



SPECTER 700

MANUAL

ROCK YOUR DREAM



Length without main blades.....	1300mm
Overall height.....	376mm
Width.....	134mm
Tail rotor-Main rotor ratio.....	4.7 (5.0 optional)
Main pulley.....	106T M1
Autorotation pulley.....	80T
Tail pulley.....	17T
Main Gear ratio.....	9.636 (10.6-8.3 optional)
Weight without battery.....	Arround 3.6kg
Main shaft diameter.....	15mm
Feathering shaft diameter.....	10mm
Tail boom diamater.....	27mm
Battery tray size.....	350mm*66mm*70mm(12s-14s)

Release 1.0

Always check on www.xlpower-rc.com for a more recent version of this manual

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


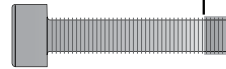
Novice R/C helicopter pilots should always seek advice from experienced pilots to obtain hints with assembly and for pre-flight adjustments.

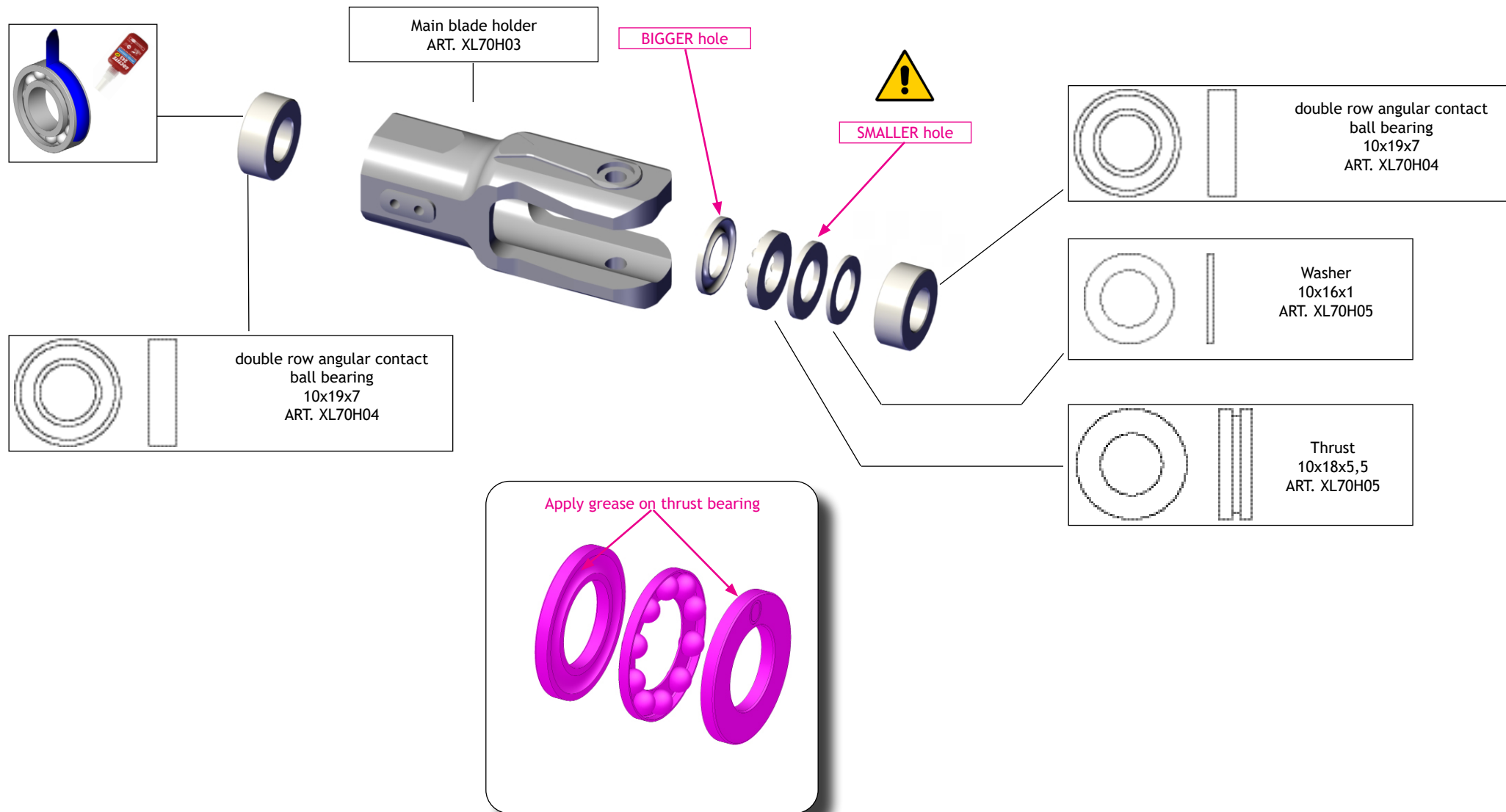
Note that a badly assembled or insufficiently adjusted helicopter is a safety hazard!

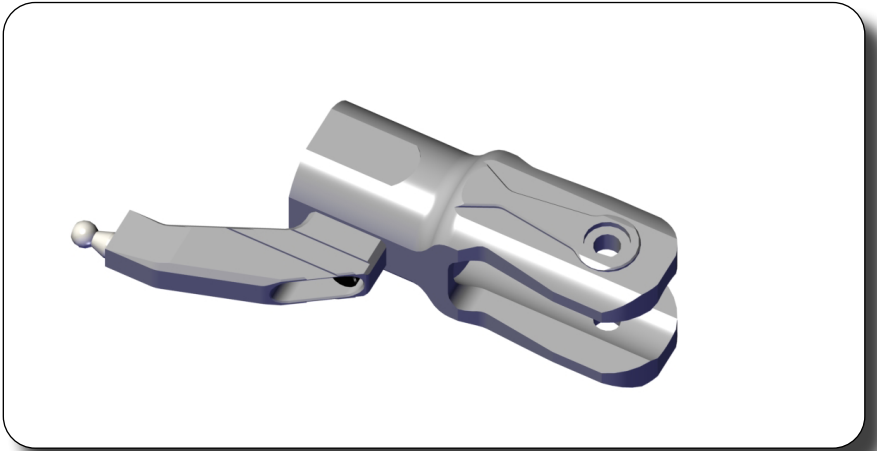
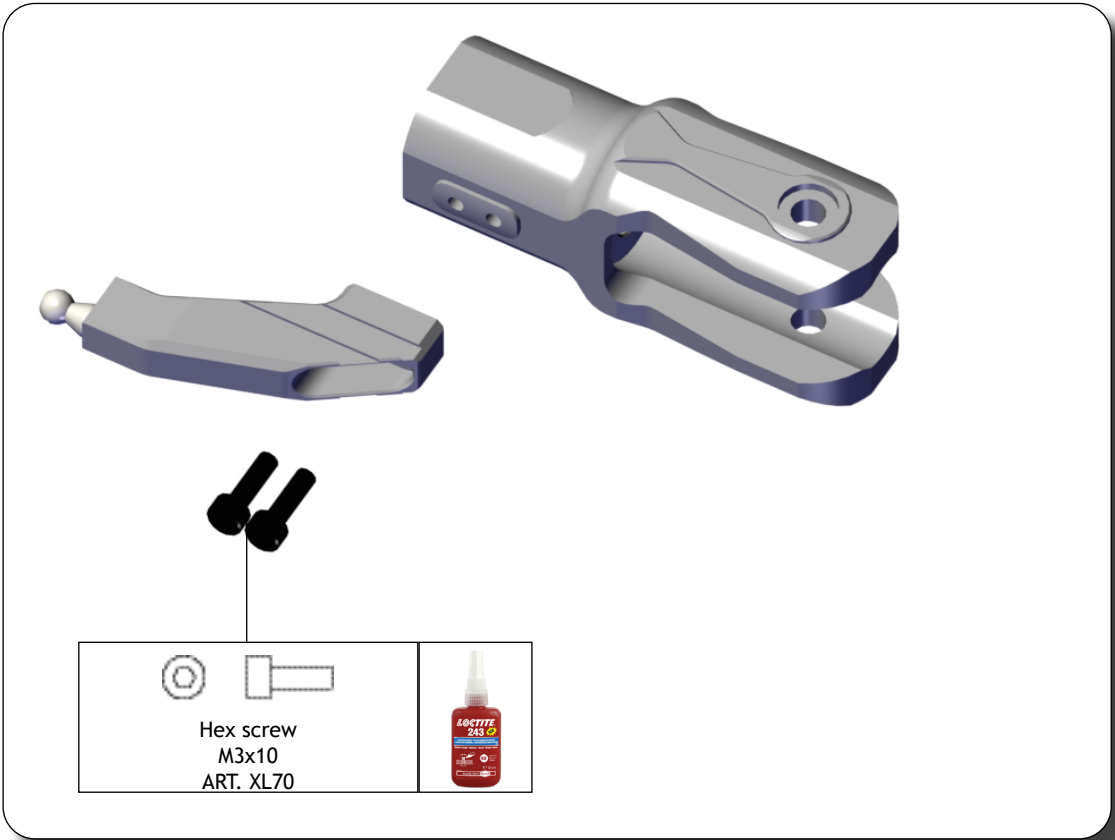
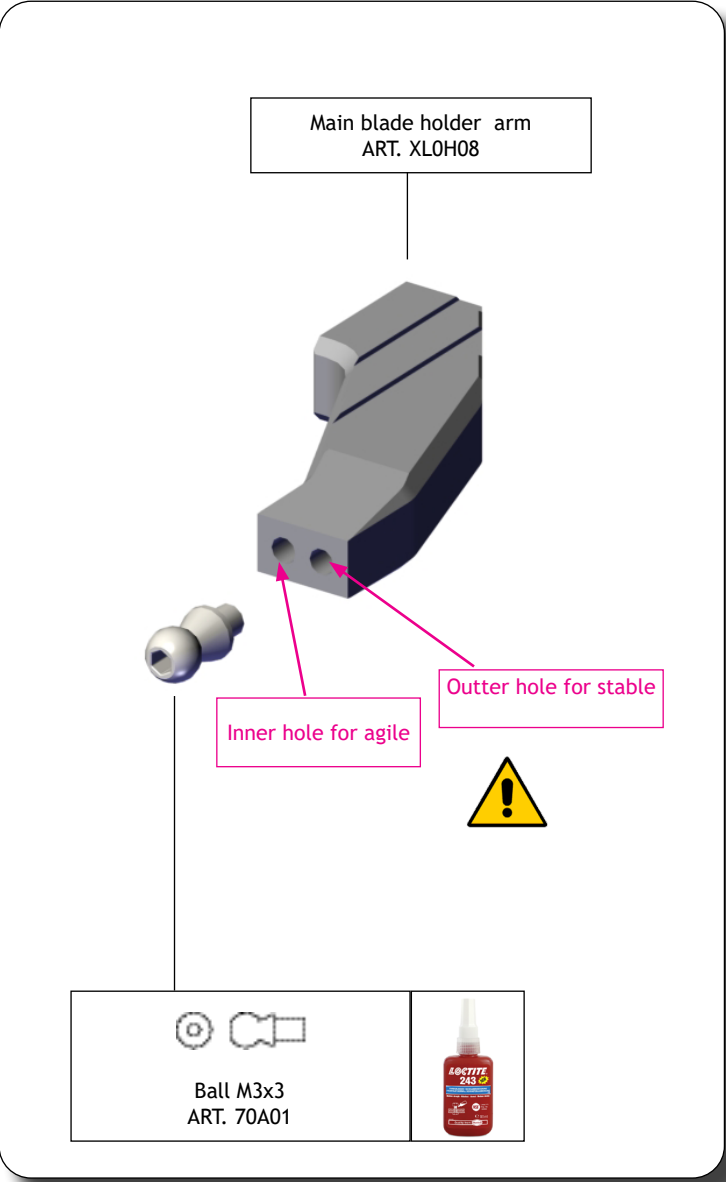
In the beginning, novice R/C helicopter pilots should always be assisted by an experienced pilot and never fly alone!

R/C equipment and required for assembly



Swashplate servos supported: all standard servos (qnty. 3)	ESC: 130HV-250HV	Hexagon screw drivers : 1,5mm,2mm,2*2.5mm,3mm,2*4mm
Tail servo supported: all standard servos (qnty. 1)	Main blades: standard full carbon blades 690mm - 716mm	  <p>where indicated use Thread lock MEDIUM</p>
Trasmitter Receiver/satellite Flybarless unit	Tail blades: standard full carbon blades 105mm to 115mm	Thrust bearing grease
Battery pack: LiPo 6s 4000-5500mAh *2	Motor: 4525-4530 500kv-550kv	Pitch gauge





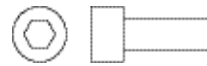
Head dampeners



ART. XL70H02
sport / 3D(POW with 70° O ring)



ART. XL70H02-2
Hard 3D (Full POM)
Optional



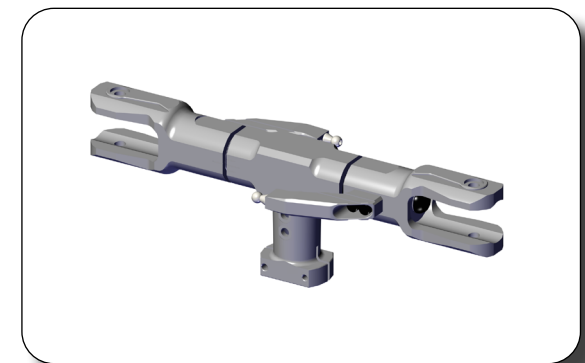
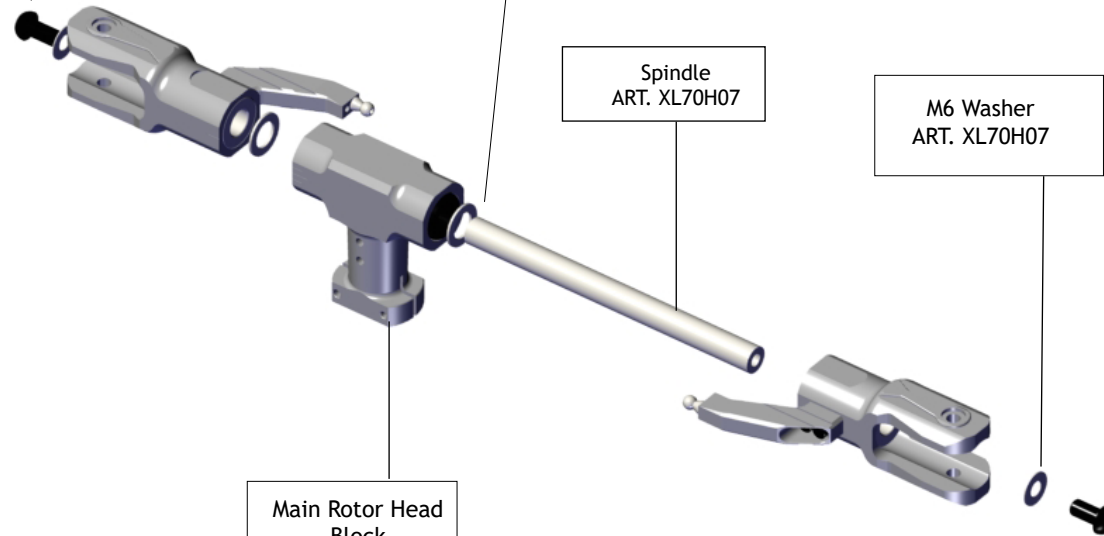
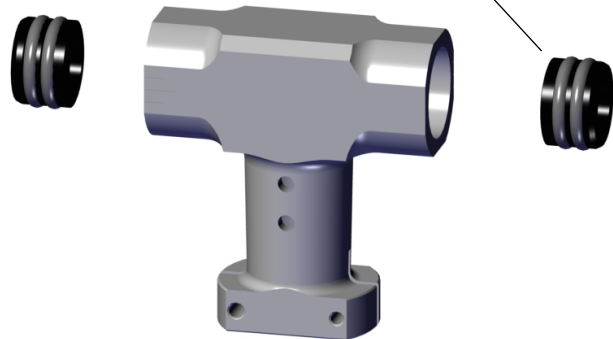
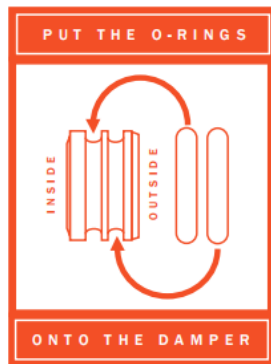
Screw M6x12
ART.XL70H07

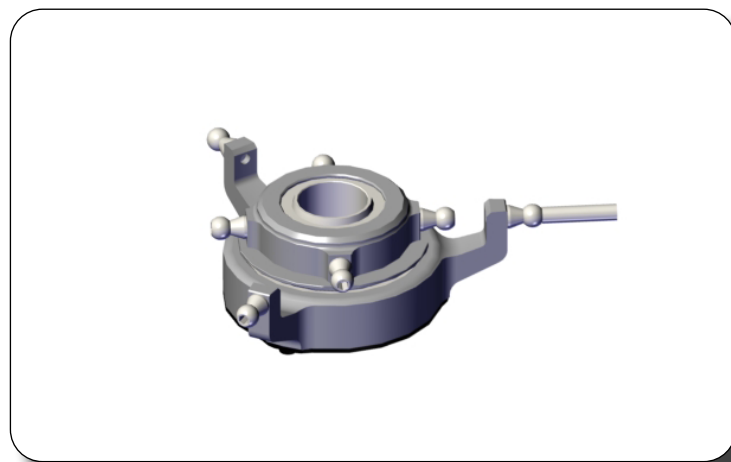
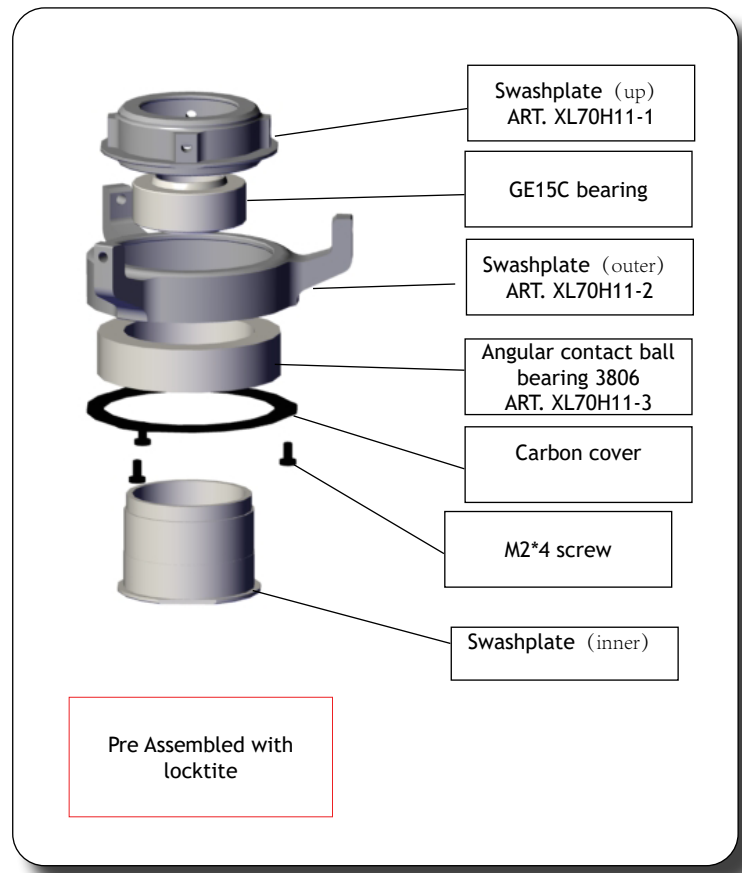
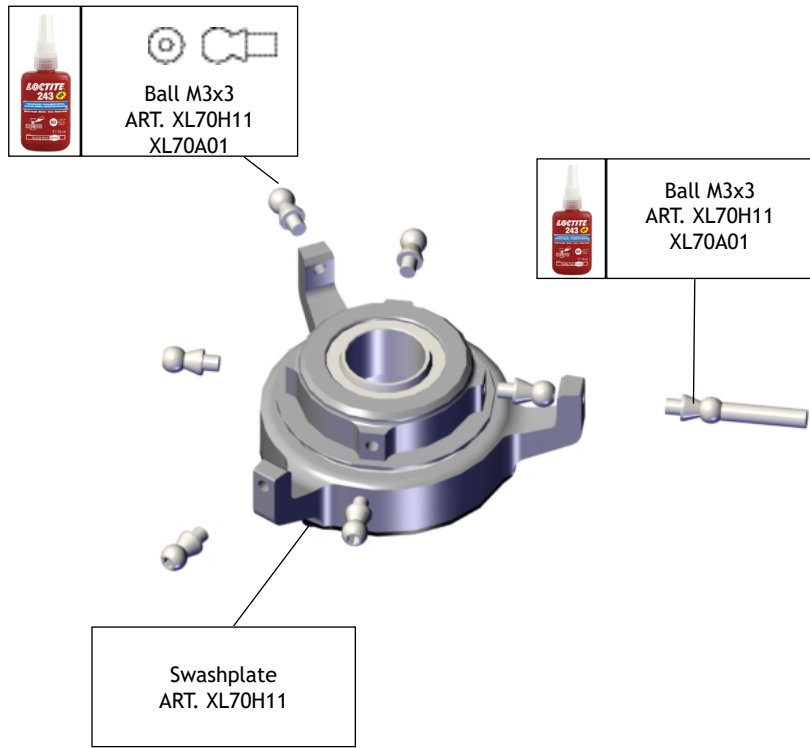
Spindle spacer
ART. XL70H05

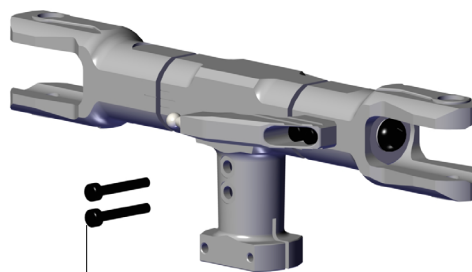
Spindle
ART. XL70H07

M6 Washer
ART. XL70H07

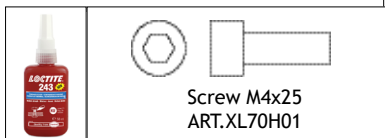
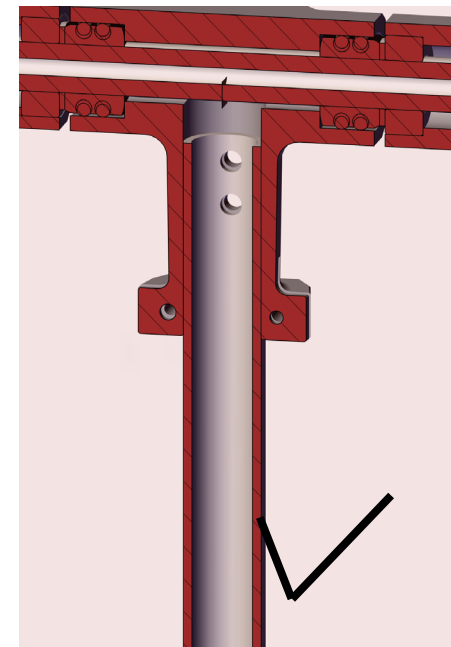
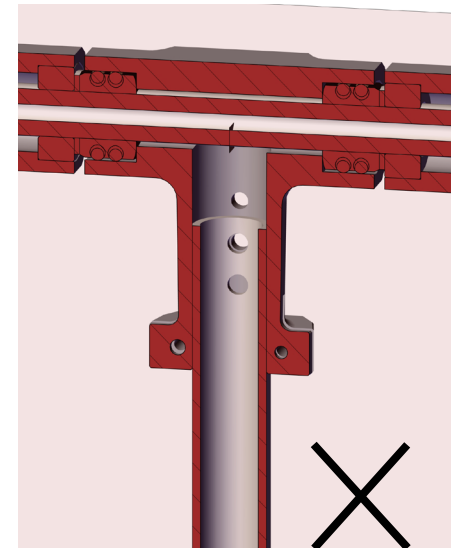
Main Rotor Head
Block
ART. XL70H01







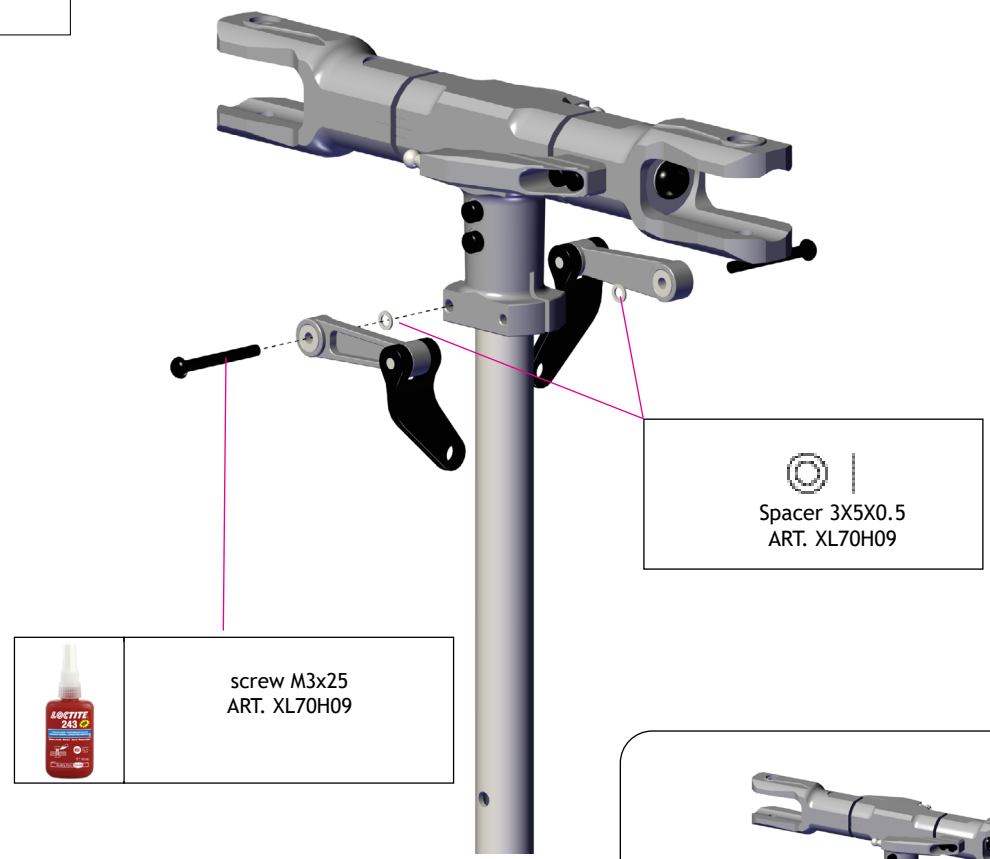
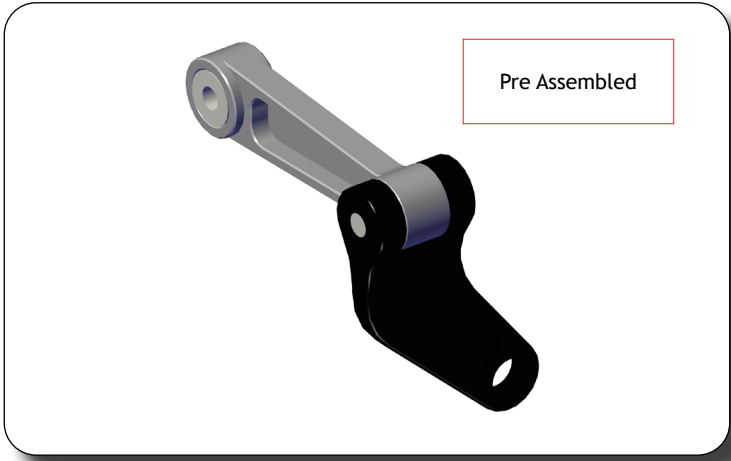
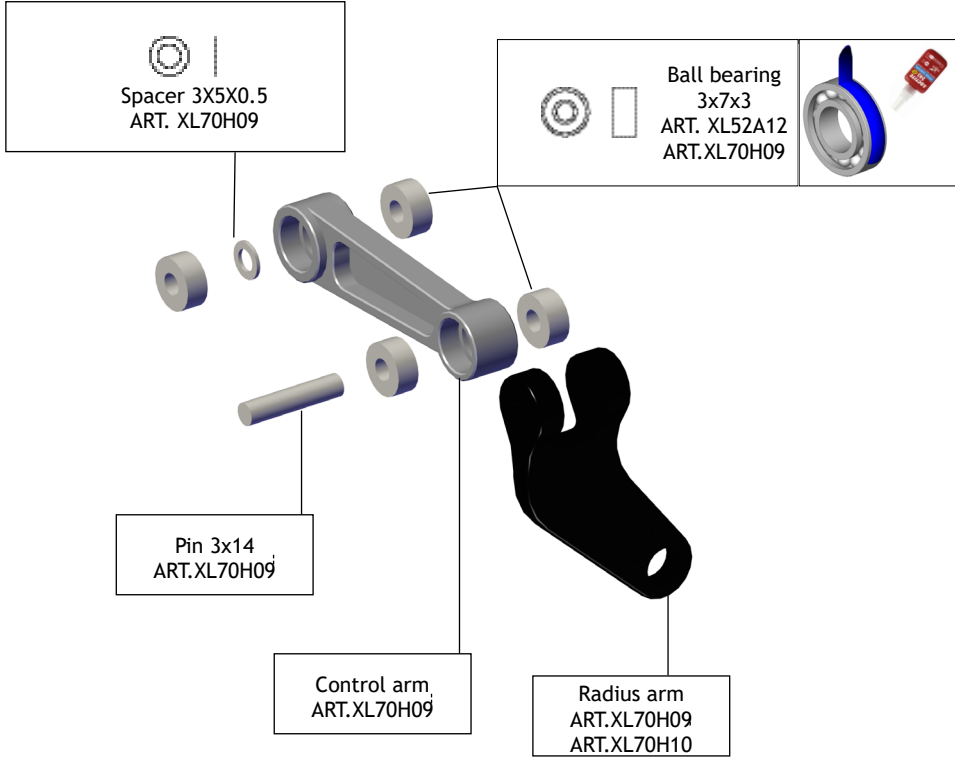
Pay attention to the hole position

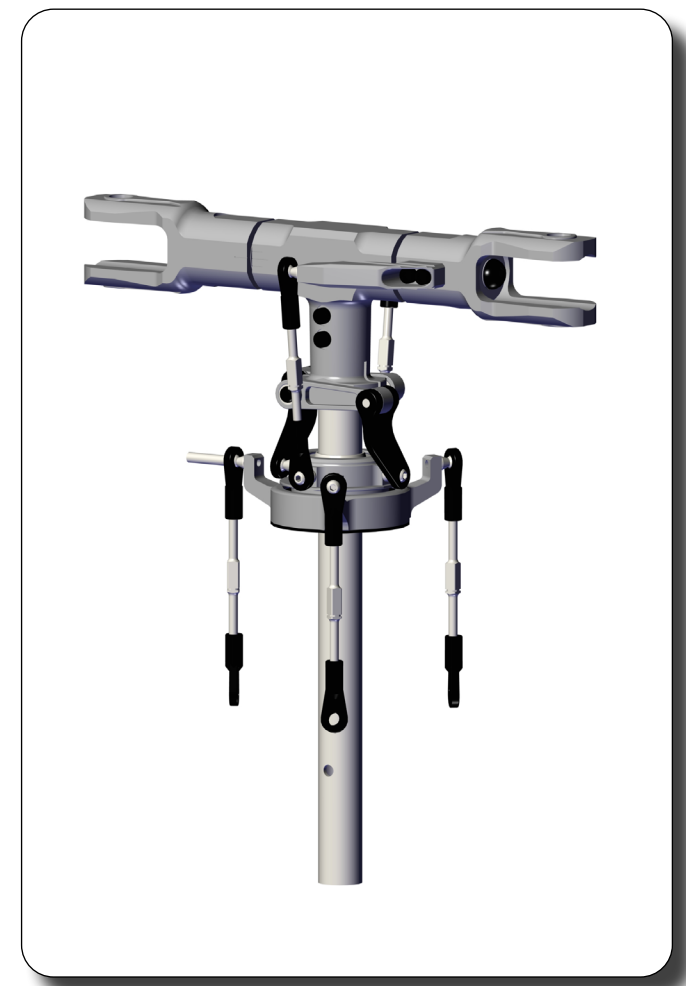
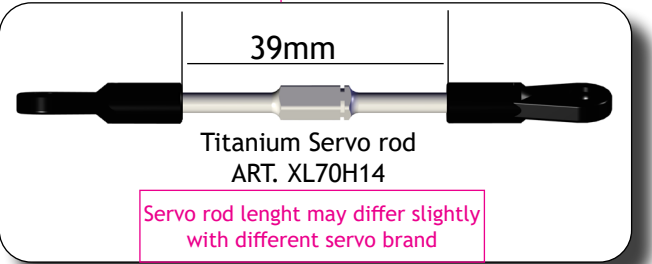
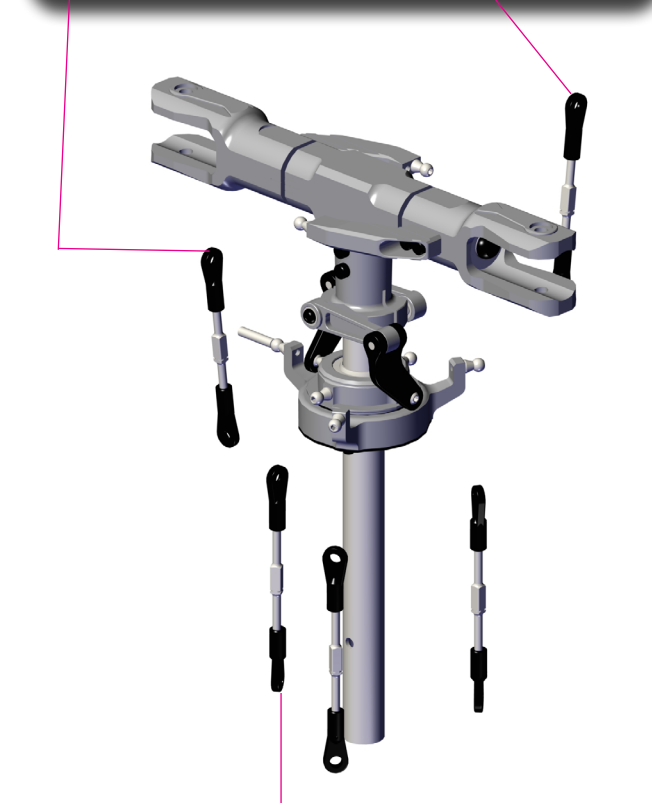
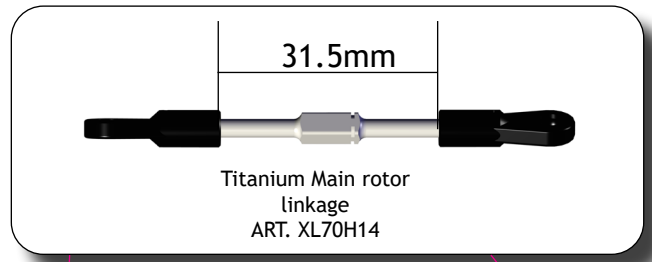
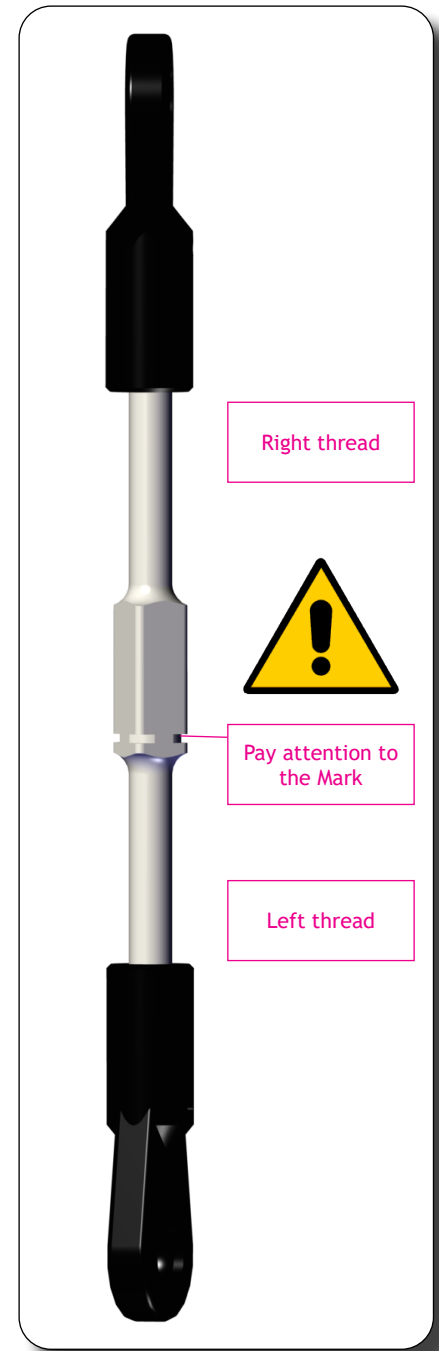


Screw M4x25
ART.XL70H01



Main shaft
ART. XL70H12





Ball bearing
3x6x2.5
ART.XL52A13



Button head screw M3x16
ART. XL70B24-3



New belt tensioner
ART. XL70B24-3



Pulley must move freely
This upgrade included in the
world champion edition

Spacer 3X5X0.5
ART. XL70B24-3

Carbon Fiber Main Frame(L)
ART. XL70B17

Hex screw M2.5x8
ART. XL70B24-2



belt tensioner Reinforcement
ART. XL70B24-2

If you choose basic kit
pls follow this manual

Belt tensioner mounting block
ART. XL70B24

Pin 3x14
ART.XL70B24

belt tensioner pulley(Front)
ART. XL70B24-1

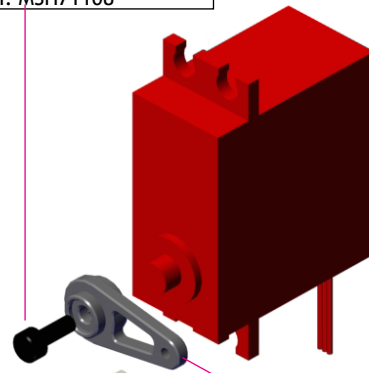
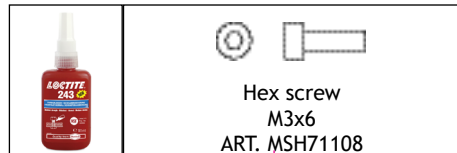
Special washer(Note direction. Gap face to bearing)
ART. XL70B24-1

Ball bearing
3x6x2.5
ART.XL52A13

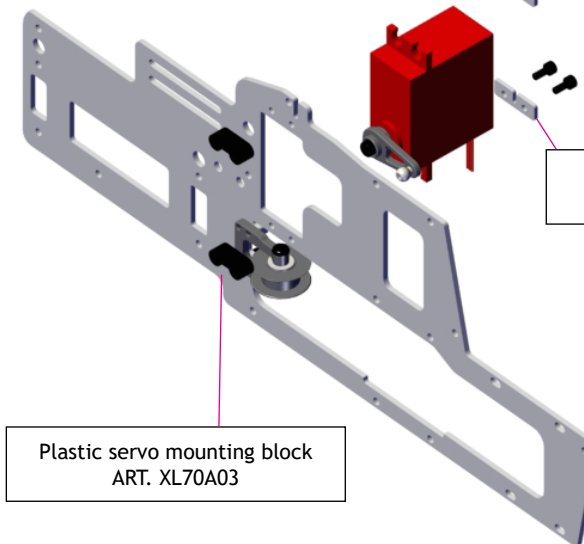
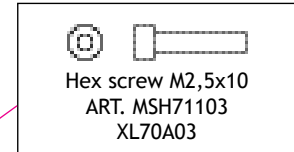
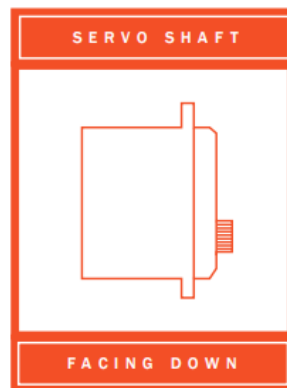
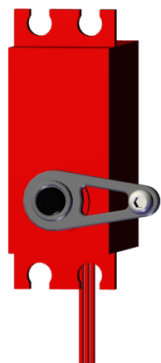
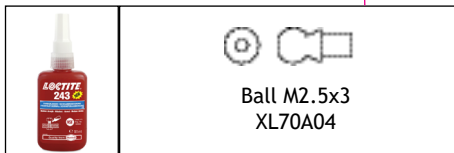


Hex screw M2.5x6
ART. XL70B24



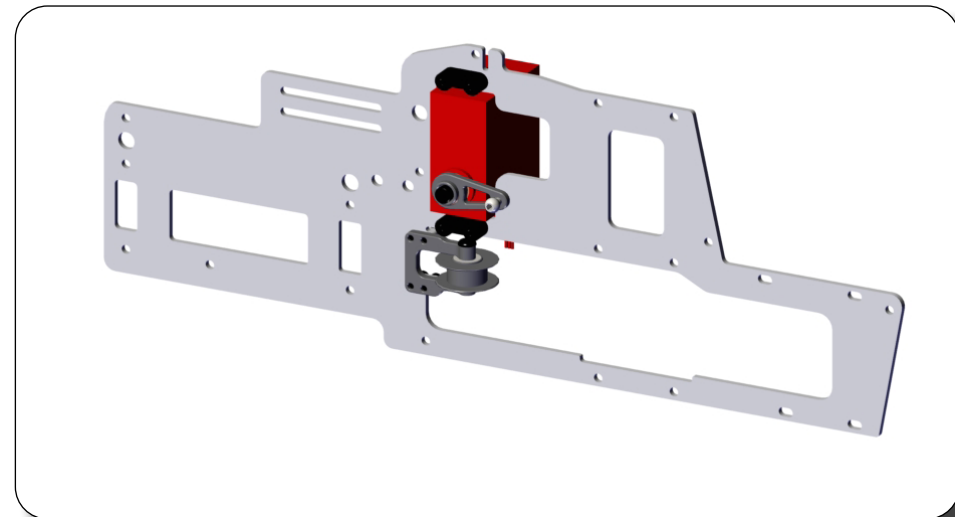


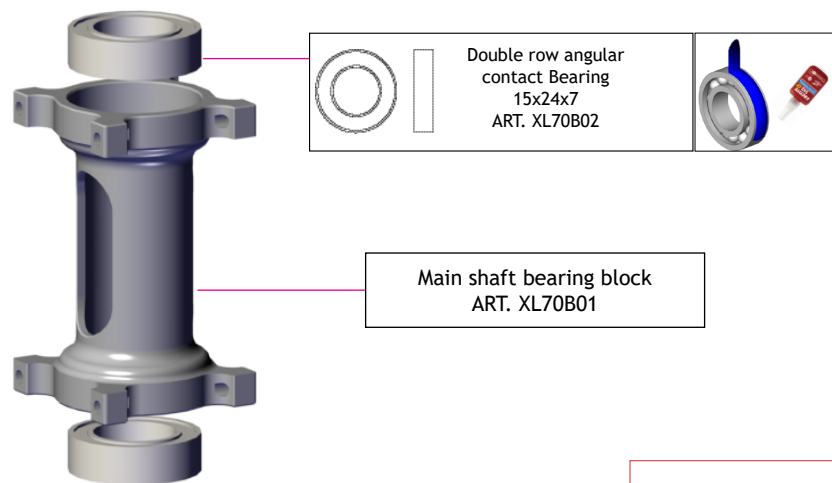
Servo horn
XL70A04
Optioal:XL70A04-1



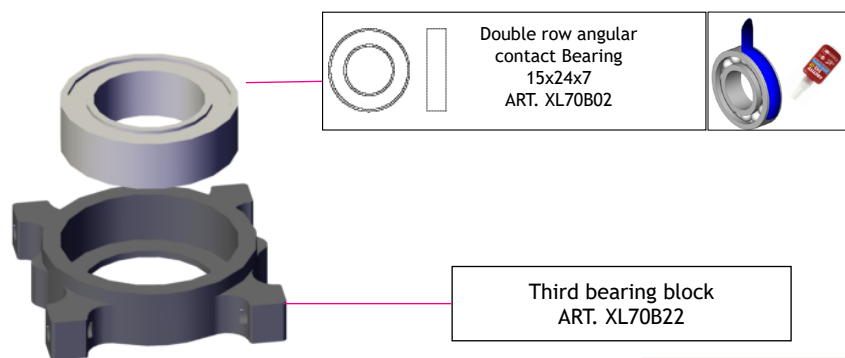
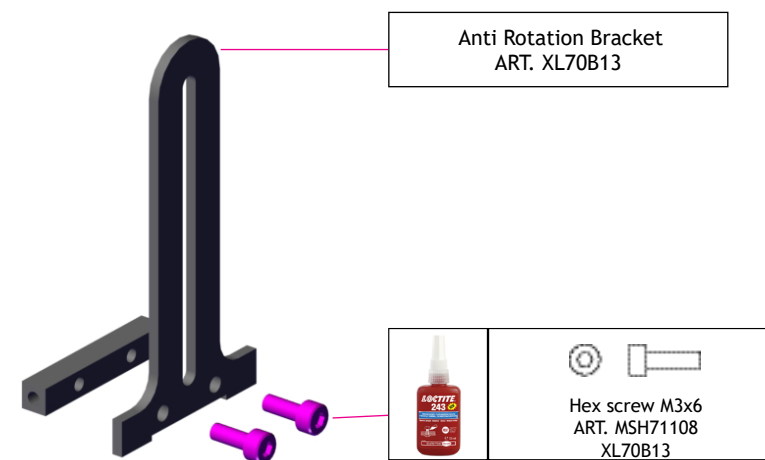
Plastic servo mounting block
ART. XL70A03

Carbon servo washer
ART. XL70A03

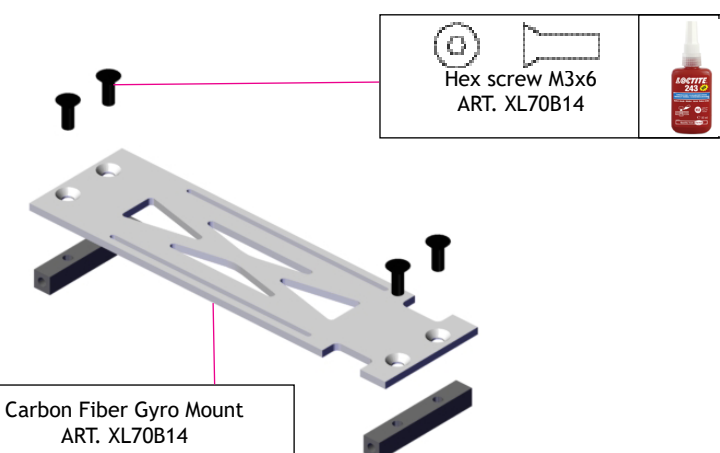


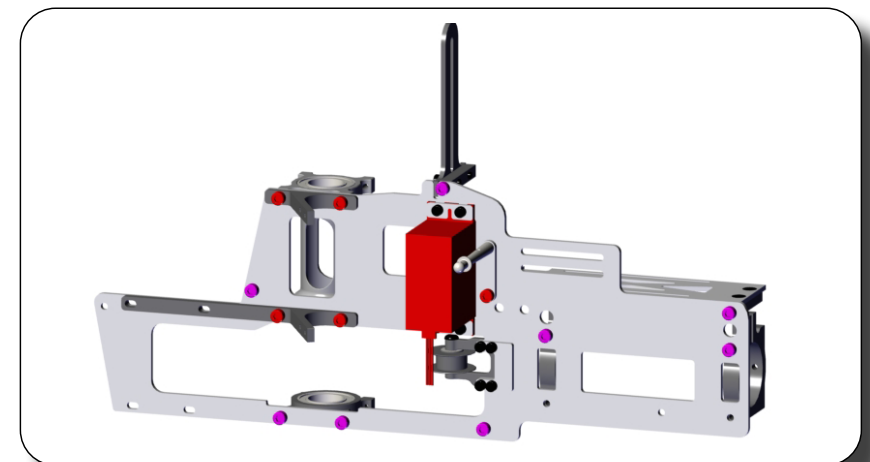
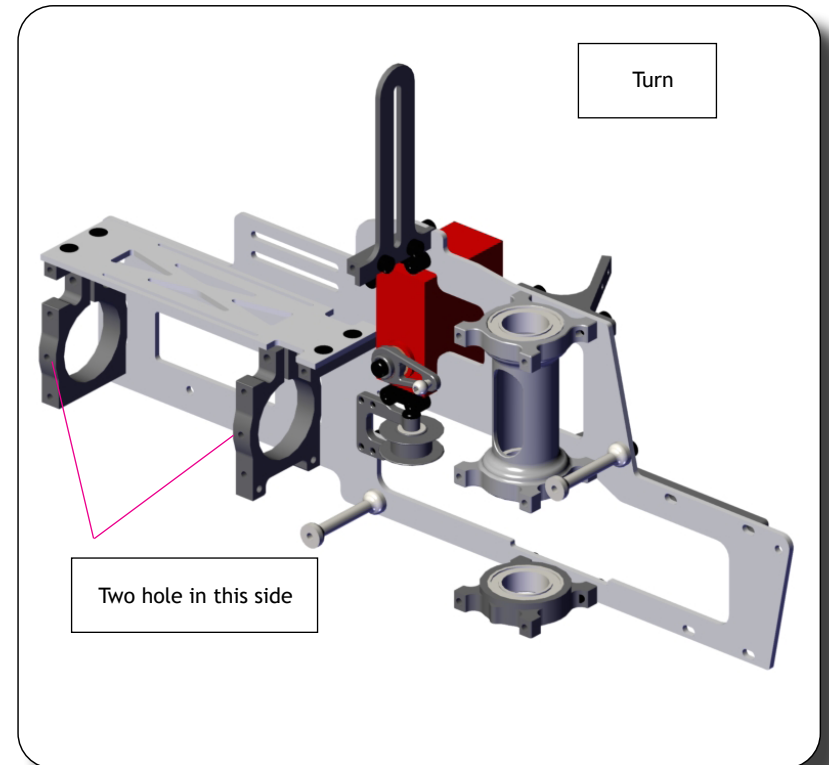
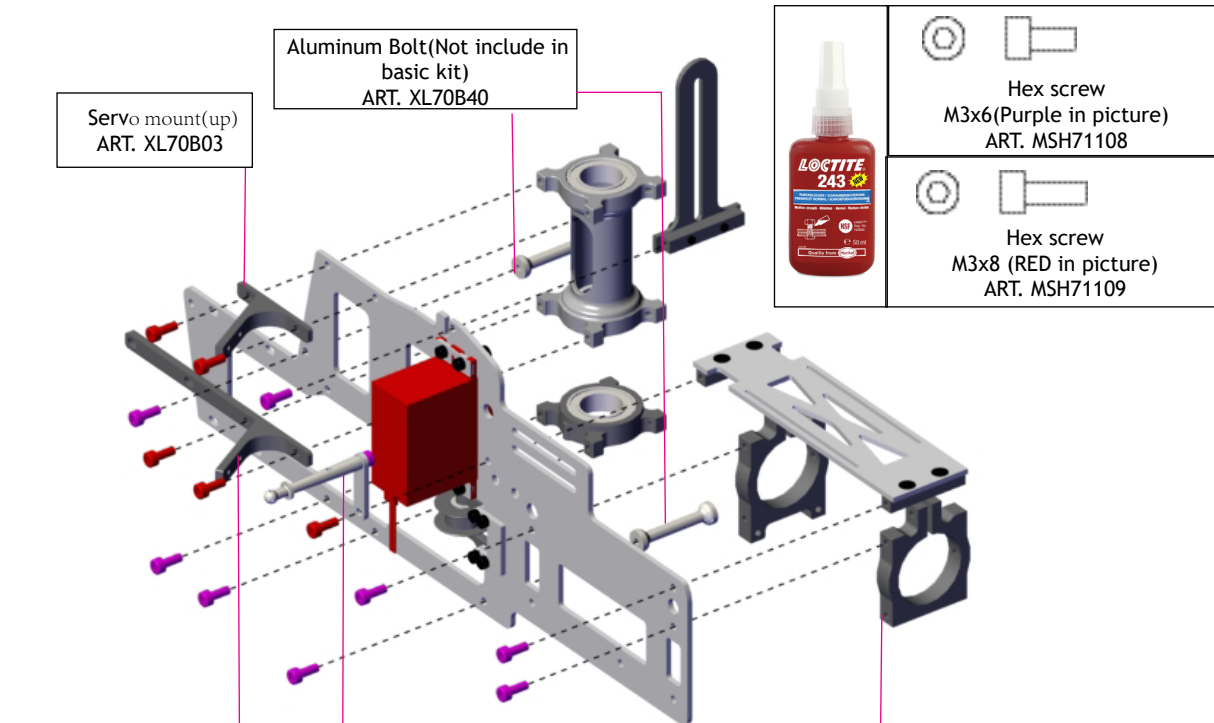


Pre Assembled



Pre Assembled

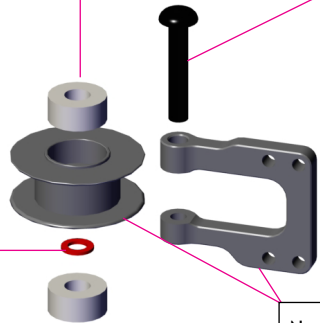




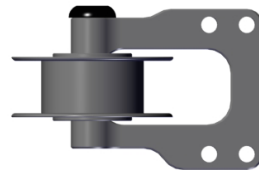
Ball bearing
3x6x2.5
ART. XL52A13



Button head screw M3x16
ART. XL70B24-3

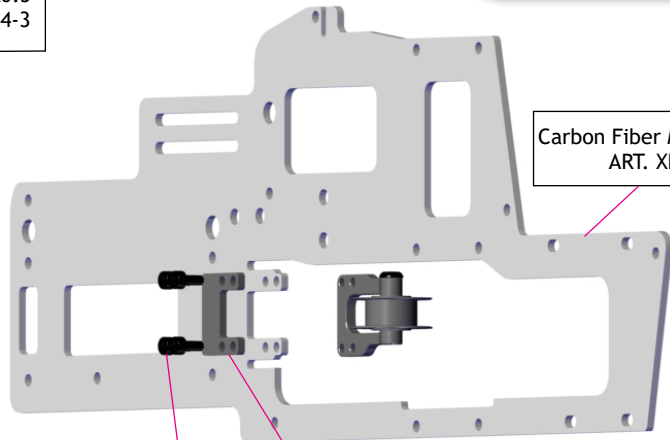


New belt tensioner
ART. XL70B24-3



Pulley must move freely
This upgrade included in the
world champion edition

Spacer 3X5X0.5
ART. XL70B24-3



Carbon Fiber Main Frame(R)
ART. XL70B18

Hex screw M2.5x8
ART. XL70B24-2



belt tensioner Reinforcement
ART. XL70B24-2

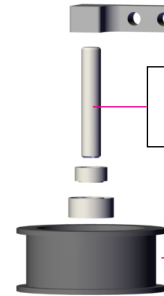
If you choose basic kit
pls follow this manual

Belt tensioner mounting block
ART. XL70B24

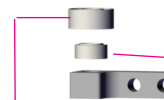


Pin 3x14
ART. XL70B24

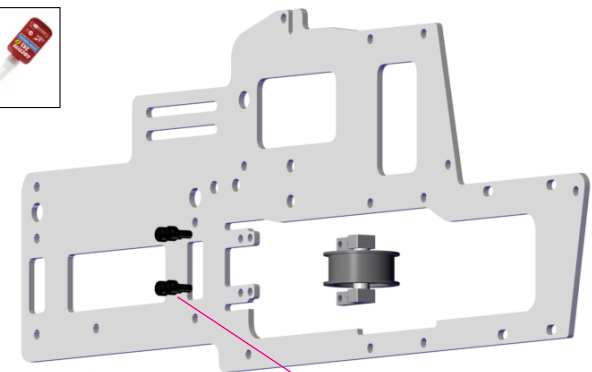
belt tensioner pulley(Front)
ART. XL70B24-1



Special washer(Note direction. Gap face to bearing)
ART. XL70B24-1

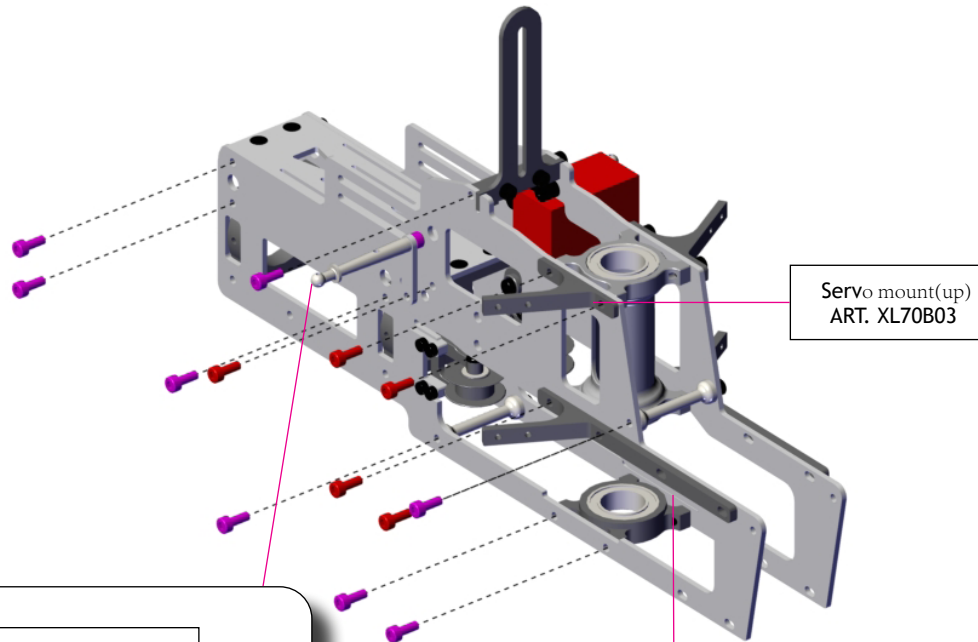


Ball bearing
3x6x2.5
ART. XL52A13

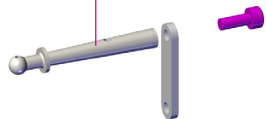


Hex screw M2.5x6
ART. XL70B24

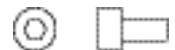
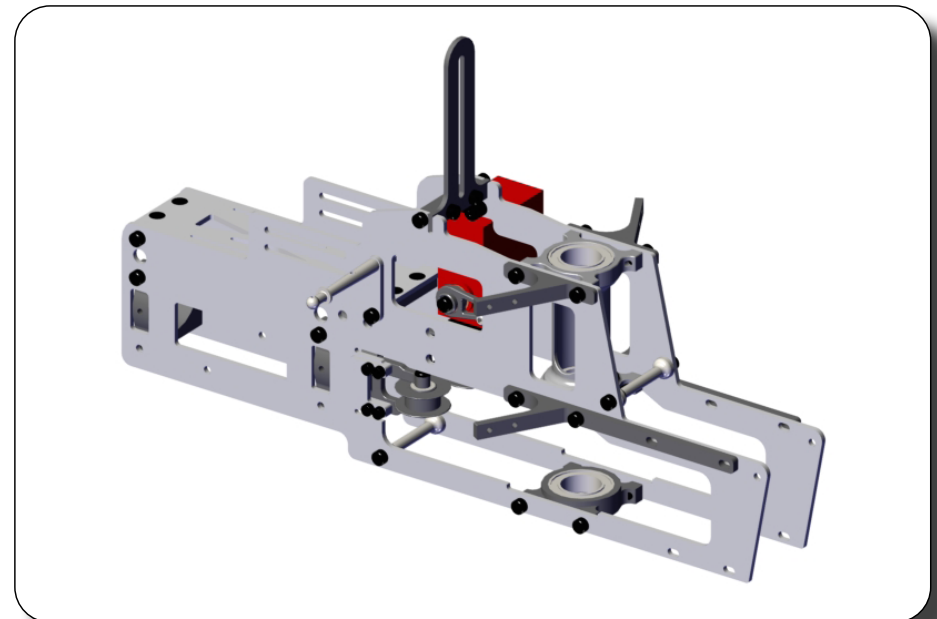
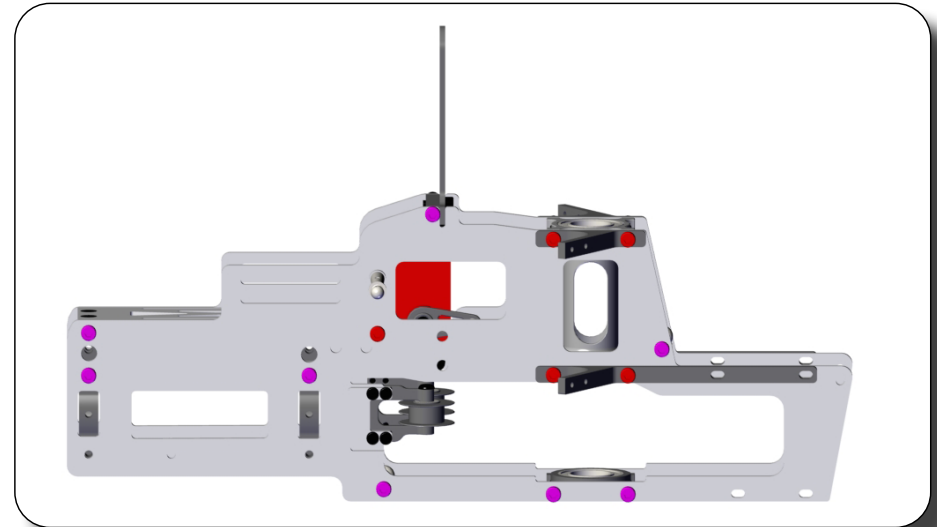




Canopy mount(Rear)
ART. XL70B30



Lower servo mount(R)
ART. XL70B04-1

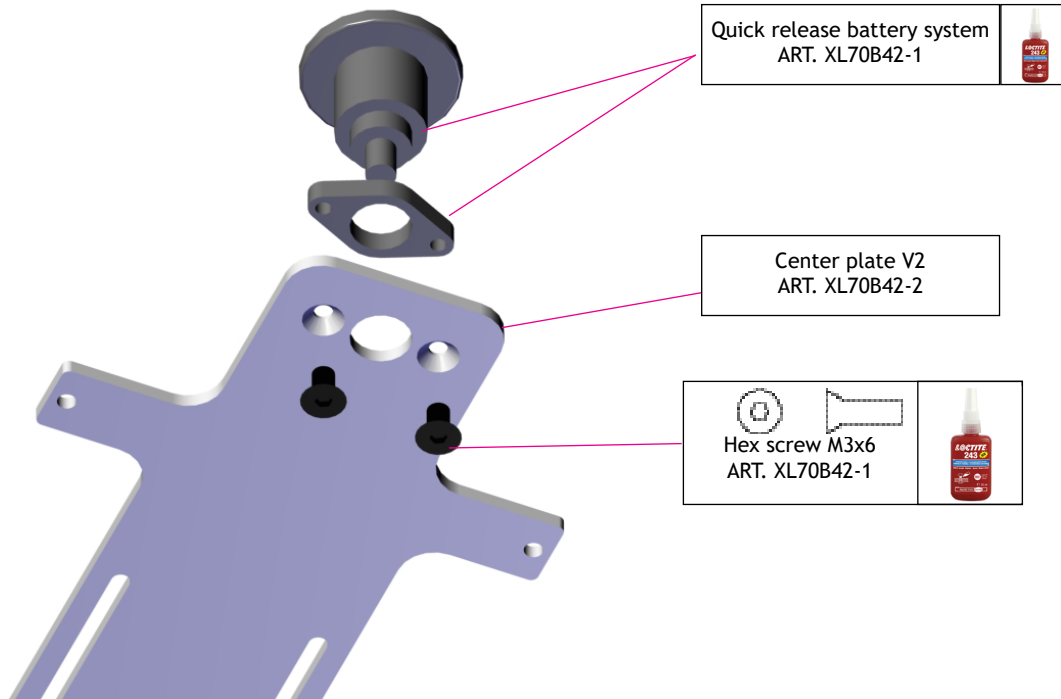


Hex screw
M3x6(Purple in picture)
ART. MSH71108



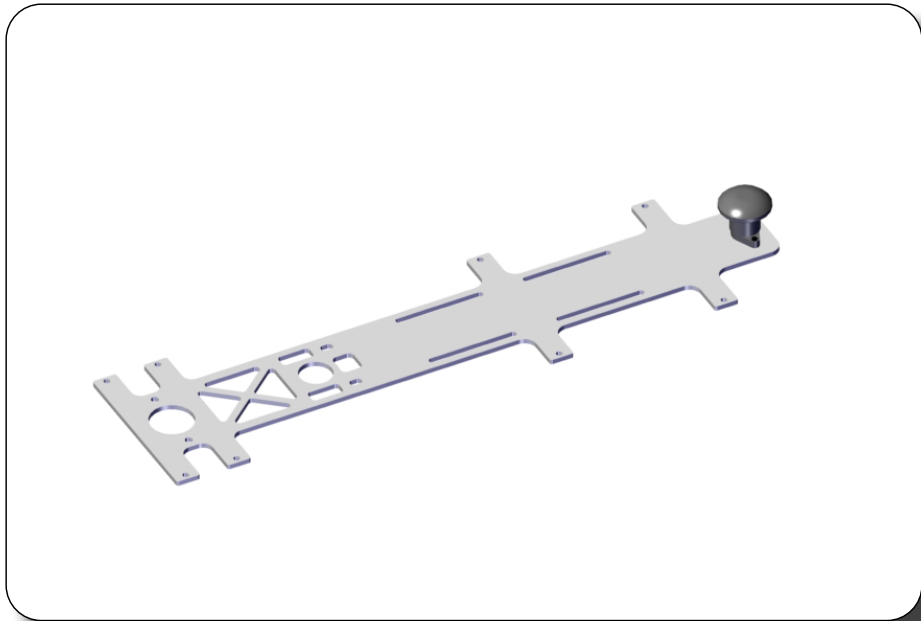
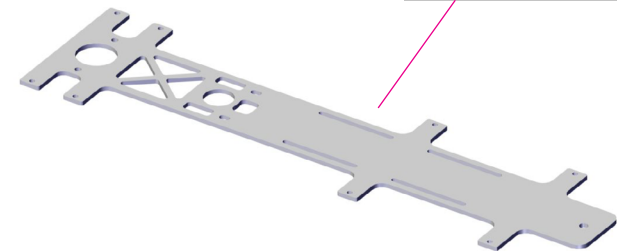
Hex screw
M3x8 (RED in picture)
ART. MSH71109

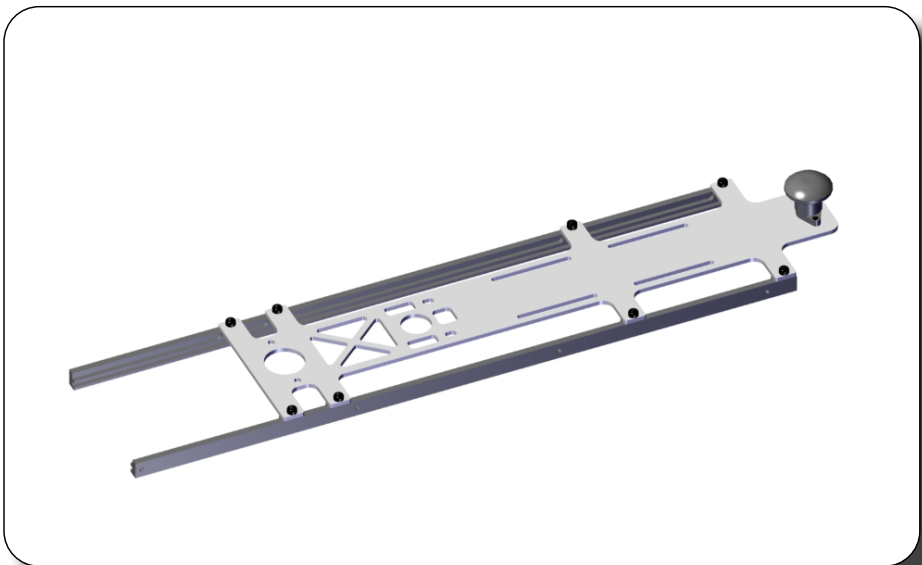
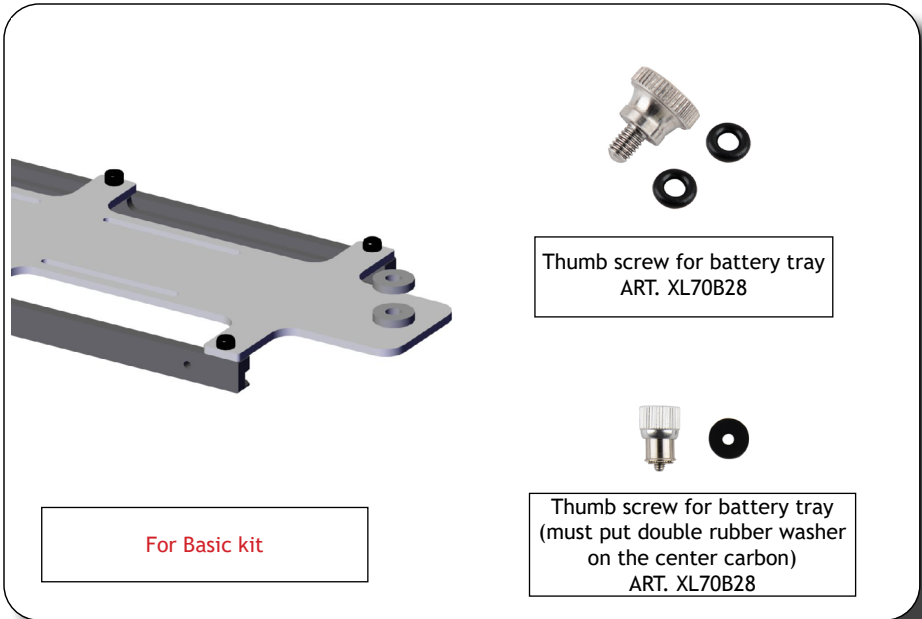
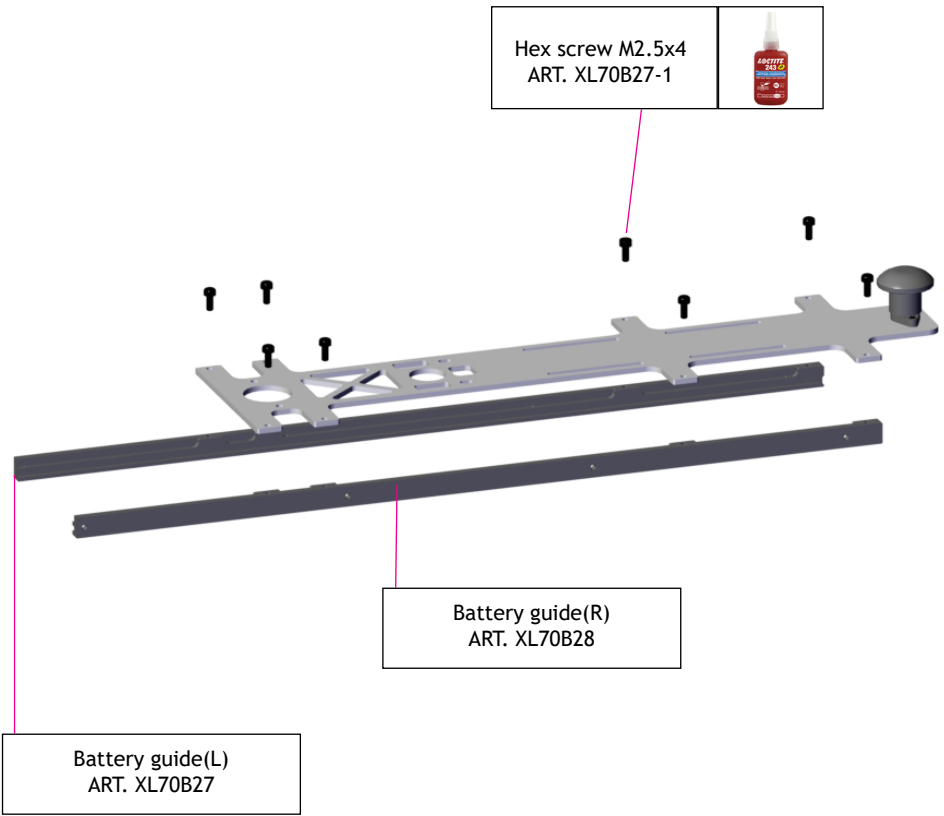
Not included in the basic kit

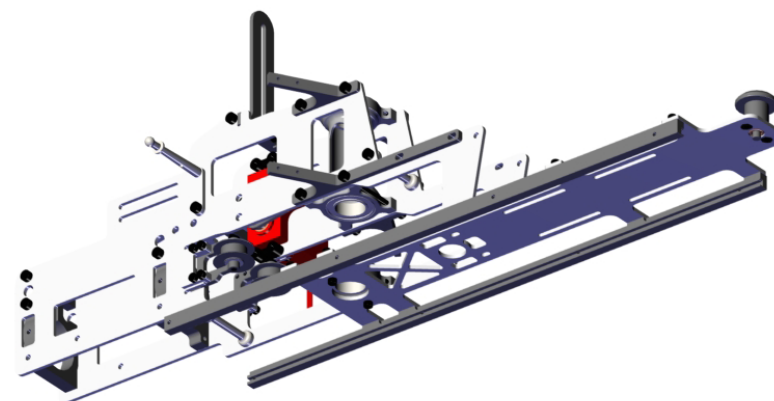
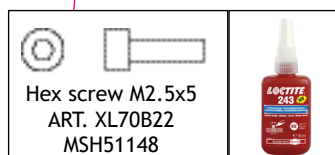
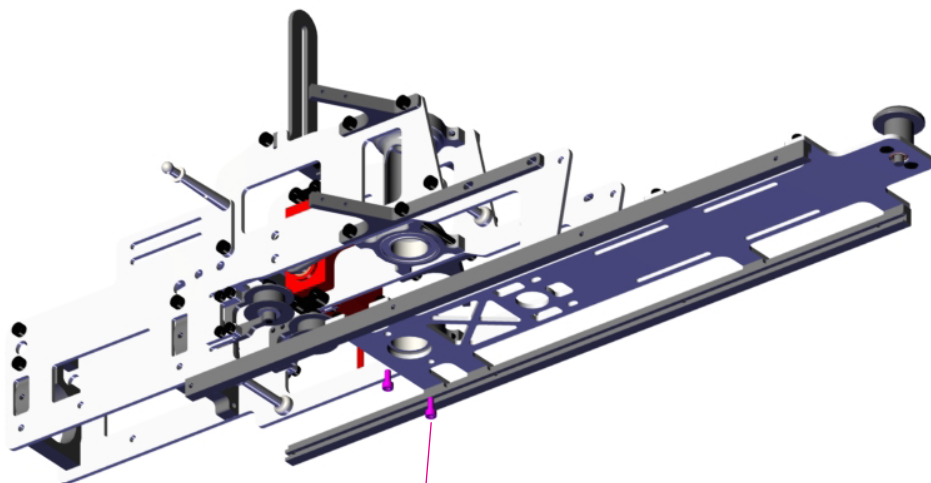


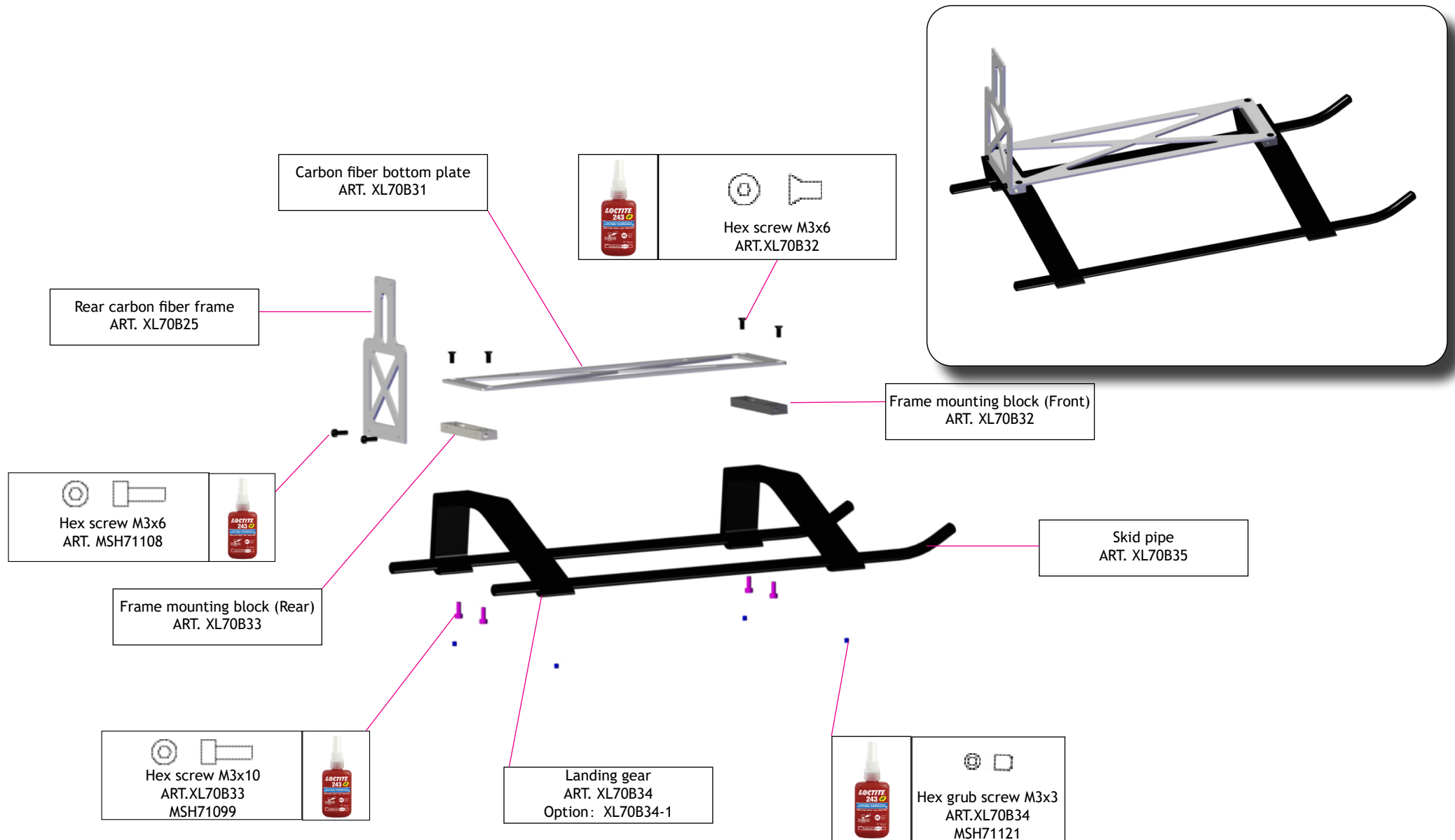
For Basic kit

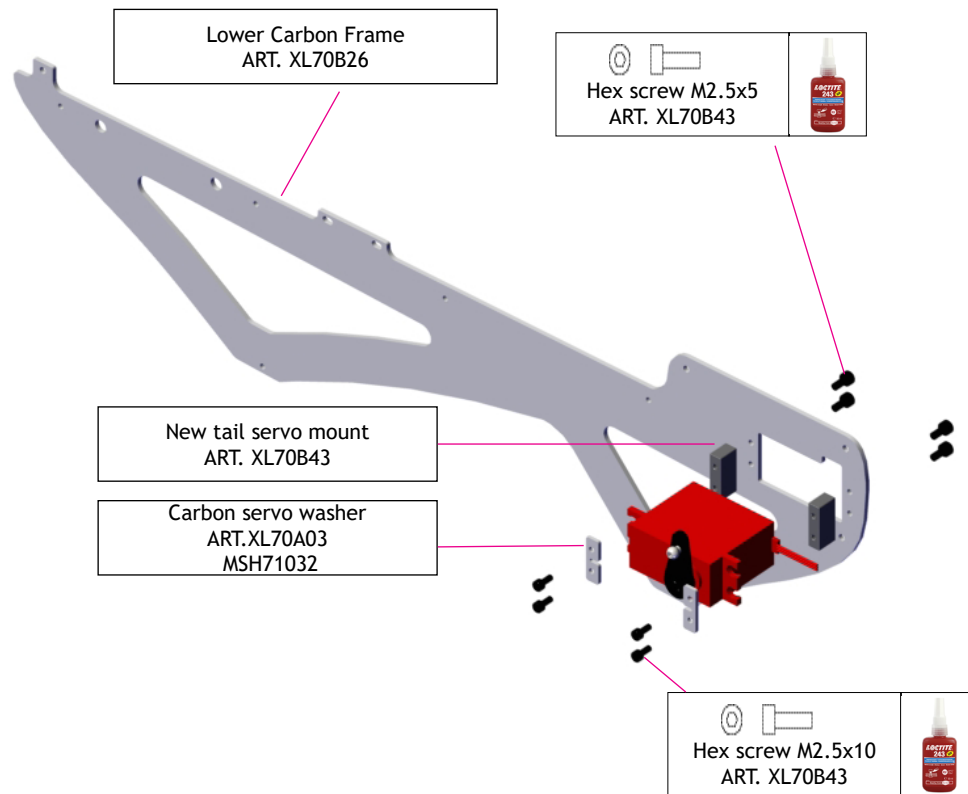
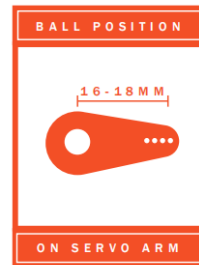
Center plate
ART. XL70B23



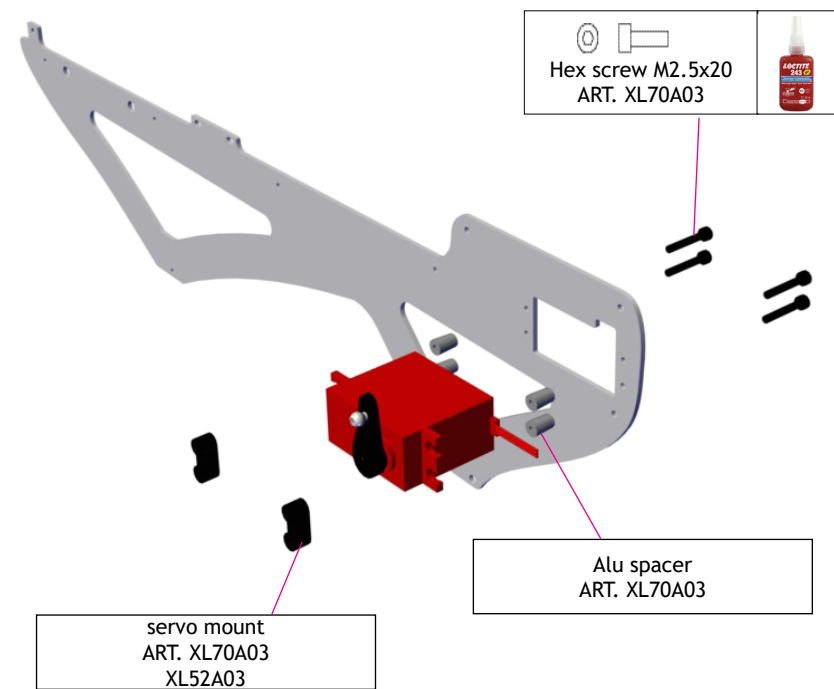


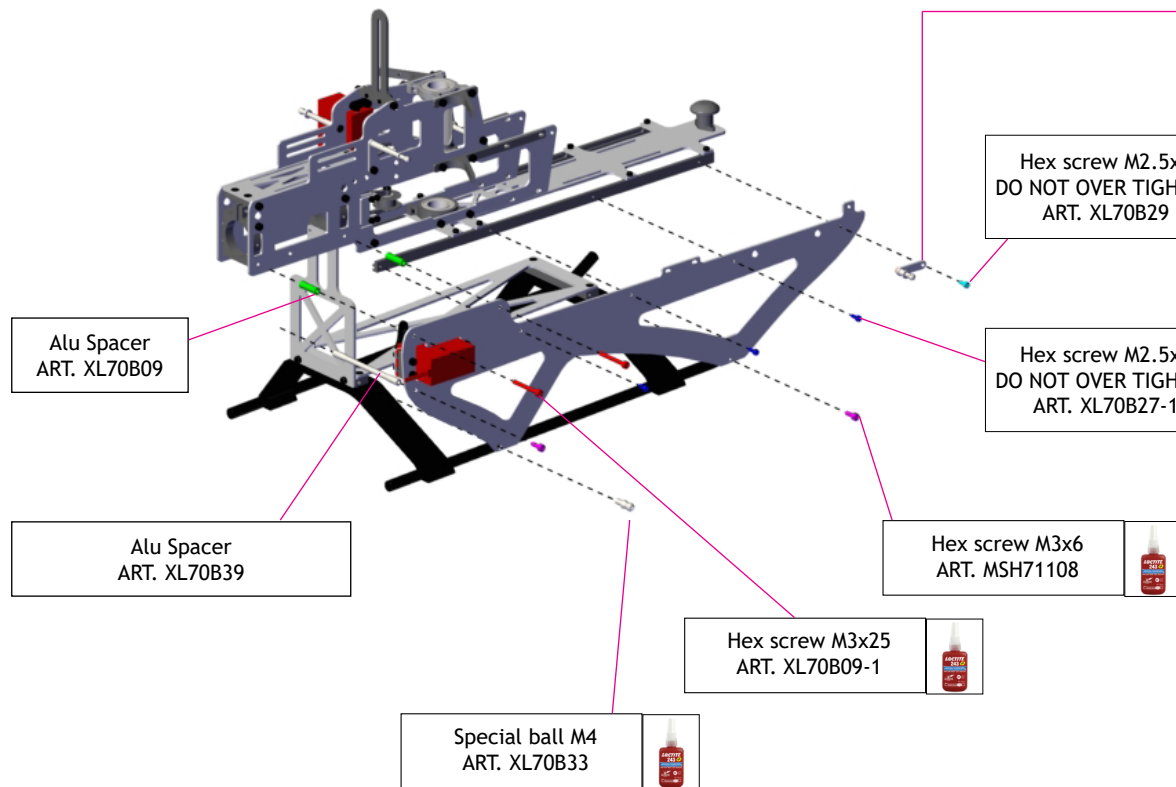






For Basic kit

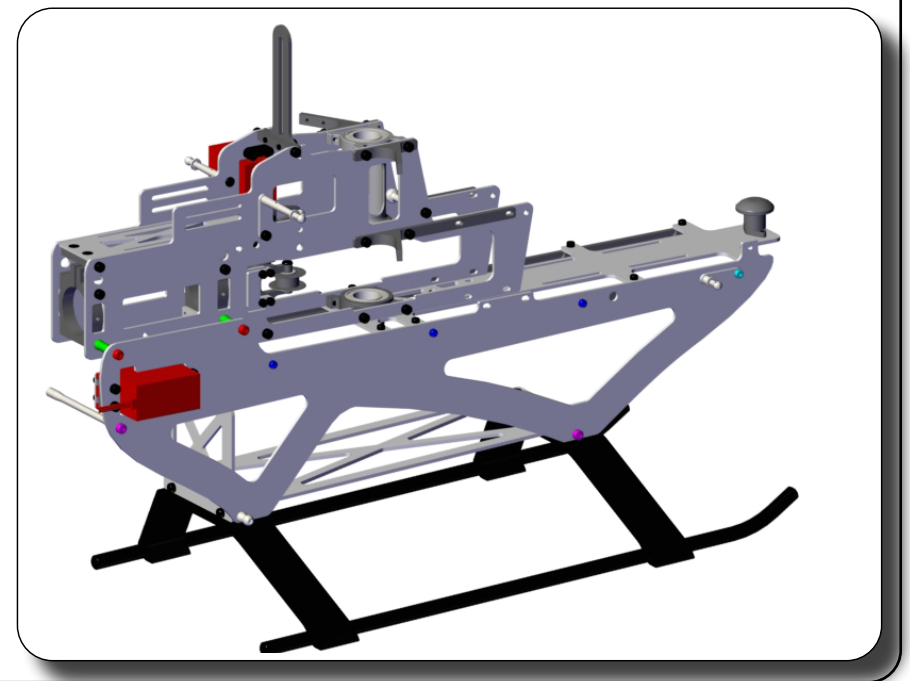


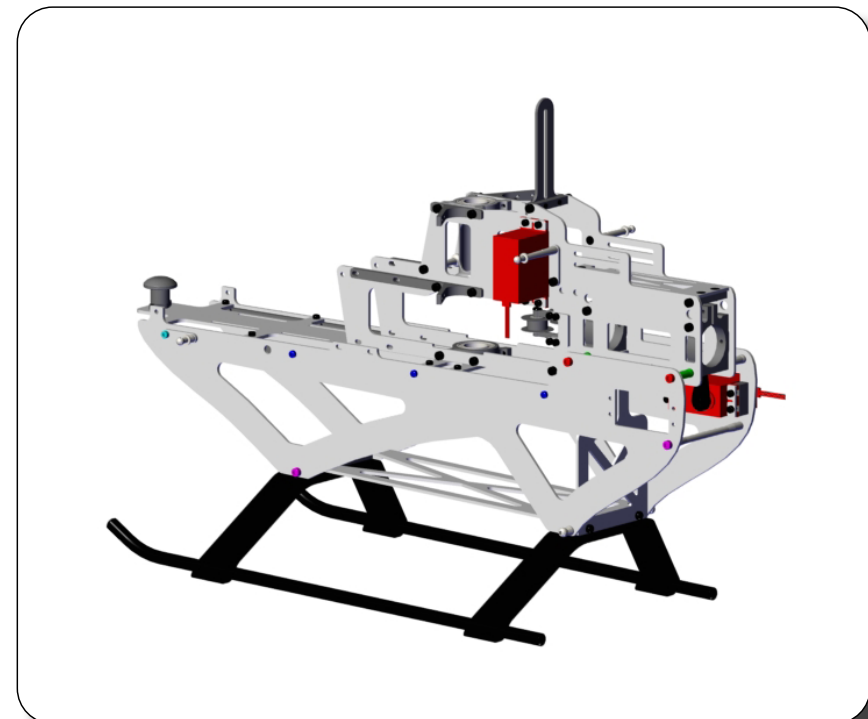
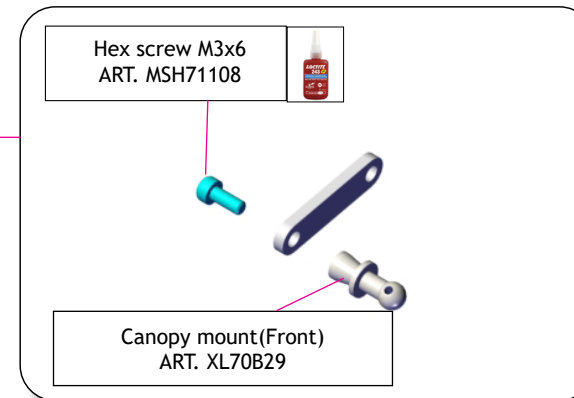
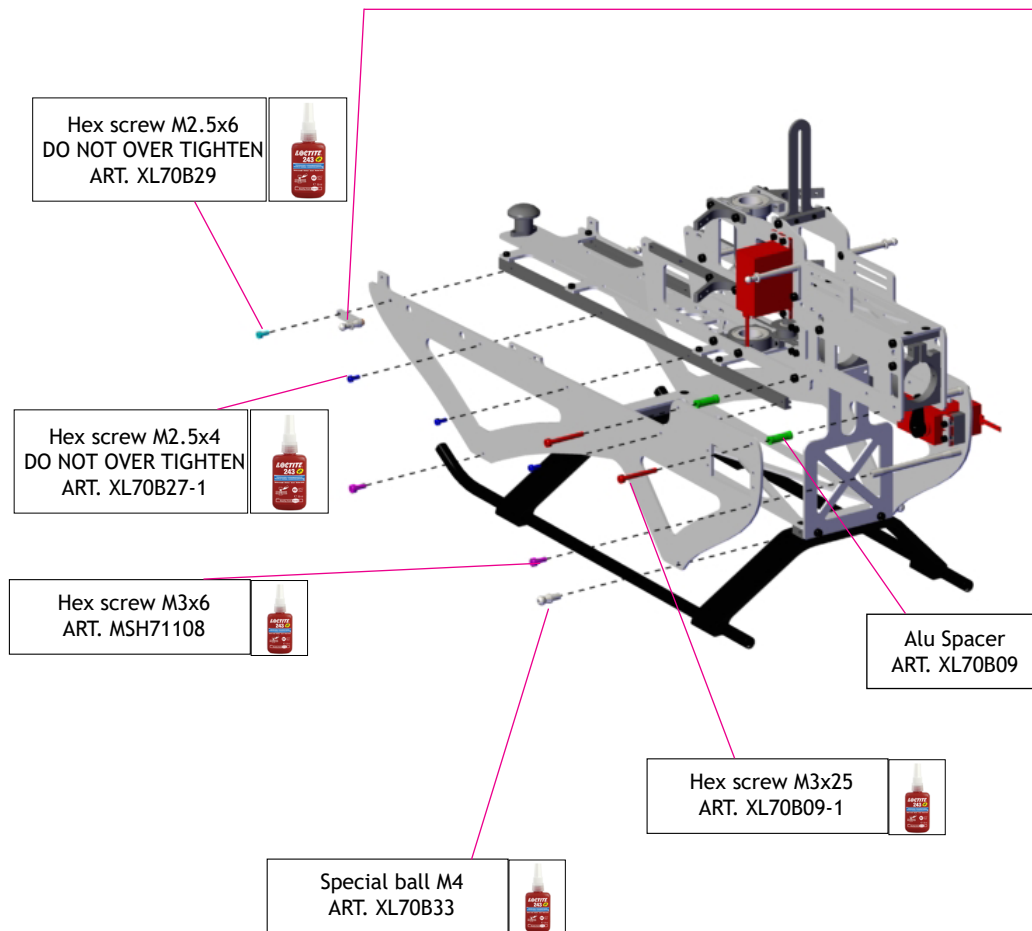


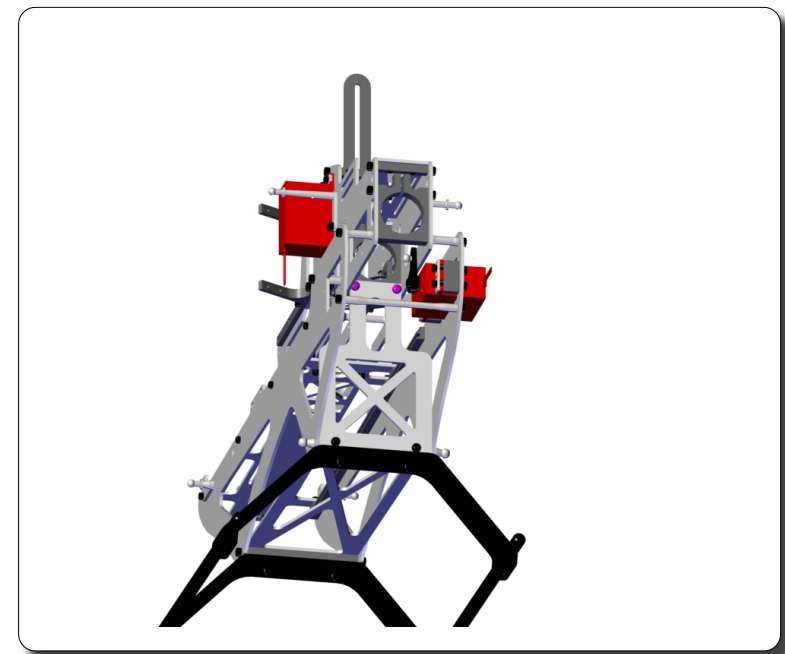
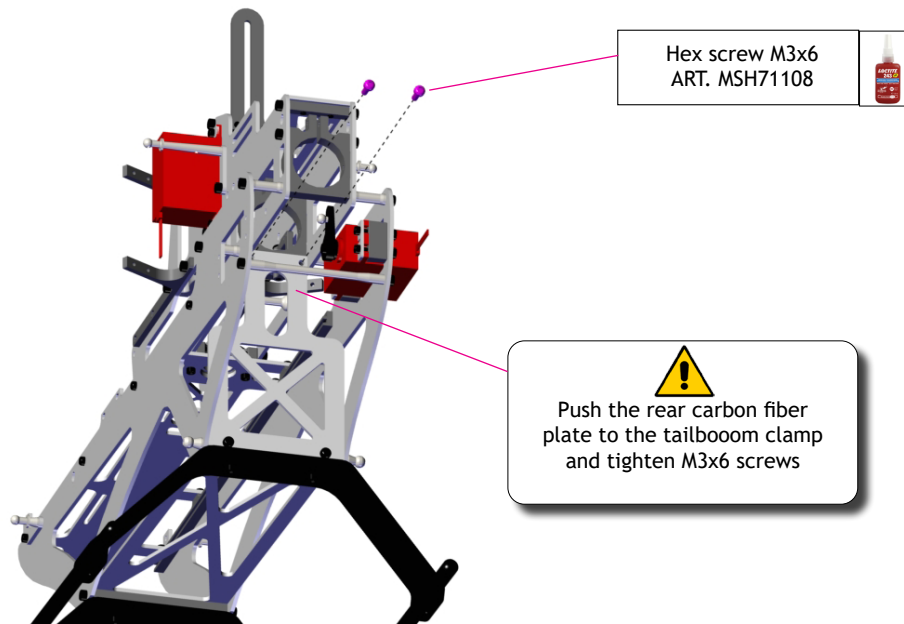
Hex screw M3x6
ART. MSH71108

Canopy mount(Front)
ART. XL70B29

If you use XL70C05 canopy must change this
to XL70B29-1 and put the set into rear hole
on the frame

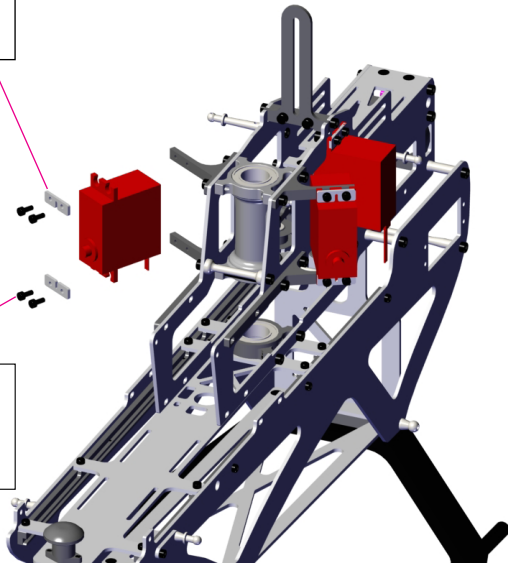






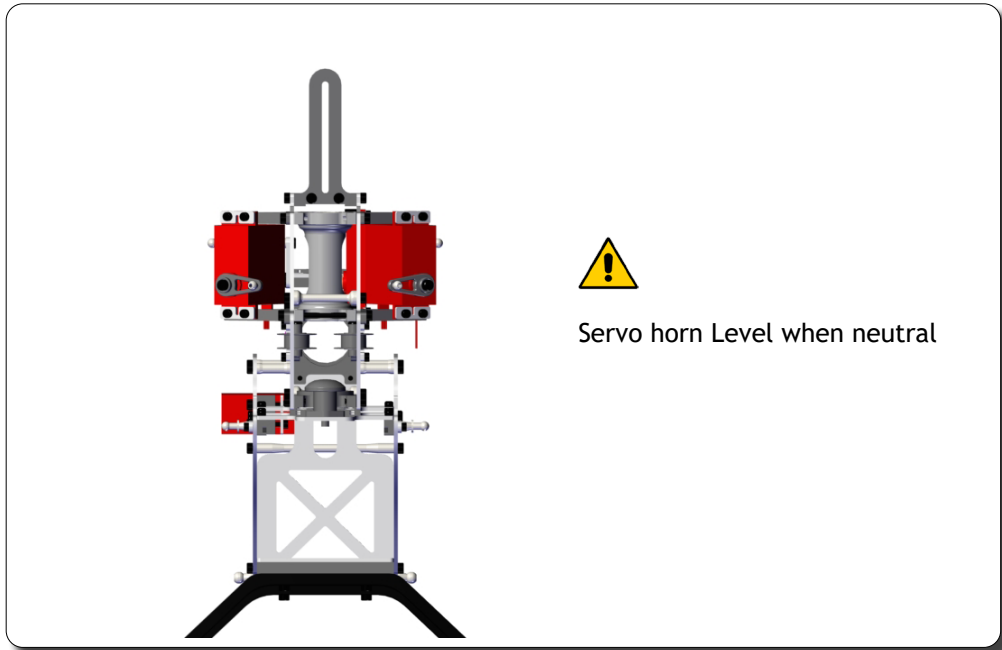
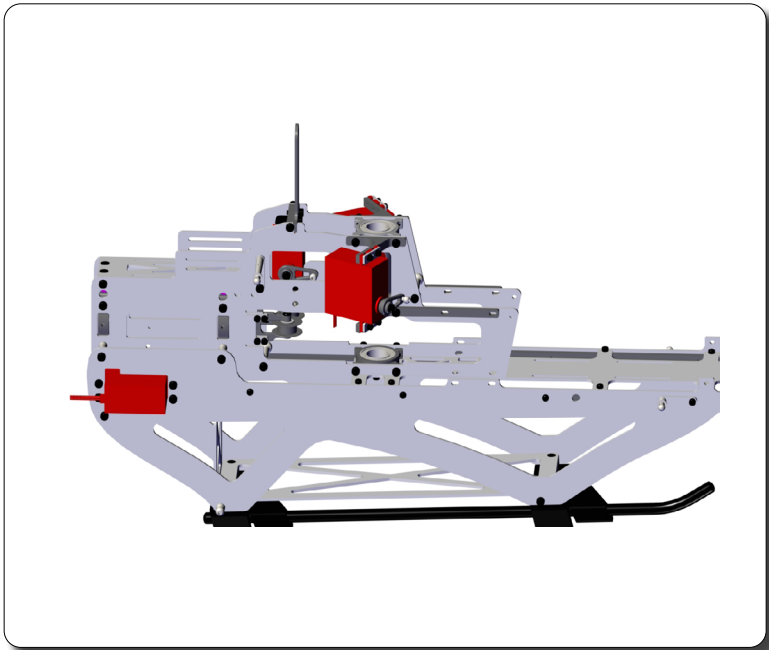
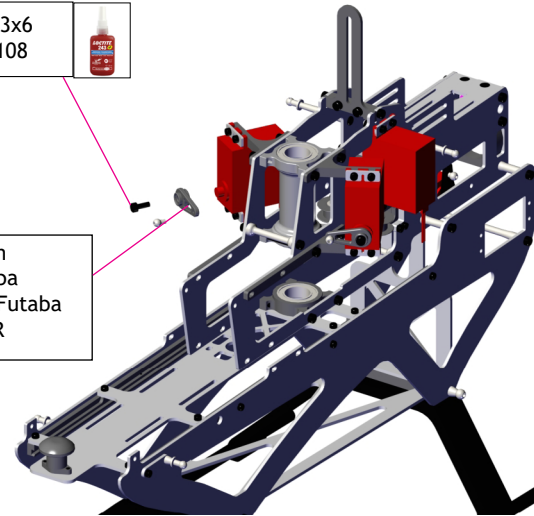
Carbon servo washer
ART. MSH71032

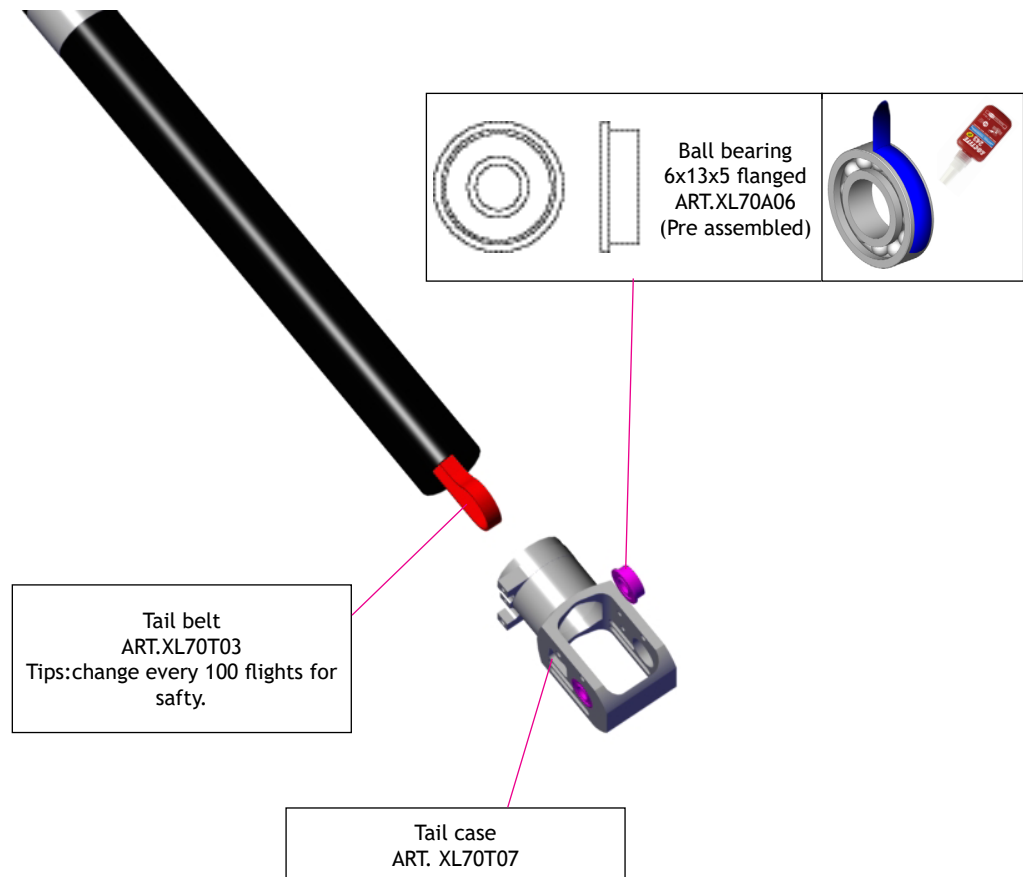
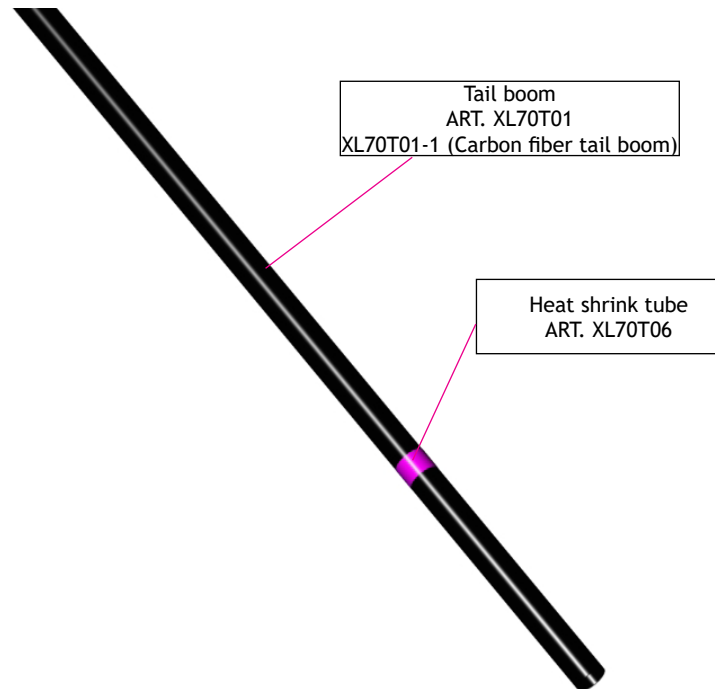
Hex screw M2,5x10
ART.XL70A03



Hex screw M3x6
ART. MSH71108

Servo horn 18mm
XL70A04 For Futaba
Option:XL70A04-1 for Futaba
XL70A04-2 for JR





New tail pulley 17T
ART. XL70T24
Option:XL70T24-1 (16T)

collar
ART. XL70T24

O ring
ART. XL70A17

Tail shaft
ART. XL70T13

Tighten hard and make sure the grub screw
engages in the recess when tightening

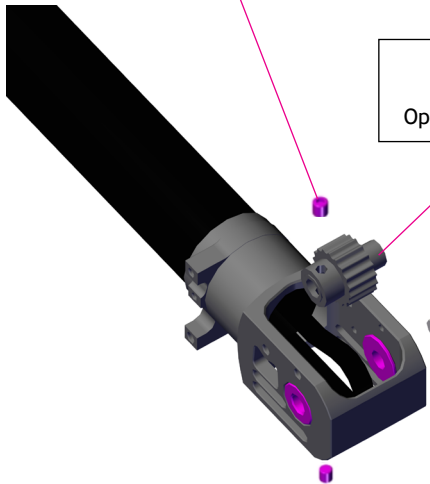
Hex grub screw M4x4
ART. XL70T24
MSH71122



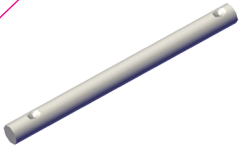
Pay attention to
the direction



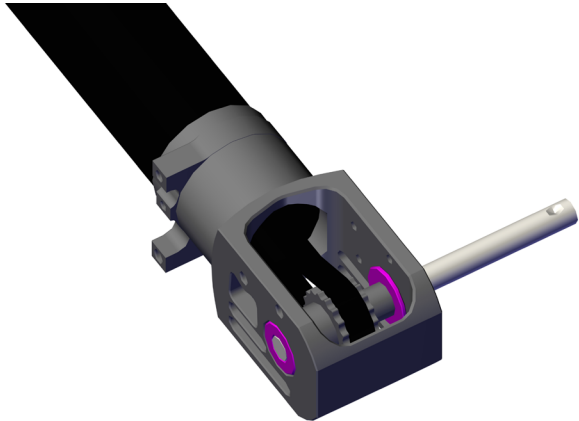
Adjust the play
with the collar

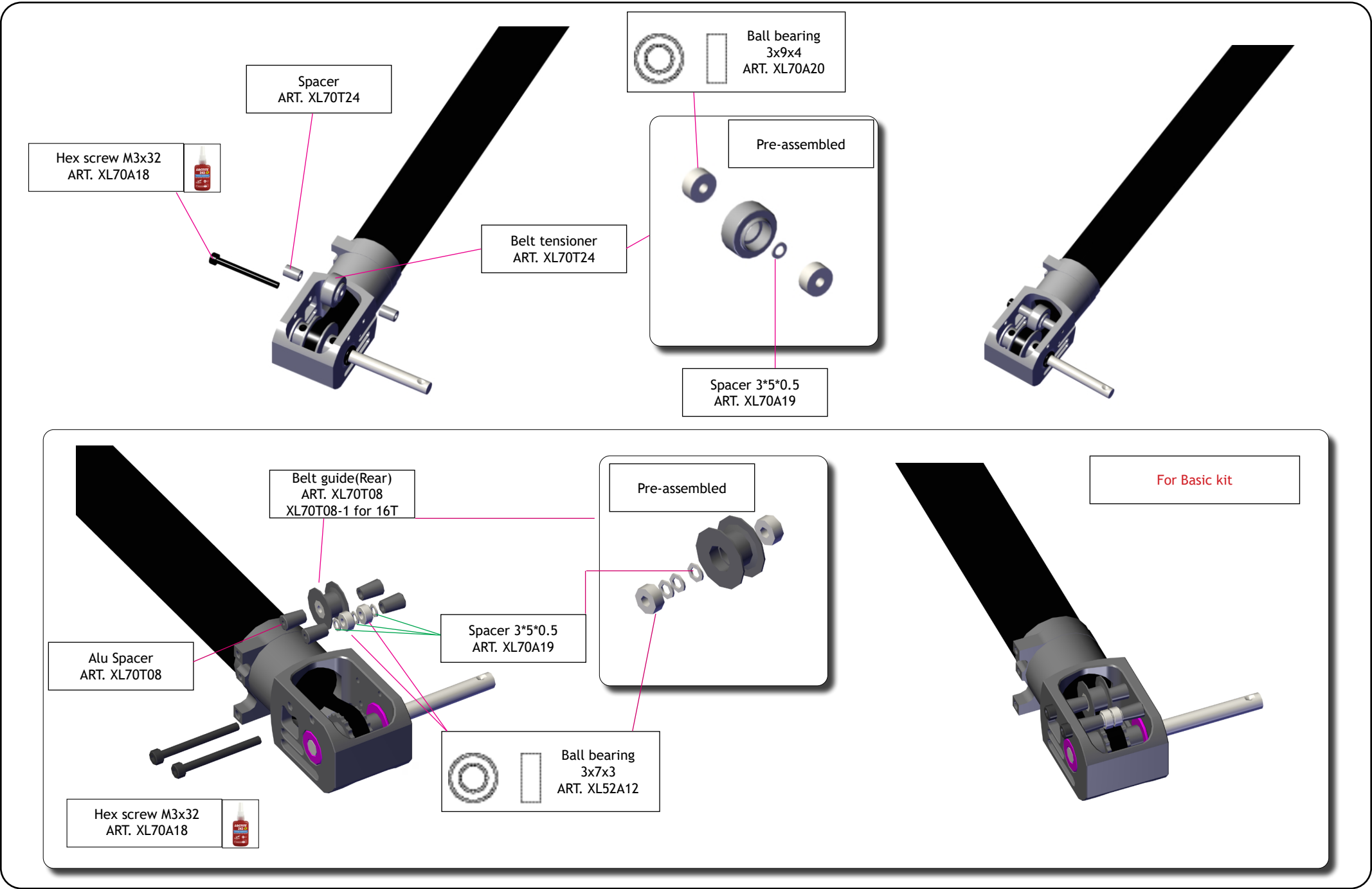


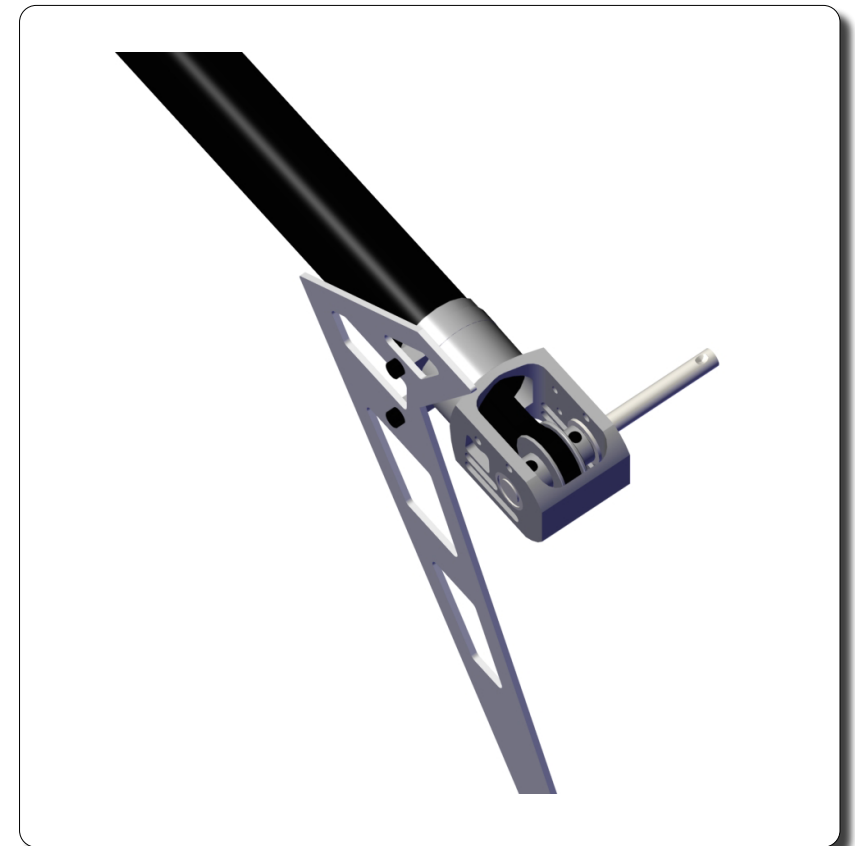
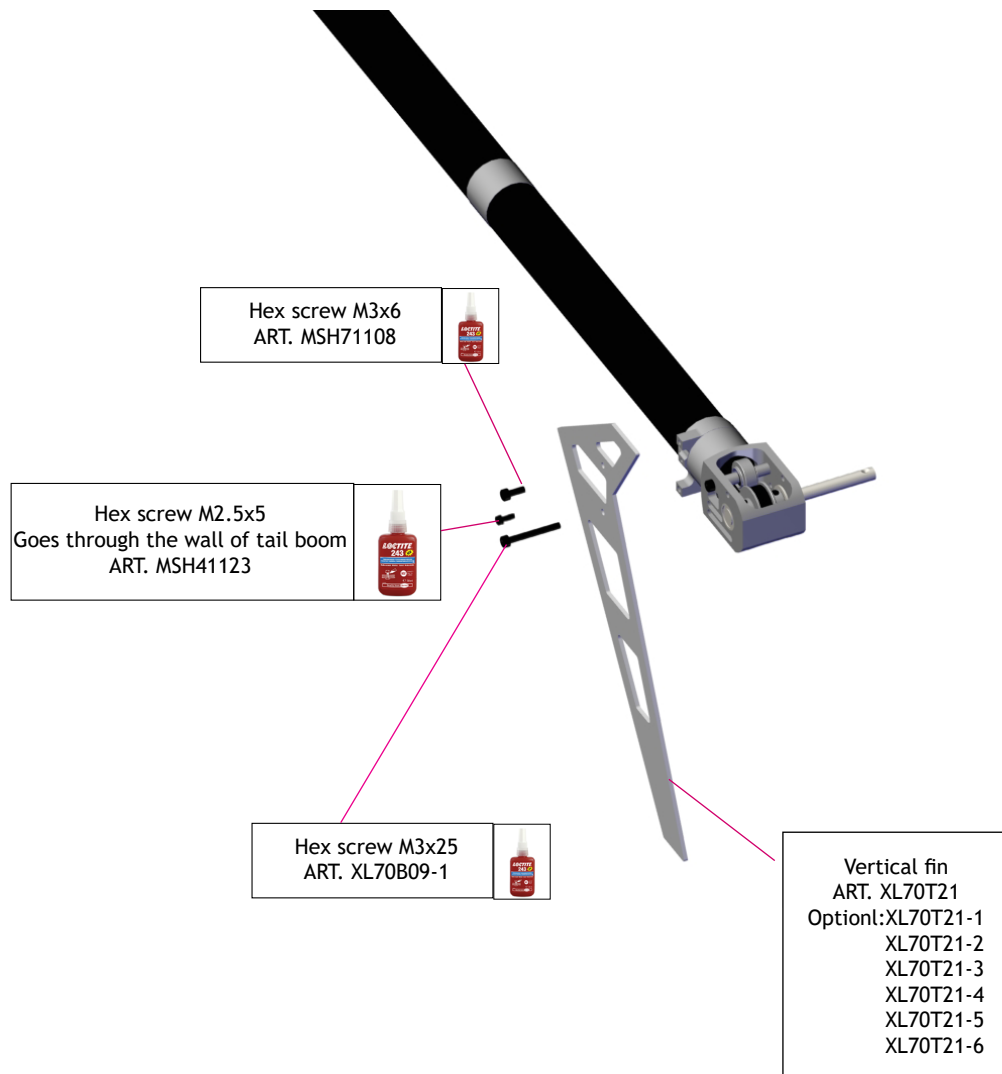
Tail pulley 17T
ART. XL70T23
Option:XL70T23-1 (16T)

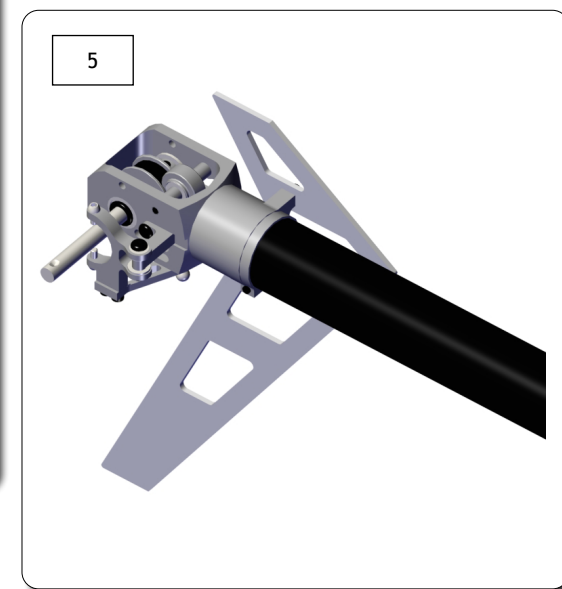
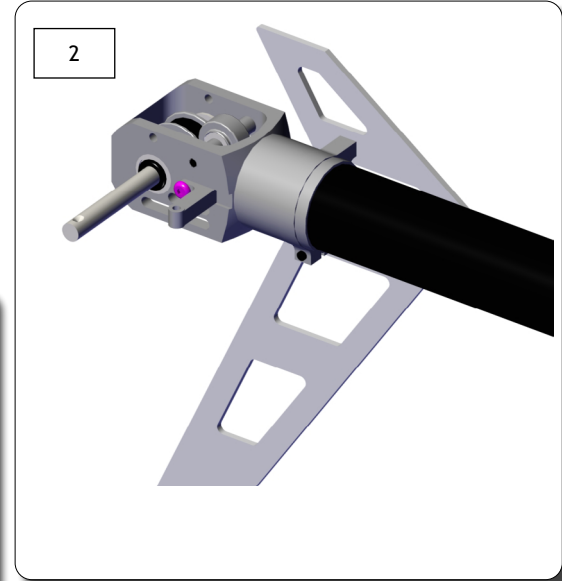
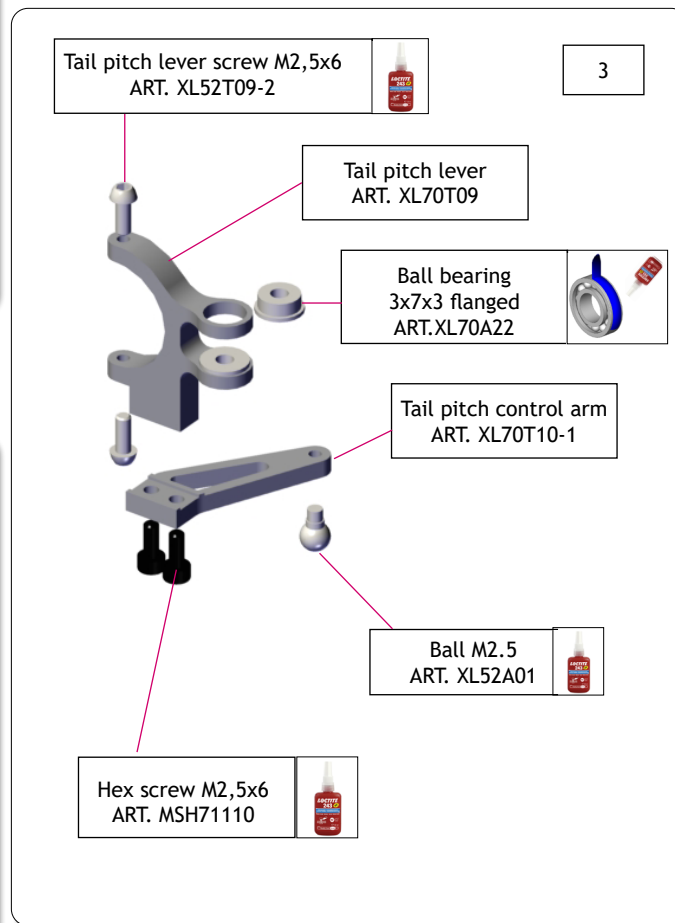
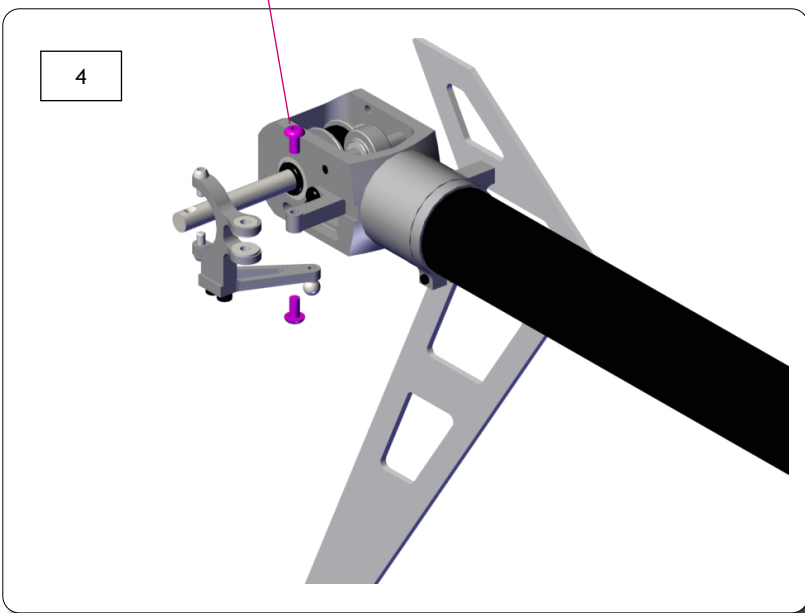
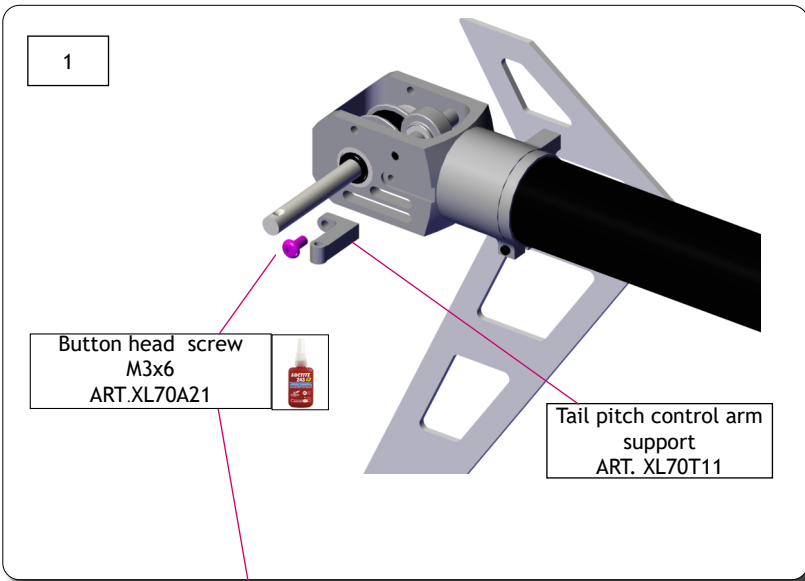


For Basic kit











Tail pitch assembly
ART. XL70T12

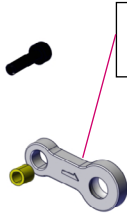
Tail Shaft Slide Bushing
ART. XL70T12-1

Tail Pitch Slider Bearing
Assembly
ART. XL70T12-2

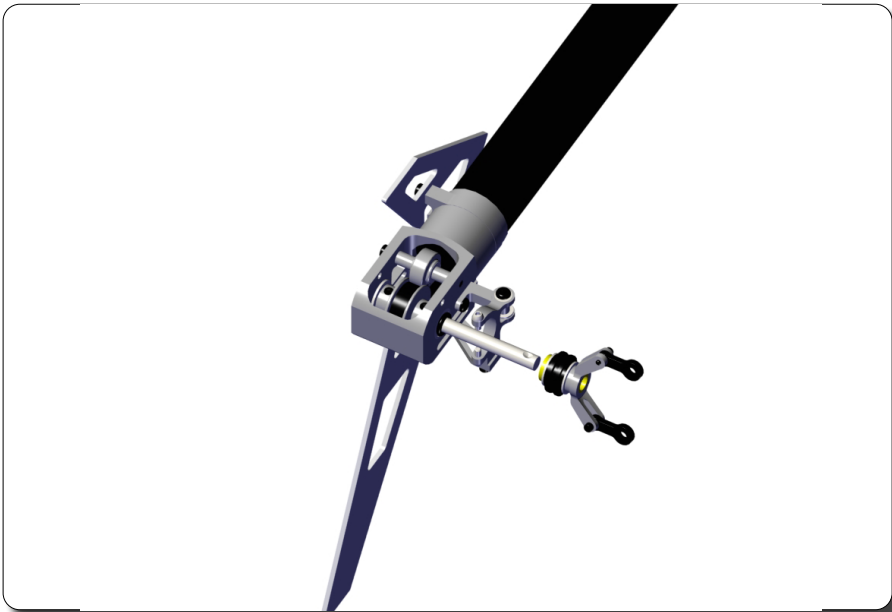
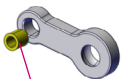
Hex screw M2x8
(Do not overtighten)
ART. MSH41128




Tail control link
ART. XL52T11




Special spacer
ART. XL70T12-3

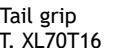





Washer
8x10x0,3
ART. XL70T19




Thrust
5x10x4
ART. MSH51065
ART. MSH71048



Tail grip
ART. XL70T16



Ball M2.5
ART. XL70A01

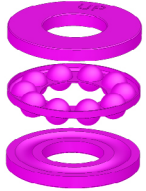


Ball bearing
5x10x4
ART. XL70T17


Thrust bearing inner hole smaller
outside and bigger hole inside

Apply grease on thrust
bearing

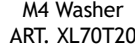
Internal hole SMALLER



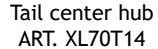
Internal hole BIGGER




Tail spindle
ART. XL70T20



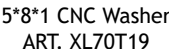
M4 Washer
ART. XL70T20




Tail center hub
ART. XL70T14



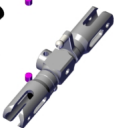
Tail damper
ART. XL70T15



5*8*1 CNC Washer
ART. XL70T19




Hex screw M4x6
ART. XL70T20




Hex grub screw M4x4
ART. XL70T24
MSH71122

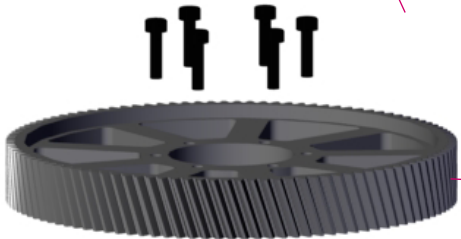
Tighten hard and make sure the grub screw
engages in the recess when tightening



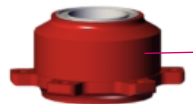
Pay attention to the direction of
tail grip



Hex screw M3x12
ART. XL70B21
MSH51149




106T main gear
ART. XL70B20
Option:XL70B20-1 (109T only for XL70G11-1/70G12-2/70G13)




Main gear case(Pre assembled)You can add some grease on the oneway
ART. XL70T21

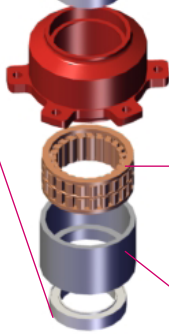




Ball bearing
15x21x4
ART. XL70B21-3



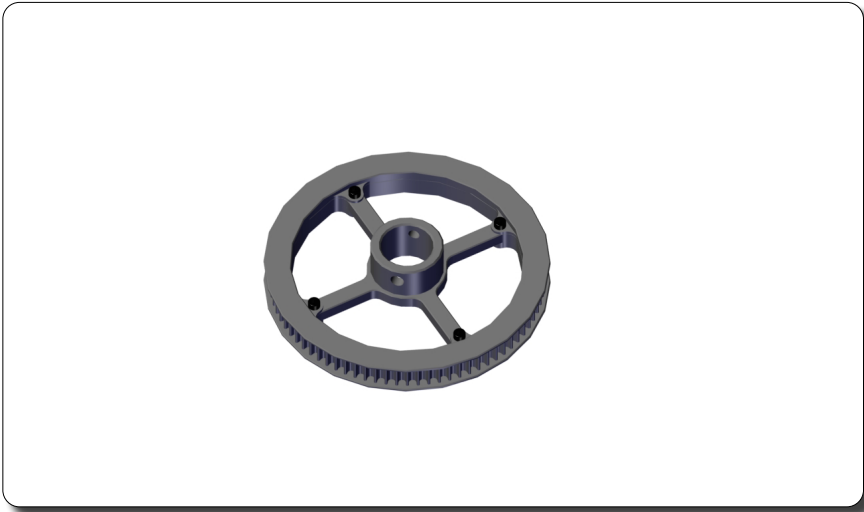
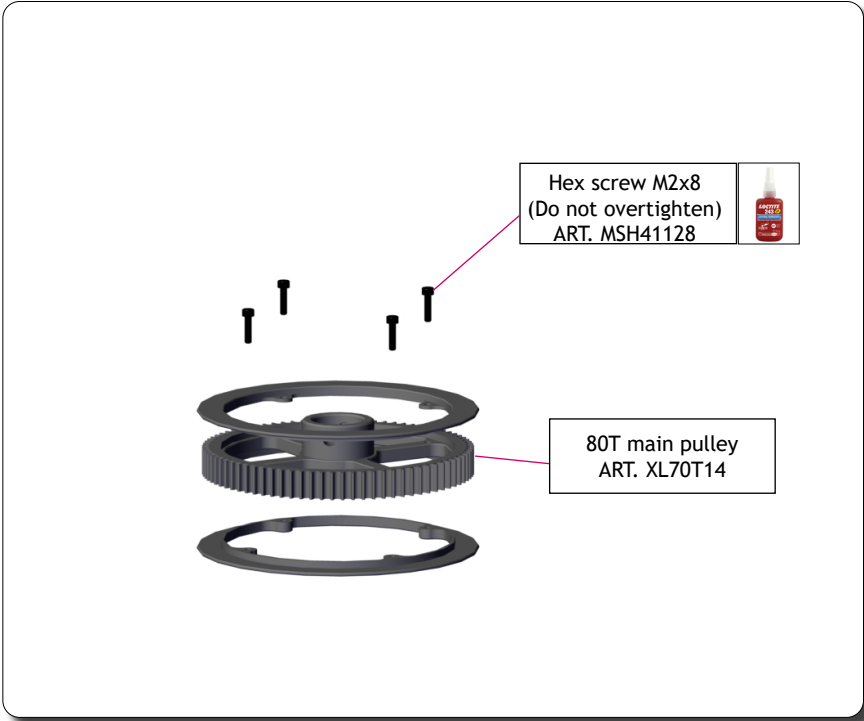
One way bearing(pay attention to the direction)
ART. XL70B21-1



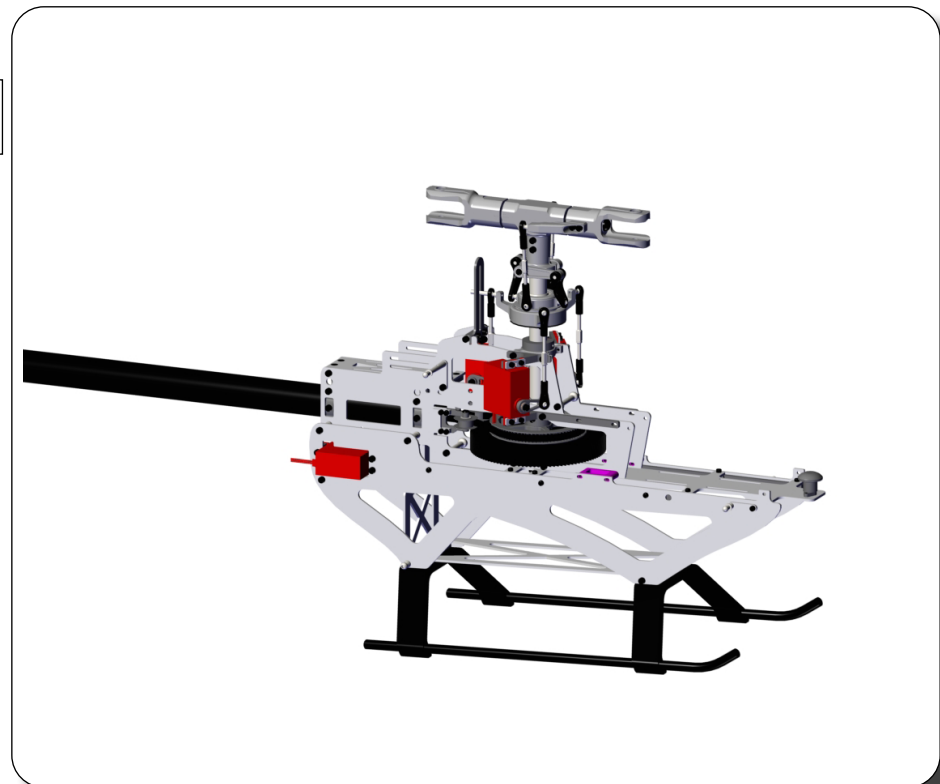
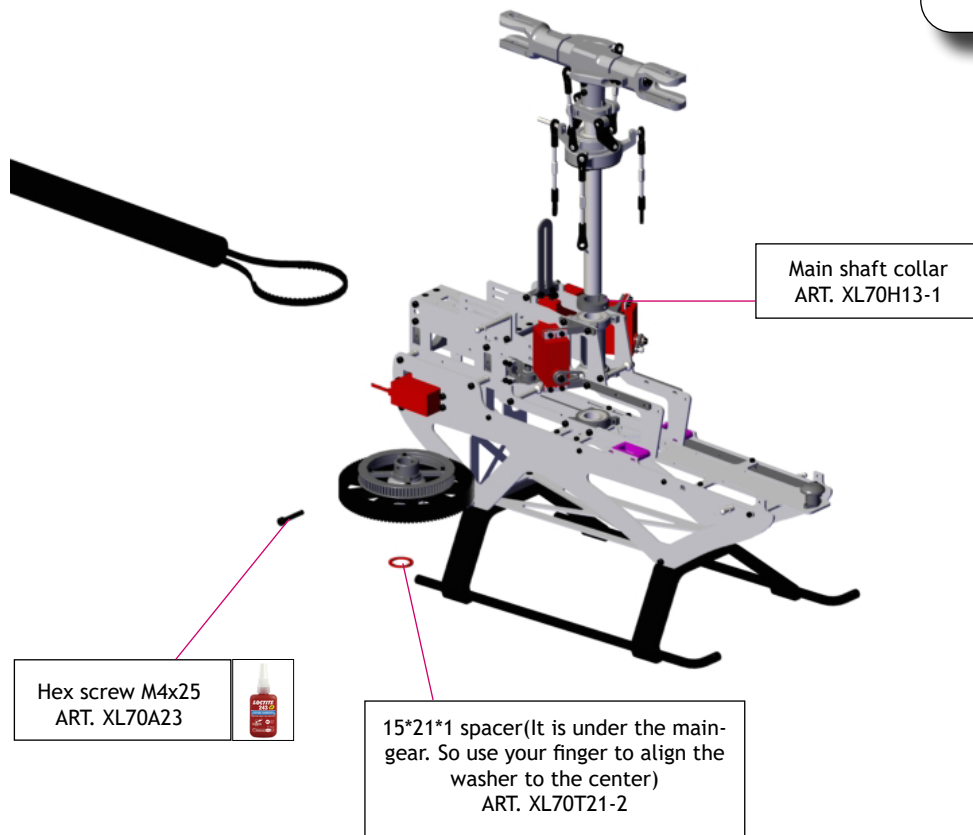
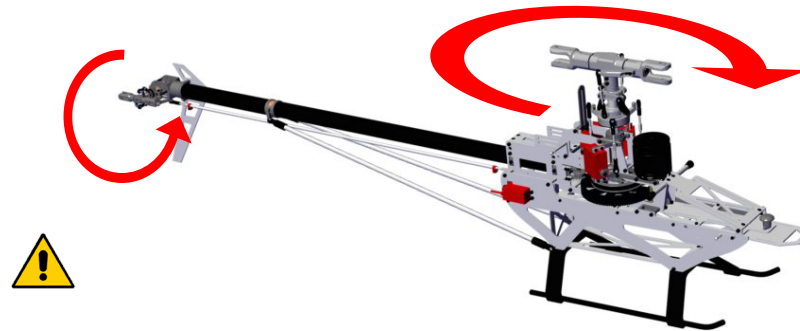
When you want to rebuild the oneway. heat it up and it will come out.Add enough loctite 638 when put them together

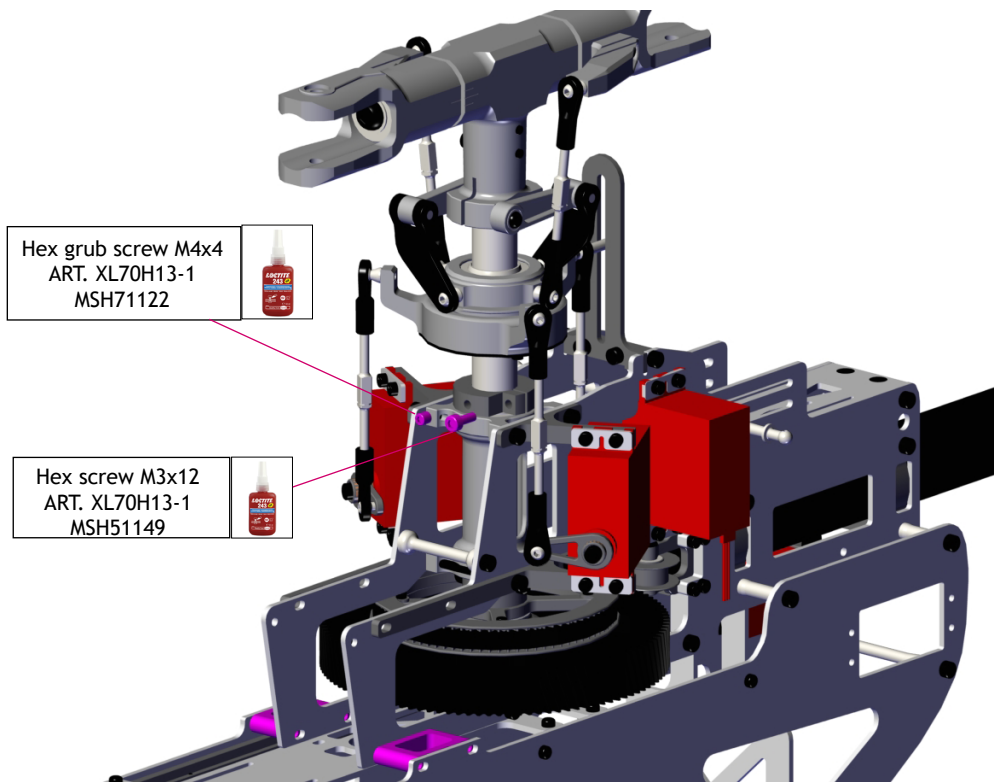
One way bearing direction(from upside)



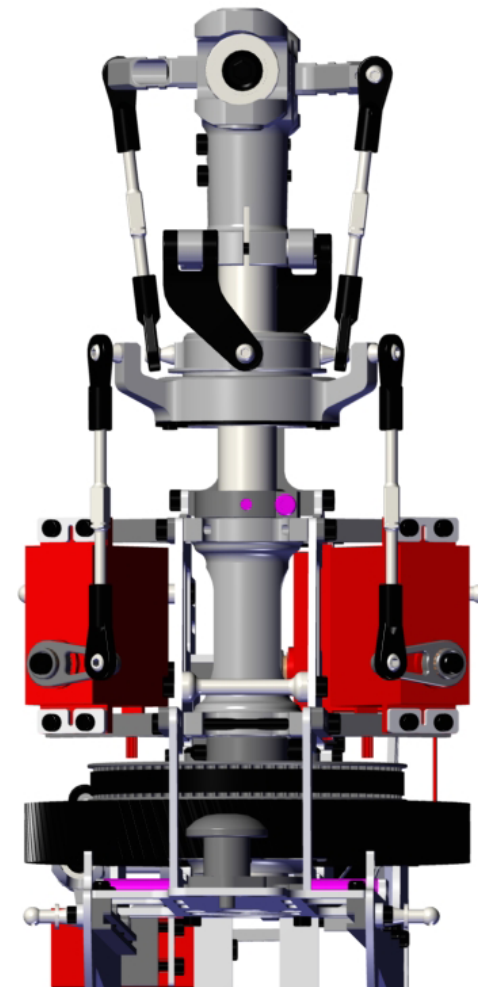


Check the rotation direction during the installation of the belt

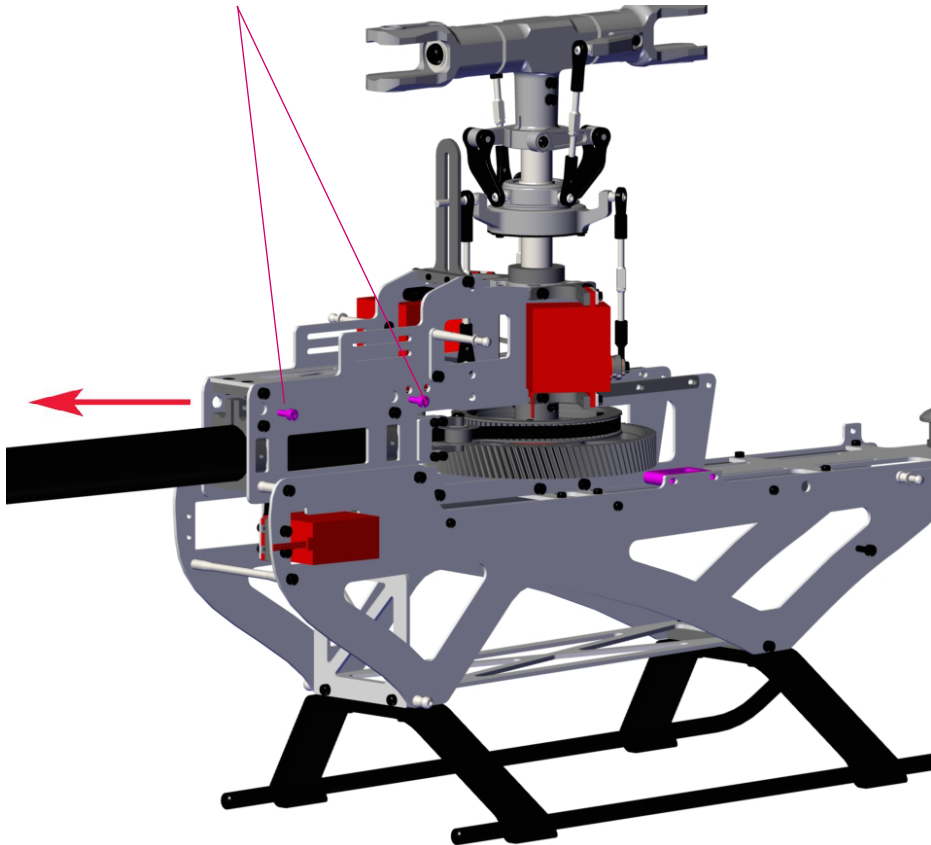




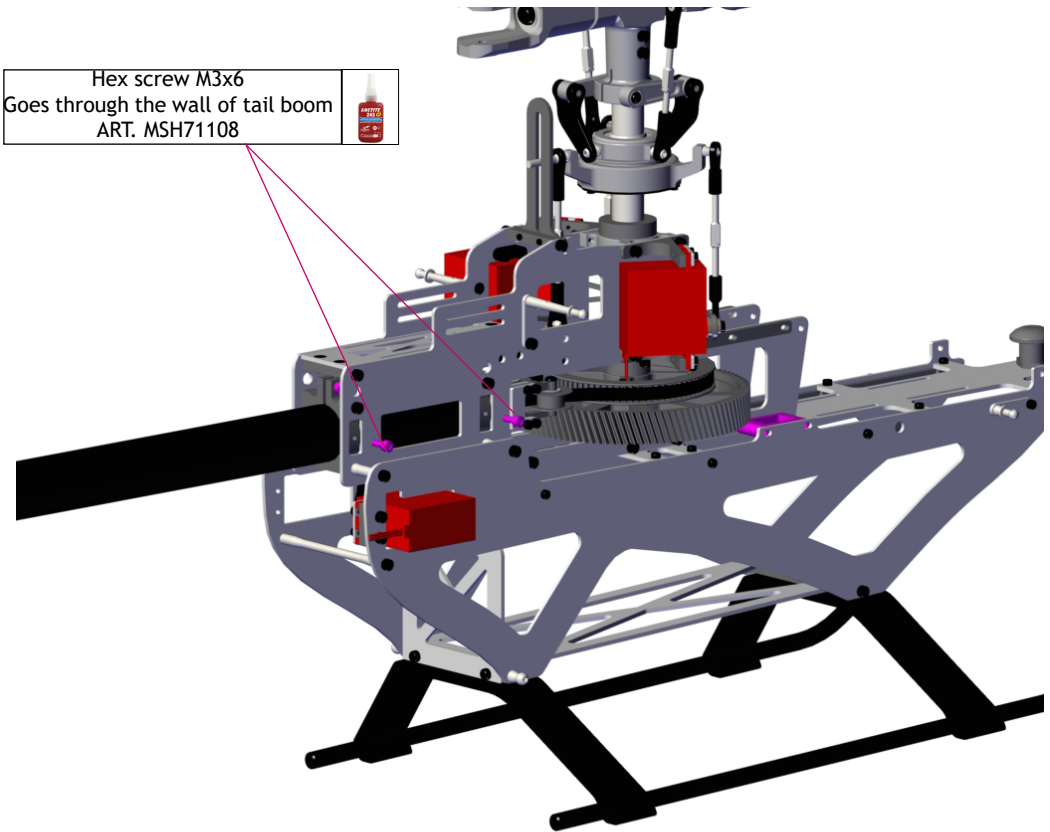
- Pull up main shaft
- Push down shaft lock
- Fully tighten

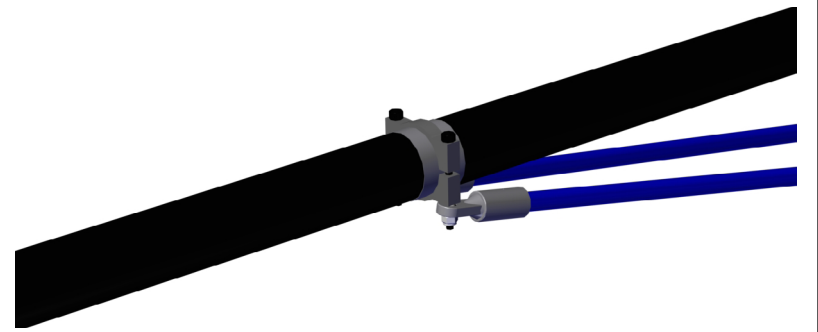
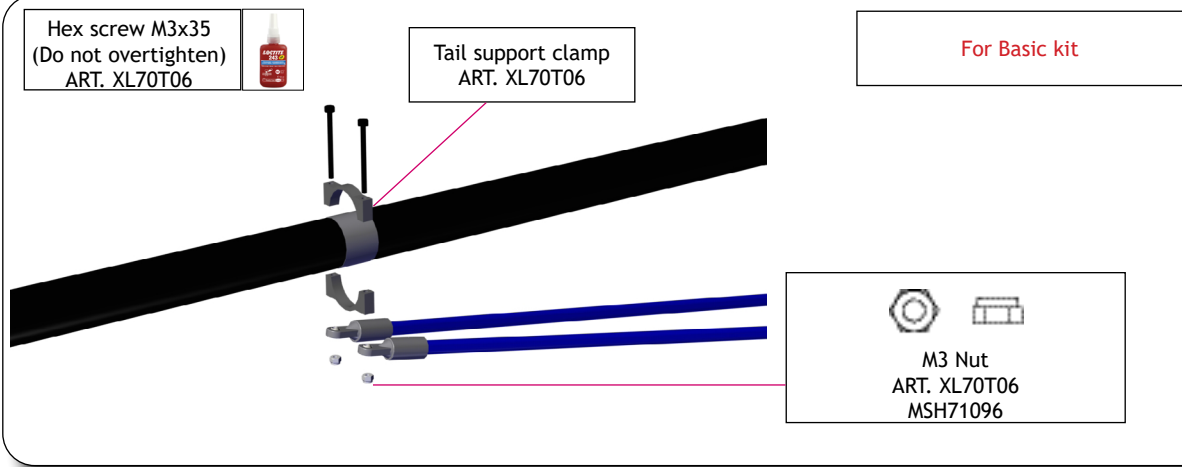
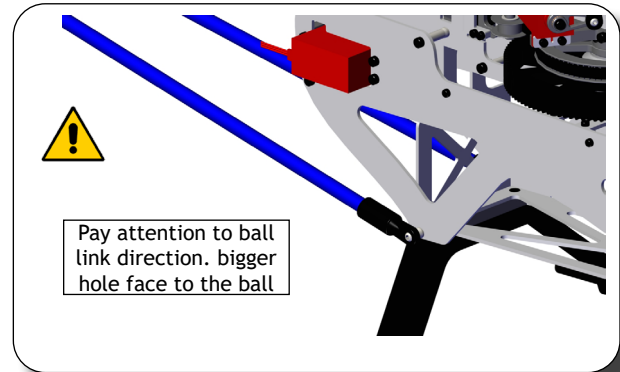
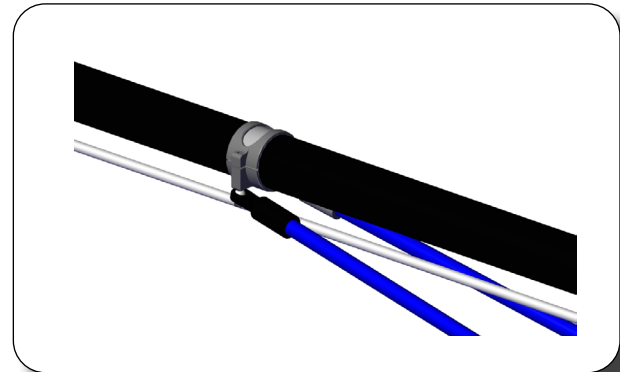
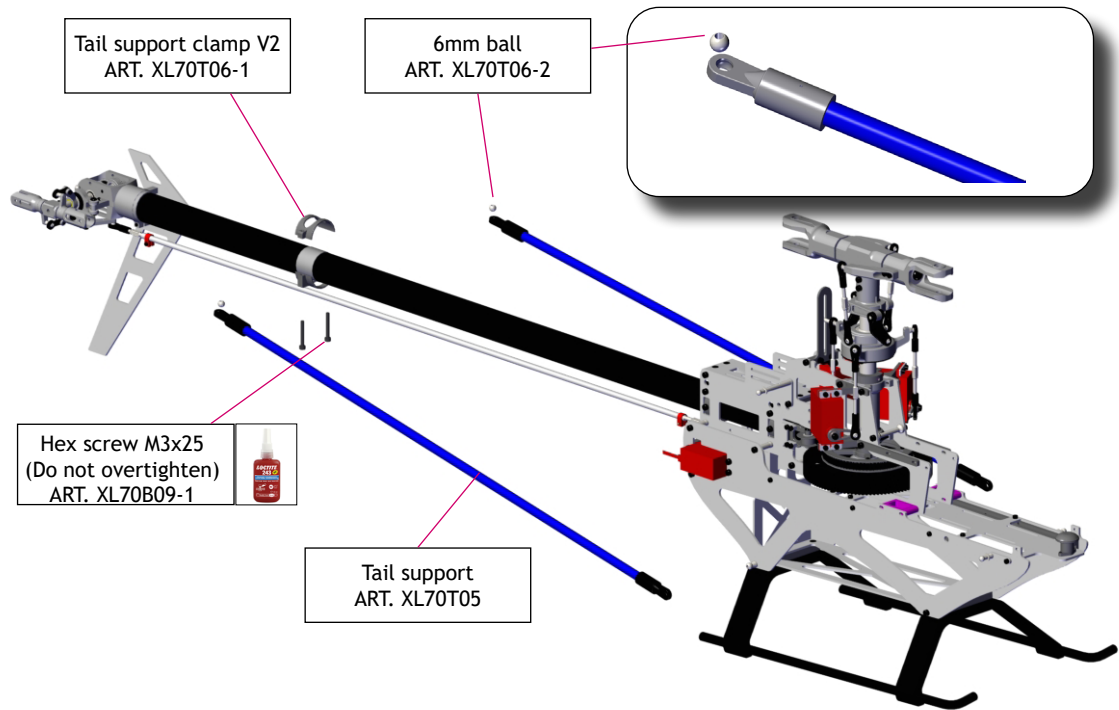


Hex screw M3x10
(pull the tailboom and fully tighten)
ART. MSH71114



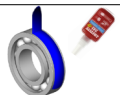
Hex screw M3x6
Goes through the wall of tail boom
ART. MSH71108





4525-4530 500-550kv
motor 6mm shaft(not
include)
ART. XL70M01

Motor mount
ART. XL70B05



719 Angular contact Ball bearing
ART. XL70B06

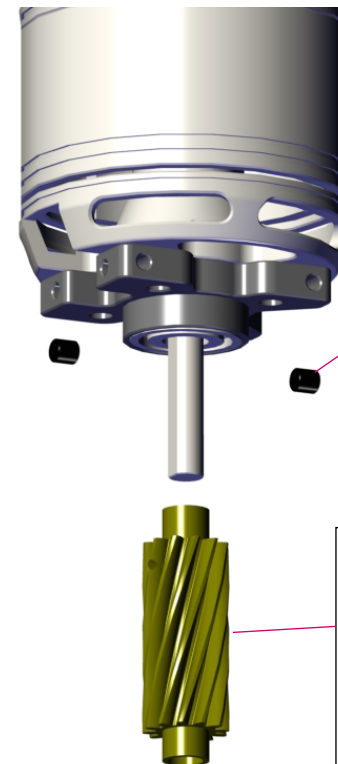
UP



Down



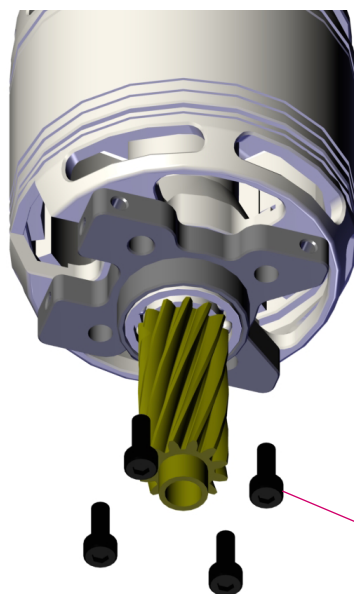
Pay attention to
the bearing di-
rection(Pre-assembled)



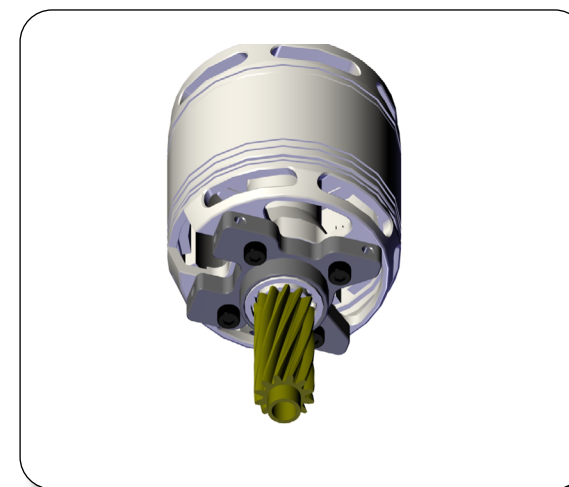
Hex grub screw M4x4
ART. MSH71122

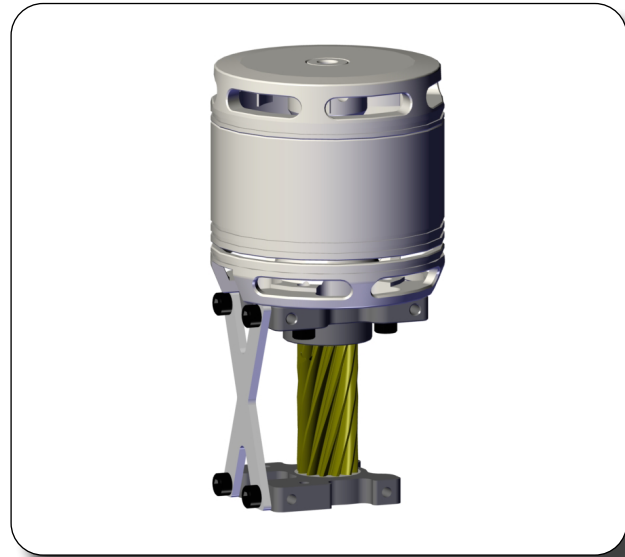
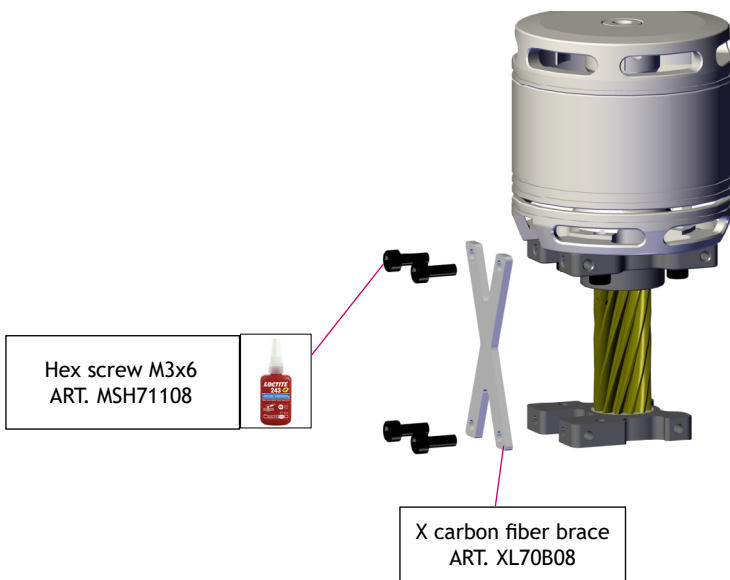
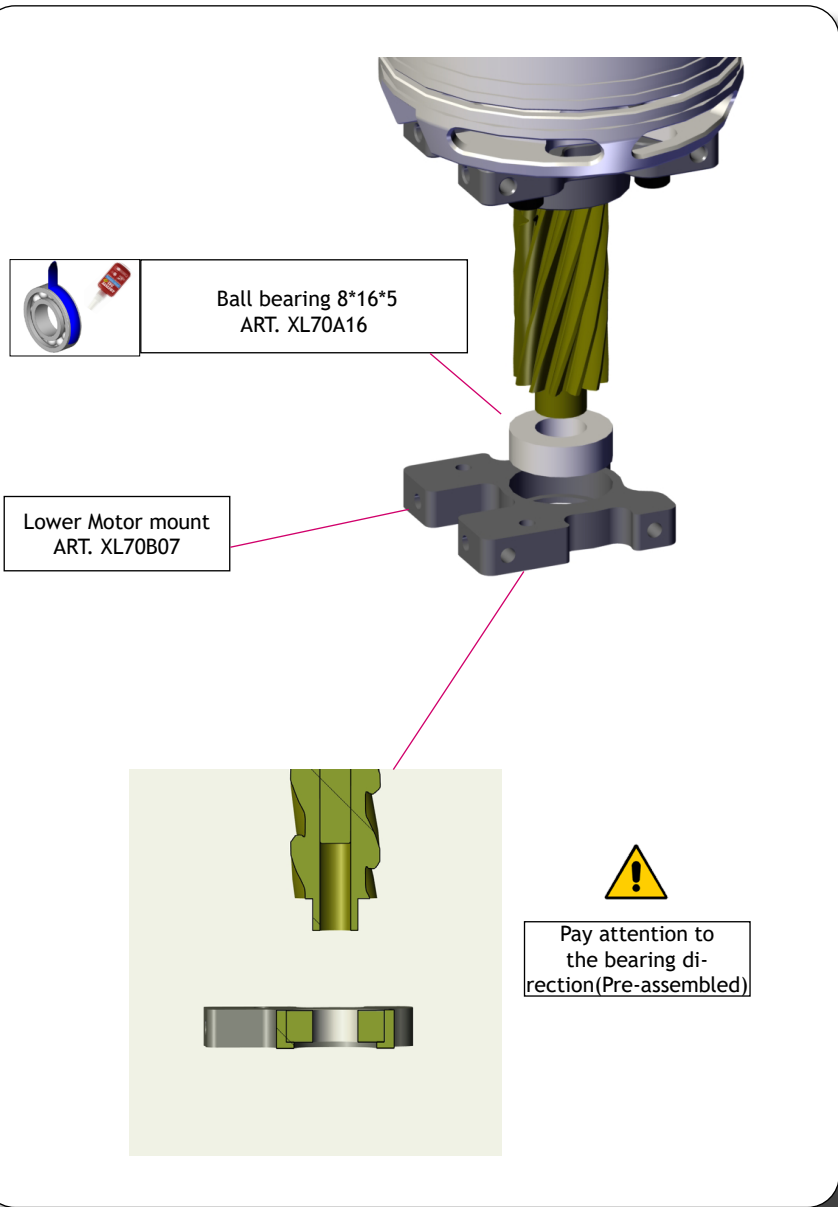


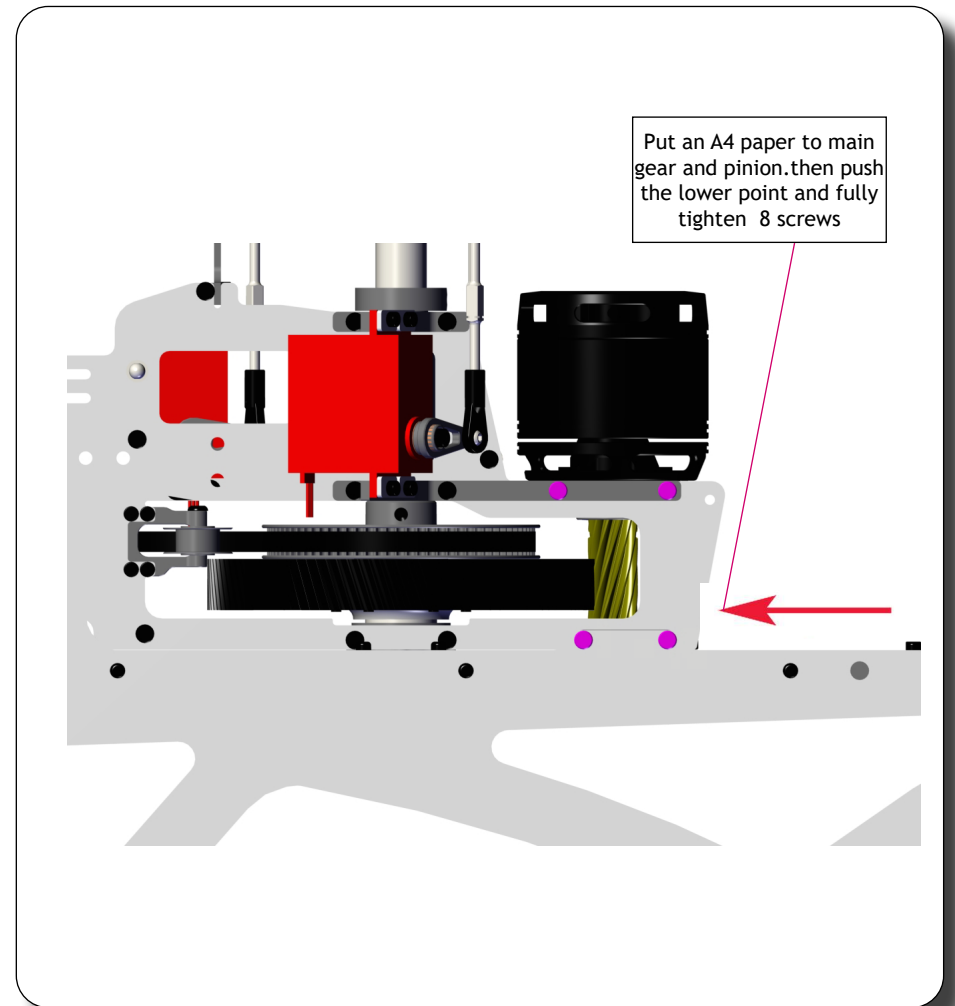
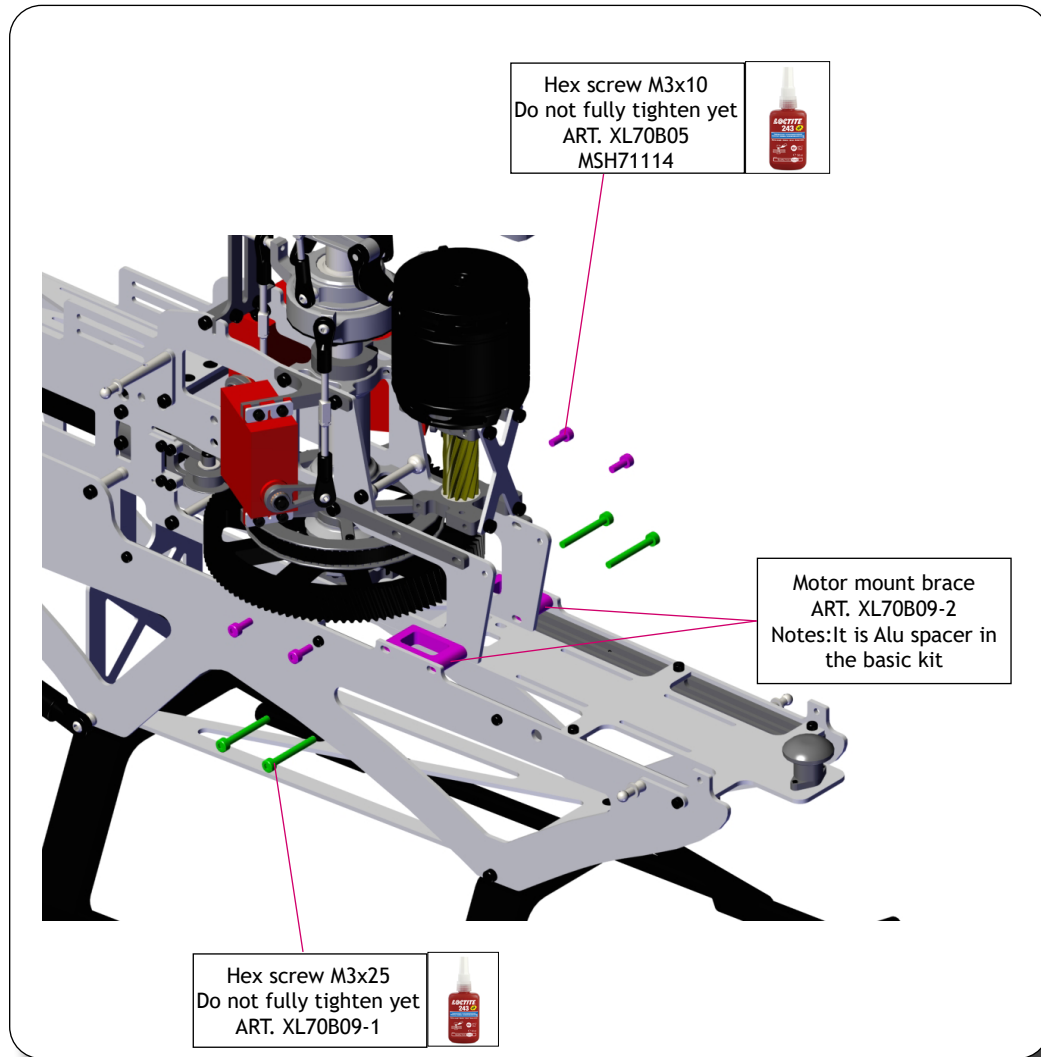
Motor pinion 11T
ART. XL70G11
option:
XL70G10
XL70G12
XL70G11-1 for XL70B20-1
XL70G12-1 for XL70B20-1
XL70G13 for XL70B20-1

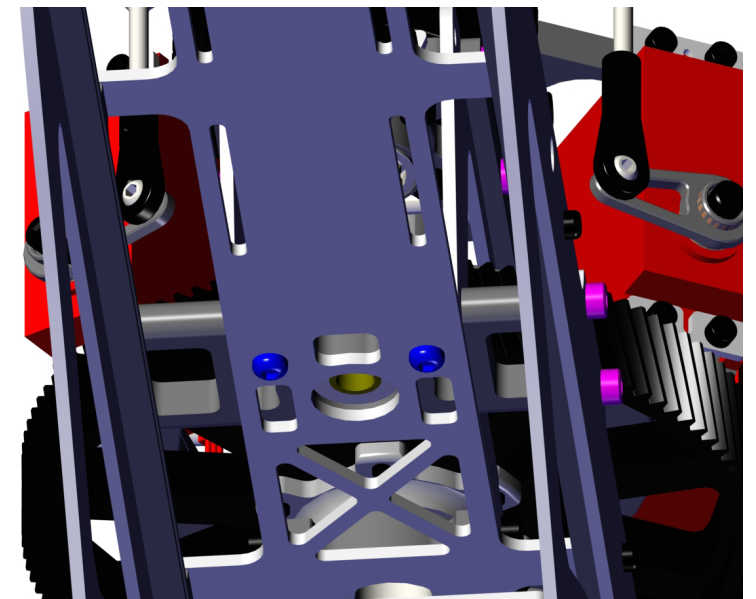
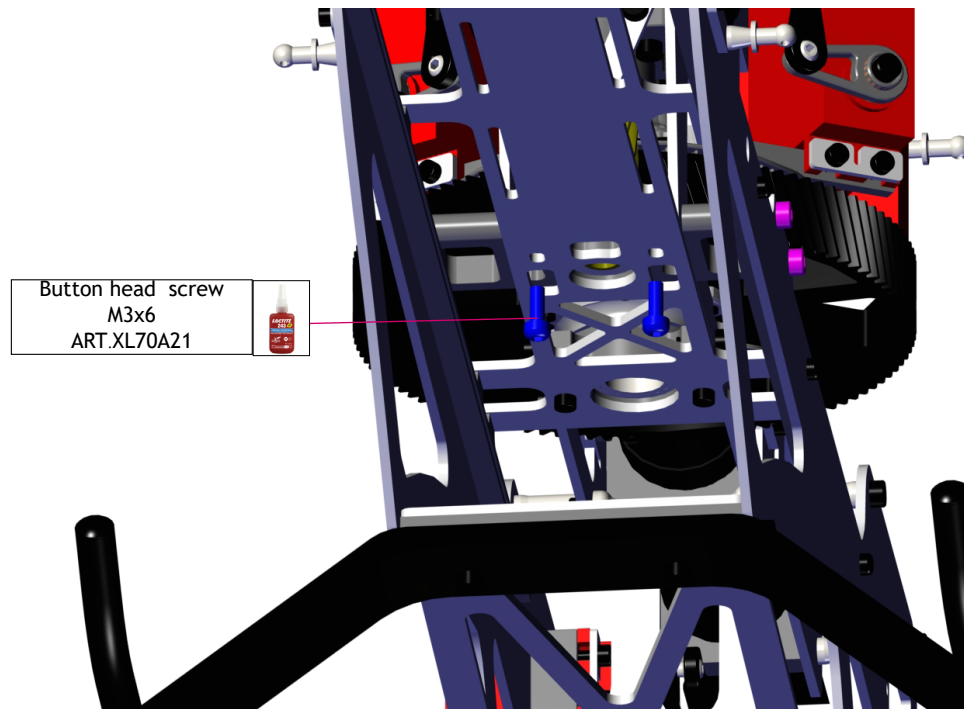


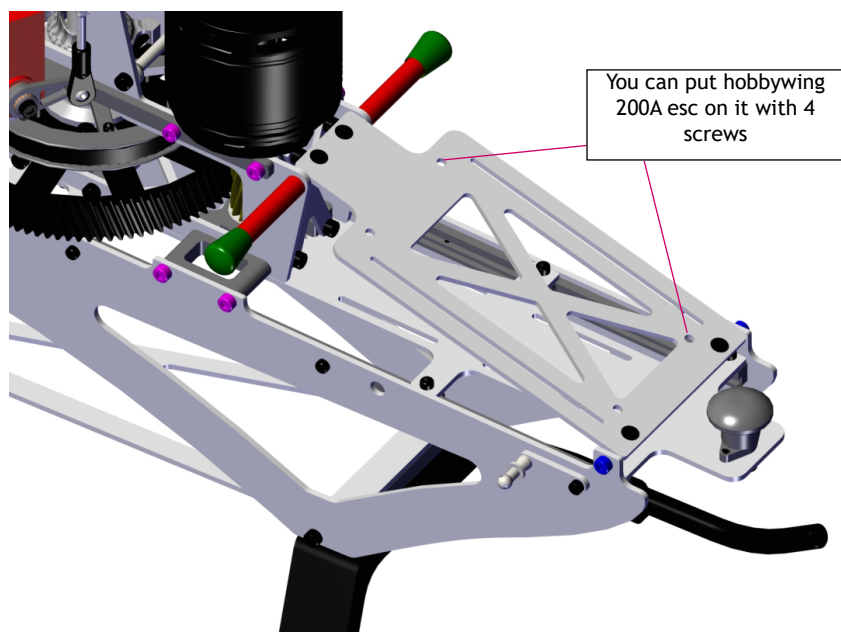
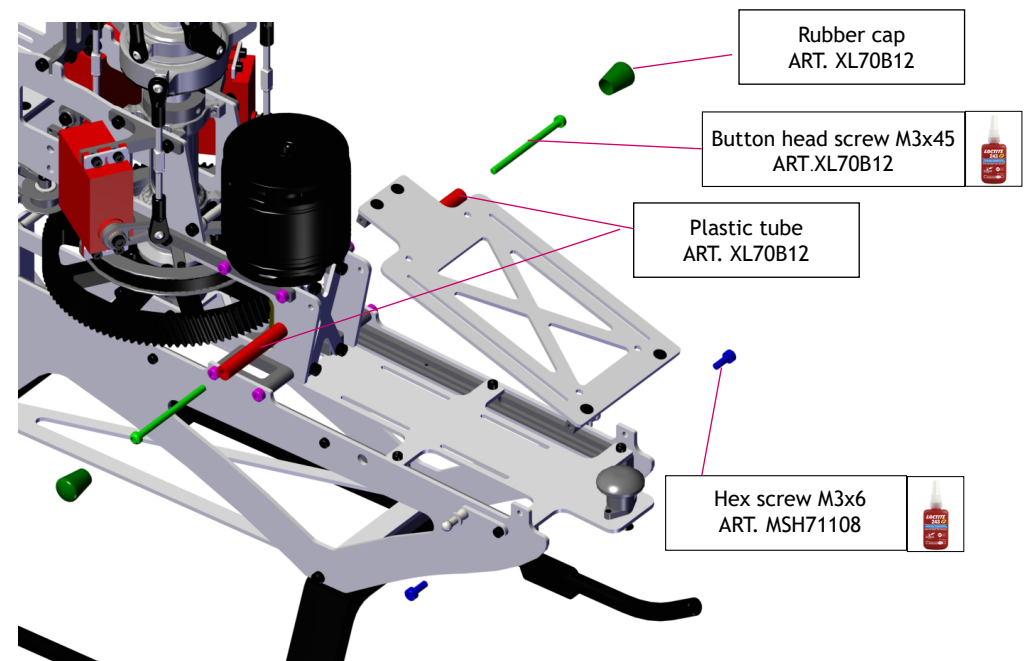
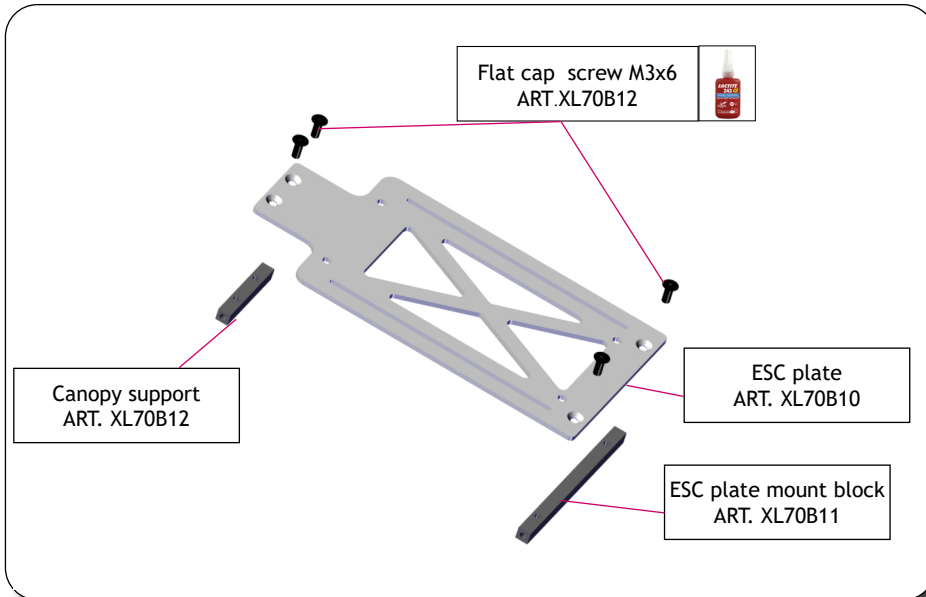
Hex screw M4x10
ART. MSH71116

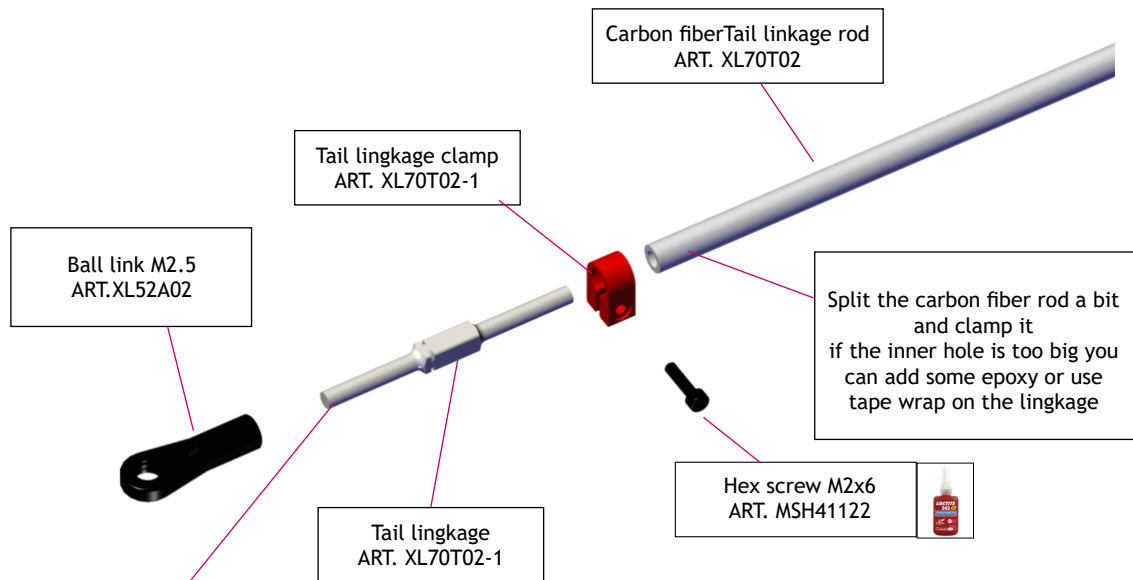




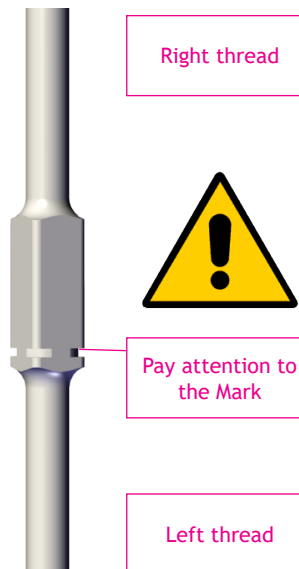
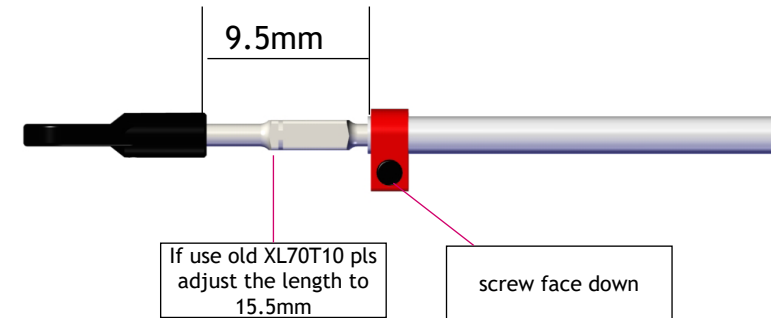


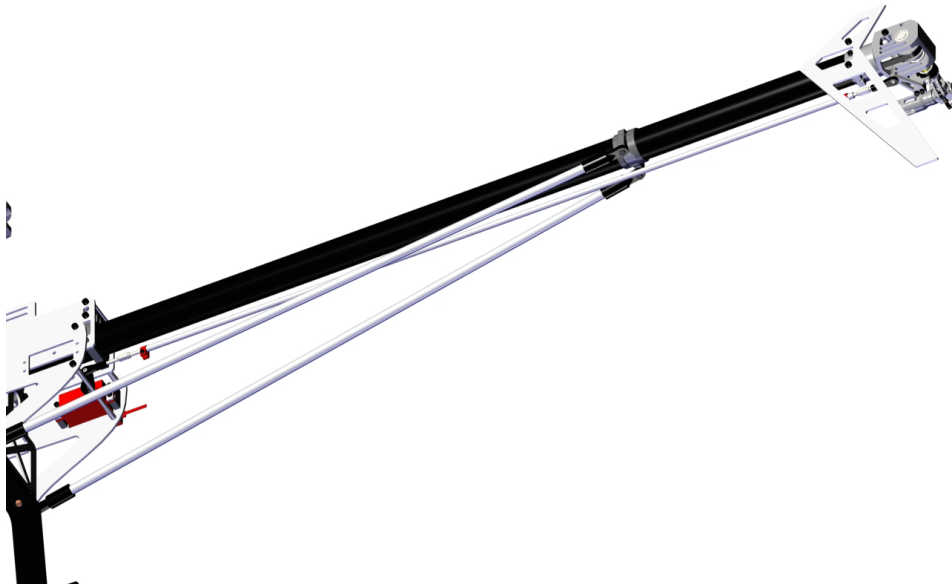




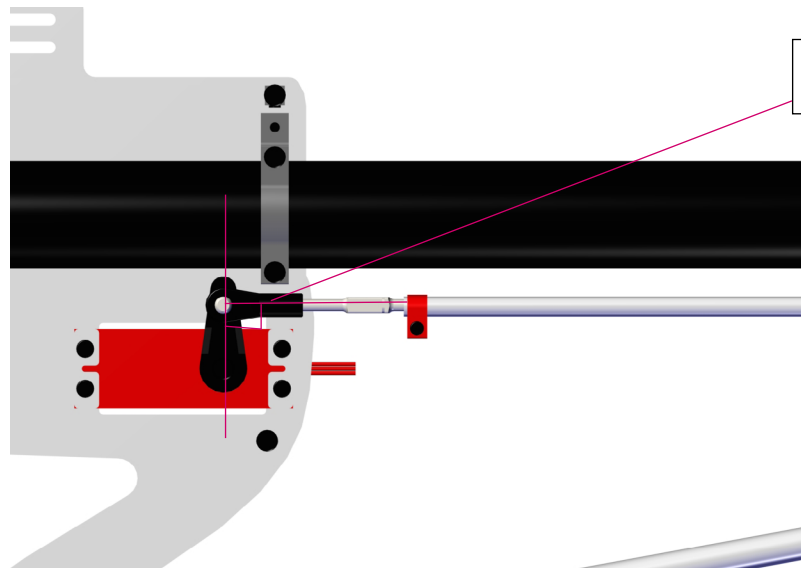


Servo rod lenght may differ slightly with different servo brand .
Keep left rudder range same as right range on the gyro setting

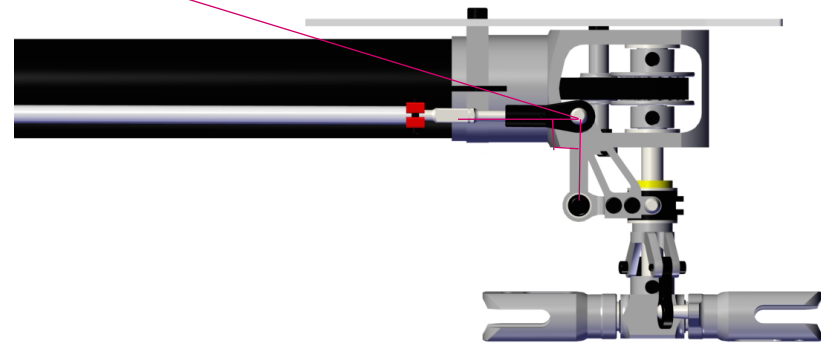


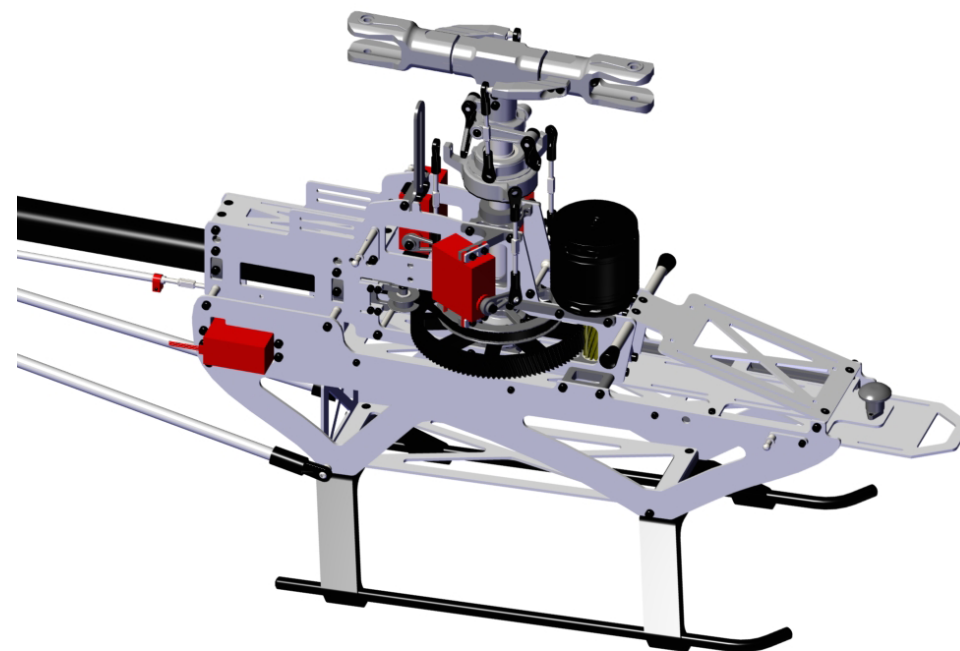
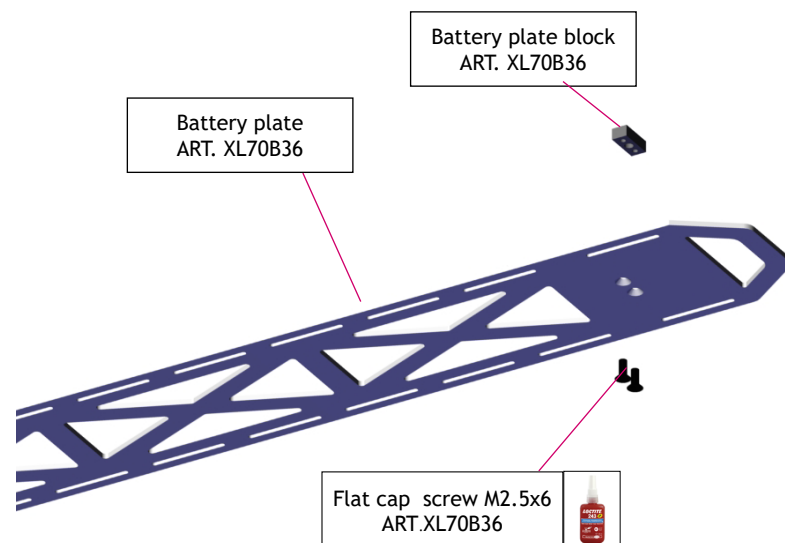


Tail control guide
ART. XL70T04



90degree when servo
center





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