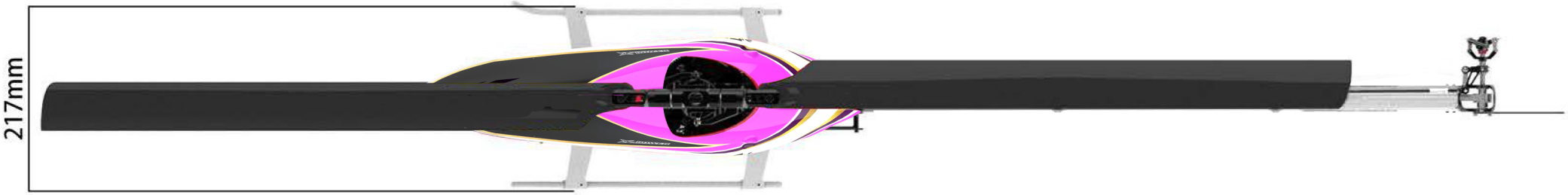
INTRODUCTION





- **Length Without Main Blades:** 1383mm
- **Overall Height:** 351mm
- **Width:** 217mm
- **Main Gear:** 106T Mod 1
- **Pinion Gear:** 11T (10-13T Optional)
- **Motor Shaft Diameter:** 6mm (Length 20-55mm)
- **Main Gear Ratio:** 9.636 (10.6 - 8.38 Optional)
- **Front Tail Pulley:** 100T
- **Rear Tail Pulley:** 21T (20T Optional)
- **Tail Ratio:** 4.767 (5.0 Optional)
- **Frame Weight:** 2060g
- **Main Shaft Diameter:** 15mm
- **Feathering Shaft Diameter:** 10mm
- **Tail Boom Diameter:** 32mm
- **Tail Belt Width:** 8mm
- **Main Gear Thickness:** 18mm
- **Battery Compartment Size:** 380mm*68mm*70mm

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.

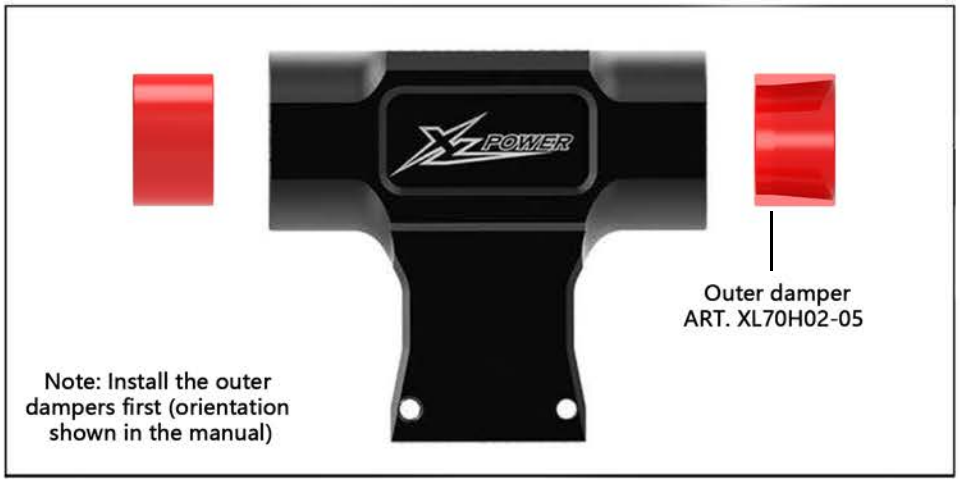
NEVER use the same control frequency as someone else. Doing so may cause interference or loss of control of the model.
NEVER continue flying if the model is displaying irregular behavior or noises. Bring the model to a halt immediately and disconnect the batteries.
NEVER fly the model with known broken 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.

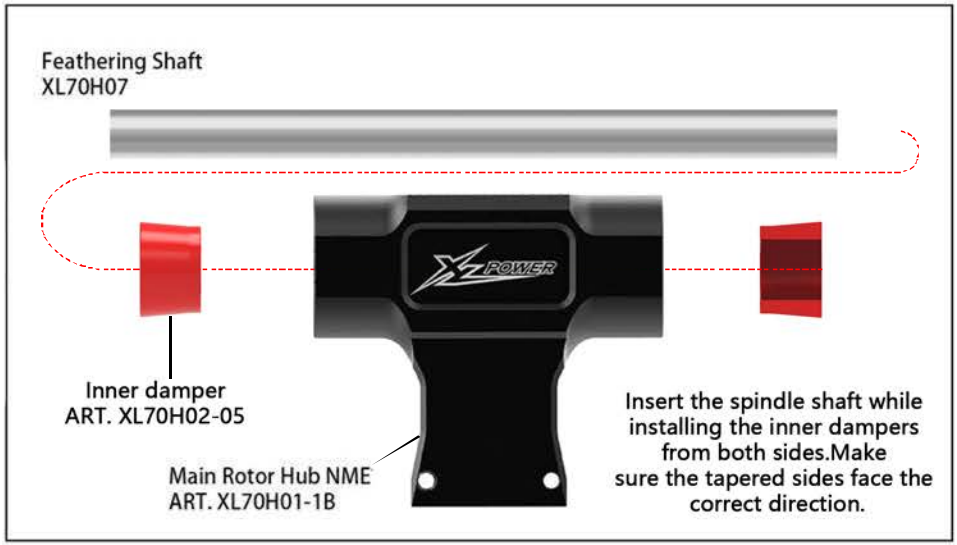
Operate only outdoors and out of bystanders reach, as the main rotor operates at high rpm and is very dangerous.
While adjusting and testing, pilots and observers should stand at least 10 meters from the model.
Novice pilots should be assisted by an experienced pilot and never fly alone!

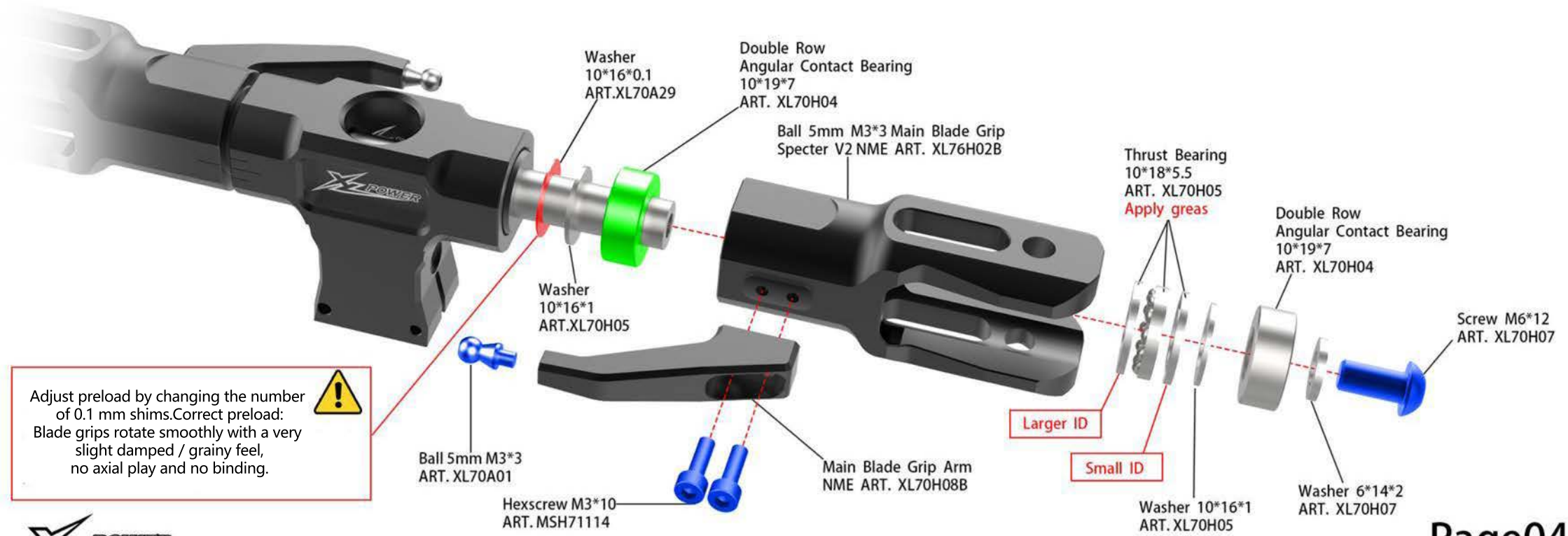
EQUIPMENT REQUIRED FOR ASSEMBLY

Swashplate Servos: Standard size(Qty.3)	ESC: 130HV-250HV Typical	Hex Screwdriver Sizes: 1.5mm 3mm 2mm 4mm*2 2.5mm*2
Tail Servo\Thrttle Servo Standard Size(Qty.1)	Main Blades: Carbon Fiber 690mm - 720mm	 Where indicated, use Thread lock MEDIUM 
Trasmitter Receiver/Satellites Flybarless Unit	Tail blades: Carbon Fiber 105mm to 116mm	 Wicking compound bearing retainer 
Battery Pack (Typical): LiPo 6s 4000-5500mAh * 2 or LiPo 7s 4000-5500mAh * 2	Motor: 4525-4530 500kv-550kv Typical	Thrust Bearing Grease Pitch Gauge

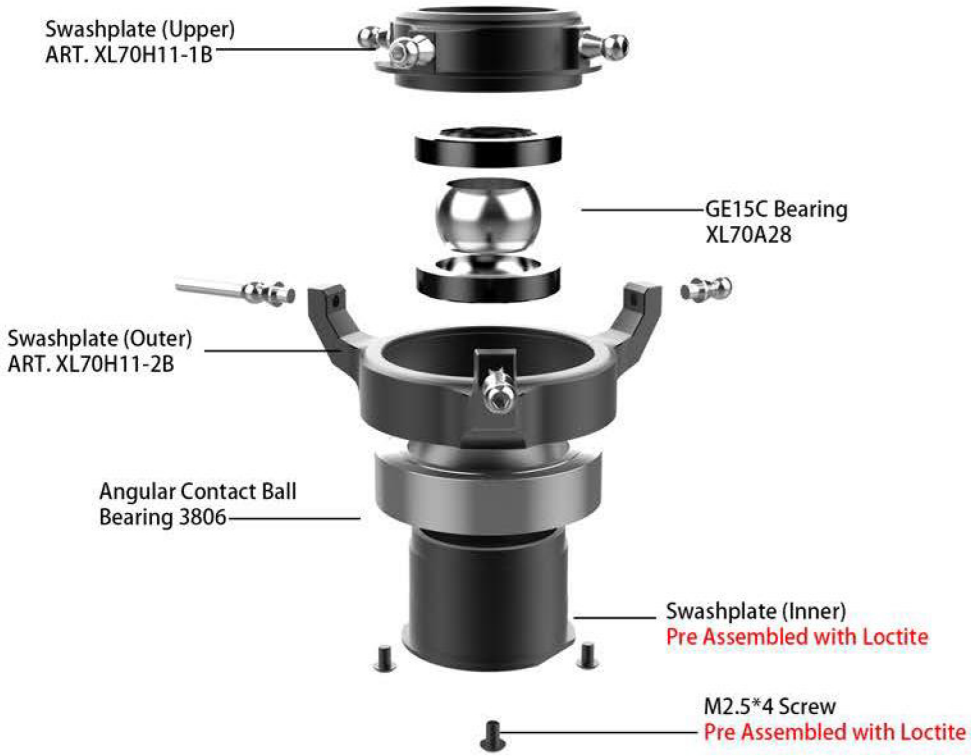
TAPERED DAMPER ASSEMBLY



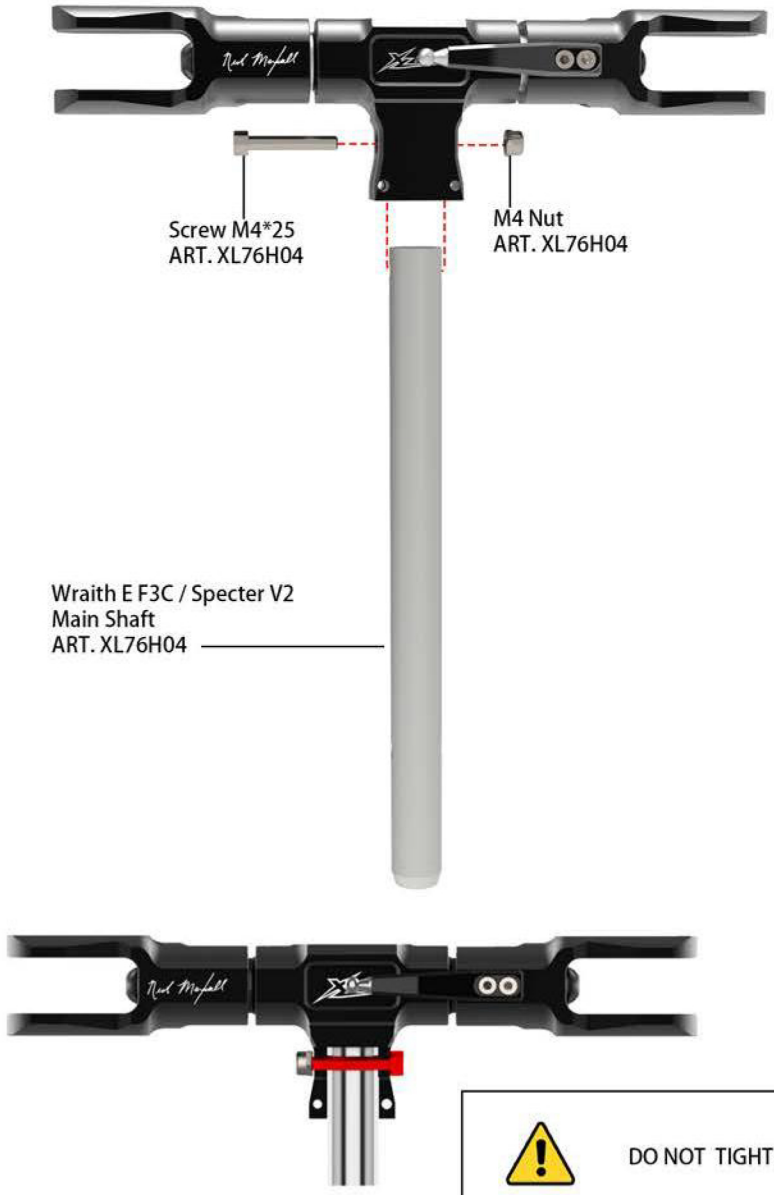




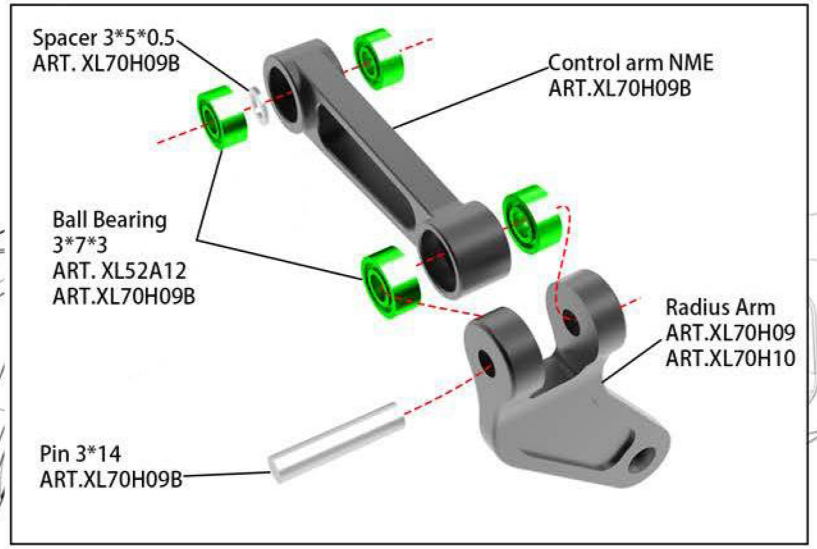
HEAD ASSEMBLY

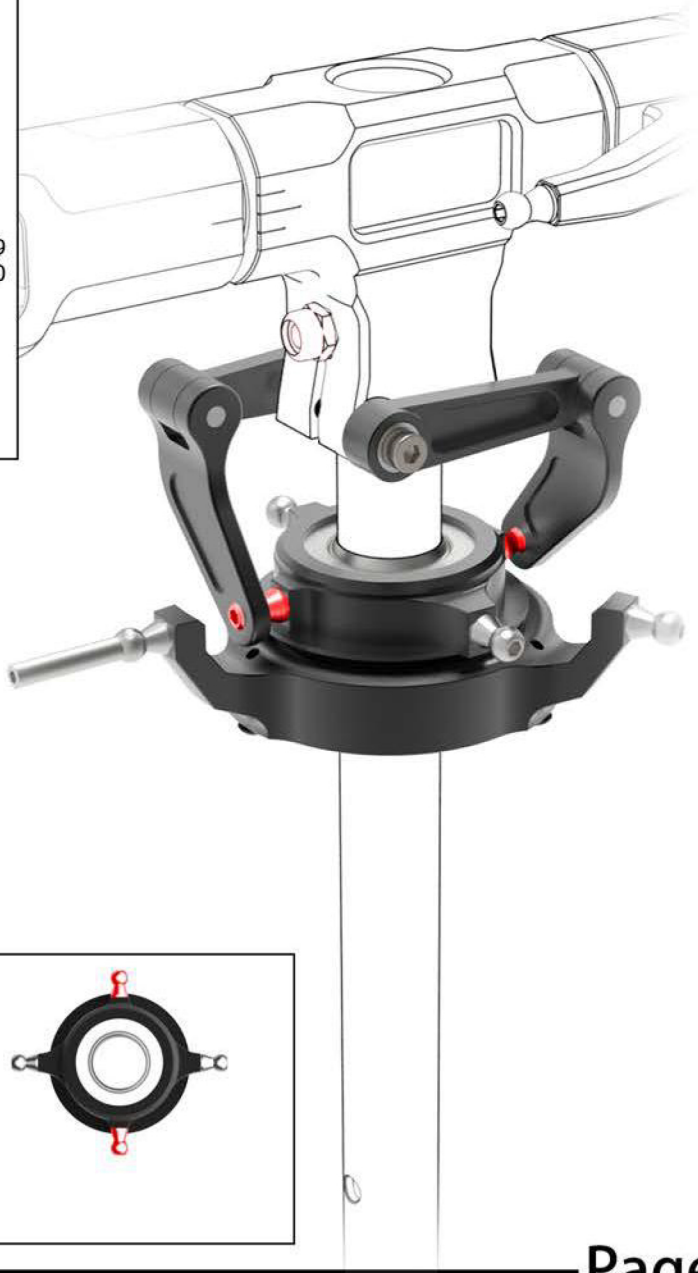






DO NOT TIGHTEN YET





Fully tighten M4*25 screw

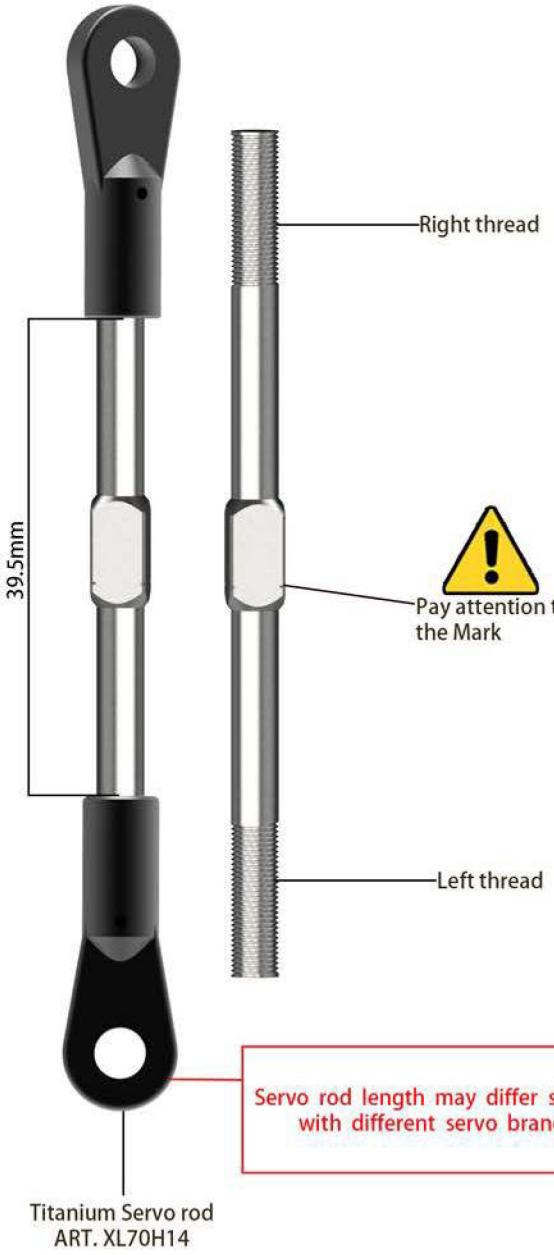
Pinch bolts together

Screw M3*25
ART. XL70H09B

Spacer 3*5*0.5
ART. XL70H09B

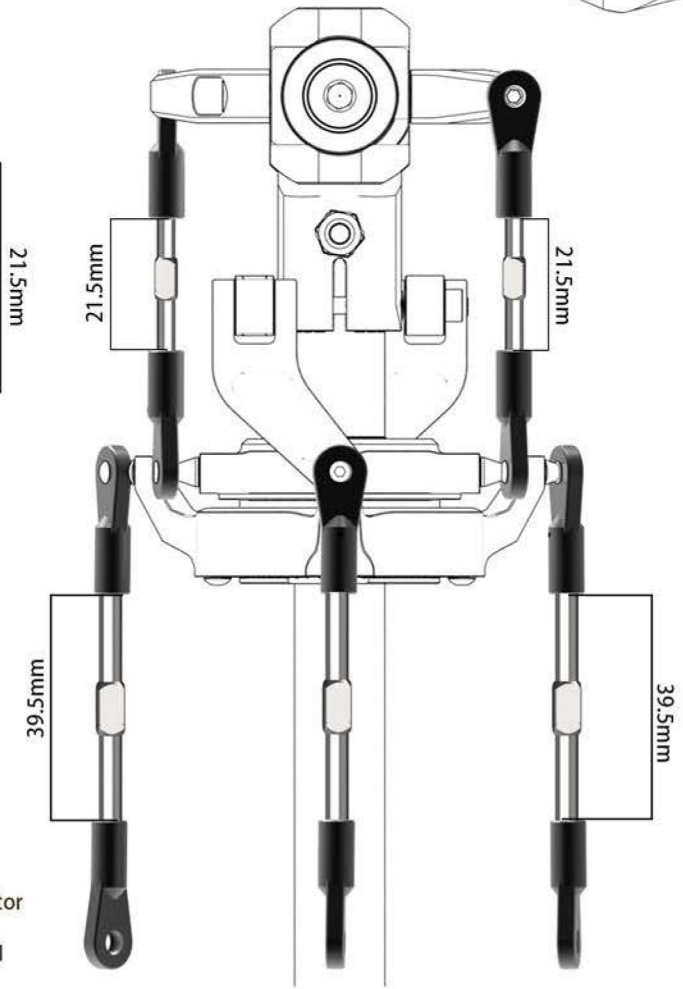


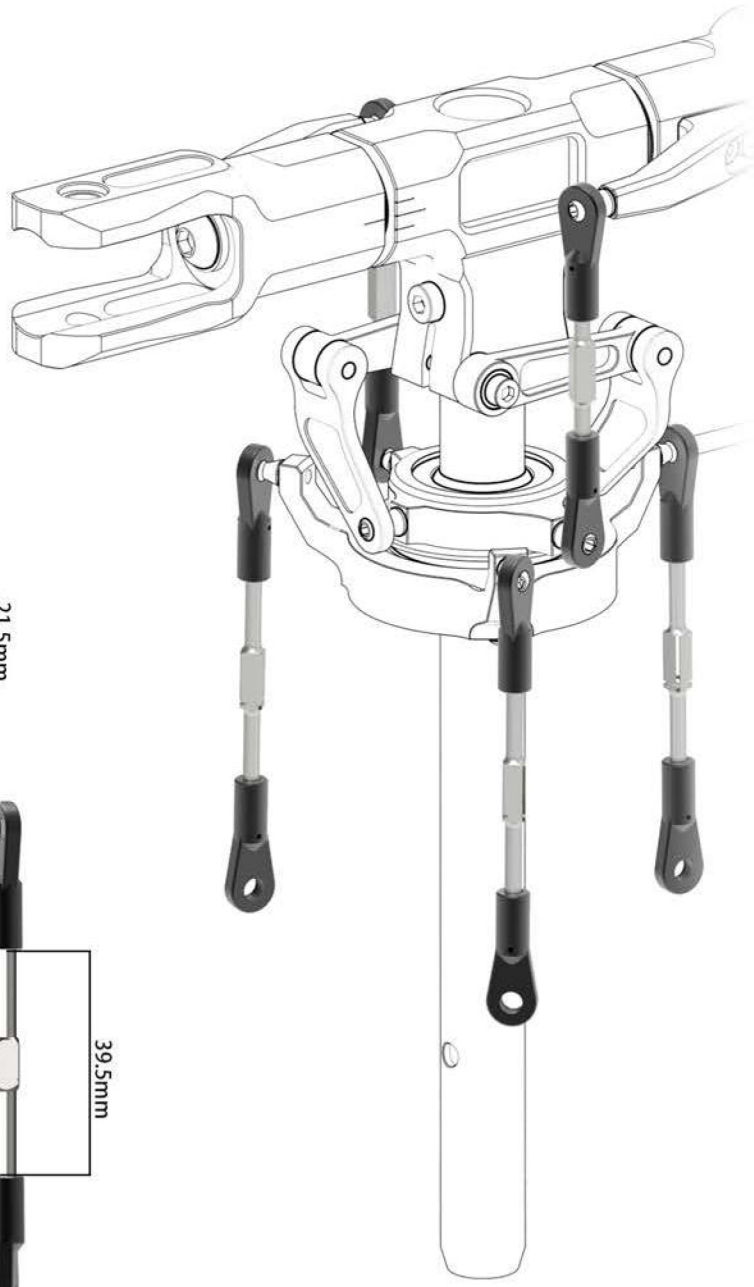
HEAD ASSEMBLY



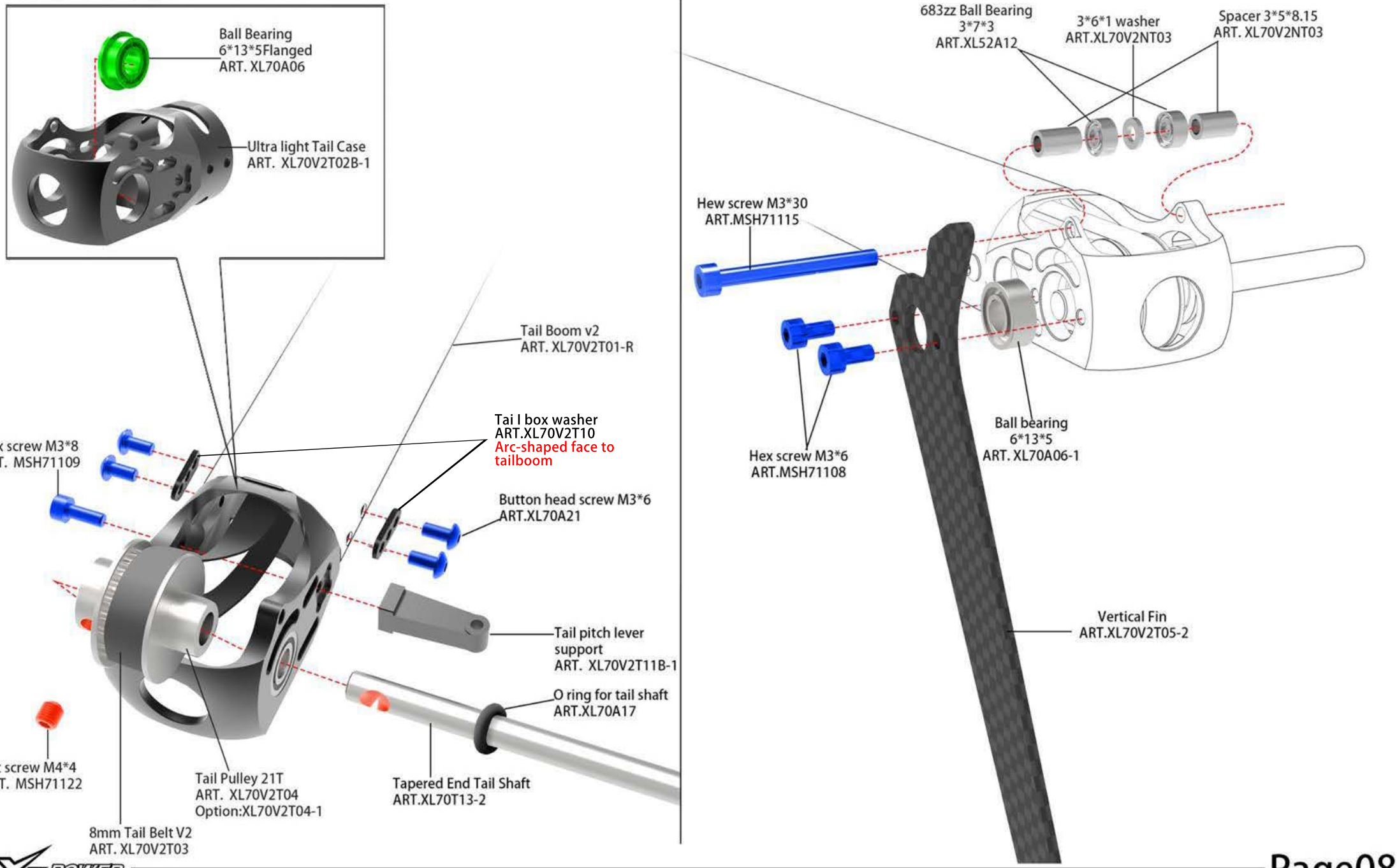




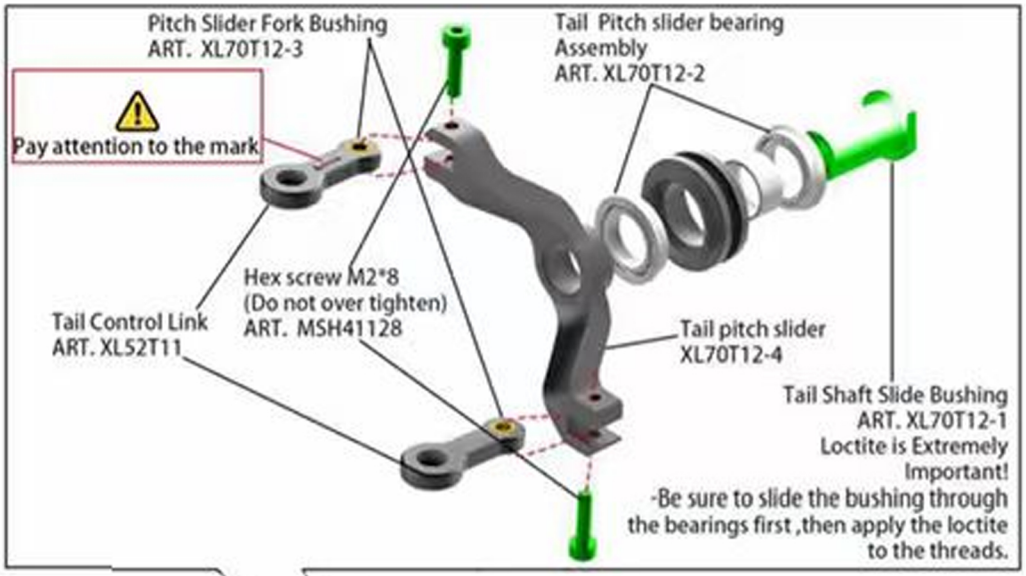


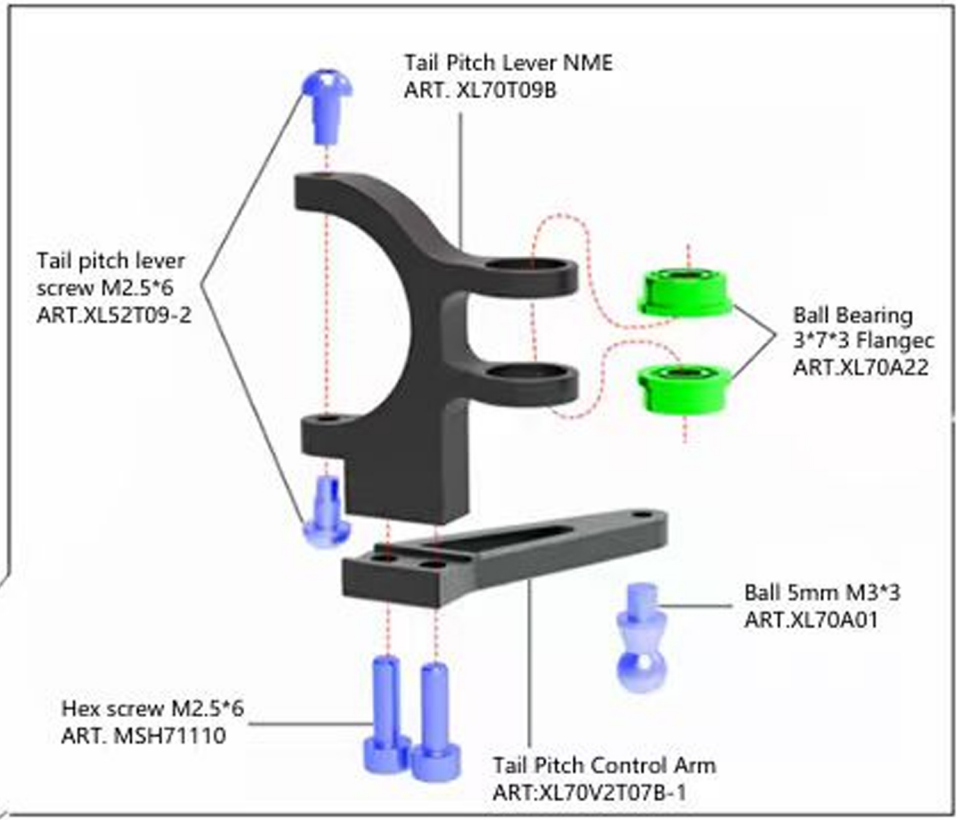


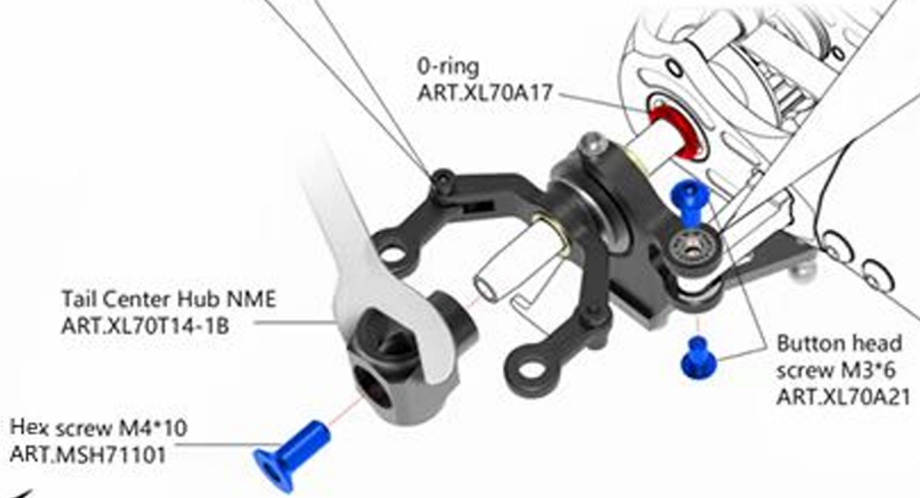
TALL ASSEMBLY



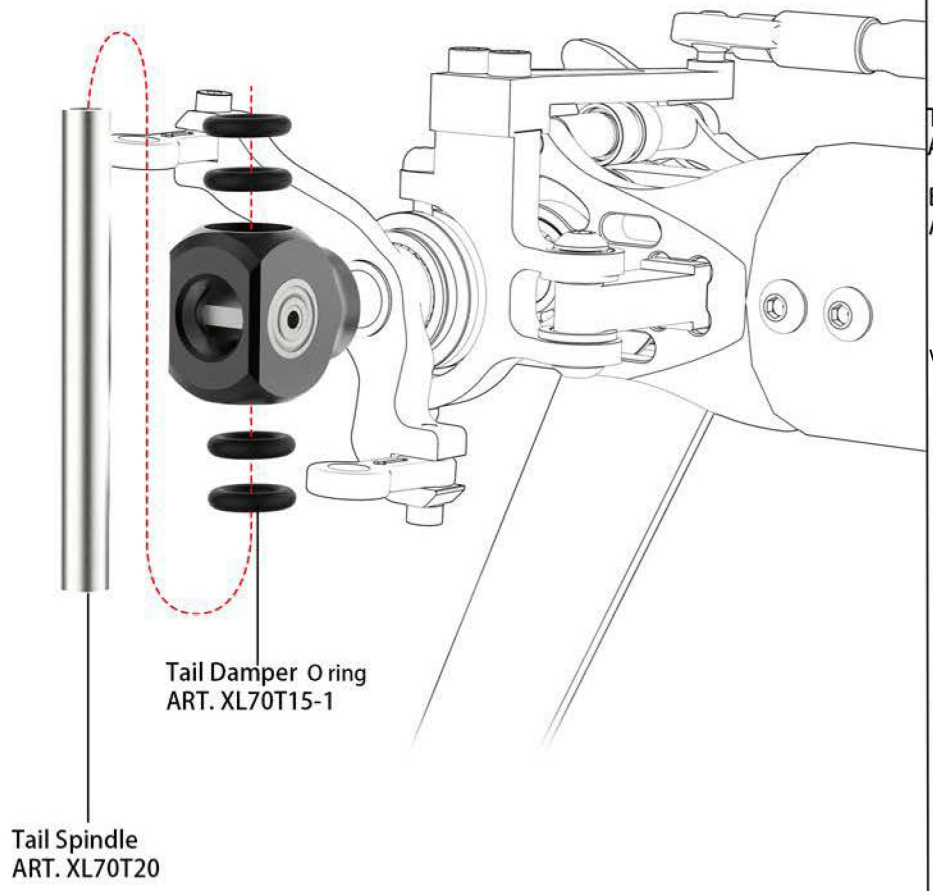
TALL ASSEMBLY

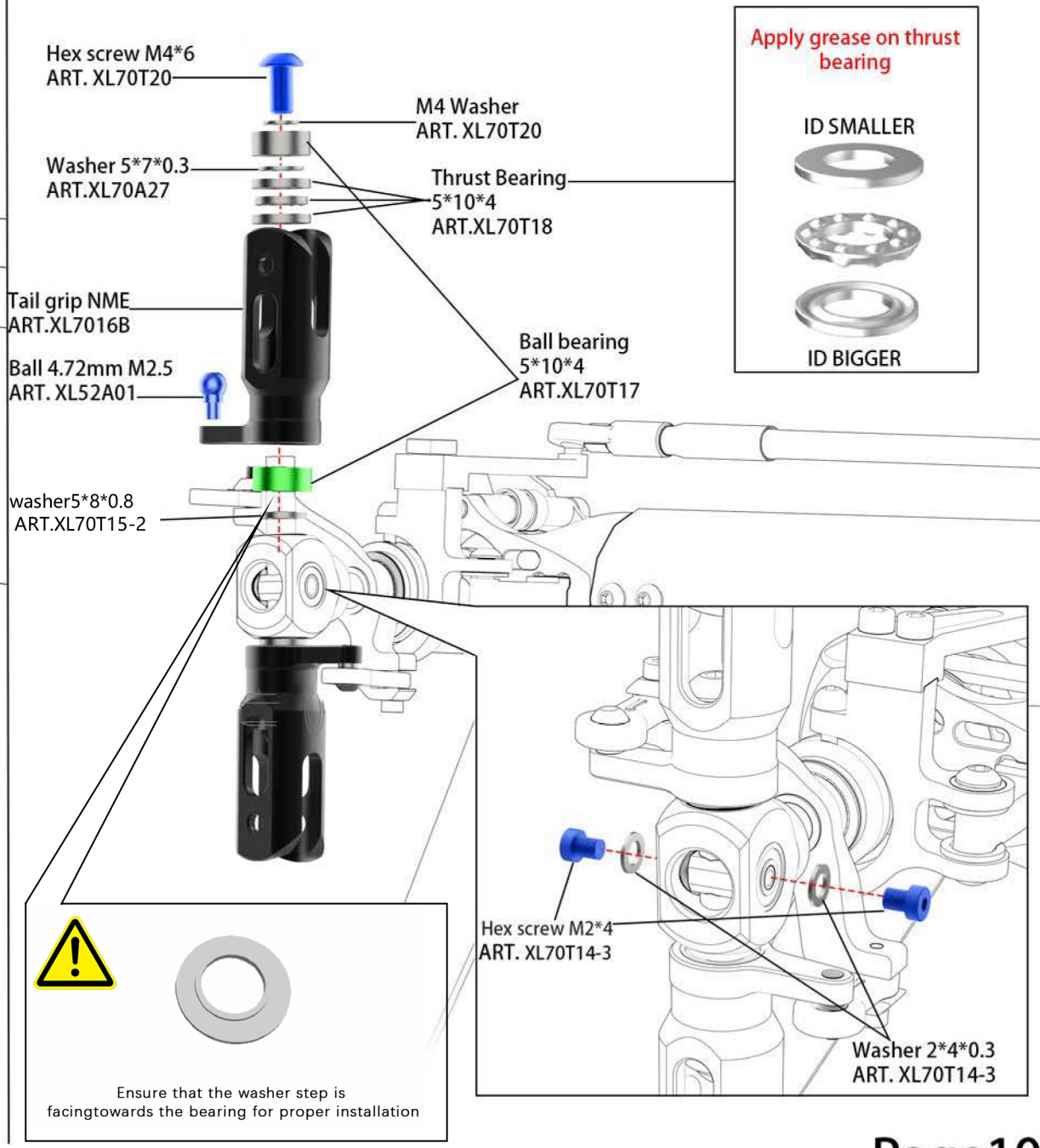




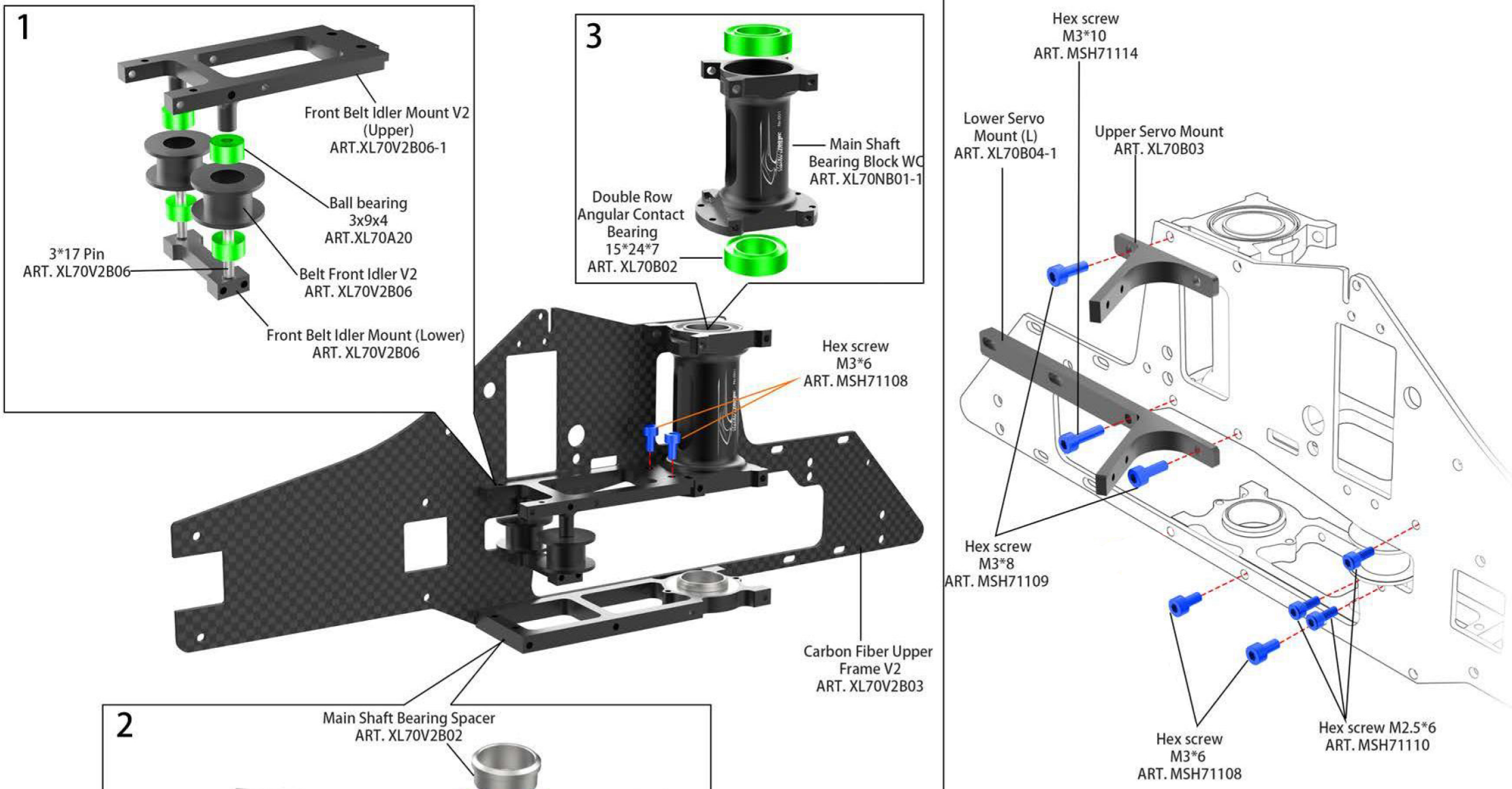


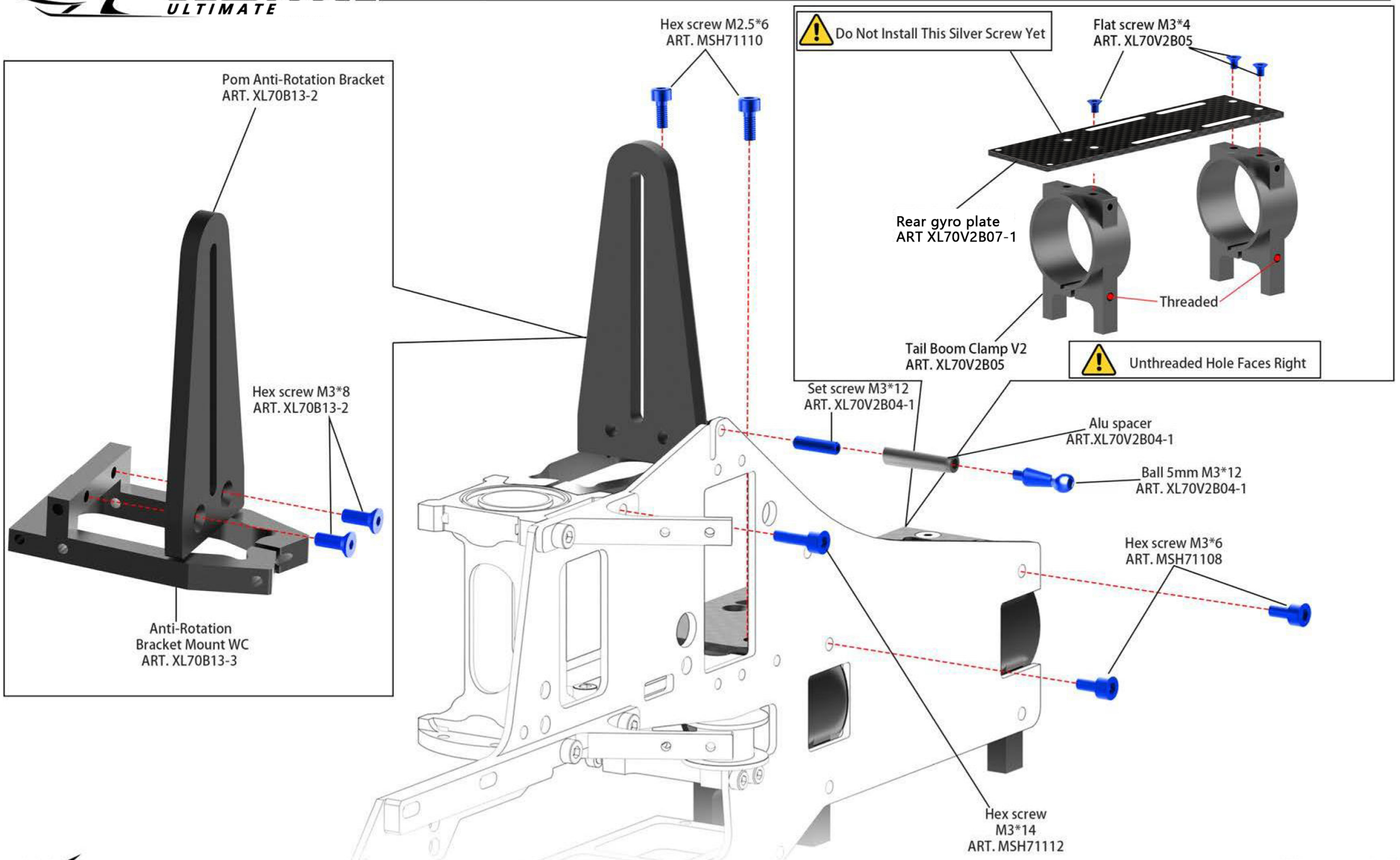
TALL ASSEMBLY

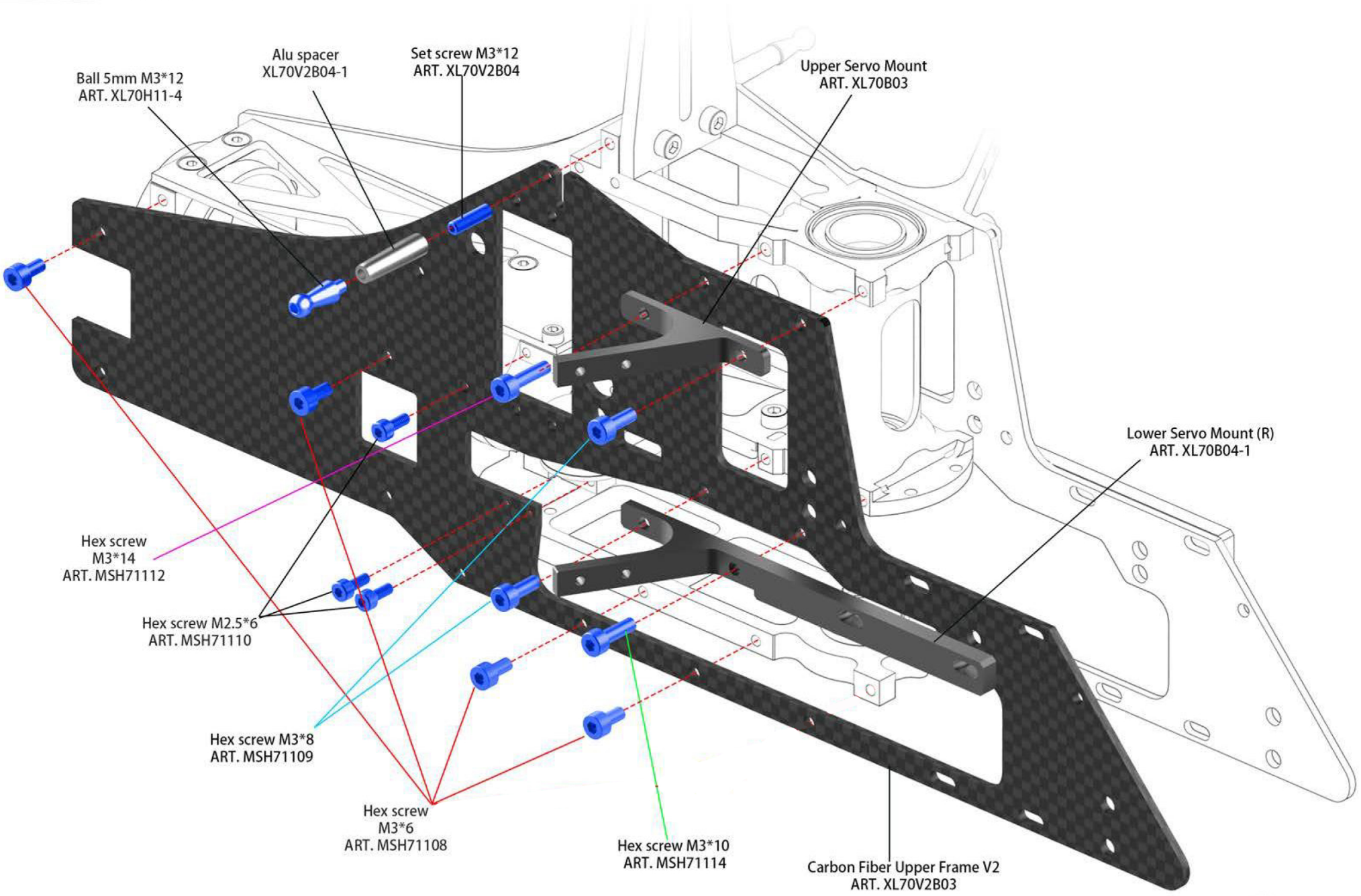




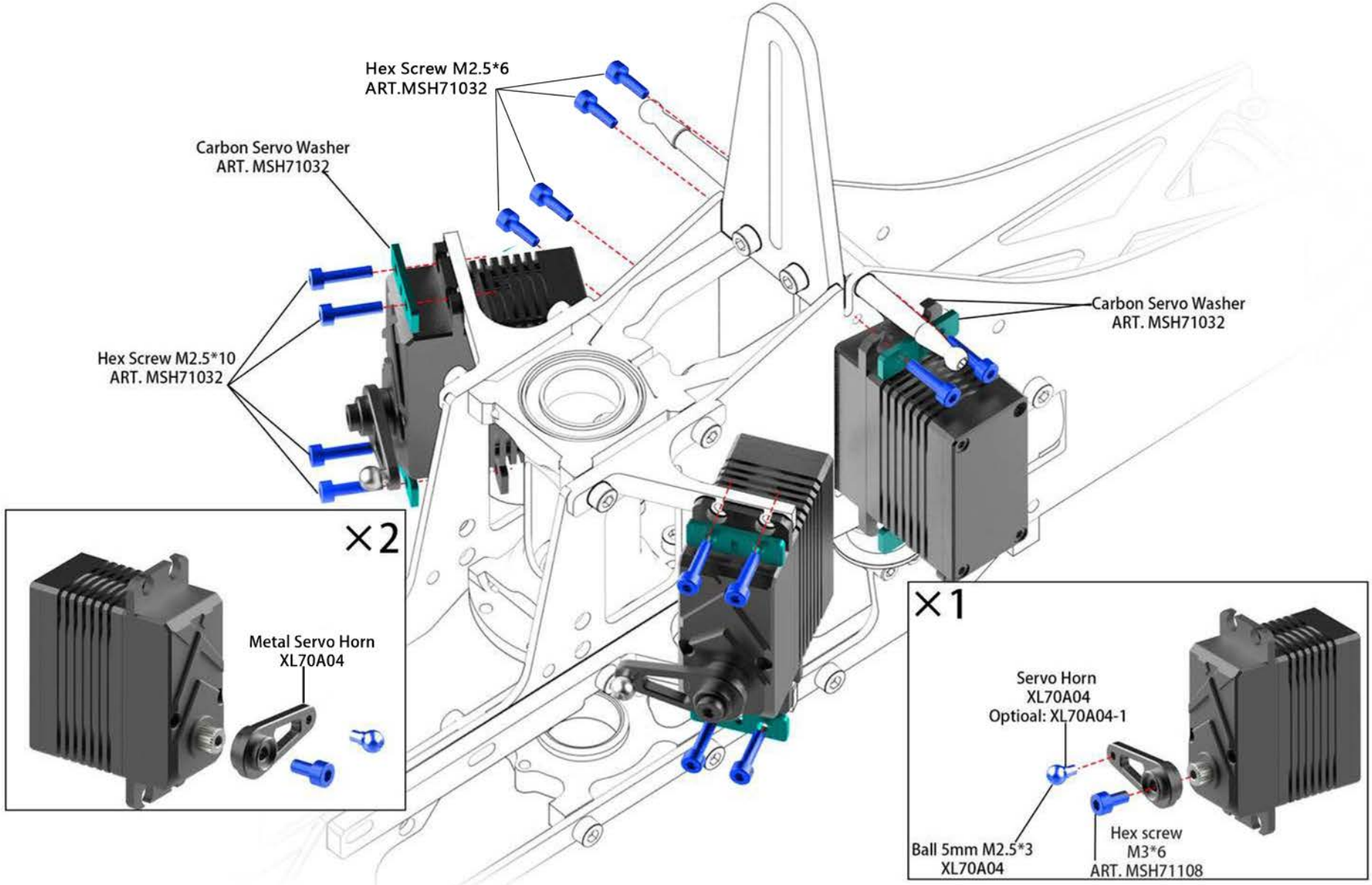
FRAME ASSEMBLY



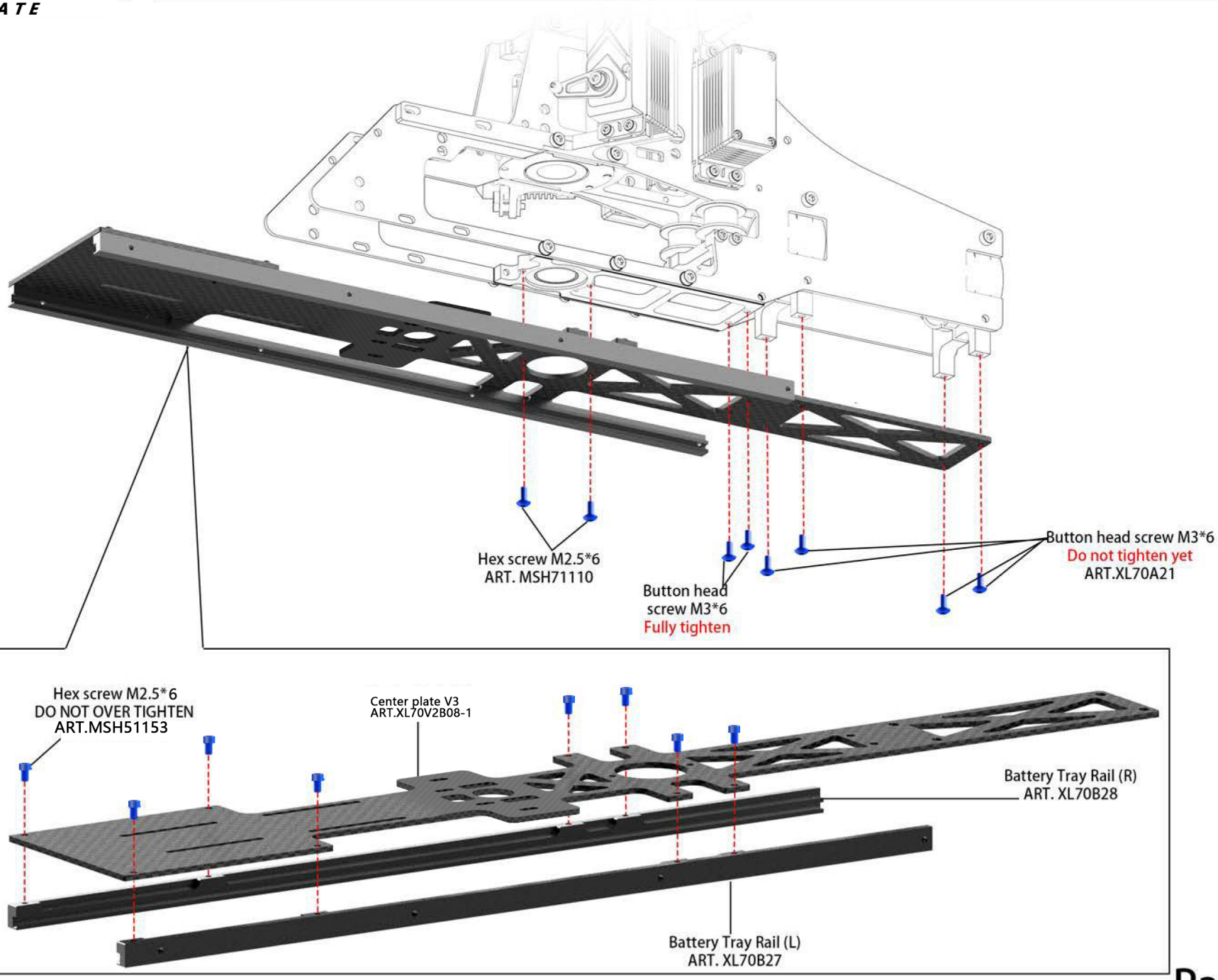

Pom Anti-Rotation Bracket
ART. XL70B13-2
Hex screw M3*8
ART. XL70B13-2
Anti-Rotation
Bracket Mount WC
ART. XL70B13-3
Hex screw M2.5*6
ART. MSH71110
Do Not Install This Silver Screw Yet
Flat screw M3*4
ART. XL70V2B05
Rear gyro plate
ART XL70V2B07-1
Threaded
Tail Boom Clamp V2
ART. XL70V2B05
Unthreaded Hole Faces Right
Set screw M3*12
ART. XL70V2B04-1
Alu spacer
ART.XL70V2B04-1
Ball 5mm M3*12
ART. XL70V2B04-1
Hex screw M3*6
ART. MSH71108
Hex screw
M3*14
ART. MSH71112


Ball 5mm M3*12
ART. XL70H11-4
Alu spacer
XL70V2B04-1
Set screw M3*12
ART. XL70V2B04
Upper Servo Mount
ART. XL70B03
Lower Servo Mount (R)
ART. XL70B04-1
Hex screw
M3*14
ART. MSH71112
Hex screw M2.5*6
ART. MSH71110
Hex screw M3*8
ART. MSH71109
Hex screw
M3*6
ART. MSH71108
Hex screw M3*10
ART. MSH71114
Carbon Fiber Upper Frame V2
ART. XL70V2B03

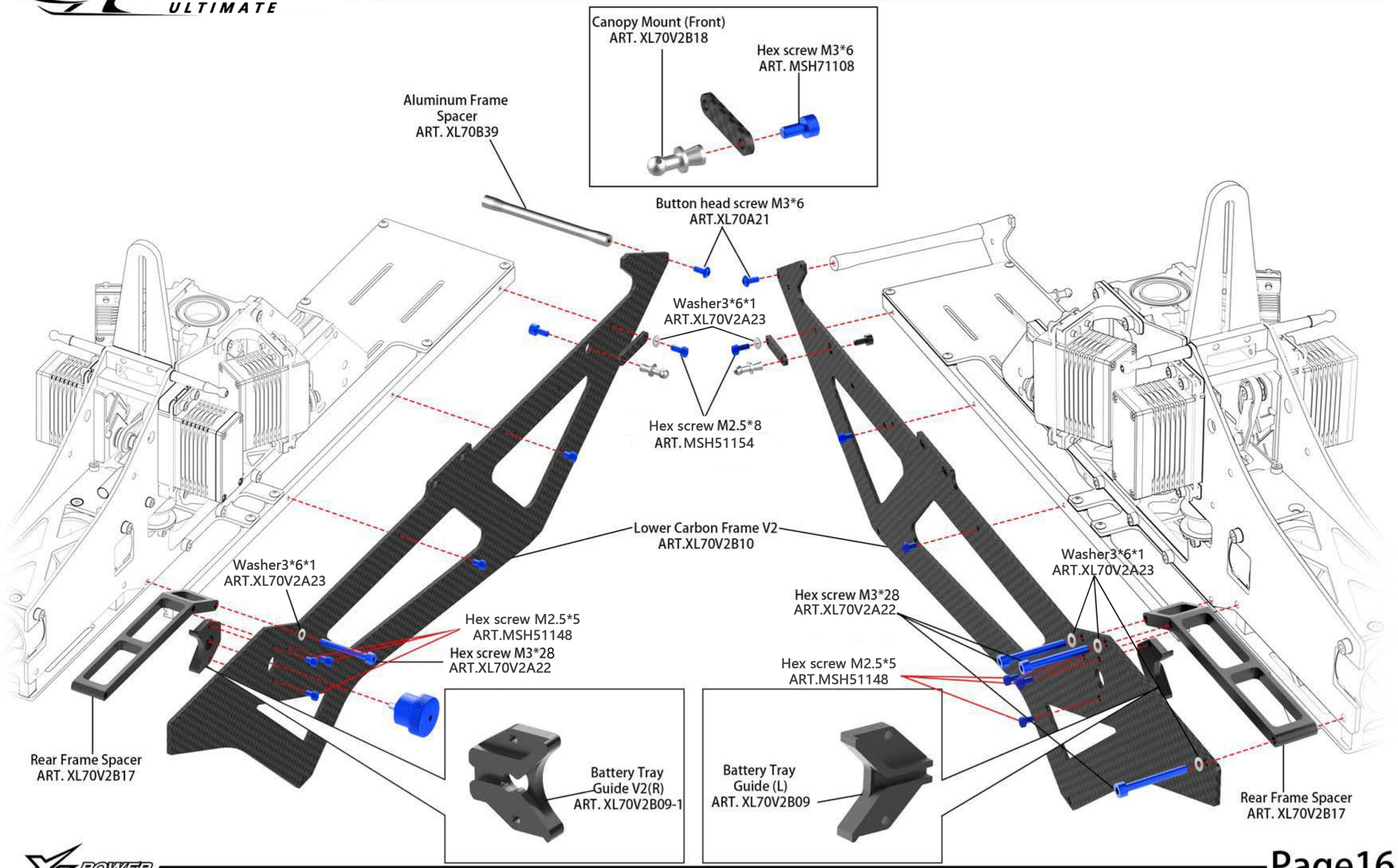
SERVO ASSEMBLY



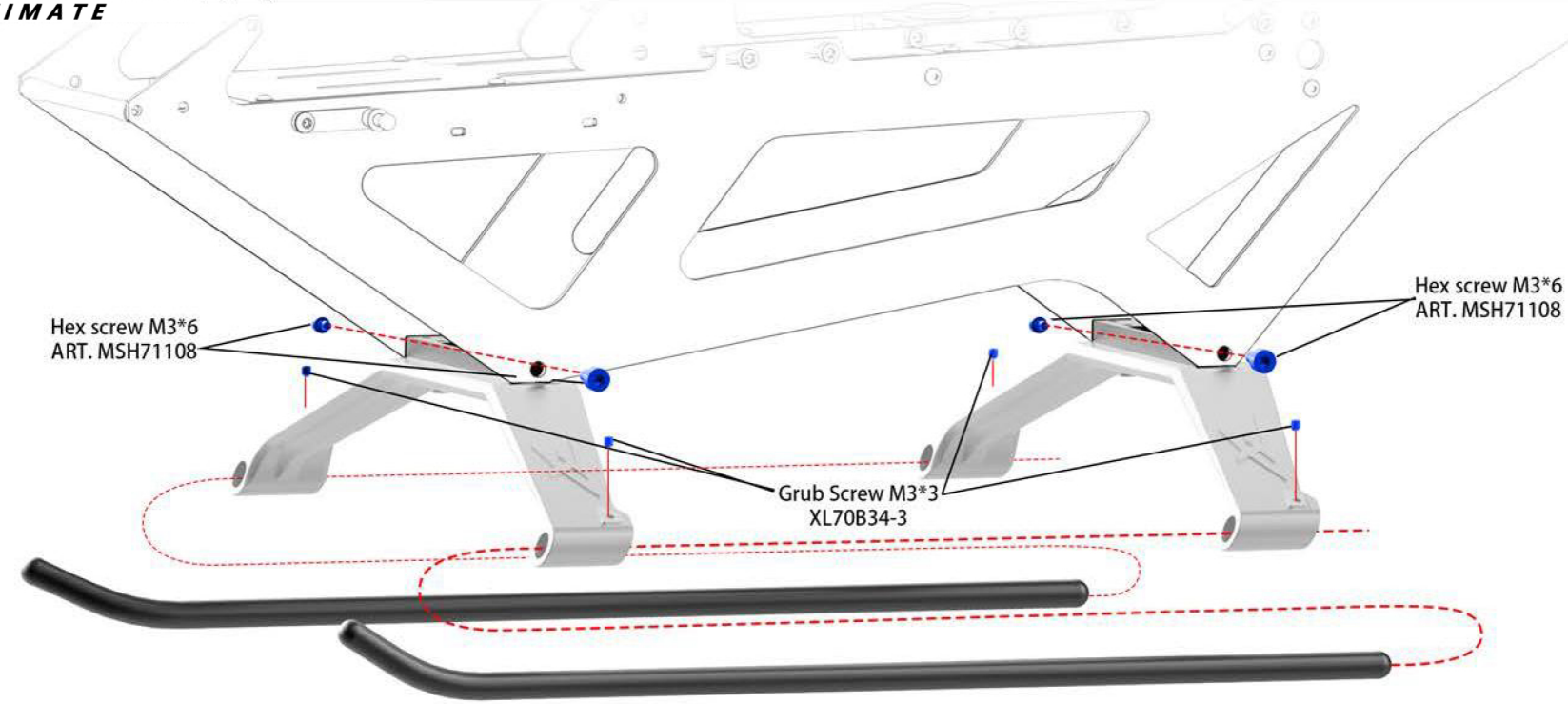
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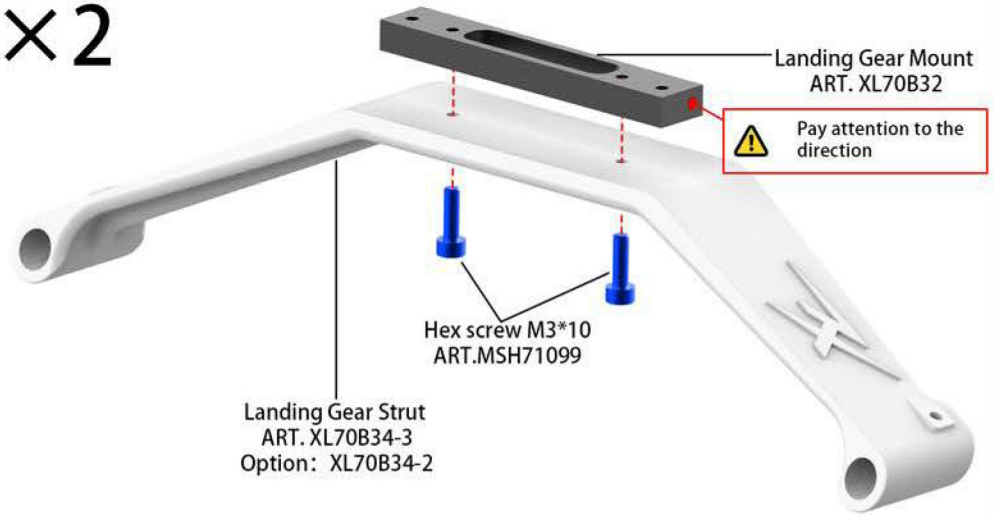
FRAME ASSEMBLY



LANGING GEAR ASSEMBLY



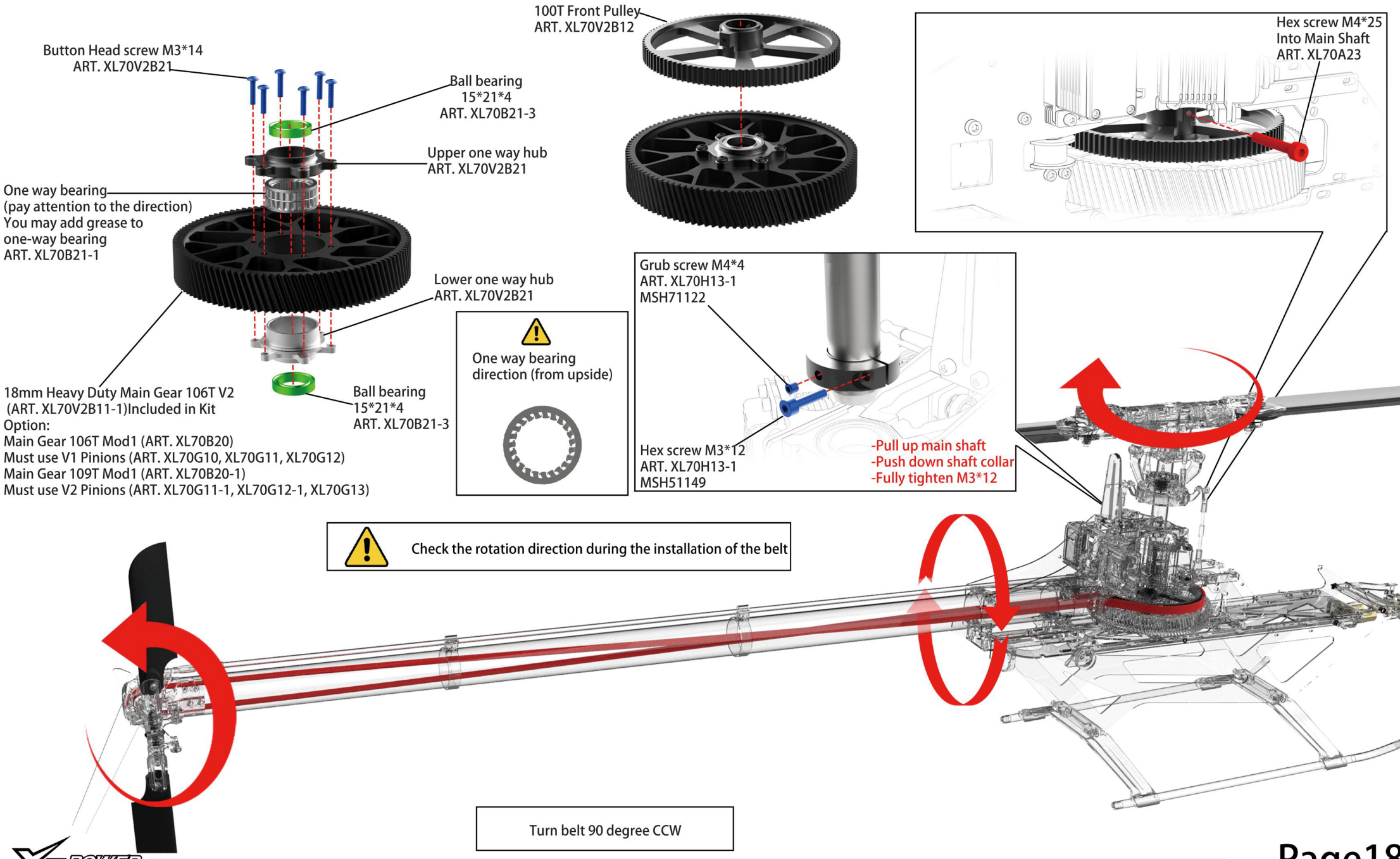
×2



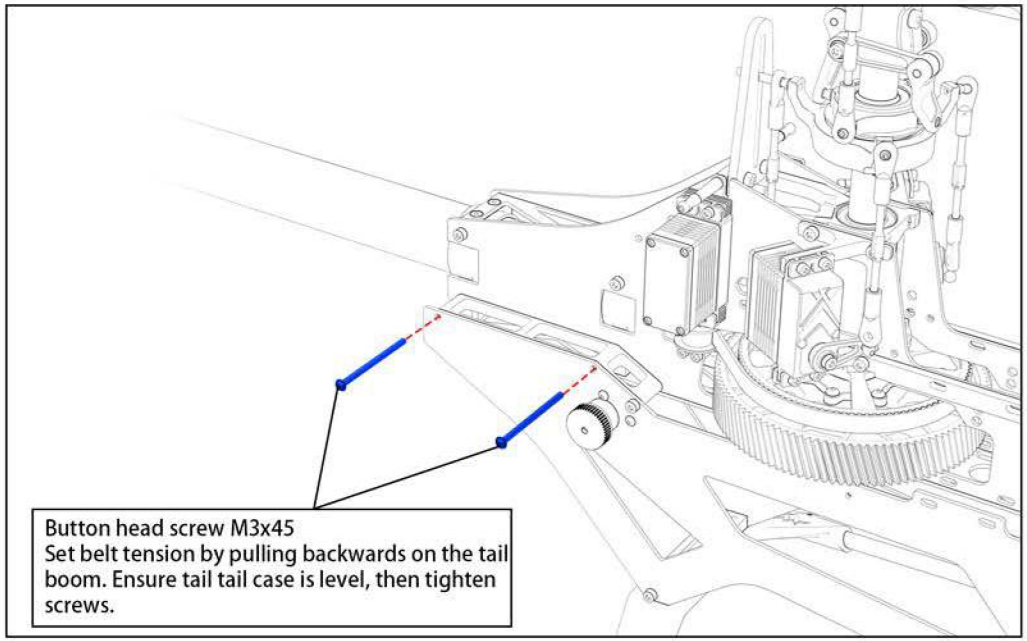
×2



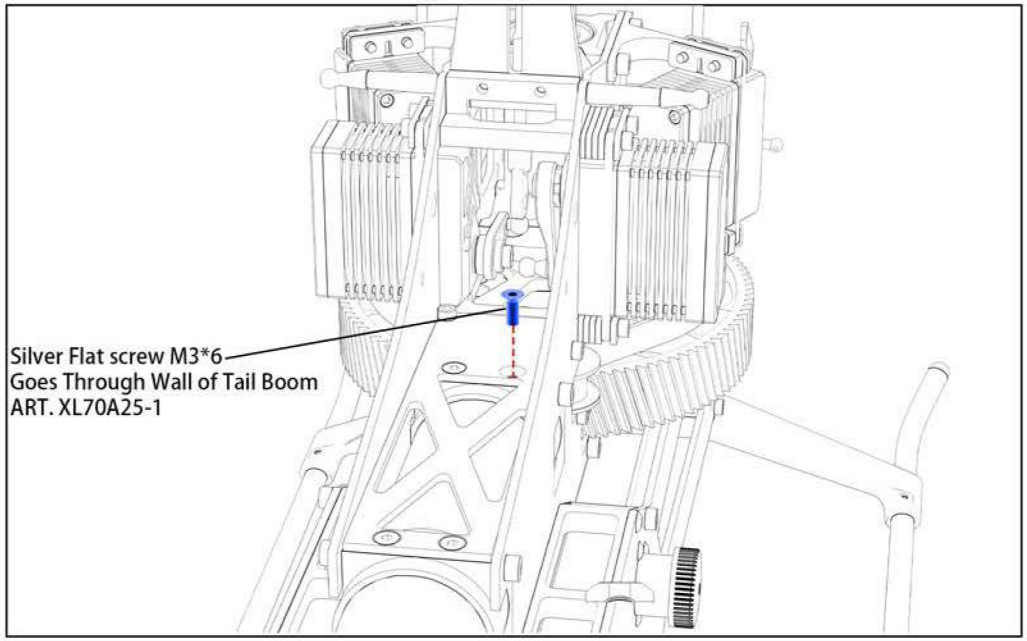
MAIN GEAR ASSEMBLY



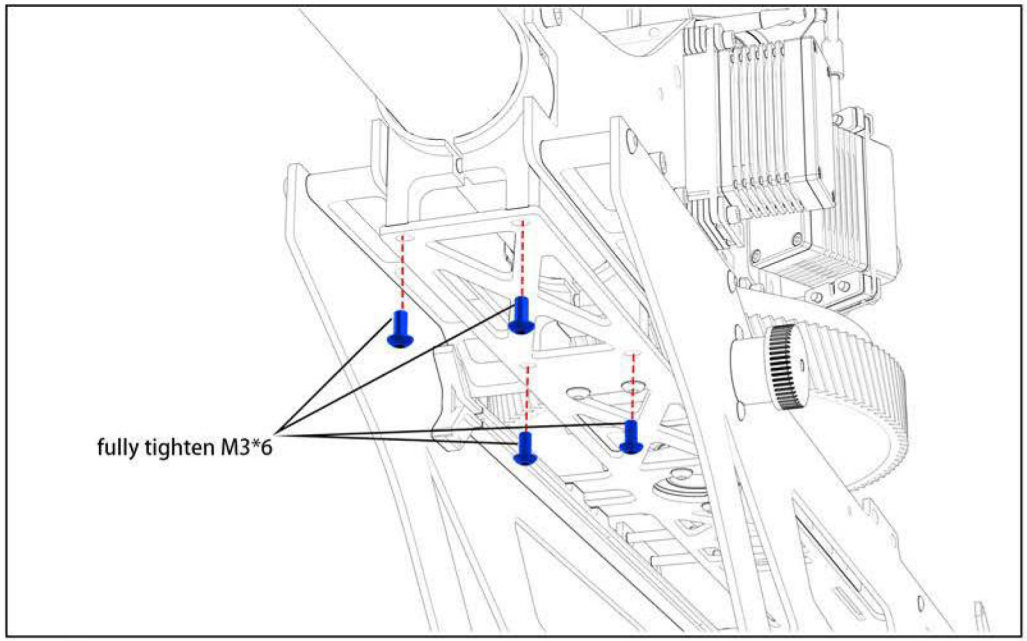
FRAME ASSEMBLY



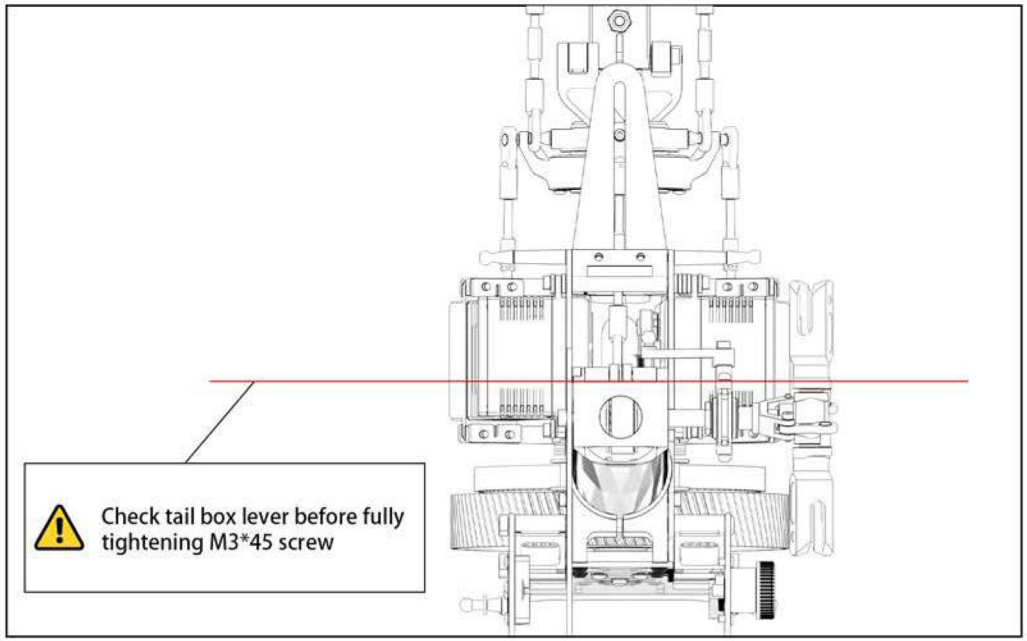
Button head screw M3x45
Set belt tension by pulling backwards on the tail boom. Ensure tail tail case is level, then tighten screws.



Silver Flat screw M3*6
Goes Through Wall of Tail Boom
ART. XL70A25-1

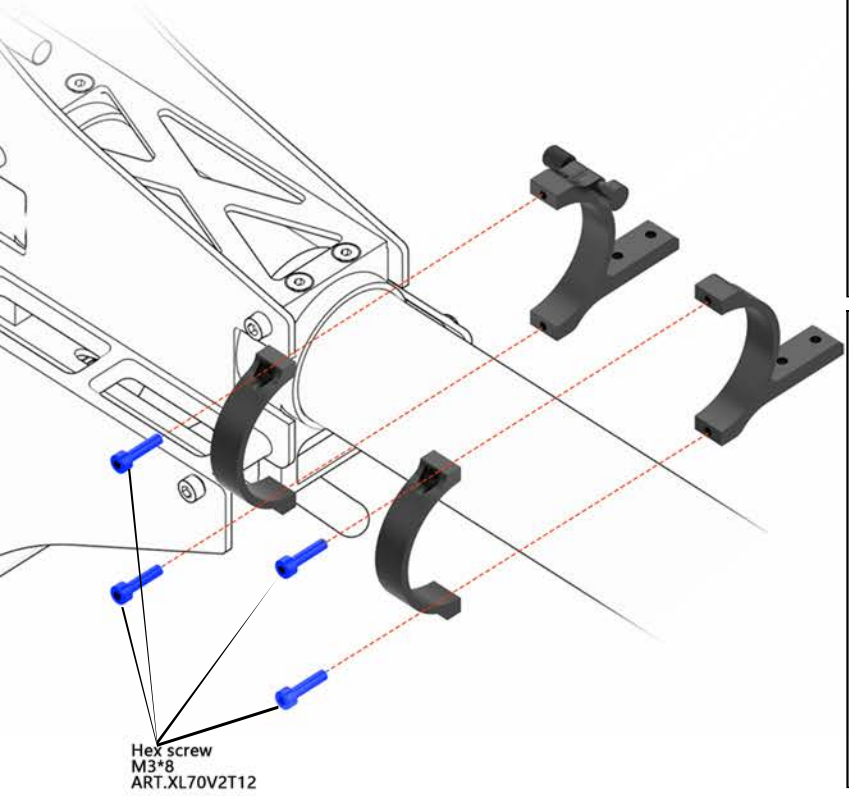


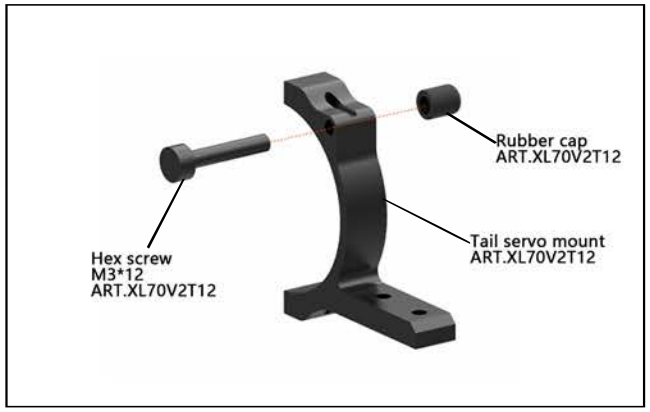
fully tighten M3*6

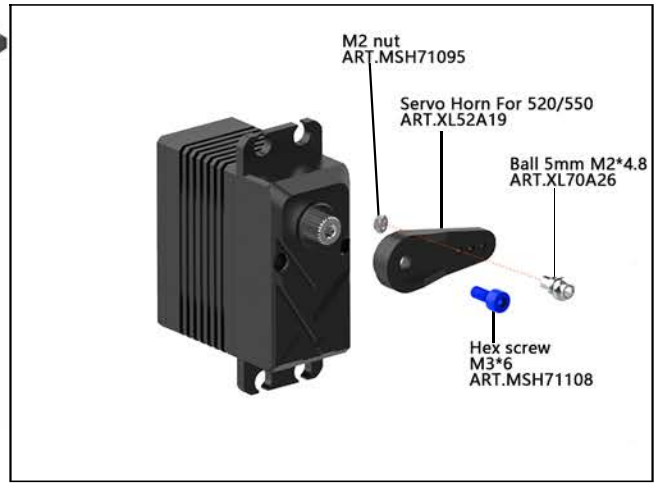


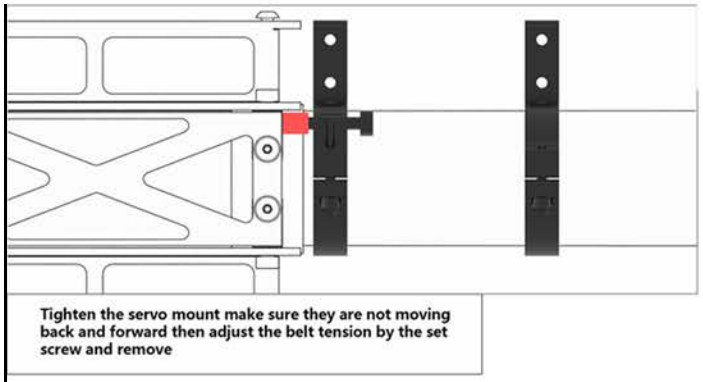
Check tail box lever before fully tightening M3*45 screw

TALL ASSEMBLY

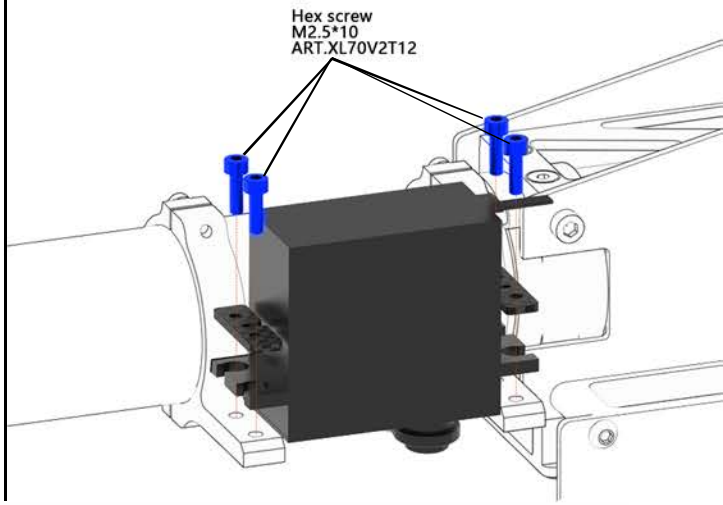




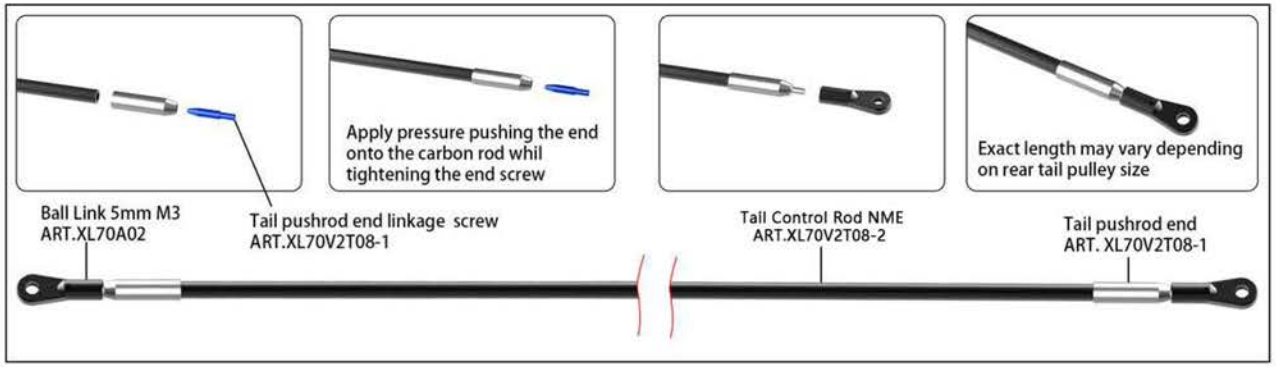


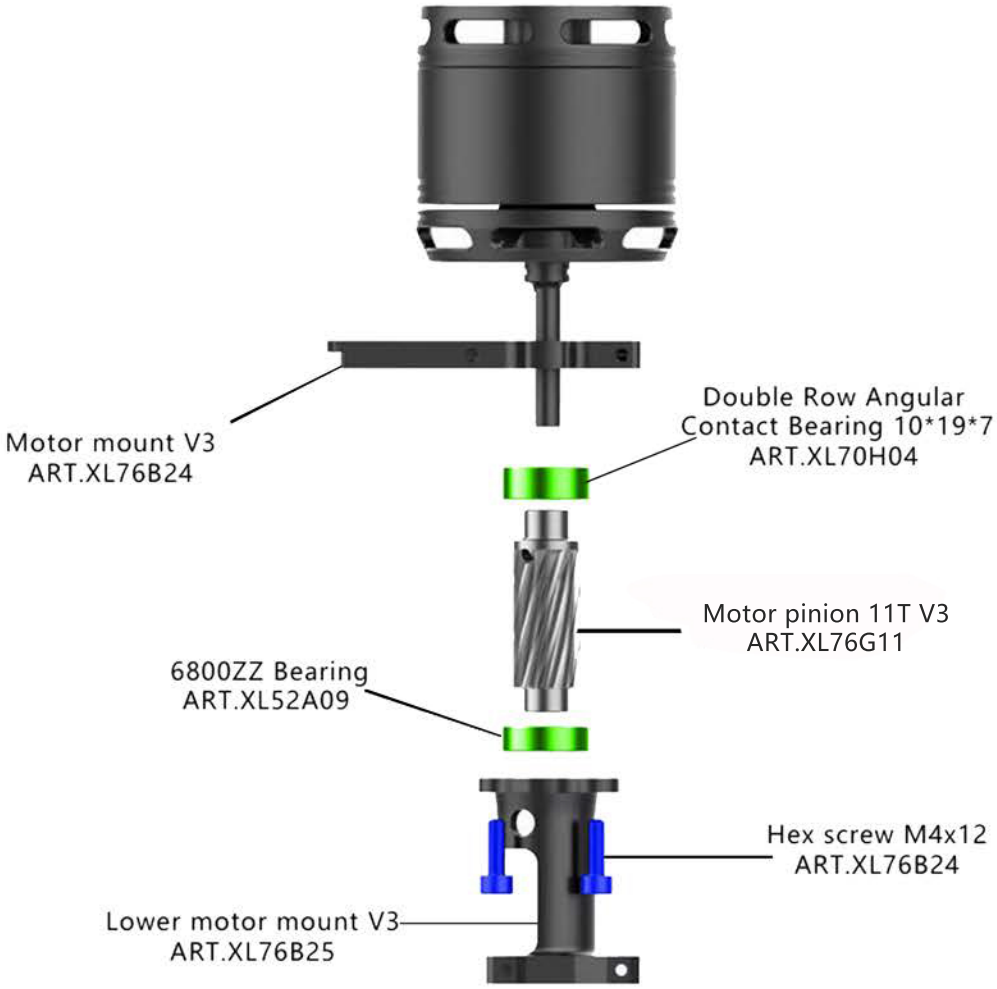


Tighten the servo mount make sure they are not moving back and forward then adjust the belt tension by the set screw and remove



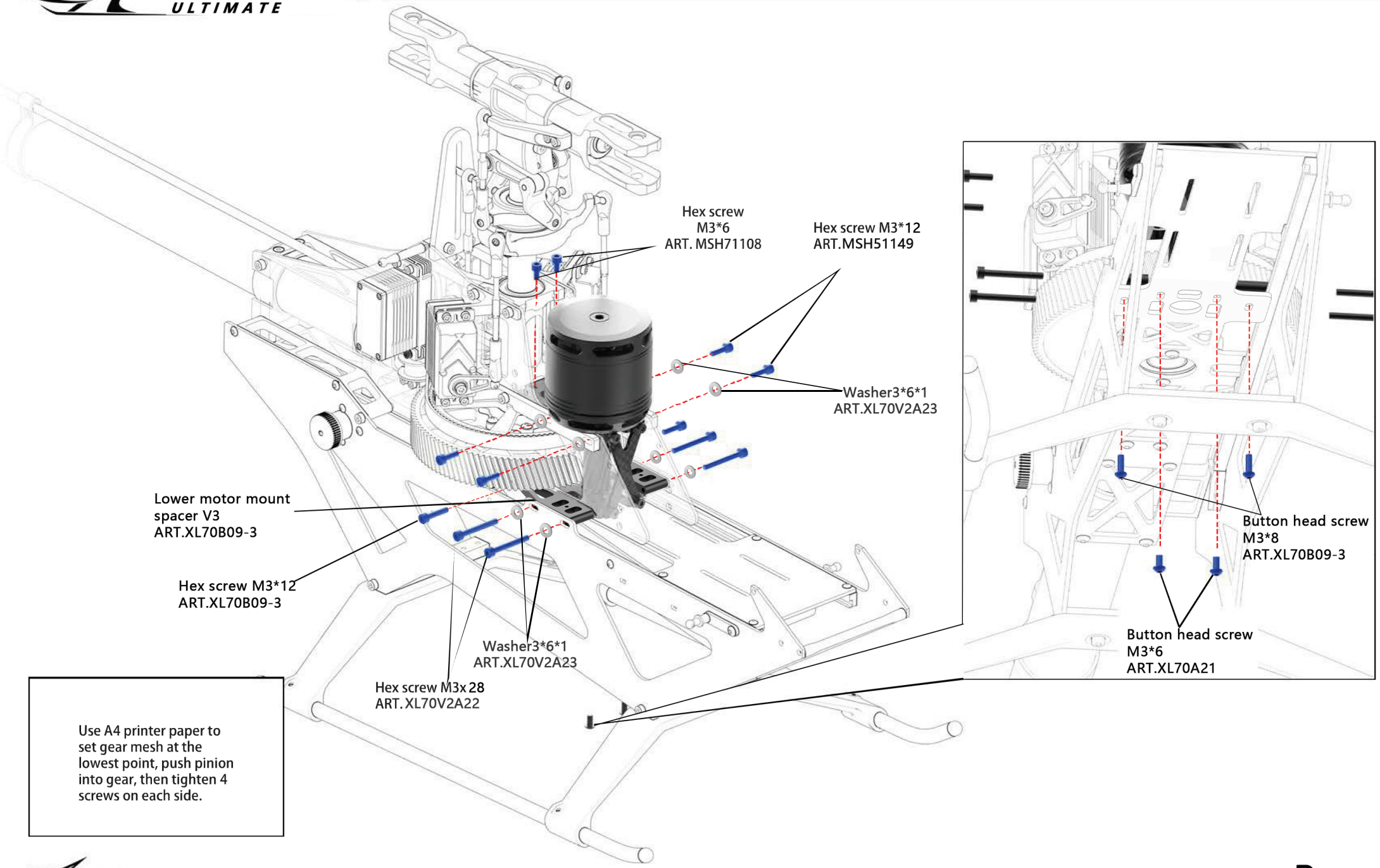





Motor mount V3
ART.XL76B24
Double Row Angular
Contact Bearing 10*19*7
ART.XL70H04
Motor pinion 11T V3
ART.XL76G11
6800ZZ Bearing
ART.XL52A09
Hex screw M4x12
ART.XL76B24
Lower motor mount V3
ART.XL76B25

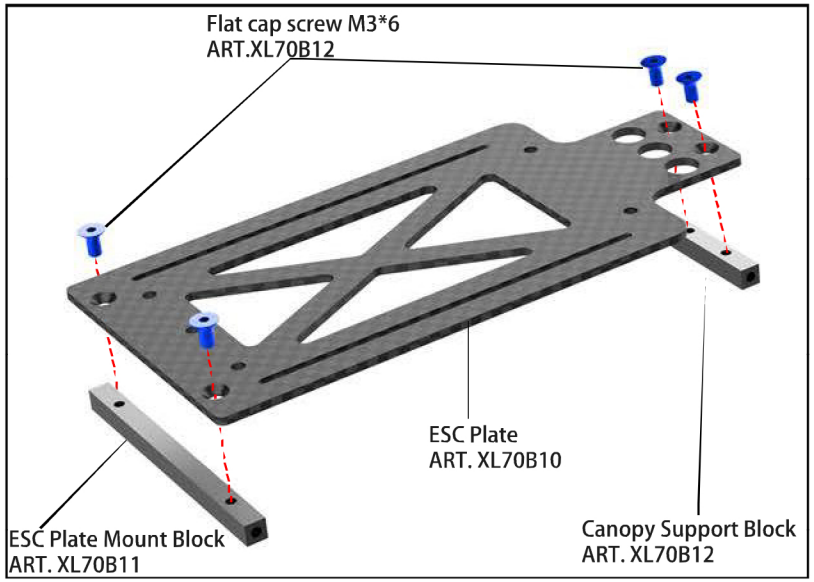

Grub screw M4*4
ART.MSH71122

MOTOR ASSEMBLY

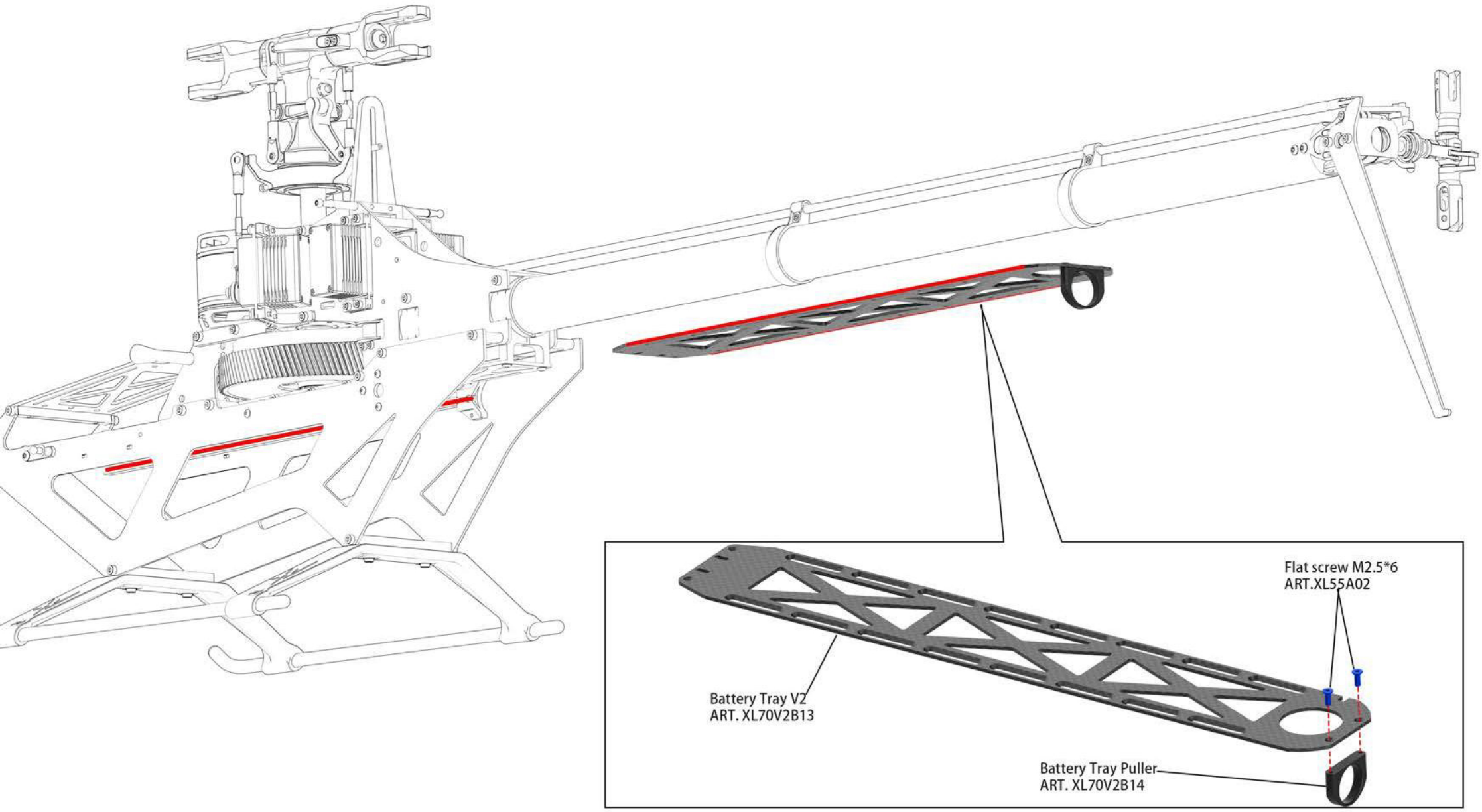


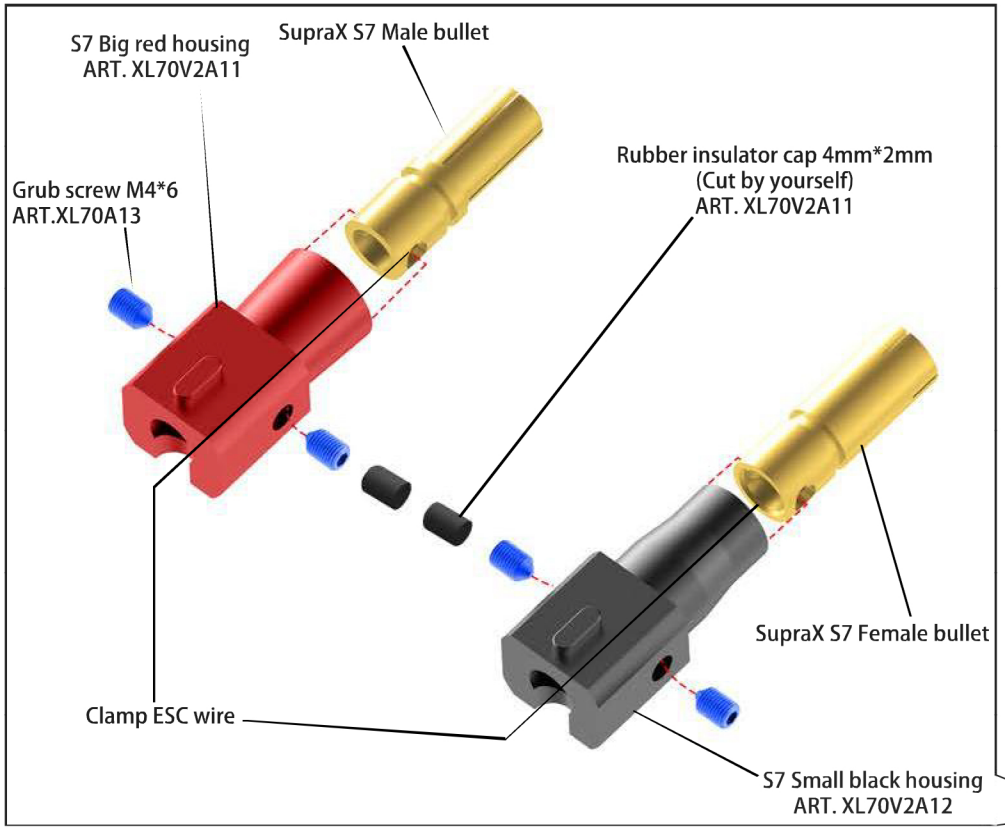
Use A4 printer paper to set gear mesh at the lowest point, push pinion into gear, then tighten 4 screws on each side.

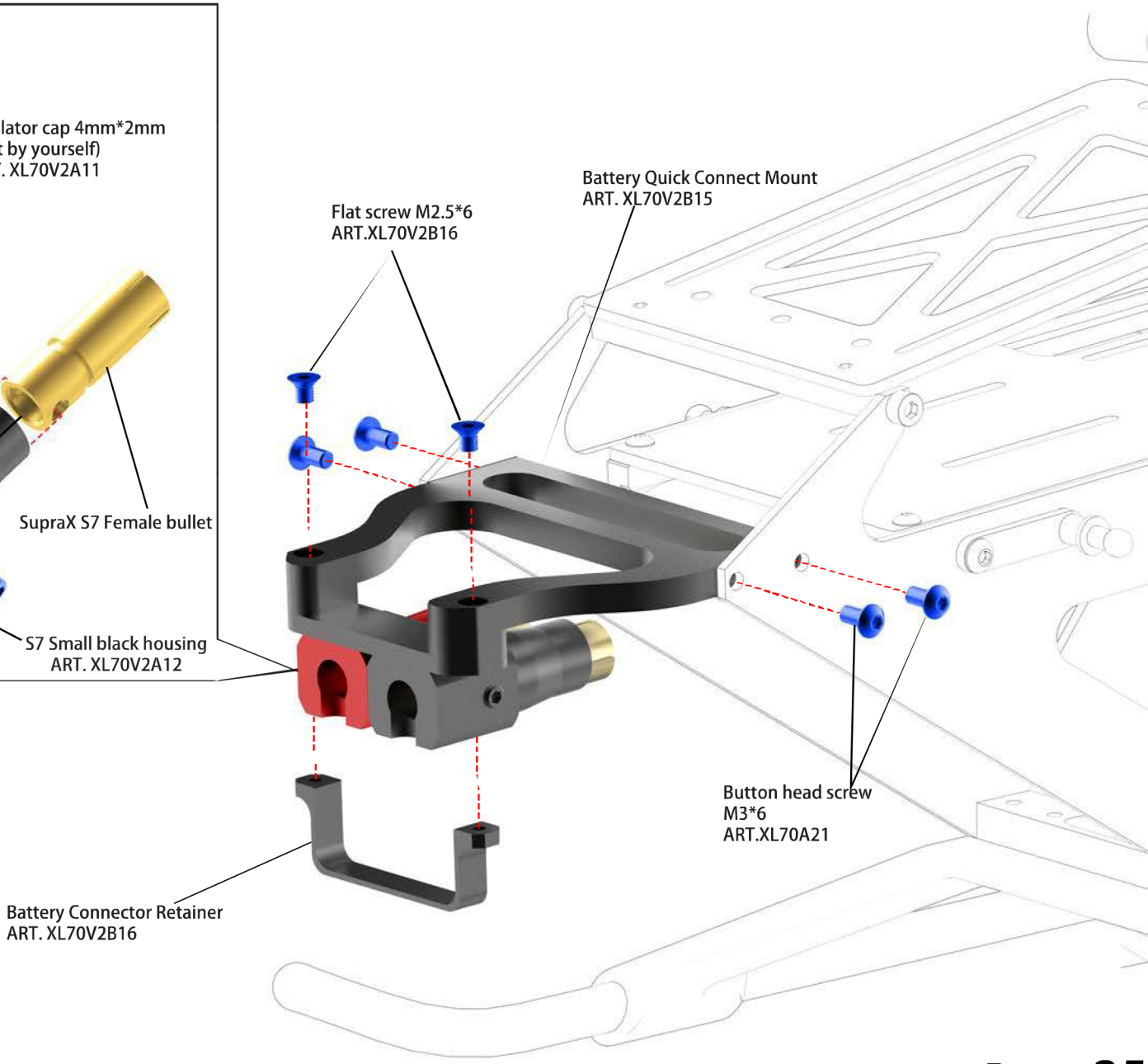
ESC PLATE ASSEMBLY

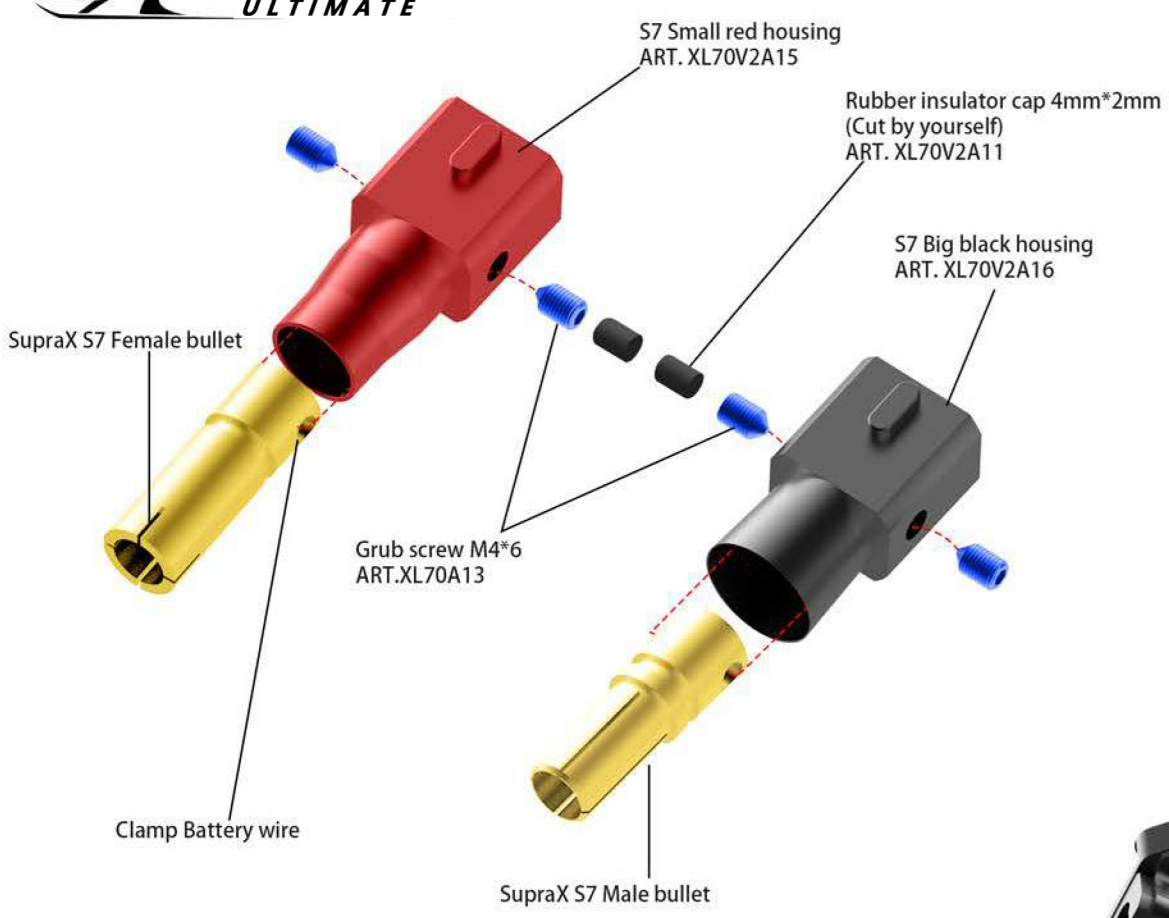


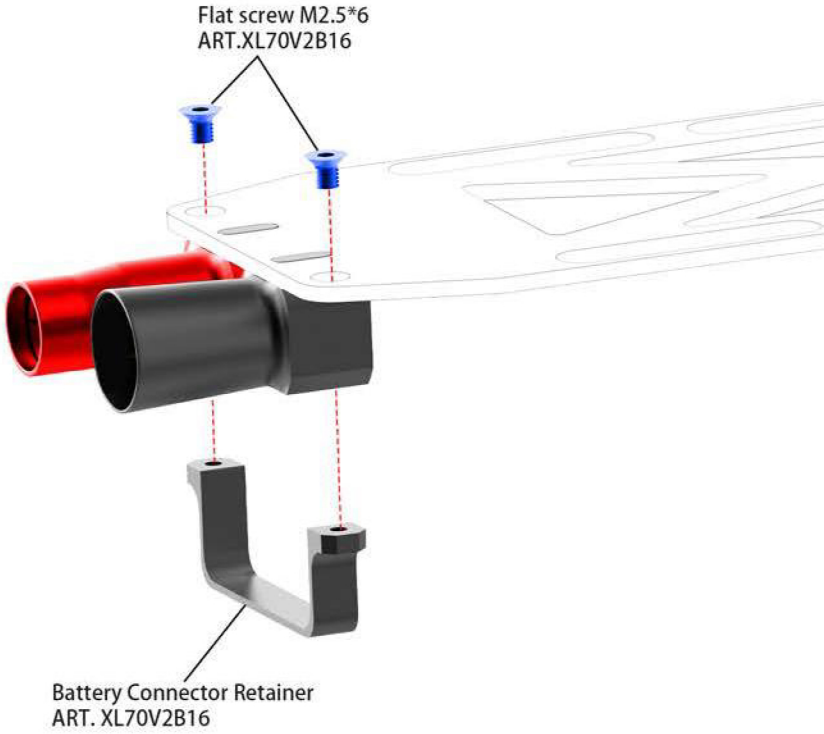
BATTERY TRAY ASSEMBLY

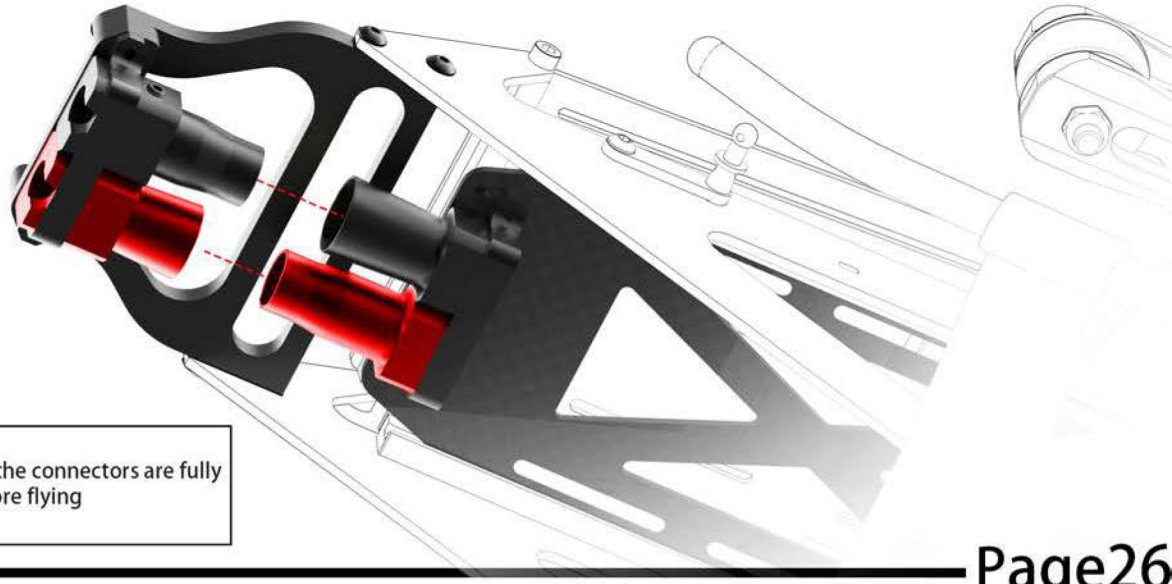



S7 Big red housing
ART. XL70V2A11
SupraX S7 Male bullet
Grub screw M4*6
ART.XL70A13
Rubber insulator cap 4mm*2mm
(Cut by yourself)
ART. XL70V2A11
SupraX S7 Female bullet
Clamp ESC wire
S7 Small black housing
ART. XL70V2A12

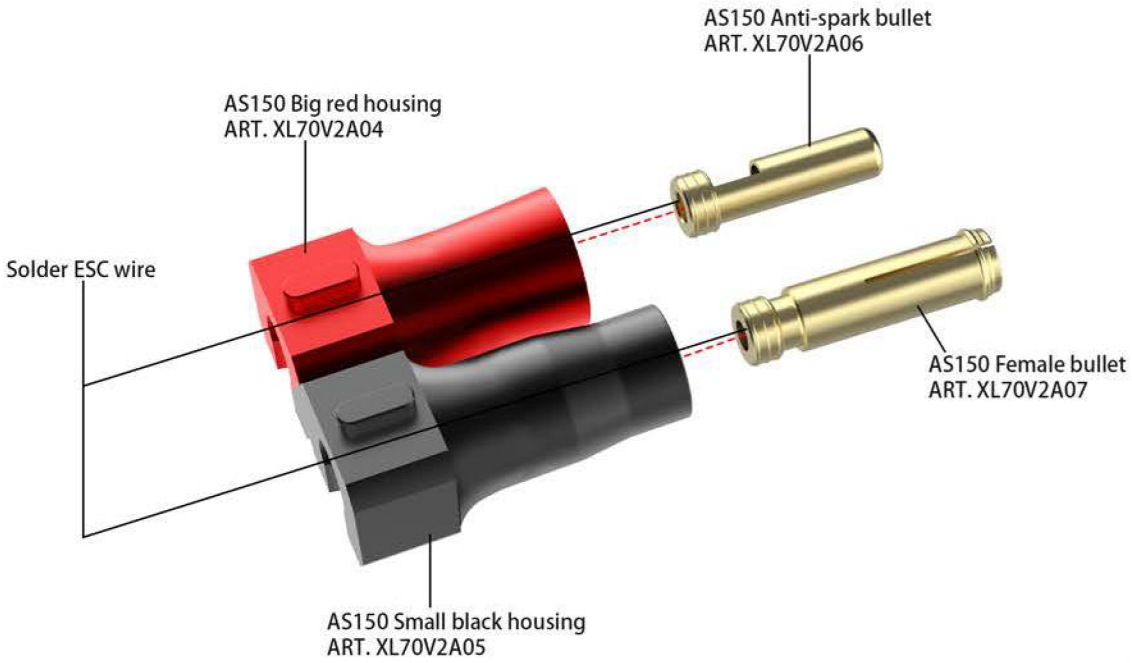

Flat screw M2.5*6
ART.XL70V2B16
Battery Quick Connect Mount
ART. XL70V2B15
Button head screw
M3*6
ART.XL70A21
Battery Connector Retainer
ART. XL70V2B16

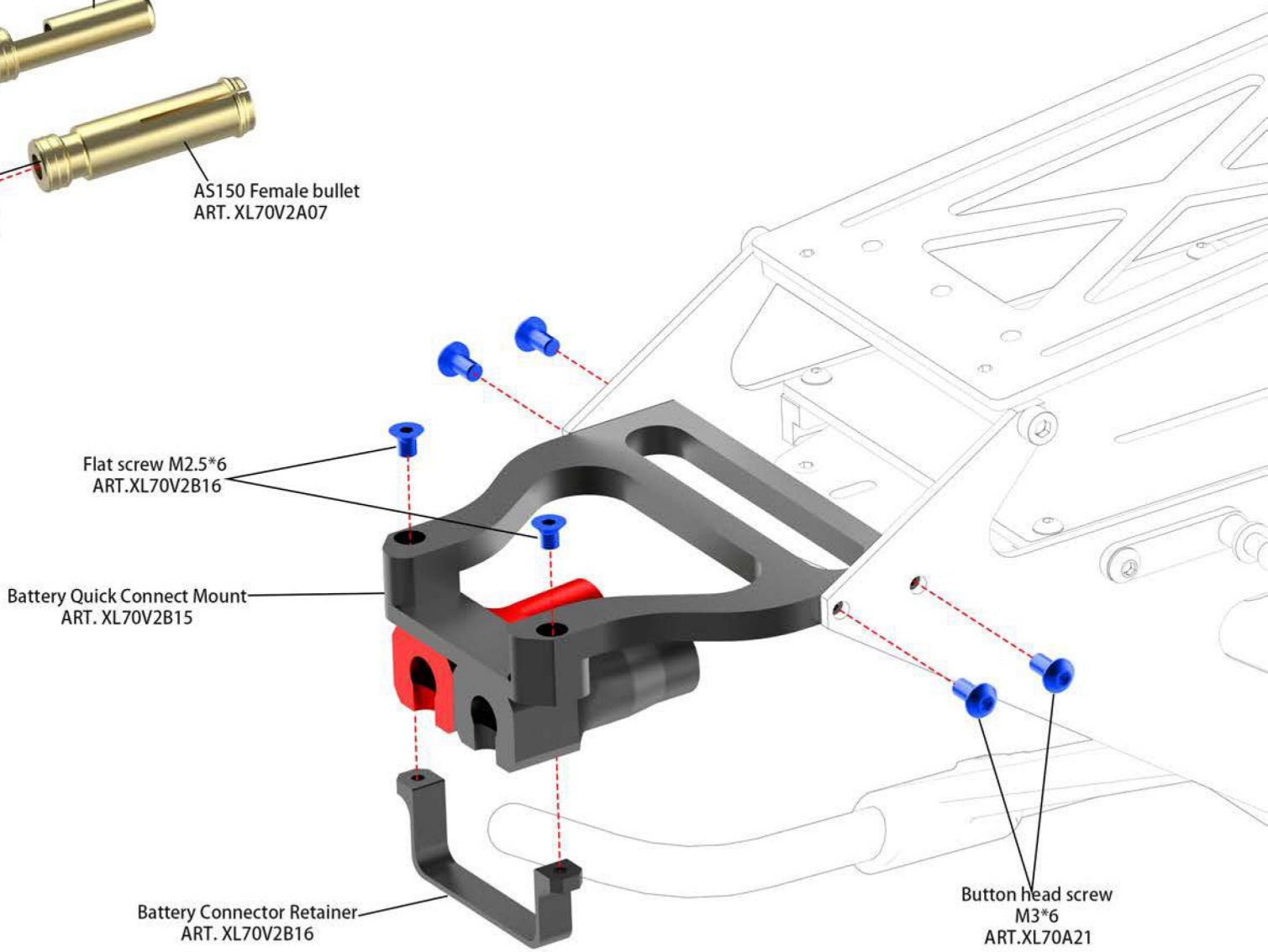


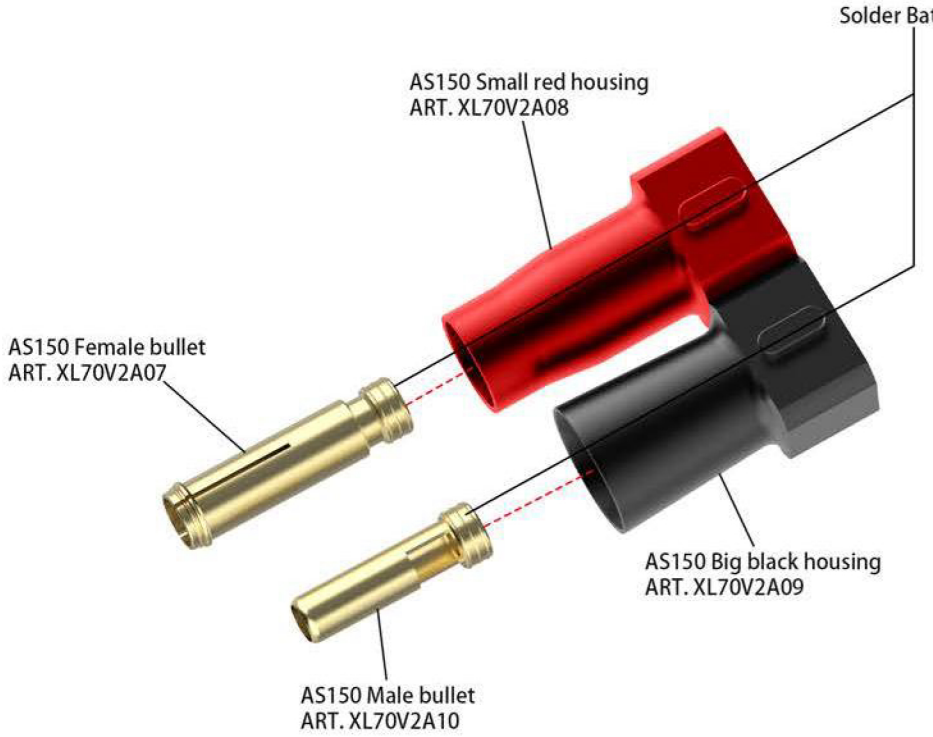


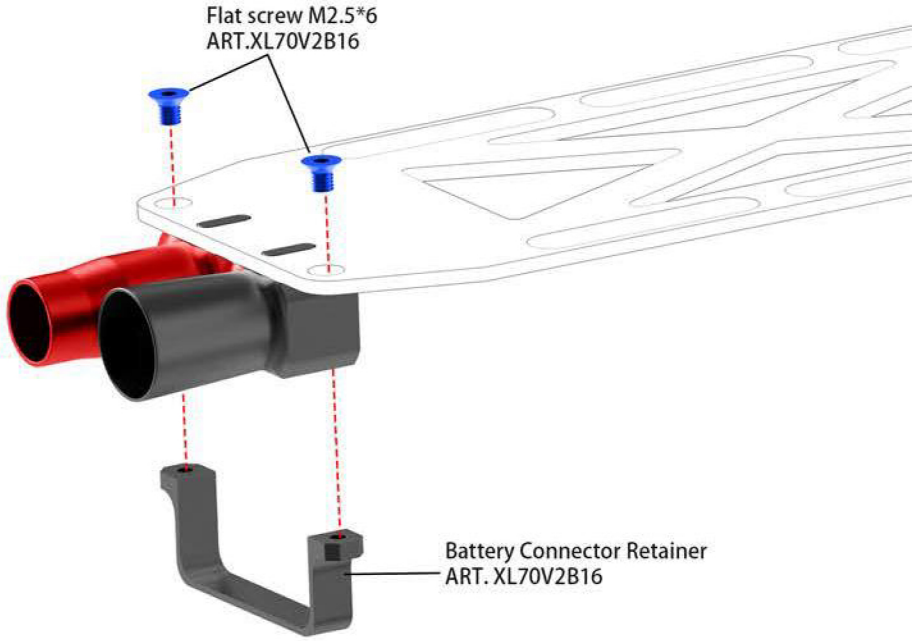


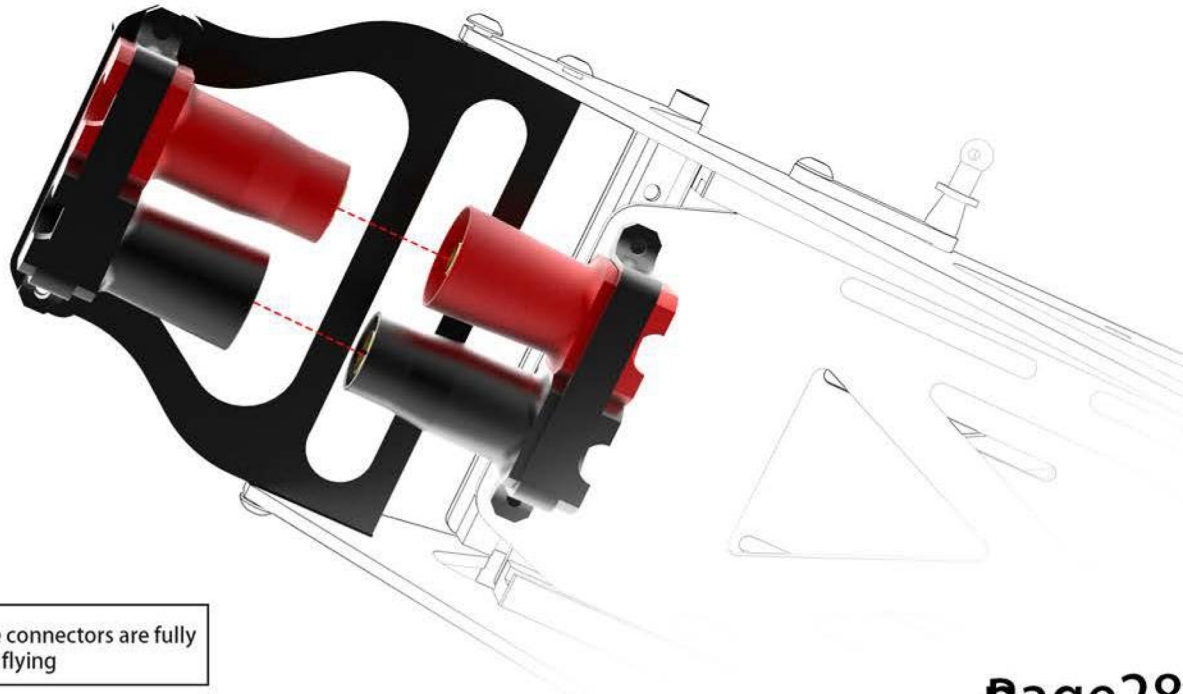
Make sure the connectors are fully mated before flying


AS150 Anti-spark bullet
ART. XL70V2A06
AS150 Big red housing
ART. XL70V2A04
Solder ESC wire
AS150 Female bullet
ART. XL70V2A07
AS150 Small black housing
ART. XL70V2A05


Flat screw M2.5*6
ART.XL70V2B16
Battery Quick Connect Mount
ART. XL70V2B15
Battery Connector Retainer
ART. XL70V2B16
Button head screw
M3*6
ART.XL70A21

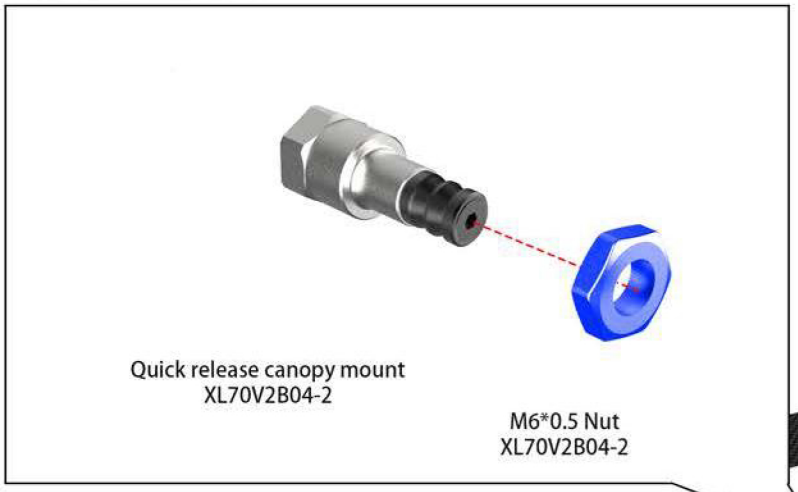






Make sure the connectors are fully mated before flying

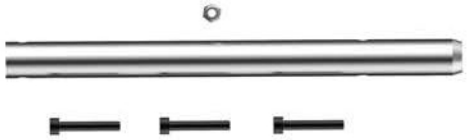
CANOPY ASSEMBLY



Quick release canopy mount
XL70V2B04-2

M6*0.5 Nut
XL70V2B04-2

Canopy Grommets
XL52B27

MSH71114  5×Hex screw M3×10	MSH71108  5×Hex screw M3×6	MSH71109  5×Hex screw M3×8	MSH71110  10×Hew screw M2.5×6	XL70A21  5×Button head screw M3×6	XL70V2A03  5×Button head screw M2.5×6	XL70B27-1  10×Hex screw M2.5×4
XL70B09-1  10×Hex screw M3*25	XL70A24  5×Button head screw M3×45	MSH71110  10×Hex screw M2.5×6	MSH71115  5×Socket head cap screw M3×30	MSH41128  5×Hex screw M2×8	MSH71101  5×Flat head screw M4×10	MSH71116  5×Hex screw M4x10
XL70A25-1  5×Silver Flat screw M3×6	MSH71116  5×Hex screw M4×10	MSH71122  5×Grub screw M4×4	XL70H04  Double Row Angular Contact Bearing 10*19*7	XL70H05  2×F10-18M Thrust Bearing 10×18×5.5 2×Washer 10×16×1		XL70H02-3  2×Head Damper 4×80°Oring
XL70H02-4  2×Pom damper 2×70°Oring	XL70H07  2×Washer 6×15×2 1×Feathering Screw 2×Screw M6×12	M2 Nut  MSH41119	XL70H01-1B  1×Main Rotor Hub NME 1×Screw M4×25 1×M4 Nut		MSH71112  5×Socket head cap screw M3×14	XL70B13-2  1×Pom Anti-Rotation Bracket 2×Hex screw M3×6
XL76H02B  1×Main Blade Grip Specyter V2 NME 2×Hex screw M3×10		XL76H04  3×Screw M4×25 1× M4 Nnt 1×Wraith E F3C / Specter V2 Main Shaft		XL70B03  1×Upper Servo Mount		XL70A01  3×mm Ball 5×7.3 2×Ball 4.72×13.6 mm 3×Ball 5×10.6mm 1×Ball 4.72×8.2mm 1×Ball 5×26.6mm

PARTS LIST

XL70H11B-1



1×Swashplate
Assembly NME V2

XL70H11-2B



1×Swashplate (Outer) NME
2×5mm Ball M3×3
1×5mm Ball M3×26

XL70H11-1BV2



1×Swashplate (Upper)NME V2
4×5mm Ball M3×3

XL70H09B



1×Radius Arm
1×Control arm NME
4×Ball Bearing 3×7×3
1×Screw M3×25
1×Pin 3×14
3×Spacer 3×5×0.5

XL70H10



2×Radius Arm

XL52A12



4×MR683ZZ Bearing

XL70H14



2×Titanium Servo linkage
4×Ball link

XL70H14-1



2×Titanium Main rotor linkage
4×Ball link

XL70V2N801-1



4×Hex screw M3×8
4×Hex screw M3×6
2×Hex screw M3×10
1×Main Shaft Bearing Block WC

XL70A28



1×GE15C Bearing
4×POM sleeve

XL70V2A01



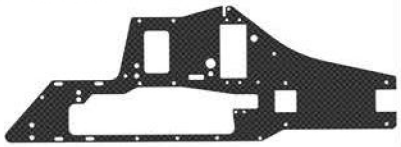
1×6803ZZ Bearing 17×26×5

XL70V2B02



1×Main Shaft Bearing Spacer

XL70V2B03

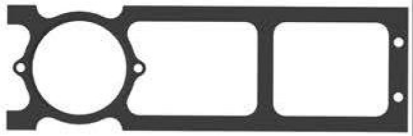


1×Carbon Fiber Upper Frame V2

XL70V2B01



1× Third Bearing Block V2
6×Hex screw M3×6
2×Hex screw M3×25
2×Hex screw M2.5×6
2×Button head screw M3×6



XL70B04



1×Lower Servo Mount (R)

XL70B04-1



1×Lower Servo Mount (L)

XL70B13-3



2×Hex screw M3*6 2×Hex screw M2.5*16
2×Set screw M3*12 2×Hex Screw M2.5*10
1×Anti-Rotation Bracket Mount WC

XL70V2B04-1



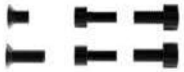
2×Canopy Mount (Rear)
2×Alu spacer

XL52A19



4×Servo Horn For

XL70V2B05-1





1×Tail Boom Clmp nitro
1×Flat screw M3×4
1×Flat screw M3×6
4×Hex screw M3×6 1×Hex screw M3×16 1×Hex screw M3×35

XL70V2B08-1



1×Rear gyro plate

XL70A20



2×Ball bearing 3×9×4

XL70V2B06



2×Pulley
2×pin 3×17
4×Bearing 3×9×4
1×Front belt idler mount upper

XL70V2B06-1



4×M2.5×6 Screw
2×M2.5×10 Screw
2×M2.5×16Screw
1×Front Belt Idler Mount V2 (Upper)

XL70A04



3×18mm metal servo horn
3×M2.5 ball 5mm

MSH41119



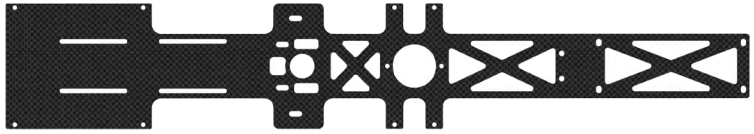
10×M2 Nut

XL70A26



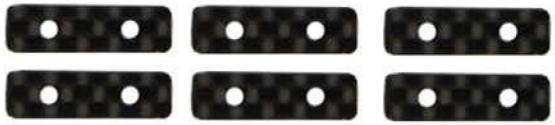
4×Ball 5mm M2

XL70V2B08-1



1×Center plate V3

XL70V2A02



6×Carbon Servo Washer

XL70V2B10



1×Lower Carbon Frame V2

XL70B27



1×Battery Tray Rail (L)

XL70B28



1×Battery Tray Rail (R)

MSH71032



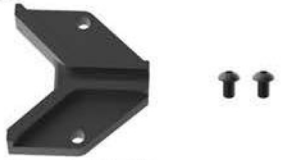
4×Carbon Servo Washer
8×Hex Screw M2.5×10

XL70B39



2×Aluminum Frame Spacer

XL70V2B09



1×Battery Tray Guide (L)
2×Screw M2.5×6

XL70V2B09-1



1×Battery Tray Guide (R)
2×Screw M2.5×6

XL70V2B17



1×Rear frame Spacer

XL70B32



2×Flat Head Cap Screw
1×Frame Mounting Block
2×Hex screw M3×10
2×Hex screw M3×6

XL70B34-3



2×Landing Gear Strut
4×M3×3mm Set Screw

XL70B09-3



2×Button head screwM3*8
2×Hex screw M3*12
4×Hex screw M3x25
2×Lower motor mountspacer V3

XL70B12



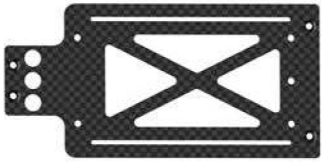
2×Screw M3×45mm
1×ESC mount
2×Rubber
2×M3×6mm Flat Head Cap Screw
2×Flat cap screw M3*6

XL70B11



2×M3×6mm Screw
2×M3×6mm Flat Haed cap screw
1×ESC Mount

XL70B10



1×ESC Plate

XL70V2B14



1×Battery Tray Puller
2×Flat screw M2.5×6

XL70V2B13



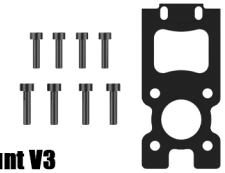
1×Battery tray V2

XL70M01



1×4525 Motor

XL76B24



1×Motor mount V3
4×Hex screw M3*10
4×Hex screw M3*6

XL76B25



1×Lower motor mount V3
4×Hex screw M4×12
2×Button head screwM3×6

XL70A06



2×F686zz Bearing

XL70V2T11B-1



1×tail pitch Lever Support
1×M3×8 screw

XL70V2T02B-1



1×Ultra light tail case
2×M3×6 screw
4×M3×6Button head screw
1×M3×30 screw

XL70V2T04



1×21T tail pulley
1×M4×4Set screw

XL70V2T04-1



1×20T tail pulley
1×M4×4Set screw

XL70T13-2



1×Tapered End Tail Shaft
1×M4×10 Flat head screw

XL70V2T01-R



1×Tail Boom V2-R

XL70A06-1



2×Ball bearing 6×13×5

XL70V2NT03

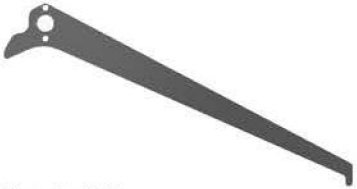
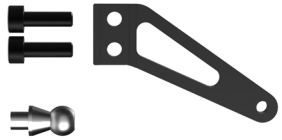
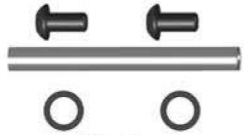


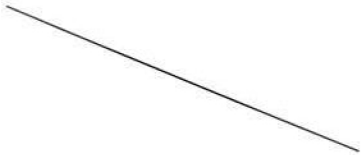
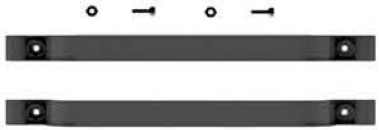
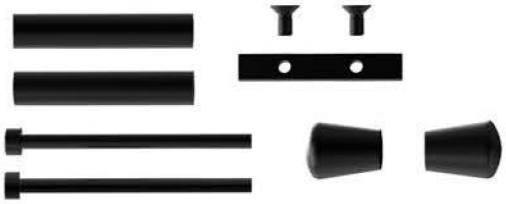
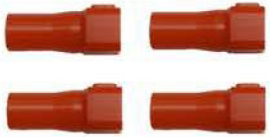
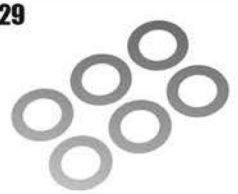
2×Rear Belt Idler Spacer
2×Bearing 3×8×3
1×Washer3×6×1

XL52A12



4×MR683ZZ Bearing

XL70V2T05-2  1×Vertical Fin	XL70T12-2  1×Tail Pitch Slider 2×MF128 Bearing	XL70T12-1  1×Tail Shaft Slide Bushing	XL52T11  2×Tail Control Link	XL70T12-3  2×Pitch Slider Fork Bushing 2×3×3
XL70T12-4  1×Tail pitch slider 2×Hex screw M2×8 2×Ball 4.72mm	XL52T09-2  2×screw M2.5×6	XL70A22  2×F683zz Bearing 3×7×3	XL70T09B  1×Tail Pitch Lever NME 2×M2.5×6 screw 2×Bearing3×7×3Flange 2×M2.5×6Pitch lever screw	XL70V2T07B-1  1×Tail Pitch Control Arm nitro
XL70T14-3  2×Center pin 2×Washer M2×4 2×Hex screw M2×3 2×F 683zz Ball Bearing 3×7×3 Flanged	XL70T15-1  4×0 ring for tail shaft 2×Washer 5×8×0.5	XL70T20  2×Hex screw M4×6 2×M4 Washer 1×Tail Spindle	XL70A27  5×Washer 5×7×0.3	 1×Thrust Bearing 5×10×4
XL70T17  4×Ball bearing 5×10×4	XL70T14-2  1×Tail Center Hub WC	XL70T16B  1×Tail grip NME 1×M3×17 Screw 1×M3 Nut 1×4.72 mm ball 2×Bearing5×10×4		XL70B21-3  2×6702zz Ball bearing 15×21×4
XL70V2T03  1×8mm Tail Belt V2	XL70V2B21  1×Upper one way hud 1×Lower one way hub 2×Bearing 15×21×4 6×M3×12 Screw	XL70B21-1  1×One way bearing	XL70V2B11  1×118mm Heavy Duty Main Gear 106T Mod1 V2	XL70V2B12  1×100T Front Pulley 1×M4×25 screw

XL70H13-1  1×Main shaft collar 1×M3×12 Screw 1×M4×4 Set screw	XL70A23  5×Hex screw M4×25	XL70V2T08-1  2×Tail pushrod end 2×Tail pushrod end linkage screw 2×Ball Link 5mm M3 1×Ball 5mm M3*3 1×Ball 5mm M2*4.8	XL70A02  8×Ball Link	XL70V2T08-2  1×Tail Control Rod NME
XL70V2T09  2×Tail control rod guide 2×M2×Screw 2×M2×Nut	XL76G11  1× Motor pinion 11T V3 2×Grub screw M4*4	XL70A16  2×688ZZ Ball Bearing 8×16×5	XL70B12  2×Rubber 2×M3×45mm screw 1×Plastic Tube 2×ESC mount 2×M3×6mm Flat Head Cap Screw	
XL70V2A04  4×AS150 Big red housing	XL70V2A06  2×AS150 Anti-spark bullet	XL70V2A07  4×AS150 Female bullet	XL70V2A05  4×AS150 Small black housing	XL70V2B16  1×Battery Connector Retainer 2×Flat screw M2.5×6
XL70V2B15  1×Battery Quick Connect Mount 4×Button head screw M3×6	XL70V2A08  4×AS150 Small red housing	XL70V2A09  4×AS150 Big black housing	XL70V2A10  4×AS150 Male bullet	XL70V2A11  4×S7 Big red housing 8×Grub screw M4×6
XL70V2A12  4×S7 Small black housing 8×Grub screw M4×6	XL70V2A15  4×S7 Small red housing 8×Grub screw M4×6	XL70V2A16  4×S7 Big black housing 8×Grub screw M4×6	XL70V2B04-2  2×Quick release canopy mount 2×M6×0.5 Nut	XL70A29  6×Washer 10×16×0.1