



Length Without Main Blades:	1120mm
Overall Height:	302mm
Width:	196mm
Main Gear:	106T Mod 1
Pinion Gear:	12T (11-13T Optional)
Motor Shaft Diameter:	5-6mm (Length 20-38mm)
Main Gear Ratio:	8.83 (8.15 - 9.63 Optional)
Front Tail Pulley:	60T
Rear Tail Pulley:	13T
Tail Ratio:	4.615
Frame Weight With Blades:	1560g
Main Shaft Diameter:	10mm
Feathering Shaft Diameter:	8mm
Tail Boom Diameter:	27mm
Tail Belt Width:	6mm
Main Gear Thickness:	10mm (12mm Optional)
Battery Compartment Size:	290mm * 53.5mm * 60mm

Manual Release 1.2

Always Check <http://xlpower-rc.com> for the latest version of this manual

Always Follow These Rules For Safety



If you do not observe these instructions, you may be held liable for injury or damage.

Operate the helicopter in open areas with no people nearby. Do NOT operate the helicopter in these situations or areas:

- In places where children gather or people pass through
- In residential areas and parks
- Indoors and in limited space
- Extremely windy weather or when there is rain, snow, fog or other precipitation

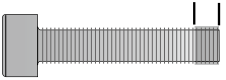
When operating and tuning/adjusting your model, keep the following in mind:

- ALWAYS check radio control system for proper operation before operating the model.
- ALWAYS check radio control system power levels before operating the model. Flying with low transmitter or receiver battery may cause loss of control.
- ALWAYS pay attention to your surroundings, and look out for others who are also operating a radio control model nearby.
- ALWAYS check that all screws are tight and not coming loose before flying the model. A single loose screw on the model may cause a major accident.
- ALWAYS perform necessary maintenance and preflight checks to keep the helicopter in a good and safe flying condition.

- NEVER use the same control frequency as someone else. Doing so may cause interference or loss of control of the model.
- NEVER continue flying if the model is displaying irregular behavior or noises. Bring the model to a halt immediately and disconnect the batteries.
- NEVER fly the model with known broken or defective parts. Always replace damaged parts before attempting to fly again.
- NEVER approach the model while the rotors are still spinning. Doing so can result in serious personal injury.
- NEVER touch the motor immediately after flying. It may be hot enough to cause moderate burns.

- Operate only outdoors and out of bystanders' reach, as the main rotor operates at high rpm and is very dangerous.
- While adjusting and testing, pilots and observers should stand at least 10 meters from the model.
- Novice pilots should be assisted by an experienced pilot and never fly alone!

Equipment Required for Assembly

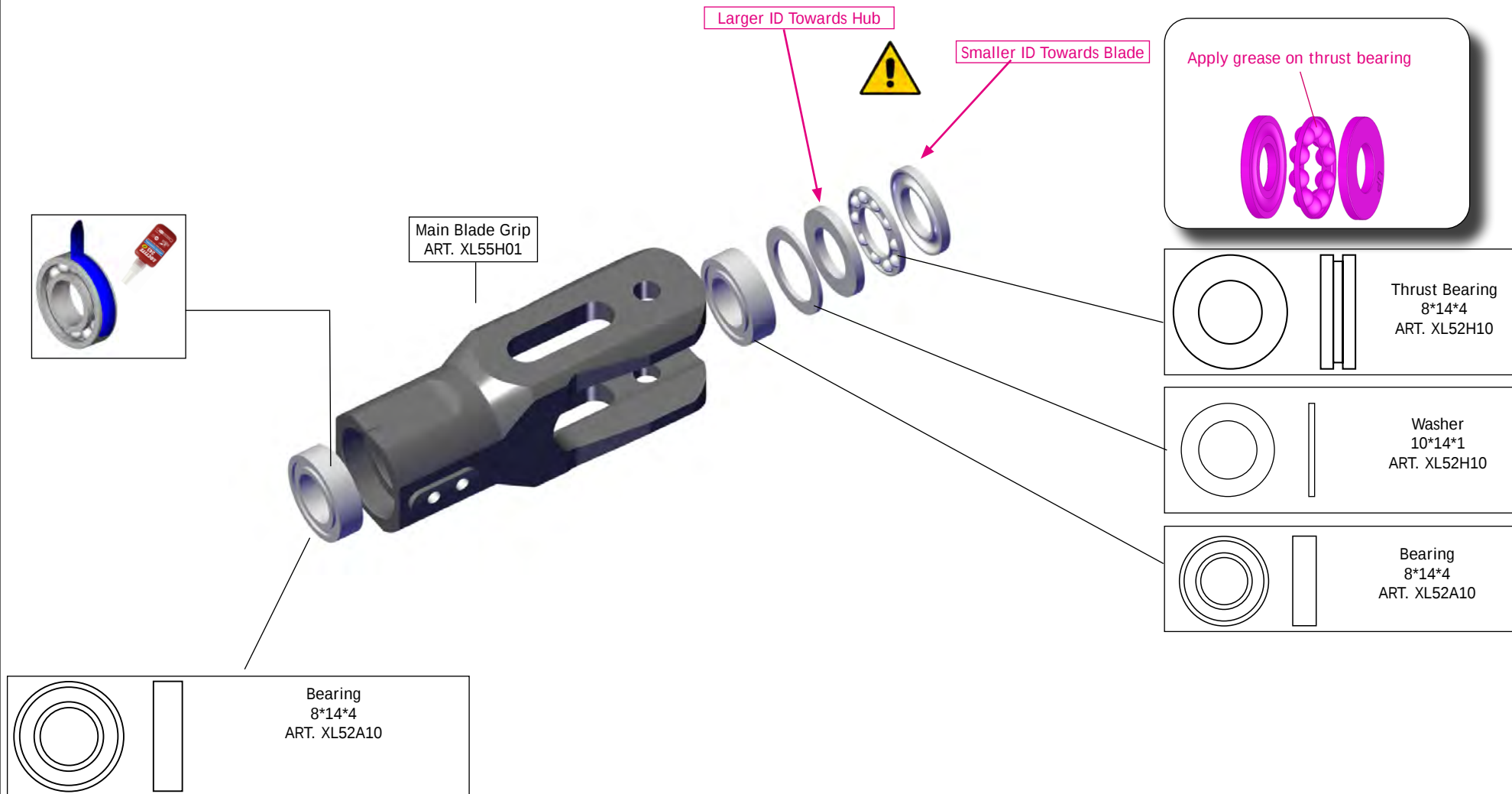
Swashplate Servos: Mini Size or Standard Size (Qty. 3)	ESC: 100-150LV (6s-8s) 80-120HV (12s)	Hex Screwdriver Sizes: 1.5mm 2mm 2.5mm * 2 3mm*2
Tail Servo Standard Size (Qty. 1)	Main Blades: Carbon Fiber 520mm - 580mm	 Where indicated, use Thread lock MEDIUM 
Trasmitter Receiver/Satellites Flybarless Unit	Tail blades: Carbon Fiber 80mm to 95mm	Thrust Bearing Grease
Battery Pack (Typical): LiPo 6s-8s 3300-5500mAh or LiPo 12s 2600-3300mAh	Motor: 4020-4035 900kv-1200kv (6s-8s) 4020-4035 500kv-550kv (12s)	Pitch Gauge

Bag1



Clean all screws and threads with isopropyl alcohol (90% or above) to ensure threadlocker bonds properly and prevent screws from loosening in flight

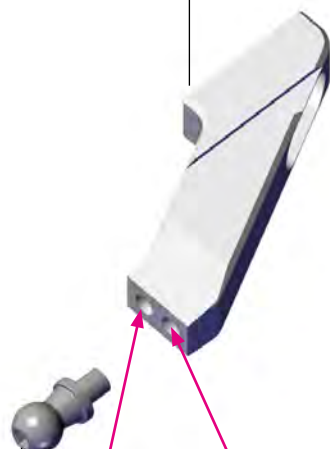
NIMBUS 550





Clean all screws and threads with isopropyl alcohol (90% or above) to ensure threadlocker bonds properly and prevent screws from loosening in flight

Main Blade Grip Arm
ART. XL55H02

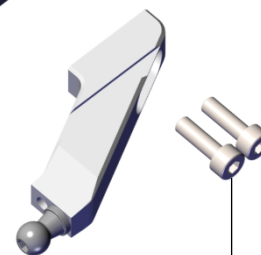


Inner hole for agile

Outer hole for stable



Ball 4.72mm M2.5*3
ART. XL52A01



Hex screw
M2.5*8
ART. MSH71111





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Head Dampeners



ART. XL52H14
Sport / 3D
(70° O-Ring)

Included in kit



ART. XL52H14-1
For both low HS and Hardcore 3D
(POM with 70° O-Ring)

Optional



POM Damper set
includes standard
washer to replace
special washer

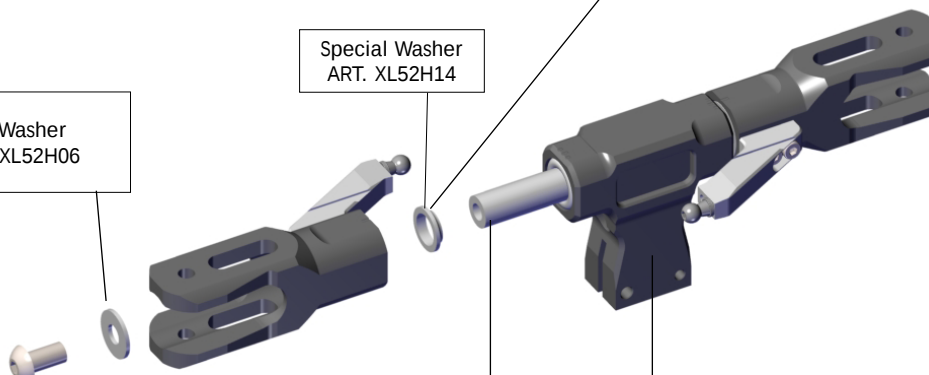


Pay attention to the
direction



Special Washer
ART. XL52H14

M5 Washer
ART. XL52H06

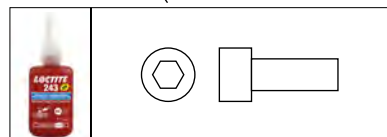


Spindle
ART. XL52H06

Main Rotor Hub
ART. XL52H01



Apply silicone grease on the
damper and Spindle

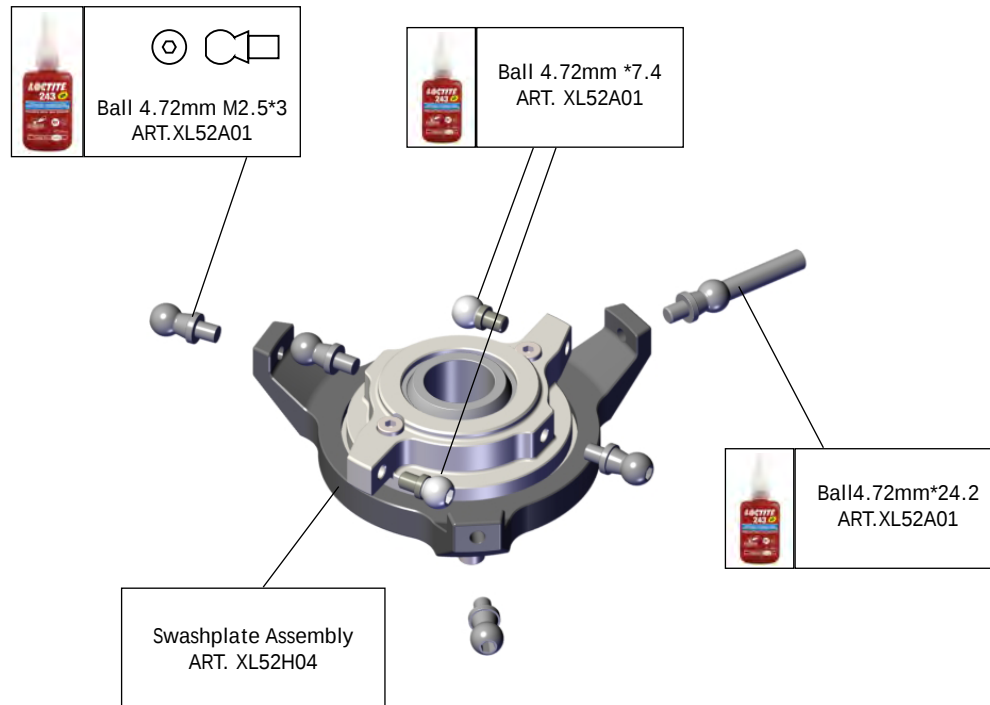


Bag1



Clean all screws and threads with isopropyl alcohol (90% or above) to ensure threadlocker bonds properly and prevent screws from loosening in flight

NIMBUS550



Bag1+Bag2

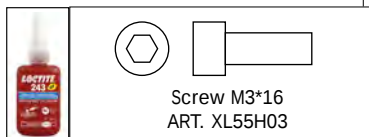


Clean all screws and threads with isopropyl alcohol (90% or above) to ensure threadlocker bonds properly and prevent screws from loosening in flight

NIMBUS 550



Short Hole Distance
Towards Rotorhead



Screw M3*16
ART. XL55H03



Nimbus Main Shaft
ART. XL55H03

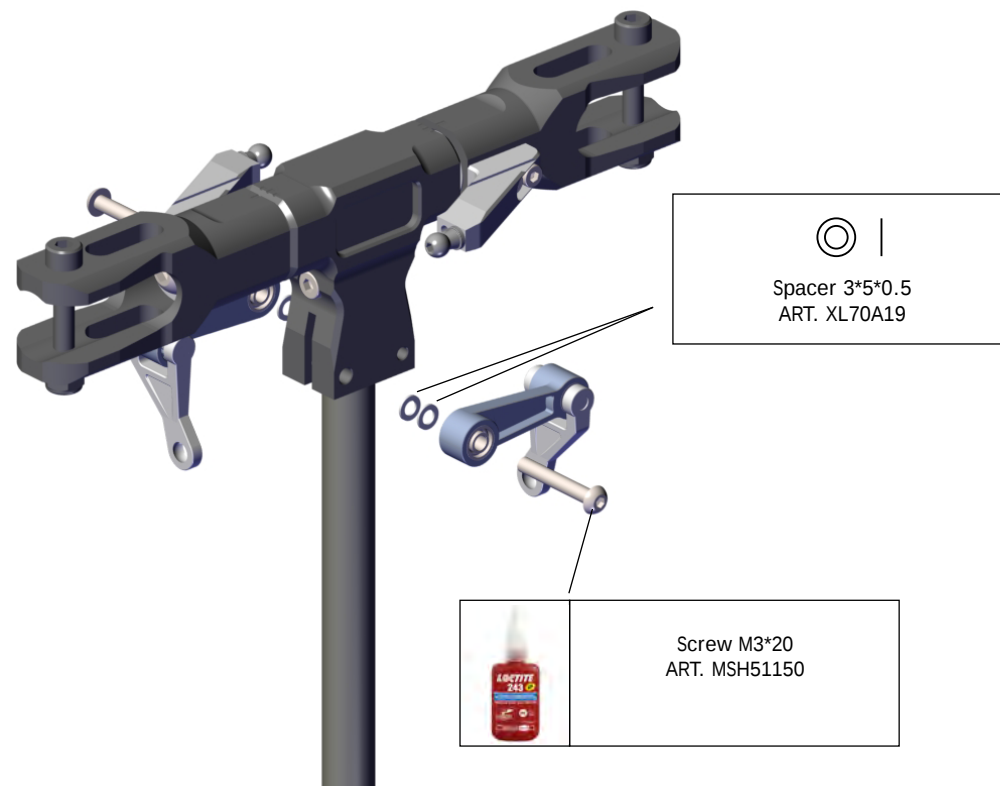
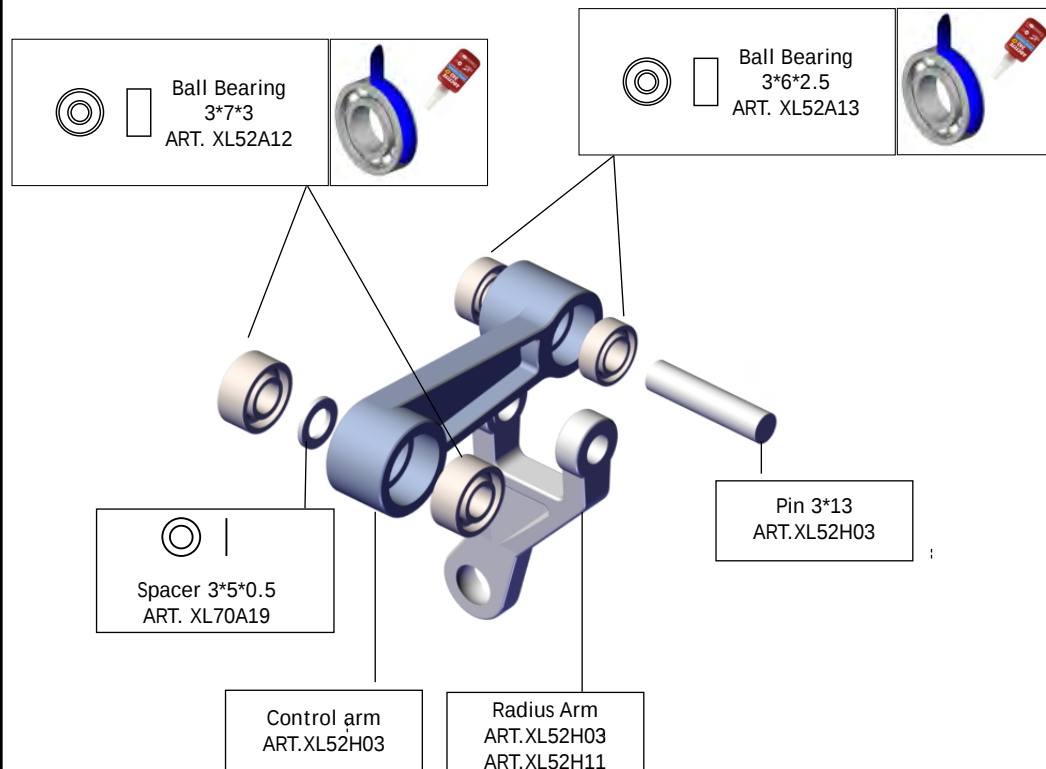


Bag1



Clean all screws and threads with isopropyl alcohol (90% or above) to ensure threadlocker bonds properly and prevent screws from loosening in flight

NIMBUS550



2X

Pre Assembled

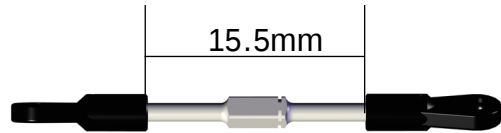


Bag1



Clean all screws and threads with isopropyl alcohol (90% or above) to ensure threadlocker bonds properly and prevent screws from loosening in flight

NIMBUS 550



Main rotor linkage
ART. XL52H12

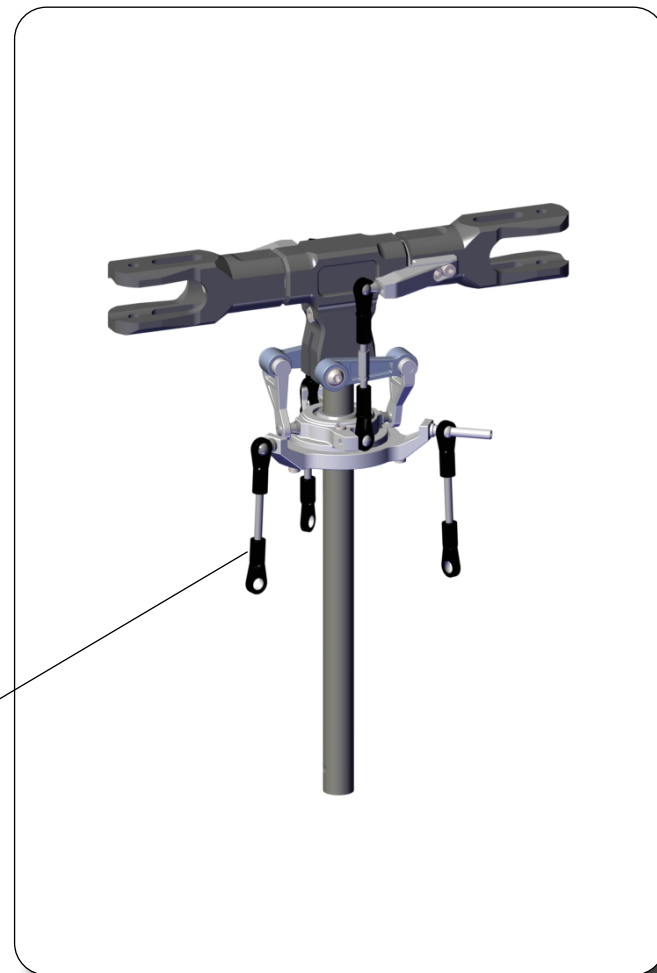


23.4mm (Mini servo)
15.7mm(Standard servo)



Servo rod
ART. XL52H13

Servo rod length may differ slightly
with different servo brands



Right thread



Pay attention to
the Mark

Left thread

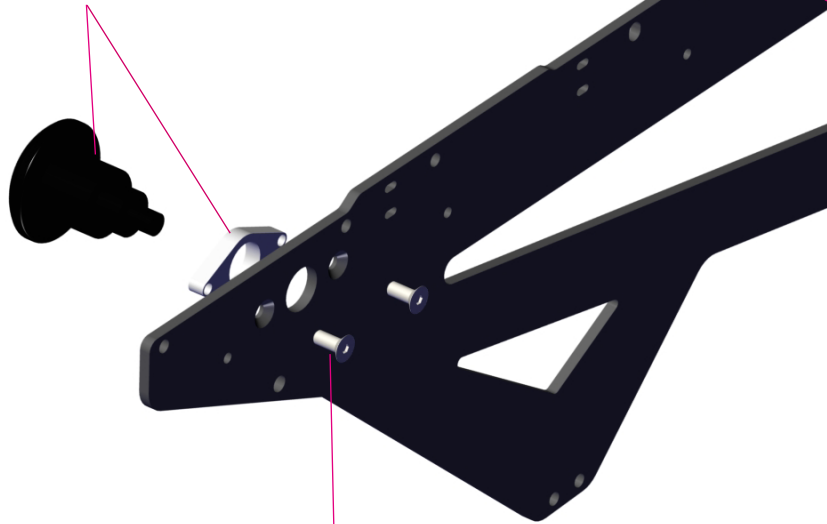
Bag3+Bag4



Clean all screws and threads with isopropyl alcohol (90% or above) to ensure threadlocker bonds properly and prevent screws from loosening in flight

NIMBUS550

Quick Release Battery System
ART. XL55B03



Lower Carbon Frame
ART.XL55B02

Flat head screw M2.5*6
ART. XL55A02

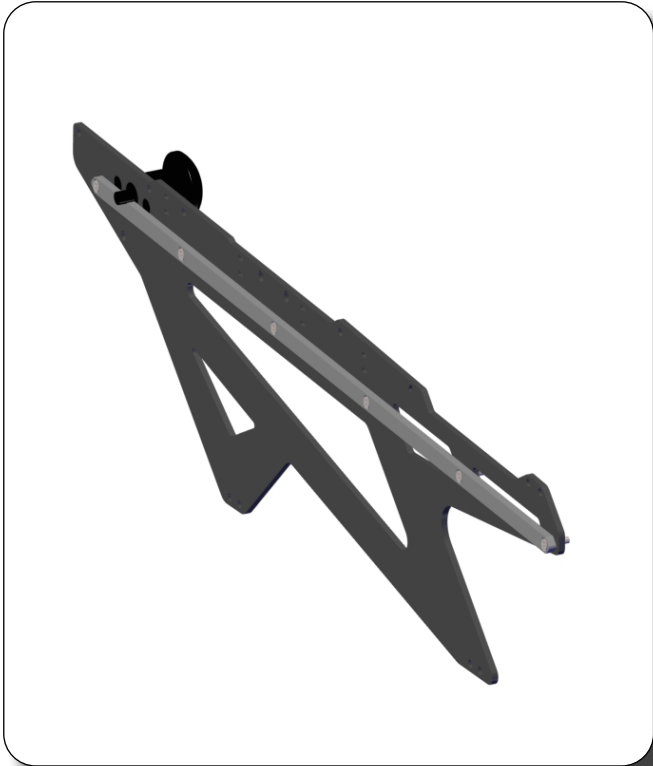
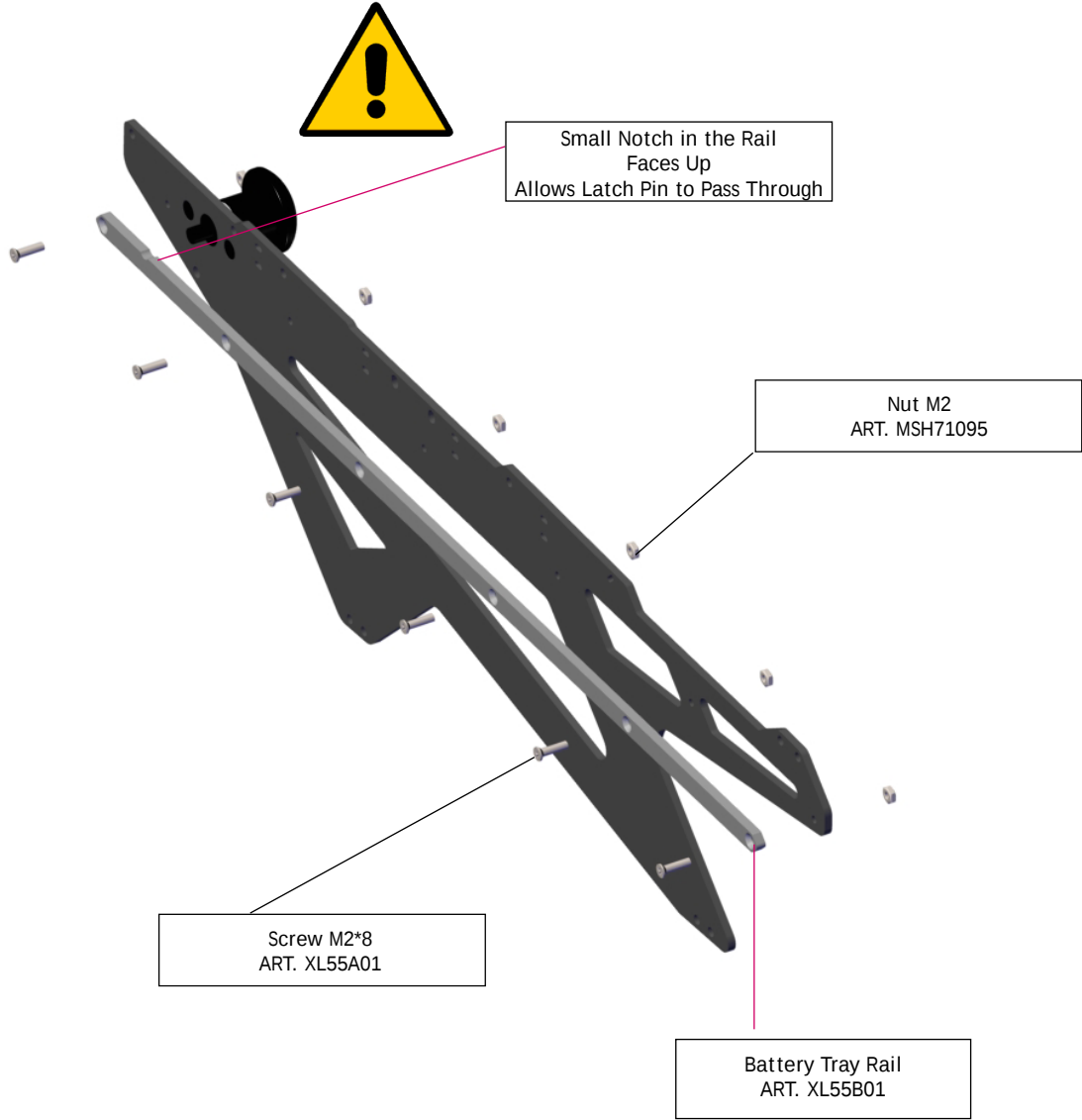


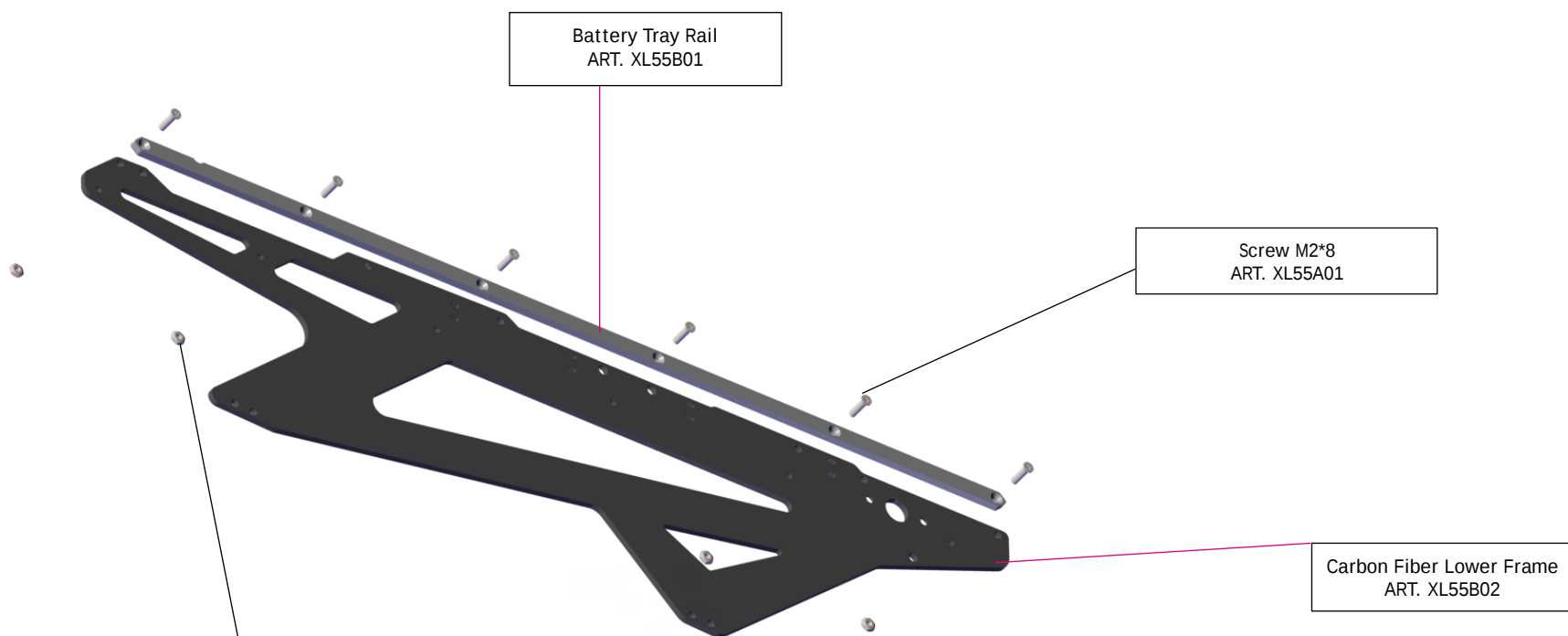
Bag3+Bag4



Clean all screws and threads with isopropyl alcohol (90% or above) to ensure threadlocker bonds properly and prevent screws from loosening in flight

NIMBUS550



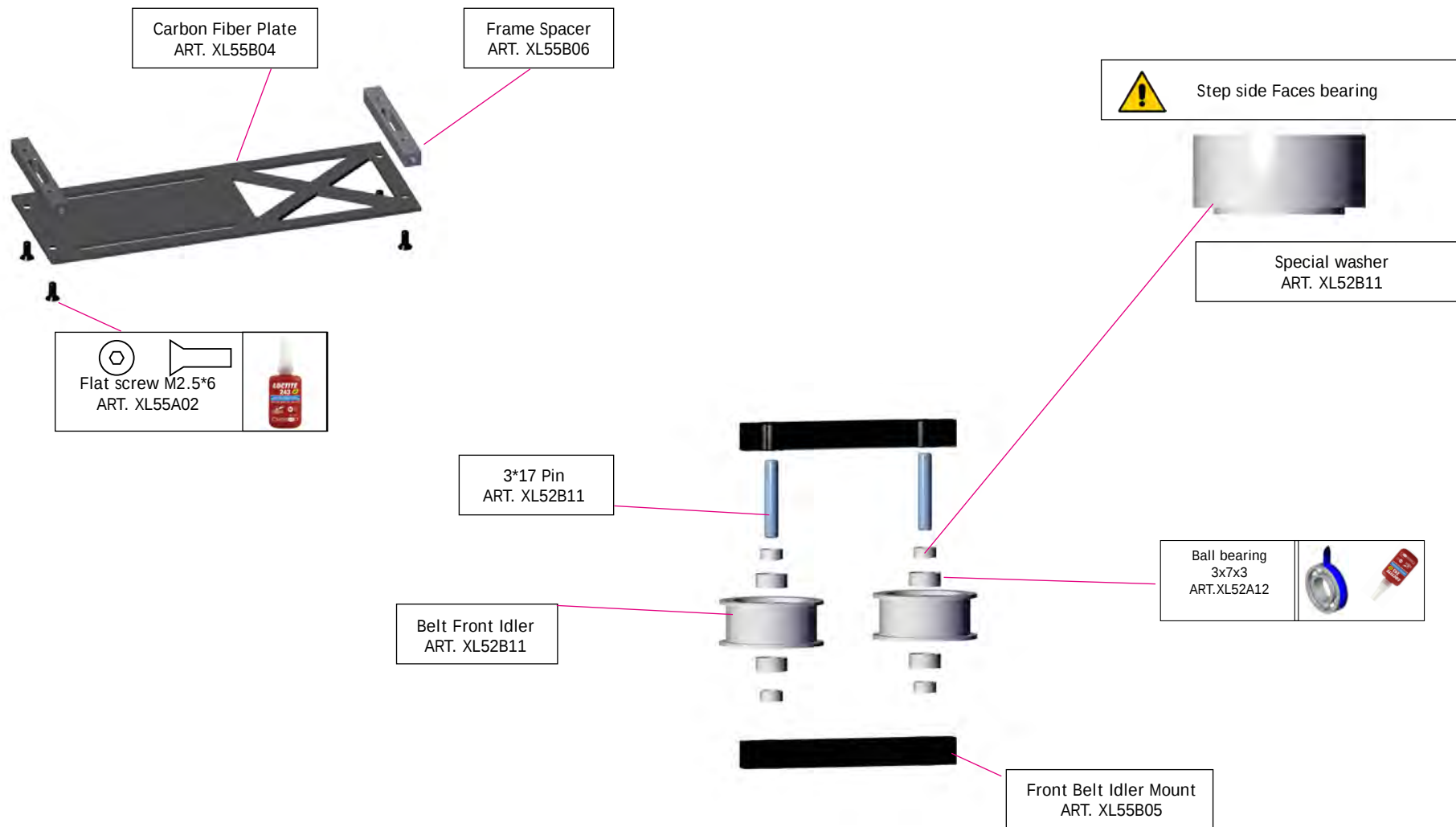


Bag3+Bag4



Clean all screws and threads with isopropyl alcohol (90% or above) to ensure threadlocker bonds properly and prevent screws from loosening in flight

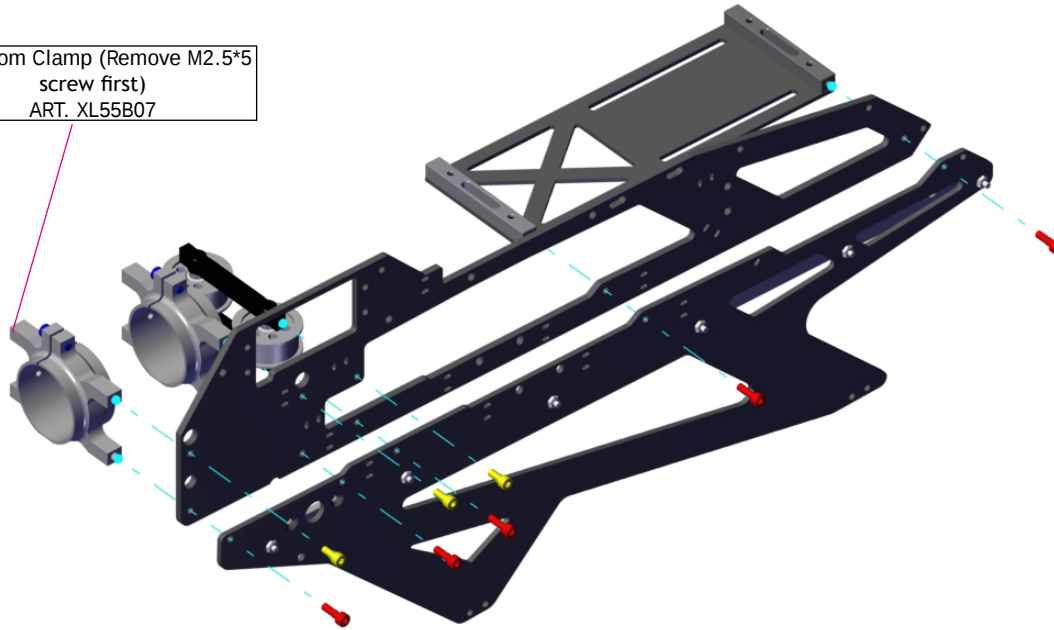
NIMBUS550



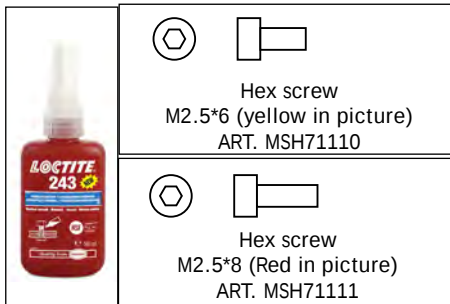


Clean all screws and threads with isopropyl alcohol (90% or above) to ensure threadlocker bonds properly and prevent screws from loosening in flight

Tail Boom Clamp (Remove M2.5*5 screw first)
ART. XL55B07

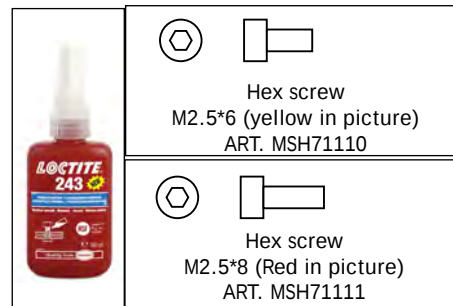
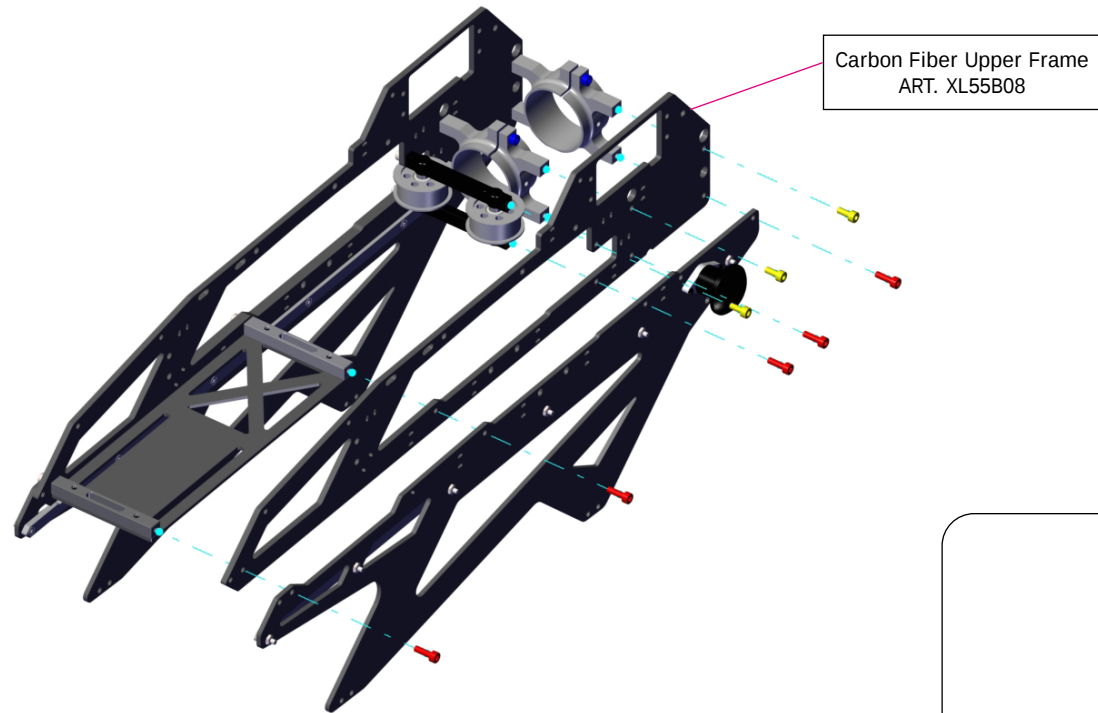


View from back side





Clean all screws and threads with isopropyl alcohol (90% or above) to ensure threadlocker bonds properly and prevent screws from loosening in flight





Clean all screws and threads with isopropyl alcohol (90% or above) to ensure threadlocker bonds properly and prevent screws from loosening in flight



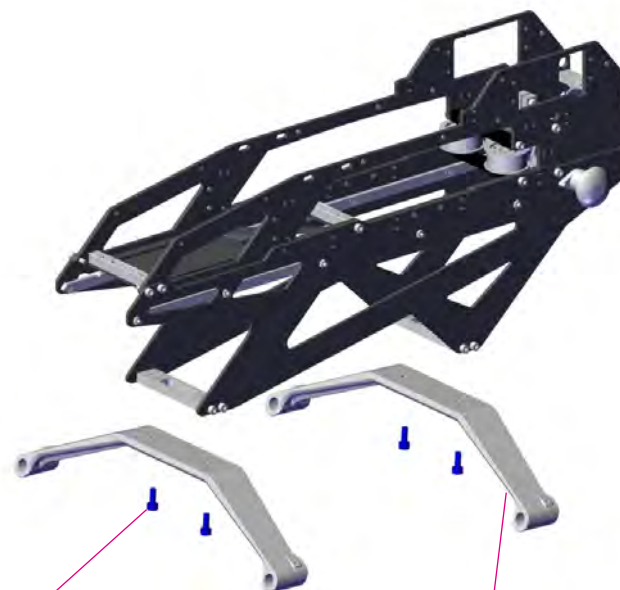
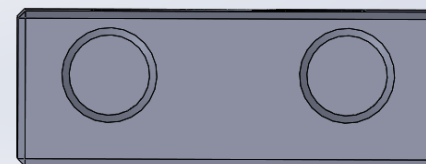
Landing Gear Mount
ART. XL55B09



Hex screw M2.5*6
ART.MSH71110



View from side



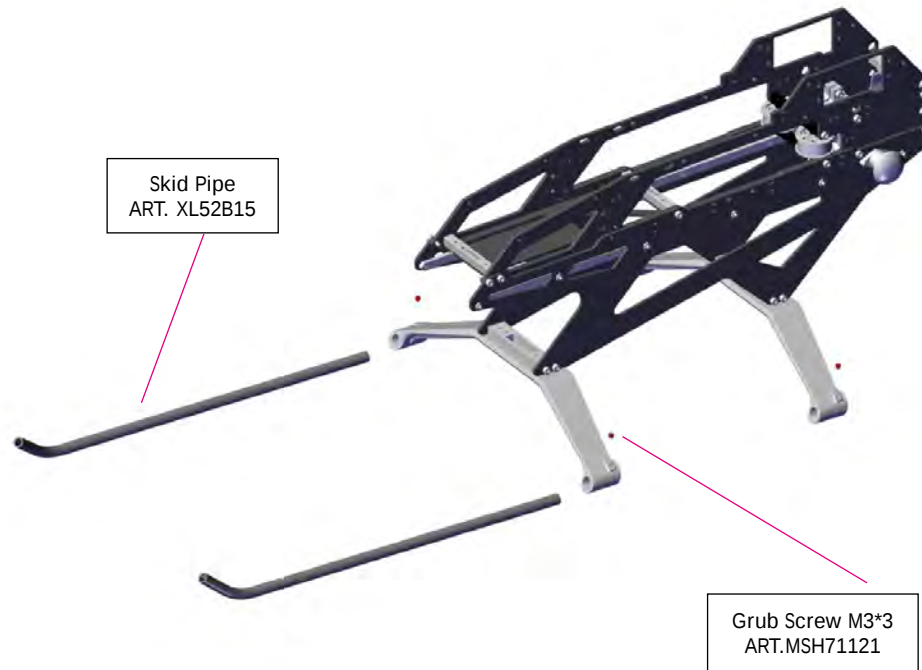
Hex screw M3*8
ART.MSH71109



Landing Gear Strut
ART. XL55B10
Option: XL55B10-1



Clean all screws and threads with isopropyl alcohol (90% or above) to ensure threadlocker bonds properly and prevent screws from loosening in flight

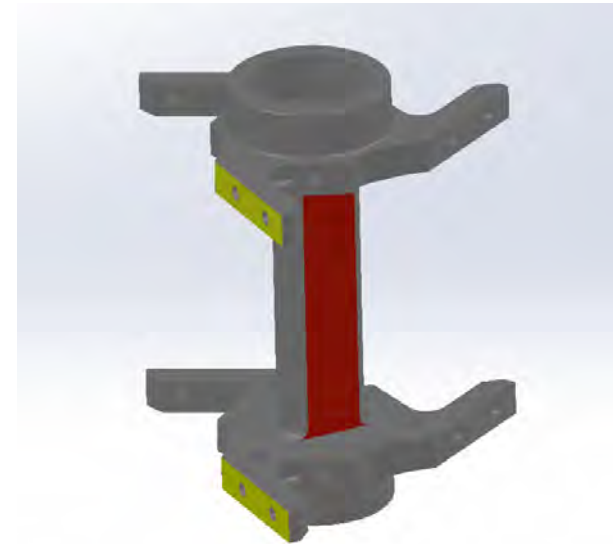
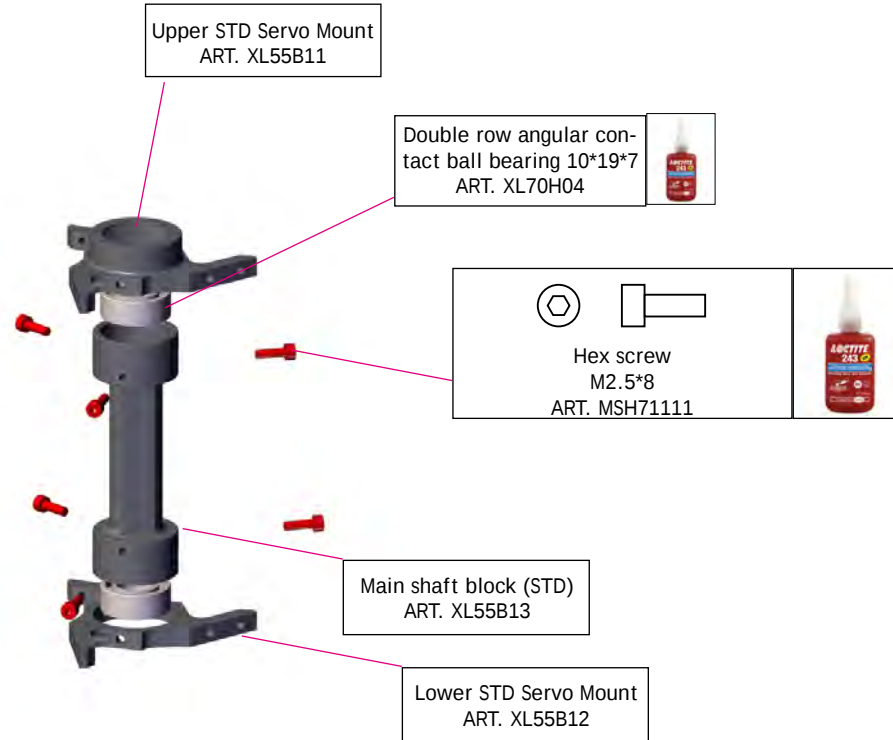


Bag6 (XL55V2K02)

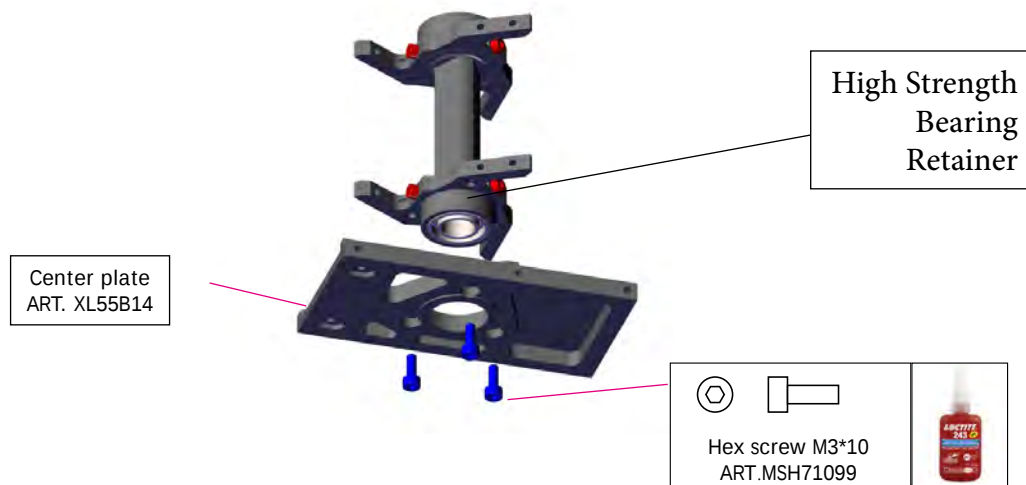


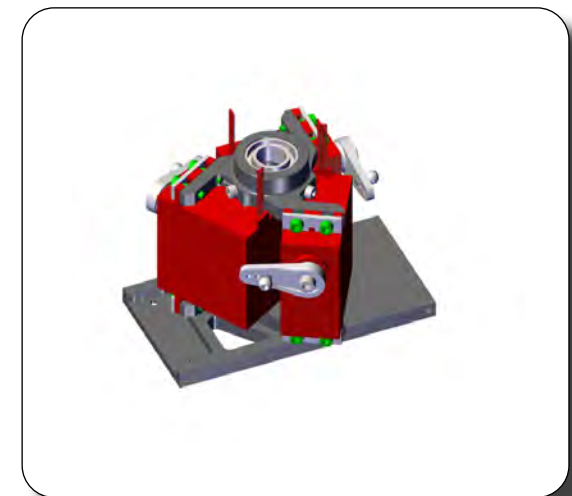
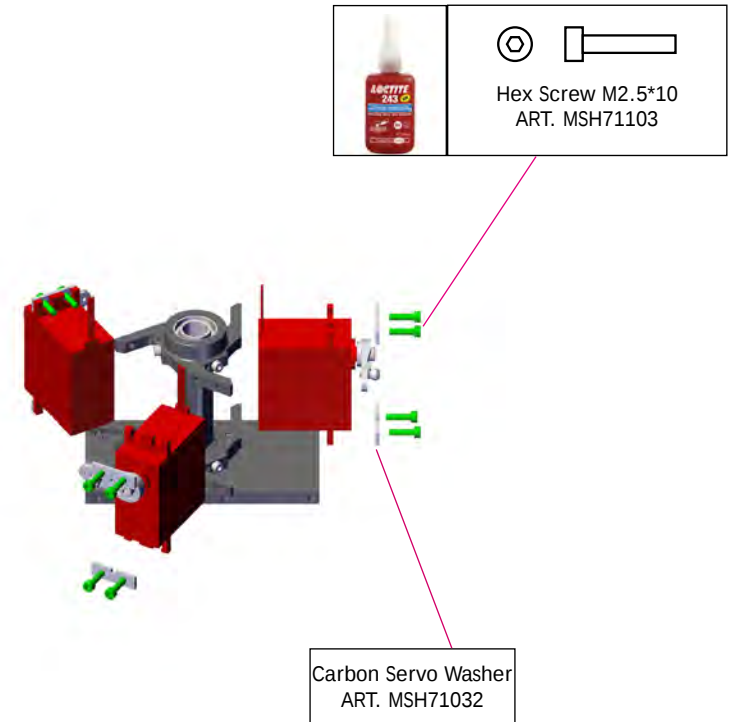
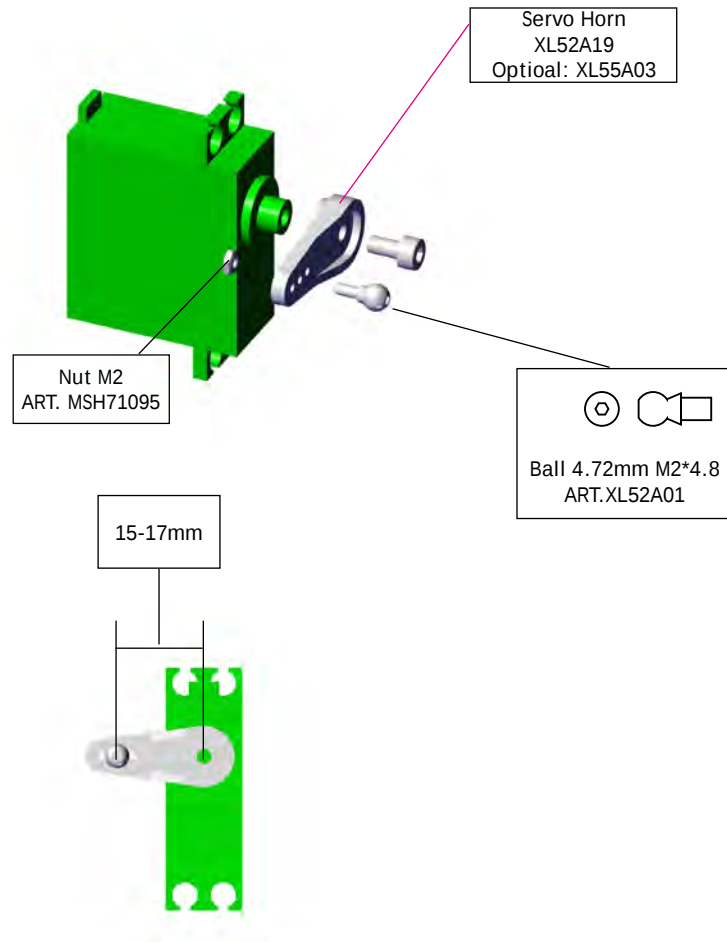
Clean all screws and threads with isopropyl alcohol (90% or above) to ensure threadlocker bonds properly and prevent screws from loosening in flight

NIMBUS550



Yellow surfaces should be parallel to each other and perpendicular to red surface to allow servo to fit properly without binding





Bag6 (XL55V2K01)



Clean all screws and threads with isopropyl alcohol (90% or above) to ensure threadlocker bonds properly and prevent screws from loosening in flight

NIMBUS550

Upper Mini Servo Mount
ART. XL55B11-1

Double row angular contact ball bearing 10*19*7
ART. XL70H04



Hex screw
M2.5*8
ART. MSH71111

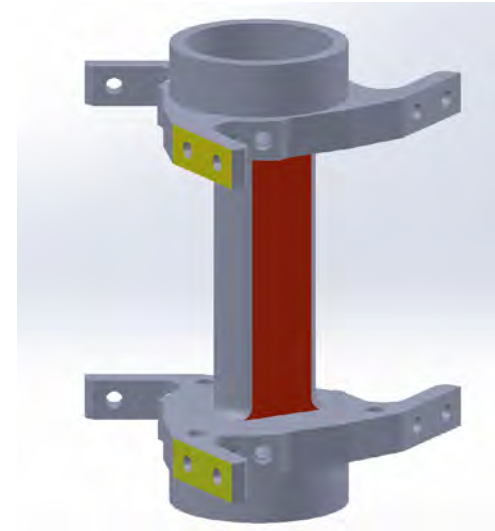


Main shaft block (Mini)
ART. XL55B13-1

Lower Mini Servo Mount
ART. XL55B12-1



Yellow surfaces should be parallel to each other and perpendicular to red surface to allow servo to fit properly without binding

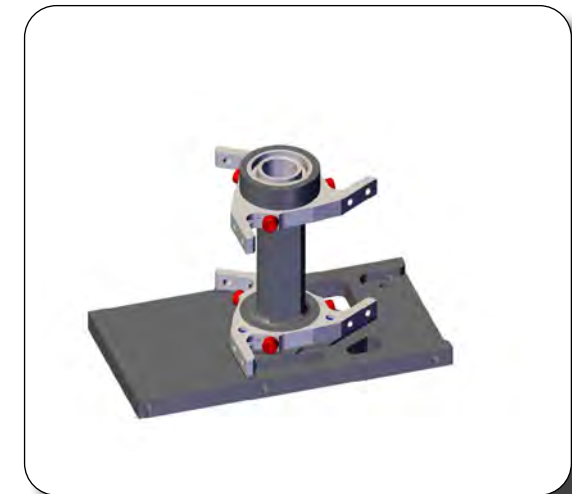


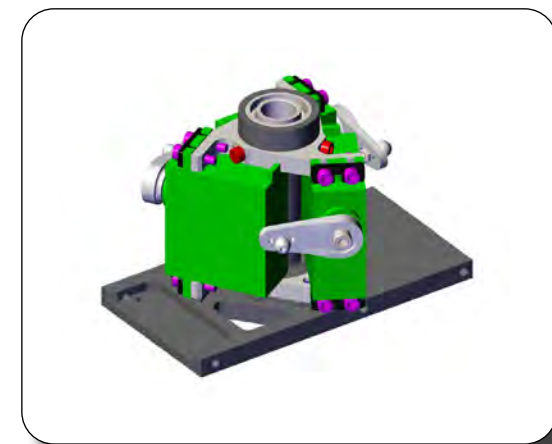
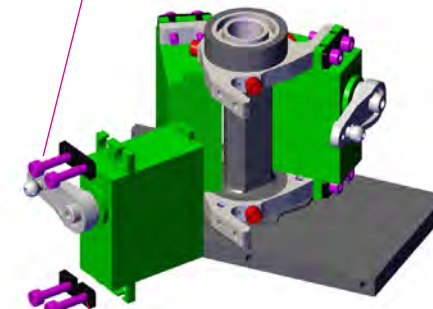
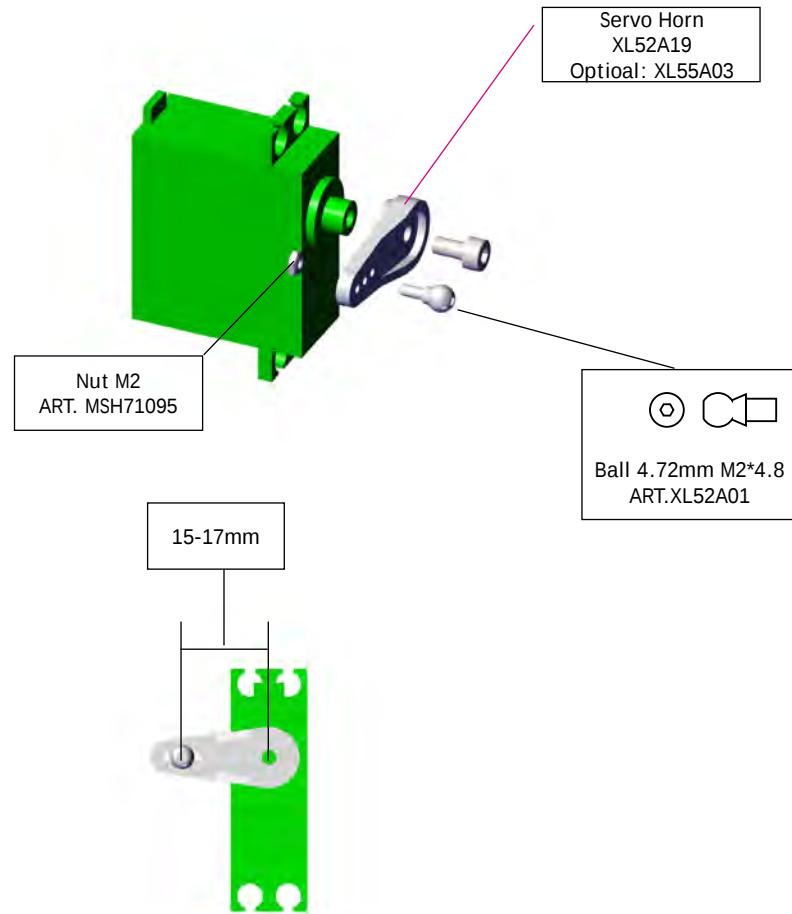
Center plate
ART. XL55B14

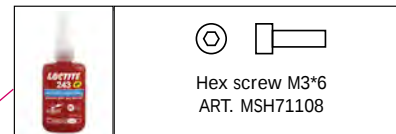
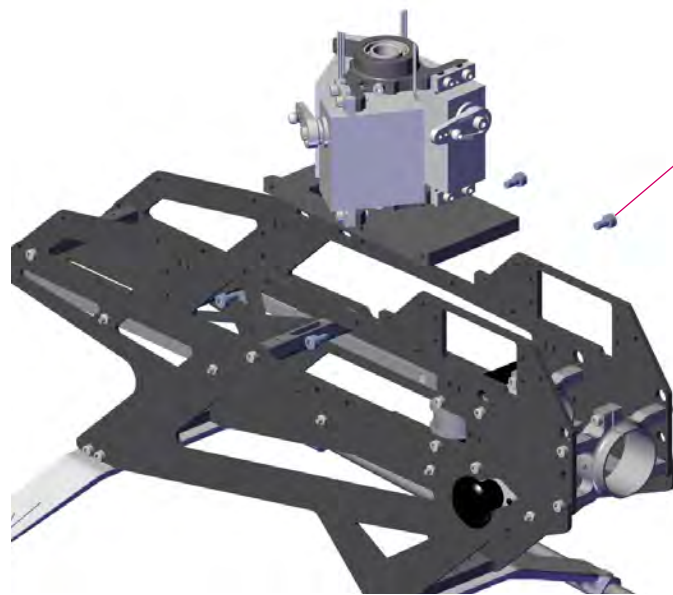
High Strength
Bearing
Retainer



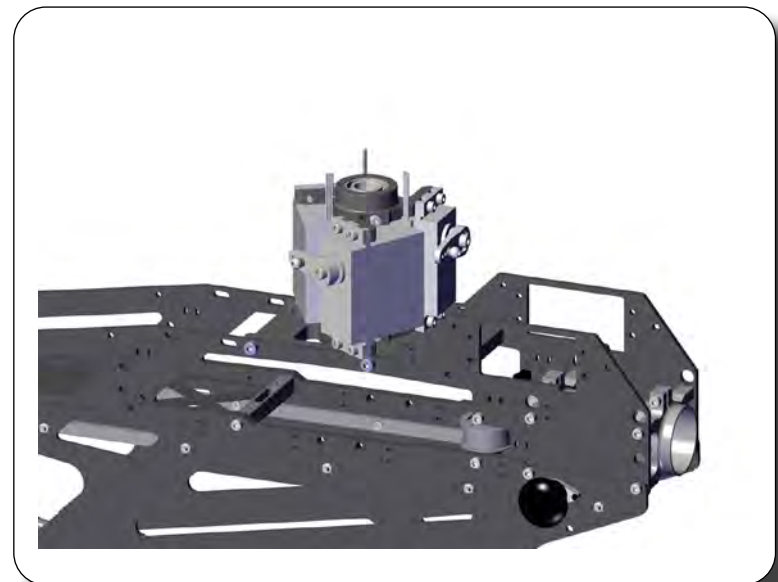
Hex screw M3*10
ART. MSH71099





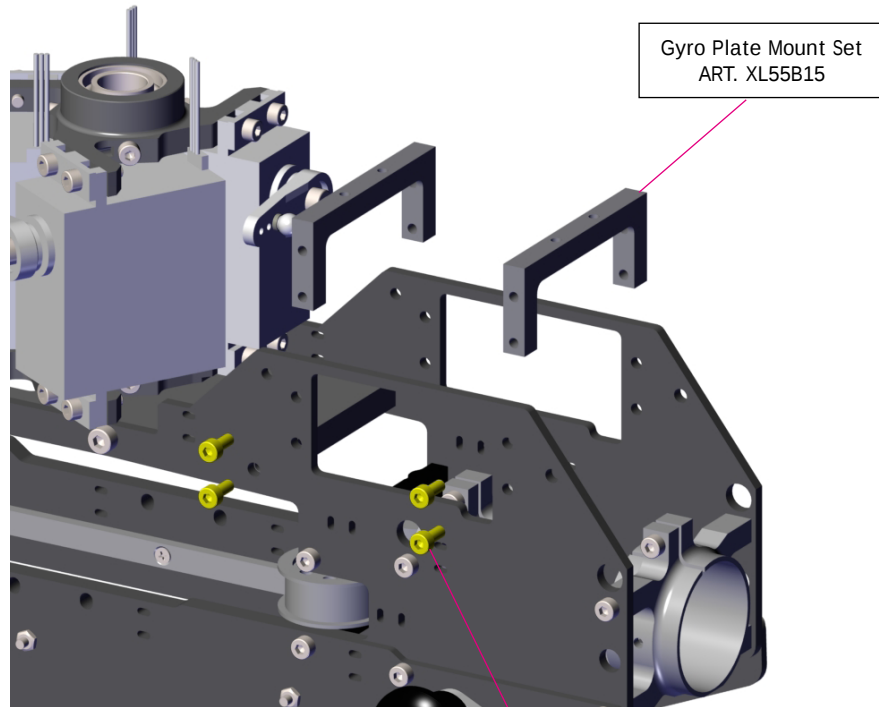


Hex screw M3*6
ART. MSH71108





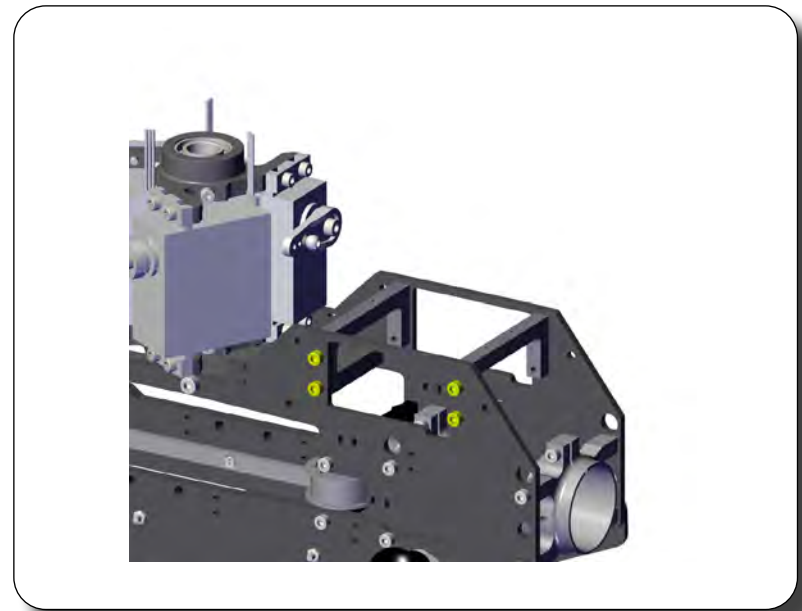
Clean all screws and threads with isopropyl alcohol (90% or above) to ensure threadlocker bonds properly and prevent screws from loosening in flight



Gyro Plate Mount Set
ART. XL55B15



Hex screw M2.5*6
ART.MSH71110





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Anti-Rotation Bracket
ART. XL55B17

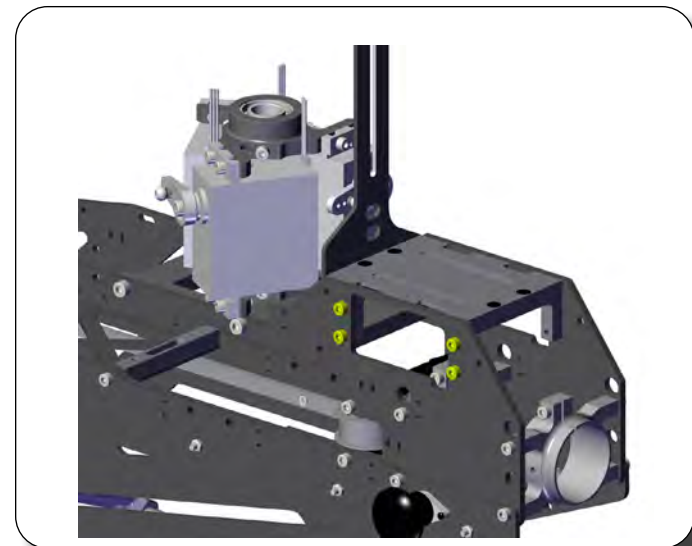
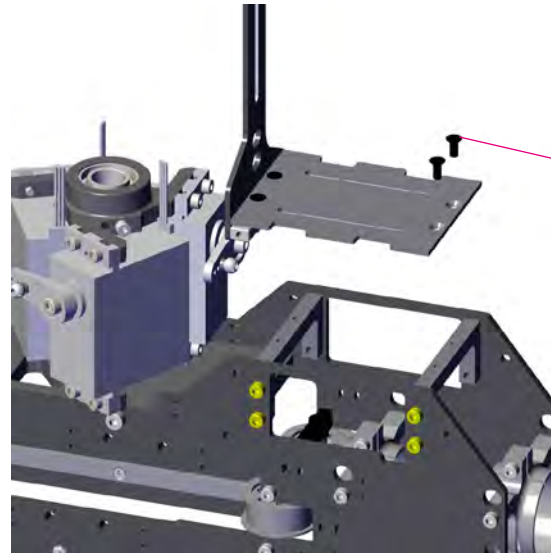
Gyro Plate
ART. XL55B16

Anti-Rotation Bracket Mount
ART. XL52B08

Flat screw M2.5*6
ART. XL55A02

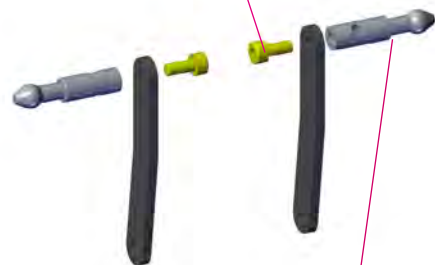
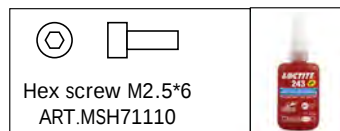


Flat screw M2.5*6
ART. XL55A02

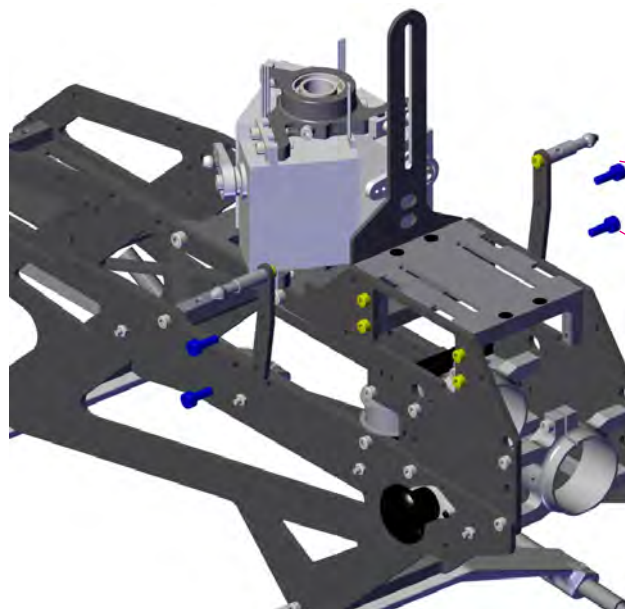
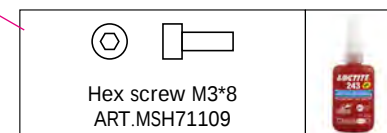
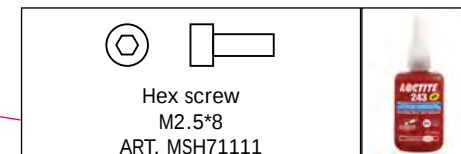




Clean all screws and threads with isopropyl alcohol (90% or above) to ensure threadlocker bonds properly and prevent screws from loosening in flight



Canopy Mount (Rear)
ART. XL55B18



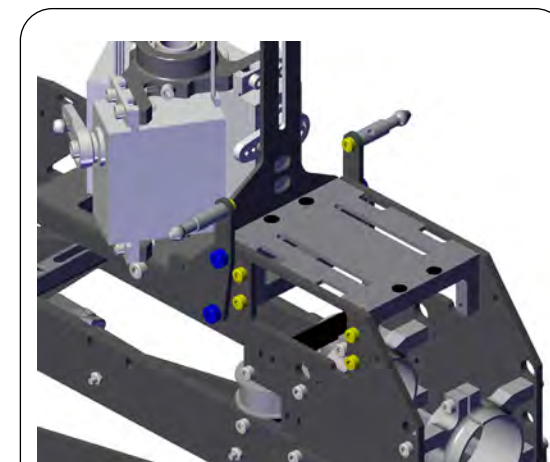
Note the Orientation



M3 Hole Down
Towards Front
of Heli

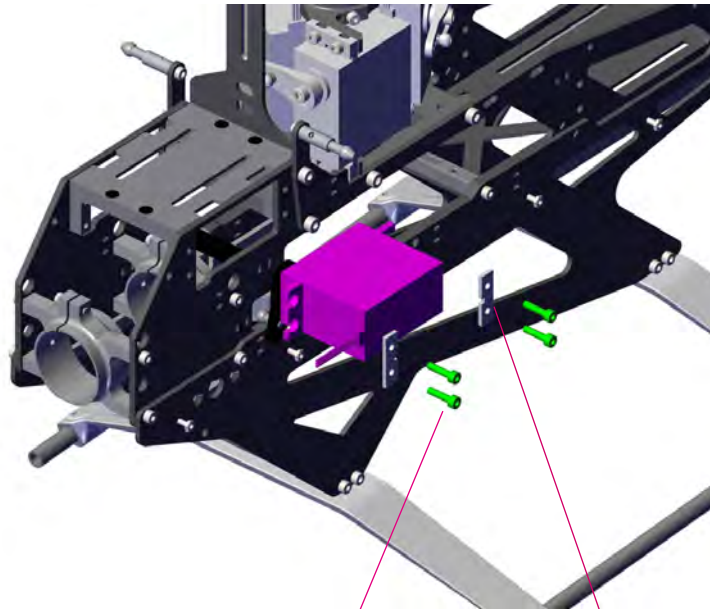


M2.5 Hole Up
Towards Rear
of Heli

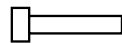




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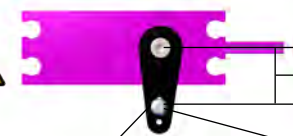


Hex Screw M2.5*10
ART. MSH71103



Carbon Servo Washer
ART. MSH71032

Front

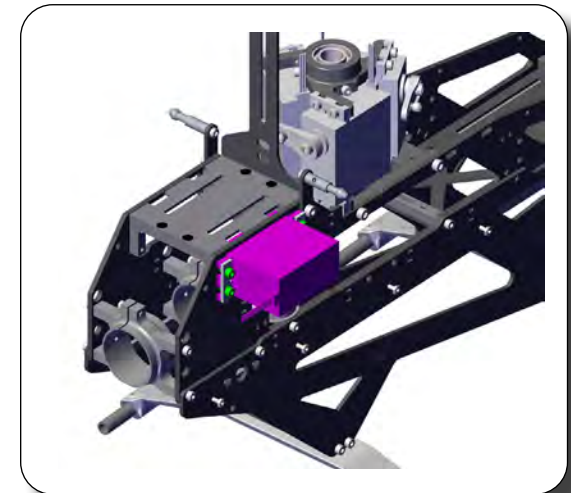


10-14mm
Depends on servo resolution.
Choose hole for optimal
endpoints in FBL

Nut M2
ART. MSH71095

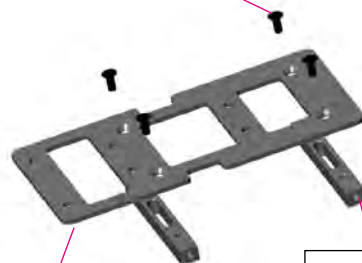
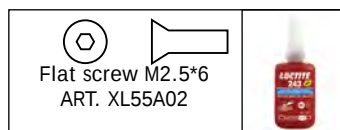


Ball 4.72mm M2*4.8
ART. XL52A01



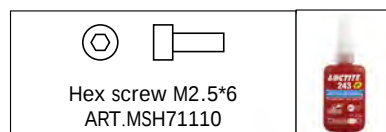
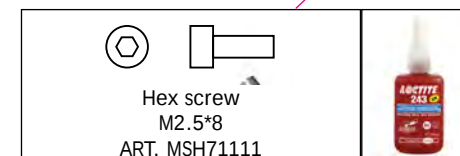
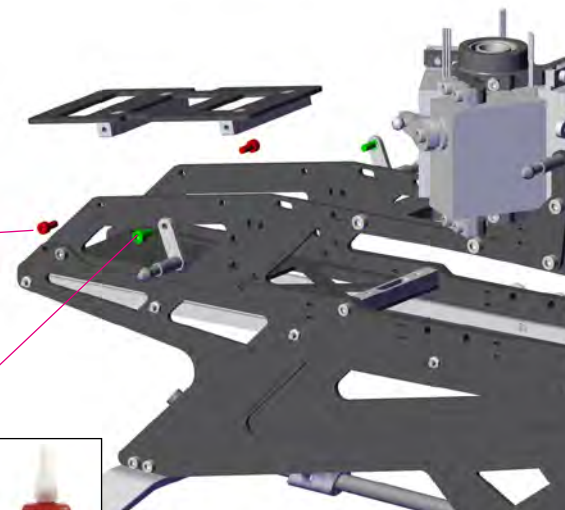
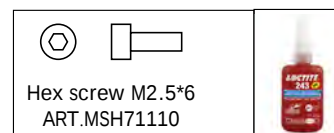


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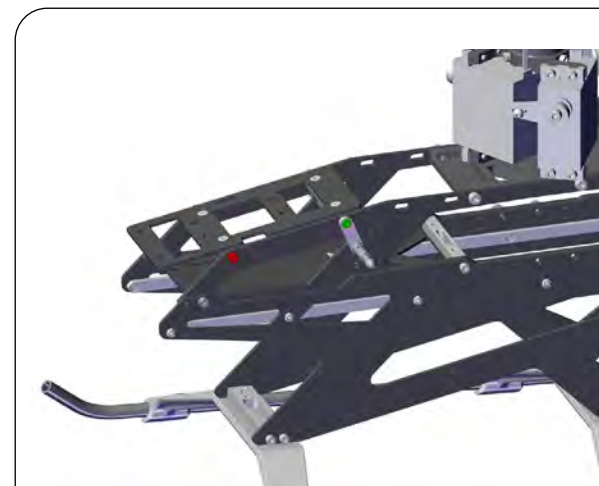


ESC Plate Mount Set
ART. XL55B06

ESC Plate
ART. XL55B20

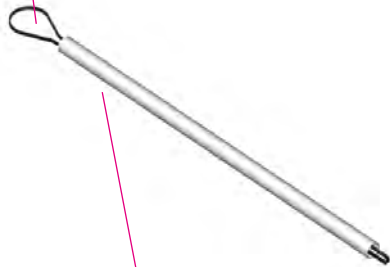


Canopy Mount (Front)
ART. XL55B19





Tail Belt 550
ART. XL52T24



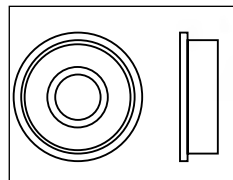
Tail Boom
ART. XL55T01

Button head screw M3*5
ART.MSH71249

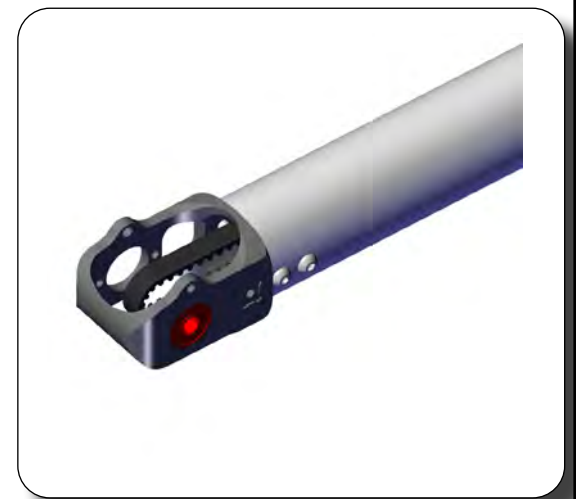


Tail Case
ART. XL55T02

Ball Bearing
5x13x4 Flanged
ART.XL55A04



High Strength
Bearing
Retainer





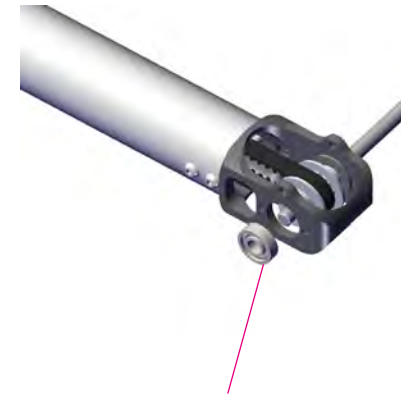
Clean all screws and threads with isopropyl alcohol (90% or above) to ensure threadlocker bonds properly and prevent screws from loosening in flight

Tighten securely, and ensure the grub screw engages with the small recess in the tail shaft

Grub screw M3*3
ART.MSH41133



Pay attention to shaft orientation

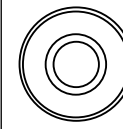


Tail Pulley 13T
ART. XL52T16

Tail Shaft(if you have new tapered tail shaft pls check next page)
ART. XL52T15



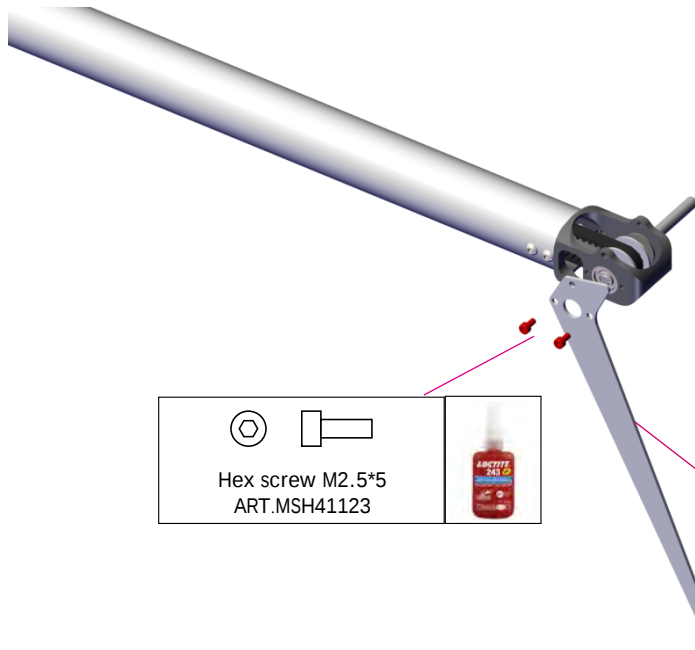
High Strength
Bearing
Retainer



Ball bearing
5*13*4
ART. XL55A04



Add 5*8*0.1 washer
(XL55A08) as needed for
adjusting play



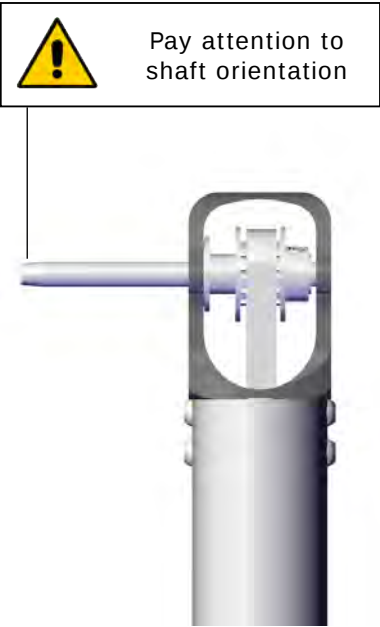
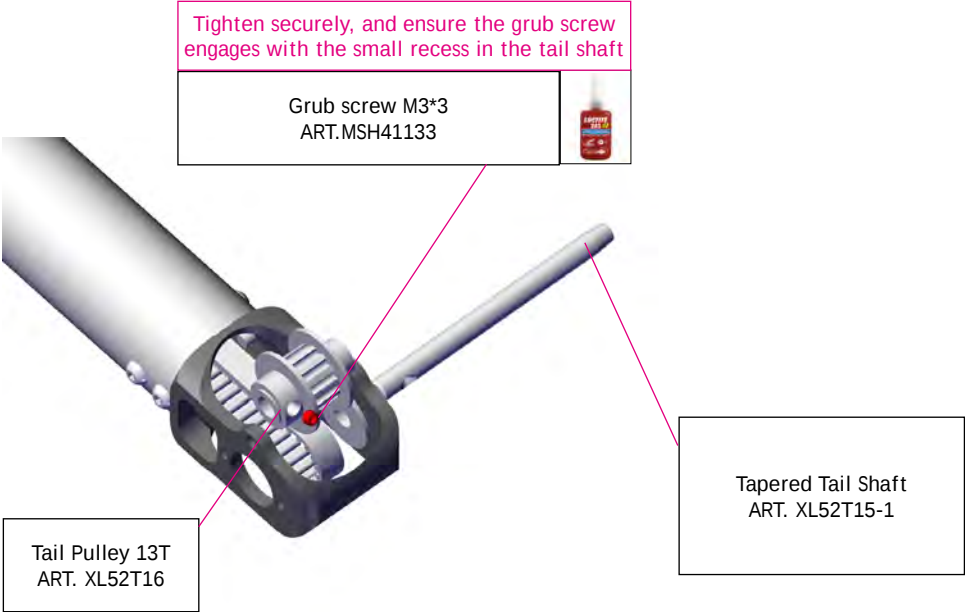
Hex screw M2.5*5
ART.MSH41123



Vertical Fin
ART. XL55T03

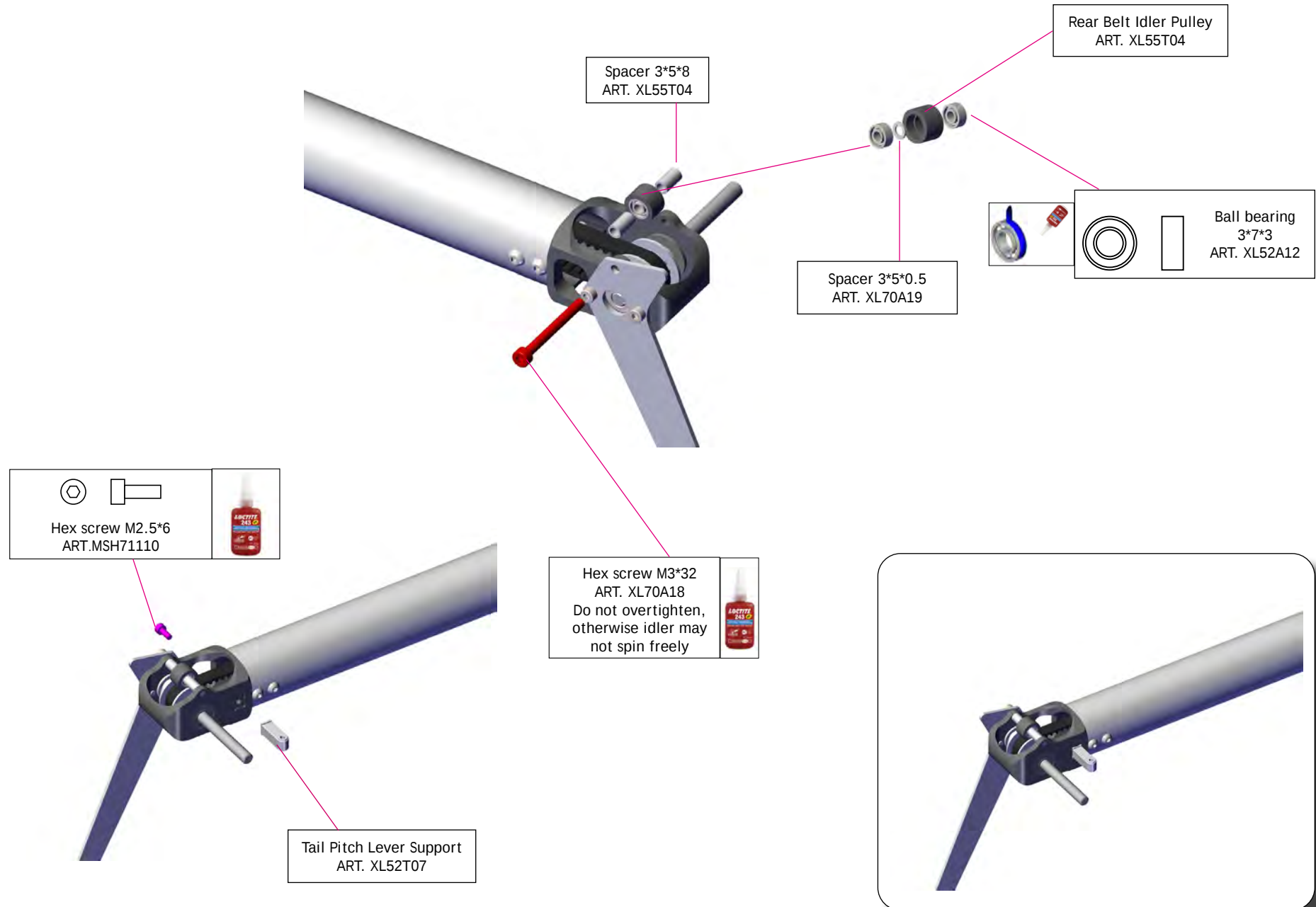


Tapered tail shaft





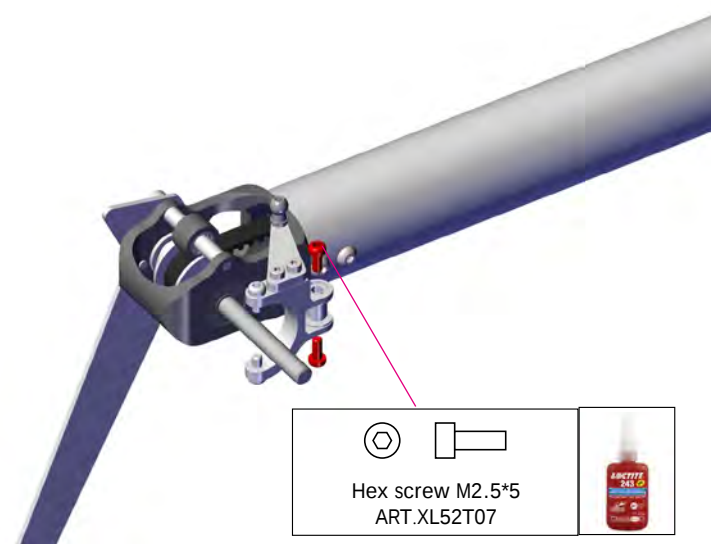
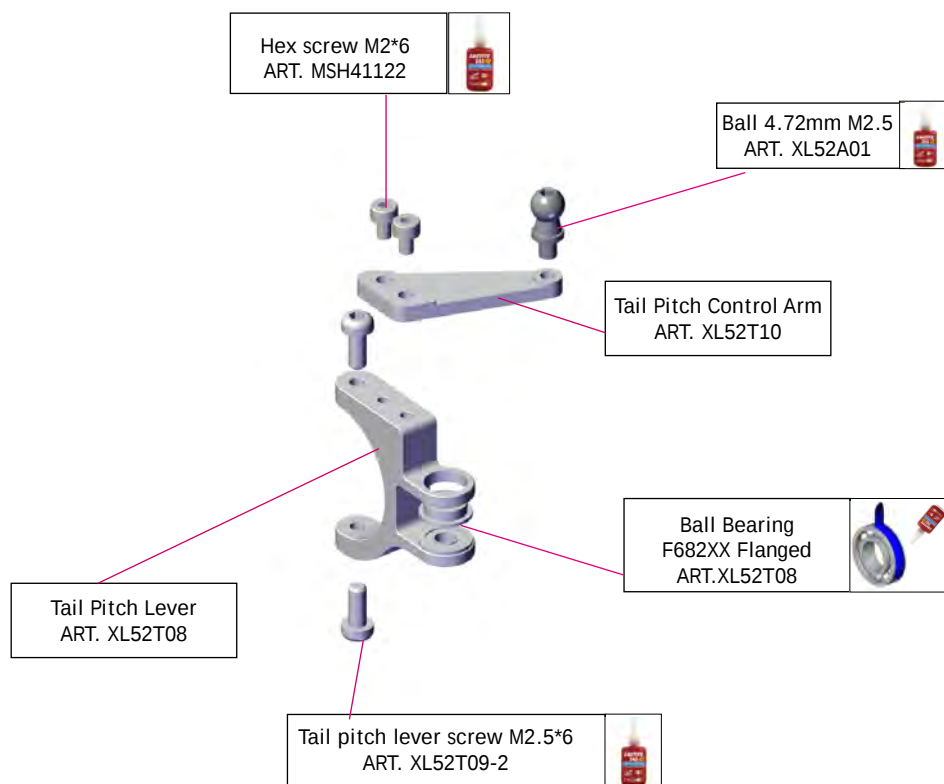
Clean all screws and threads with isopropyl alcohol (90% or above) to ensure threadlocker bonds properly and prevent screws from loosening in flight





Clean all screws and threads with isopropyl alcohol (90% or above) to ensure threadlocker bonds properly and prevent screws from loosening in flight

3





Clean all screws and threads with isopropyl alcohol (90% or above) to ensure threadlocker bonds properly and prevent screws from loosening in flight



Tail Shaft Slide Bushing
ART. XL52T09
Loctite is Extremely Important! Green loctite 638/680 recommend



Tail Pitch Slider Bearing Assembly
ART. XL52T09

Tail pitch assembly
ART. XL52T09

Pitch Slider Fork Bushing
ART. XL52T09

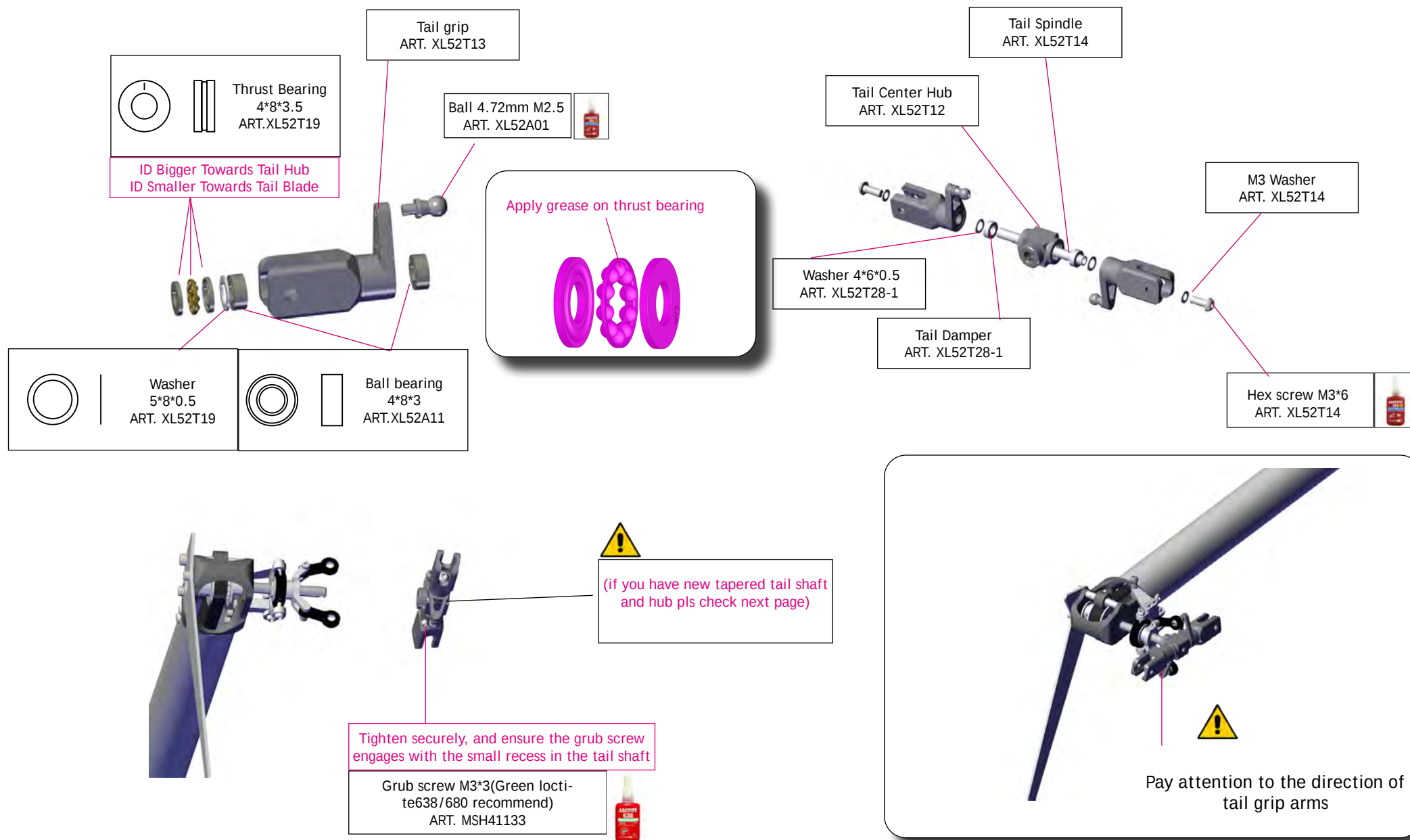
Tail Control Link
ART. XL52T11

Hex screw M2*8
(Do not overtighten)

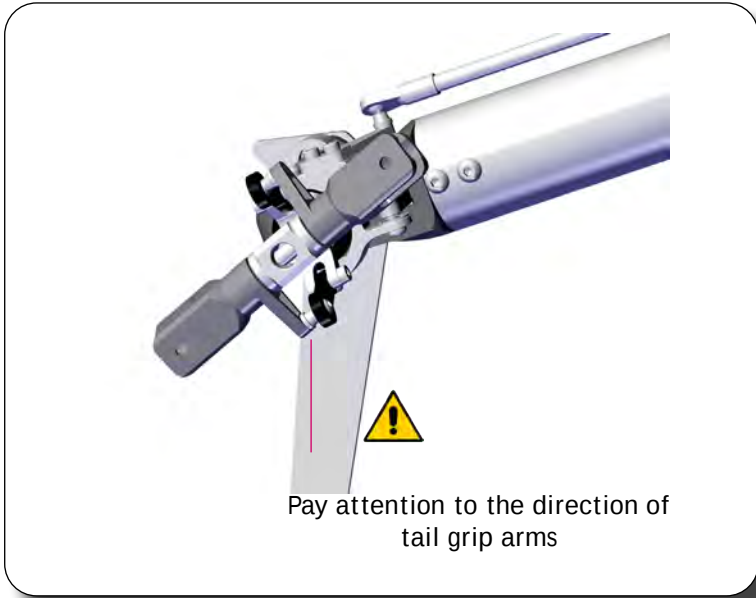
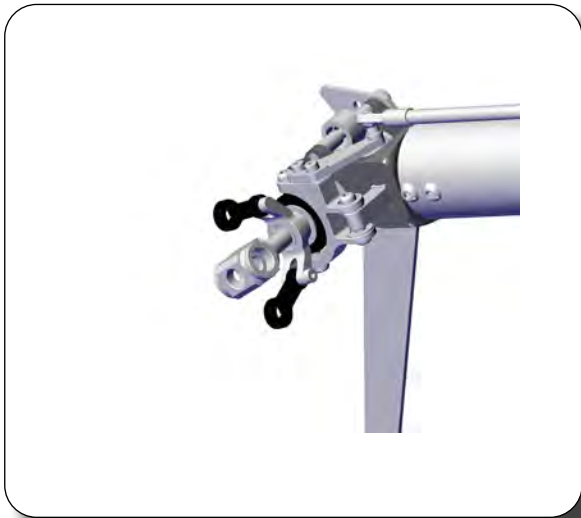
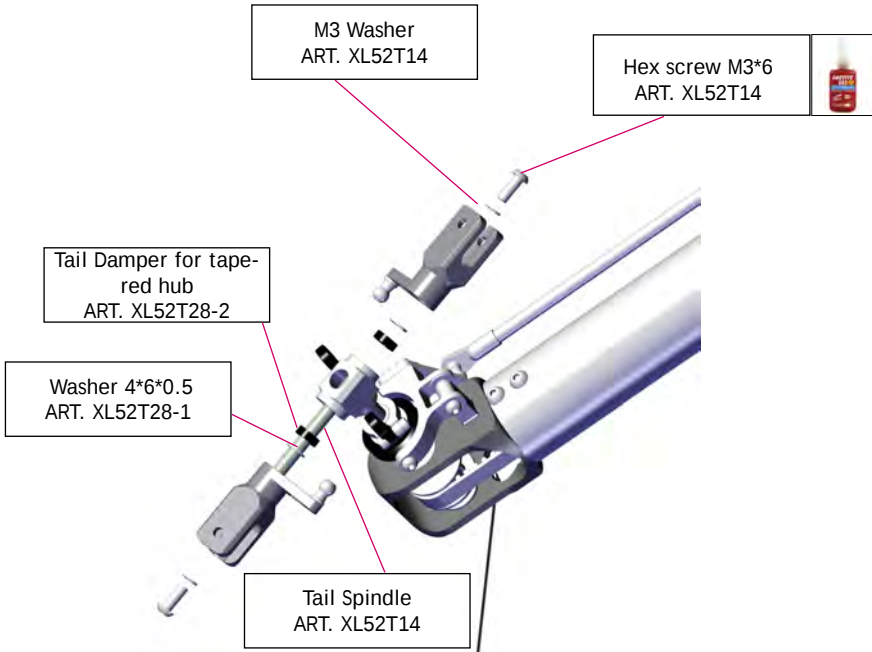
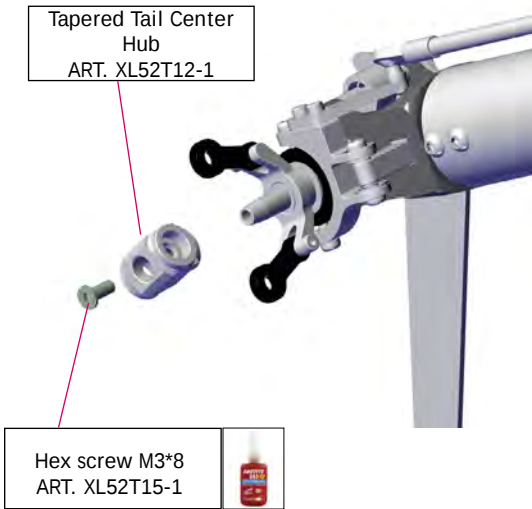




Clean all screws and threads with isopropyl alcohol (90% or above) to ensure threadlocker bonds properly and prevent screws from loosening in flight



Tapered tail hub





Clean all screws and threads with isopropyl alcohol (90% or above) to ensure threadlocker bonds properly and prevent screws from loosening in flight

Hex screw M3*8
ART. XL55B21



Main Gear 106T Mod1
(ART. XL52B24-1)
Option:

12mm Heavy Duty Main Gear 106T Mod1
(ART. XL52B24-2)



Main Gear Hub (Preassembled)
ART. XL55B21

You may add grease to one-way bearing



60T Front Pulley
ART. XL55B22

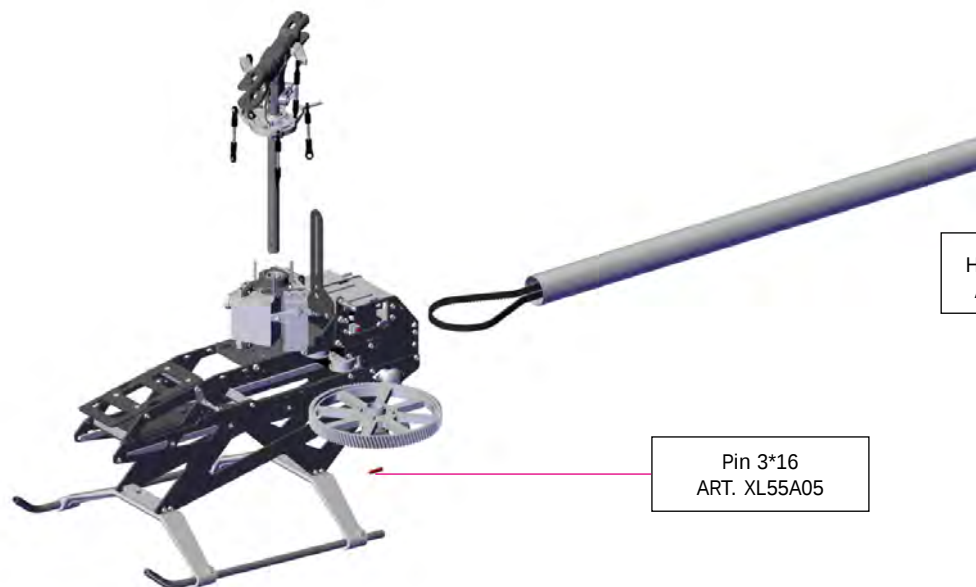


Ball bearing
15*21*4
ART. XL70B21-3



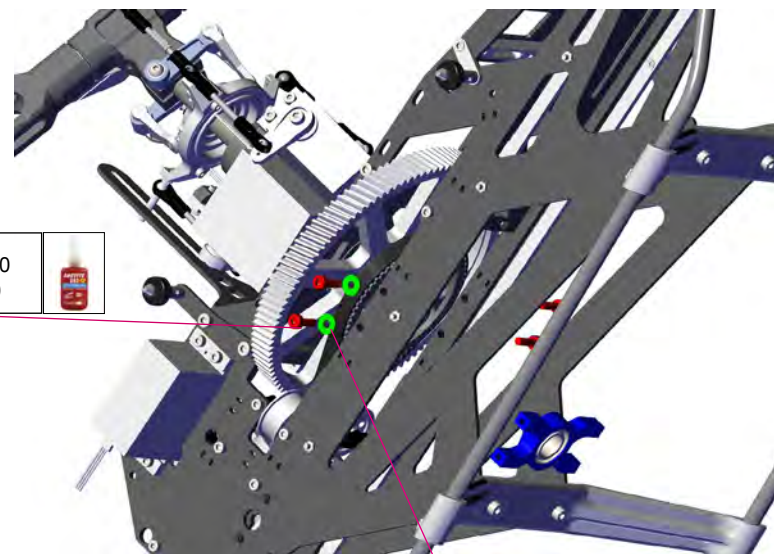
Pay attention to the direction of
hub



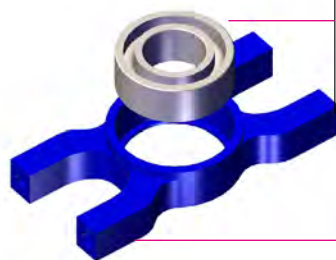


Pin 3*16
ART. XL55A05

Hex screw M3*10
ART. MSH71099

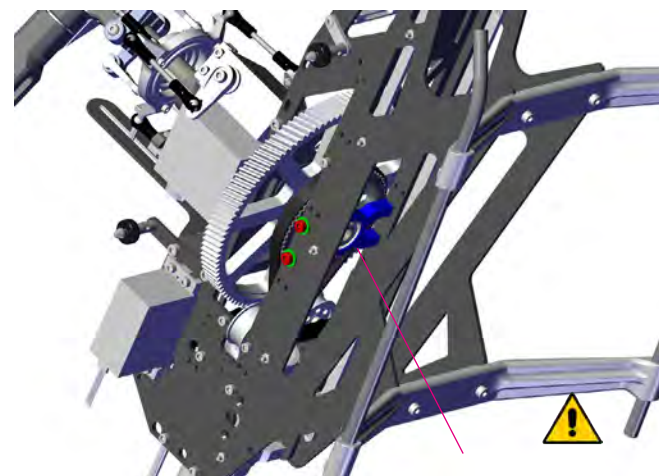


3*8*1 washer
ART. XL55A07

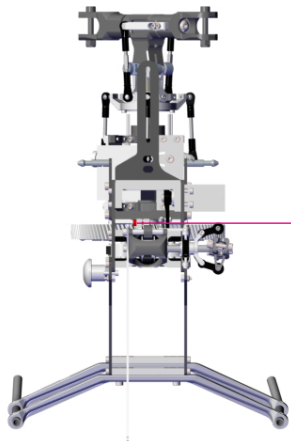


Double Row
Angular Contact
Bearing
10*19*7
ART. XL70H04

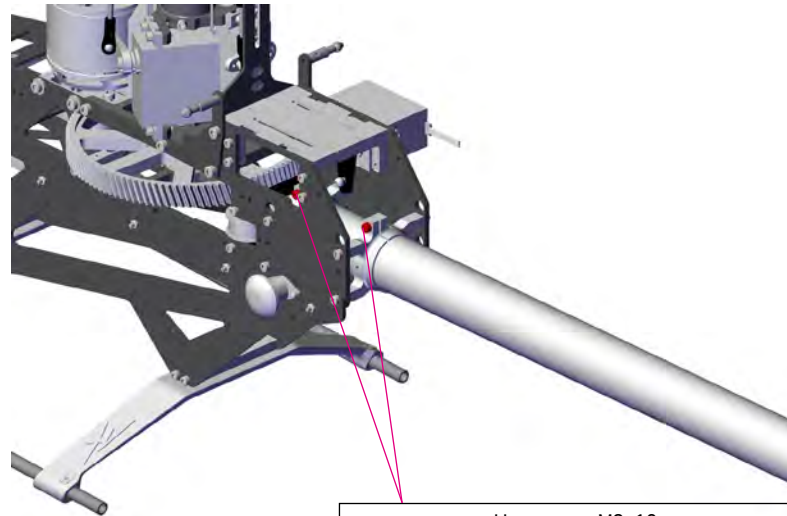
Third Bearing Block
(Not included in XL55V2K01)
ART. XL55B23



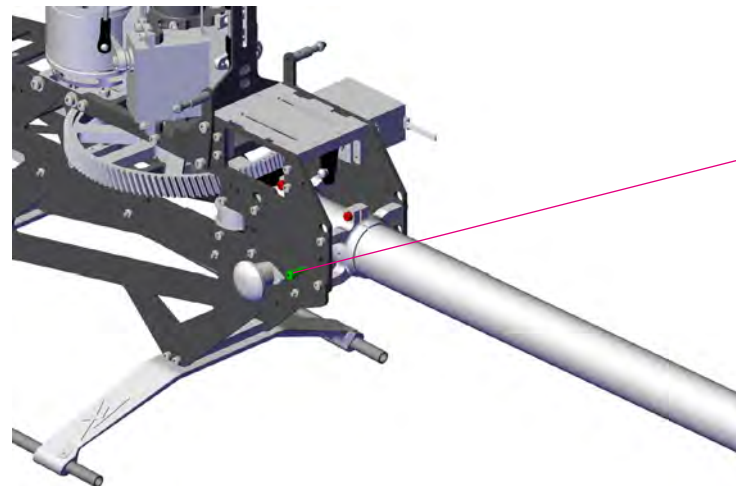
Push third bearing block up and
tighten M3*10 screws



Ensure tail box alignment
before tightening clamps

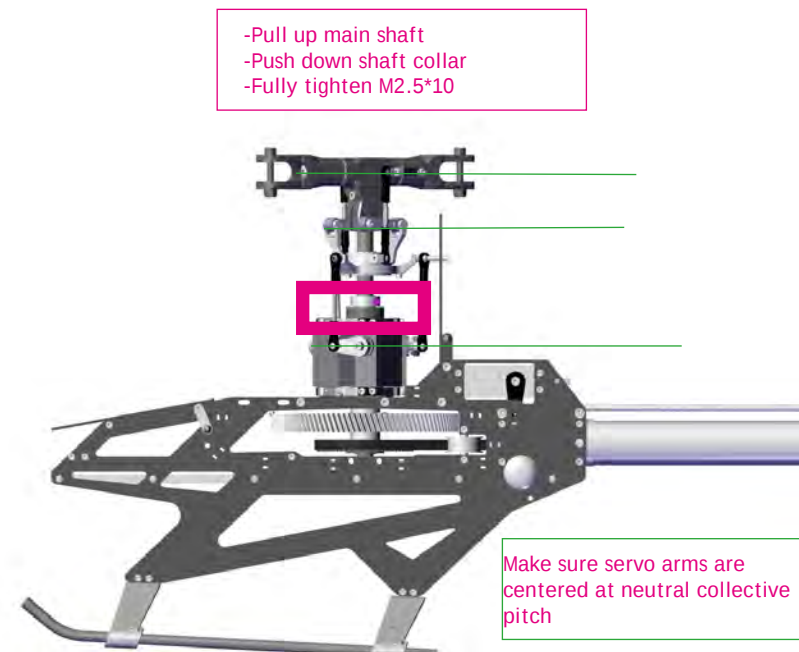
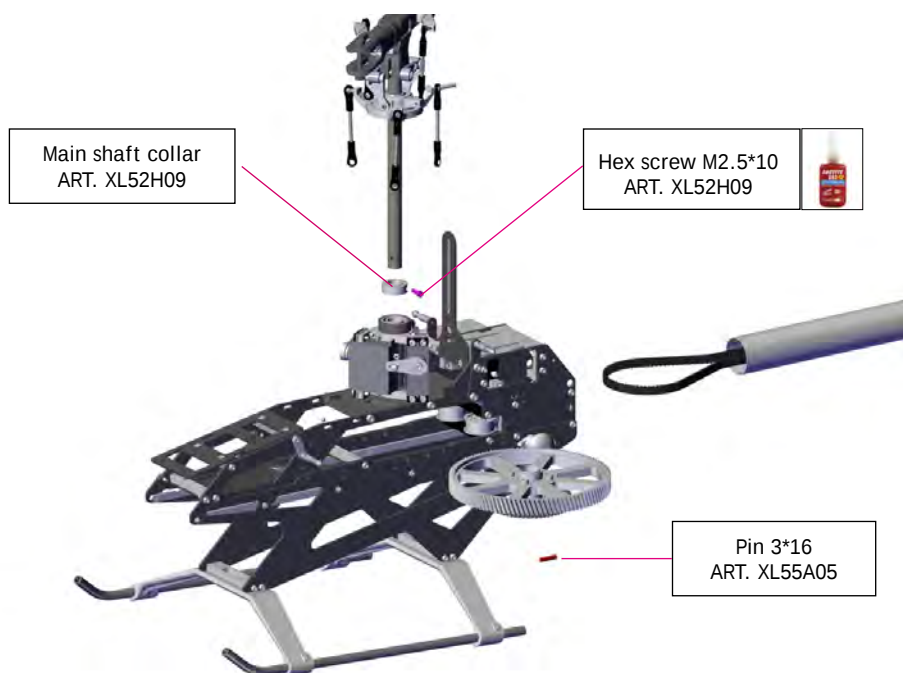


Hex screw M3x10
Set belt tension by pulling backwards on the tail
boom. Ensure tail tail case is level, then tighten
screws.

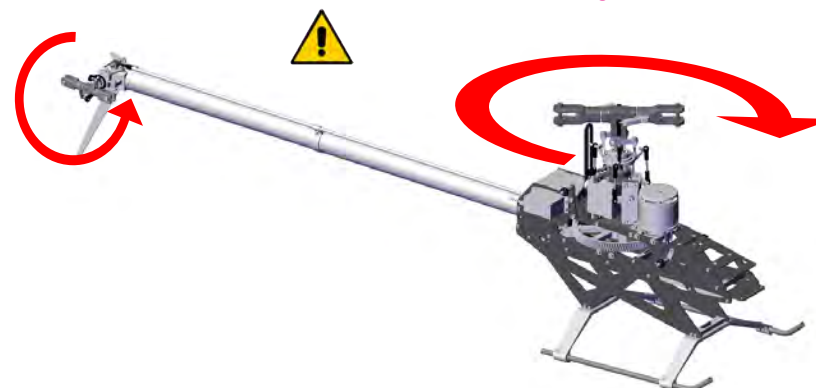


Hex screw M2.5*5
Goes Through Wall of Tail Boom
ART. MSH41123



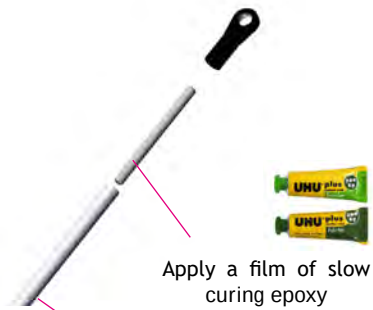


Check the rotation direction during the installation of the belt



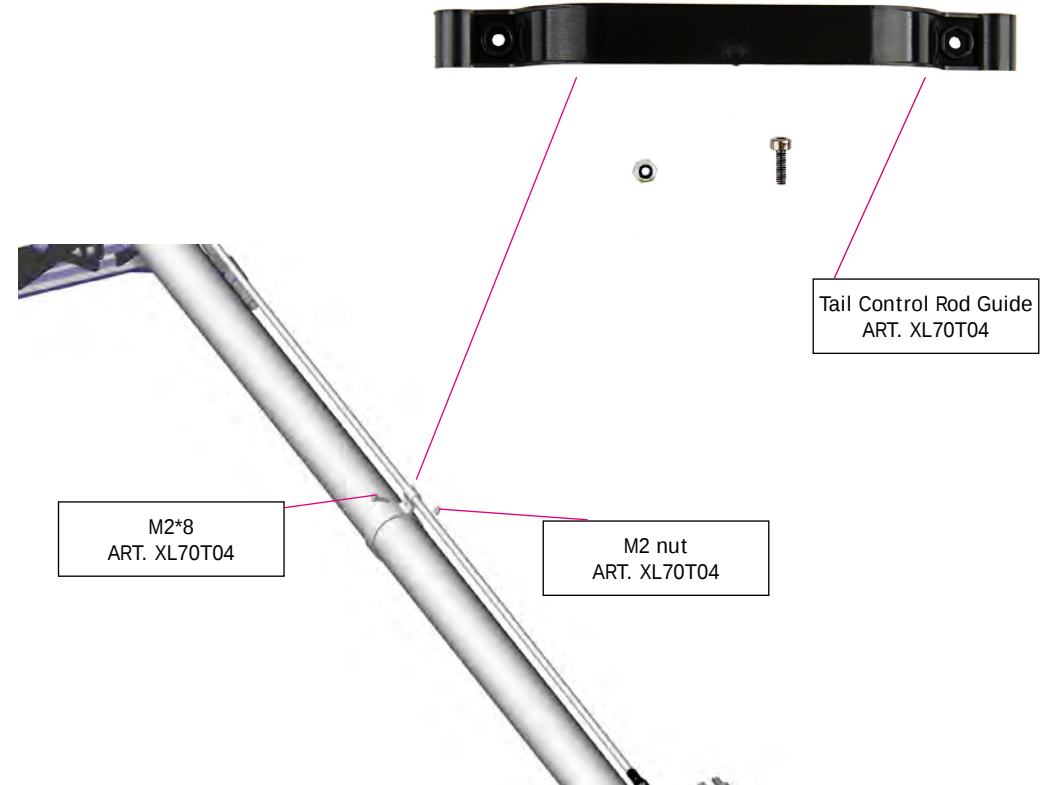
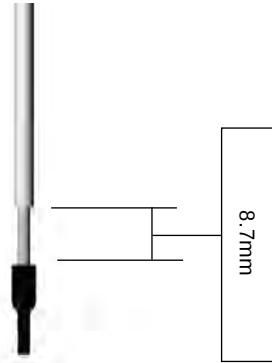


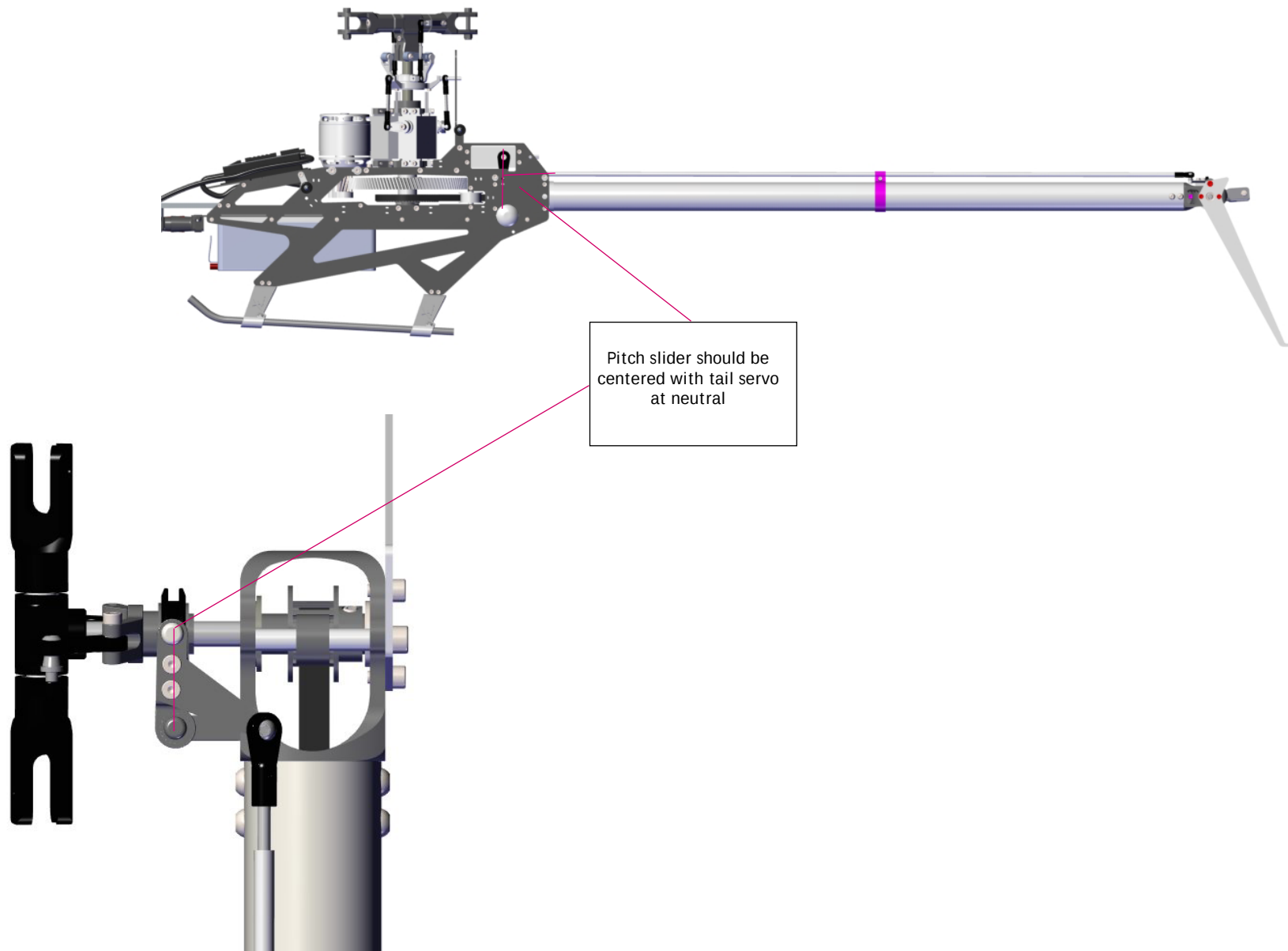
Clean all screws and threads with isopropyl alcohol (90% or above) to ensure threadlocker bonds properly and prevent screws from loosening in flight



Tail linkage rod
ART. XL52T23

Rod length may differ slightly with different servo brands







Clean all screws and threads with isopropyl alcohol (90% or above) to ensure threadlocker bonds properly and prevent screws from loosening in flight

4020-4035 500-1200kv
motor 5/6mm shaft
(20mm length min)(not
included)
ART. XL52M01
XL52M03

Motor Mount Upper
ART. XL55B24



Flat screw M3*10
ART. MSH71099



Tighten securely, and ensure the grub screw
engages with the flat in the tail shaft

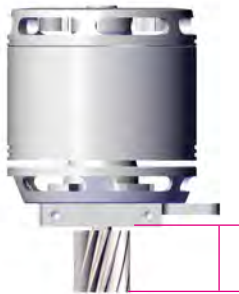
Grub screw M3*3
ART. MSH41133



HD Motor pinion 12T
ART. XL52G12-1
Included in Kit

Option:
XL52G11
XL52G13-1

Use bushing when motor
shaft is 5mm



17MM

Hex Screw M2.5*10
ART. MSH71103

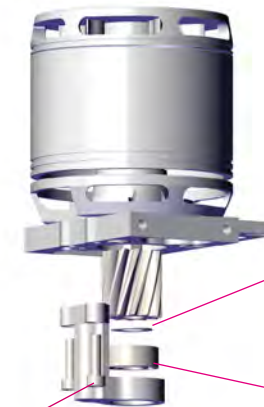


Washer
6*8*0.1
ART. XL48A02

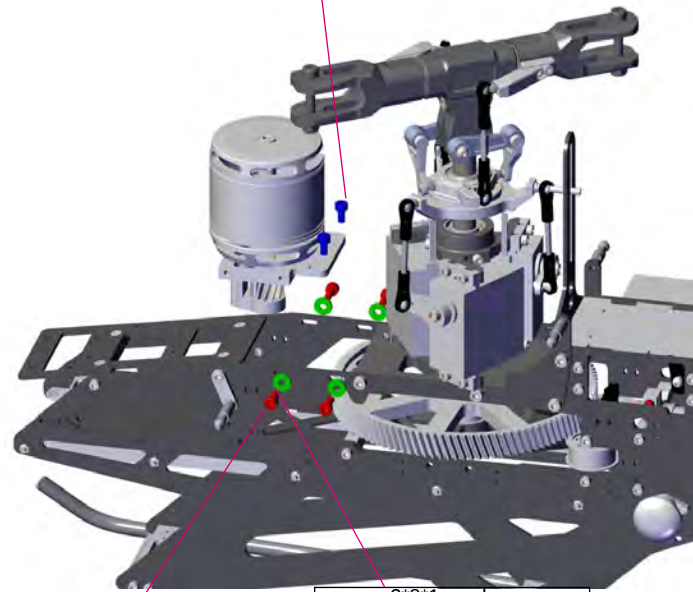
Bearing
6*13*5
ART. XL70A06-1



Motor Mount lower(Optional
.6mm diameter 29mm lenth
min)ART. XL55B25



Hex screw M3x6
Do not fully tighten yet
ART. MSH71108

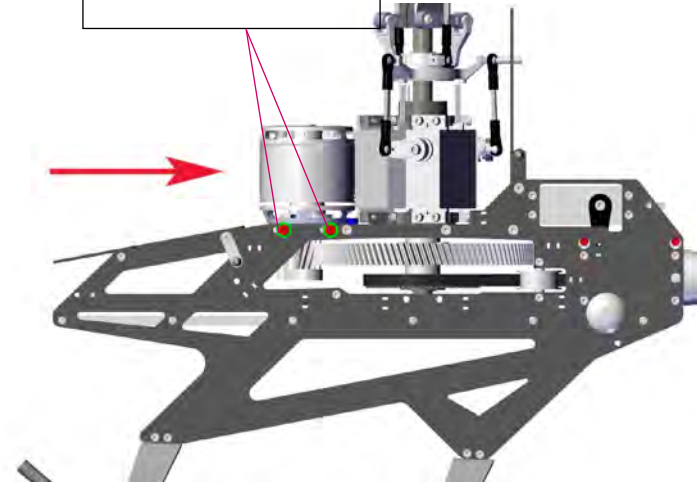


3*8*1 washer
ART. XL55A07

Hex screw M3*8
Do not fully tighten yet
ART. MSH71109



Use A4 printer paper to set
gear mesh at the lowest point,
push pinion into gear, then
tighten 2 screws on each side
and the top 2 screws

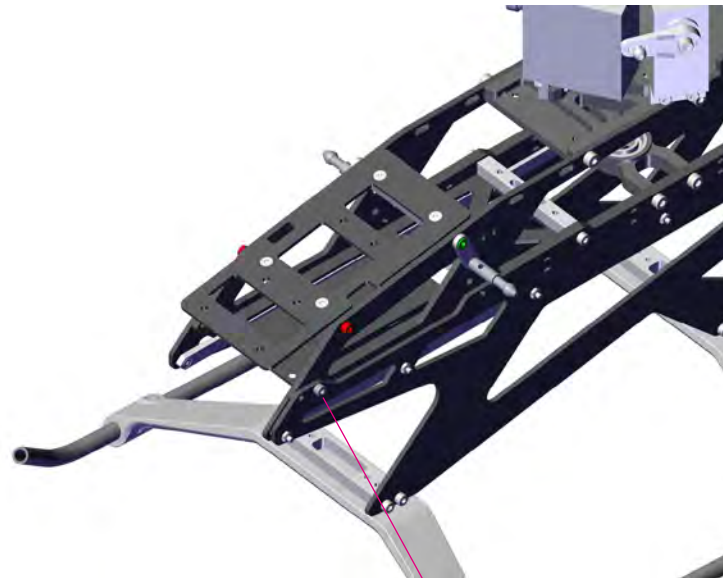


Optional



Clean all screws and threads with isopropyl alcohol (90% or above) to ensure threadlocker bonds properly and prevent screws from loosening in flight

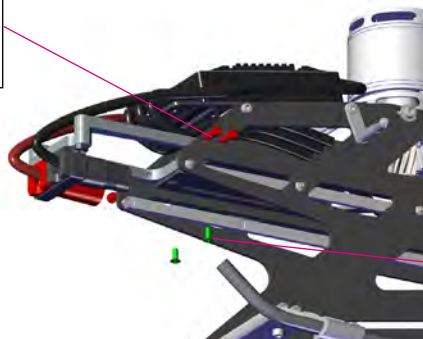
NIMBUS 550



Remove M2.5*8 screws
M2.5*6 Flat screws and
frame spacer



Hex screw
M2.5*8
ART. MSH71111



Flat screw M2.5*6
ART. XL55A02



Flat screw M2.5*6
ART. XL55A02



AS150 Big red housing
ART. XL70V2A04

Solder ESC wire

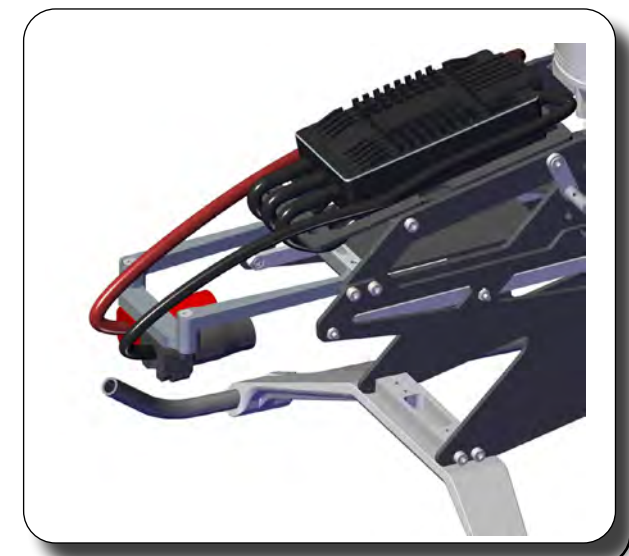
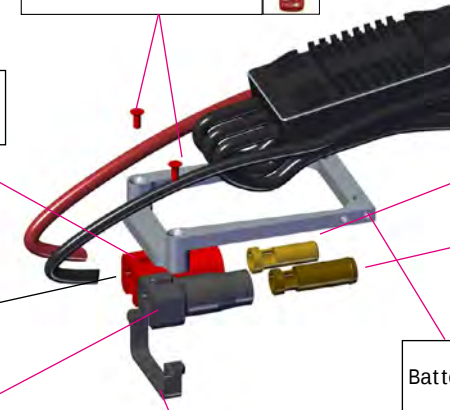
AS150 Small black housing
ART. XL70V2A05

Battery Connector Retainer
ART. XL70V2B16

AS150 Anti-spark bullet
ART. XL70V2A06

AS150 Female bullet
ART. XL70V2A07

Battery Quick Connect Mount
ART. XL55B26

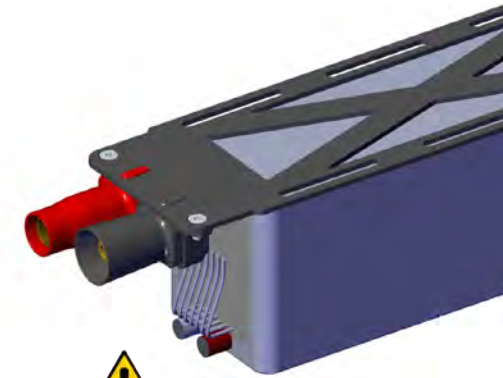
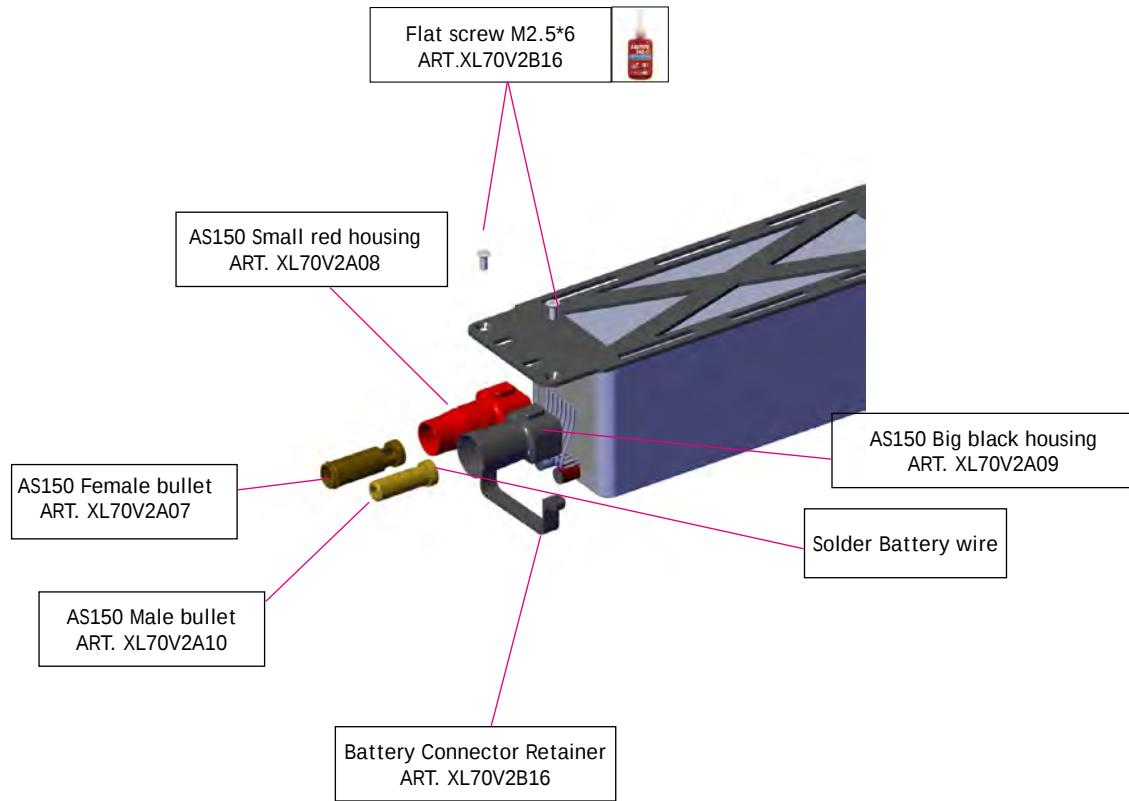


Optional



Clean all screws and threads with isopropyl alcohol (90% or above) to ensure threadlocker bonds properly and prevent screws from loosening in flight

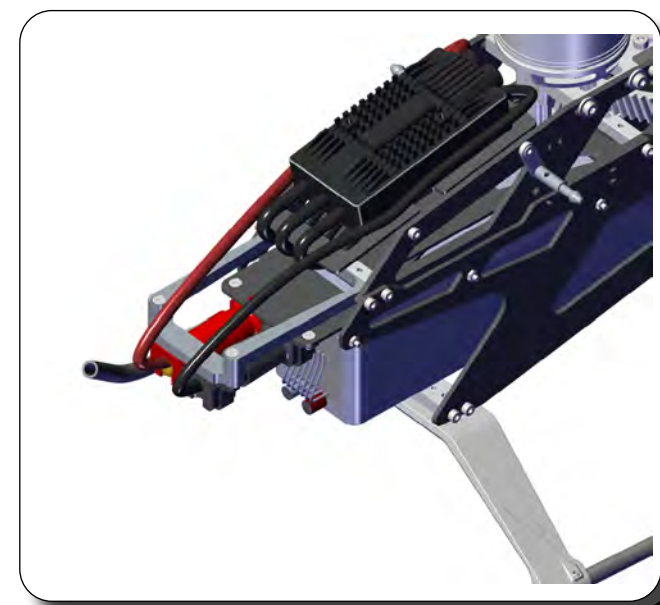
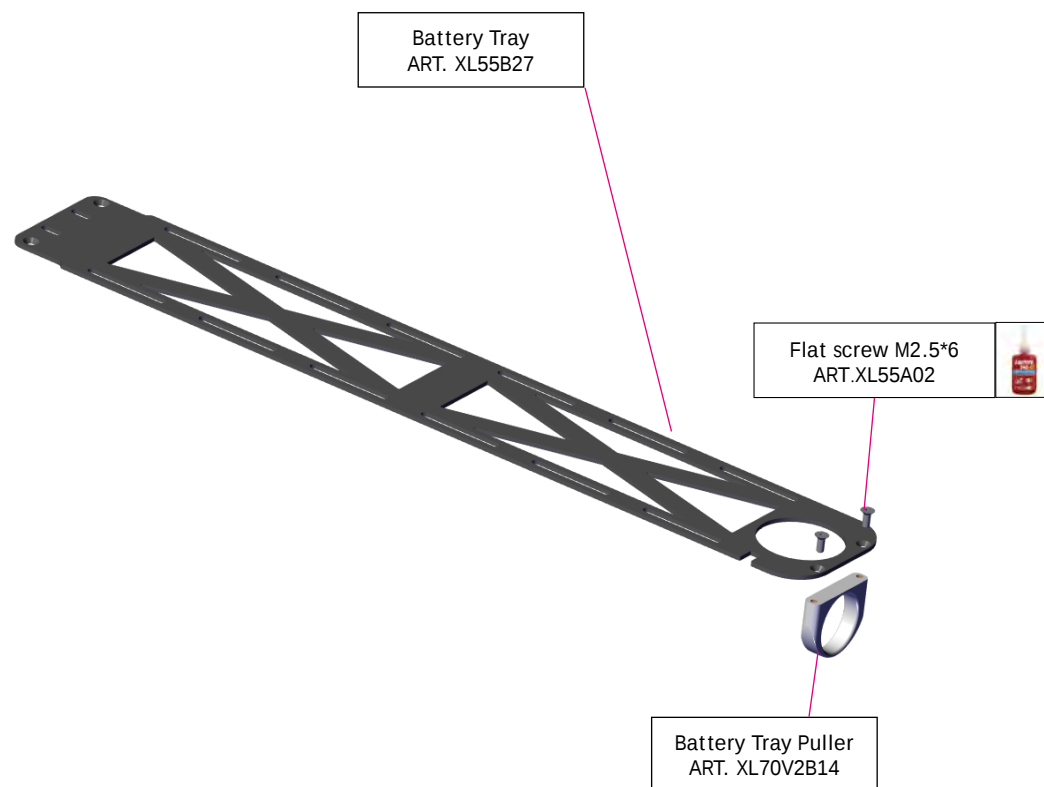
NIMBUS550



Make sure the connectors are fully mated and tray latch is locked before flying



Clean all screws and threads with isopropyl alcohol (90% or above) to ensure threadlocker bonds properly and prevent screws from loosening in flight



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