
TRON
PERFORMANCE HELICOPTER
7.0

Safety notice

Operate the helicopter in open areas with no people nearby.
Follow your country air regulation rules.
You may need to join a local club and become a member before flying the model.

Do NOT operate the helicopter in the following places and situations (or else you risk injury or death): 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.

Keep in mind that other people around you might also be operating a R/C models. 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:vBefore flying the helicopter, ensure that all screws and bolts are tightened. A single loose screw may cause a major accident.

Replace all broken or defective parts with new ones, as damaged parts can lead to crashes. Never approach a spinning rotor. Keep at least 5 meters/yards away from a spinning rotor blades. Do not touch the motor or muffler 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!
Note that a badly assembled or improperly adjusted helicopter is a safety hazard!
In the beginning, novice R/C helicopter pilots should always be assisted by an experienced pilot.

SAFETY FIRST! ALWAYS.

Experience the next level of RC helicopter design and performance!

Features

The new Tron 7.0 DNAMIC PRO ultralight 700 class Helicopter delivers stunning flight performance starting from 6S up to 12S lipo battery configurations.
The DNAMIC was already considered in the development of the Tron 5.8, but with appropriate changes to meet the need for a 700 size helicopter flying with a lower head speed and weight.
An updated and larger rotor head, a new tail transmission and various other changes have found their way into the DNAMIC to deliver you an absolutely precise and agile helicopter.
Excellent stability with bulletproof tail authority.
Last but not least, the take-off weight is once again, second to none!

- CNC Maingear 137 T for STANDART and 121 T for PRO
- Motor pinion 13T /14T /15T /16T /17T = slant and 12T / 13T / 14T / 15T / 16T herringbone.
- Tail maindrive pulley 101 T
- Tail back side pulley 20T /19T /18T .Tail gear ratio from 4.8 up to 5.6 possible (5.05 stock)
- Mechanic weight with canopy and batterie tray =1650 grams.
- Mini or full-size cyclic servo option. (Adapters included in kit)
- Motor mounting features a bearing block supported pinion, reducing overall wear on the power system and drive train.
- Compatible with a wide range of motor sizes. 4020, 4025 or 4225 series. (6mm shaft diameter with min 15mm lenght required)
- Weight RTF = (**3700 grams** with 6s-5500mah lipo 3* FULL LOW PROFILE servo1* FULL TAIL servo, ESC- Scorpion130HV ,Scorpion 4225 size motor.
- Supersonic canopy mounts included in kit. (backside)
- Semi Fusion edition design included in kit. (frame and tail fin stickers)
- Heavy duty one way bearing and hub design.
- Innovative FBL tray. (Adjustable dampening hardness)
- Octa boom design with oval side shapes,
- Capable to use a wide range of lipo batteries. (6S-5000mAh 7S /8S to 5500mAh recommended or 12S- 3300mAh stickpack)
- High visibility canopy for perfect orientation in flight. 2 option available.
- Headspeed range from 1100rpm up to **maximum 2000rpm!**

About Tron Helicopters

Ricky has been known in the RC helicopter industry for many years, with experience in the development and production of model helicopters. His journey dates back to the early days of Synergy Helicopters, a company he took over in 2010 following the passing of Stephen Fan.

Dario is a well-respected name in the RC helicopter community, with a long and accomplished career working with some of the most recognized brands in the industry. His contributions include the development and testing of iconic products such as the MSH Protos helicopter series and the renowned MSH Brain FBL unit. Dario also served as a long-time factory pilot and R&D contributor for SpinBlades. In 2017, Dario shifted gears to compete in FPV racing, where he excelled and earned the title of official FPV-FAI World Champion.

Joachim has earned a stellar reputation for his knack for turning visionary product ideas into market successes. With a strong foundation in innovative product design and business strategy, he's worked alongside leading manufacturers to bring bold concepts to life. As the visionary founder and driving force behind Xnova Motors, Joachim was instrumental in shaping the brand's identity and fueling its growth from the very beginning.

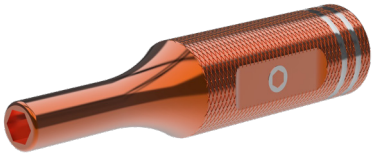
CAUTION:
This radio controlled helicopter is not a toy.
The product is not suitable for children under 14 years of age.

SAFETY PRECAUTIONS:
This kit includes some preassembled components. Please check for any loose screws and tighten them with thread lock before you proceed with assembly. Use thread lock where required as shown in this manual!

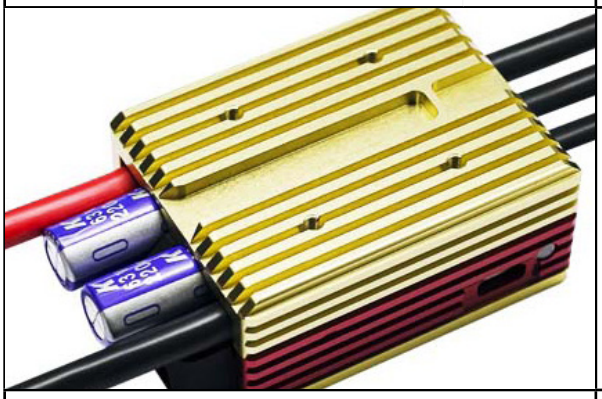
You are responsible for the assembly, operation, maintenance, inspection and adjustment of the model. Before beginning assembly, please read these instructions thoroughly.
Check all parts. If you find any defective or missing parts, contact your local dealer.

For the USA market, The Academy of Model Aeronautics (AMA) is a national organization representing modelers in the United States.
Please refer to the National Model Aircraft safety code from Academy of Model Aeronautics.

Tools required

	2 component epoxy
	Loctite 243 / Medium Strength
	Grease
	2* 5.5mm Wrenches for tail shaft nut
	Hex drivers 1.5mm/2mm/2.5mm/3mm/4mm/5mm
	TR501-518 Pair of customized nut wrench for tail shaft assembly. Optionally available at your Dealer.
	Sprag Grease (Isoflex LDS18 Special A)
	Adjustable Wrench
	Canopy Reamer (optional)

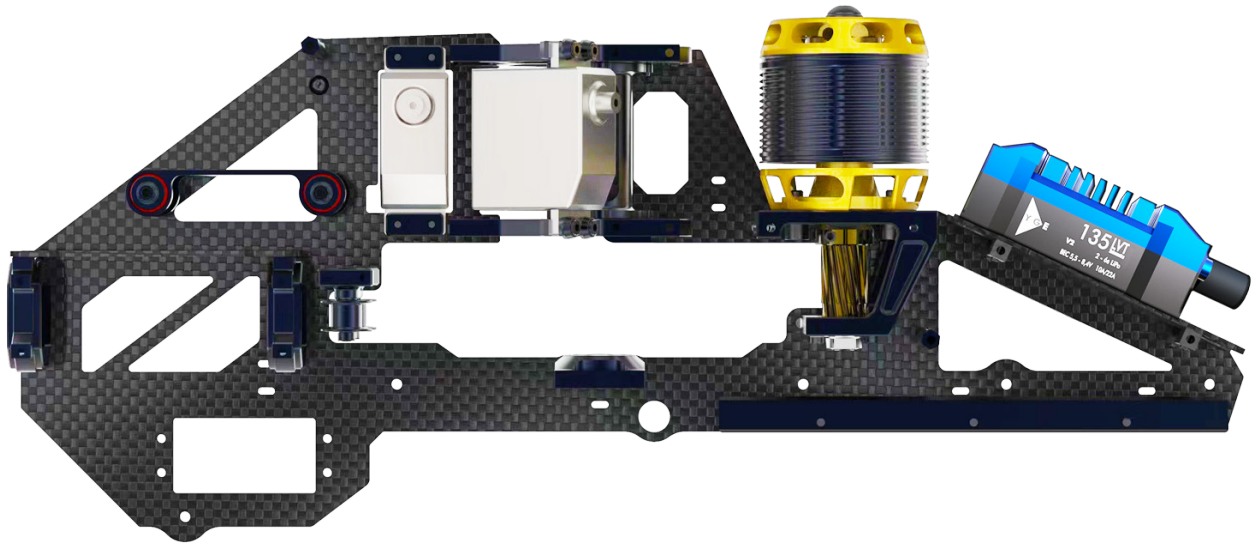
Electronics required

	3 mini, full size or low profile servos for the swash plate
	1 full size profile servo for the tail
	6-12S ESC 120-180A
	Motor: 4025-4225 size
	FBL Unit, such as Brain/iKon, Mikado Neo/Evo, Futaba, Spirit, BeastX, Spektrum or Nexus/RF FBL

ESC and Motor

Motor and ESC recommendatiion for Tron 7.0 (650- 705mm blade length)

- **4025-4225 size** / 810 -1100kv /6mm shaft with 15mm min length for 6/7/8S.
- **4025-4225 size** / 520-560kv /6mm shaft with 15mm min length for 12S.
- Hobbywing 155A/HV. 6-8S / 180A- 12S
- Scorpion Tribunus II 130A/HV. 6-12S
- YGE 155A/LV Saphir. 6-8S



Dnamic Motors

The DNAMIC 4225 series motors are an ideal choice for the Tron 7.0 DNAMIC helicopter. These motors have undergone extensive testing specifically with this model, ensuring optimal performance and reliability.

SKU: DM01-04225-955 4225 Motor 550kv

DNAMIC 4225-550 KV MOTOR (10-12S applikation) FOR 580-700MM BLADE SIZE LIGHTWEIGHT HELI-COPTERS

- 3 Large NSK 698ZZ Bearing (8x19x6mm)
- 1.2mm HQ copper wire.
- High quality NdFeB Magnets.
- Heat resistant up to 180 degrees C.
- Efficient.
- Optimized ventilation.
- Superb quality and machining of CNC parts.
- Stylish modern look.
- Hand wound

Motor not includet in kit!

SKU: DM01-04225-981 Dnamic 4225 Motor 810kv

DNAMIC 4225-810 KV MOTOR (6-8S applikation) FOR 580-700MM BLADE SIZE LIGHTWEIGHT HELI-COPTERS

- 3 Large NSK 698ZZ Bearing (8x19x6mm)
- 1.4mm HQ copper wire.
- High quality NdFeB Magnets.
- Heat resistant up to 180 degrees C.
- Efficient.
- Optimized ventilation.
- Superb quality and machining of CNC parts.
- Stylish modern look.
- Hand wound

Batterie compartement space

Battery recommendation for Tron 7.0 Dnamic

- 6S (5200-5600mha)
- 7S (4500-5000mah)
- 8S (4200mah-4500mah)
- 12S (3300mah) Stick Pack.

PLEASE NOTE:
BATTERY SPACE DIMENSION MAY CHANGE SLIGHTLY AS MANUFACTURERS USE DIFFERENT DESIGNS IN CONFIGURATION OF CABLES AND CONNECTORS

(61mm) and 68mm in total without straps. Available lengt for 12S stick packs (280mm-290mm)

Information on equipment

Pre-assembled parts streamline the packing process with less waste and facilitate a quicker build.

This approach ensures assembling the helicopter is fast and straightforward. Additionally, it guarantees a high standard of quality control, ensuring all components fit precisely without any unexpected issues or missing parts.

The provided drawings serve as references for part identification and clarification. Screws requiring checking or loctiting are clearly labeled in the manual. Only remove these designated screws, apply Loctite 243 as instructed, and securely tighten them back into place.

Main blade recommendation (690mm-705mm length).

Tail blade recommendation (105mm-115mm length).

You will need:
Loctite 243 = blue

Head assembly

The center hub assembly has been pre-assembled at the factory.

Disassembly is not required if you use FIGURE 1 = medium as the default dampening configuration!

This makes building the helicopter quick and easy. You also benefit from a high level of quality control, ensuring that all parts fit together correctly, with no unpleasant surprises or missing parts.

The following drawings are for reference and parts clarification. We have clearly identified screws that still need to be checked and/or loctited. Only remove screws labeled in the manual, apply Loctite 243, and screw them back in.

FIGURE 1 / MEDIUM
Stock configuration

TR584-870 Head dampeners 70 shore green, for Sport and moderate 3D flying. (standard in kit).

If you prefer to use FIGURE 2, please exchange the green O-rings (70 shore) with the black O-rings (90 shore), **NOT INCLUDET IN KIT!**

FIGURE 2 / HARD
For hard 3D flying.
OPTIONAL!

TR584-890 Head dampeners 90 shore (black) for high rpm and hard 3D flying style. (optional)

You will need:
Loctite 243 = blue

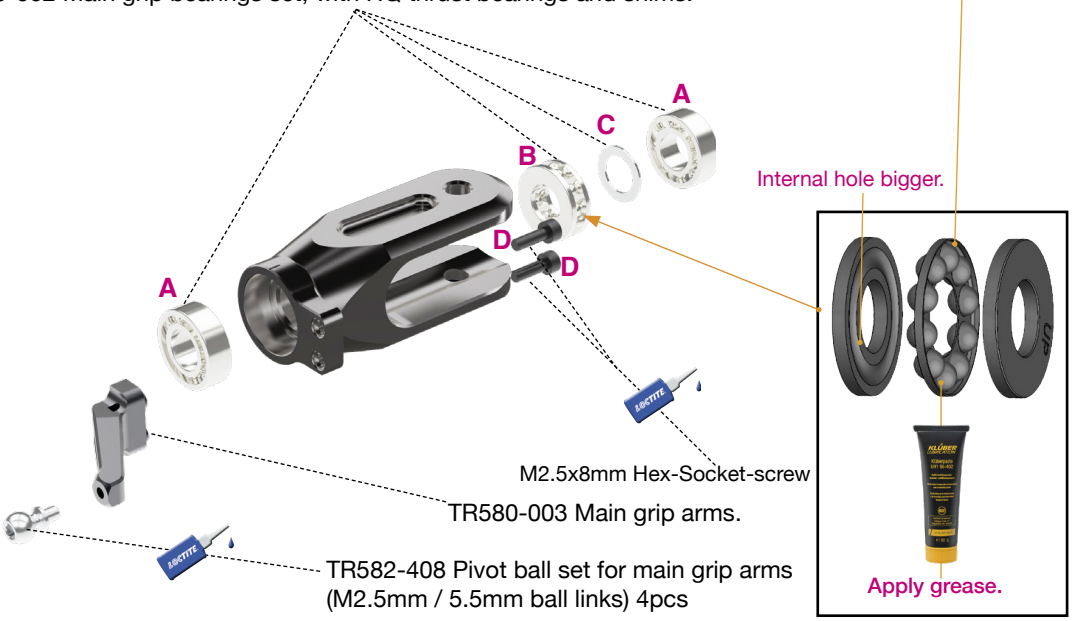
Head assembly

1. Remove the bearings to apply grease to the thrust bearings.
2. Reassemble them in the order shown in the render below.
3. Assemble the main grip arms and apply Loctite 243 to screws labeled as **D**.
4. Assemble the pivot balls and apply Loctite 243.

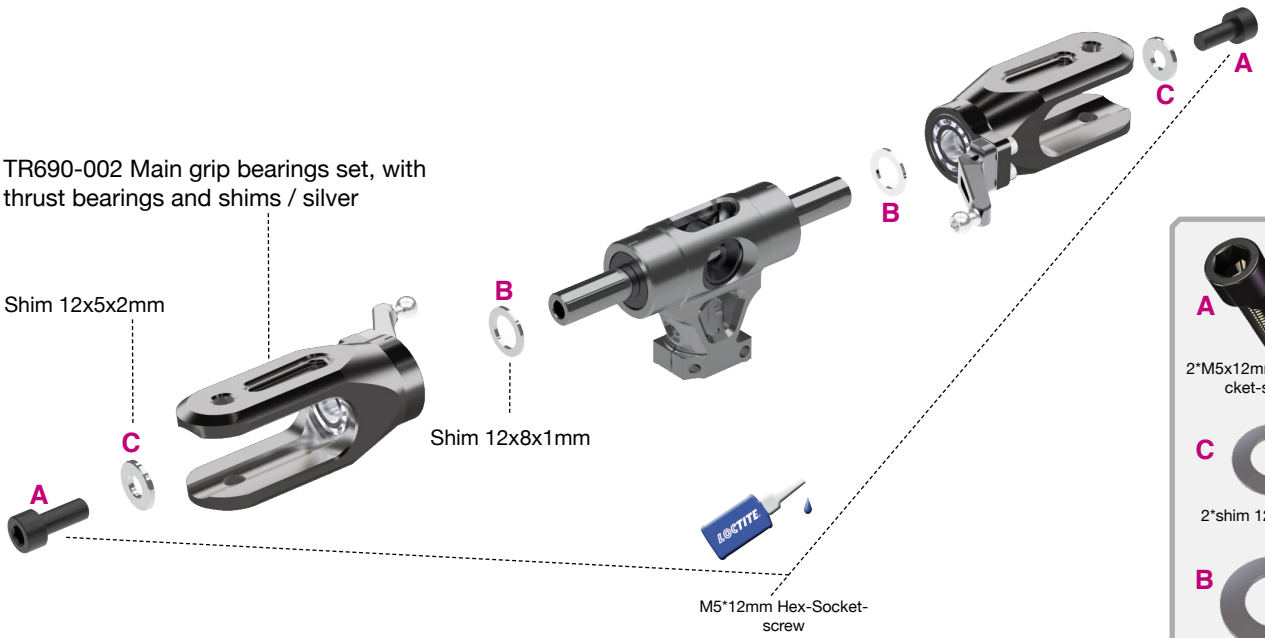
The blade grip have been pre-assembled at the factory. Disassembly is required to apply grease to the thrust bearings.

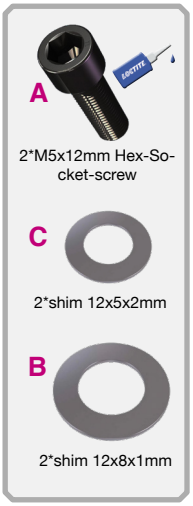
Pay attention to the orientation of the ball cage.

TR 680-002 Main grip bearings set, with HQ thrust bearings and shims.



TR690-002 Main grip bearings set, with thrust bearings and shims / silver





You will need:
Loctite 243 = blue

Head assembly

A
4*Radial Bearing 3x8x3mm

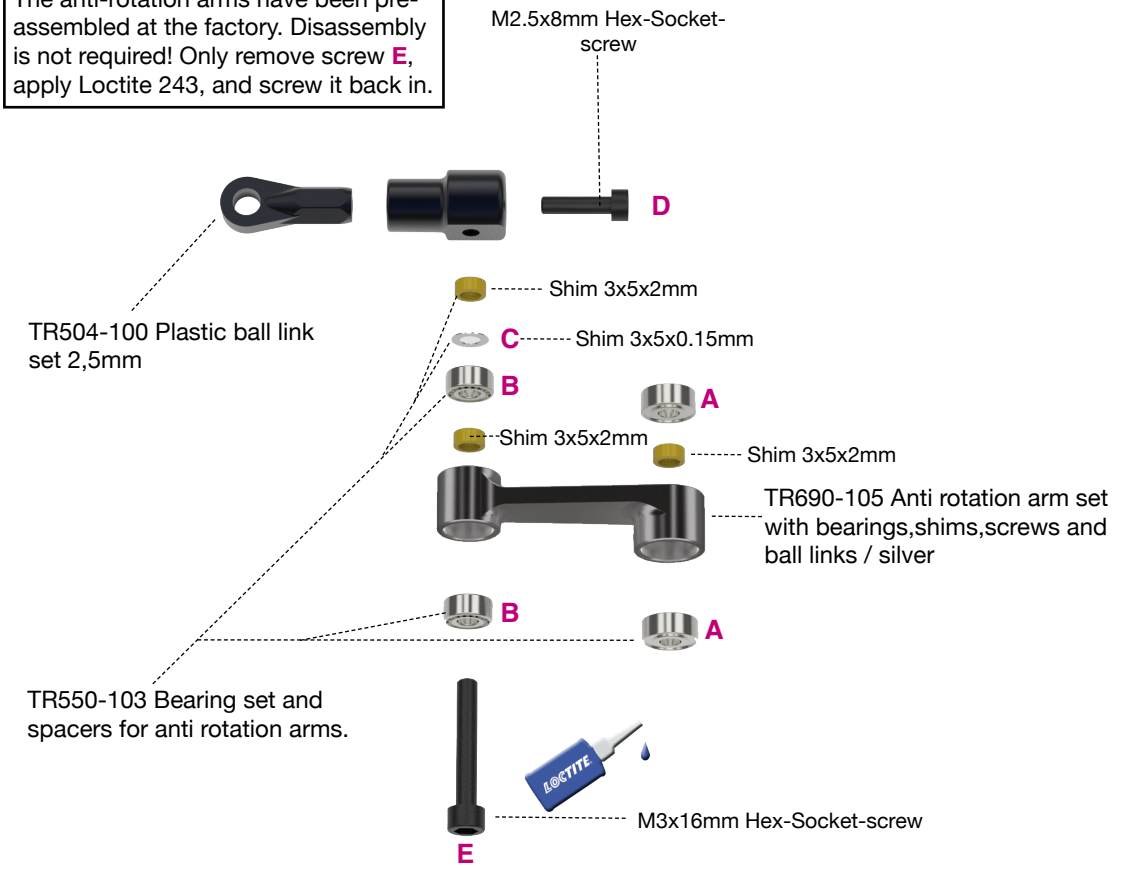
B
4*Radial Bearing 3x7x3mm

C
2*shim 3x5x0.15mm

D
2*M2.5x8mm Hex-Socket-screw

E
2*M3x18mm Hex-Socket-screw

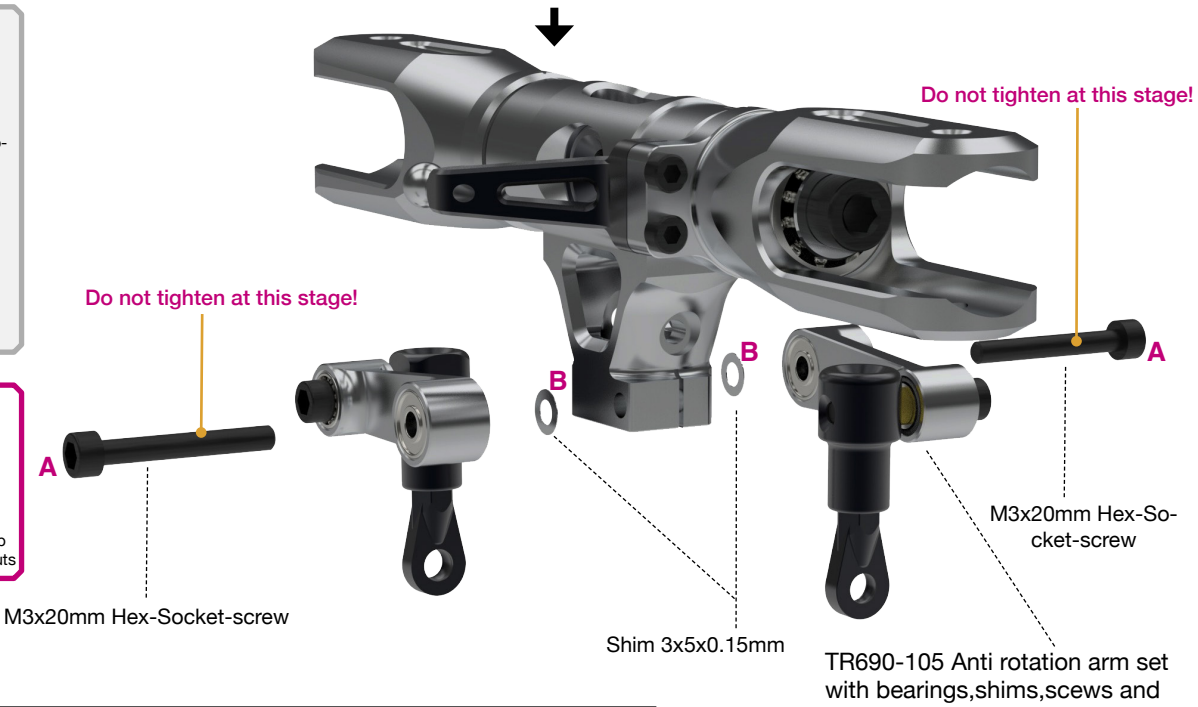
The anti-rotation arms have been pre-assembled at the factory. Disassembly is not required! Only remove screw **E**, apply Loctite 243, and screw it back in.



A
2*M3x22mm Hex-Socket-screw

B
Shim 3x5x0.15mm

TR687-528 Main grip bolts 4pcs with m5 nuts

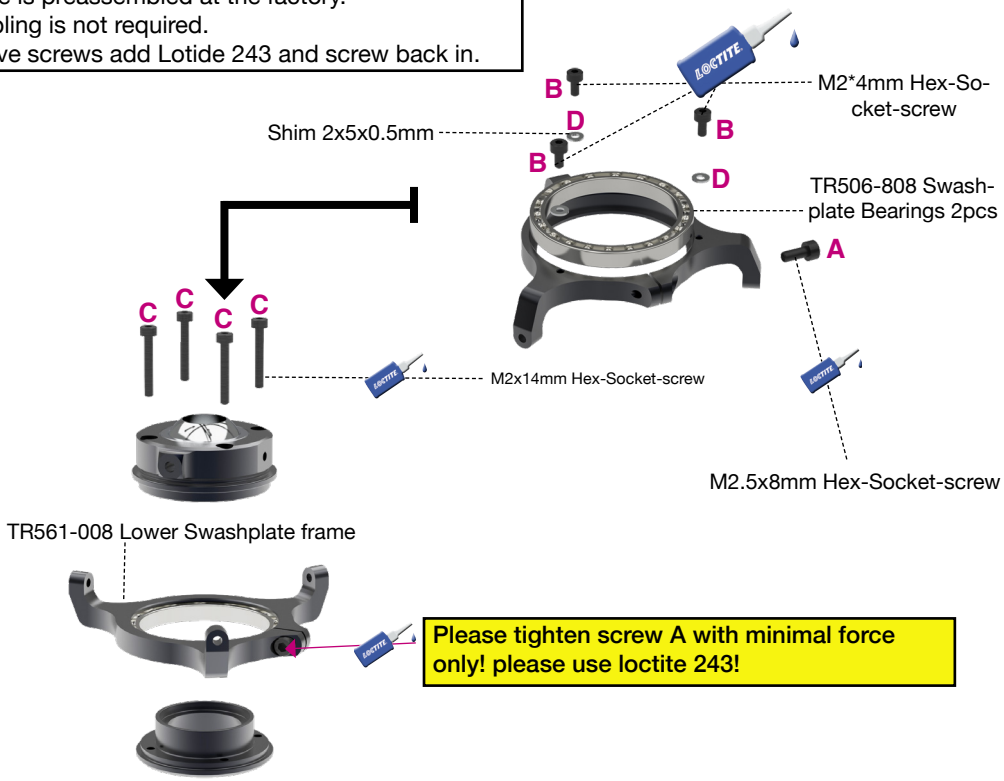


Important note!
Do not tighten the M3*20mm screws here. Apply Loctite 243 and tighten them after assembling the main shaft to the center hub.

You will need:
Loctite 243 = blue

Head assembly

Swashplate is preassembled at the factory.
Disassembling is not required.
Only remove screws add Lotide 243 and screw back in.



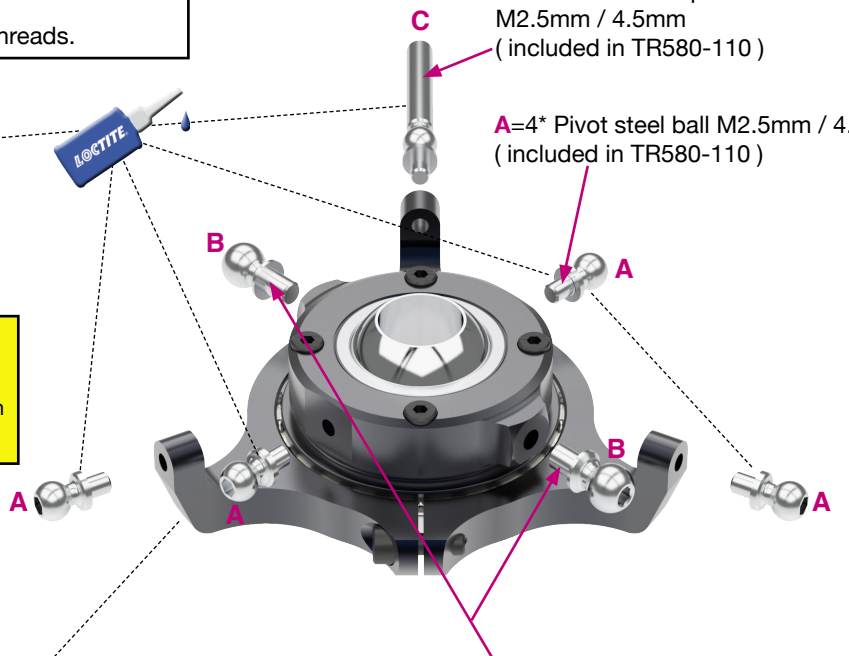
Please tighten screw A with minimal force only! please use loctite 243!

Swashplate is preassembled at the factory.
Disassembling is not required.
Please use loctite 243 on all pivot ball threads.

TR580-110 Pivot steel ball set for head. (16pcs.)

C=1xAnti rotation pivot steel ball M2.5mm / 4.5mm (included in TR580-110)

A=4* Pivot steel ball M2.5mm / 4.5mm (included in TR580-110)



Important note!
The ball links have a larger and a smaller diameter. Always make sure the larger diameter is pointing towards the pivot ball when assembling!

TR580-008 Complete swashplate assembly. (included pivot ball)

B= 2* Pivot steel ball M3mm / 5.5mm to maingrip (included in TR580-110)

You will need:
Loctite 243 = blue

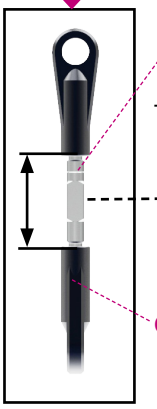
Head assembly

1. Insert main shaft into center hub first.
2. Tighten screw **B to lock nut D.**
3. Tighten the screws **A =M3x20mm** which are shown on page 13 left and right step by step (use loctite 248).Make sure the shim A do not fall out.

TR502-230 Linkage rod set. Contains 3* rod for linkage of swashplate servo or swasplate to main grip. (Rod for servos to swashplate and swashplate to grip arms are identical)

TR704-100 Plastic ball link

M3x3.5mm-20mm Hex-Socket- HD screw



1* Lock nut M3

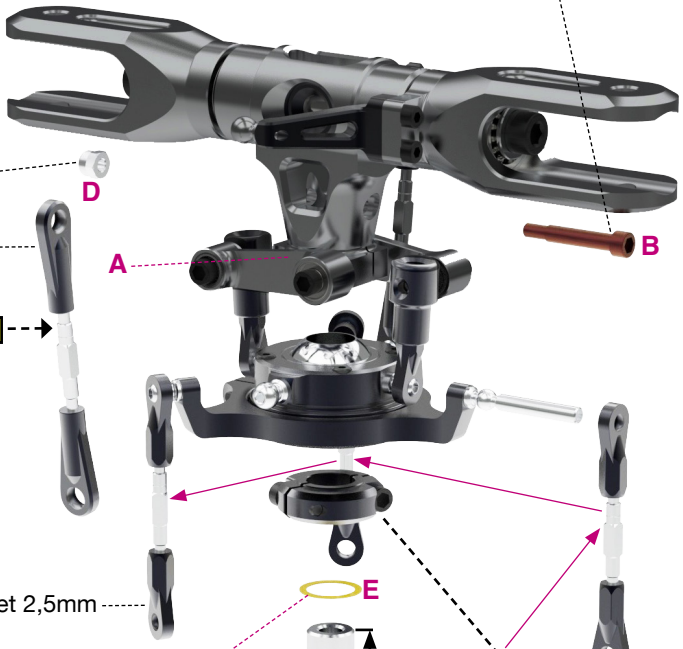
D

TR704-100 Plastic ball link

A

B

2* Linkage rod, swashplate to main grip.



TR504-100 Plastic ball link set 2,5mm

E

12mm

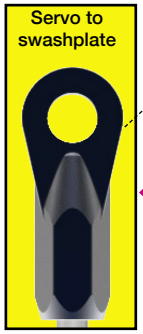
Kepp shim E in a save place! You will need it at page 44

C

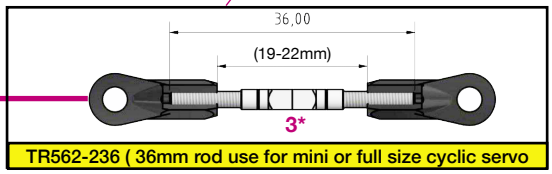
C

TR682-104 Hollow main shaft

Do not tighten yet!
Keep gap equal!
2*M3x12mm Hex-Socket-screw



TR504-100 Plastic ball link set 2,5mm



TR562-236 (36mm rod use for mini or full size cyclic servo

Note:
The linkage distance between the servo and swashplate (19mm-22mm) may vary depending on the servo manufacturer and the positioning of the spline.

Additionally, using either a mini or full-size servo will affect this measurement. As a general guideline, use the length of the swashplate to main grip (20mm) as a reference, and adjust accordingly once the assembly is complete.

You will need:
Loctite 243 = blue

Tail assembly

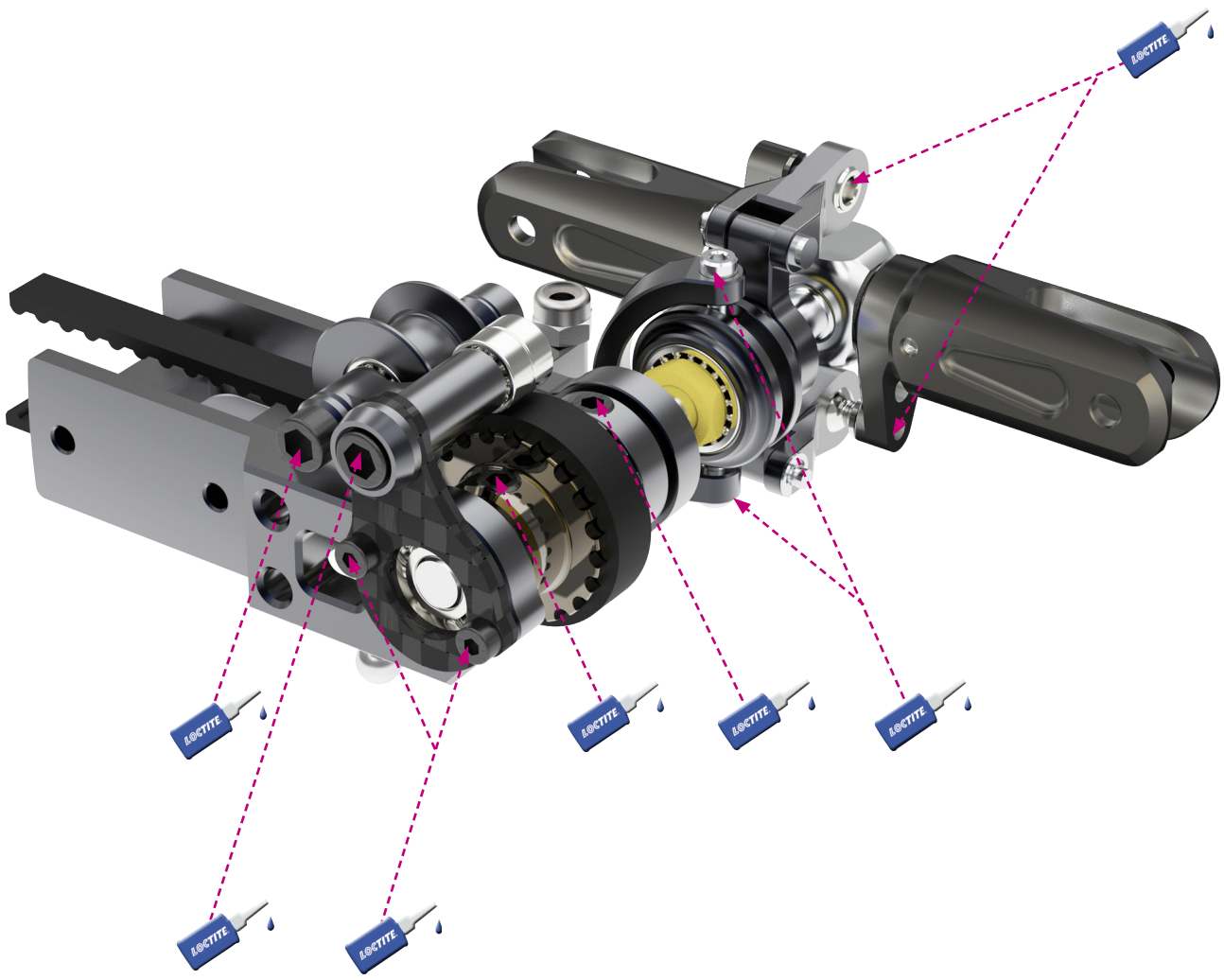
The tail housing assembly have been pre-assembled at the factory.

Removal of all screws to add thread lock is necessary!

This makes the helicopter build very quick and easy. You also benefit from a high level of quality control as we ensure all parts fit together correctly, eliminating unpleasant surprises and missing parts.

The tail thrust bearings have been greased by the factory! If you are building a new kit, it is not necessary to remove the tail blade holders to add grease to the thrust bearings!

Pay attention to the two M2.5x8mm (A) screws that hold the tail pitch arm support, as shown on page 17. These screws need to be loctited as well!



=Remove screw, add locktite and screw it back in

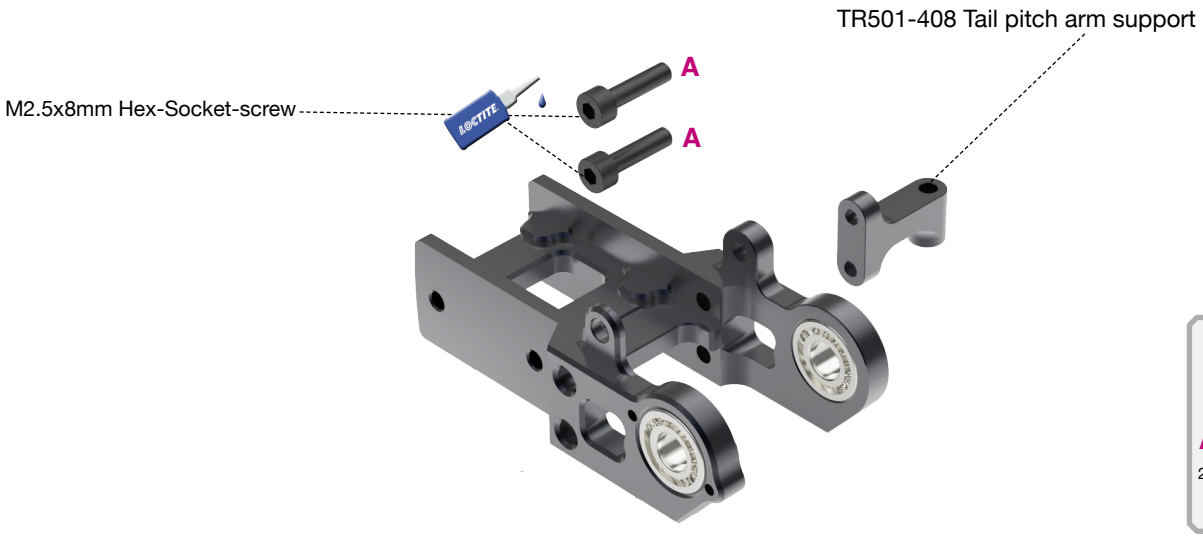
You will need:
Loctite 243 = blue

Tail assembly

1. The following drawings showing the tail drive housing are for reverence and parts clarification.
2. **Keep in mind that when purchasing spare parts separately, you should add Loctite where specified!**


2*Radial Bearing 5x11x4mm

The tail case bearings ar assembled at the factory. Disassembly is not required.

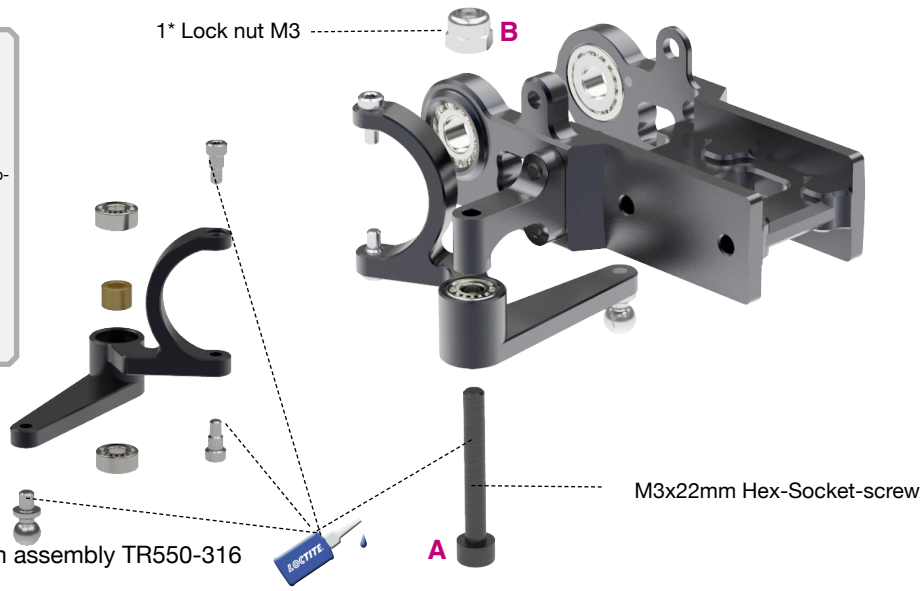


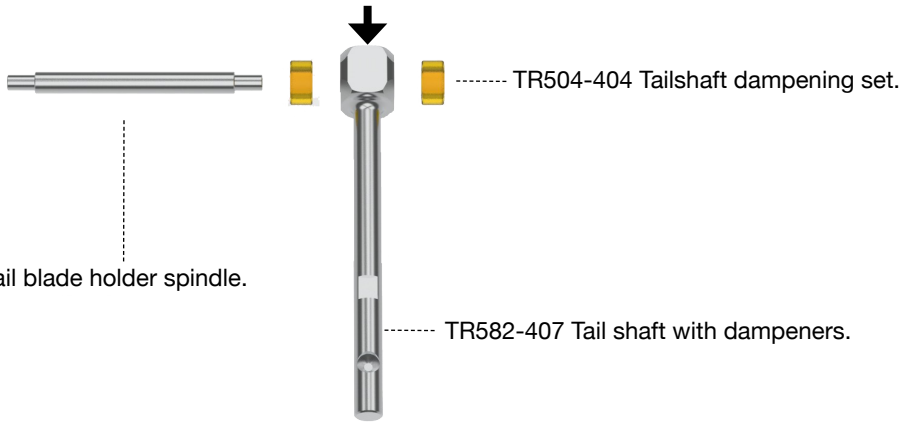

A
2*M2.5x10mm Hex-Socket-screw

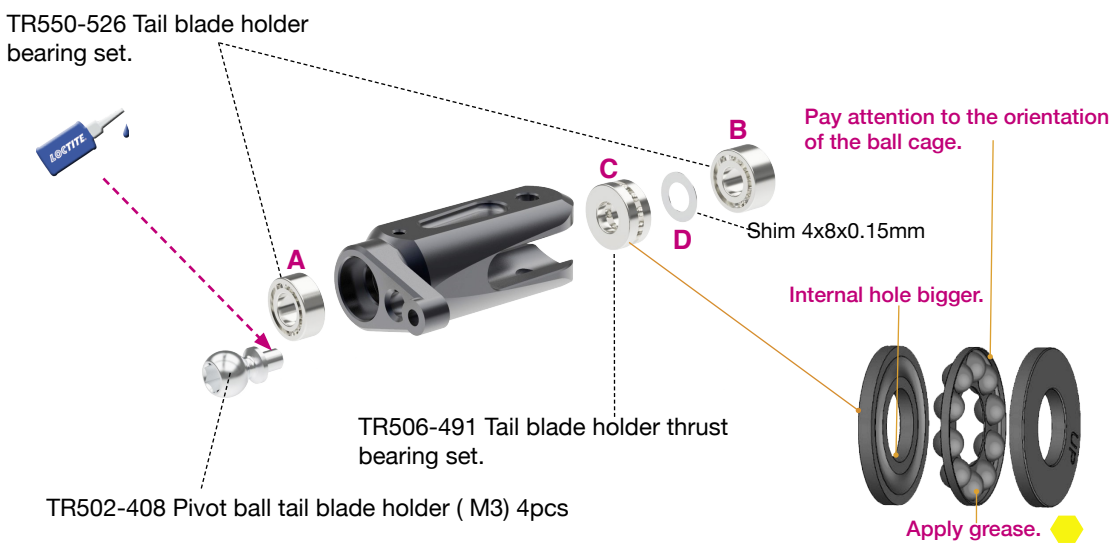
Keep in mind that when purchasing spare parts separately, you should add Loctite where specified!

You will need:
Loctite 243 = blue

Tail assembly

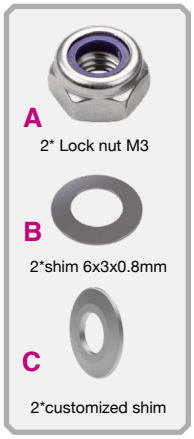


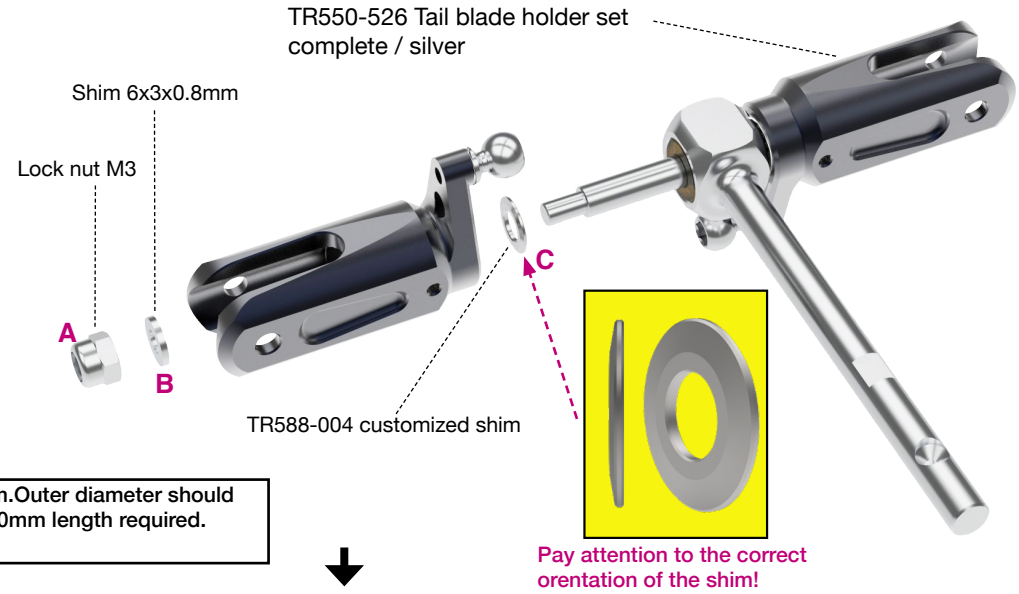




You will need:
Loctite 243 = blue

Tail assembly

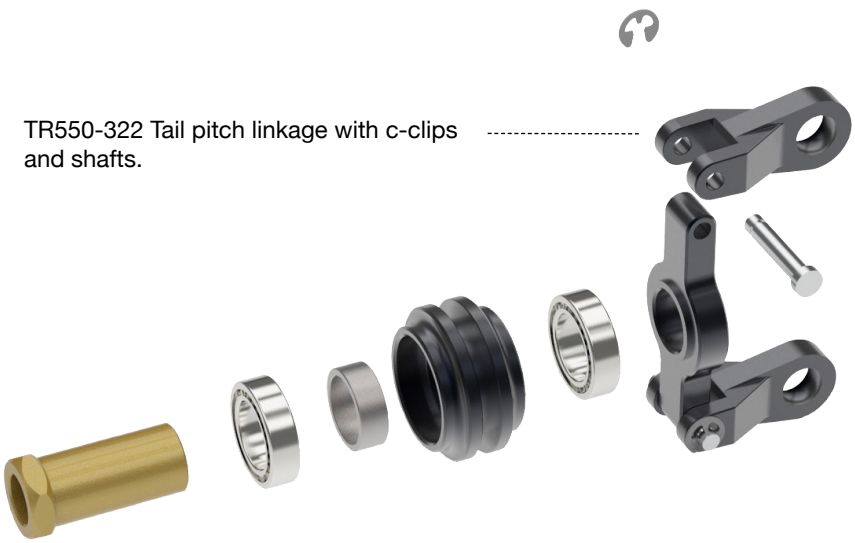




Wrench size for nut B = 5.5mm.Outer diameter should not exceed 9.2mm and min. 20mm length required. Optional (TR:501518)

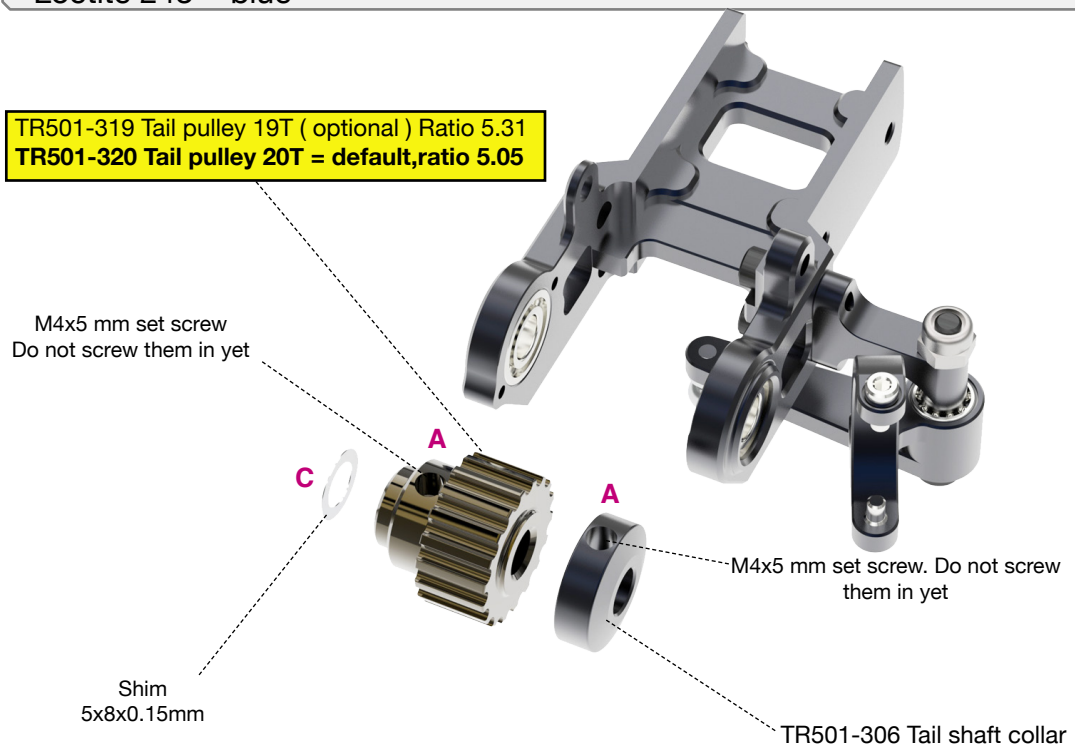
Pay attention to the correct orentation of the shim!

The tail pitch slider is assembled at the factory. Disassembly is not required.

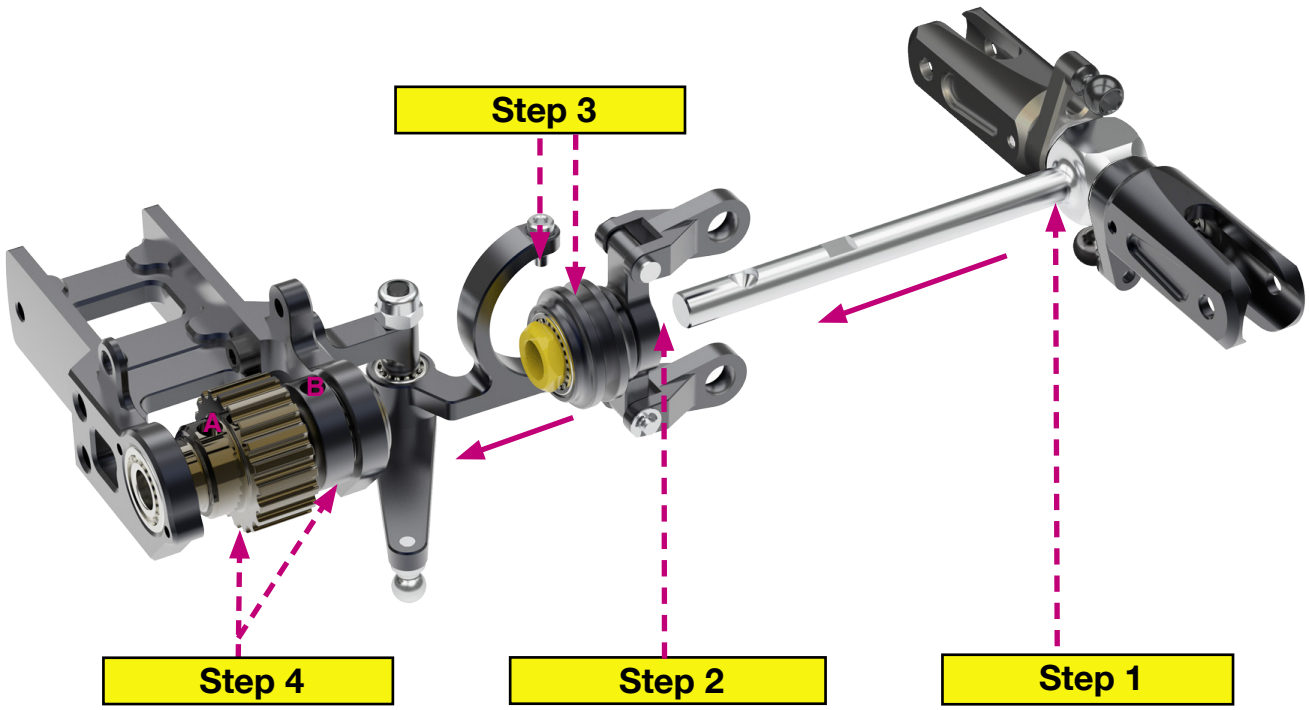


You will need:
Loctite 243 = blue

Tail assembly



1. Insert the tail shaft **(step 1)** into the tail pitch slider **(step 2)**. Ensure the pulley aligns with the pitch pins **(step 3)** then slide the tail shaft into the tail housing bearings, tail shaft collar, tail pulley, and the shim (12x8x0.5 / C) **Step 4.**
2. Align the flat spot on the tail shaft with the set screws.
3. Slightly tighten the 2 set screws (A-B) on the pinion and collar. **DO NOT APPLY LOCTITE TO THEM IN THIS STEP. REFER TO PAGE 22!**



You will need:
Loctite 243 = blue

Tail assembly

1. Attach the tail slider pitch links to the tail blade grip pivot balls. Refer to the render below for the correct order.
2. Assemble the carbon tail idler plate **(Figure 1).**
3. Add tail belt.

TR687-316 Tail grip screws / 4pcs

Add the tail belt before assembling the belt idler bearing (see page 22).

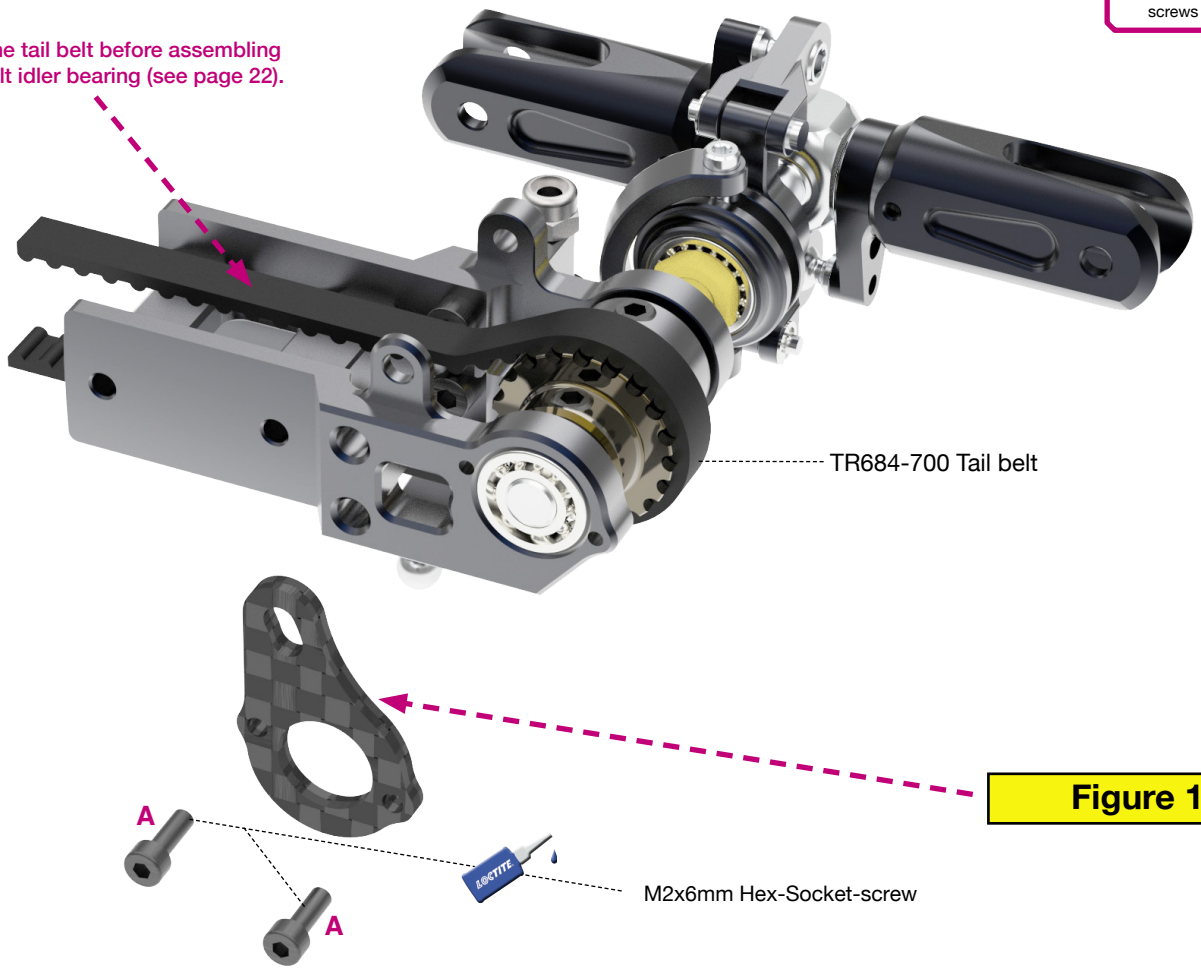


Figure 1

TR550-407 Mounting brackets Belt pusher / complete assembly

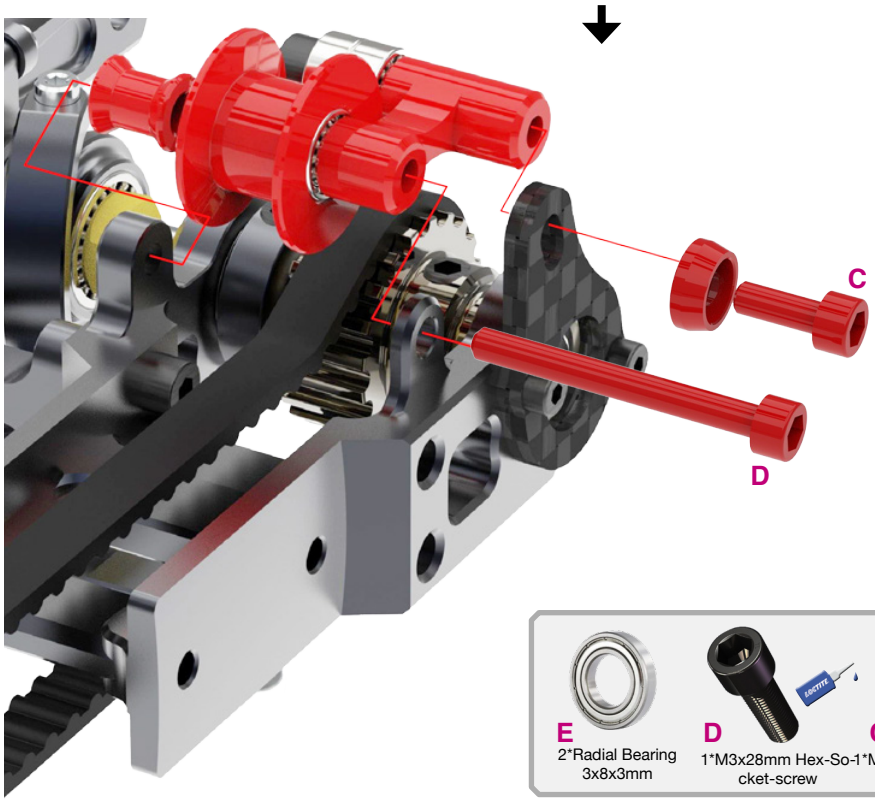
This tail performance upgrade can be used for Tron 5.5 V1 / Nitron 50 and 90 / Tron 5.8 and Tron 7.0 DNAMIC

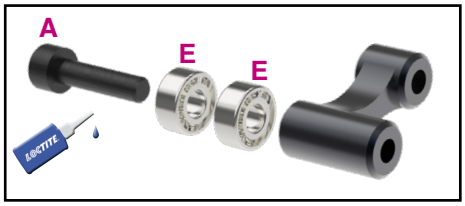
NOTE!
Includet in Tron 7.0 DNAMIC PRO Kit!
Not in includet in Tron 7.0 DNAMIC standart Kit!

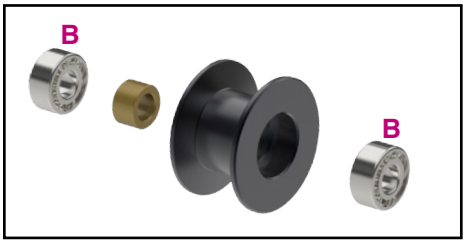
2*M2x6mm Hex-Socket-screw

Tail assembly

You will need:
Loctite 243 = blue

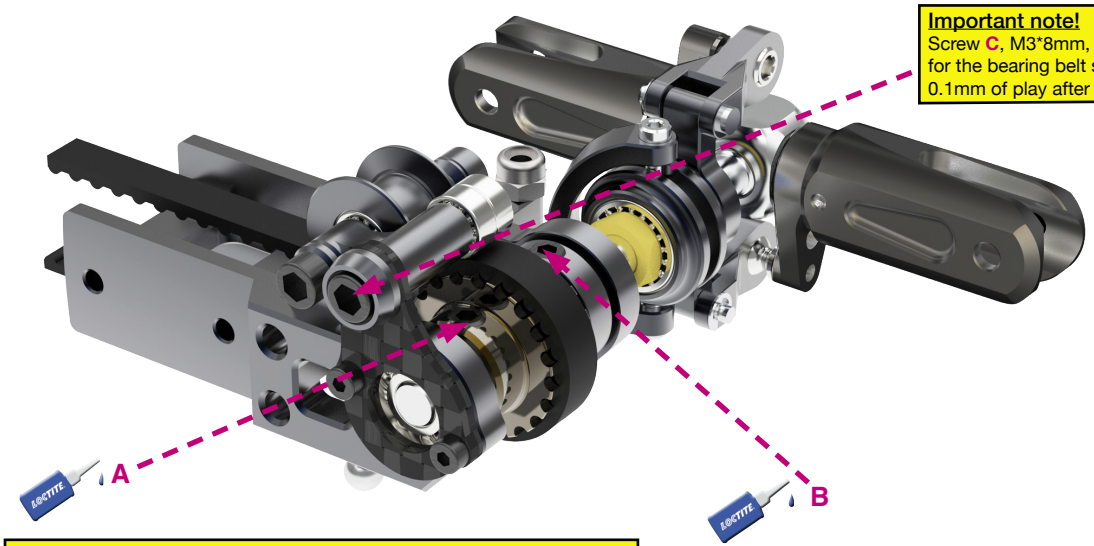






The collar design is to remove tail shaft lateral play.

1. After tighten the pulley set screw **A** ,slightly push the collar to the right while pushing the tail shaft to the left side.
2. Then tighten the set screw **B** on the collar.



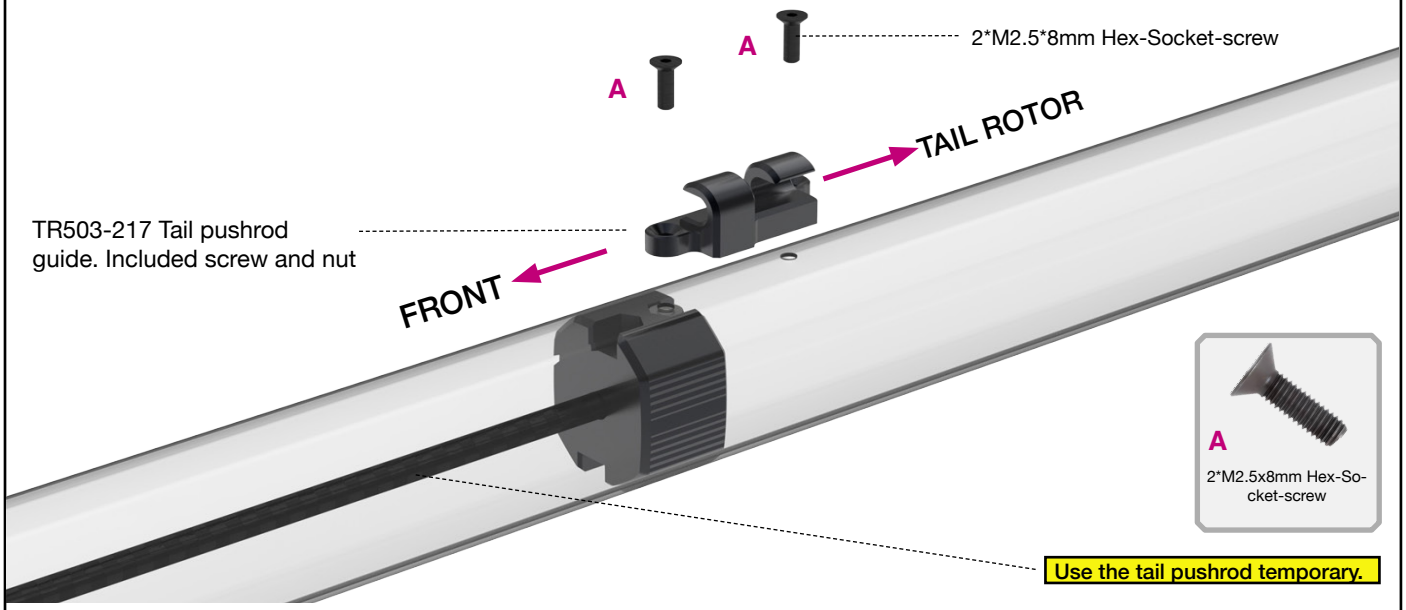
Important note!
Screw **C**, M3*8mm, can be used to adjust the play for the bearing belt space. Leave approximately 0.1mm of play after the belt is under tension.

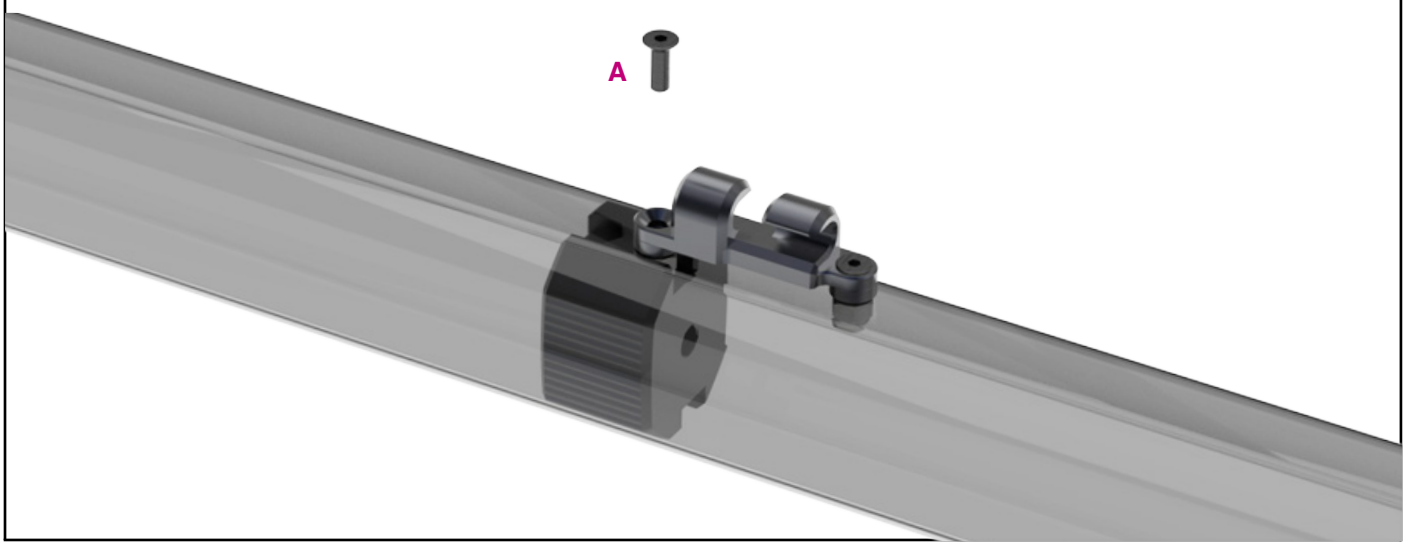
Tech tip!
Pay attention to the orientation of the flat spots on the tail shaft when tightening the set screws. Use a minimal amount of Loctite 243 for the set screws.

Boom assembly

TR504-501 New tail pushrod assembly tool for T5.5/5.8/Nitron/ DNAMIC

Insert the tail push rod with the nuts facing up into the boom. Ensure that when you tighten the screws for the tail push rod guide, your mounting device faces up as shown in the illustration.





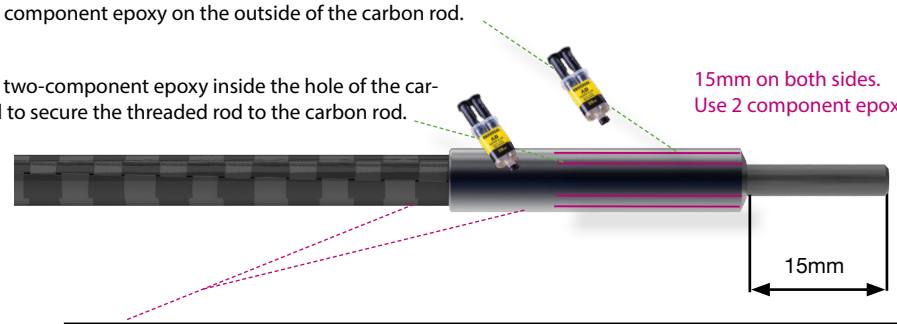
You will need:
2 component epoxy

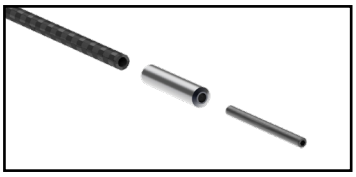
Teflon tail rod assembly

Apply a two-component epoxy to glue the thread into the tail push rod and the shell on the outside of the rod. This double safety measure ensures that the thread cannot turn if you adjust the ball-link after the assembly has fully hardened.

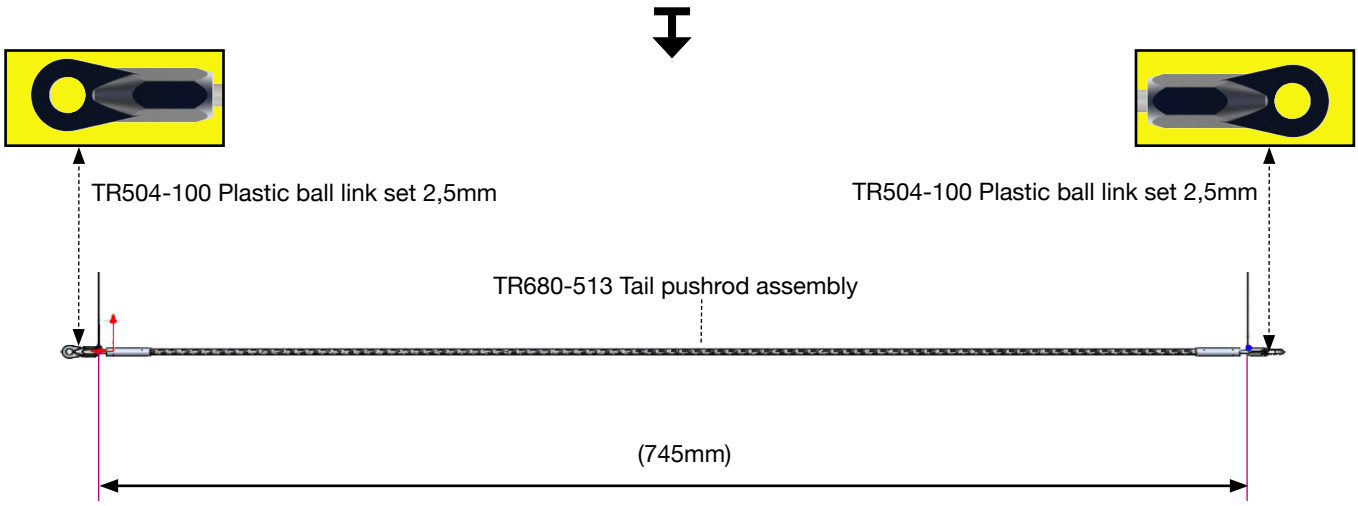
Apply 2 component epoxy on the outside of the carbon rod.

Apply a two-component epoxy inside the hole of the carbon rod to secure the threaded rod to the carbon rod.





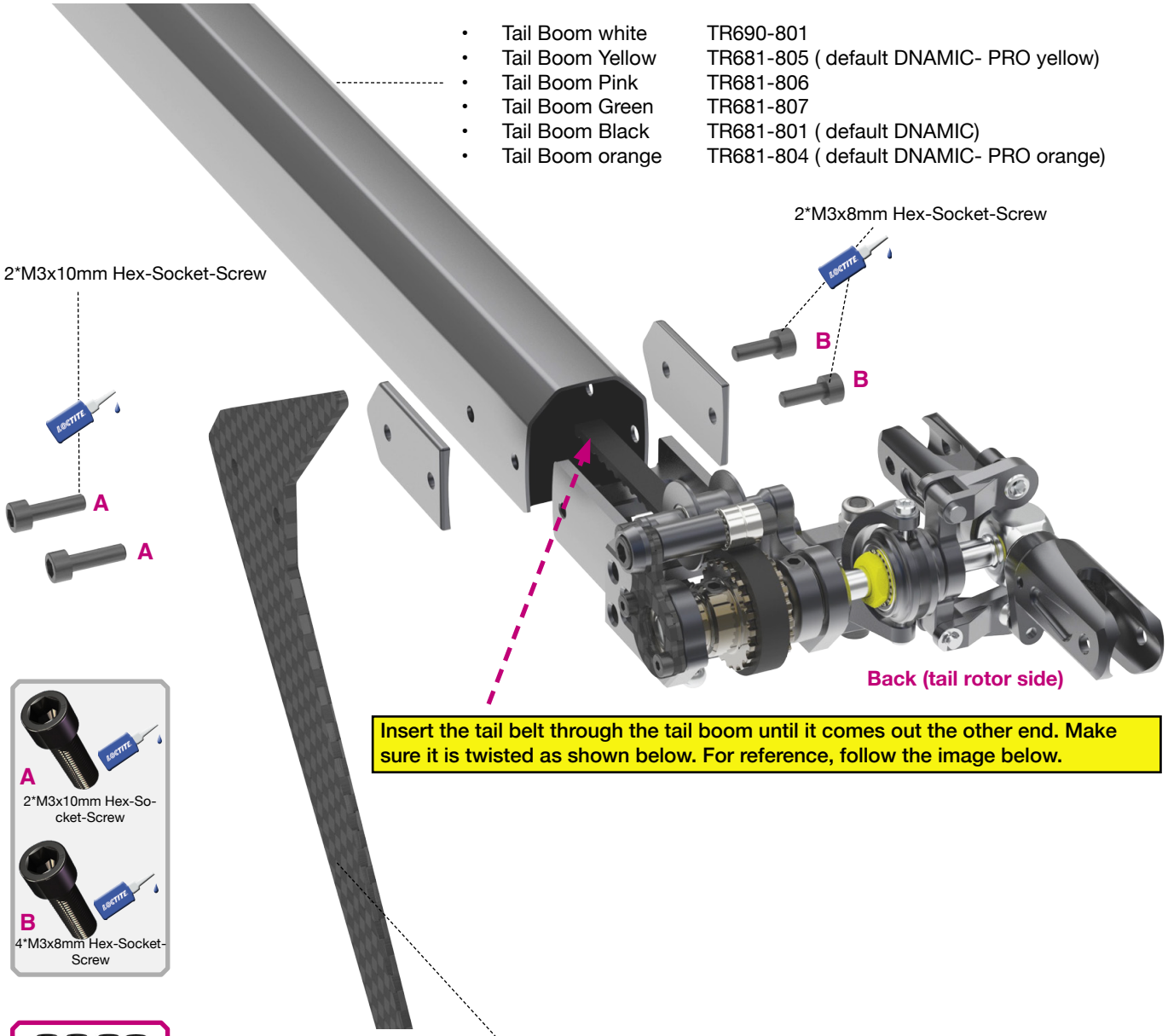
Ensure that the assembly remains stationary while drying. Secure it on both sides to prevent any movement.



You will need:
Loctite 243 = blue

Tail box to tail boom assembly

Front (main frame side)



- Tail Boom white — TR690-801
- Tail Boom Yellow — TR681-805 (default DNAMIC- PRO yellow)
- Tail Boom Pink — TR681-806
- Tail Boom Green — TR681-807
- Tail Boom Black — TR681-801 (default DNAMIC)
- Tail Boom orange — TR681-804 (default DNAMIC- PRO orange)

Insert the tail belt through the tail boom until it comes out the other end. Make sure it is twisted as shown below. For reference, follow the image below.

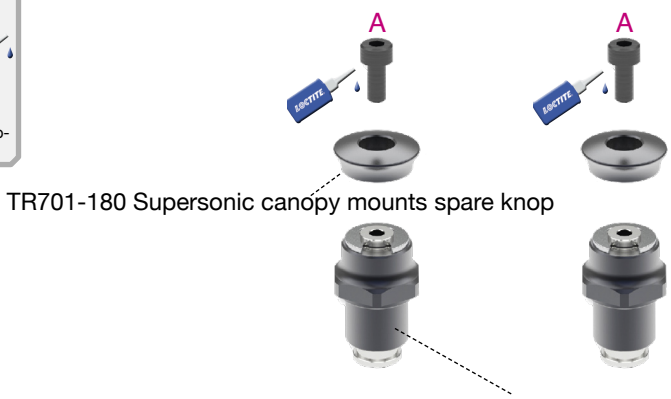

TR687-316 Tail grip screws / 4pcs

- DNAMIC / NiTron 90 Tail Fin Yellow — TR685-411 (default DNAMIC- PRO yellow)
- DNAMIC / NiTron 90 Tail Fin Orange — TR685-410 (default DNAMIC- PRO orange)
- DNAMIC / NiTron 90 Tail Fin Green — TR685-412
- DNAMIC / NiTron 90 Tail Fin Blue — TR695-409
- DNAMIC / NiTron 90 Tail Fin Pink — TR685-409
- DNAMIC /NiTron 90 Tail Fin Carbon — TR685-408 (default DNAMIC)

Supersonic mounts

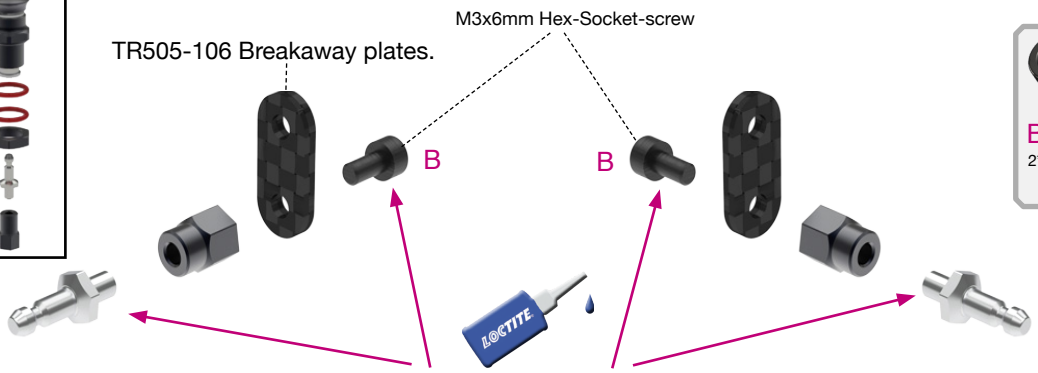
You will need:
Loctite 243 = blue

Apply loctite to M2.5X6mm screw !

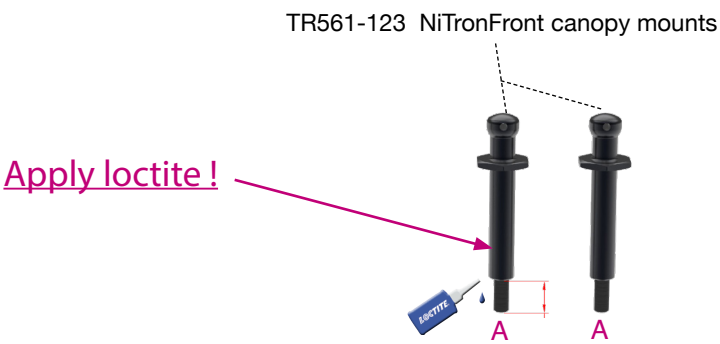


TR704-246 Rear canopy mounts

Rear canopy mounts



Front canopy mounts



You will need:
Loctite 243 = blue

Batterie tray assembly

Battery recommendation for Tron 7.0 DNAMIC (6/7/8S setup)

- 6S (5200-5600mha) High C rating.
- 7S (4500-5000mah)
- 8S (4200-4500mah)

Battery recommendation for Tron 7.0 DNAMIC (12S setup)

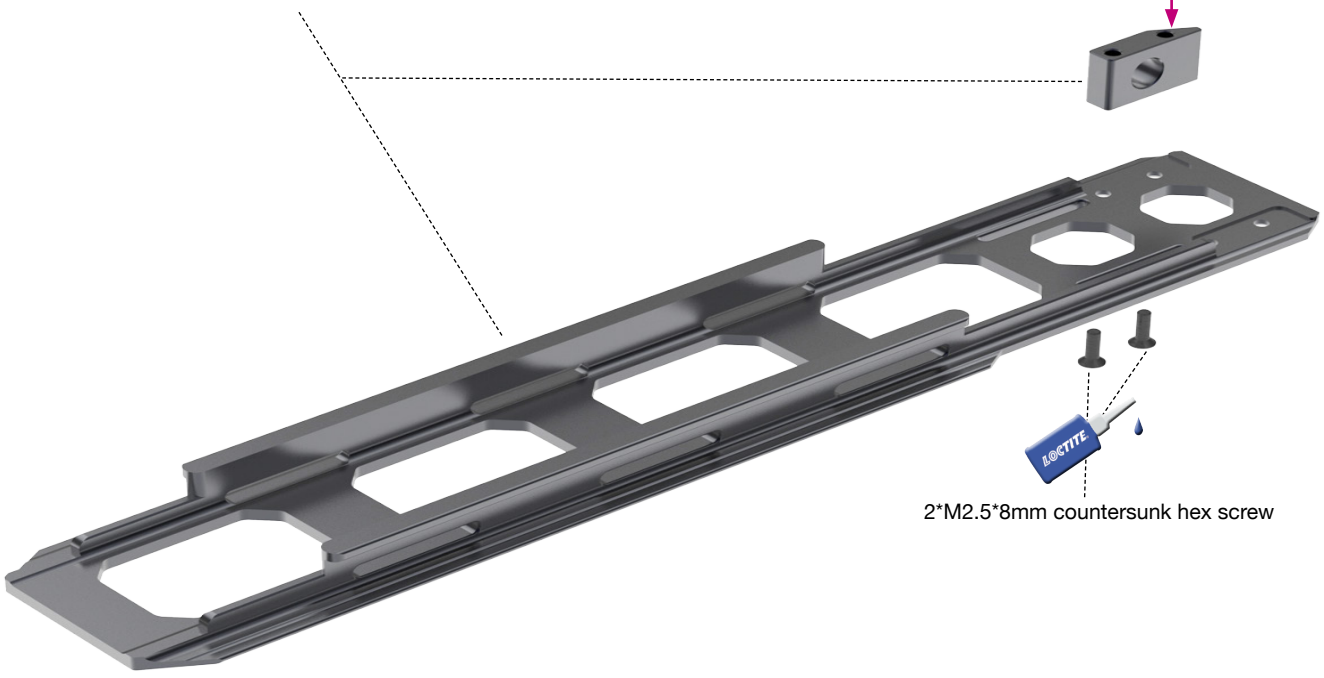
- 12S Fullymax 3300mah
- 12S Maniax 3300mah
- 12S Optipower 3300mah
- 12S Gens ACE 3300mah

ESC recommendation for Tron 7.0 DNAMIC (6-12S setup)

- HOBBY WING 130HV for 6-12S
- YGE 155 LV Saphir for 6-8S
- Scorpion 130A HV Tribunus. for 6-12.

Please pay attention to the direction and position the batterie pin lock support is assembled.
Please see page Nr. 27.

TTR580-711 Upgrade alu battery tray assembly

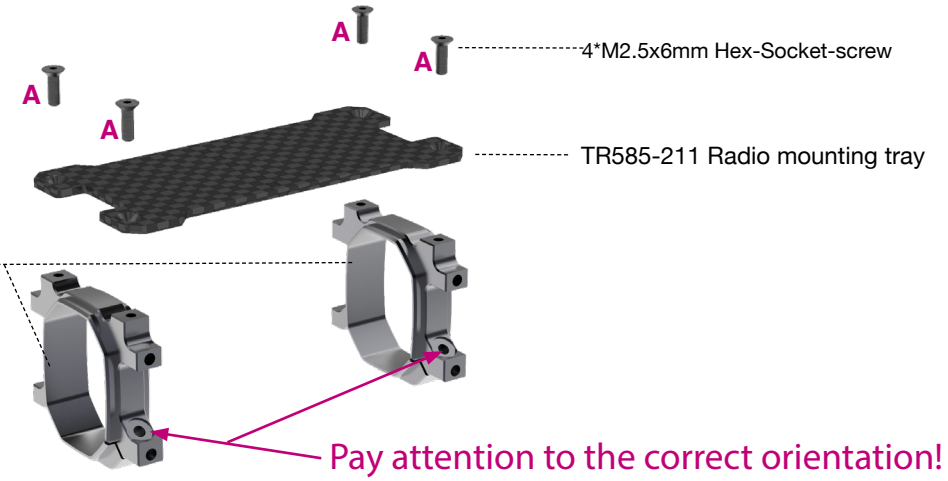


2*M2.5*8mm countersunk hex screw

2*M2.5x8mm counter-sunk hex screw

You will need:
Loctite 243 = blue

Upper main frame assembly



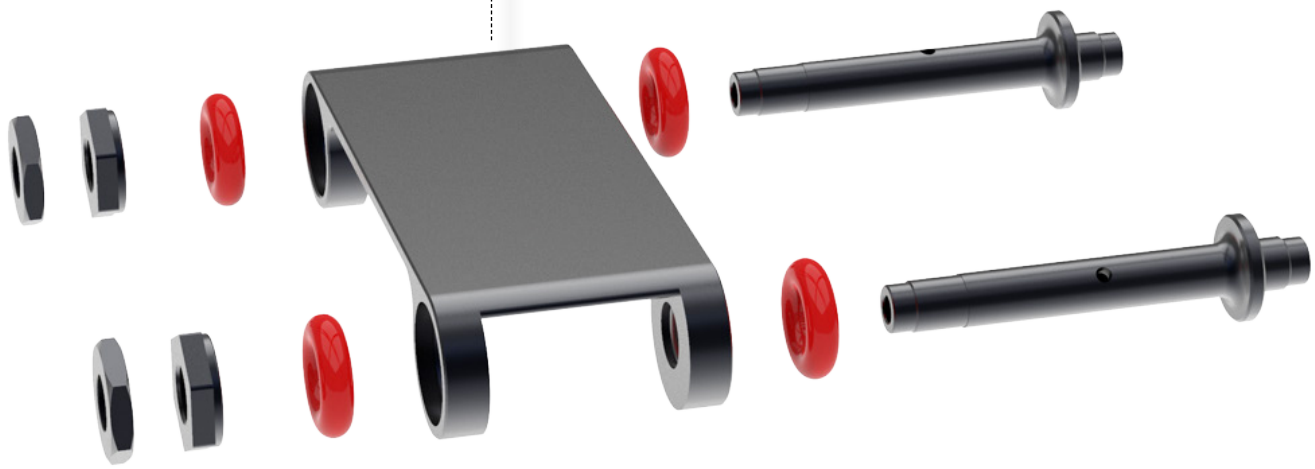
You will need:
Loctite 243 = blue

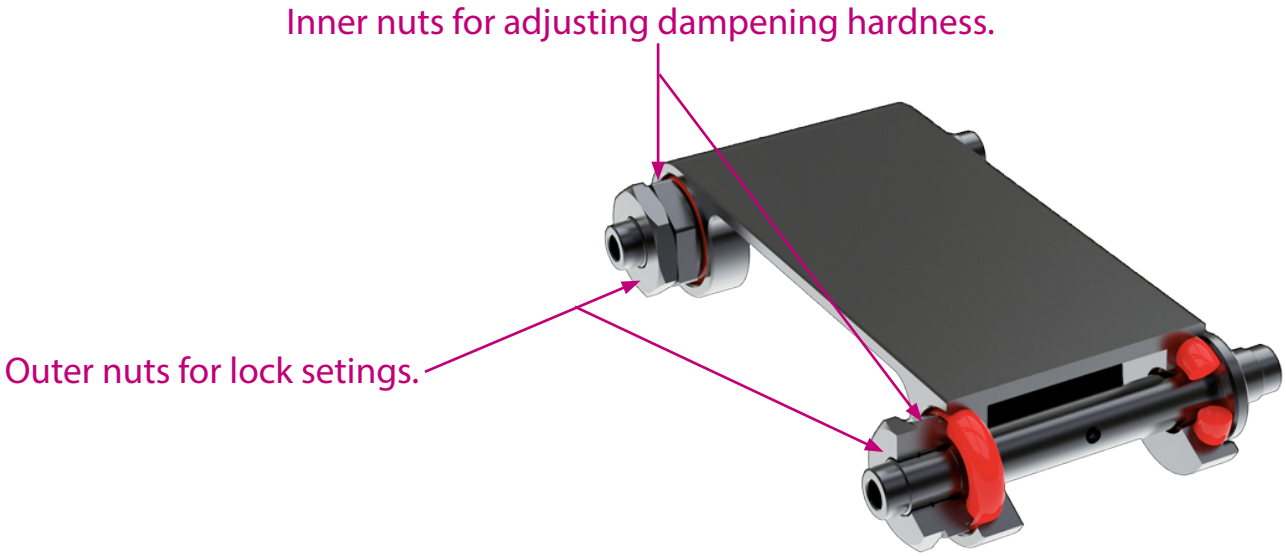
Upper main frame assembly

The tray comes pre-assembled from the factory—no disassembly is required.

- To adjust the damping stiffness of the FBL unit, use the inner adjustment nuts. Begin with a medium-hard setting by threading the inner nuts to the midpoint of their travel range.
- Once adjusted, use the outer nuts to securely lock the settings in place.
- This setup should work well for most applications.

TR700-212 Adjustable FBL mounting tray

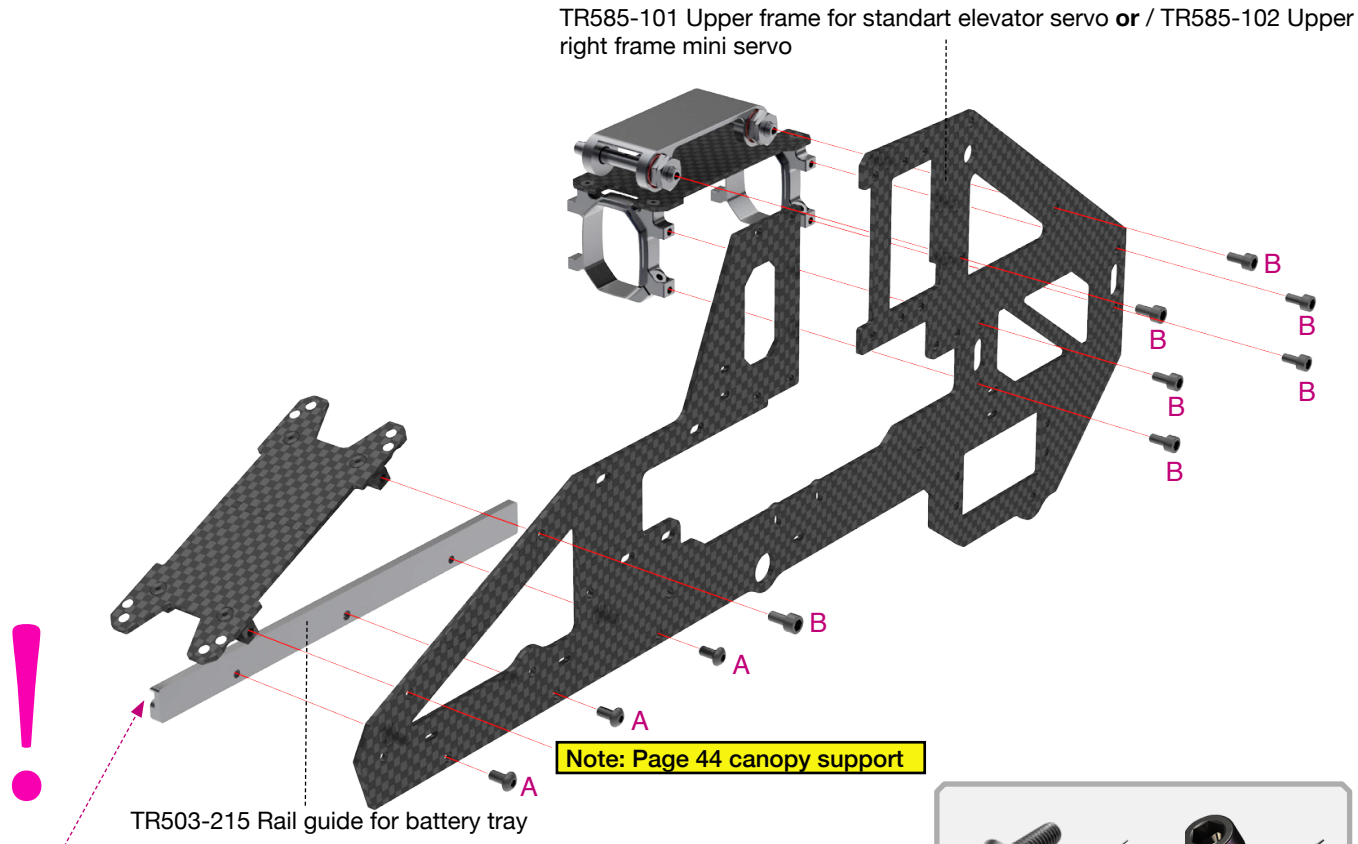




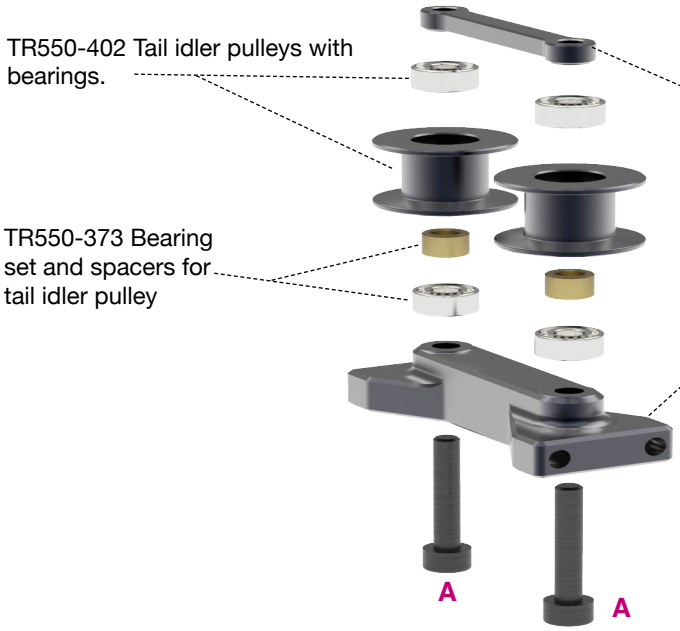
You will need:
Loctite 243 = blue

Upper main frame assembly

The illustration shows the use of a full-size cyclic elevator servo. If using a mini-size elevator servo, select the alternate upper main frame with a smaller cutout designed for the mini servo = TR585-102



Note the orientation of the rail, which is facing towards the inside and the guide rail is facing up.

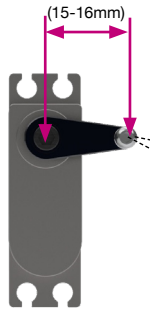


You will need:
Loctite 243 = blue

Mini size cyclic servo

We offer two options for the cyclic servo setup.
If you choose to use mini cyclic servos, install the CNC mini servo adapter (**TR561-125**) included in the kit for the two front servos,
(pitch and aileron).
Use the compatible rear main frame designed with the cutout for mini cyclic servos.**(PAGE 33)**

Mini size elevator servo



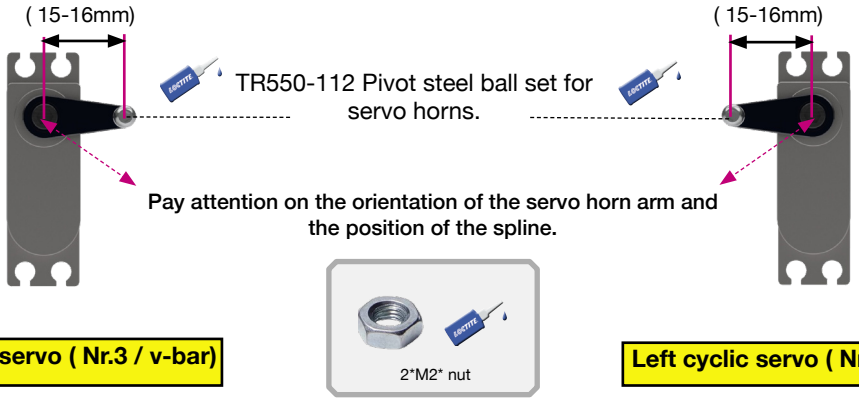
1. Servo horn position at 90 degree and ball link length for FULL SIZE ELEVATOR SERVO.
2. Please note: The length of the servo horn ball link may vary slightly depending on the servo manufacturer and the flybar manufacturer brand.

1* Nut M2

TR550-112 Pivot steel ball set for servo horns


1* Nut M2 for secure pivot steel bal

Mini size pitch and aileron servo



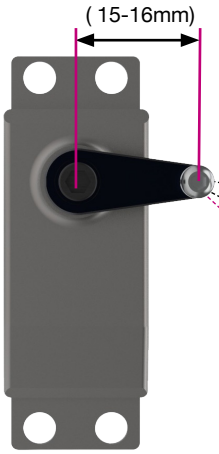
Right cyclic servo (Nr.3 / v-bar)

Left cyclic servo (Nr.2 / v-bar)

You will need:
Loctite 243 = blue

Full size cyclic servo

Full size elevator servo



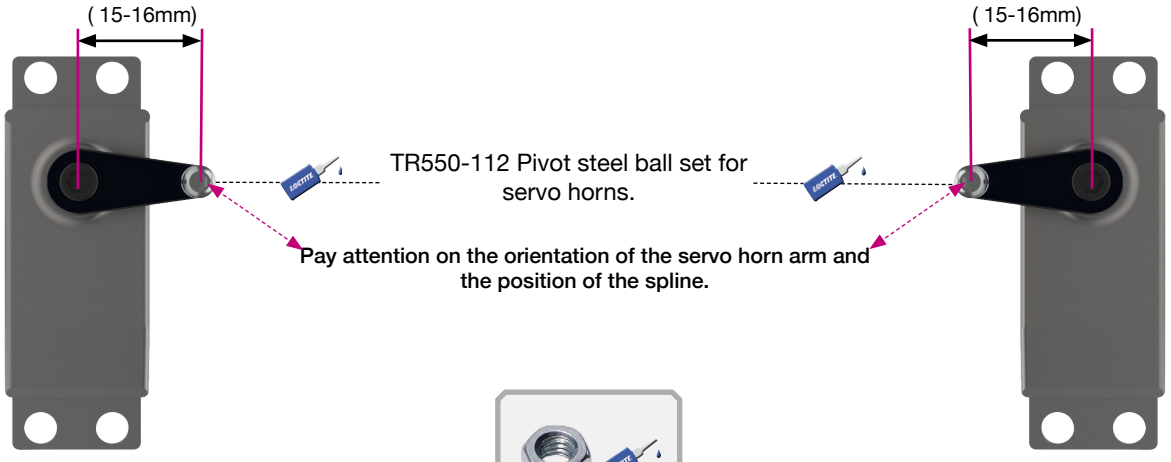
1. Servo horn position at 90 degree and ball link length for **FULL SIZE ELEVATOR SERVO.**
2. Please note: The length of the servo horn ball link may vary slightly depending on the servo manufacturer and the flybar manufacturer brand.

1* Nut M2

TR550-112 Pivot steel ball set for servo horns

Pay attention on the orientation of the servo horn arm and the position of the spline.

Full size pitch and aileron servo



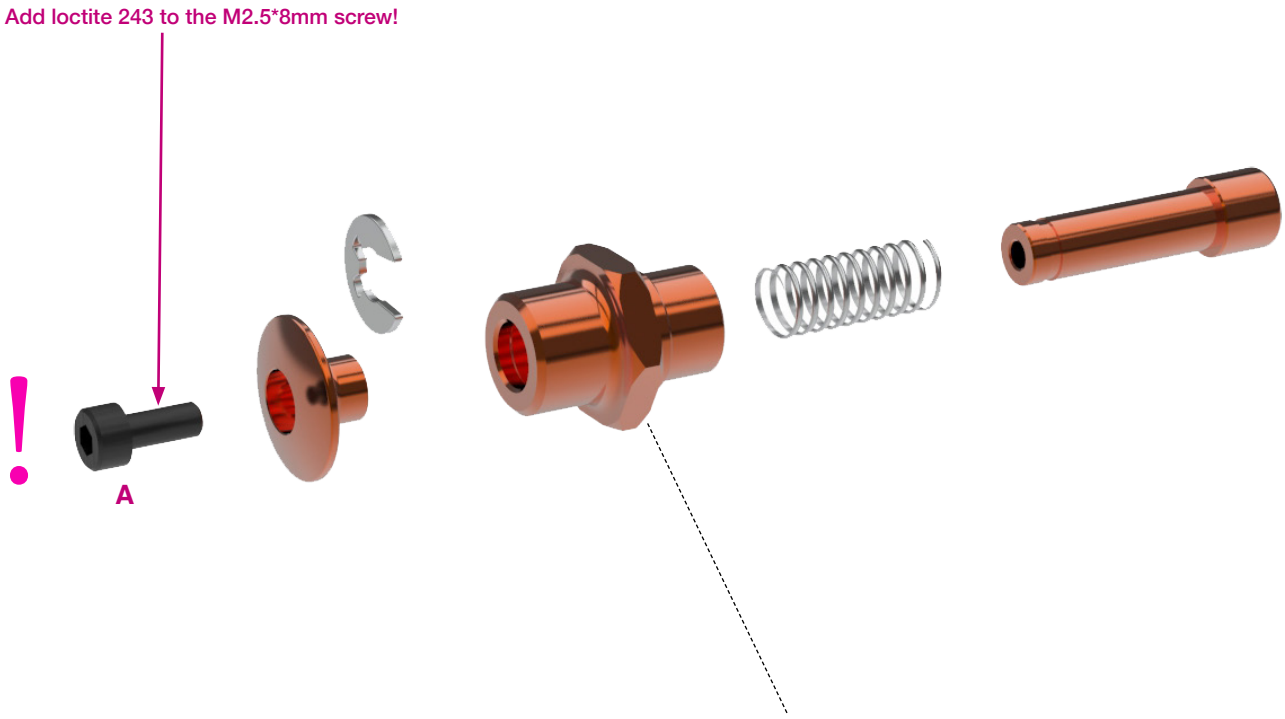
Right cyclic servo (Nr.3 / v-bar)

Left cyclic servo (Nr.2 / v-bar)

You will need:
Loctite 243 = blue

Upper Main Frame Installation

Supersonic batterie release knob is pre assembled at the factory.
Disassembling is not required. Only remove M 2.5*8 screw, add loctite 243 and screw it back.



TR550-420 Release knop for battery tray
(pre assembled by factory)

M2.5x8mm Hex-Socket-screw

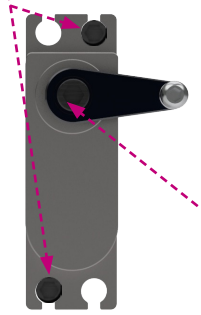
You will need:
Loctite 243 = blue

Upper Main Frame Installation

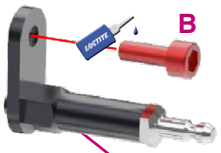
The upper main frame (mini or full-size) can be installed on either the left or right side of the assembly. The mounting side is optional and does not affect performance.
-For full-size elevator servos, use TR561-124 mounting plates.
-For mini elevator servos, use TR501-122 mounting plates.

The illustration shows the use of a full-size cyclic elevator servo. If using a mini-size elevator servo, select the alternate upper main frame with a smaller cutout designed for the mini servo.

TIP! use 2* M2.5*6mm screw crosswise for easy centering by the head of the screw when adjusting the servo position in the frame.



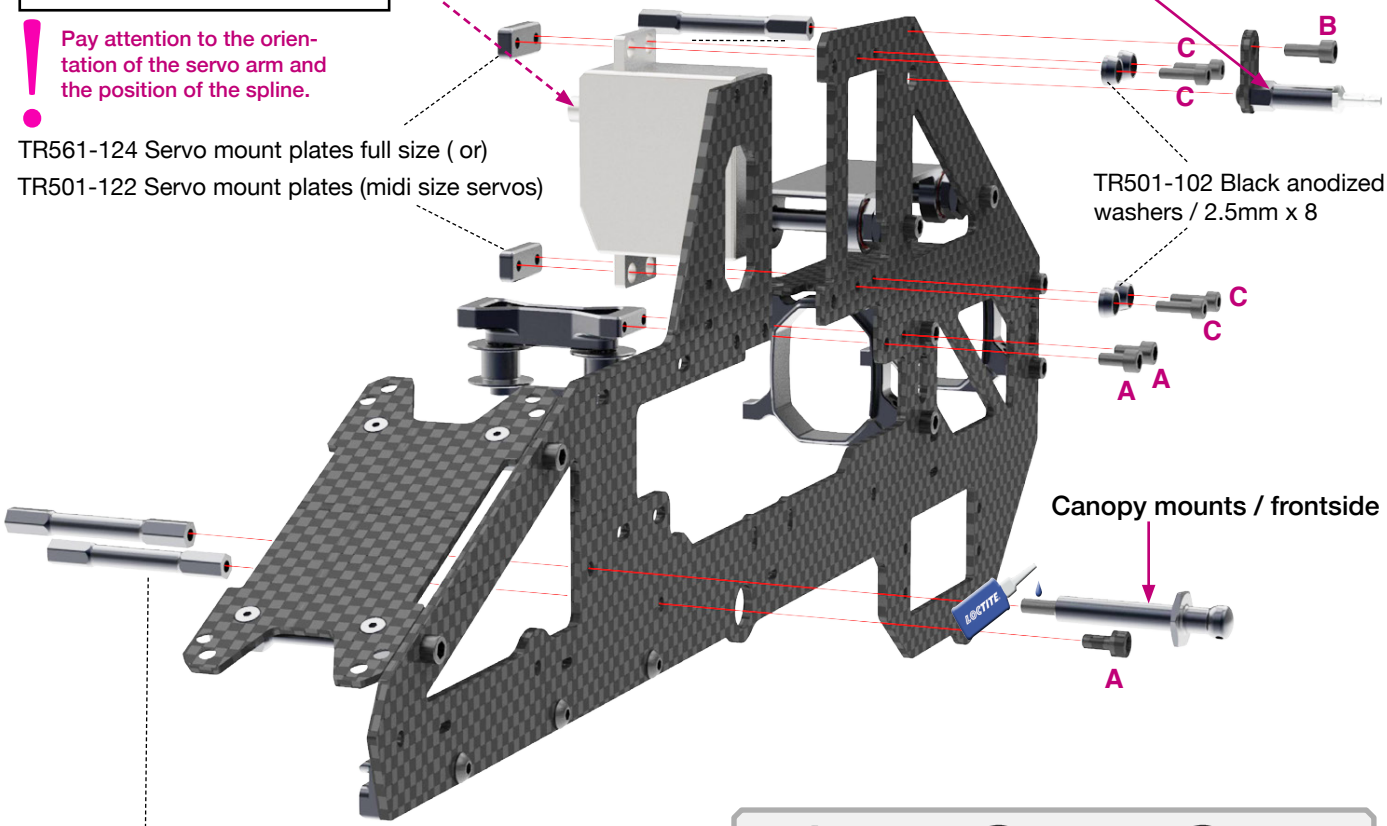
Supersonic mounts / backside
TR704-246 Rear canopy mounts



! Pay attention to the orientation of the servo arm and the position of the spline.

TR561-124 Servo mount plates full size (or)
TR501-122 Servo mount plates (midi size servos)

TR501-102 Black anodized washers / 2.5mm x 8



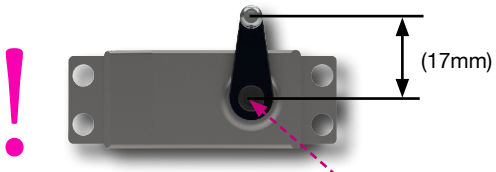
Canopy mounts / frontside

TR501-219 Frame spacers

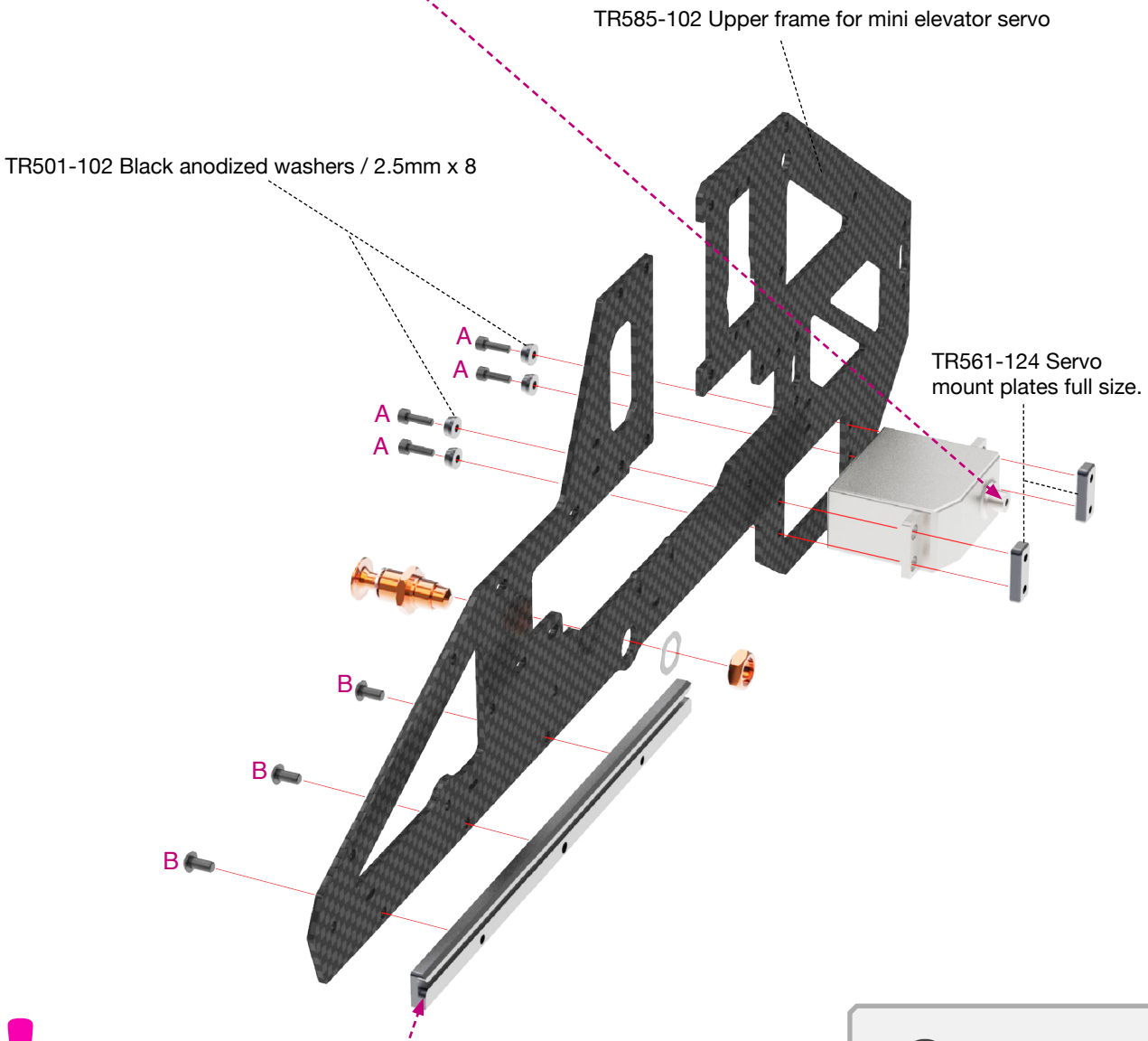
You will need:
Loctite 243 = blue

Upper main frame assembly

Pay attention to the orientation of the servo horn arm and the position of the spline. When assembling to the frame the servo horn need to facing upwards.



We added 2mm CF servo shims to the kit. For servos of certain brands with larger dimensions. This allows more clearance from the wires versus the main frame while mounting them to the servo frames. (CF plates can be found in the spare parts bag inside the kit)



Note the orientation of the rail, which is facing towards the inside and the guide rail is facing up.

You will need:
Loctite 243 = blue

Servo frame assembly

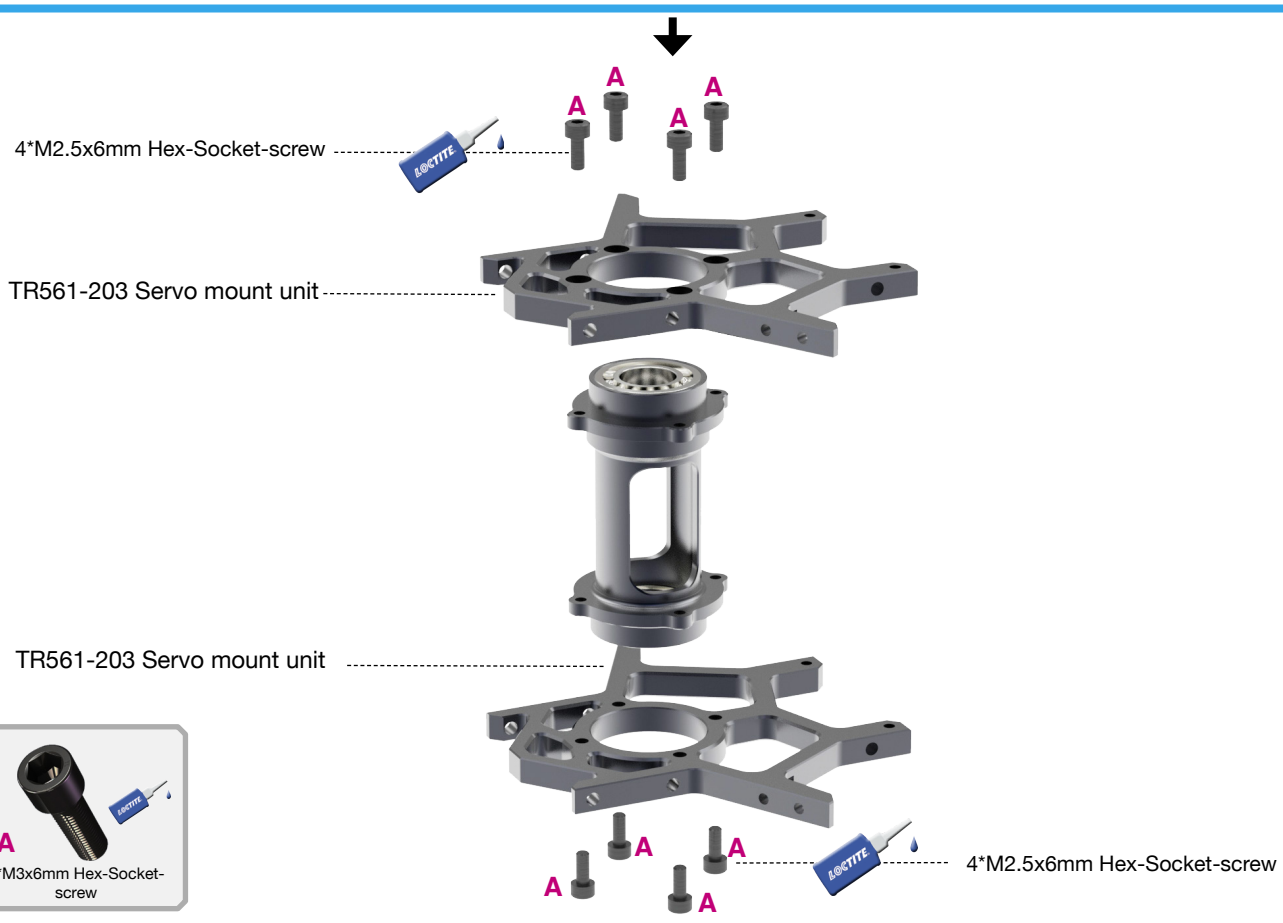
4*or 2* Radial Bearing 10x19x5mm

DNAMIC-PRO ONLY! (4 bearing)

STANDART DNAMIC! (2 bearing)

2*or 2* Radial Bearing 10x19x5mm

The mainshaft support tube has been assembled at the factory. Disassembly is not required, and no Loctite is needed to secure the bearings. If the bearings need to be replaced, you may want to use a hair dryer to slightly heat up the support tube.

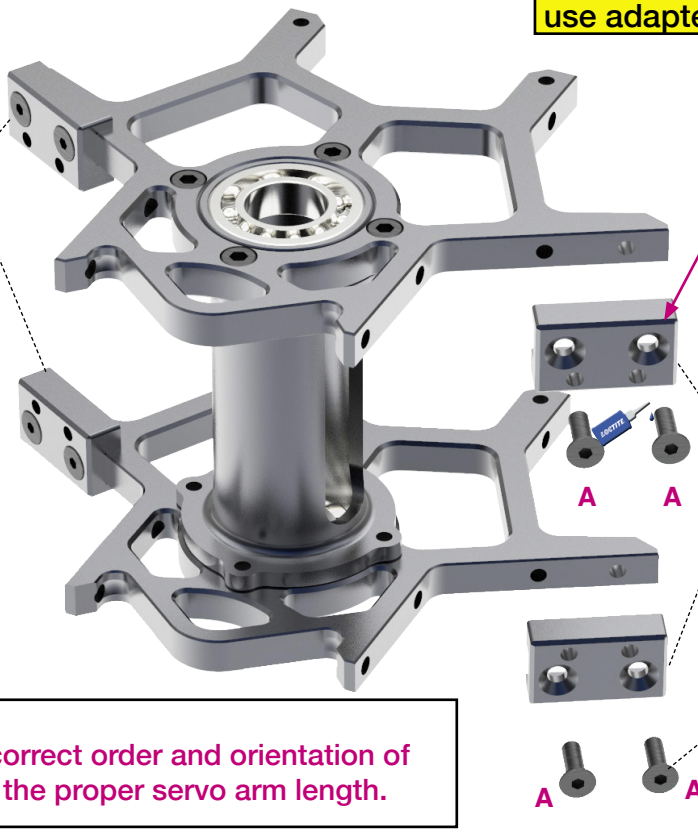


8*M3x6mm Hex-Socket-screw

You will need:
Loctite 243 = blue

Servo frame assembly (mini cyclic servo)

For midi size cyclic servos use adapters. (included in kit)



TR561-125 Midi size servo adapters

TR561-125 Midi size servo adapters

4*M2.5x6mm Hex-Socket-screw

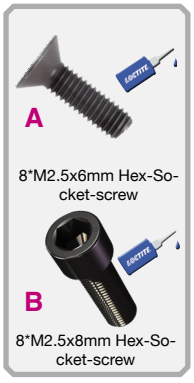
Note:
Refer to Page 30 for the correct order and orientation of the servo installation and the proper servo arm length.

Tech tip!
Use 2* M2.5*6mm screws crosswise for easy centering by the screw head when align servo position. Assemble the M2.5 scew until the head enters the recess of the servo mounting holes. Then use the other 2 crossbars to fix the servo. Remove the temporary center screws and mount the remaining M2.5x10mm with the washer.

Mini size cyclic servos

Note position of spline!

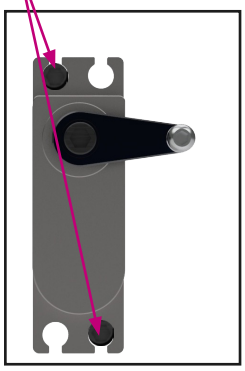
8*M2.5x8mm Hex-Socket-screw



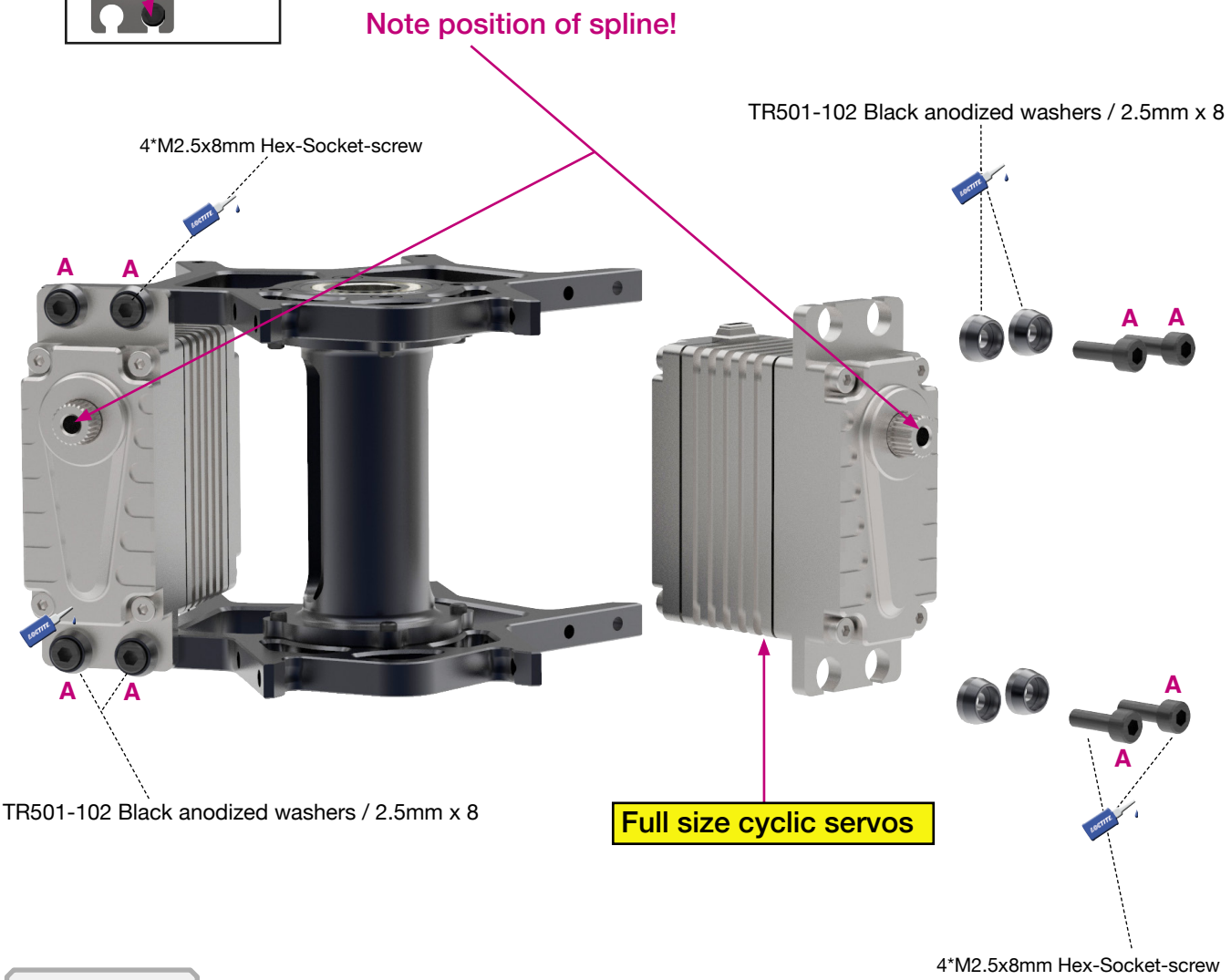
You will need:
Loctite 243 = blue

Servo frame assembly (full size cyclic servo)

Tech tip!
Use 2* M2.5*6mm screws crosswise for easy centering by the screw head when align servo position. Assemble the M2.5 scew until the head enters the recess of the servo mounting holes. Then use the other 2 crossbars to fix the servo. Remove the temporary center screws and mount the remaining M2.5x10mm with the washer.



Note:
Refer to Page 31 for the correct order and orientation of the servo installation and the proper servo arm length.



You will need:
Loctite 243 = blue

Motormount and pinion

Available slant pinions for Tron 7.0 DNAMIC and Tron 5.8

- 12T/6mm TR582-012
- **13T/6mm TR582-013 (stock, included in Dnamic STANDART kit)**
- 14T/6mm TR582-014
- 15T/6mm TR582-015
- 16T/6mm TR582-016
- 17T/6mm TR587-017

Available herringbone pinions for Tron 7.0 DNAMIC and Tron 5.8

- 12T/6mm TR682-012
- 13T/6mm TR682-013
- **14T/6mm TR682-014 (stock, included in Dnamic PRO kit)**
- 15T/6mm TR682-015
- 16T/6mm TR682-016

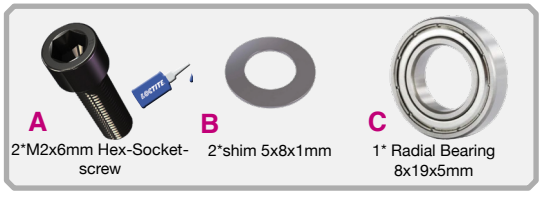
Note: The Tron 7.0 Dynamic PRO Kit now comes with a **14T** motor pinion as standard.
Please be aware that first-series kits were originally supplied with a 12T pinion.

TR682-014 Motor Pinion 14T 6mm
(included in Tron 7.0 DNAMIC PRO kit)

TR700-206 Motor mount including pinion support bearing

C TR706-126 Motor support bearing set

TR502-804 Motor pinion nut



You will need:
Loctite 243 = blue

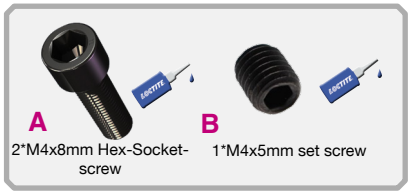
Motormount and pinion

Tech Tip – Pinion and Motor Installation

1. **Insert the pinion into the motor mount support, passing it through the bearing.**
2. **Apply a thin layer of thread locker (e.g., Loctite) to the pinion shaft and secure it using the provided nut.**
3. **Mount the motor to the support using the designated C-type screws. Ensure the motor cable exits on the correct (right-hand) side.**
4. **Align the pinion set screw with the flat spot on the motor shaft. Apply thread locker to the set screw and tighten it securely.**
5. **Once the motor is properly mounted, re-tighten the pinion nut slightly. This step is easier now that the motor is secured in place.**

BL motor 4020-4225 size (not included) ----------

min. 15mm motorshaft length required.



Gear ratio maingear and tail

Gear ratio for herringbone main gear.

Main and tail rotor gear ratios.

Main gear	Pinion	Ratio	Tail drive	Tail	Ratio
121 T	12T /6mm	10.08	101 T	18 T	5.6
121 T	13T /6mm	9.30	101 T	19 T	5.3
121 T	***14T/6mm***	***8.64***	***101 T***	***20 T***	***5.05***
121 T	15T/6mm	8.06			
121 T	16T/6mm	7.56			

Note: The Tron 7.0 Dynamic PRO Kit now comes with a **14T** motor pinion as standard. Please be aware that first-series kits were originally supplied with a 12T pinion.

Do not exceed 1500 rpm headspeed if using a 5.6 tail ratio!

Note: The 20T tail rotor pulley is included as standard in the kit.

Max. head speed for main rotor head must not exceed 2000 RPM!

Gear ratio for slant main gear.

Main and tail rotor gear ratios.

Main gear	Pinion	Ratio	Tail drive	Tail	Ratio
137 T	**13T /6mm**	**10.53**	101 T	18 T	5.6
137 T	14T /6mm	9.78	101 T	19 T	5.3
137 T	15T/6mm	9.13	**101 T**	**20 T**	**5.05**
137 T	16T/6mm	8.56			
137 T	17T/6mm	8.05			

13T pinion INCLUDED in Tron 7.0 Dnamic **standart** kit KIT

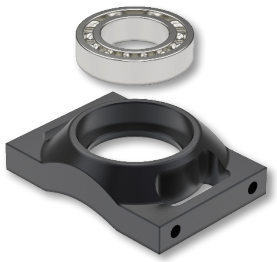
Do not exceed 1500 rpm headspeed if using a 5.6 tail ratio!

Note: The 20T tail rotor pulley is included as standard in the kit.

Max. head speed for main rotor head must not exceed 2000 RPM!

You will need:
Loctite 243 = blue

Upper main frame assembly

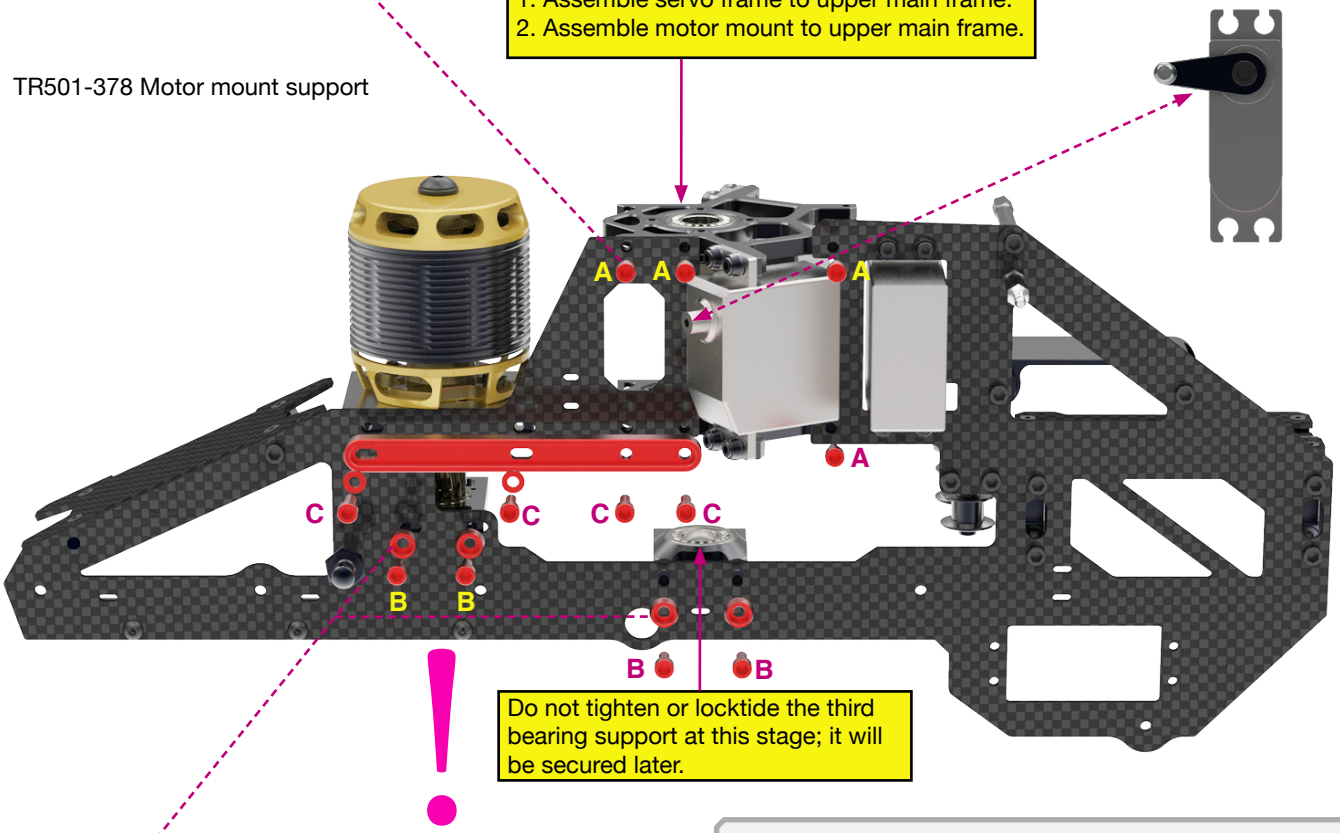


TR581-205 3rd bearing block include bearing

If you experience that your servo horn will slightly touch the screw head, use 1.8 type screws.

1. Assemble servo frame to upper main frame.
2. Assemble motor mount to upper main frame.

TR501-378 Motor mount support

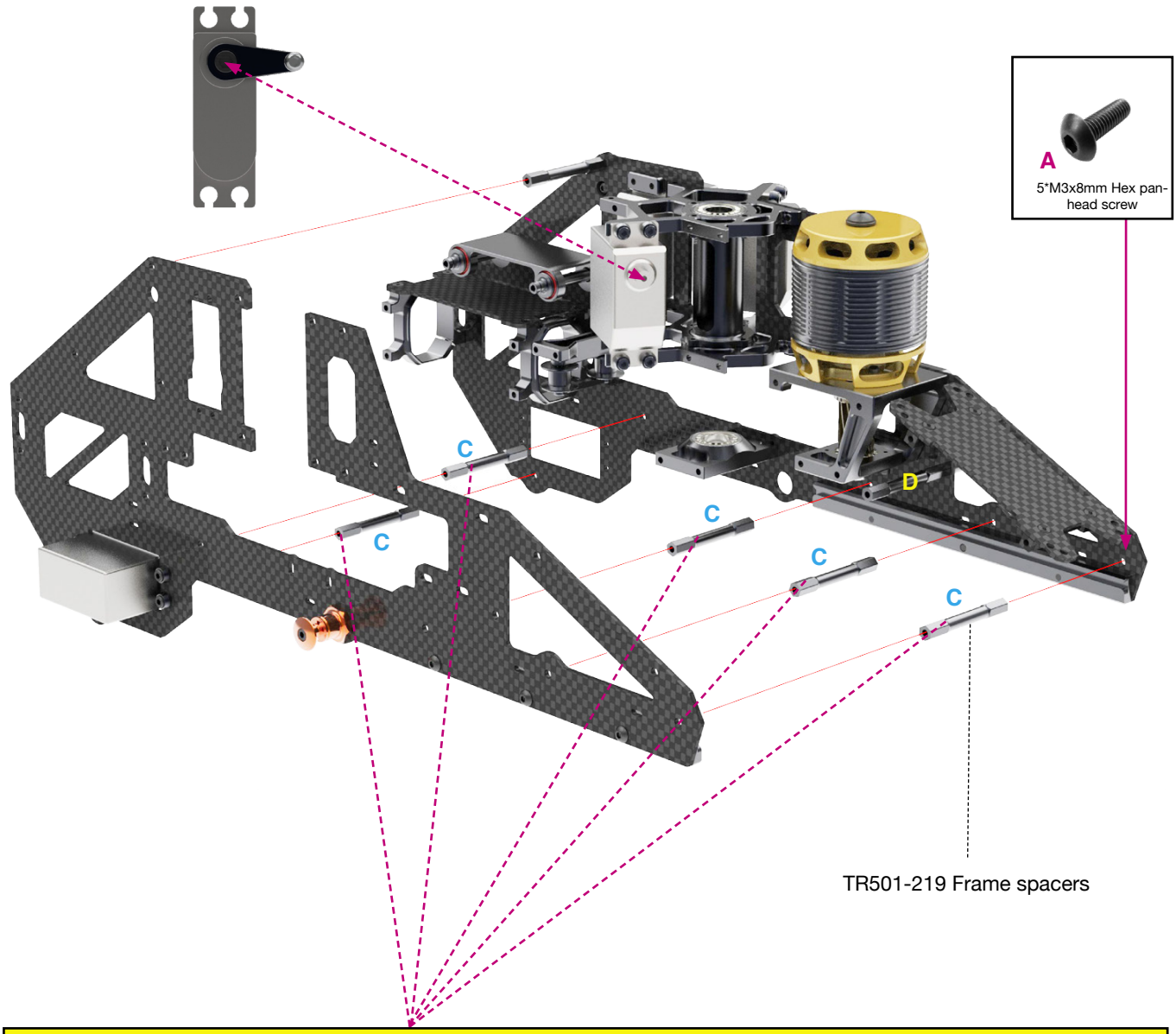


Do not tighten or locktide the third bearing support at this stage; it will be secured later.

TR501-101 Black anodized washers / 3mm

You will need:
Loctite 243 = blue

Upper main frame assembly



Frame Spacer Installation Instructions

Temporary Frame Spacer Fixing:
Using Type A screws, temporarily secure all C and D spacers to the right side of the upper main frame. This will help align the components and simplify the installation of the lower left side frame. (page 42)

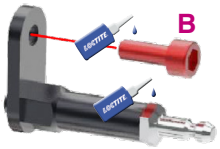
C-Frame Spacer =
These spacers should be separated using the plastic breakaway frame spacers as illustrated on page 42.

D-Frame Spacer =
D-Frame spacers at the front section of the assembly to support the canopy mount.

You will need:
Loctite 243 = blue

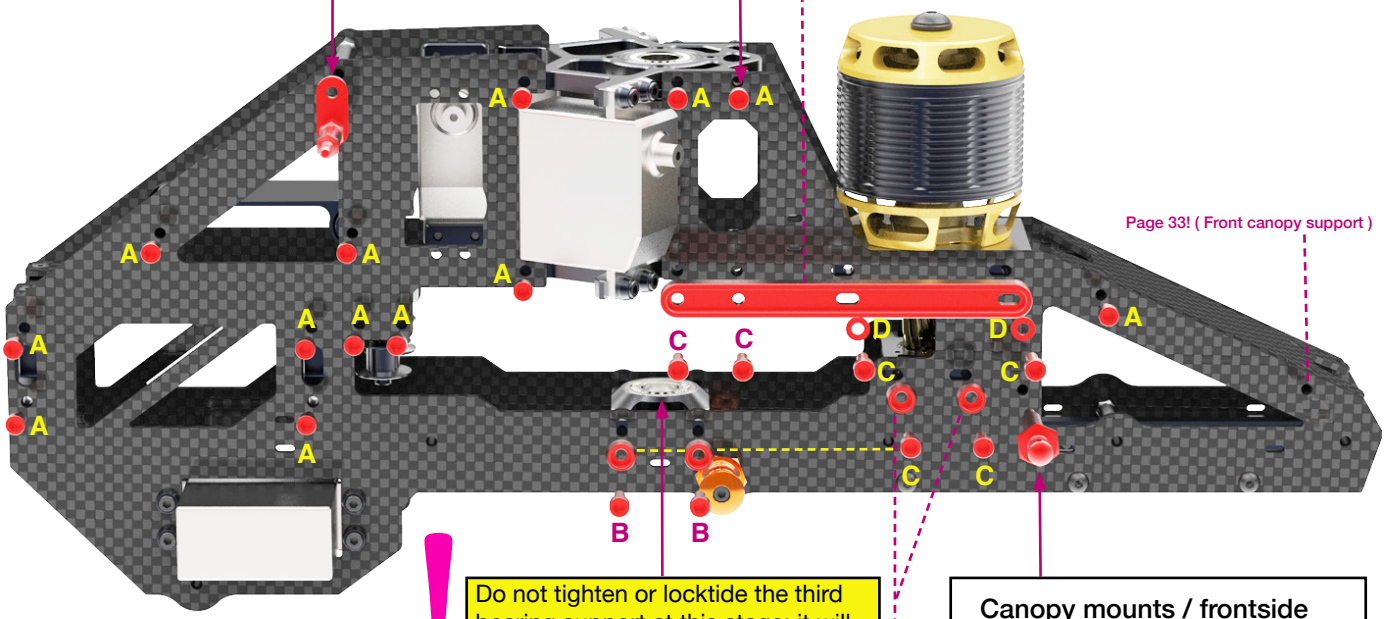
Upper and lower main frame assembly

Supersonic mounts / backside
TR704-246 Rear canopy mounts



If you experience that your servo horn will slightly touch the screw head, use Hex-Pan_head type screws. (includet in spare part bag)

TR501-378 Motor mount support



Page 33! (Front canopy support)

Do not tighten or locktide the third bearing support at this stage; it will be secured later.

Canopy mounts / frontside

TR501-101 Black anodized washers / 3mm

You will need:
Loctite 243 = blue

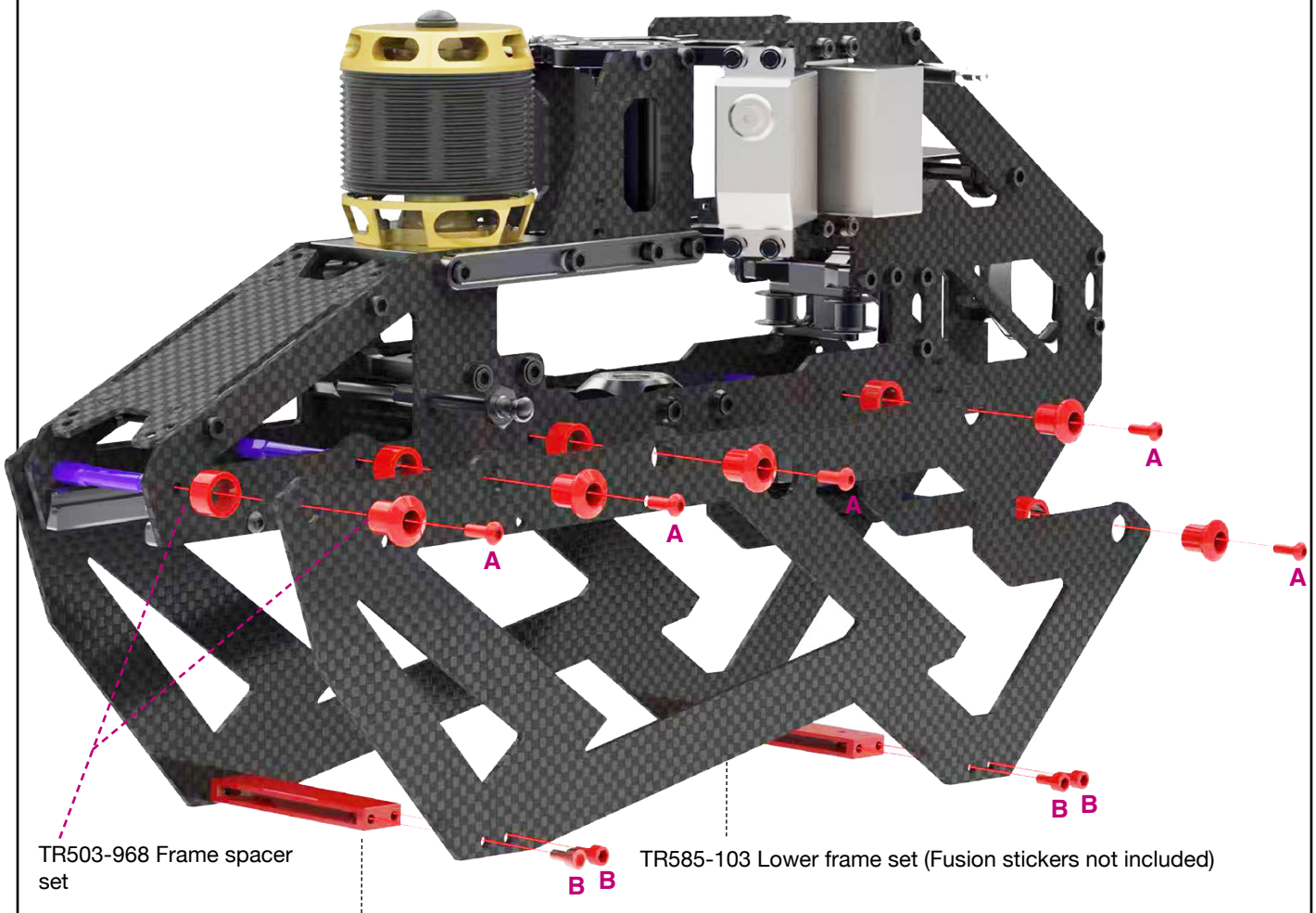
Assembling lower main frames

Lower Left Frame Assembly

Mount the lower left side frame to the upper main frame using Type A screws. Ensure that the plastic break-away spacers are positioned between the frames. Apply Loctite to all screws before tightening.

Remove the temporary Type A pan head screws previously installed on the upper right main frame (see page 40).

Insert the plastic breakaway spacers between the frame components on the right side, then reinsert the Type A screws. Apply Loctite before securing the screws in place.



TR503-968 Frame spacer set

TR585-103 Lower frame set (Fusion stickers not included)

TR501-219 Landing gear support

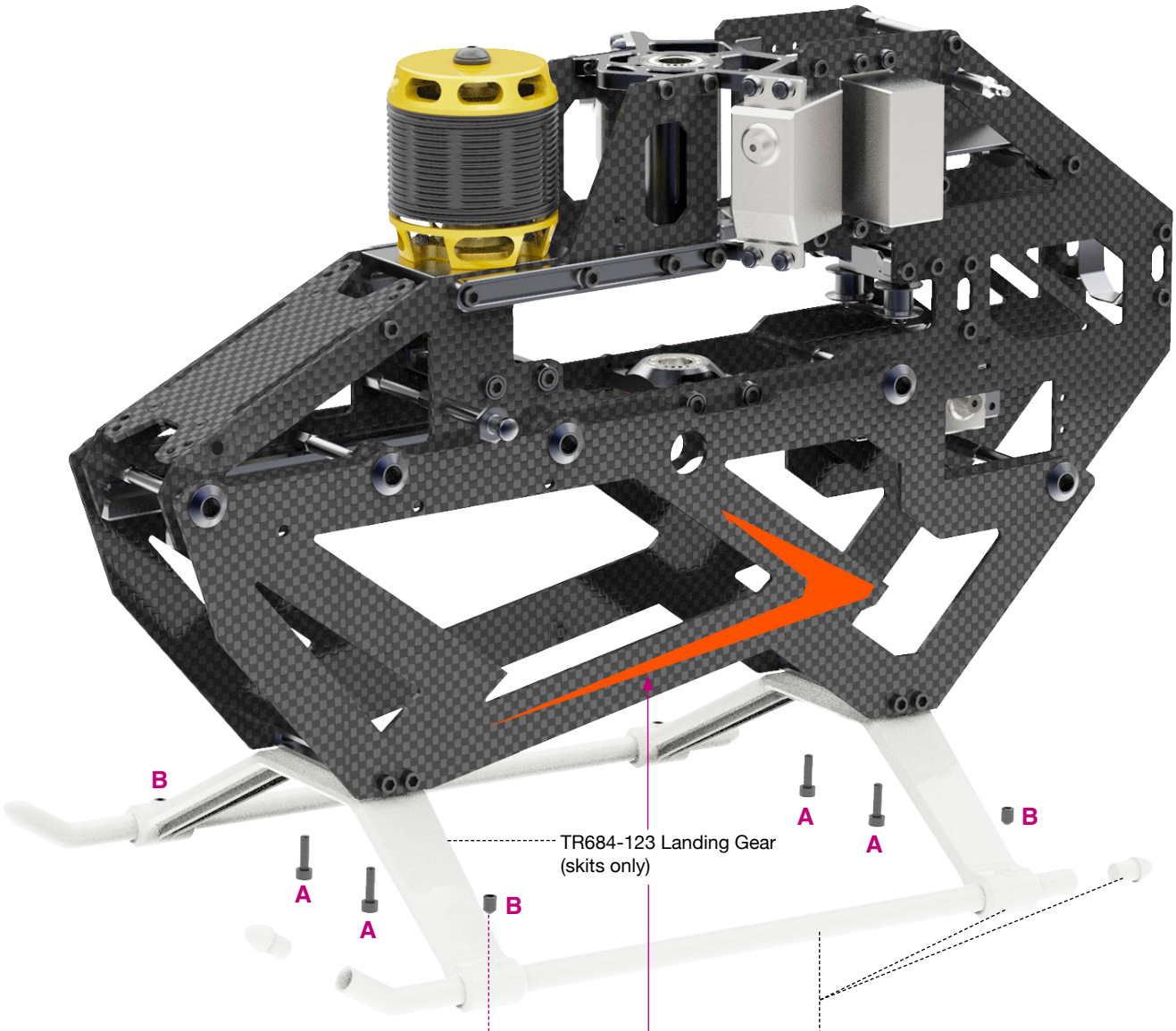
Left and right side lower main frames are identical.

You will need:
Loctite 243 = blue

Landing gear

How to Apply Water-Based Stickers:

1. Clean the Surface: Ensure the surface is smooth, clean, and dry. Wipe off dust or grease.
2. Cut & Soak: Cut out the sticker. Soak it in water for 20–30 seconds until the backing paper loosens.
3. Slide & Apply: Gently slide the sticker off the backing onto the surface.
4. Position & Smooth: Adjust the placement, then smooth out air bubbles with your fingers or a soft cloth.
5. Dry: Let it dry completely for best adhesion.



ALIGN SETSCREWS WITH THE SKID'S PRE-DRILLED HOLES

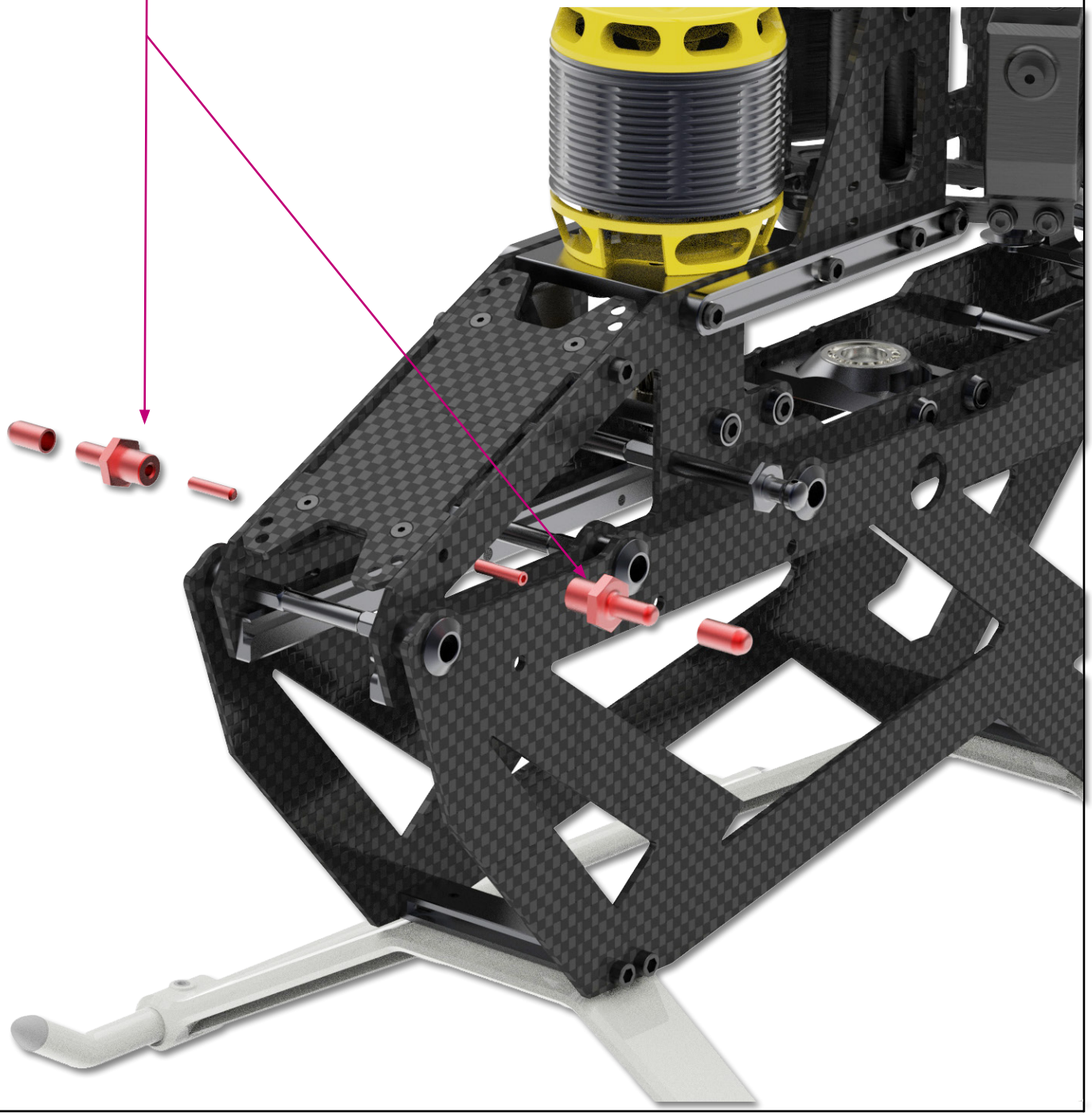
TR588-001 ORANGE / Lower frame Fusion and tail fin sticker set 5.8
TR588-002YELLOW / Lower frame Fusion and tail fin sticker set 5.8

You will need:
Loctite 243 = blue

Canopy standoff mounts

Front canopy support / 2*

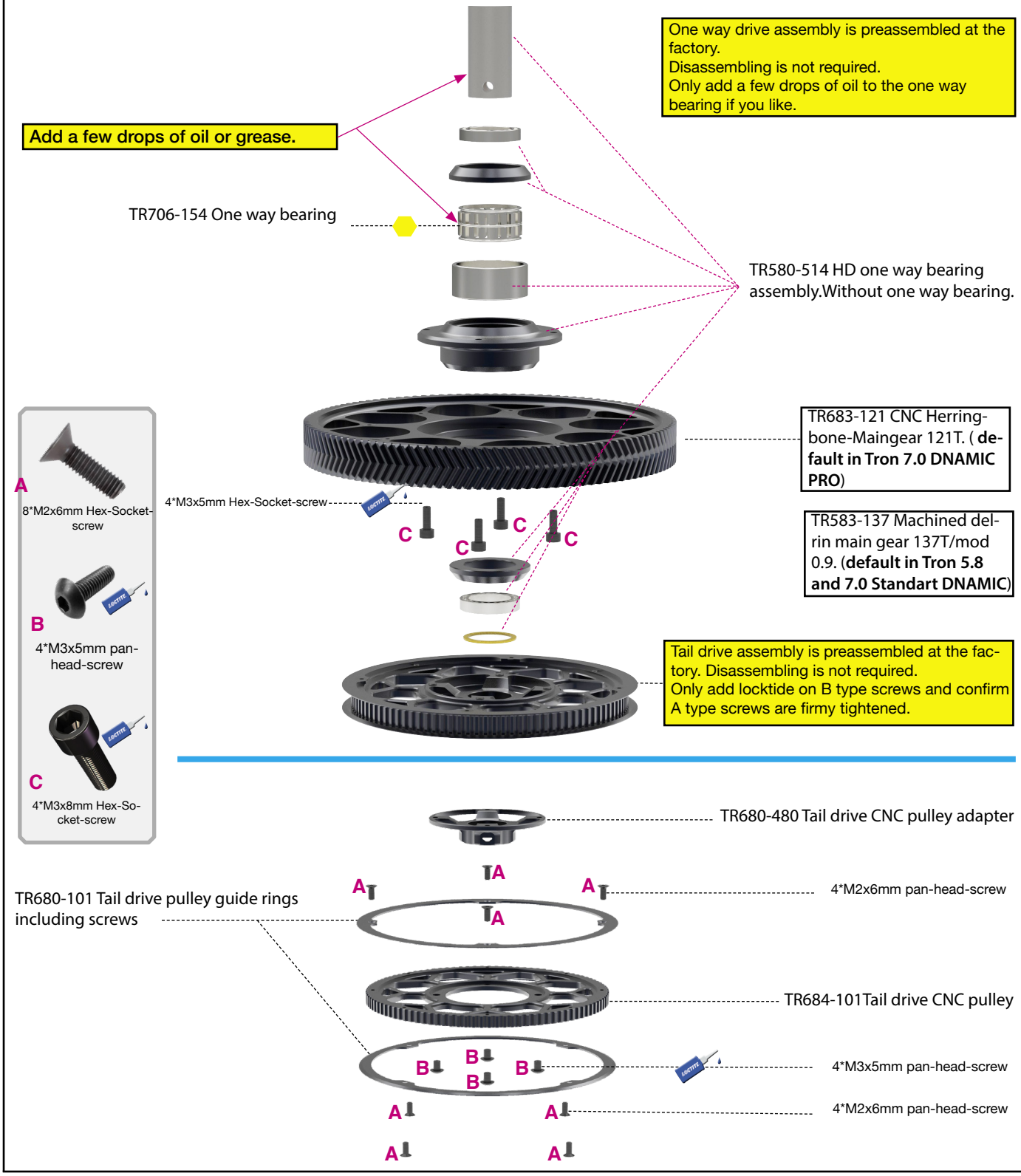
TR690-125 Front canopy support



You will need:
Loctite 243 = blue
Grease = yellow

Main drive assembly

Main drive assembly is preassembled at the factory.
Disassembling is not required.
Just remove **4*A=M2.5x6mm screw and 4*B=M3x6mm** add loctite 243 and screw back.



You will need:
Loctite 243 = blue

Tail boom to main frame assembly

Ensure to have your tail belt oriented as shown in the illustration

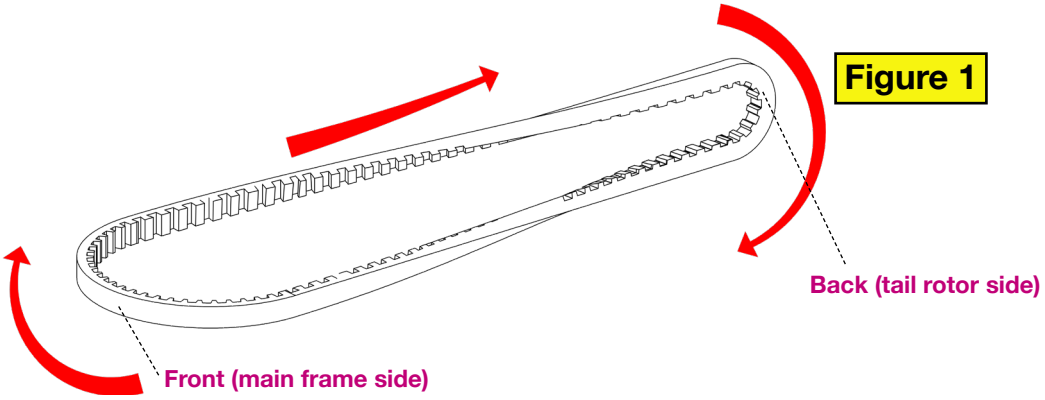
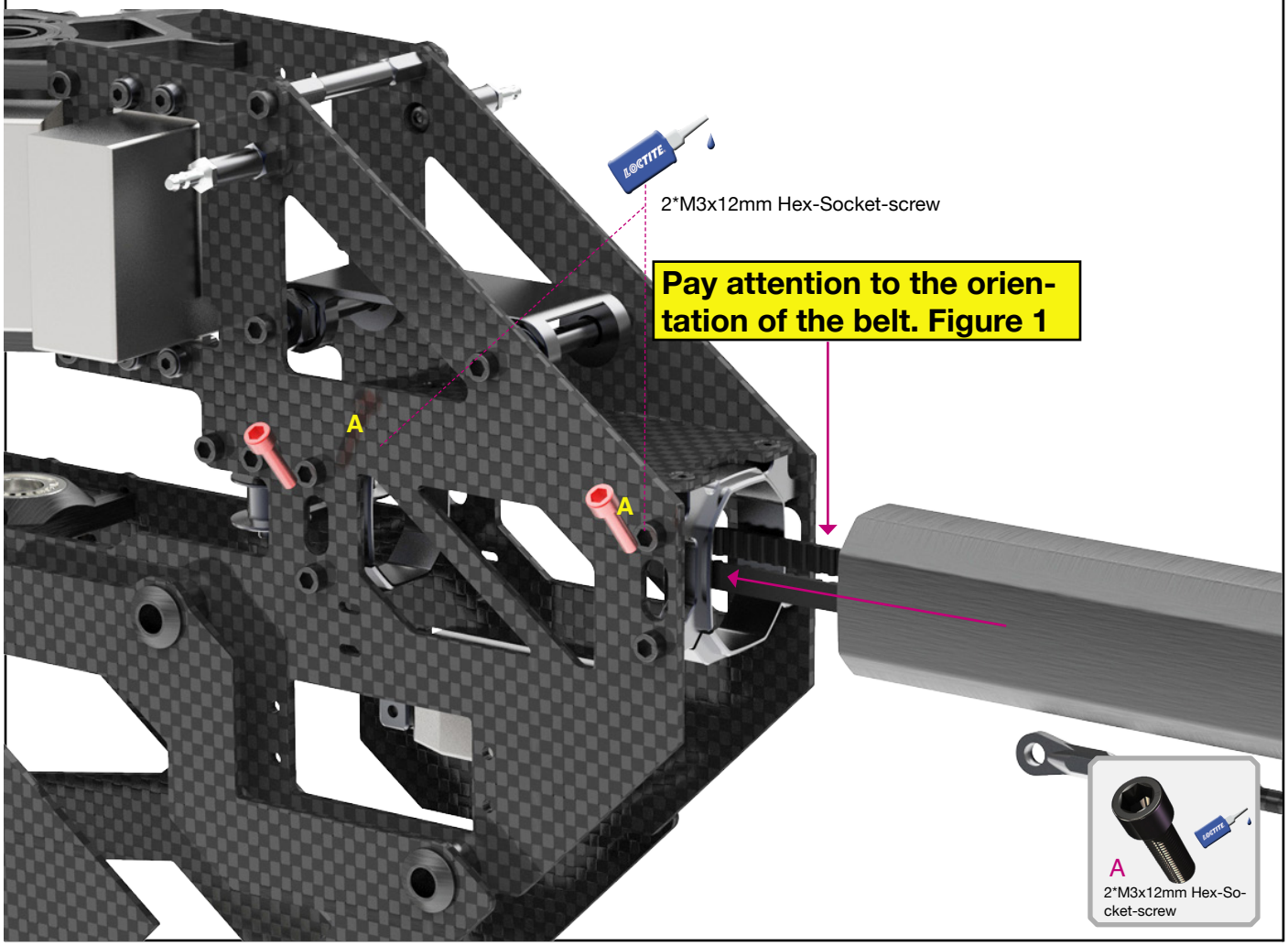


Figure 1

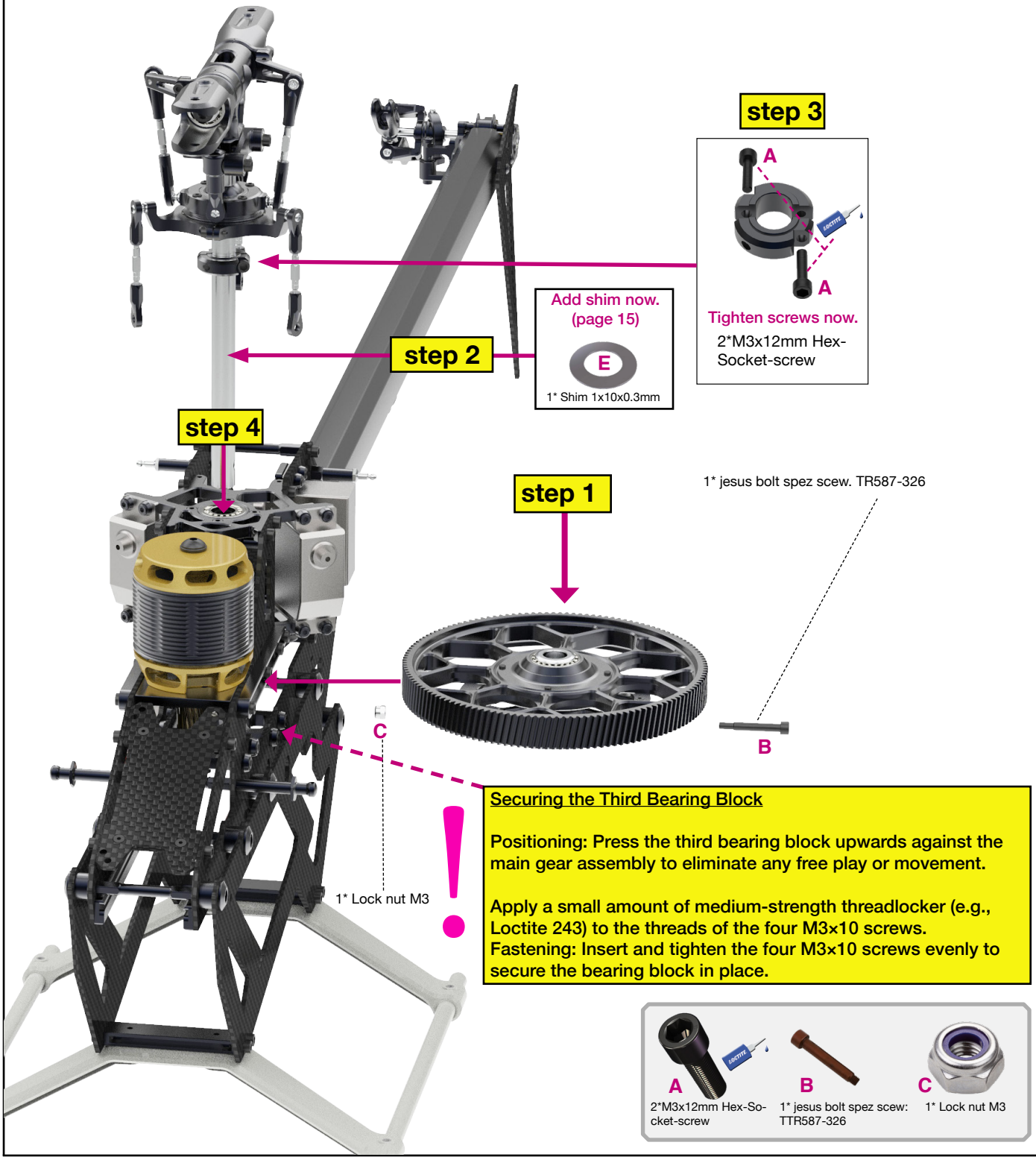
1. Insert boom as shown into the tail boom clamps, pay attention to the corect orientation of the tail belt.
2. Slide the belt through the idler pulleys from the belt tensioner, use a cable tie for help.
3. Pull the tail belt over the front belt drive pulley.
4. Pull the boom backwards and apply tension to the belt.
5. Tighten the boom clamp screws with screw **A**. Add loctite 243 / blue!
6. Ensure the tail is rotation in the corect direction when turning the main rotor head clockwise. (Figure1)



You will need:
Loctite 243 = blue

Head and main drive

1. Insert main gear assembly into frame = step 1
2. Insert rotor head assembly through bearing support tube, **dont forget to add shim E** = step 2 and 3.
3. Make sure your main shaft glide true the one way bearing sleeve and line up with the jesus bolt screw holes.
4. Insert jesus bolt screw, **B** and secure it with the M3 nut lock, **C**
5. Move down the main shaft collar to have zero up and down play on the rotor head assembly, then tighten screw **A** step by step.
6. Make sure to have an equal gap on the collar to achieve best holding results for the main shaft= step 3



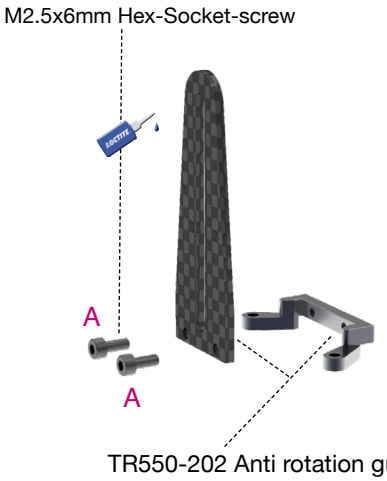
Securing the Third Bearing Block

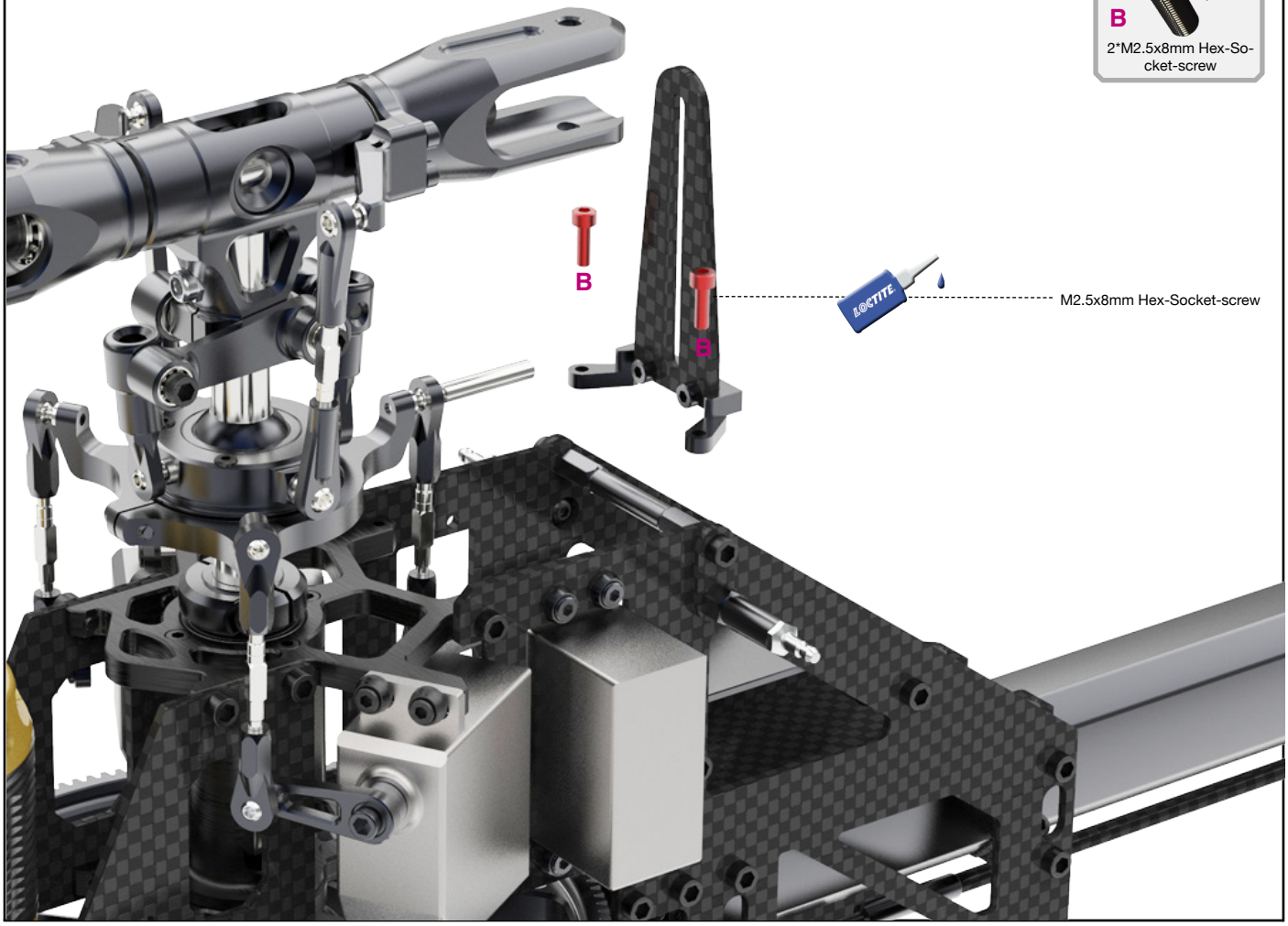
Positioning: Press the third bearing block upwards against the main gear assembly to eliminate any free play or movement.

Apply a small amount of medium-strength threadlocker (e.g., Loctite 243) to the threads of the four M3×10 screws.
Fastening: Insert and tighten the four M3×10 screws evenly to secure the bearing block in place.

You will need:
Loctite 243 = blue

Anti rotation guide





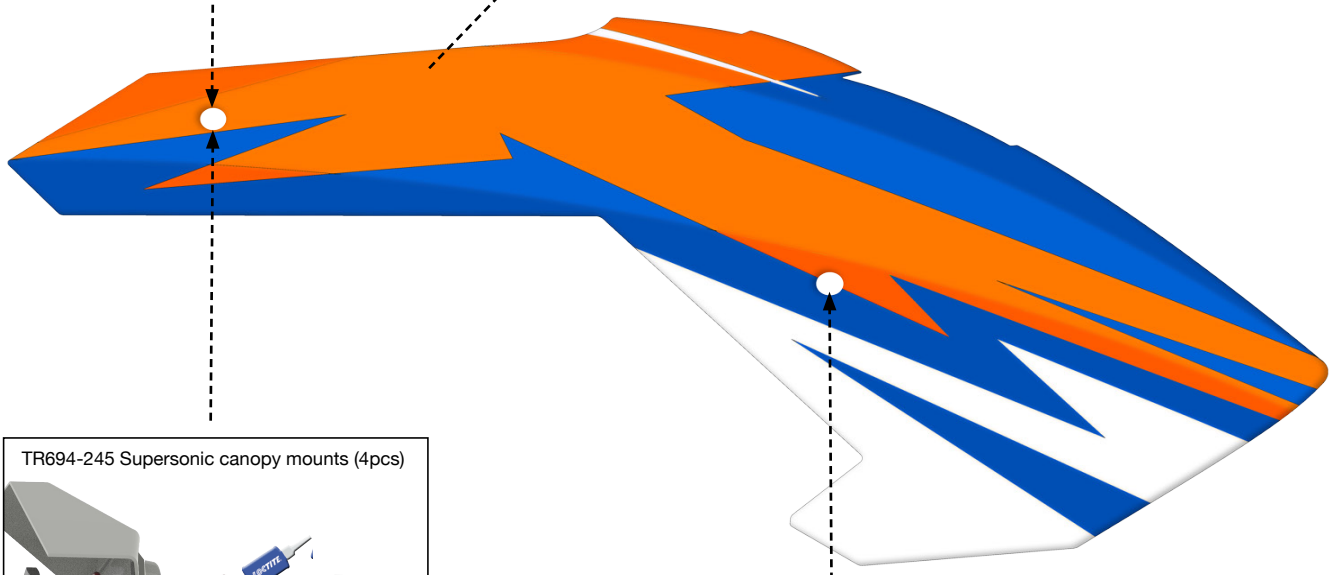
You will need:
Loctite 243 = blue

Supersonic mounts /canopy

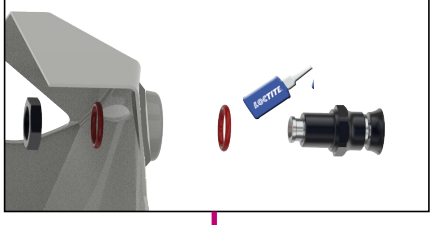
1. **Enlarge the real canopy holes to (9mm) use a propper canopy reamer!**
2. **Assemble the supersonic mounts as shown in the illustration on the backside (use loctite to secure the nuts)**
3. **Use rubber grommets in front. (A small amount of oil can facilitate easier installation and removal of the canopy)**

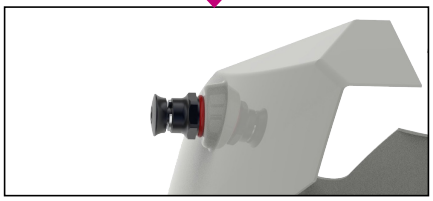
Use a canopy reamer to enlarge the holes to fit the supersonic canopy mounts.

Canopy TRON Dnamic blue orange SKU: TR682-155



TR694-245 Supersonic canopy mounts (4pcs)





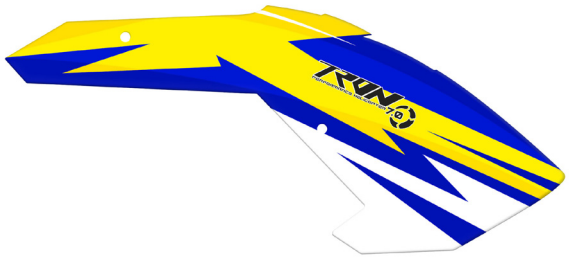
Canopy grommet TR504-008

Canopy option Tron 7.0 DNAMIC

Option canopy sold for Tron 7.0 DNAMIC / standart and PRO

Canopy TRON Dnamic blue pink SKU: TR682-154

Canopy TRON Dnamic pink white SKU: TR682-153



Canopy TRON Dnamic blue yellow SKU: TR682-156

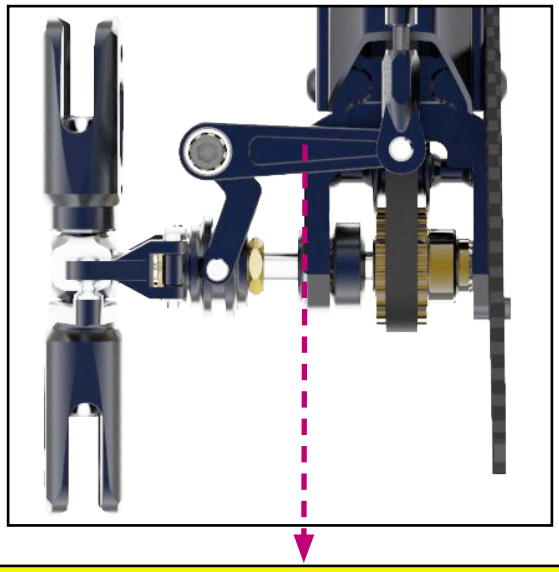
Canopy TRON Dnamic orange SKU: TR682-151

Canopy TRON Dnamic yellow SKU: TR682-152

You will need:
Loctite 243 = blue

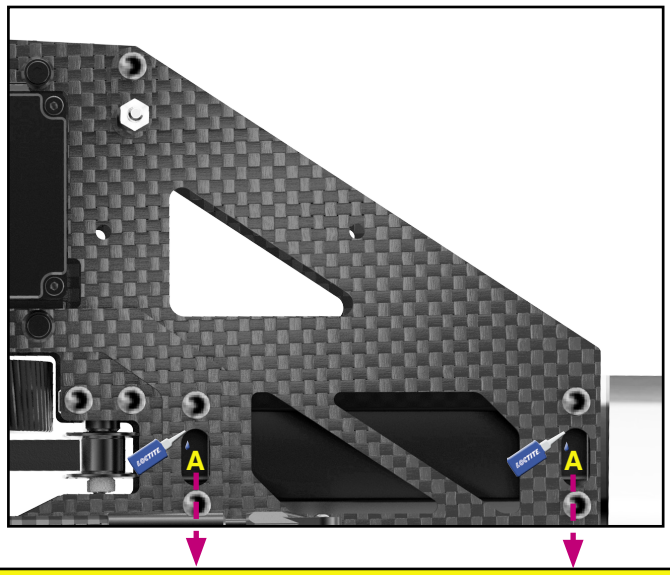
Final setup and pre-flight check

Tail rotor linkage setup.



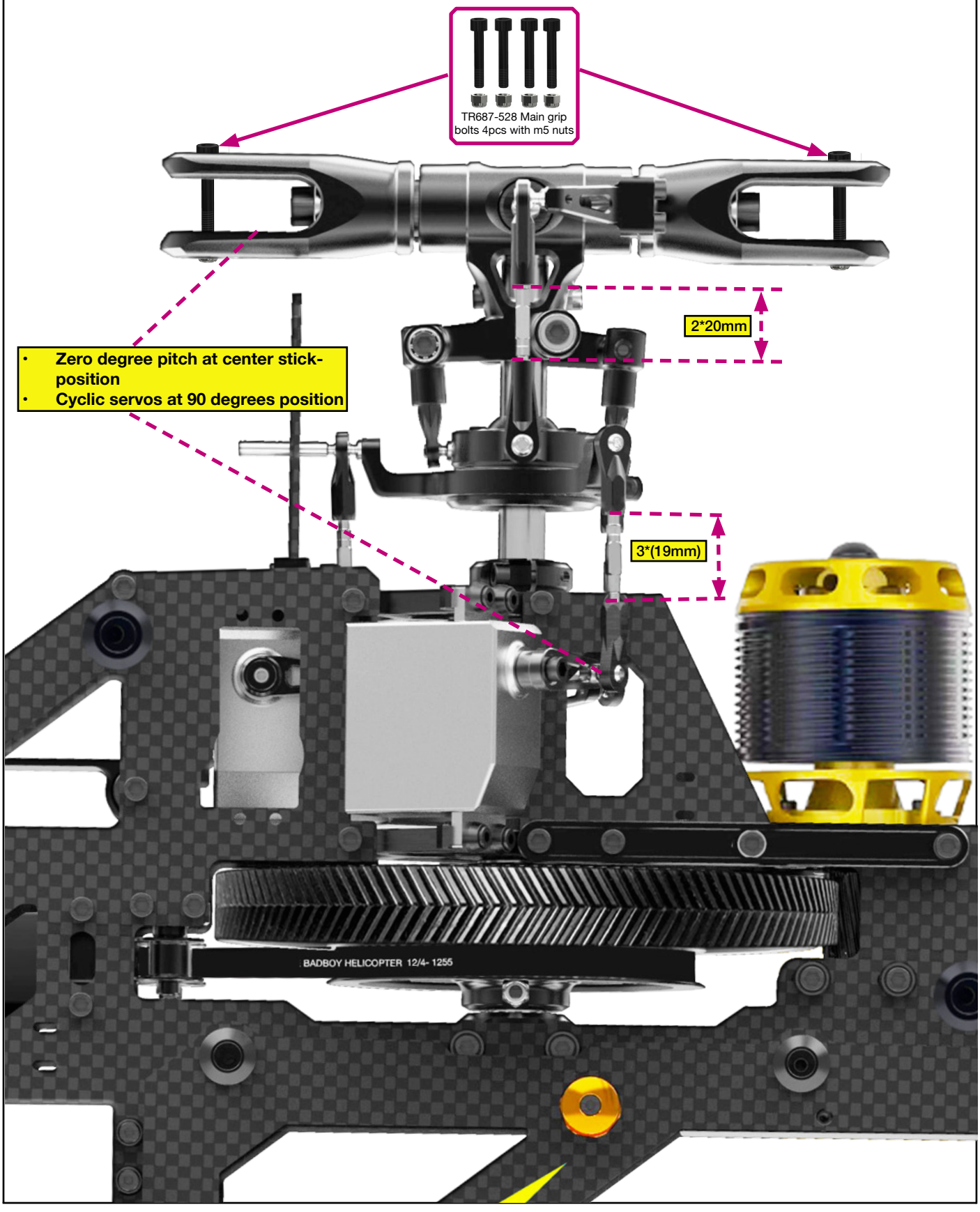
For best tail authority performance adjust center position of your tail pushrod linkage (tail servo) same as shown in the illustration (90°) degree.

Belt tension setup.



Tighten the tail belt by pulling the tail boom backward. Apply thread locker (Loctite) to the A-type screws and securely tighten them.

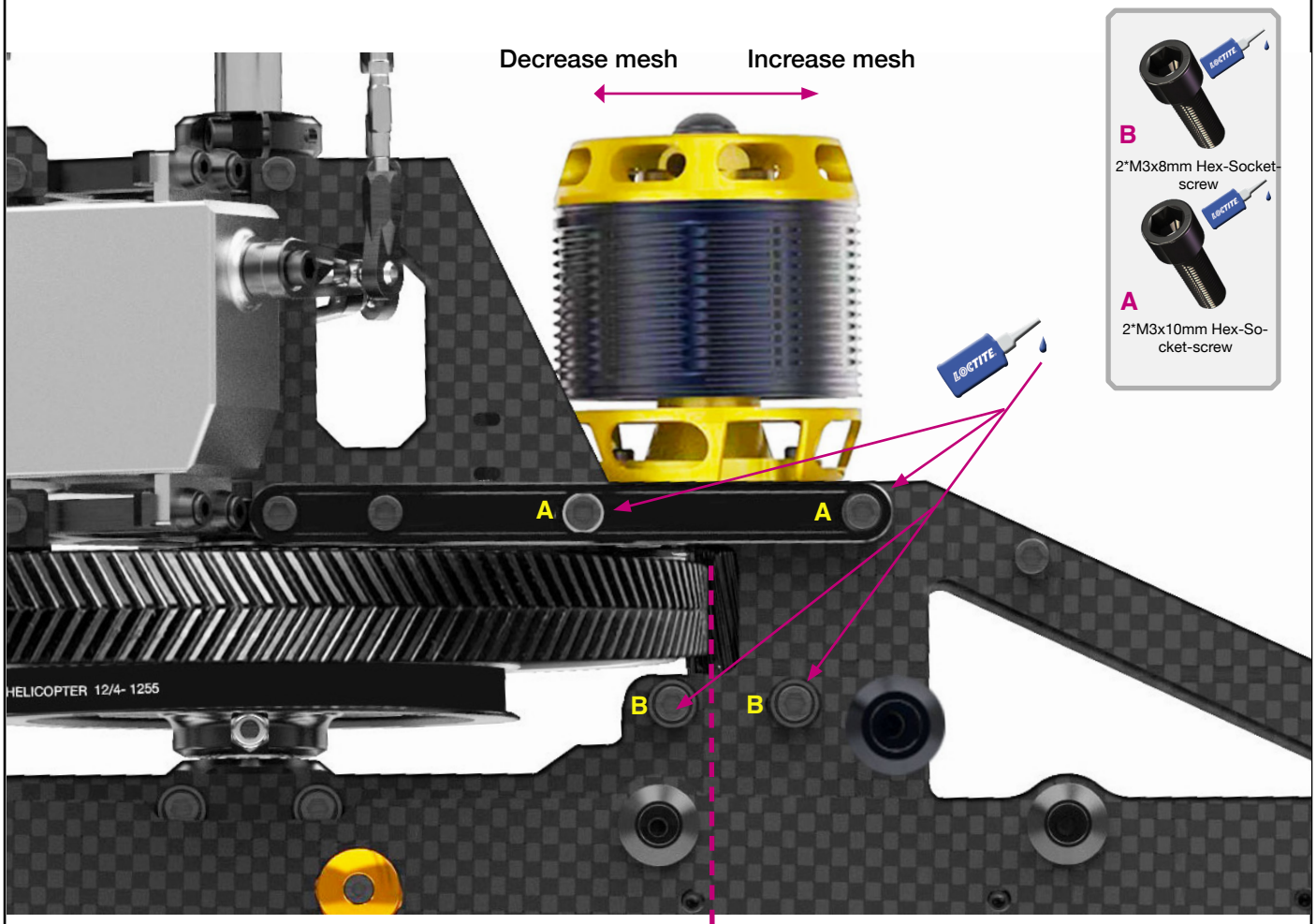
Final Setup and Pre-Flight Check



You will need:
Loctite 243 = blue

Set gear mesh for herringbone pinion gear

1. Herringbone pinions do not require gear mesh adjustment. Carefully slide the motor mount against the main gear, applying only minimal pressure to eliminate any gear play without creating binding
2. Carefully thighten screws A crosswise left and right while you slightly pressing down the motor mount to have it 90 degree to the main gear. **Use loctite 243 = blue on all A and B type screws!**
3. Make sure after all A screws are thight the main gear turn free with **zero** or just a minimal gear play.

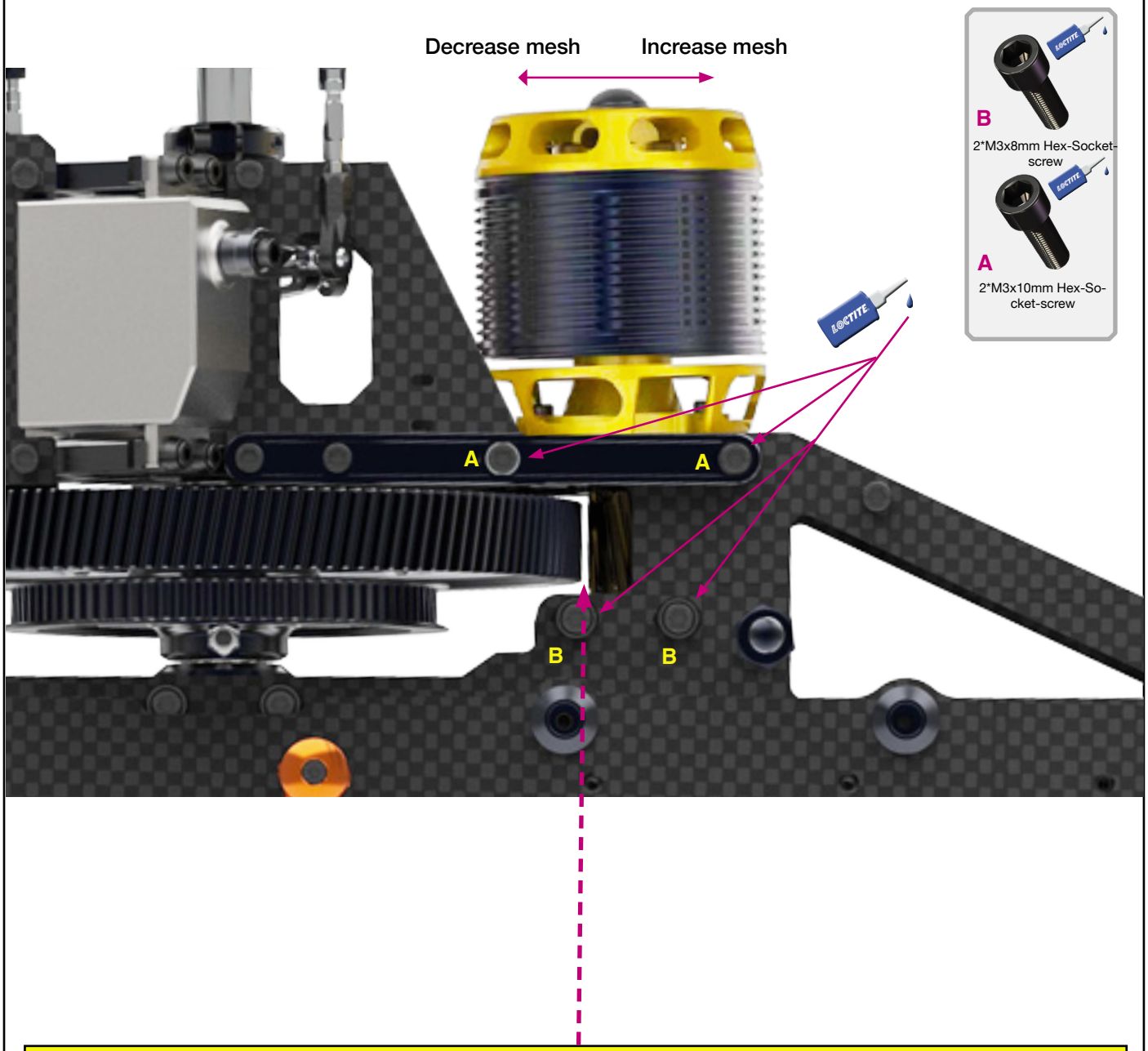


Tech tip!
Ensure proper gear mesh by adjusting the gears until they engage smoothly. Proper gear mesh is critical for optimal performance and longevity of the components.

You will need:
Loctite 243 = blue

Set gear mesh for slanted pinion gear

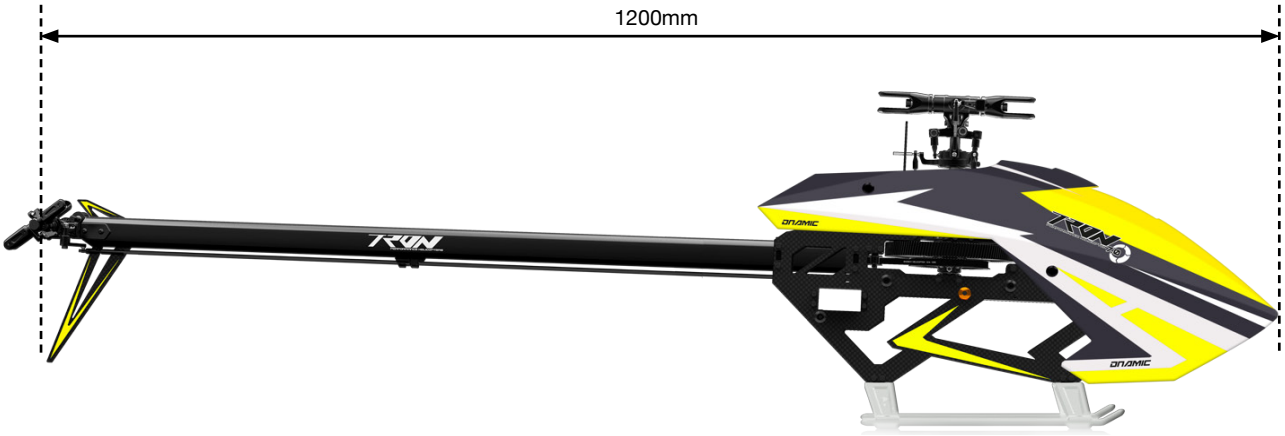
1. Set gear mesh as shown beow in the illustration (0,1mm gap)
2. Carefully thighten screws A crosswise left and right while you slightly pressing down the motor mount to have it 90 degree to the main gear. **Use loctite 243 = blue on all A and B type screws!**
3. Make sure after all A screws are thight the main gear turn free with a minimal gear play.



Tech tip!
Ensure proper gear mesh by adjusting the gears until they engage smoothly without excessive play or tightness. Proper gear mesh is critical for optimal performance and longevity of the components.

Dimensions and wheight

1. **Dry weight** = 1650 grams / 3.63 pounds, without blades and electronics.
2. **With** = 200mm / 7.87 inch
3. **Heigth** = 342 mm / 13.46 inch
4. **Length** = 1200 mm / 47.24 inch



Preflight Check and Gear Ratios

1. Make sure your battery supply for your electronics is fully charged, monitor draw to ensure your supply is always safe.
2. Inspect your blades for possible damage and ensure they are tight.
3. Inspect your linkages to make sure they are all in place and not have been popped off turing transport of your model.
4. Confirm that the FBL unit is correctly setup and initialized.
5. Make sure your canopy is secured safely.
6. If you are a beginner, always seek advice by a experienced pilot, especially for your first flight.

Recommended head speeds

Flying styles	Head speed
floating sylte.	1200-1500rpm.
Advanced sport, 3D flying.	1500-1800rpm.
Advanced 3D flying.	1800-2000rpm.

Regular Checks and Maintenance

Regular maintenance is essential for helicopters models. Follow these guidelines:

Bolt Inspection: Regularly check that all bolts remain tight. Due to the increased vibrations, the use of high-quality thread lock is strongly recommended.

Ball Link Wear: Ball links will wear out over time, particularly the two links connecting the swashplate to the blade grips. Inspect these frequently and replace them if any slop develops.

Dampener Wear: Tail and head dampeners degrade over time. Replace them if the rubber shows excessive wear or deterioration.

Contact:
For sales: sales@tronhelicopters.com / for support: support@tronhelicopters.com
tronhelicopters.com