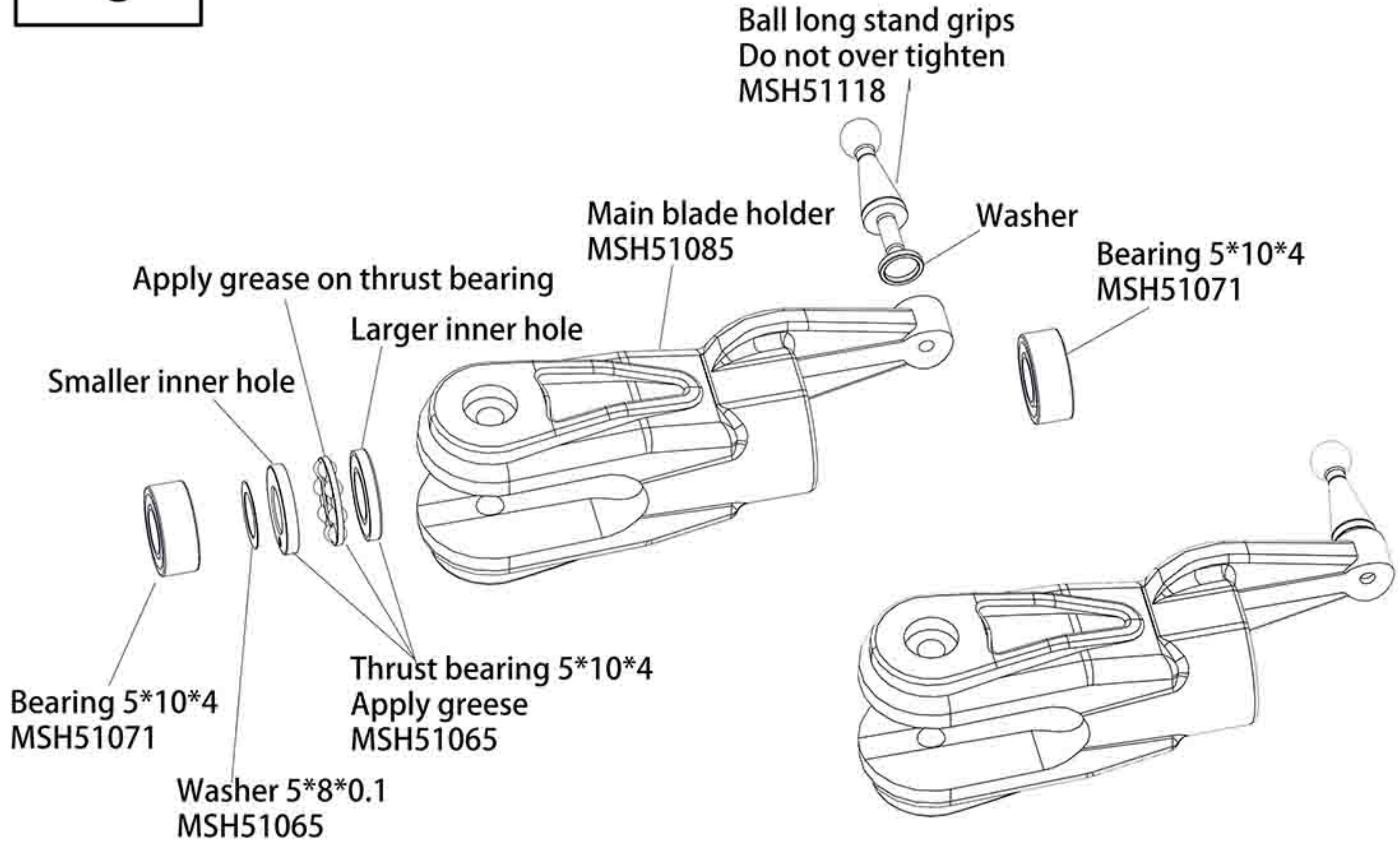
Step visible outside
the main hub



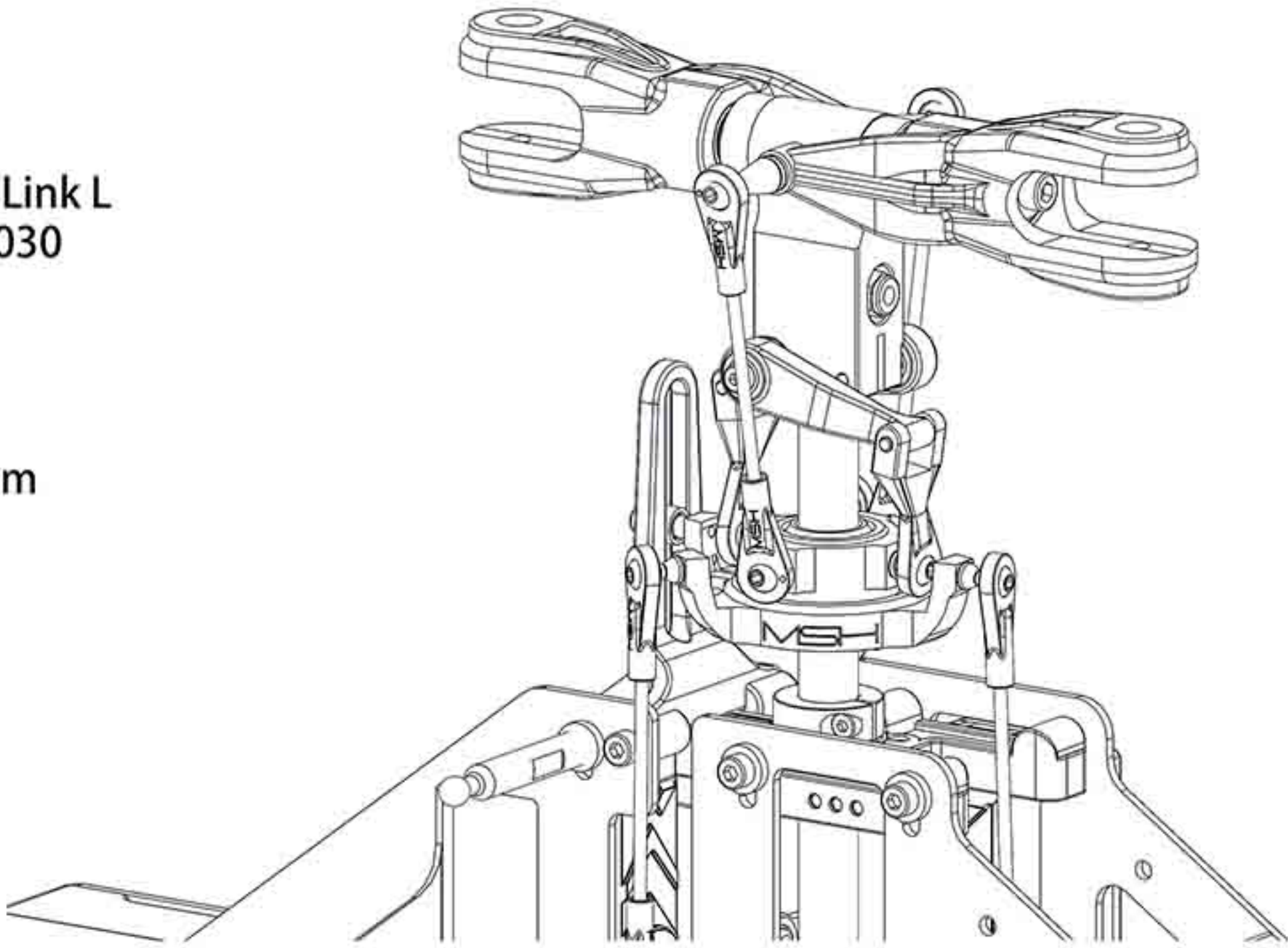
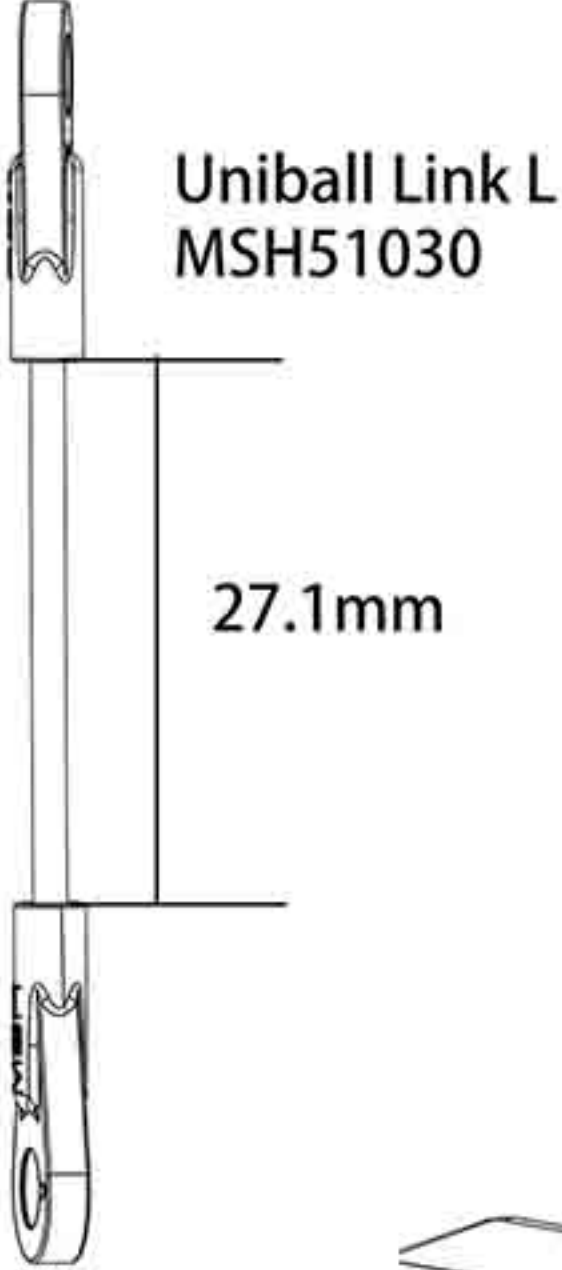
Bag 6



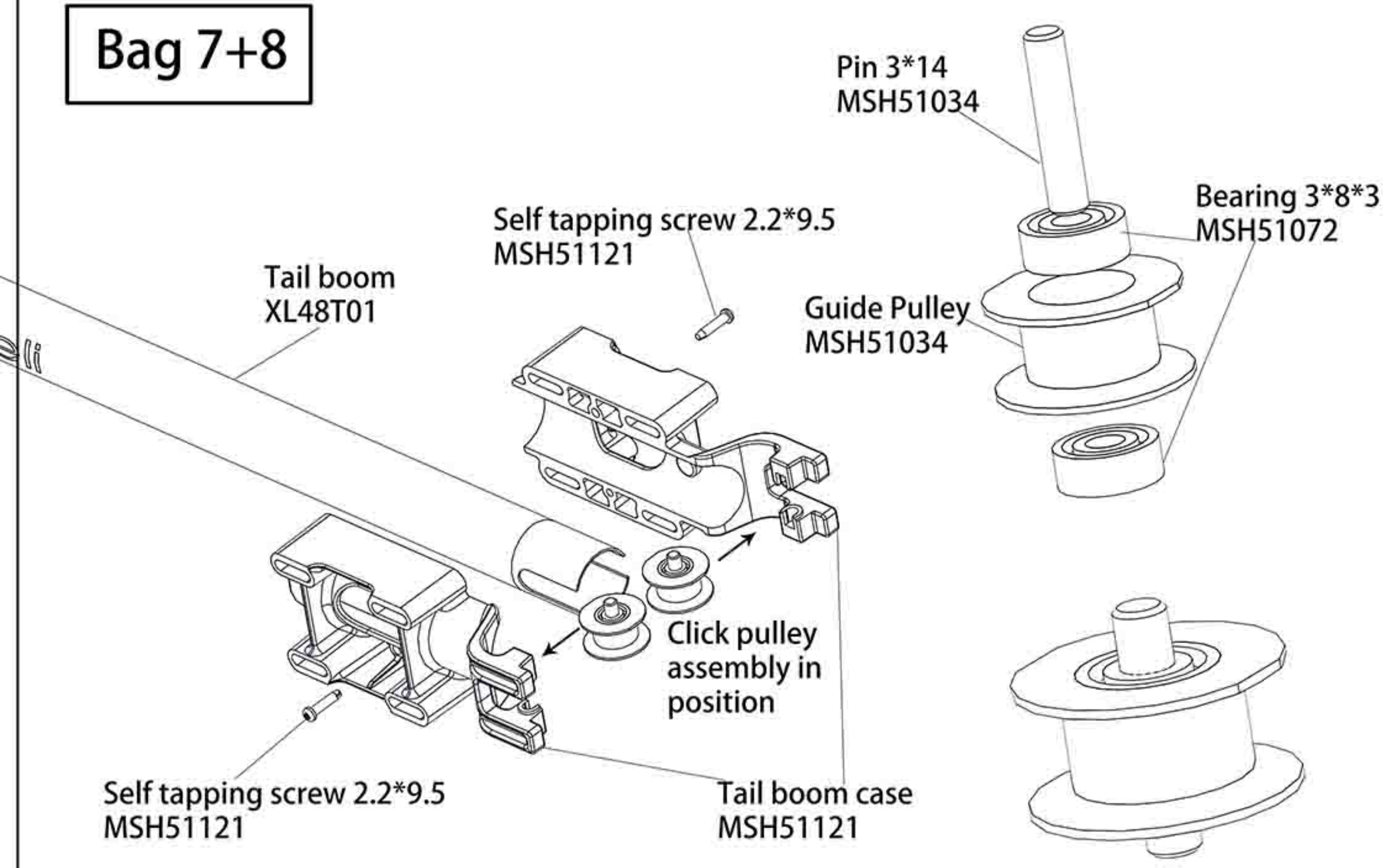
Bag 6



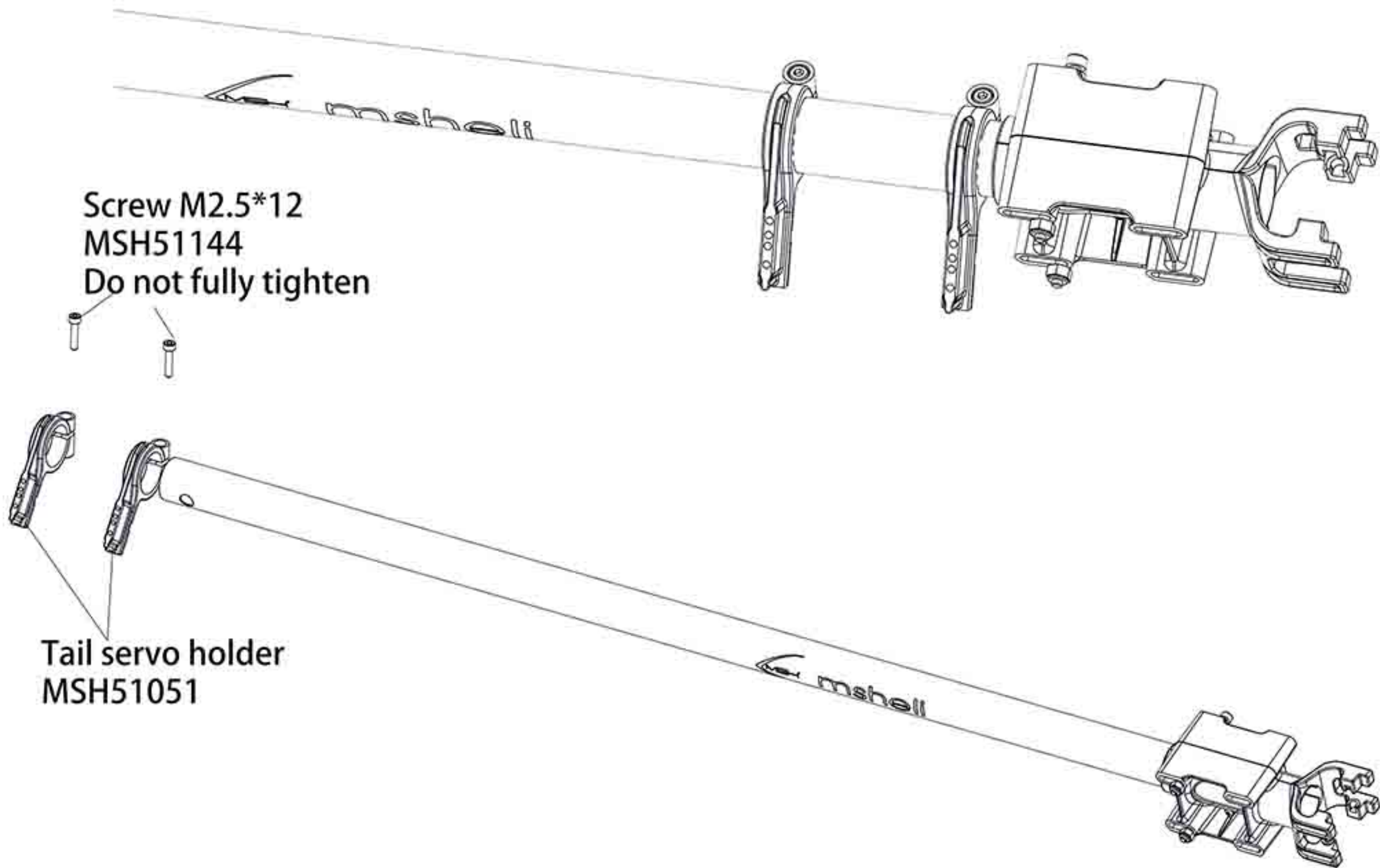
Bag 6



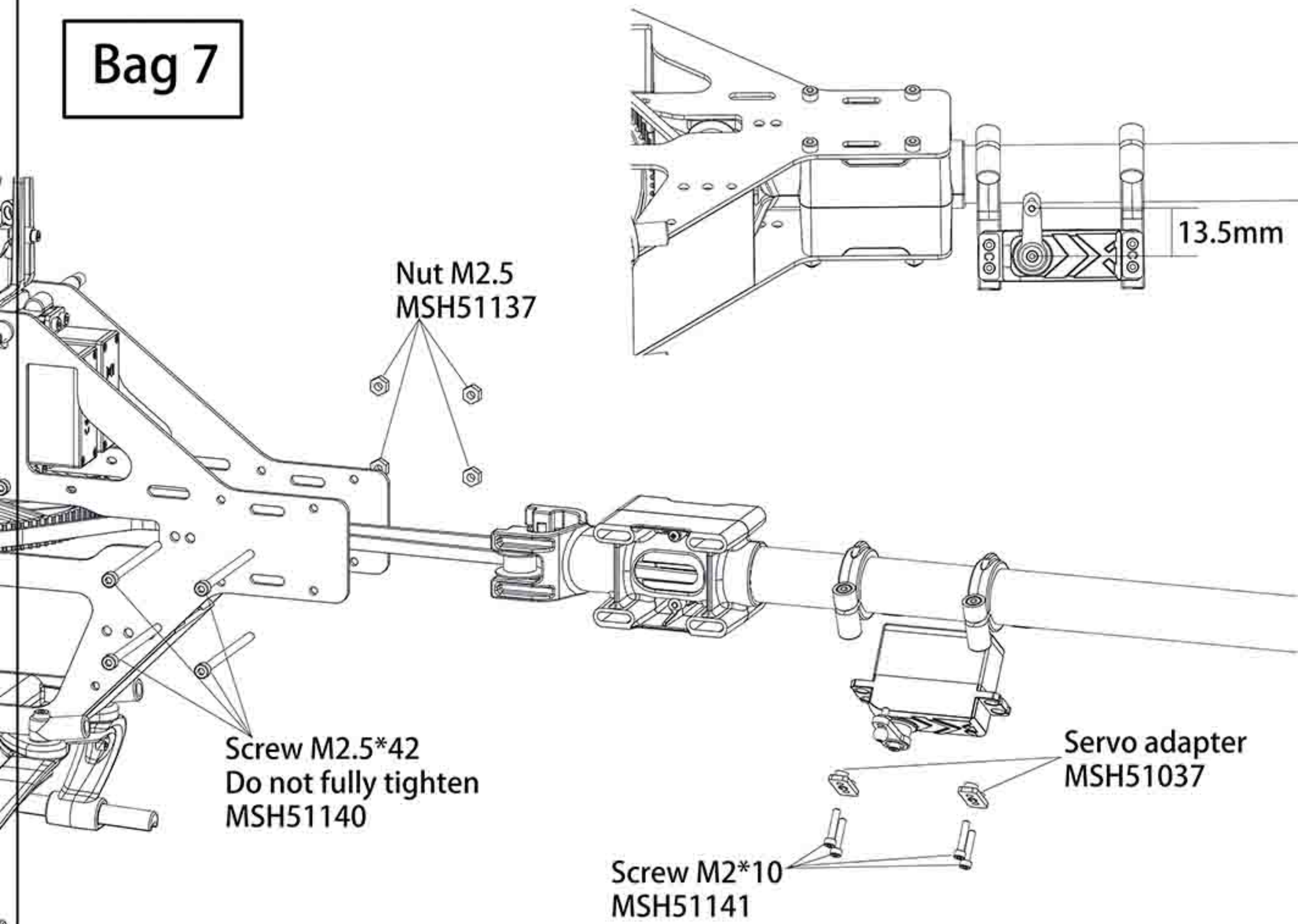
Bag 7+8



Bag 7

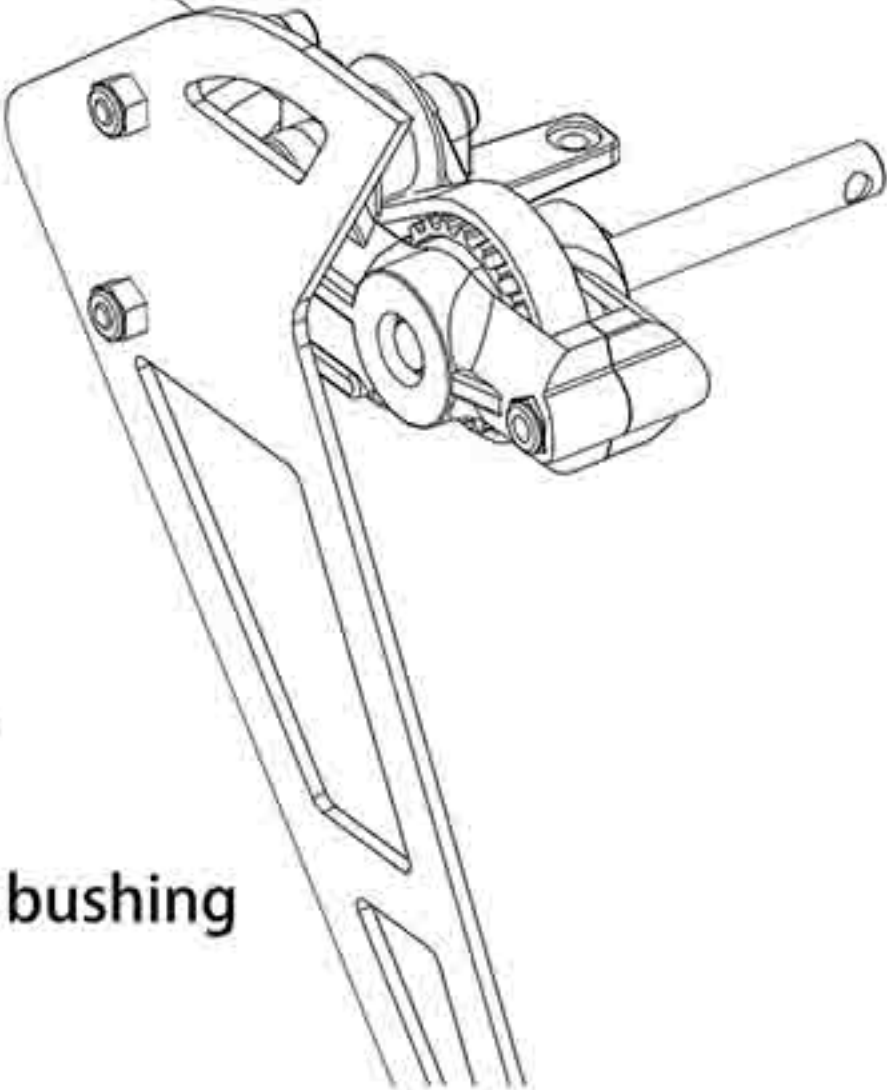


Bag 7



Bag 9

Pay attention to the belt direction



Nylon nut M2.5
MSH51137

Tail box L
MSH51044

Bearing 3*8*3
MSH51072

Guide pulley
MSH51033

Guide pulley bushing
2.5*3*7.8
MSH51033

Vertical fin
MSH51050

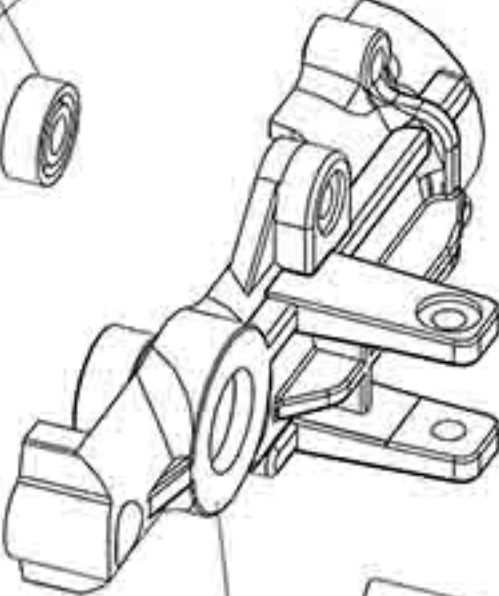
Bearing
5*10*4
MSH51071

Washer 5*7.5*0.2
XL48A03

Pin 1.5*12
XL48T05

Tail shaft
XL48T07

Tail pulley
XL48T05



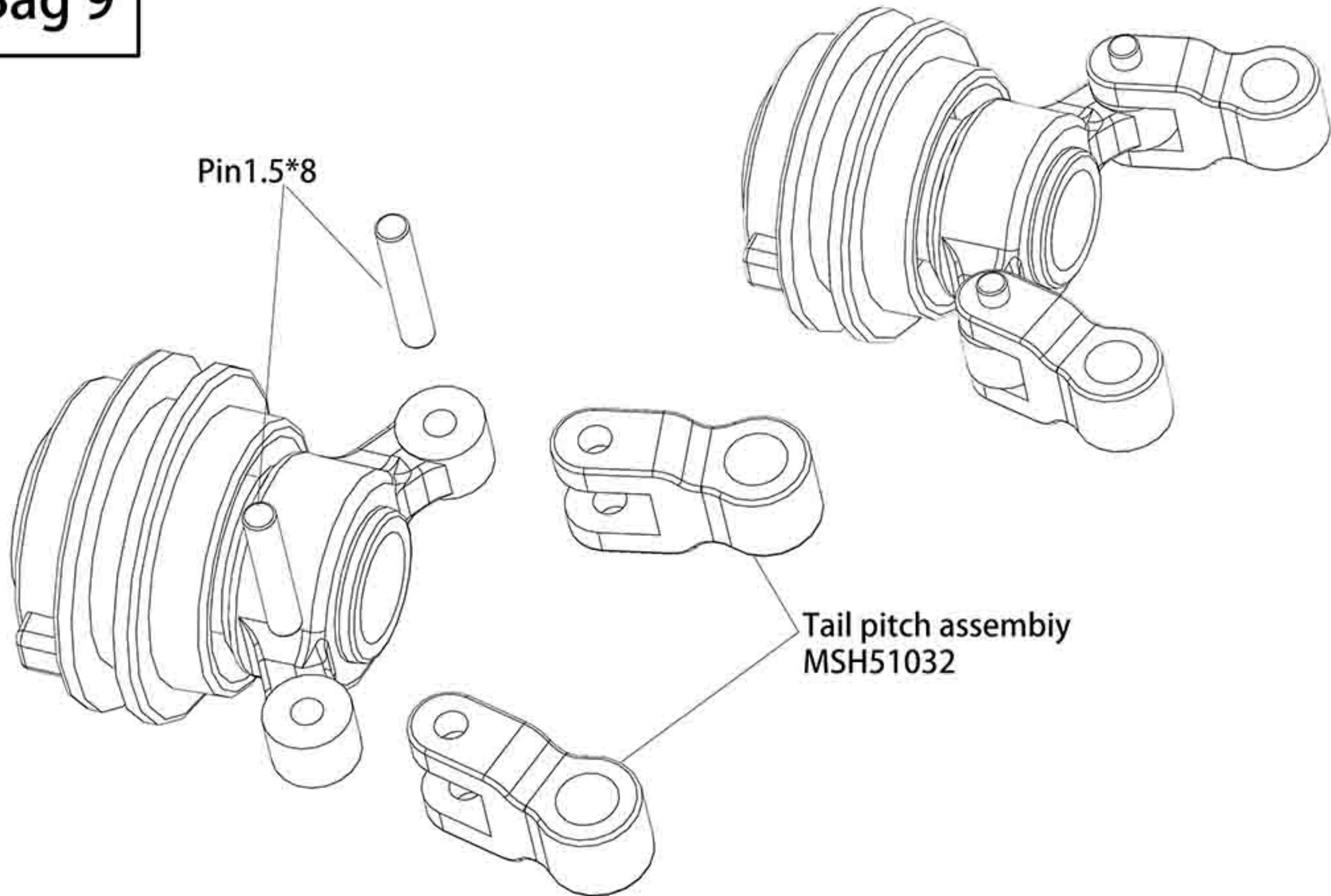
Screw M2.5*20
MSH51146

Do not over tighten

Screw M2.5*16
MSH51145

Tail box R
MSH51044

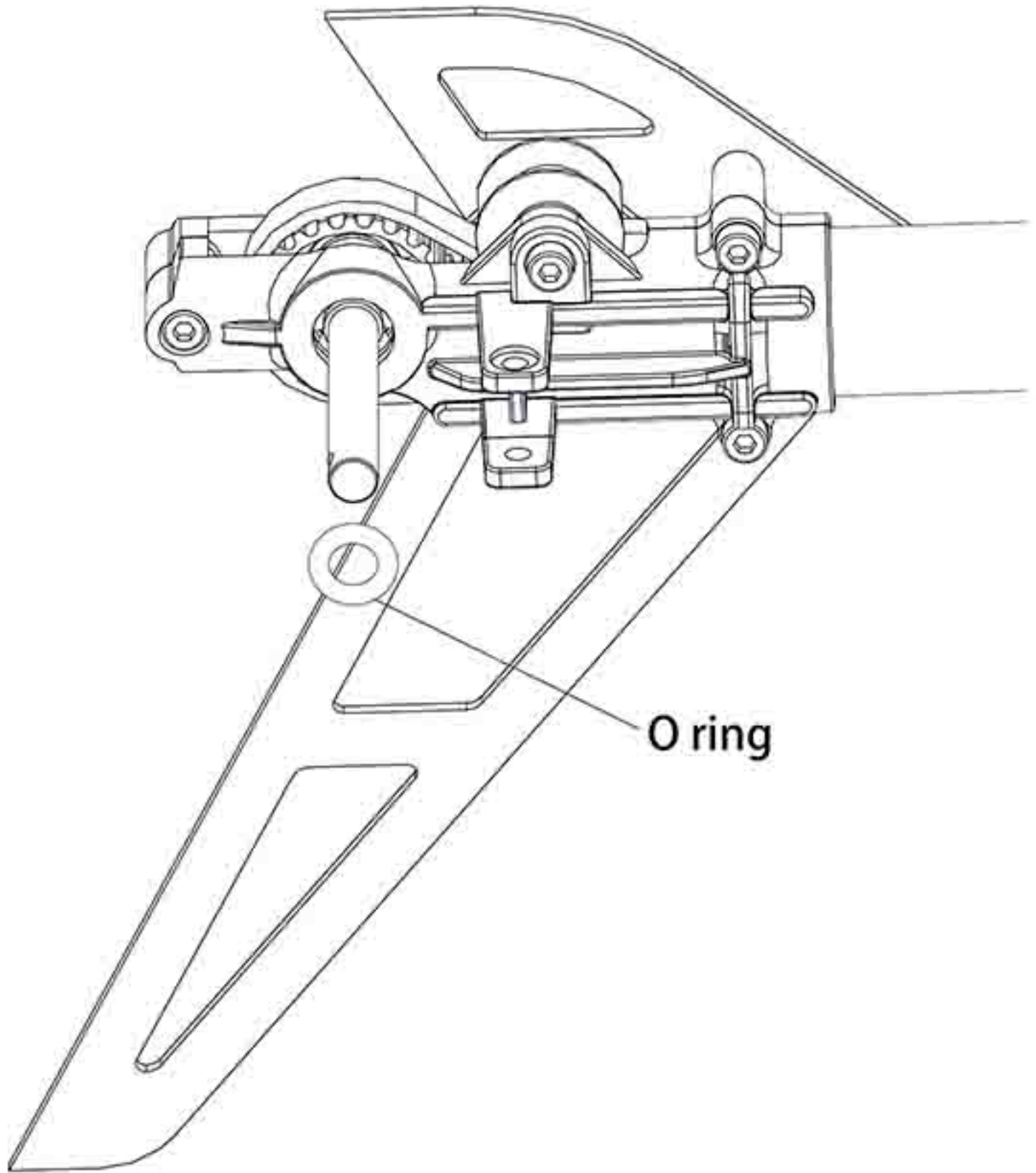
Bag 9



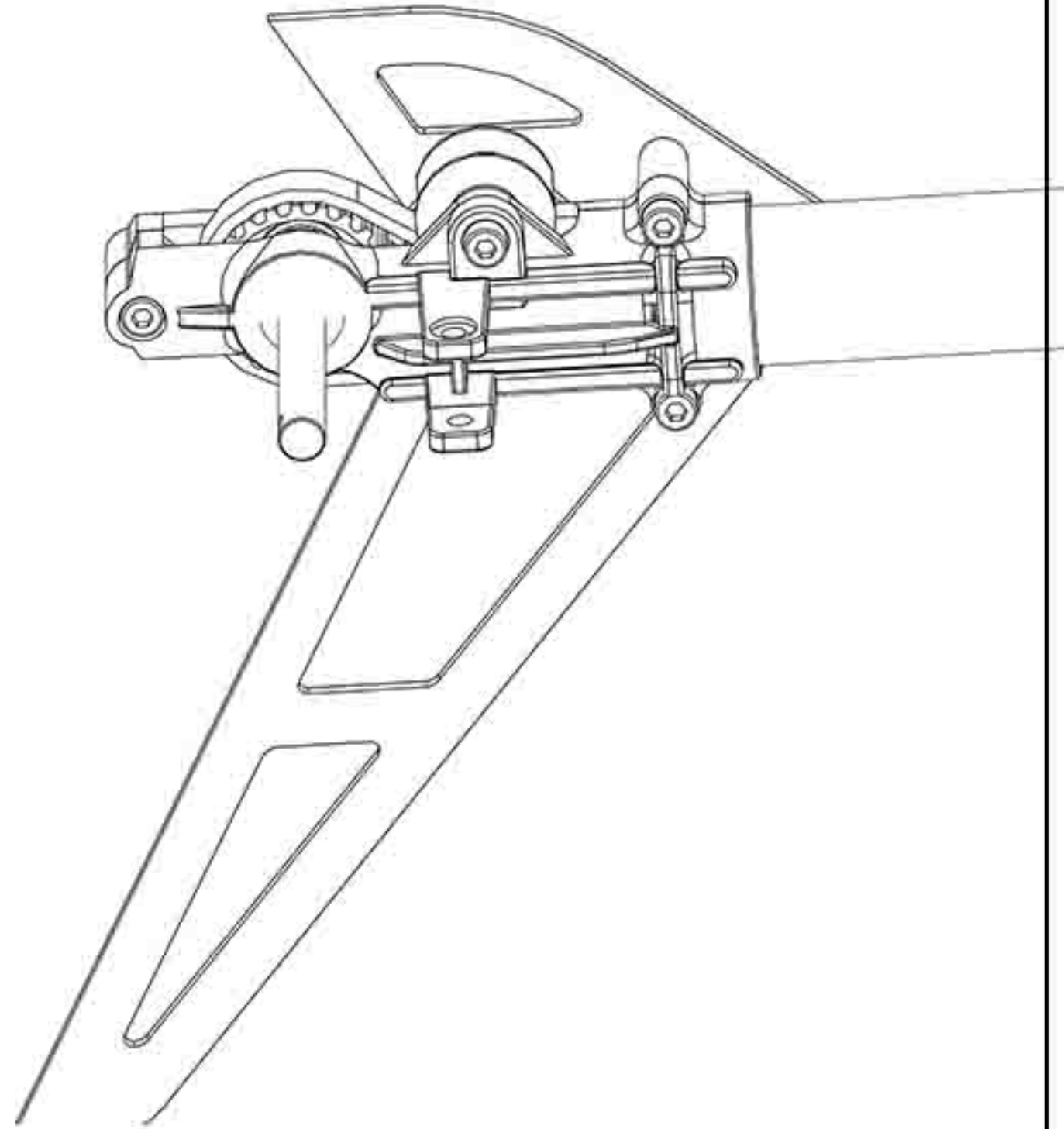
Pin 1.5*8

Tail pitch assembly
MSH51032

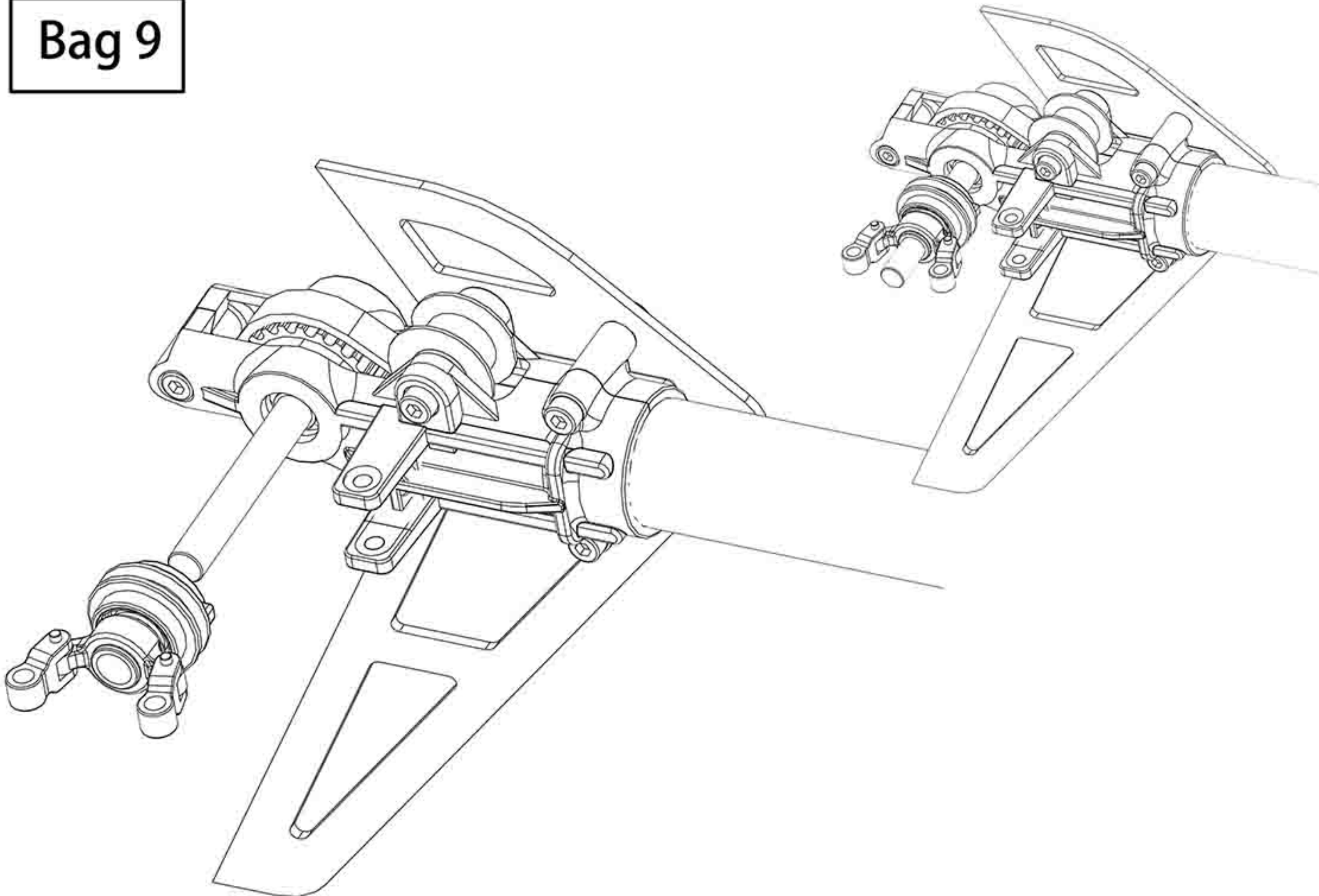
Bag 9



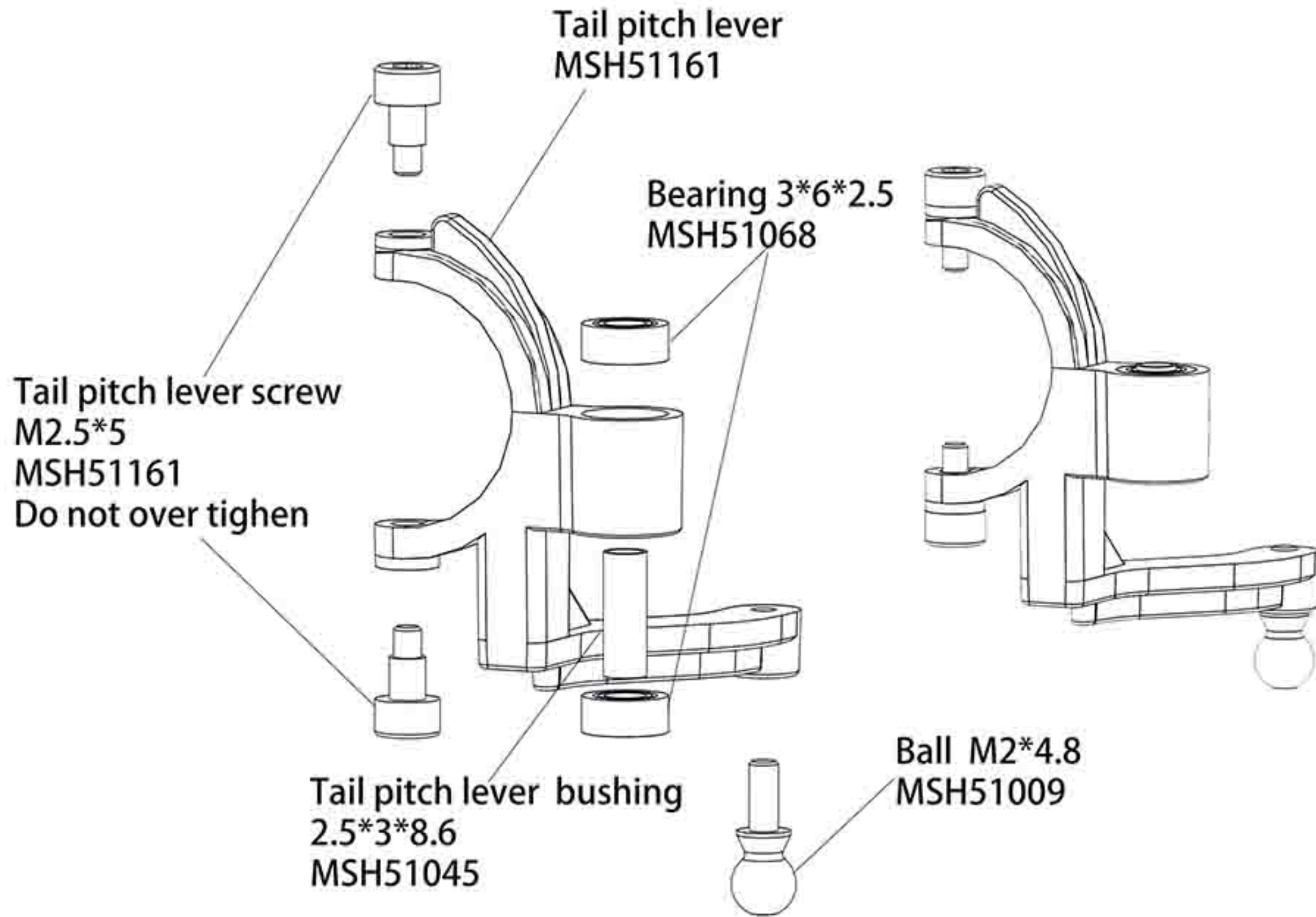
O ring



Bag 9

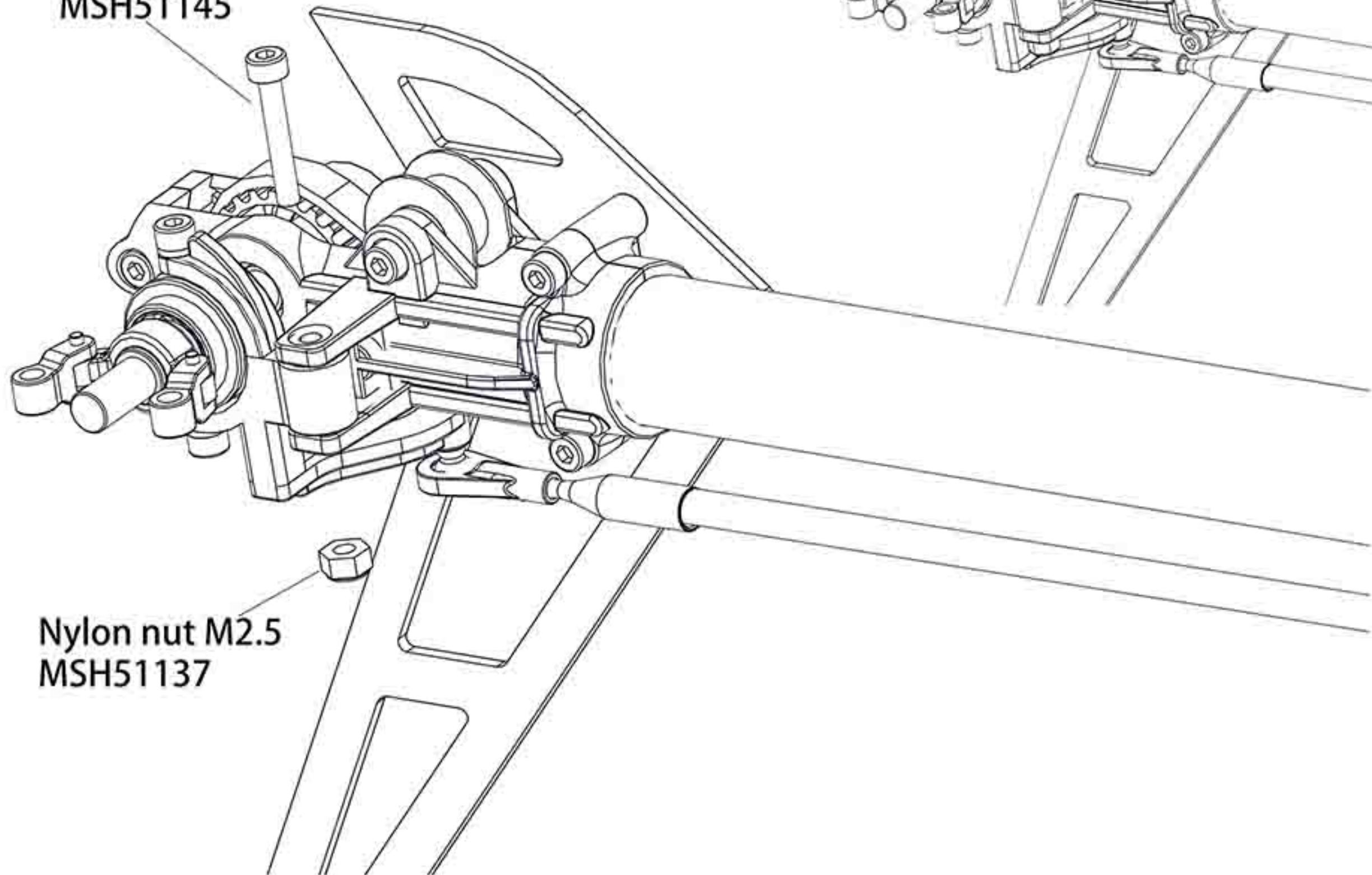


Bag 9



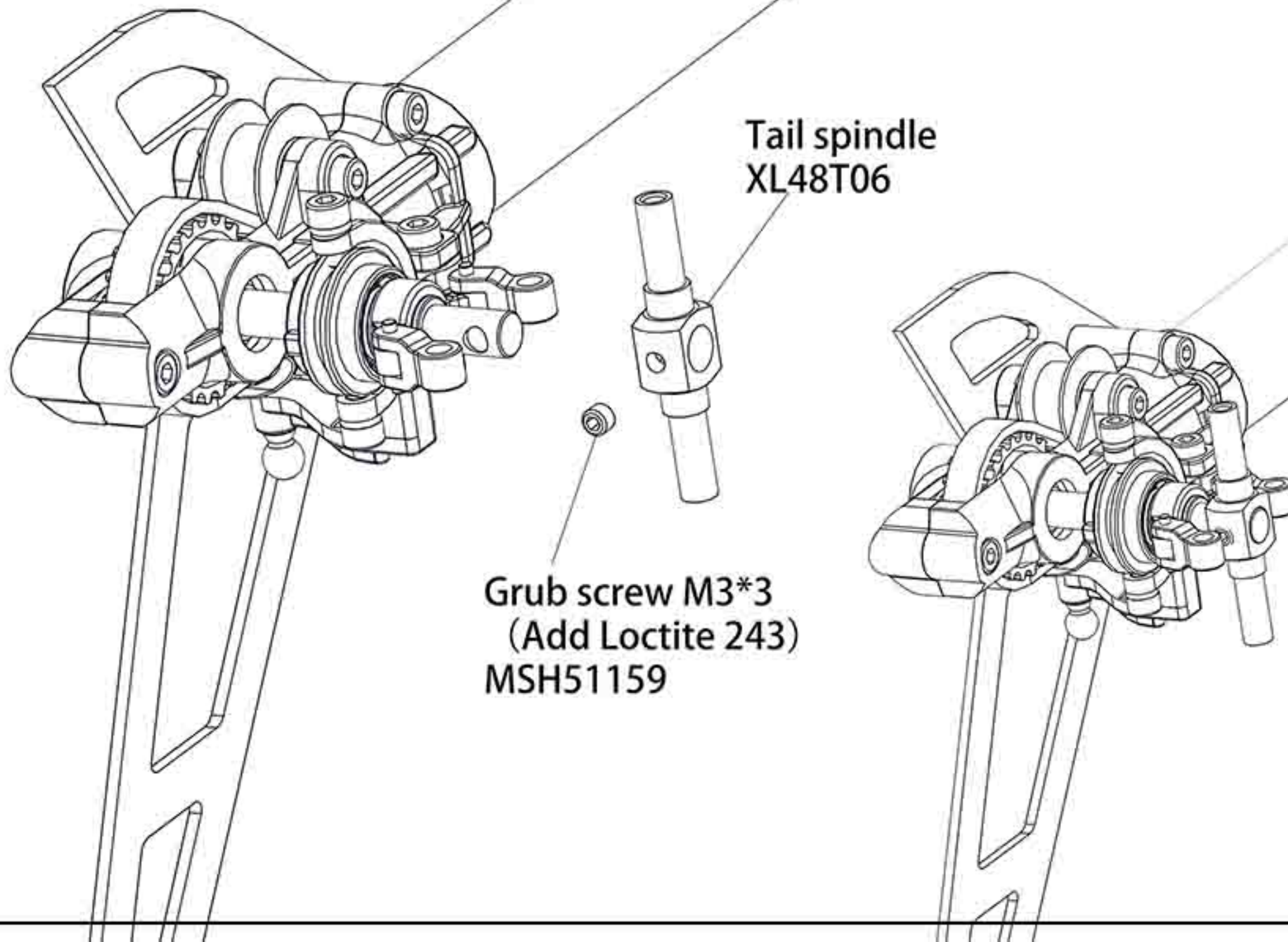
Bag 9

Screw M2.5*16
Do not over tighten
MSH51145



Nylon nut M2.5
MSH51137

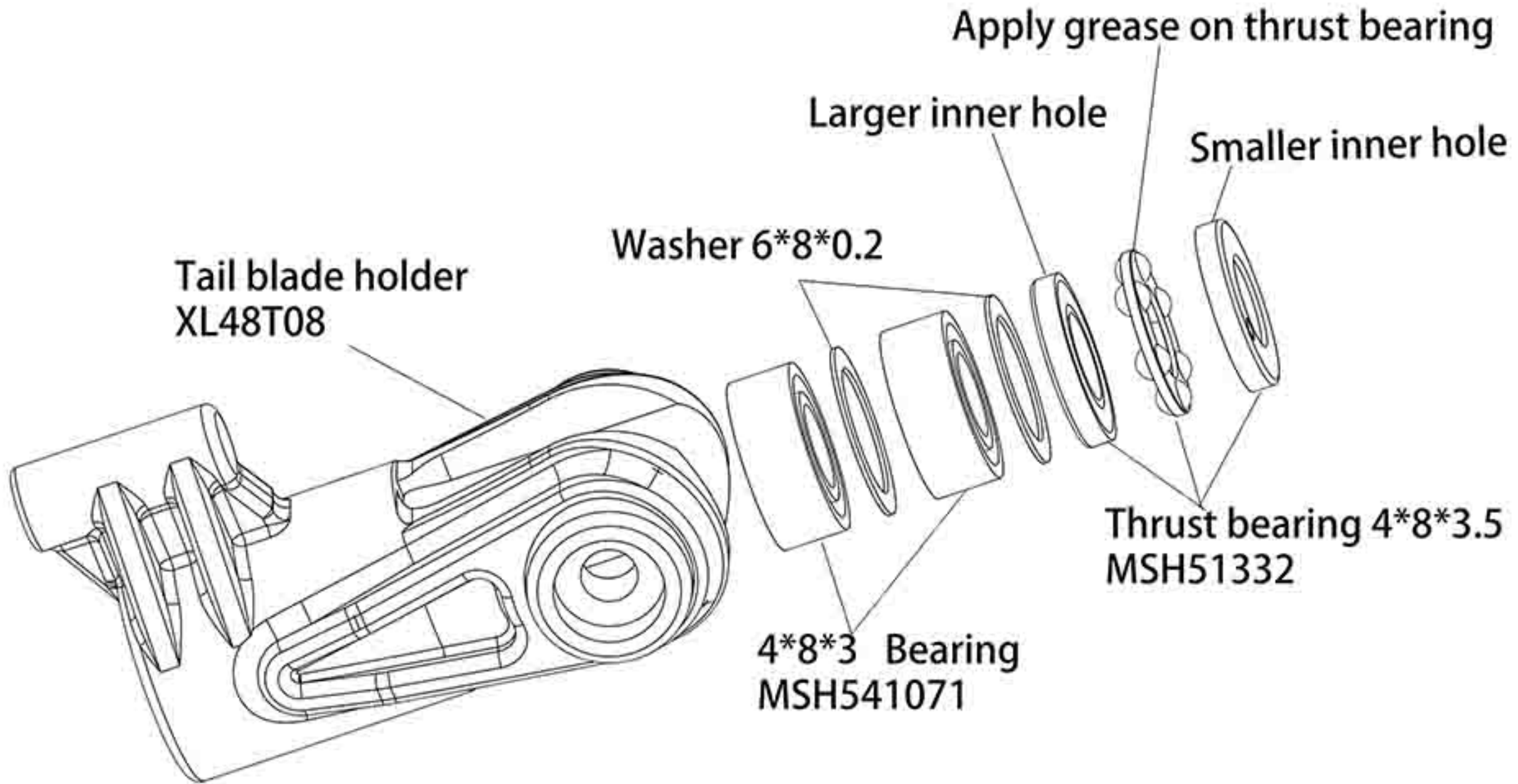
Bag 9



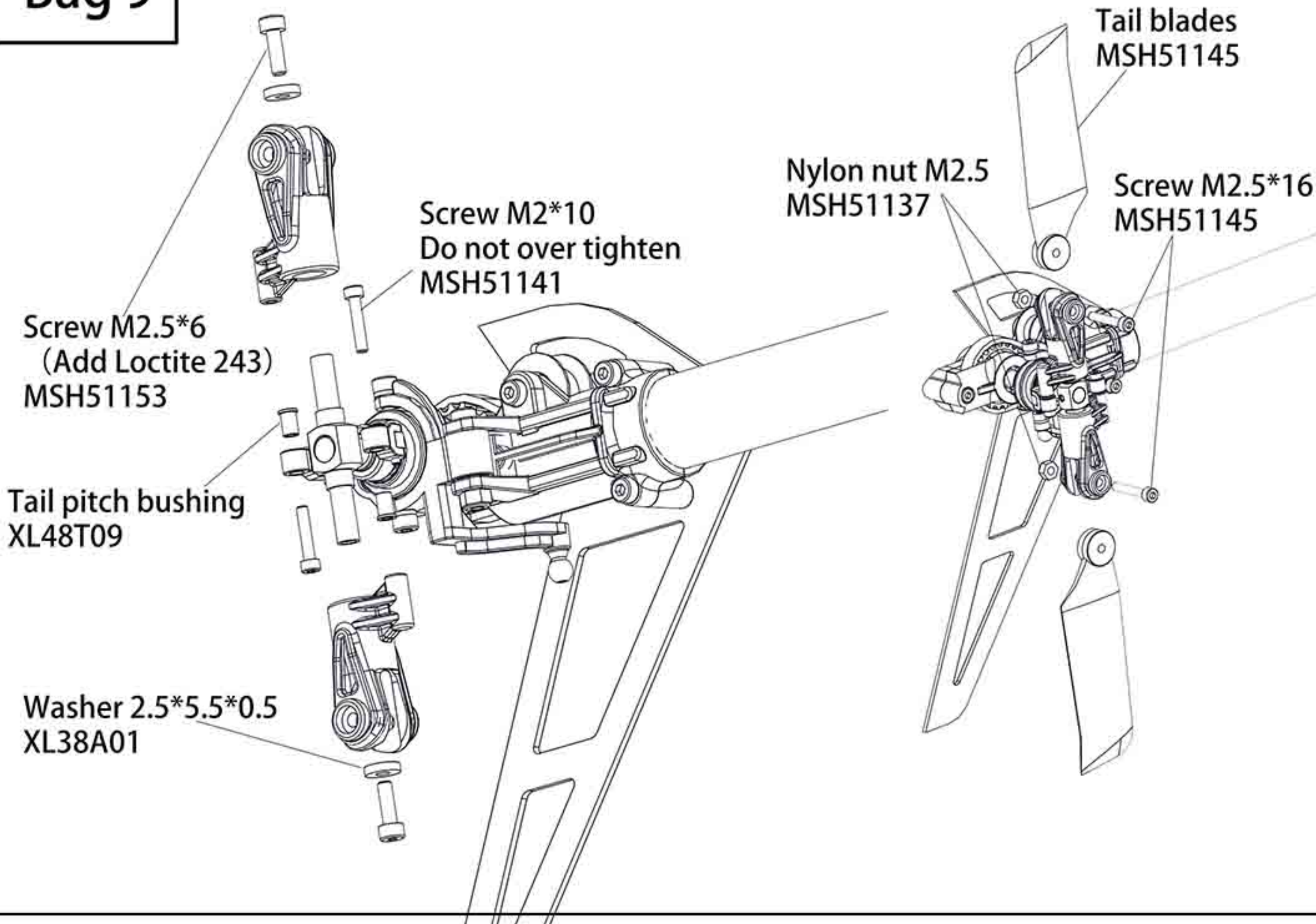
Tail spindle
XL48T06

Grub screw M3*3
(Add Loctite 243)
MSH51159

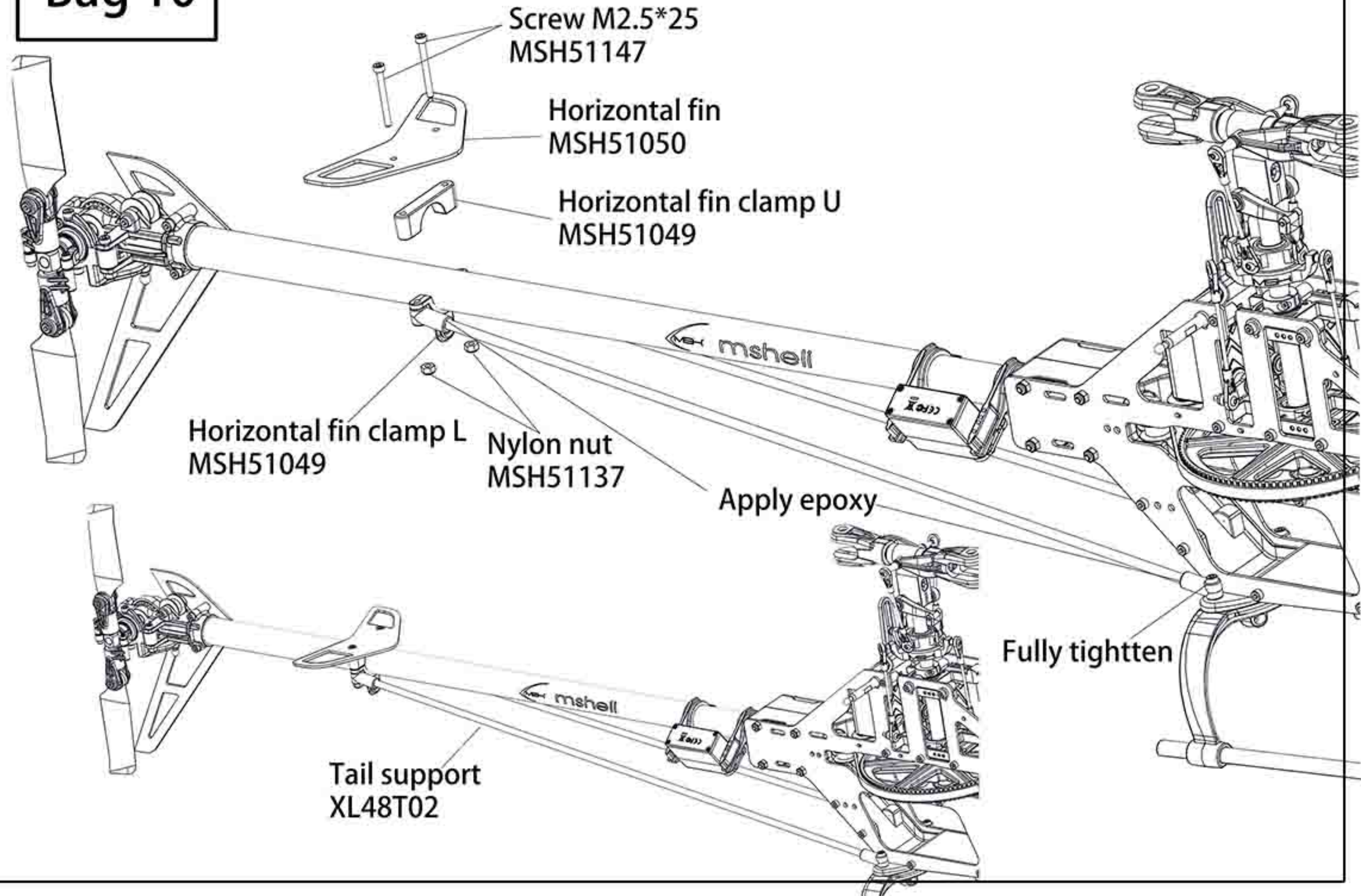
Bag 9



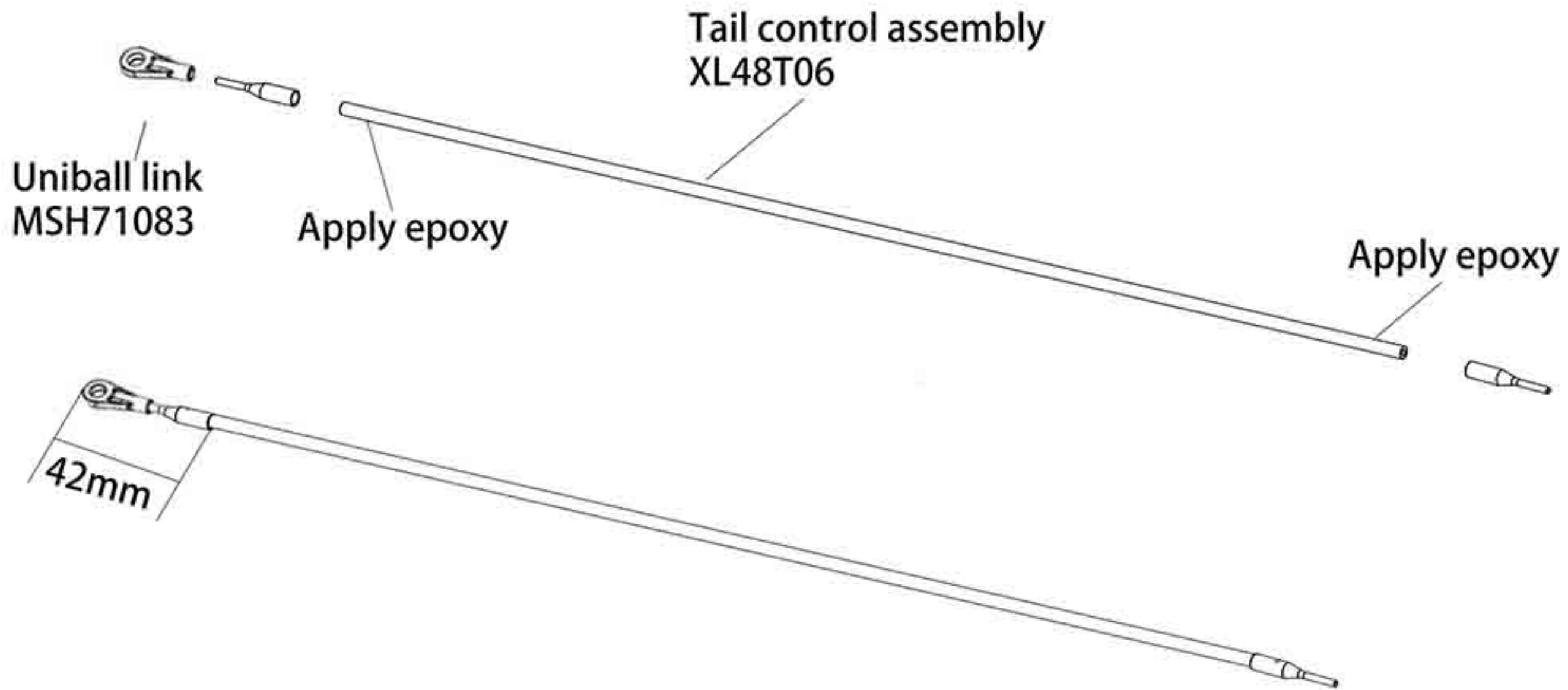
Bag 9



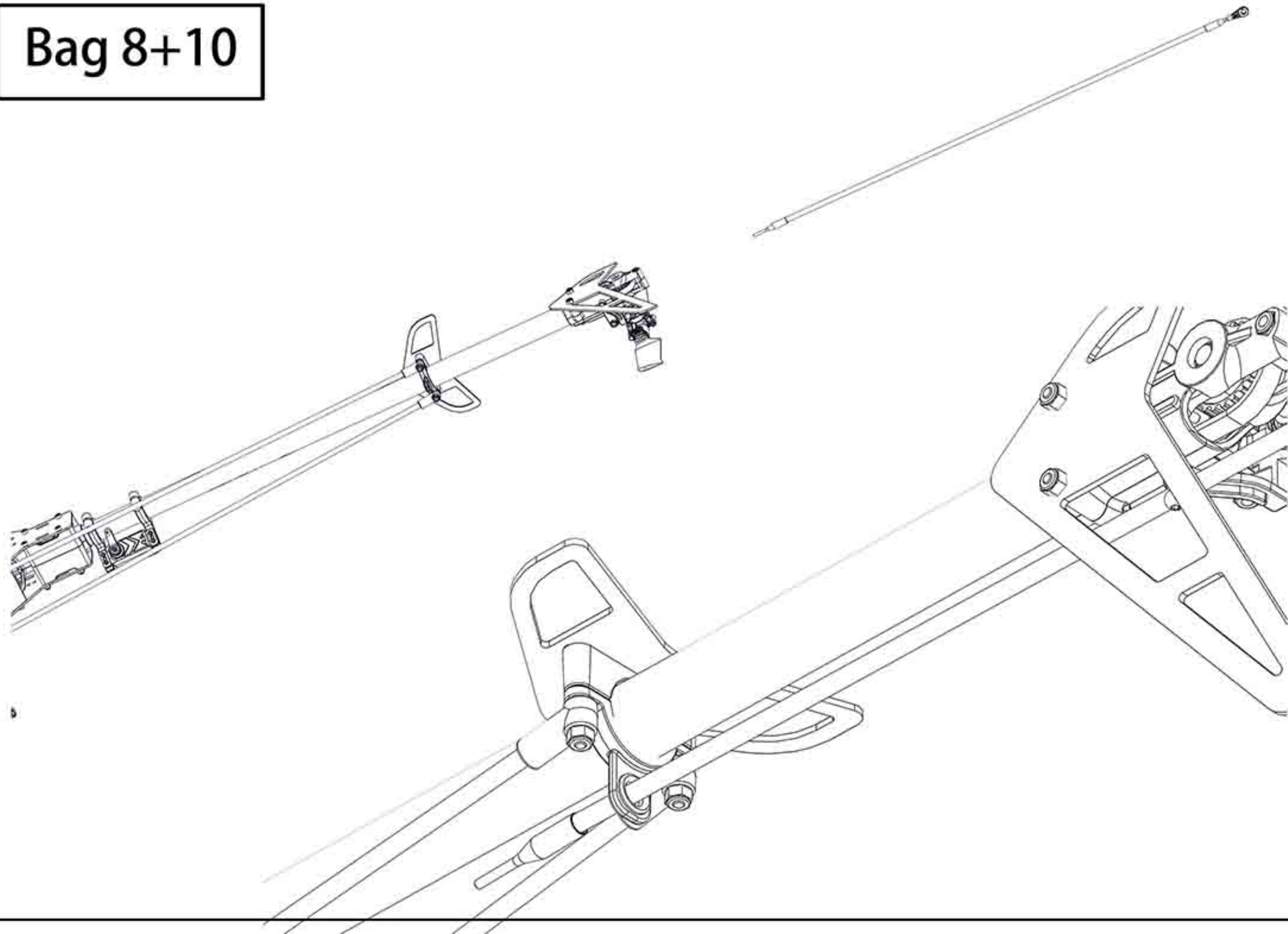
Bag 10



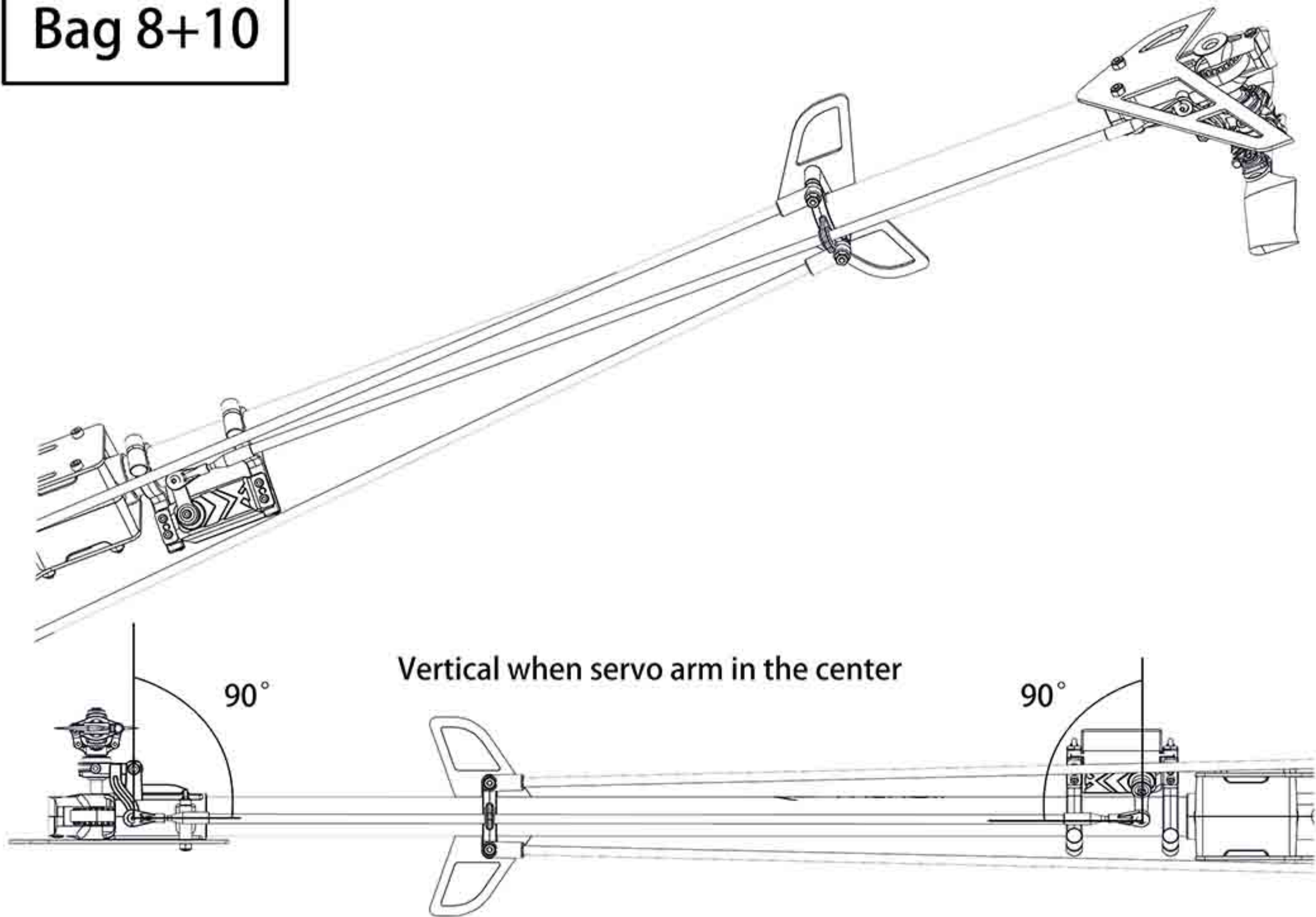
Bag 8+10



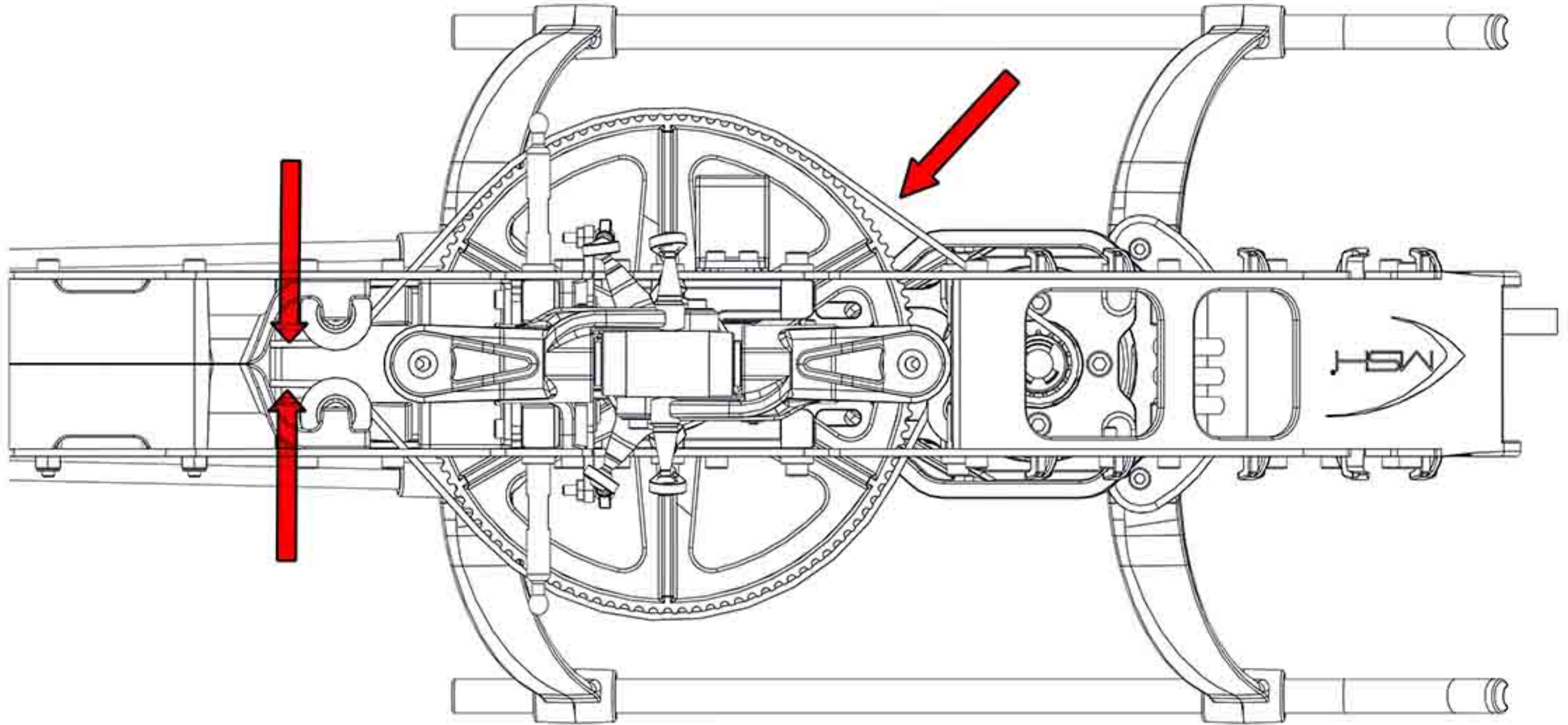
Bag 8+10

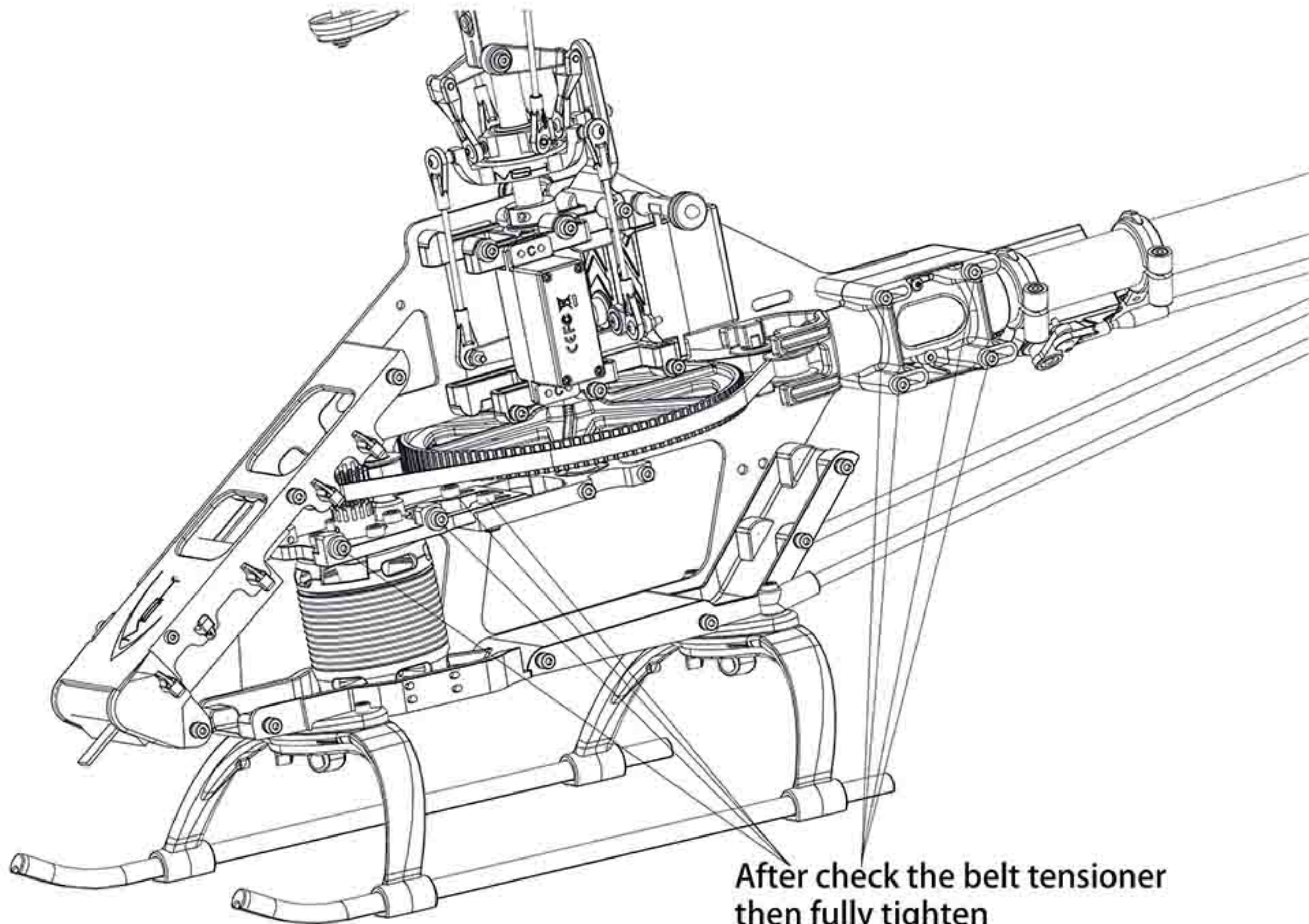


Bag 8+10



Check belt tensioner
Belt can move 1-2mm is ok





After check the belt tensioner
then fully tighten