GOBLIN
HELICOPTER

MANUAL

GOBLIN 500S

SAB HELI DIVISION

Goblin 500 Sport Manual

Release 1.0 - Octorber 2015

WORLD DISTRIBUTION
www.goblin-helicopter.com
For sales inquiries, please email: *sales@goblin-helicopter.com*
For info inquiries, please email: *support@goblin-helicopter.com*
Attention: If you are a consumer and have questions or need of assistance, please contact in a first time the Goblin retailer where you made the purchase

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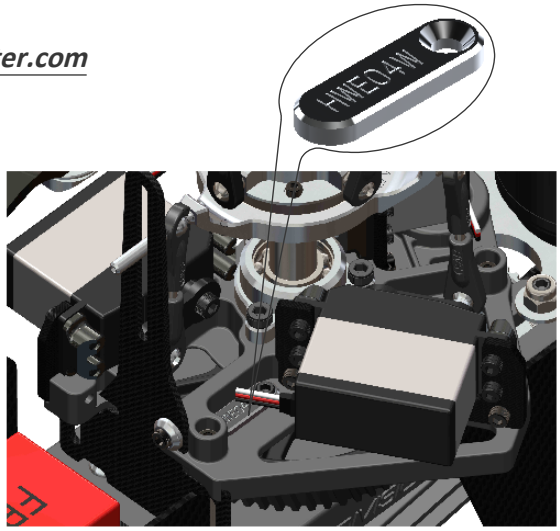
Please read this user manual carefully, it contains instructions for the correct assembly of the model.
Please refer to the web site www.goblin-helicopter.com for updates and other important information.

VERY IMPORTANT

Inside Box 4, you will find Bag 10 with a red label. This bag contains your serial number tag. Please take a moment to register your kit online via our web site at:

http: //www.goblin-helicopter.com



It is extremely important that you take a moment to register your helicopter with us. This is the only way to ensure that you are properly informed about changes to your kit, such as upgrades, retrofits and other important developments. SAB Heli Division cannot be held responsible for issues arising with your model and will not provide support unless you register your serial number.

To mount the serial number tag on your helicopter, please refer to page 25.

Thank you for your purchase, we hope you enjoy your new Goblin helicopter!

SAB Heli Division

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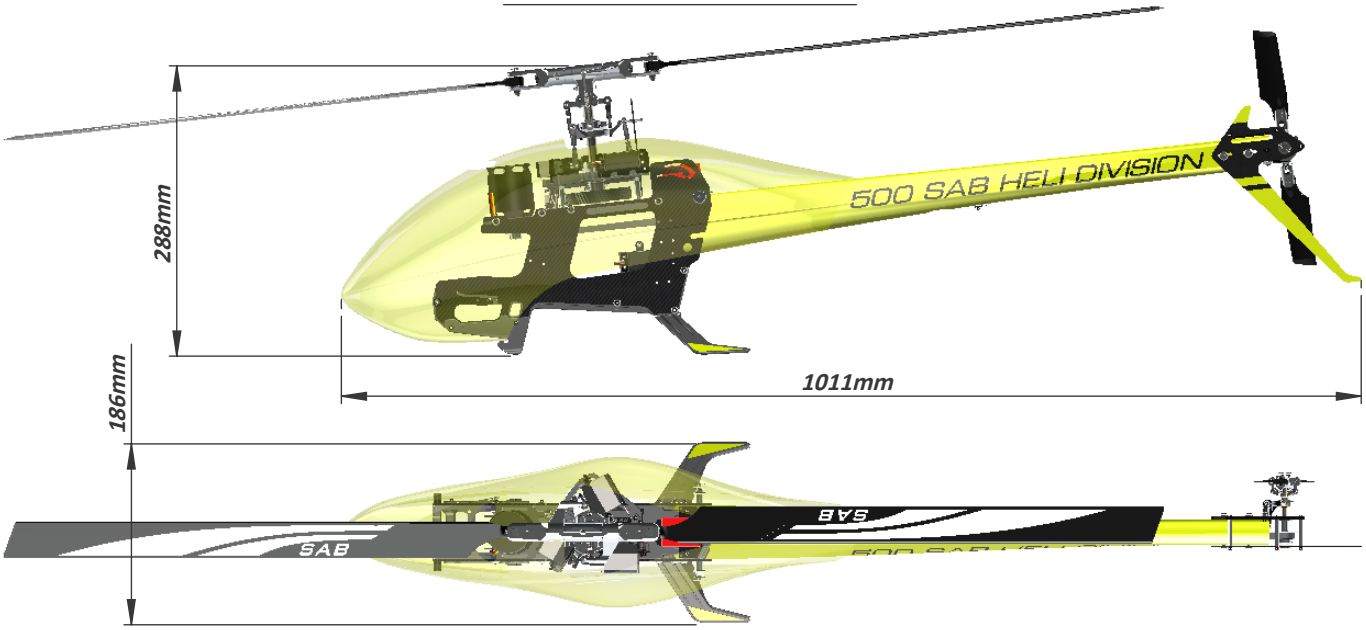
SPECIFICATIONS



Main rotor diameter: 1135mm (with 500mm blades)
Main blade length: 500mm
Tail rotor diameter: 231mm
Tail blade length: 80mm
Main shaft diameter: 10mm
Tail shaft diameter: 5mm
Spindle diameter: 8mm

- Weight including standard electronics: 1880g (excluding batteries).
- Maximum motor size: diameter 52mm, height 58mm
- Battery compartment: 52x53x180mm.

IMPORTANT NOTES

*This radio controlled helicopter is not a toy.
*This radio controlled helicopter can be very dangerous.
*This radio controlled helicopter is a technically complex device which has to be built and handled very carefully.
*This radio controlled helicopter must be built following these instructions. This manual provides the necessary information to correctly assemble the model. It is necessary to carefully follow all the instructions.
*Inexperienced pilots must be monitored by expert pilots.
*All operators must wear safety glasses and take appropriate safety precautions.
*A radio controlled helicopter must only be used in open spaces without obstacles, and far enough from people to minimize the possibility of accidents or of injury to property or persons.
*A radio controlled helicopter can behave in an unexpected manner, causing loss of control of the model, making it very dangerous.
*Lack of care with assembly or maintenance can result in an unreliable and dangerous model.

***Neither SAB Heli Division nor its agents have any control over the assembly, maintenance and use of this product. Therefore, no responsibility can be traced back to the manufacturer. You hereby agree to release SAB Heli Division from any responsibility or liability arising from the use of this product.**

SAFETY GUIDELINES

*Fly only in areas dedicated to the use of model helicopters.
*Follow all control procedures for the radio frequency system.
*It is necessary that you know your radio system well. Check all functions of the transmitter before every flight.
*The blades of the model rotate at a very high speed; be aware of the danger they pose and the damage they may cause.
*Never fly in the vicinity of other people.

NOTES FOR ASSEMBLY

Please refer to this manual for assembly instructions for this model.
Follow the order of assembly indicated. The instructions are divided into chapters, which are structured in a way that each step is based on the work done in the previous step. Changing the order of assembly may result in additional or unnecessary steps.
Use thread lockers and retaining compounds as indicated. In general, each bolt or screw that engages with a metal part requires thread lock.

It is necessary to pay attention to the symbols listed below:

Important

⇨Bag xx Indicates that for this assembly phase you need materials that are in bag xx.

Use retaining compound (eg Loctite 648)

Use retaining compound (eg Loctite 243)

Use CA Glue

Use Proper Lubricant

ADDITIONAL COMPONENTS REQUIRED

*Electric Motor: 6S – 900 / 1400Kv
maximum diameter 52mm,
maximum height 58mm, pinion shaft diameter 5 - 6mm
*Speed controller:
minimum 80A, recommended 100A
*Batteries: 6S - 3300-4500mAh
*1 flybarless 3 axis control unit
*Radio power system, if not integrated with the ESC
*3 cyclic servos
*1 tail rotor servo
*6 channel radio control system on 2.4 GHz

(See configuration examples on page 15)

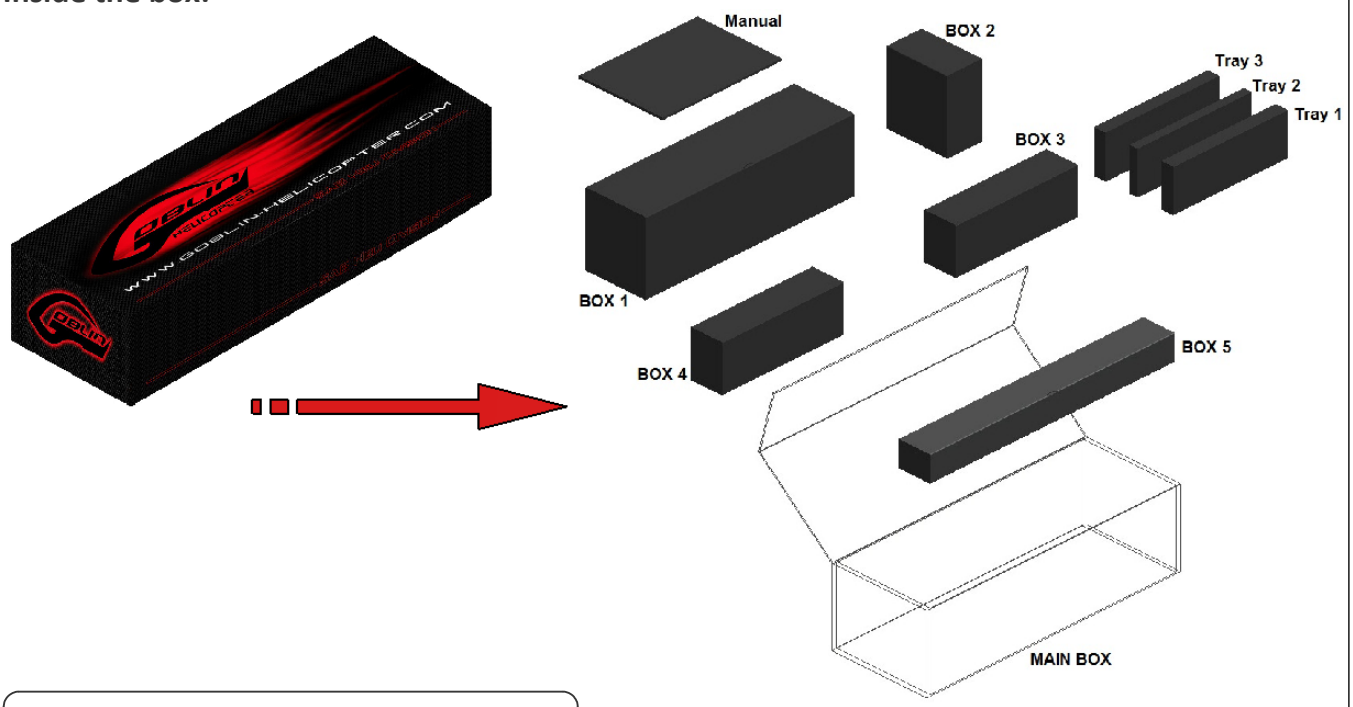
TOOLS, LUBRICANTS, ADHESIVES

*Generic pliers
*Hexagonal driver, size 1.5, 2, 2.5, 3, 4 mm
*4mm T-Wrench
*5.5mm Socket wrench (for M3 nuts)
*7mm Hex fork wrench (for M4 nuts)

*Medium threadlocker (eg. Loctite 243)
*Strong retaining compound (eg. Loctite 648)
*Spray lubricant (eg. Try-Flow Oil)
*Synthetic grease (eg. Tri-Flow Synthetic Grease)
*Grease (eg. Vaseline Grease)
*Cyanoacrylate adhesive

*Pitch Gauge (for set-up)
*Soldering equipment (for motor wiring)

Inside the box:



Inside The Box:

Box 1: Canopy, Main Frames, Big Plastic Parts
Blade Holder.

Box2: Optional Combo Components

Box 3: Mechanical Parts in 3 trays:

Tray 1: Head parts
Tray 2: Main structure
Tray 3: Transmission parts

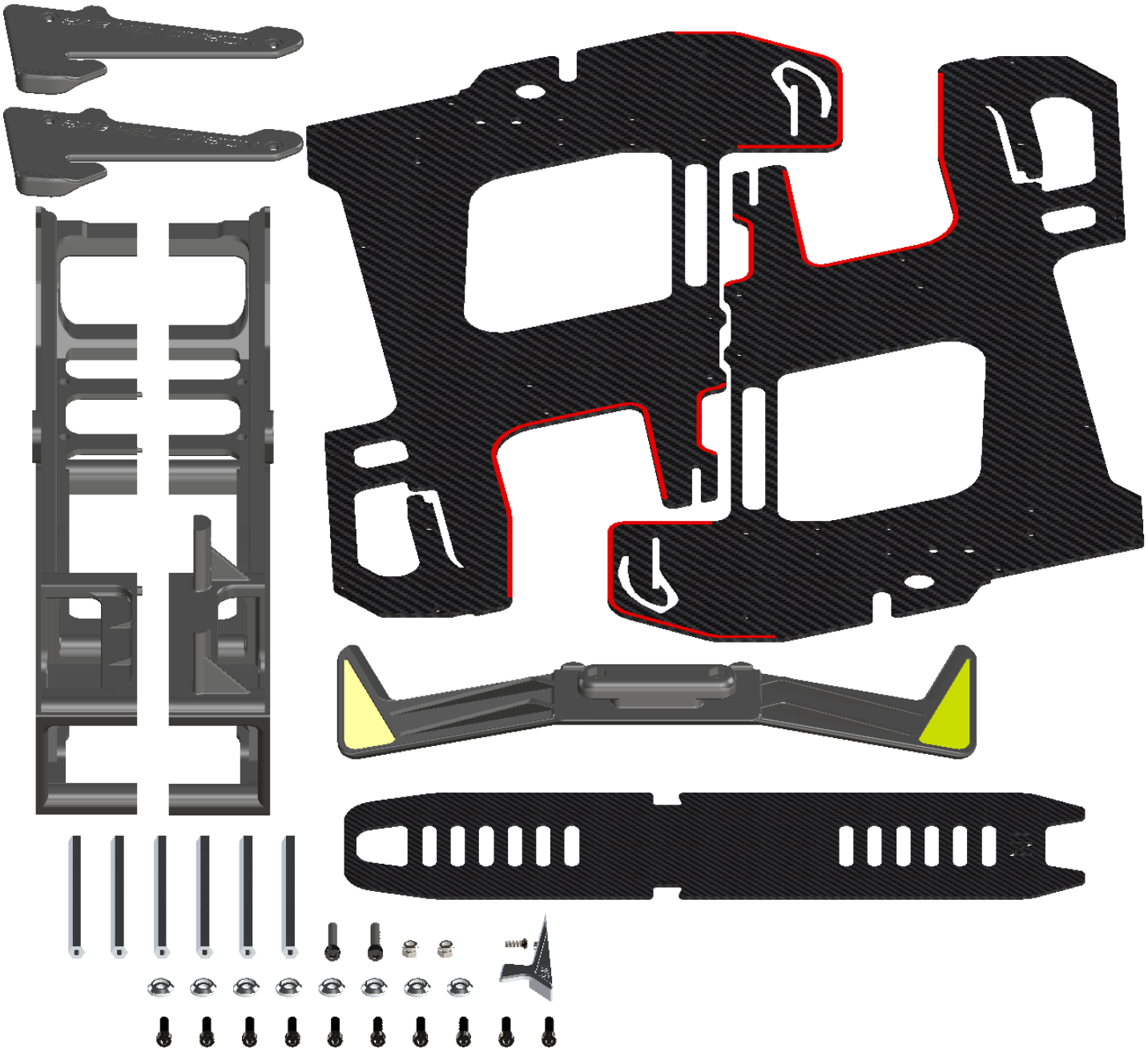
Box 4: Bags

Box 5: Blades, Tail Blades, Boom, Carbon Rod

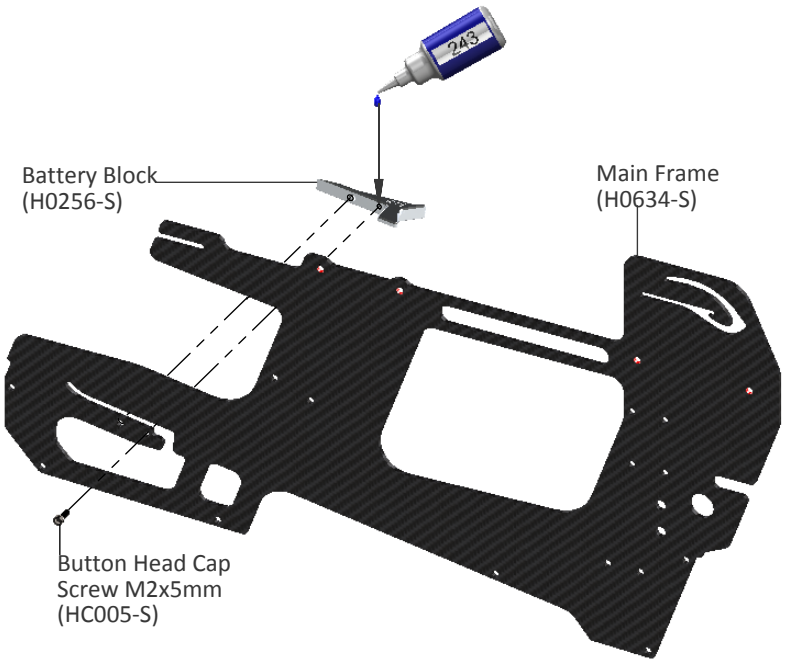
The assembly process is described in the following chapters. Each chapter provides you with the box, bag and/or foam tray numbers you will need for that chapter.
The information is printed in a red box in the upper right hand corner of the page at the beginning of every chapter.

The manufacturing process of the carbon parts often leaves micro-burrs and sharp edges. We recommend de-burring the edges to minimize the risks of electrical wire cuts, etc.

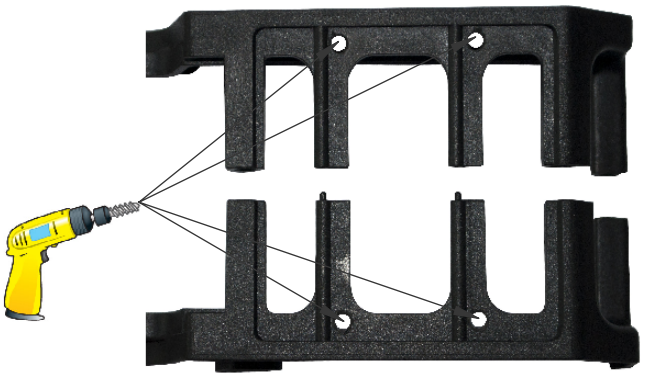
4-Carbon Frame

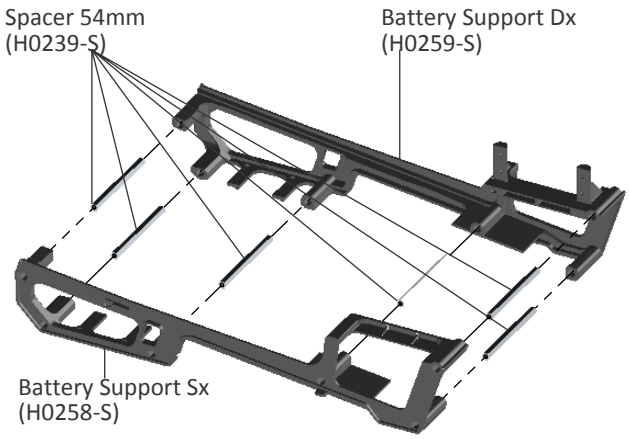


Right Main Frame Assembly

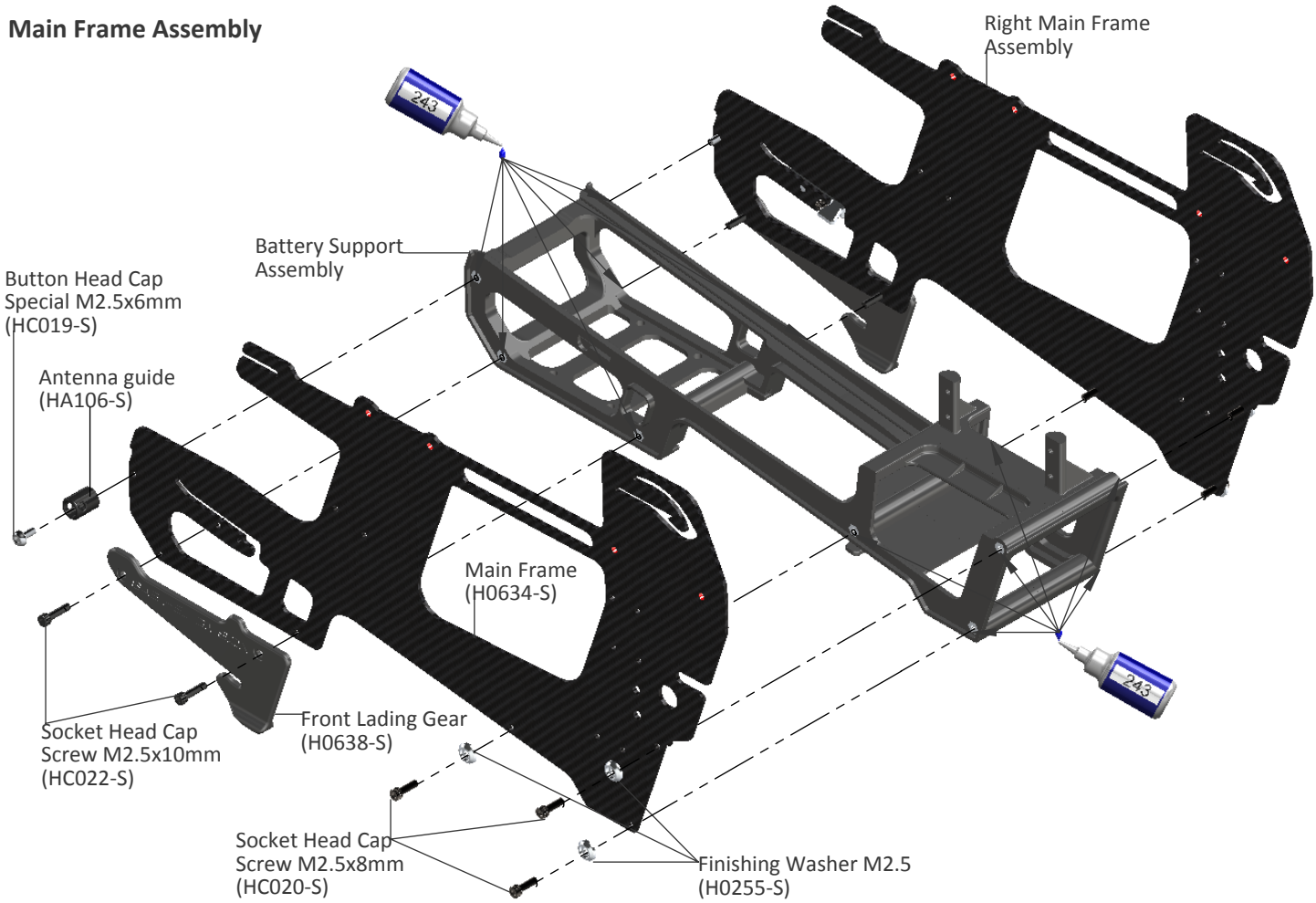


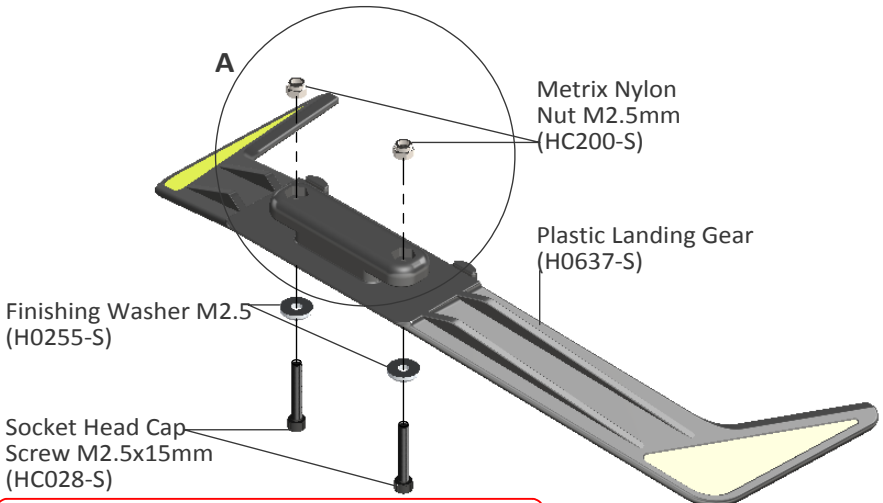
NOTE:
We recommend drilling 4 holes (approximately 2.5 ~ 3 mm) to facilitate the installation of the ESC (See page 16).





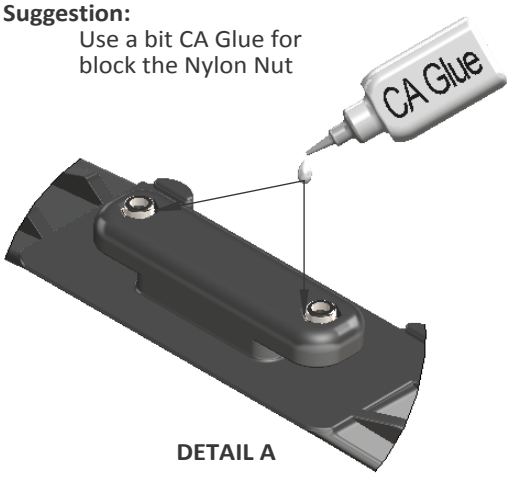
Main Frame Assembly





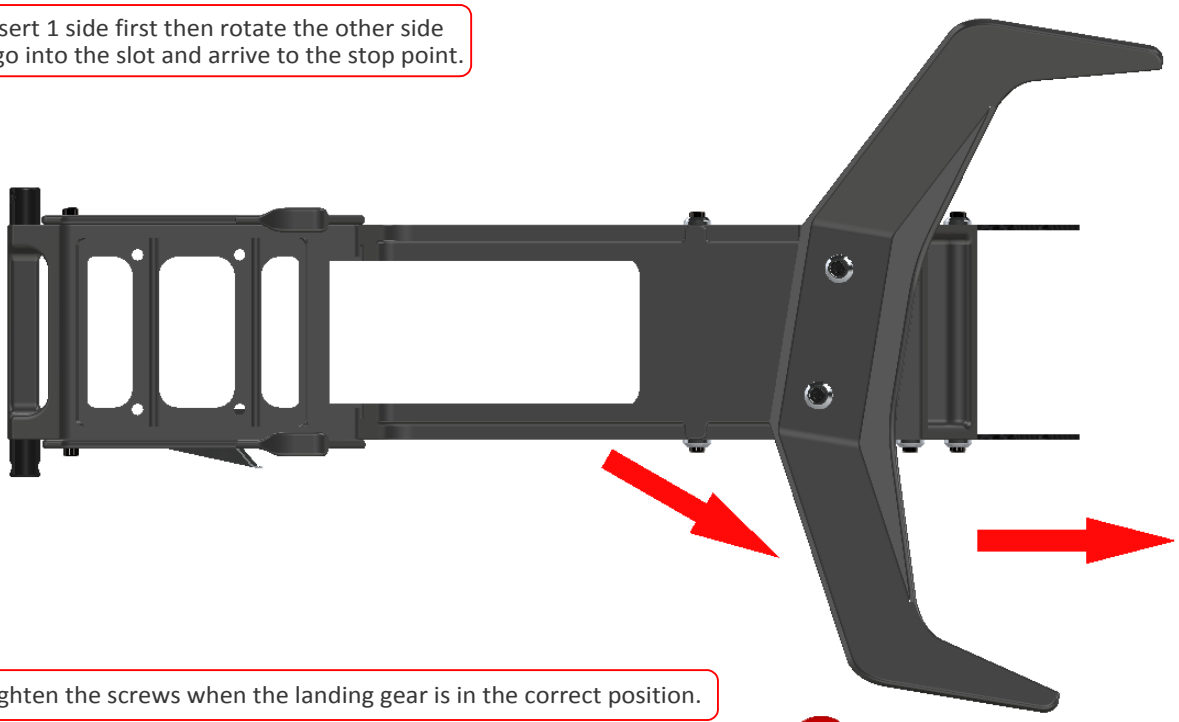
Note:
Please do not tighten screws M2.5x15mm

Suggestion:
Use a bit CA Glue for
block the Nylon Nut

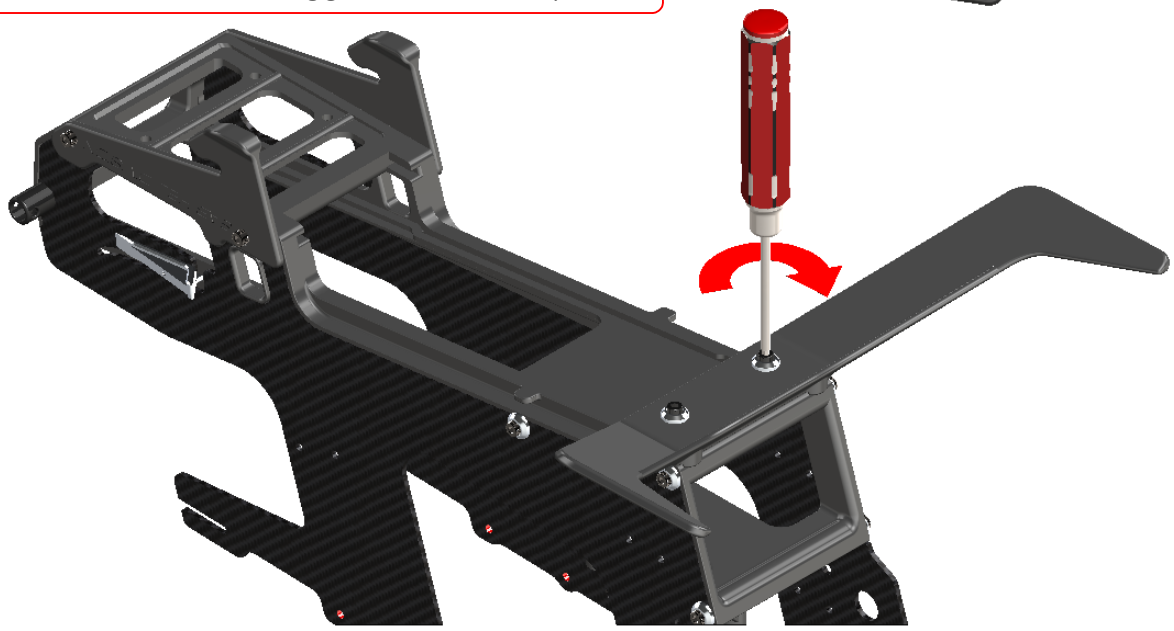


DETAIL A

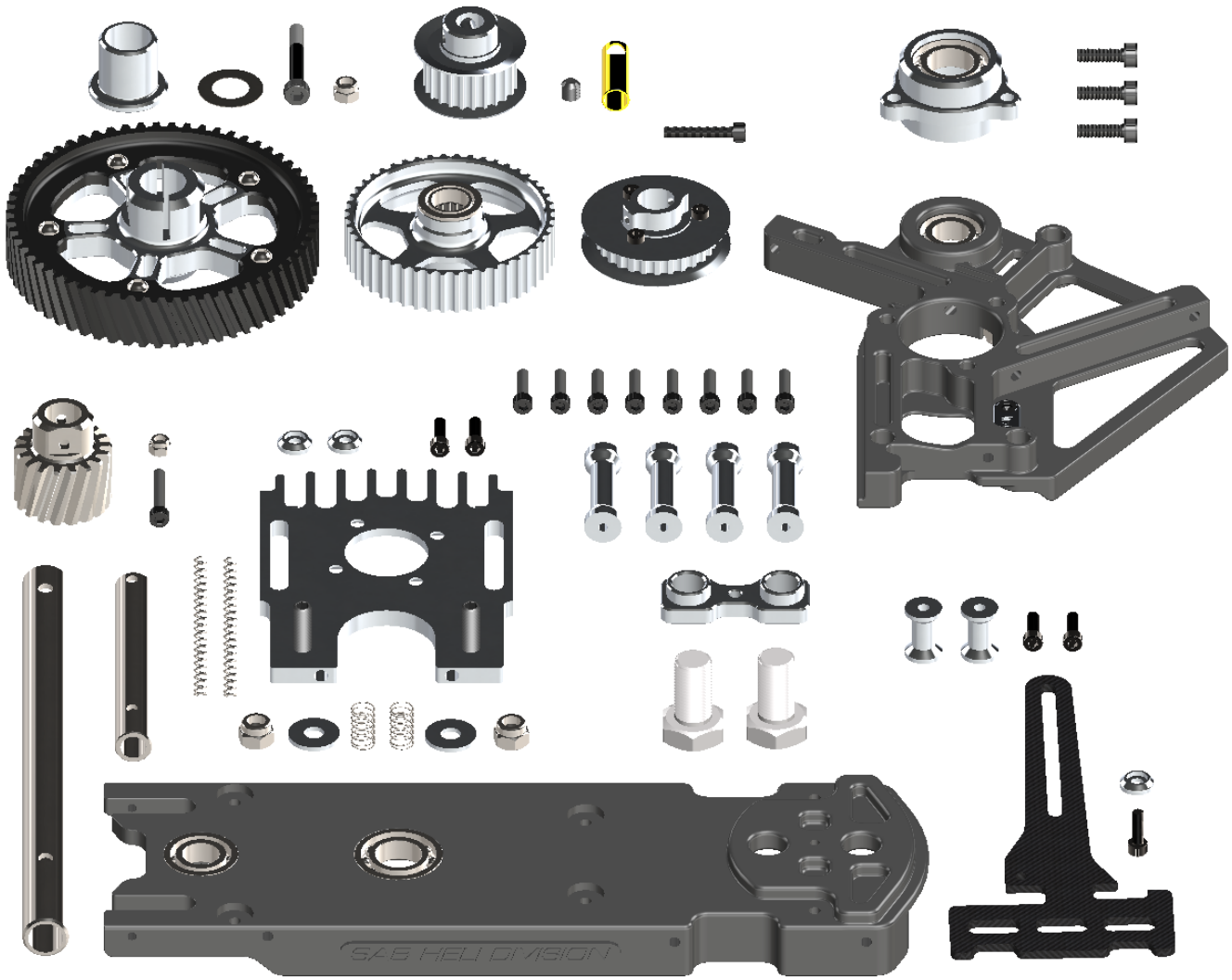
Note: Insert 1 side first then rotate the other side to go into the slot and arrive to the stop point.



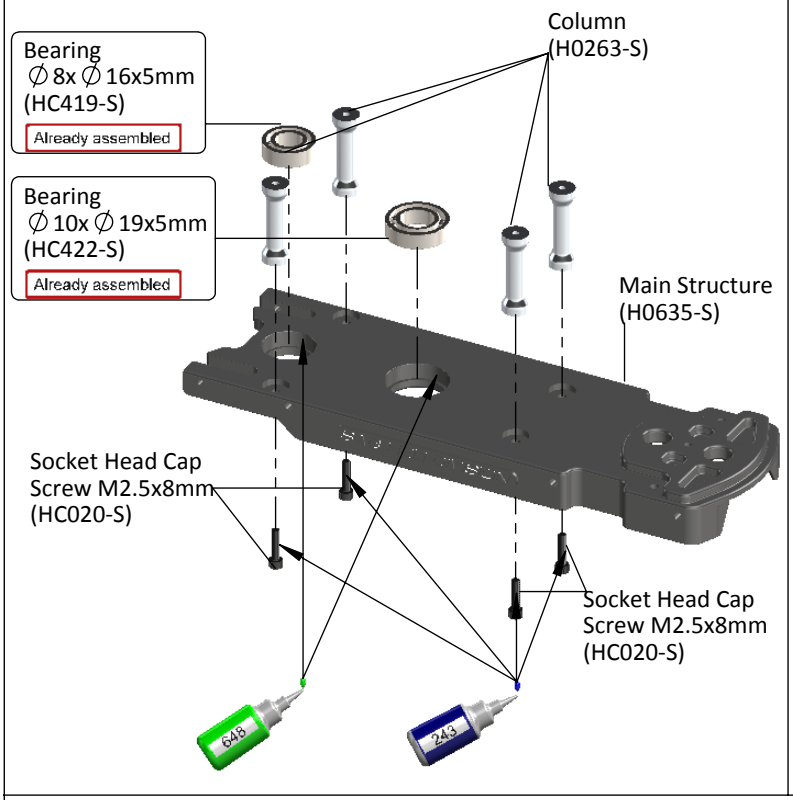
Note: Tighten the screws when the landing gear is in the correct position.

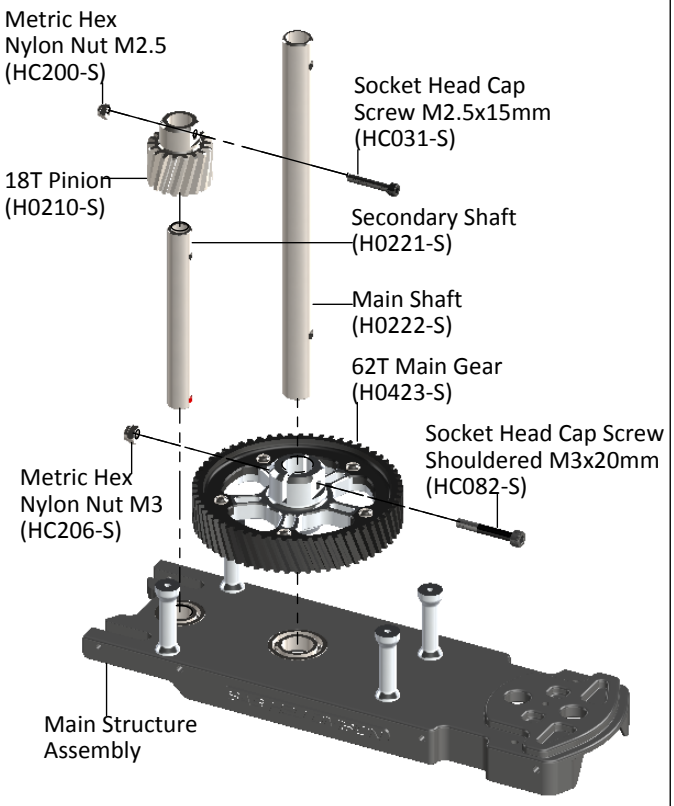


5-Tranmission Assembly



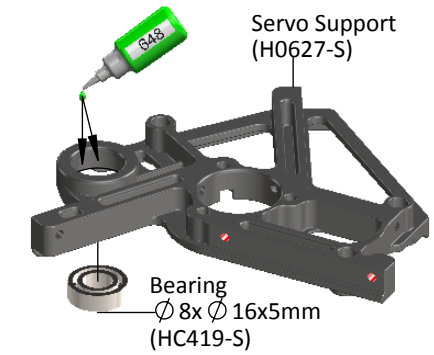
Main Structure Assembly

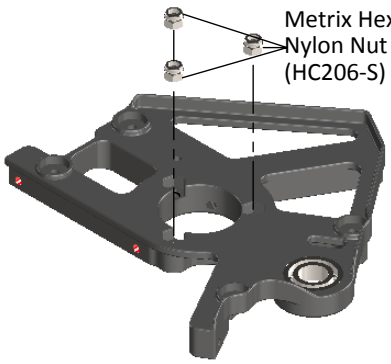




Servo Support Assembly

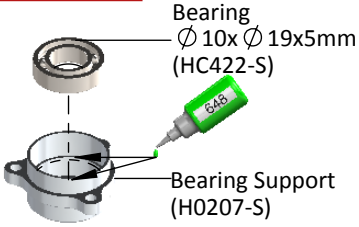
Already assembled

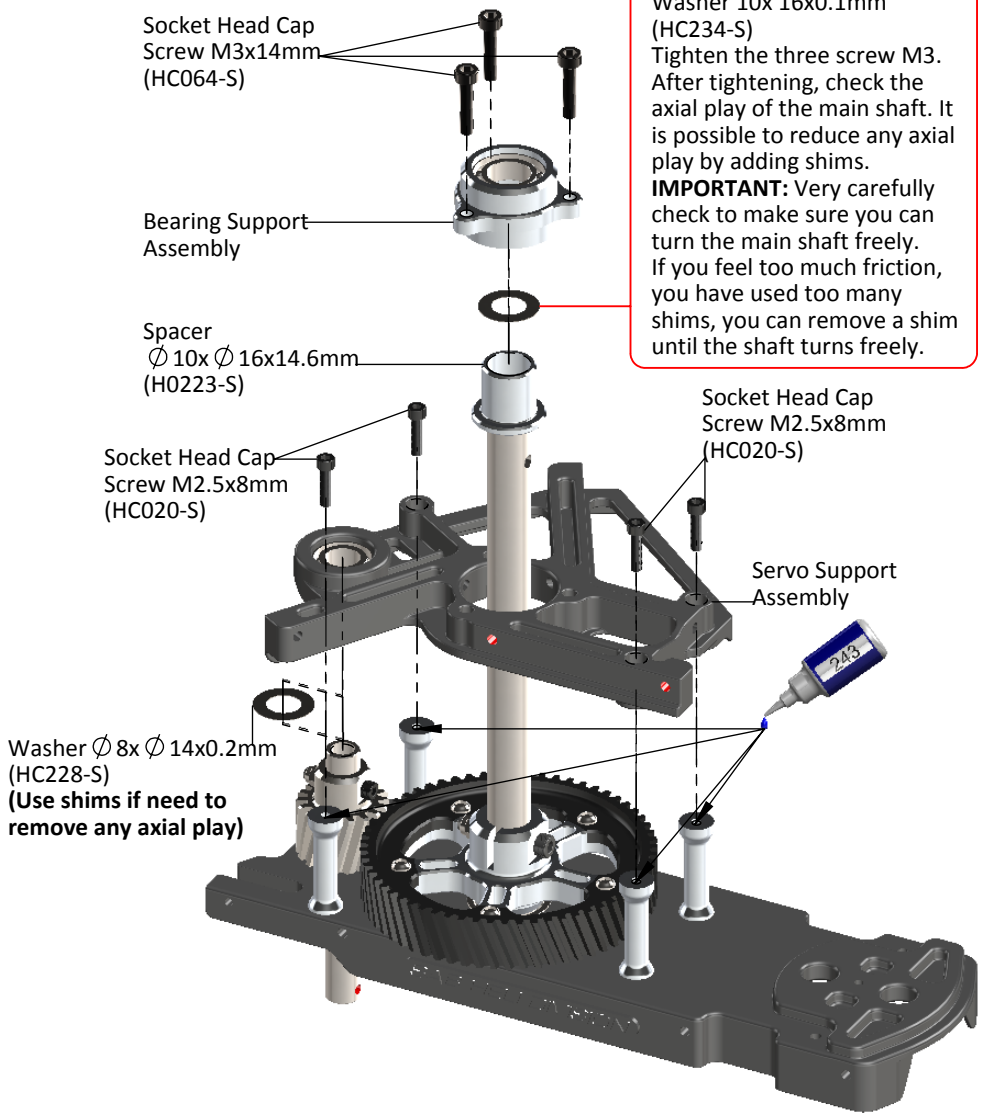




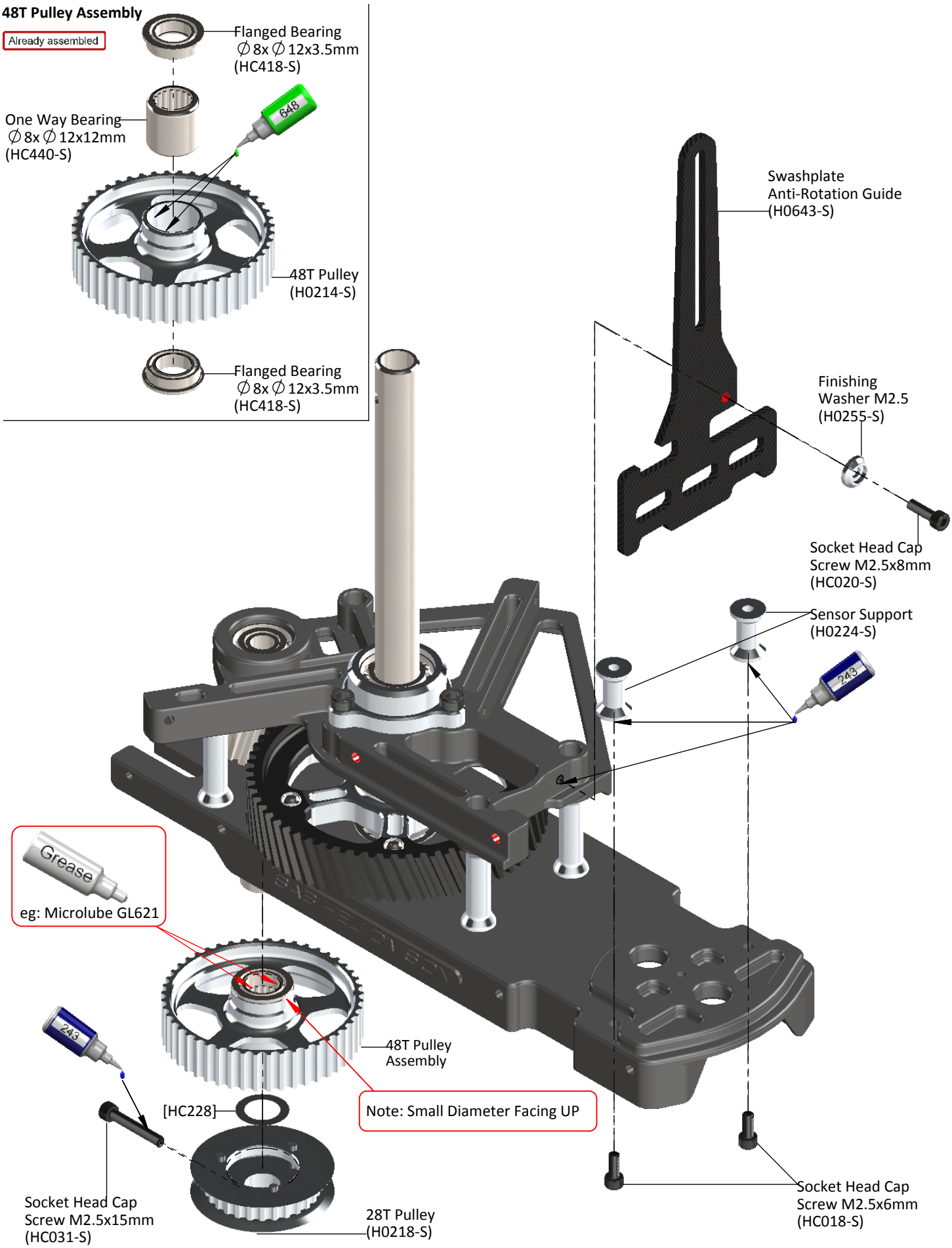
Bearing Support Assembly

Already assembled

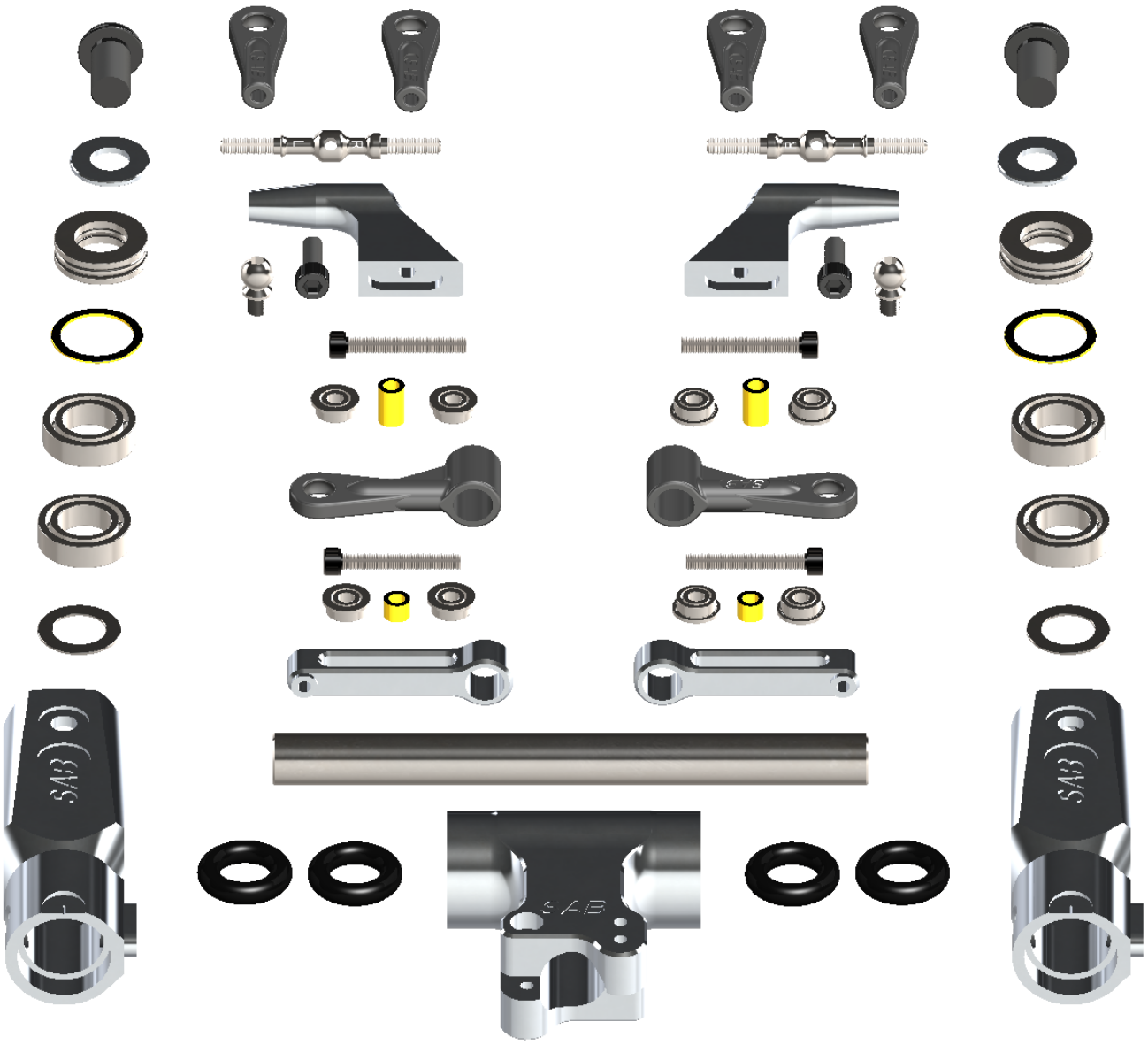




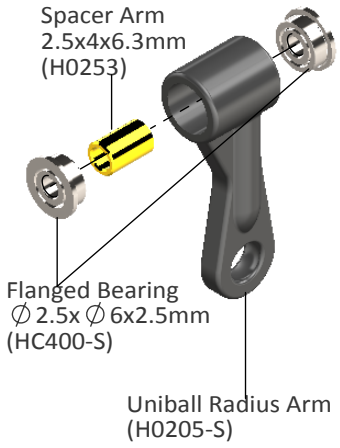
Washer 10x 16x0.1mm
(HC234-S)
Tighten the three screw M3.
After tightening, check the axial play of the main shaft. It is possible to reduce any axial play by adding shims.
IMPORTANT: Very carefully check to make sure you can turn the main shaft freely.
If you feel too much friction, you have used too many shims, you can remove a shim until the shaft turns freely.


48T Pulley Assembly
Already assembled
Flanged Bearing
∅8x∅12x3.5mm
(HC418-S)
One Way Bearing
∅8x∅12x12mm
(HC440-S)
648
48T Pulley
(H0214-S)
Flanged Bearing
∅8x∅12x3.5mm
(HC418-S)
Swashplate
Anti-Rotation Guide
(H0643-S)
Finishing
Washer M2.5
(H0255-S)
Socket Head Cap
Screw M2.5x8mm
(HC020-S)
Sensor Support
(H0224-S)
243
Grease
eg: Microlube GL621
48T Pulley
Assembly
243
[HC228]
Note: Small Diameter Facing UP
Socket Head Cap
Screw M2.5x15mm
(HC031-S)
28T Pulley
(H0218-S)
Socket Head Cap
Screw M2.5x6mm
(HC018-S)

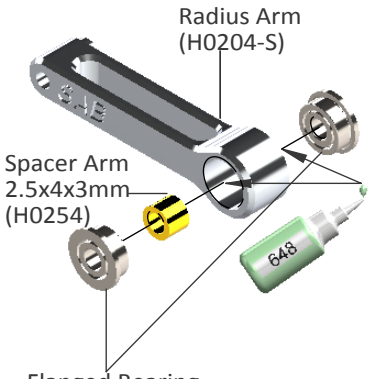
6-Main Rotor



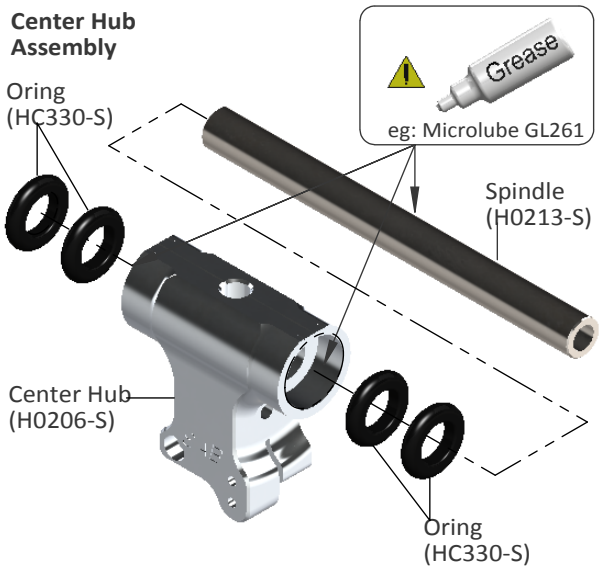
Uniball Radius Arm ... x 2 Assembly



Radius Arm ... x 2 Assembly

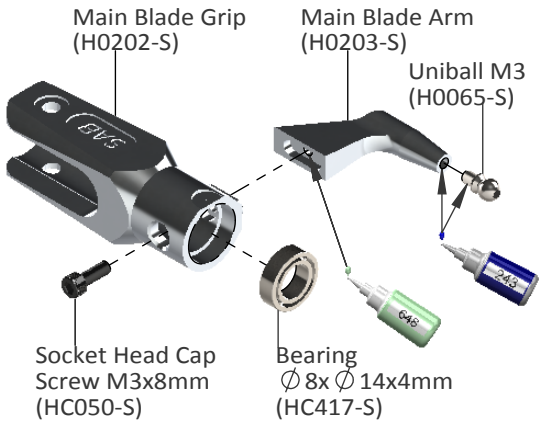


Center Hub Assembly

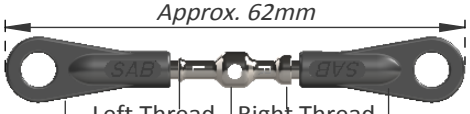


NOTE: We recommend assembling without shims for sport flying. The HPS head should be assembled with one 1mm spacer H0225 on each side. After approximately 10/20 flights, please check preload, you can add one or two shim HC228 if preload has changed. For hard 3D, the best setup is add one extra shim between the spacer H0225 and bearing. Important is that the blade grips must move freely, but they should not move just under their own weight. You can find HC228 in the Bag 11.

Main Blade Grip Assembly x2



Linkage Rod A Assembly x2



Linkage Ball Link (H0066-S)
Linkage Rod M2.5x33mm (H0237-S)
Linkage Ball Link (H0066-S)

(Initial length for the rods from the swashplate to the blade grip.)

Installation Of The Swashplate Servos

The distance between the center of the horn and the ball should be between **16-18 mm (Figure 1)**.
Select the carbon fiber servo mount that is suitable for the size of servos to be used **(Figrure 2)**.

Fig. 1

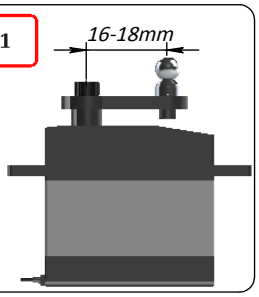
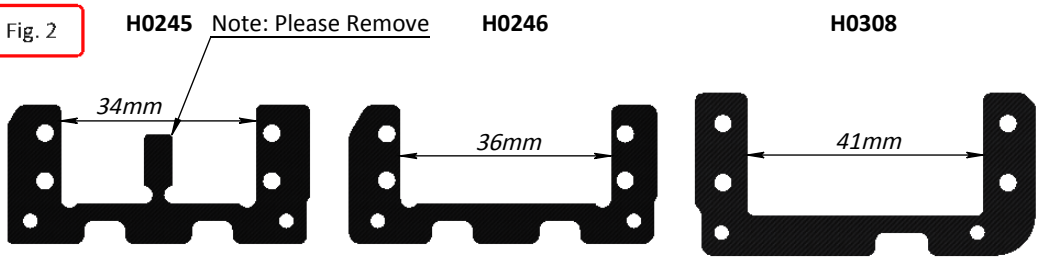


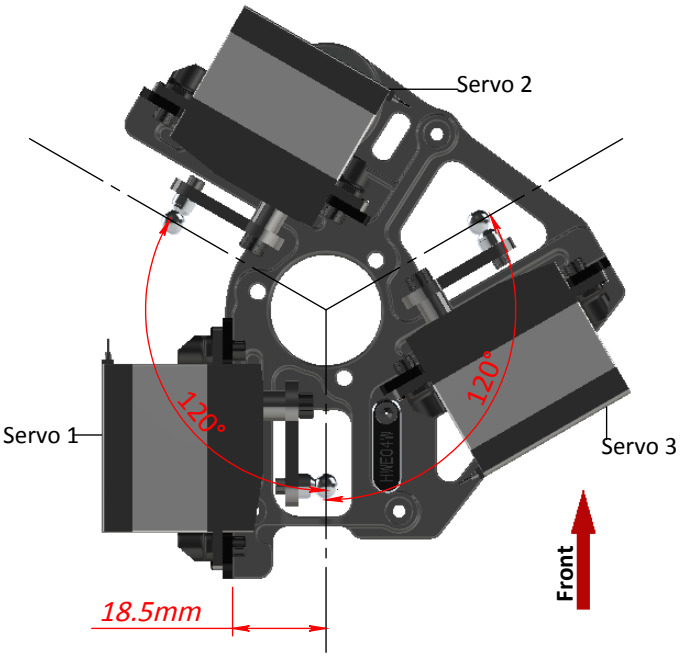
Fig. 2



Servo Mounting

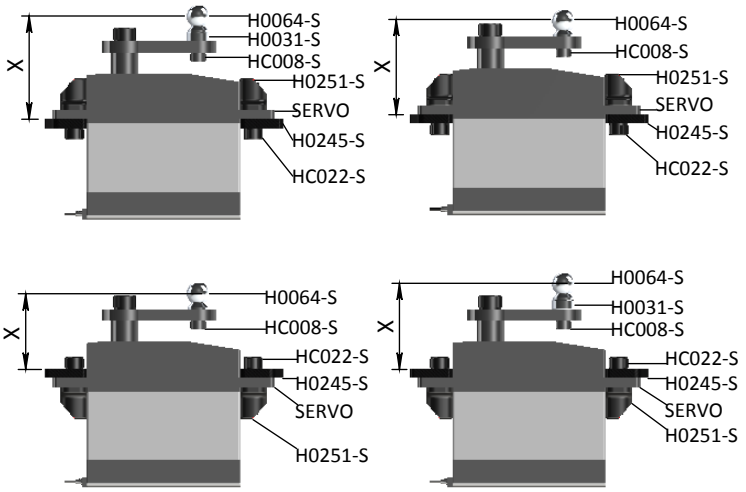
The servo linkages must be aligned correctly. In order to do this, you must chose from one of the options shown here. Figure 3 shows the installation of the servos at 120 degrees. Note that the distance between the carbon fiber servo mount and the center of the ball should be 18.5mm. Figure 4 and figure 5 shows 8 different mounting options, the distance "X" should be as close as possible to 18.5mm.

Fig. 3



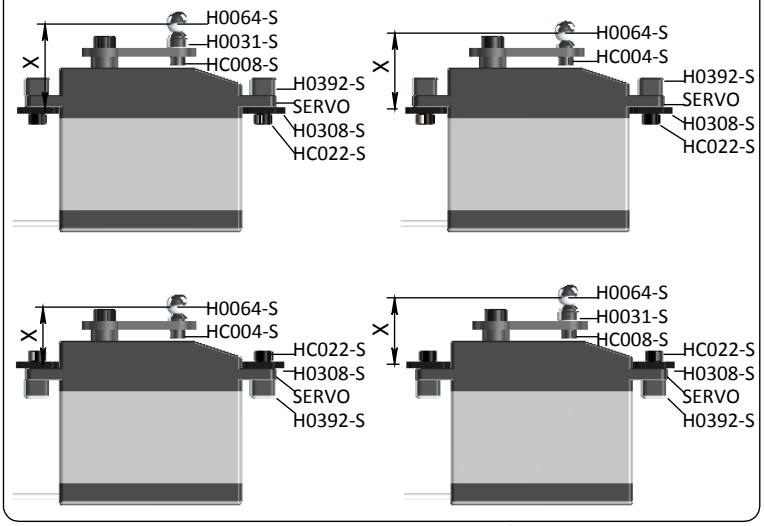
Servo Mounting Options Medium Size Servo

Fig. 4

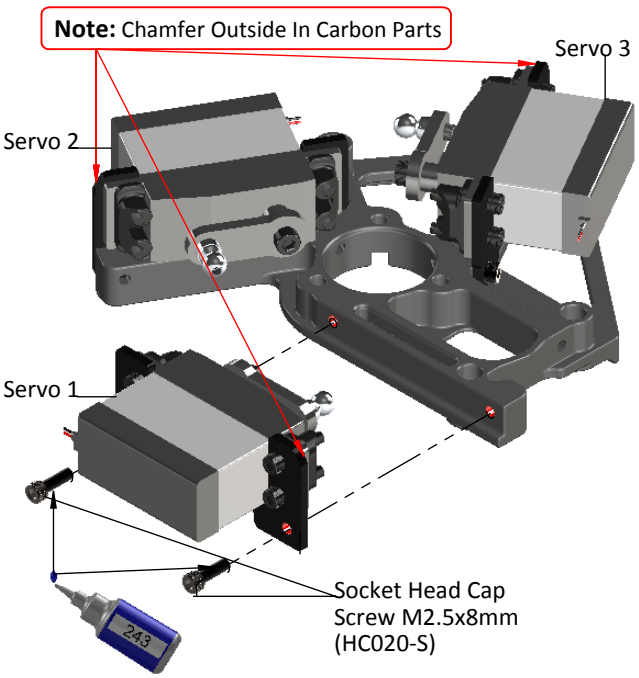


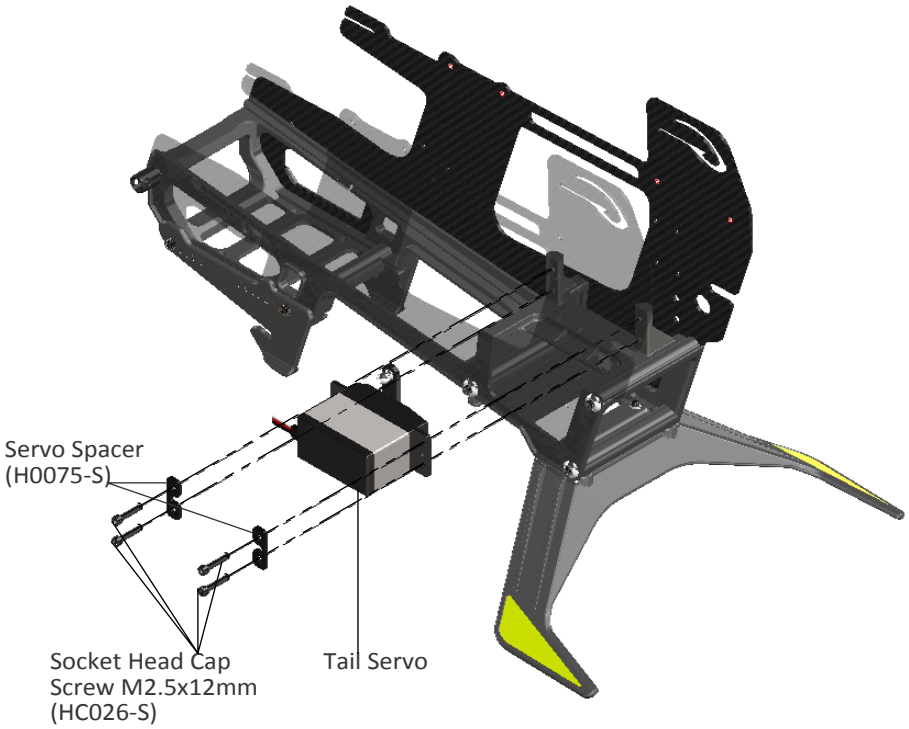
Servo Mounting Options Full Size Servo

Fig. 5

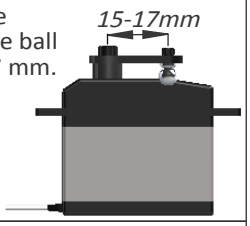


Final Servo Assembly

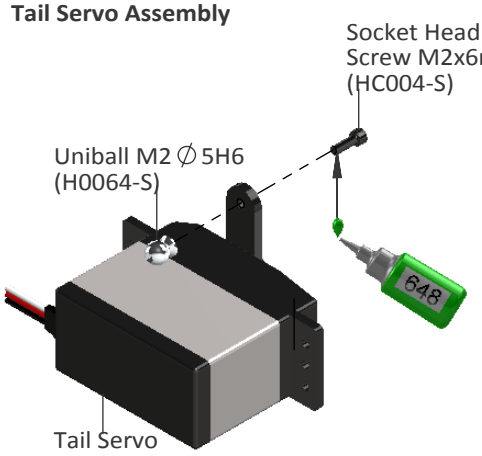


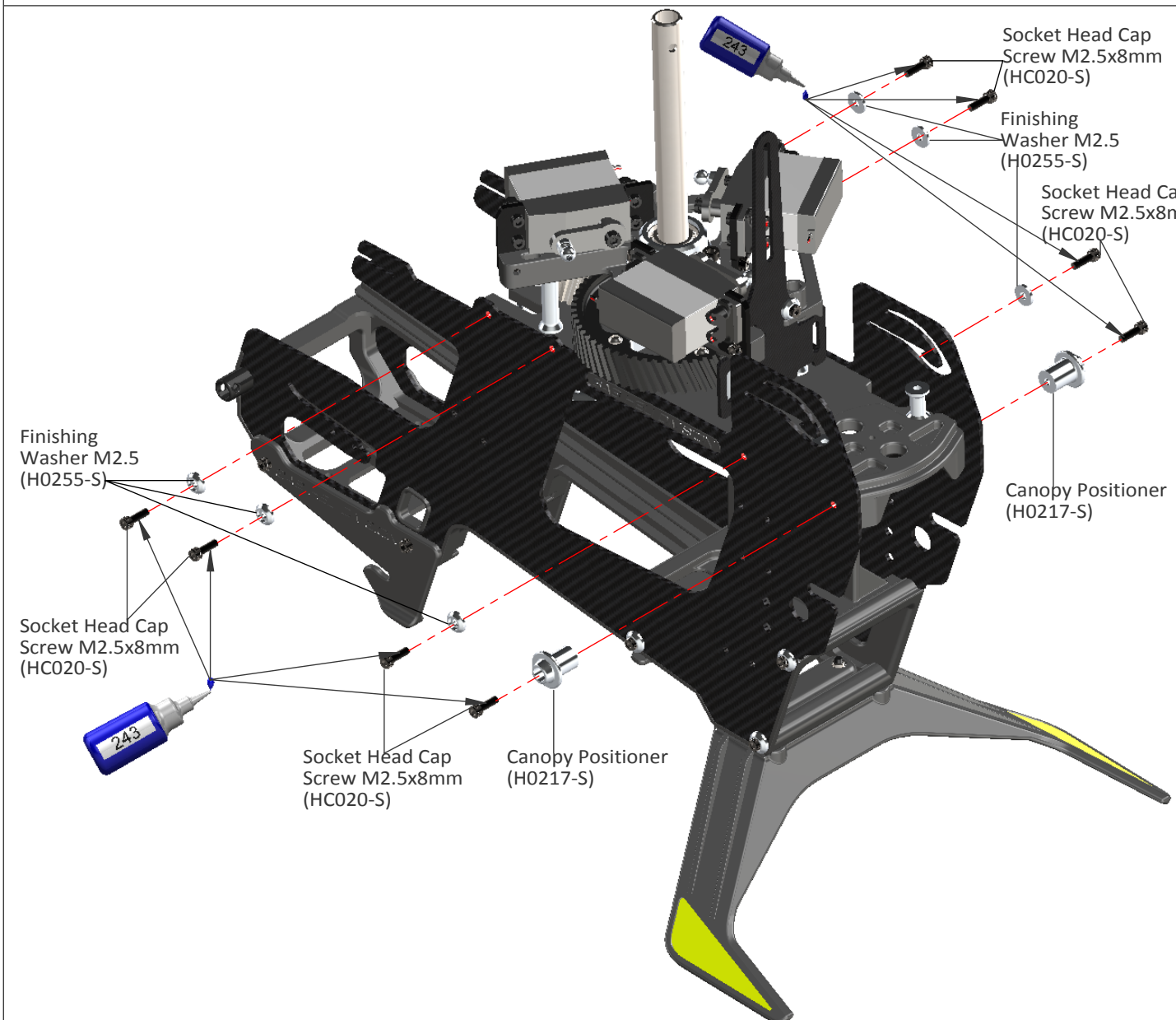


The distance between the center of the horn and the ball should be between 15-17 mm.

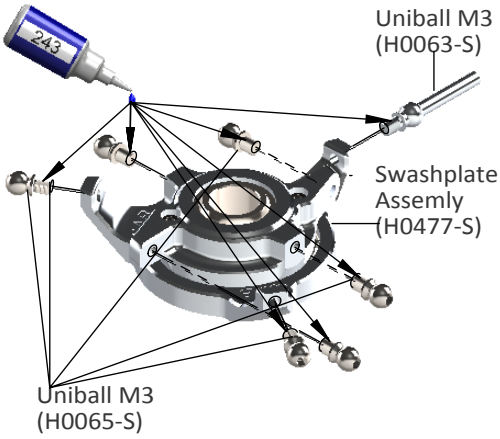


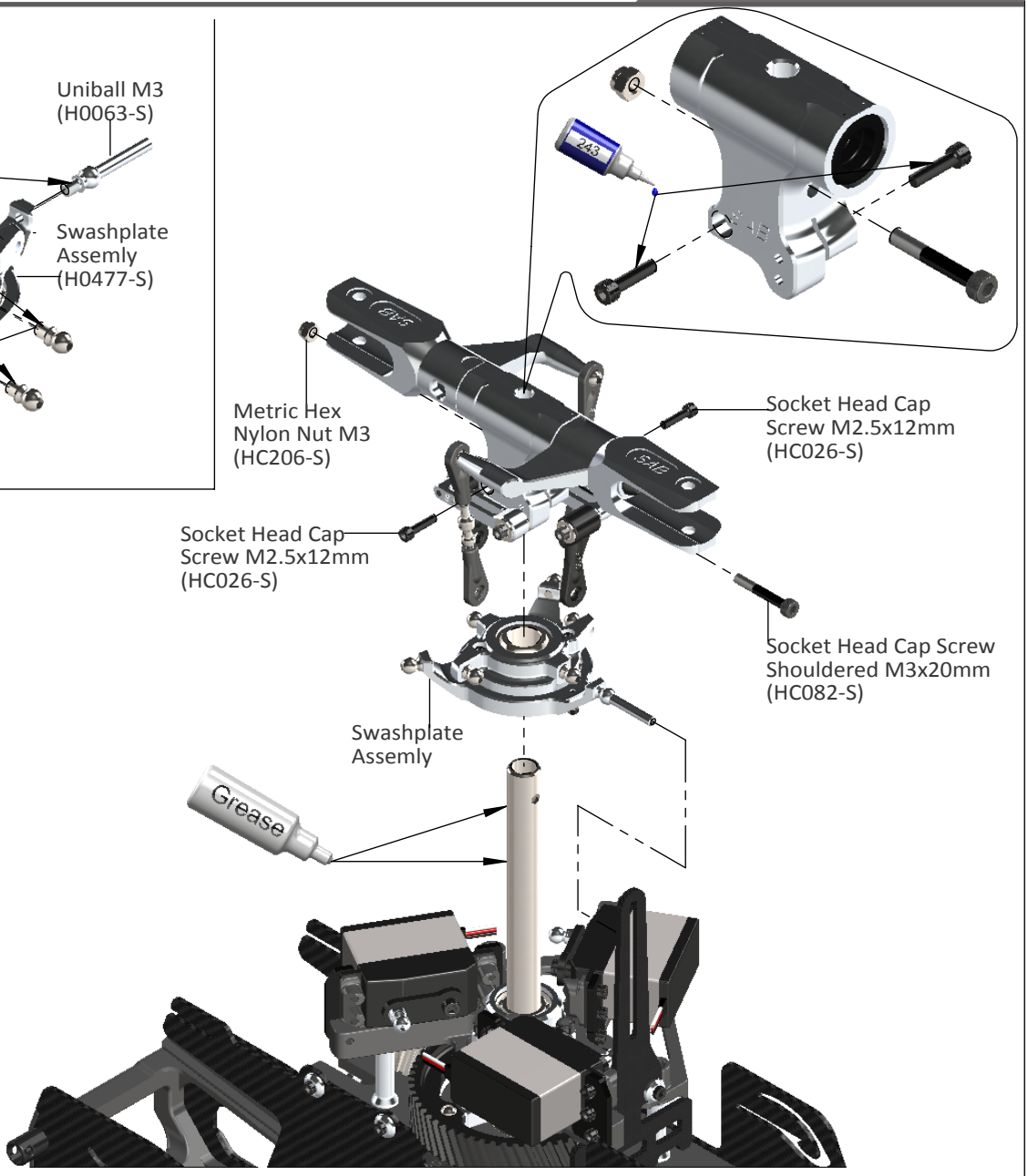
Tail Servo Assembly





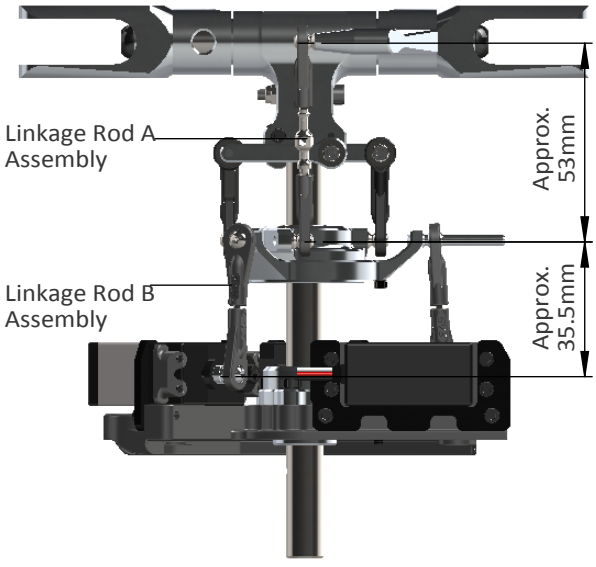
Swashplate Assembly



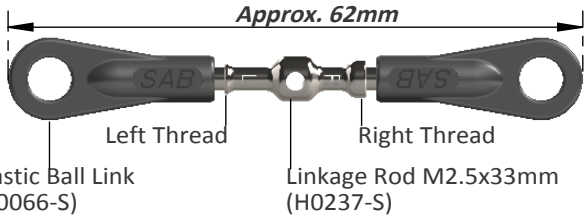


Preliminary Head Setup

Adjust the linkages as shown. You can change the tracking without disconnecting the plastic ball links by inserting a small tool through the rod hole and turning it.

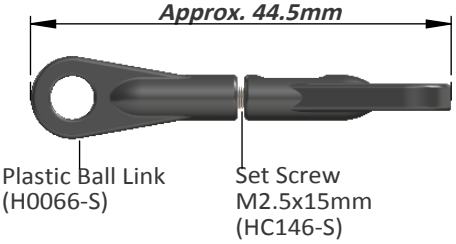


Linkage Rod A Assembly x2



(Initial length for the rods from the swash plate to the Blade Grip.)

Linkage Rod B Assembly x3



(Initial length for the rods from the servos to the swash plate.)

TRANSMISSION SETUP

It is important to choose the right reduction ratio to maximize efficiency based on your required flight performance.
The Goblin has many possible reduction ratios at your disposal. It is possible to optimize any moror and battery combination.
It is recommended to use wiring and connector appropriate for the currents generated in a helicopter of this class.

If you are using a head speed calculator which requires a main gear and pinion tooth count, use 165 teeth for main gear (this takes into account the two stage reduction) and the tooth count of your pulley as the pinion count.

Below is a list of available reduction ratios:

H0215-15-S-15T	Pinion = ratio 11:1	H0215-20-S-20T	Pinion = ratio 8.26:1
H0215-16-S-16T	Pinion = ratio 10.33:1	H0215-21-S-21T	Pinion = ratio 7.87:1
H0215-17-S-17T	Pinion = ratio 9.72:1	H0215-22-S-22T	Pinion = ratio 7.51:1
H0215-18-S-18T	Pinion = ratio 9.18:1	H0215-23-S-23T	Pinion = ratio 7.19:1
H0215-19-S-19T	Pinion = ratio 8.7:1	H0215-24-S-24T	Pinion = ratio 6.91:1

These are pulleys for motors with a 6 mm shaft. Each pulley includes an adapter for motors with a 5 mm shaft.

Some example configurations:

GOBLIN 500 SPORT CONFIGURATIONS

Battery	Motor	ESC	Pinion a,b,c	Gov	RPM Max a,b,c	Pitch
6S 3300/4500	Pyro 600-1200	CC Edge 100	**18T / 19T**	SET RPM	**2600 / 2700 / 2850**	±12.5
		HW-100A-V3 Jive 100LV YGE 120 LVK	**17T / 18T**	Gov @ 80%		
	Quantum 4120-1200	CC Edge 100	**18T / 19T / 20T**	SET RPM		
		HW-100A-V3 Jive 100LV YGE 120 LVK	**17T / 18T / 19T**	Gov @ 80%		
	Scorpion HK 4020-1100	CC Edge 100	**19T / 20T /21T**	SET RPM		
		HW-100A-V3 Jive 100LV YGE 120 LVK	**18T / 19T / 20T**	Gov @ 80%		
	X-Nova 4020-1200	CC Edge 100	**18T / 19T / 20T**	SET RPM		
		HW-100A-V3 Jive 100LV YGE 120 LVK	**17T / 18T / 19T**	Gov @ 80%		
	KDE 550XF-1200-G3	CC Edge 100	**18T / 19T / 20T**	SET RPM		
		HW-100A-V3 Jive 100LV YGE 120 LVK	**17T / 18T / 19T**	Gov @ 80%		
	Scorpion HK 4025-1100	CC Edge 100	**20T /21T / 22T**	SET RPM		
		HW-100A-V3 Jive 100LV YGE 120 LVK	**19T / 20T /21T**	Gov @ 80%		

Note: Although the Goblin can fly at high RPM, for safety reasons we recommend not exceeding 2900 RPM.

De-Burr The Side Frames

We recommend de-burring the edges of the carbon parts in areas where electrial wires run.

ESC Installation

The electronic speed control (ESC) is intalled in the front part of the helicopter.
If you have drilled the 4 holes (Fig 1) as suggested on page 5, you can easily fasten the ESC with cable ties as shown in figures 2 and 3.

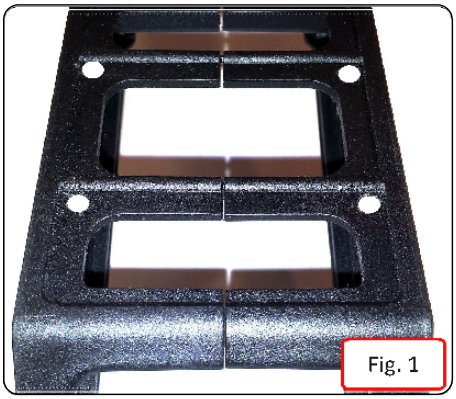


Fig. 1

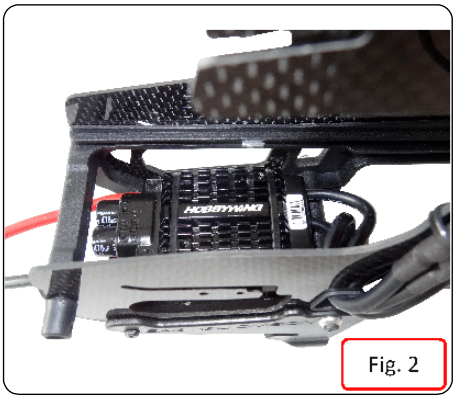


Fig. 2

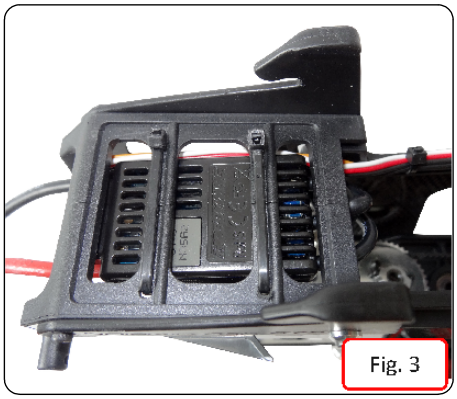
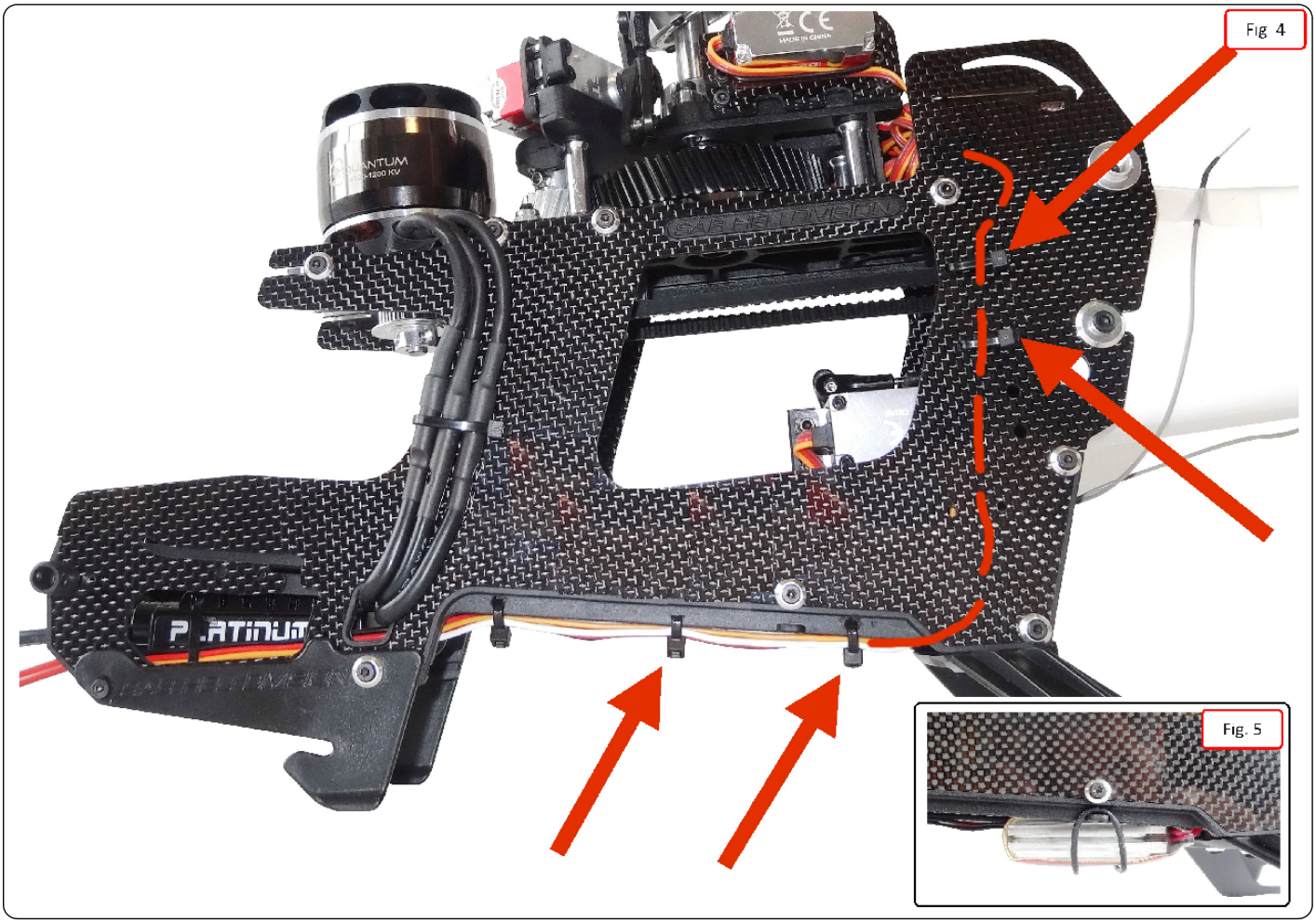


Fig. 3

Figure 4: You can see the wiring for connecting the ESC to the central unit.

Route the ESC throttle wire as shown, you can use cable ties to keep the wire in place.

Figure 5: You can install a BEC (or 2S battery) if required as shown.



FBL System Installation

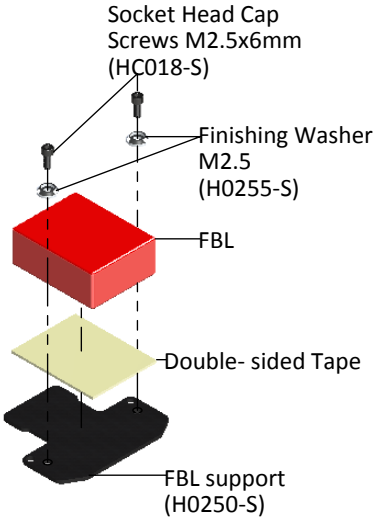
We recommend the use of a one unit flybarless system, i.e. Mini vBar, Vortex, Microbeast, etc.
However, a two unit flybarless system can also be installed. For one unit systems, the unit is installed as shown in position 1 (Fig 1)

Two unit systems can be installed as follows: control unit in position 1 and sensor in position 2 or vice-versa. (Fig 1). See Fig 2, 3 & 4.

Position 3 and 4 can be used for a Spektrum sattelite. (Fig 1)

FBL Assembly

Fig. 2



Note: We recommend de-burring the edges of the support H0250.

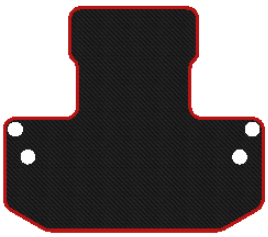


Fig. 1

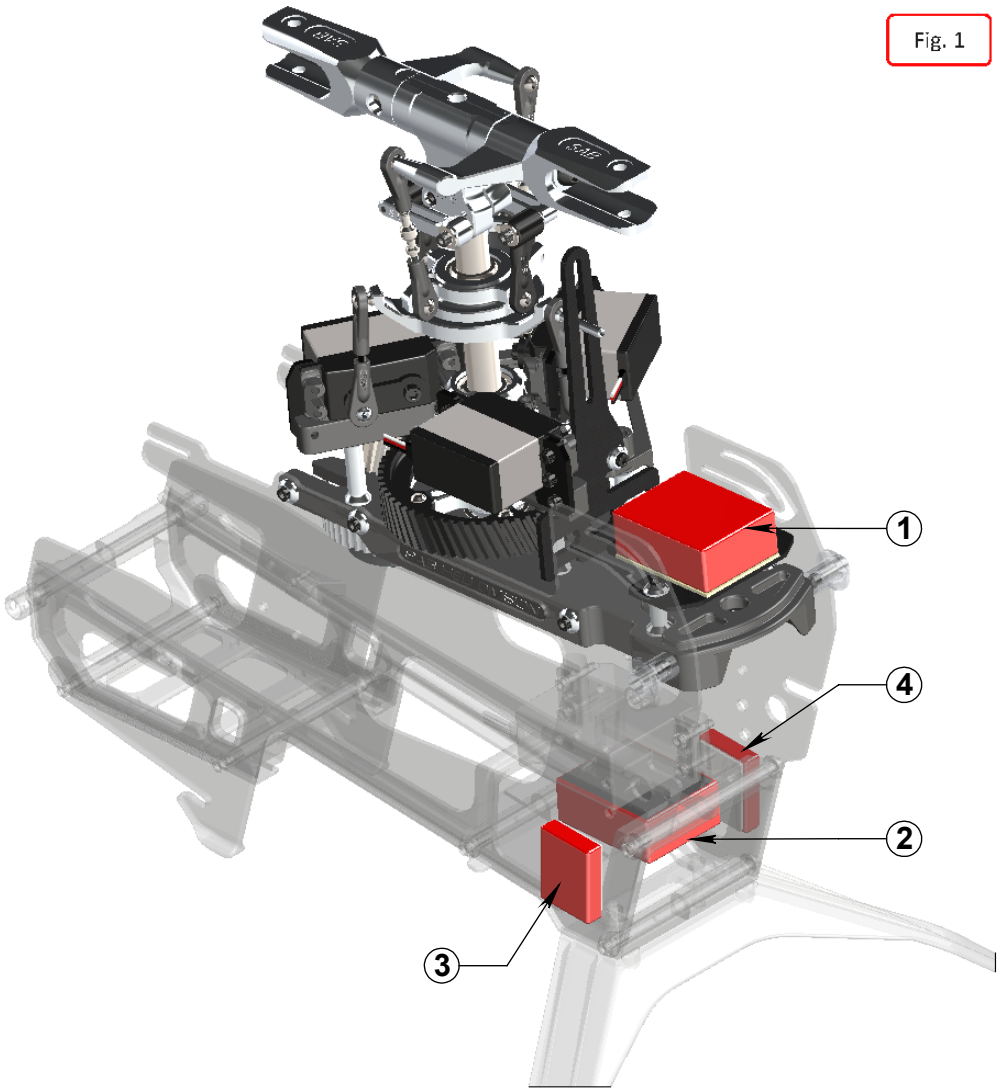
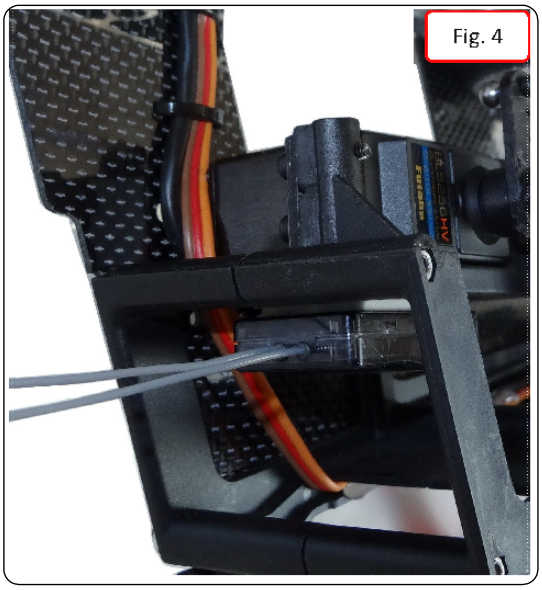
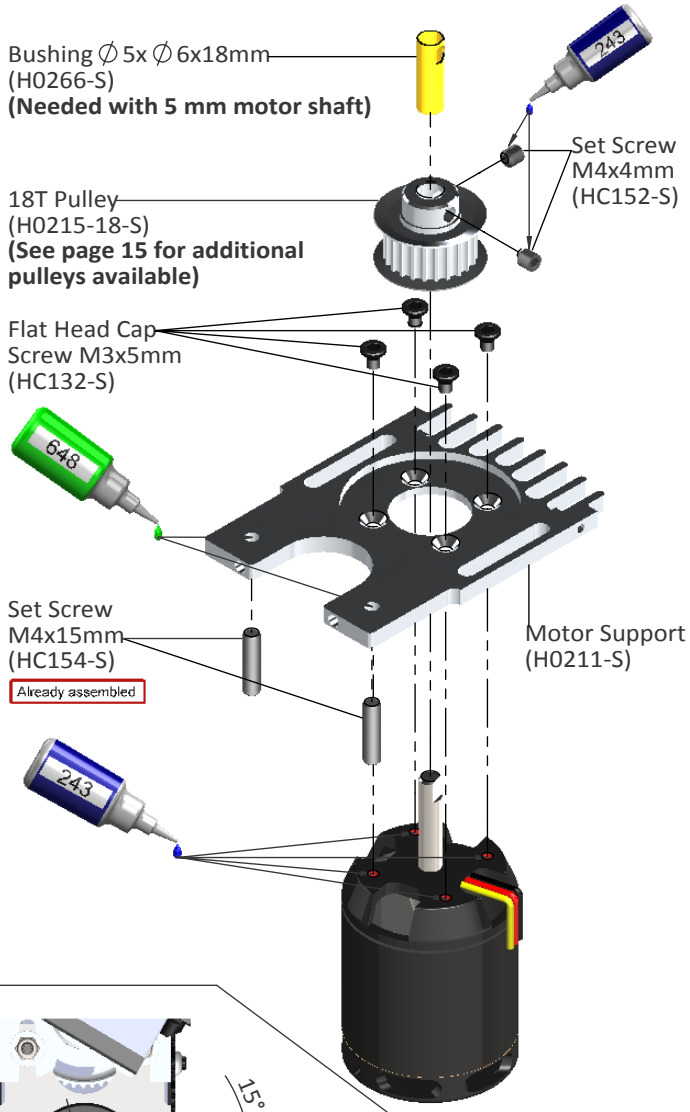
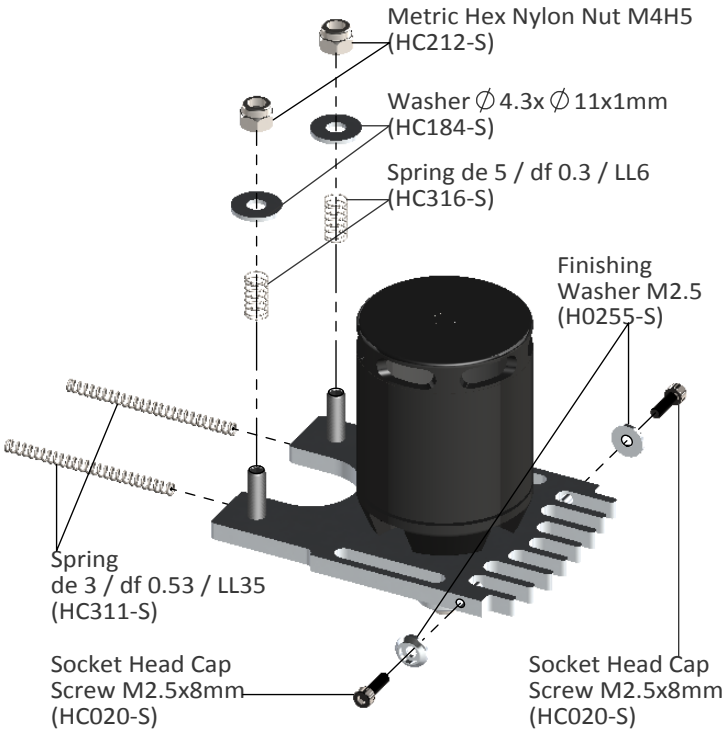


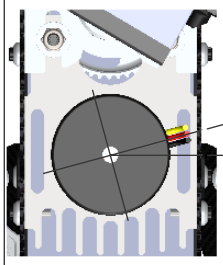
Fig. 3

Fig. 4





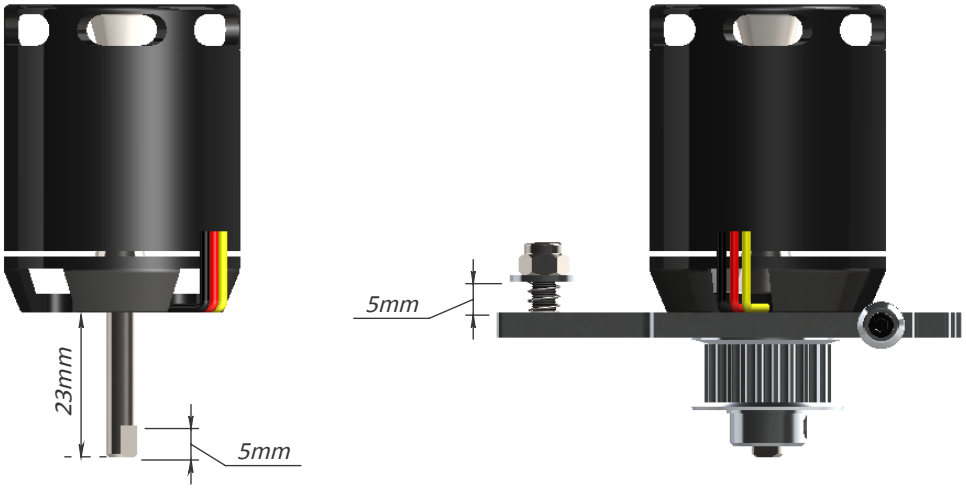




Note:
Recommended motor wiring orientation

Note:

To maximize space for the batteries, it is advisable to shorten the motor shaft.
Follow the dimensions given in this drawing.
For the cut, you can use an electric tool like a “Dremel” with a cut-off disc.
Additionally, ensure the motor shaft has an appropriate 'flat' for one of the set screws.



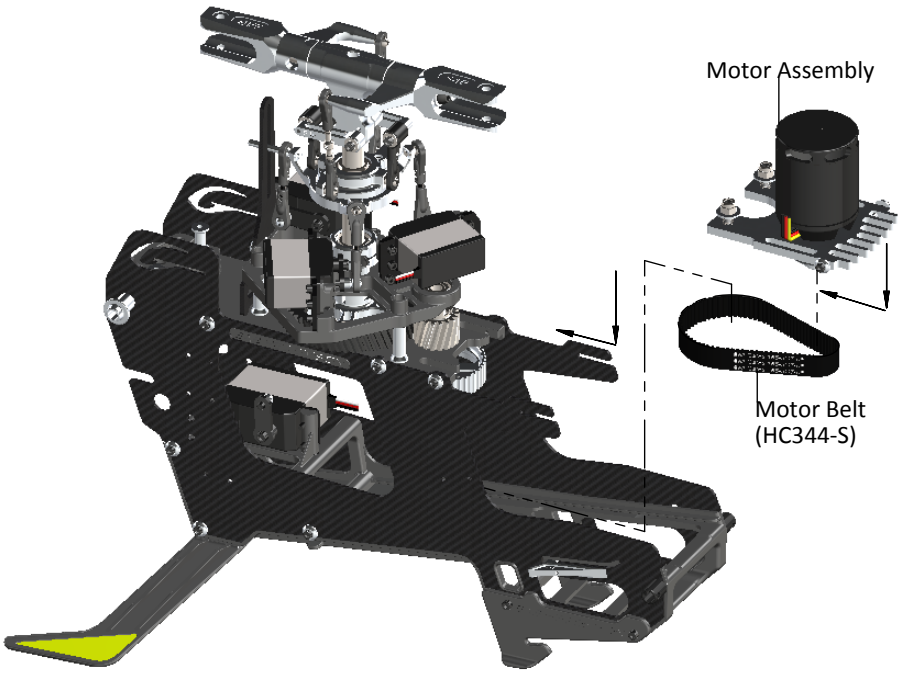
Motor Belt Tension

- Install the motor and pulley to the motor mount plate.
- Place the motor assembly in position.
- Compress the springs by pushing the motor towards the main shaft.
- At max compression, tighten one of the slide screws temporarily.
- Put the belt around the motor pulley first, then put it around the big pulley.
- Rotate the motor a few times by hand to allow the belt to site properly.
- Loosen up the slide screw; the springs will tension the belt.
- Help the springs by pulling the motor and tighten.
- The belt must be very tight.
- Make sure to tighten all screws and nuts.

Figure 1 shows the correct wiring for the motor. We recommend to use heat shrink in the joins between the motor and the ESC wires.

Check for proper vertical alignment of the motor pulley. Simply turn the motor several times by hand in the direction of normal rotation (counter clock-wise when viewed from above) and check to see if the belt is aligned with the big pulley. If the belt is riding too high, simply loosen up the motor pulley and drop it a bit, if it is riding too low, loosen up the motor pulley and raise it a bit (Fig 2 - 3).

Fig. 1



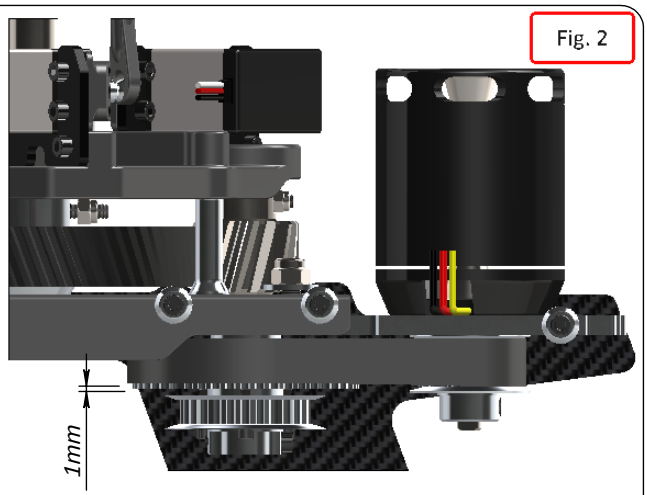


Fig. 2

INCORRECT

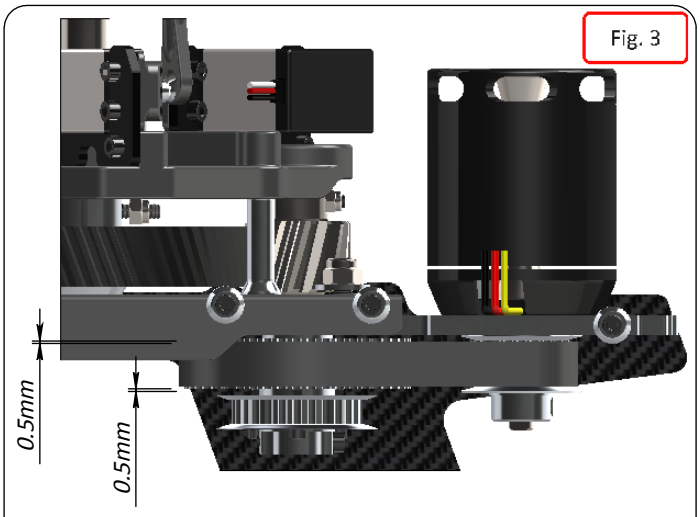
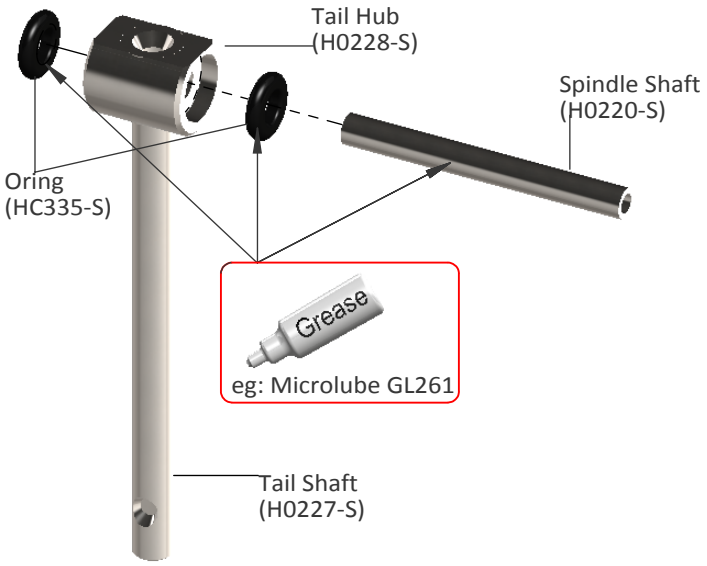


Fig. 3

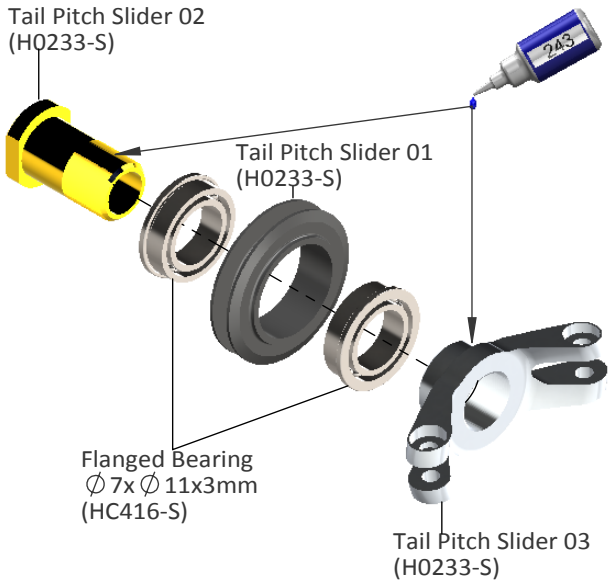
CORRECT

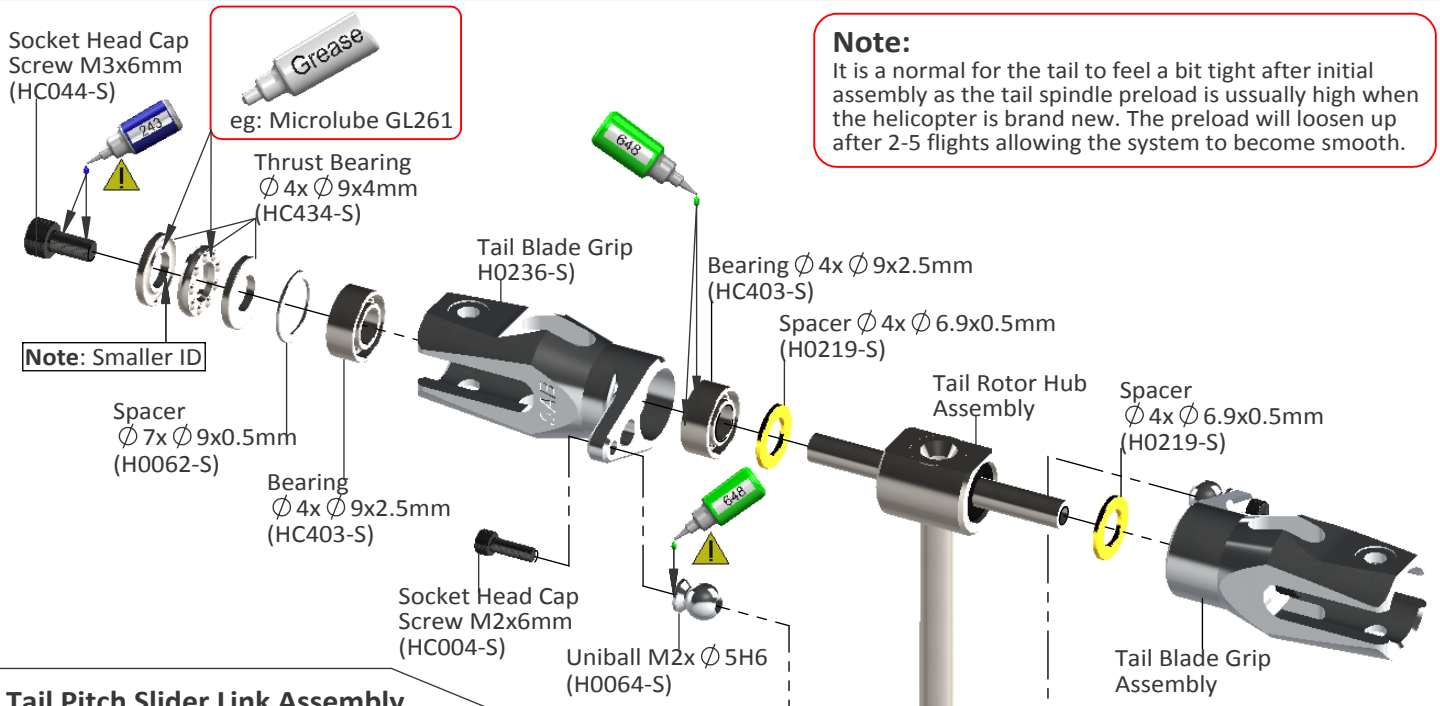
Tail Rotor Hub Assembly



Tail Pitch Slider Assembly

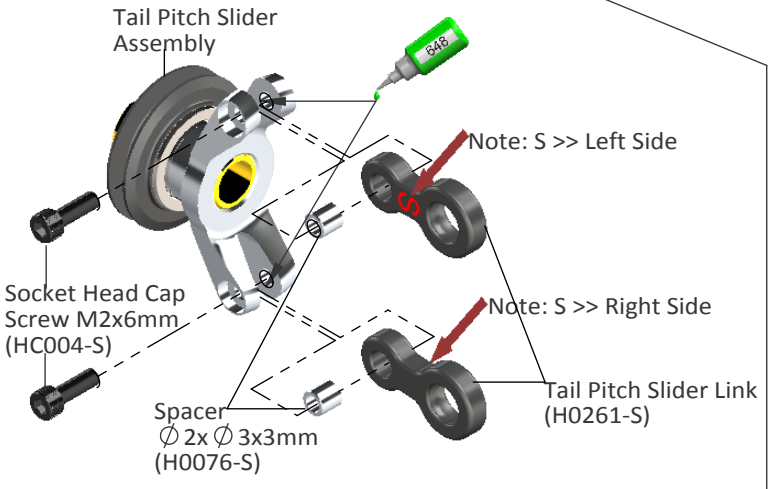
Already assembled





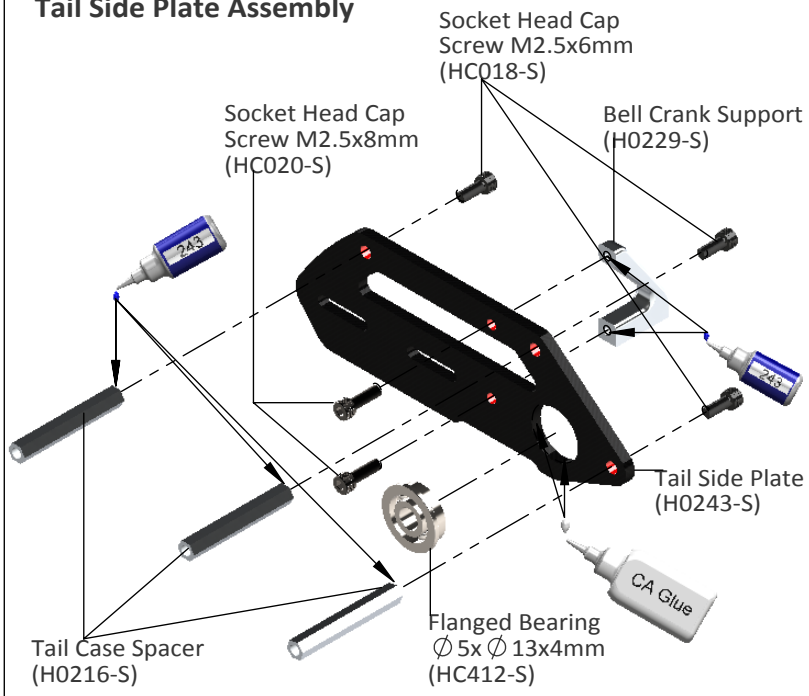
Note:
It is a normal for the tail to feel a bit tight after initial assembly as the tail spindle preload is ussually high when the helicopter is brand new. The preload will loosen up after 2-5 flights allowing the system to become smooth.

Tail Pitch Slider Link Assembly

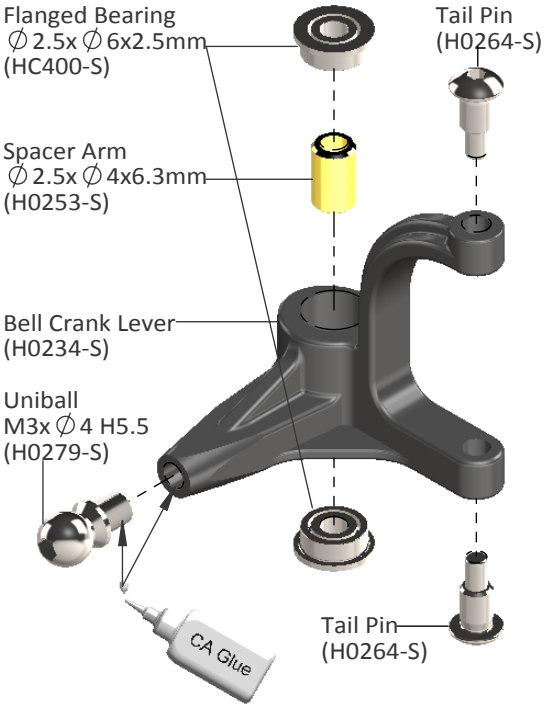


NOTE: After the use of Loctite need to the check the proper sliding off all command.

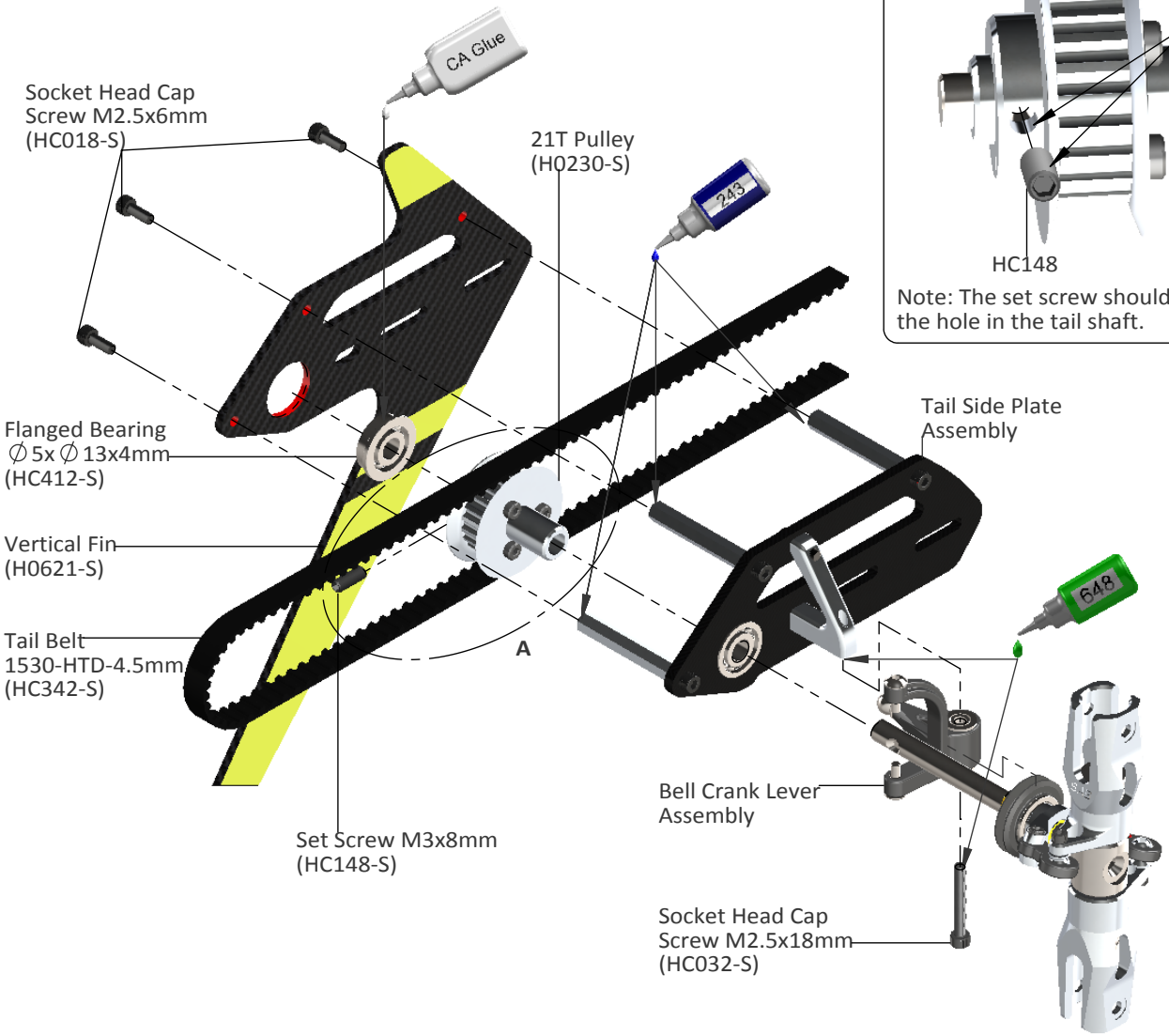
Tail Side Plate Assembly



Bell Crank Lever Assembly



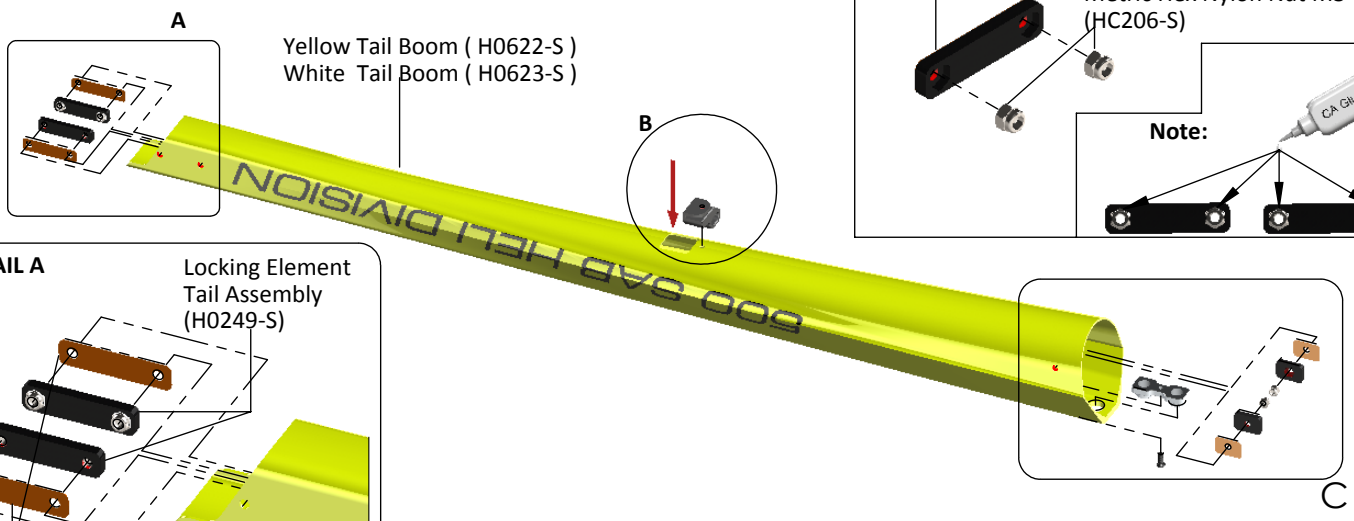
Tail System Assembly



DETAIL A

Note: The set screw should align with the hole in the tail shaft.

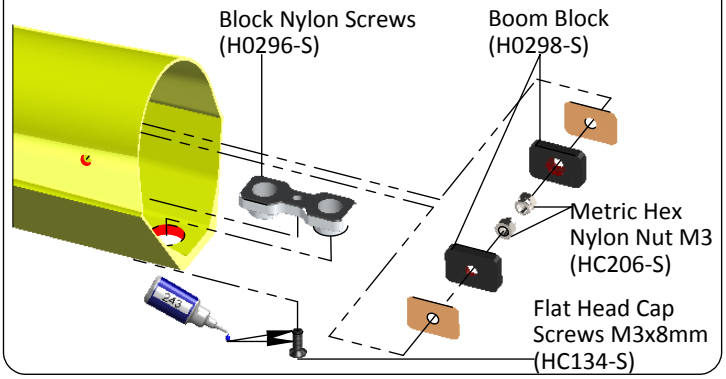
Tail Boom Assembly



Locking Element Tail Assembly ...x2

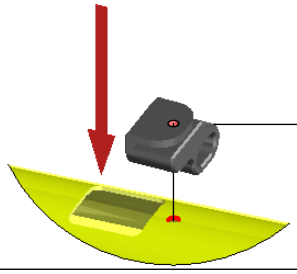
DETAIL A

DETAIL C

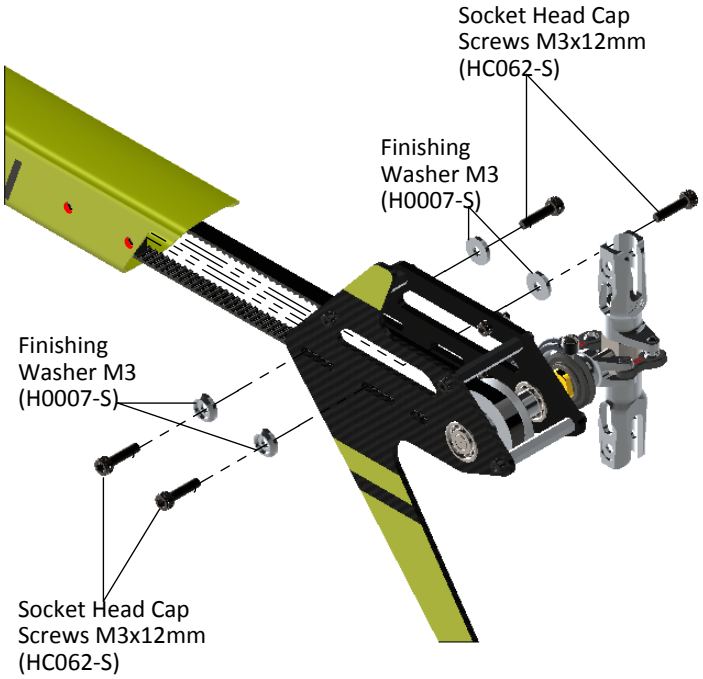


Install H0394-S On The Boom — DETAIL B

Before mounting H0394 on the boom, we recommend to first tighten the M2.5 screw into the hole to open up the threads a bit. This will allow for easier installation.

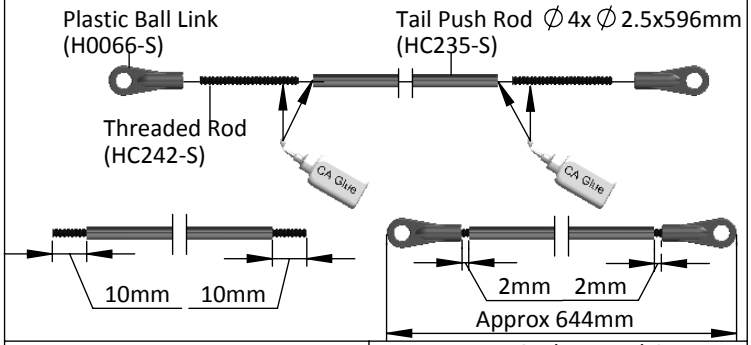


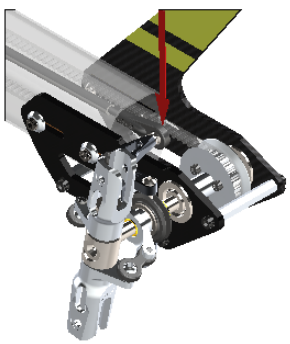
Tail Boom Assembly

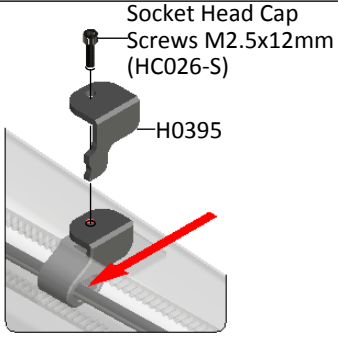


Carbon Road Assembly

Note: Before put plastic ball in threaded rod, please wait 12 hours after bonding







Installation Of The Boom

- Insert the boom in place helping enlarging the frame (Fig 1).
- **Tighten the nylon bolts and only after tighten the two M3x10mm screws.**
- For additional safety, install the boom bolt safety lock (Fig 2)

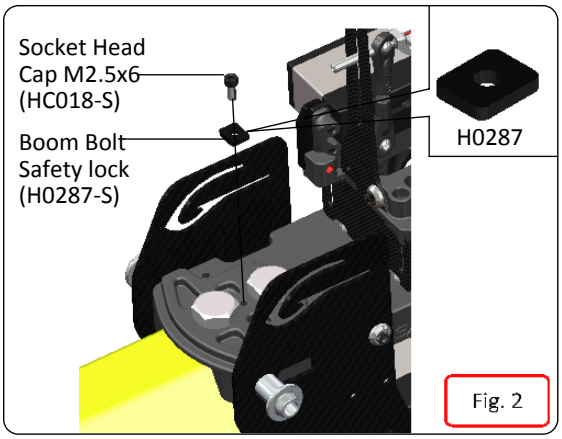
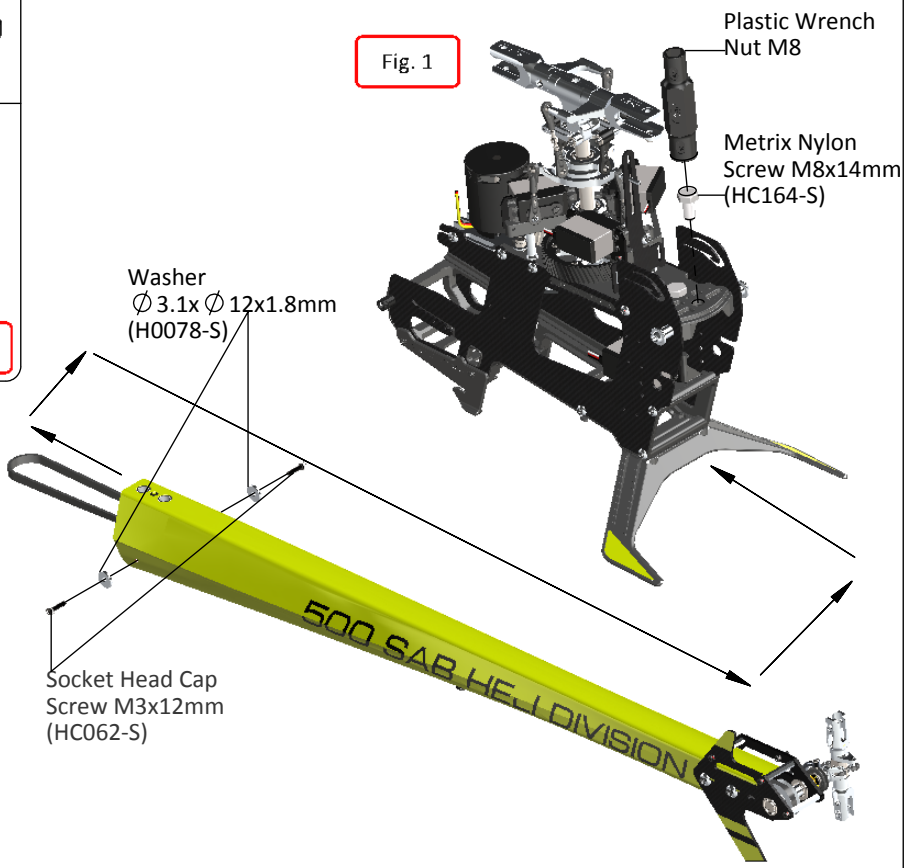


Fig. 2

Fig. 1



Tail Belt Tension

- Make sure the boom is assembled and installed correctly.
- Loosen up the tail case by loosening the 4 M3 screws.
- Mount the tail belt on the front pulley making sure the direction of rotation is correct (Fig 3).
- Adjust the belt tension by pulling on the tail case.
- Tighten the 4 M3 screws.
- Check that the tail output shaft is perpendicular to the boom (Fig 4).
- Connect the tail push rod to the tail servo.
- Make sure the tail belt and carbon rod are free, check the belt to ensure it is not twisted.

Fig. 4

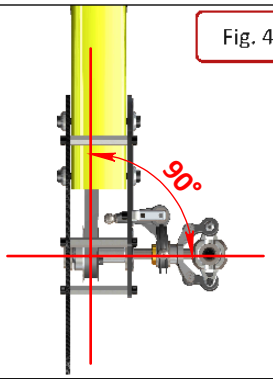
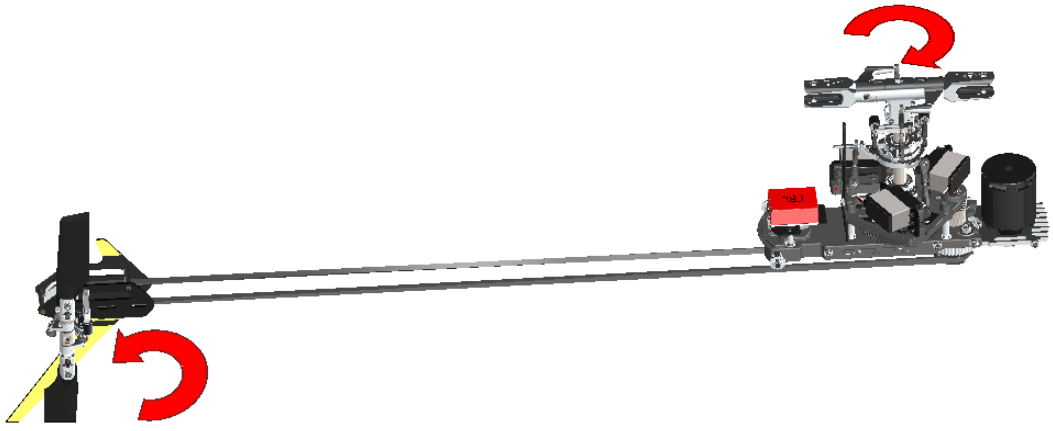


Fig. 3



Batteries

The Goblin has a quick release battery tray system.
The batteries must be installed onto the battery tray to take advantage of the quick release locking system.
Install the battery to the battery tray using double sided tape and the long Velcro straps included.
Make sure to find the right position of the battery to optimize the center of gravity.
To insert the battery, simply align the battery tray in the slots at the front of the helicopter and slide all the way. The battery will lock in place.
To remove the battery, simply lift up on the locking lever (Figs 4, 5) and pull.

IMPORTANT: Make sure the battery is locked in place before flight; the battery tray must be inside the slots on both sides! When removing the battery, pull gently on the locking lever, using excessive force can break the area of carbon that supports the locking lever damaging the quick release mechanism.

Fig. 1

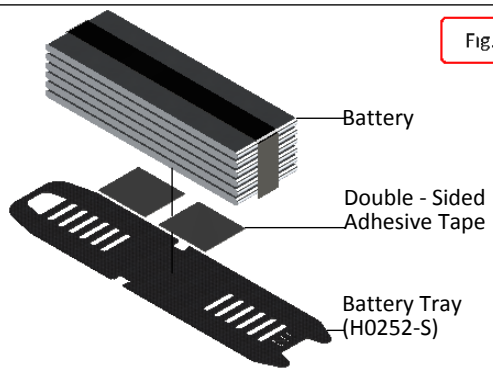


Fig. 2

Fig. 3

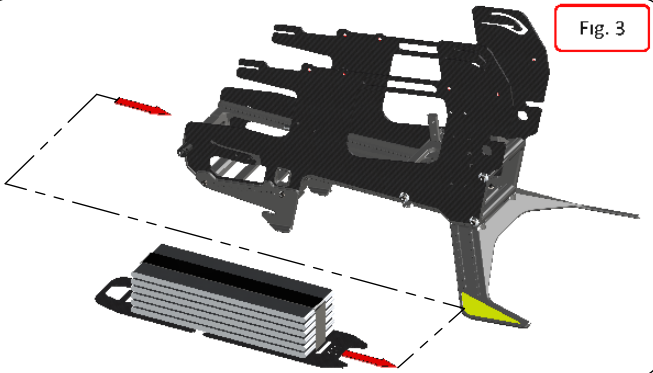


Fig. 4

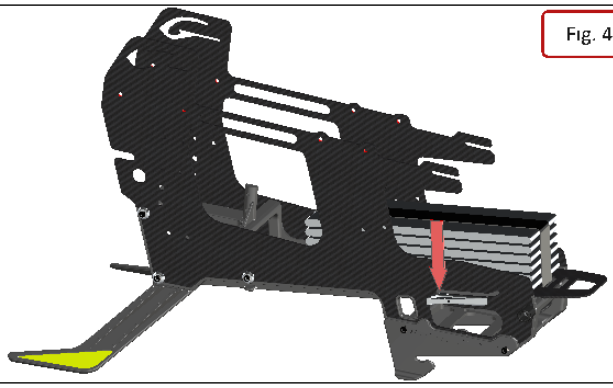


Fig. 5

CANOPY

- The canopy touches the boom on the Goblin. To avoid canopy damage due to high frequency vibration, it is necessary to attach the adhesive foam tape HA006 to the canopy (Fig 2).
- Assembly the Edge Protection [HA112] with a litle super glue. Figure.3
- The canopy locks in the front as shown by the arrow in Figure 4 and in the rear by the canopy screws H0248-S (Fig 1).
  Check alignment of the canopy on the boom:
  If the alignment is correct, enlarge the 2 canopy holes with a reamer up to 10 mm in diameter.
  If alignment is not OK, enlarge the 2 canopy holes in the appropriate direction up to 10 mm in diameter.
- Install the canopy grommets as shown in Figure 2.
- The process of installing the canopy is facilitated following the Figure 5.

Fig. 1

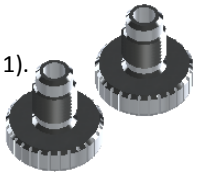


Fig. 2

Fig. 3

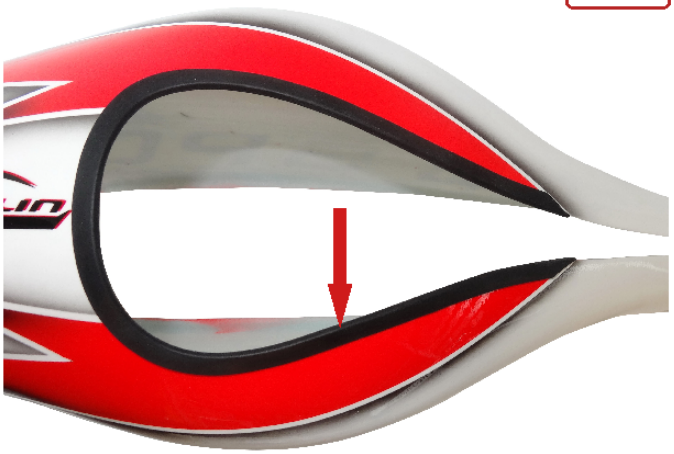
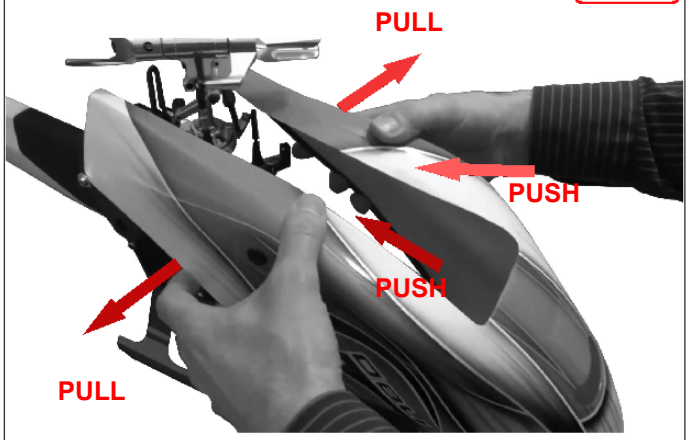


Fig. 4

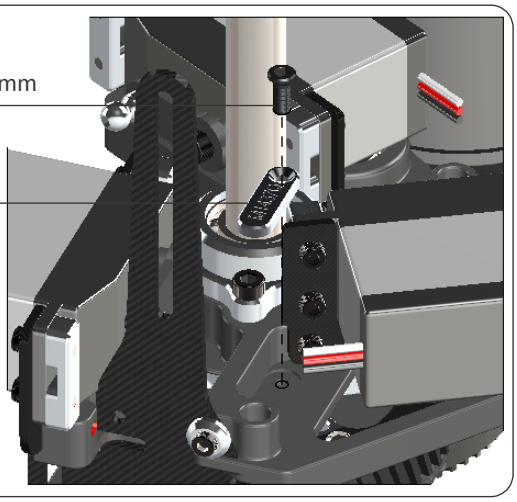
Fig. 5



Serial Number

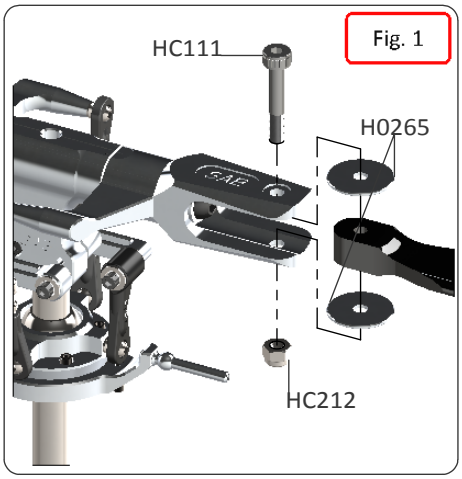
Serial Number Tag

In bag 10, you will find the serial number tag for your helicopter.
Install the tag on the servo support plate as shown.
Please remember to register your product.(See page 1)



Operations Before Flight

*Set up the transmitter and the flybarless system with utmost care.
*It is advisable to test and verify all the settings on the transmitter and flybarless system without the main or tail blades on initially.
*Check that all wiring is isolated from the carbon/aluminum parts. It is good practice to protect them in the areas where they are at most risk.
*Be sure of the gear ratio, verifying carefully the motor pulley in use. The forces acting on the mechanics increase enormously with increased rpm. Although the Goblin can fly at high rpm, for safety reasons we suggest to not exceed 2900 rpm on the Goblin 500.
*Check the correct tension of the tail belt.
*Fit the main blades and tail blades. (Fig.1 and Fig.2)
*Please make sure the main blades are tight on the blade grips, you should be able to violently jerk the head in both directions and the blades should not fold.
*Check the collective and cyclic pitch range. For 3D flight, set about +/- 12°-13°. The outer marks in the blade grips and head hub indicate 13°.
*It is important to check the correct tracking of the main blades.
*On the Goblin 500, in order to correct the tracking, adjust the main link rod as shown in figure 3. The threads are opposite, one side clock-wise and the other side counter clock-wise, this system allows for continuous fine adjustments of the length of the control rod; it is not necessary to detach any of the ball links.
*The tail of the Goblin 500 is quite unique in the sense that the tail hub is dampened like the main rotor head. It is normal for the tail slider to be a bit tight in the very beginning as the tail spindle preload is usually a bit high when the helicopter is brand new. The preload will loosen up after a few flights once the o-rings start to wear, it is completely normal for the tail blade grips to have what appears to be “lose dampening” over time.
***Perform the first flight at a lower head speed than normal, for example 2200 rpm. After this first flight, do a general check of the helicopter. Verify that all screws and bolts are correctly tightened.**



In Flight

During its first flights the Goblin has to be “run in”.
The Damper, the main gear, the uniball and other parts must undergo some slight wear to operate smoothly. It is likely that during the very first flights the model may exhibit a swaying phenomena, particularly at low head speed.
This phenomena disappears after a few flights.

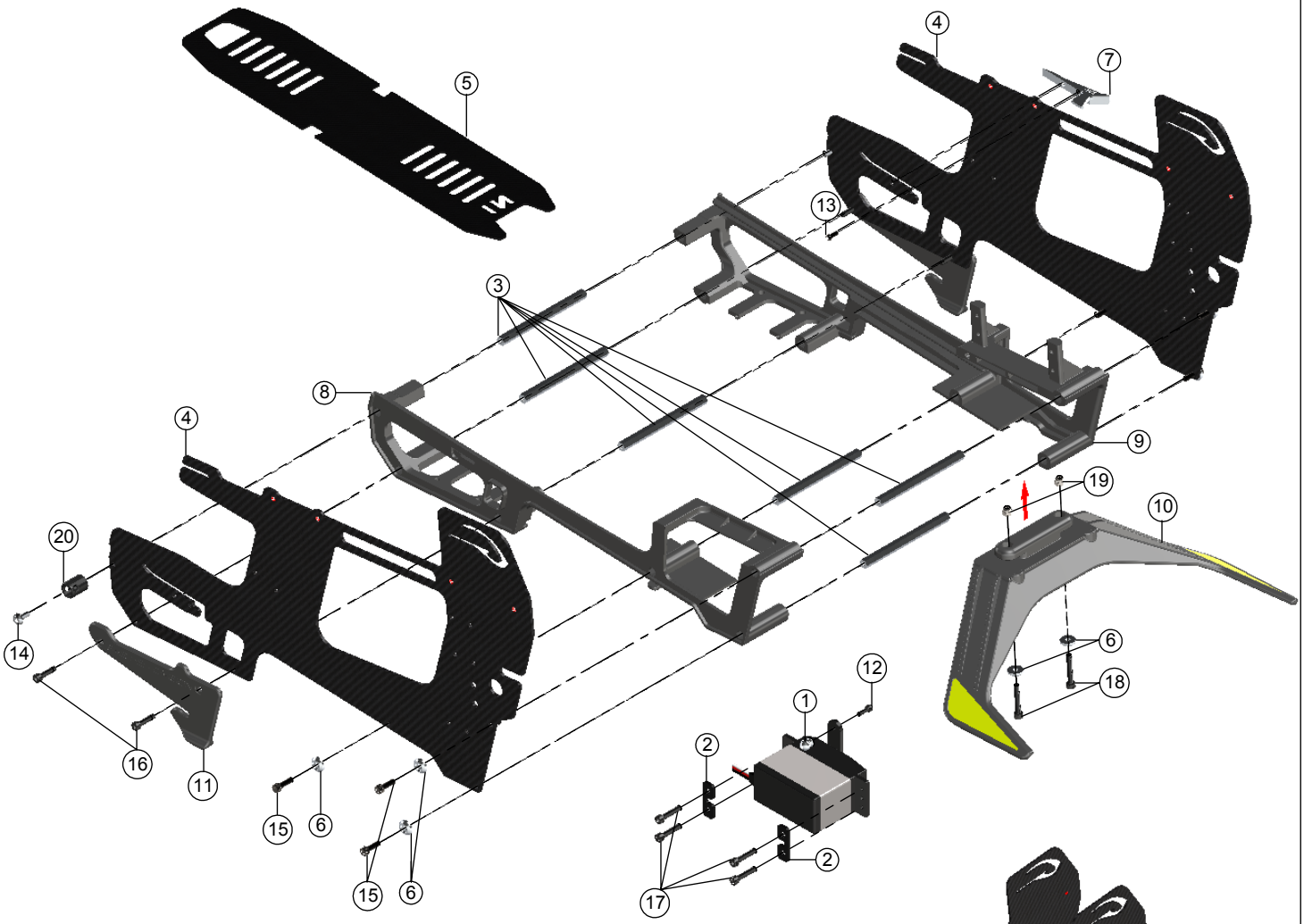
Note:
The HPS head should be assembled with one 1mm spacer H0225 on each side.
After approximately 10/20 flights, please check preload, you can add one or two shim HC228 if preload has changed.
For hard 3D, the best setup is add one extra shim between the spacer H0225 and bearing.
Important is that the blade grips must move freely, but they should not move just under their own weight.

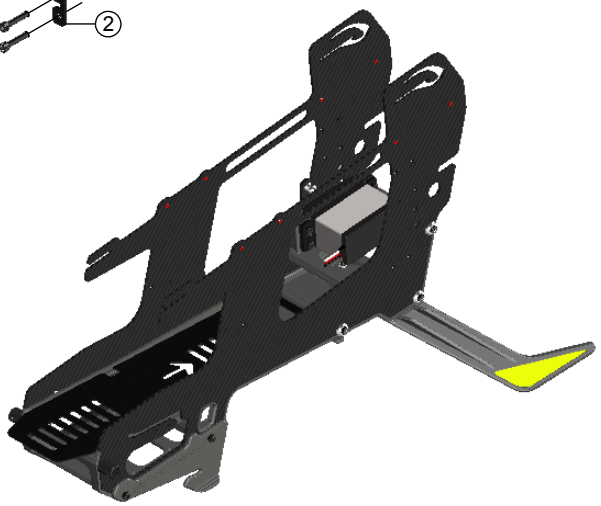
Maintenance

*On the Goblin 500, some areas to look for wear include: - Motor belt - Tail belt - Dampers - Main gear and pinion.
*The lifespan of these components varies according to the type of flying. On average it is recommended to check these parts every **100** flights. In some instances, based on wear, these parts should be replaced every **200** flights.
*The most stressed bearings are definitely those on the tail shaft. Check them frequently. All other parts are not particularly subject to wear.
*Periodically lubricate the tail slide movement and its linkages as well as the swash plate movement and its linkages.
*Lubricate the main gear with Dry-Fluid or Tri-Flow Synthetic grease.
*To ensure safety you should do a general inspection of the helicopter after each flight. You should check:

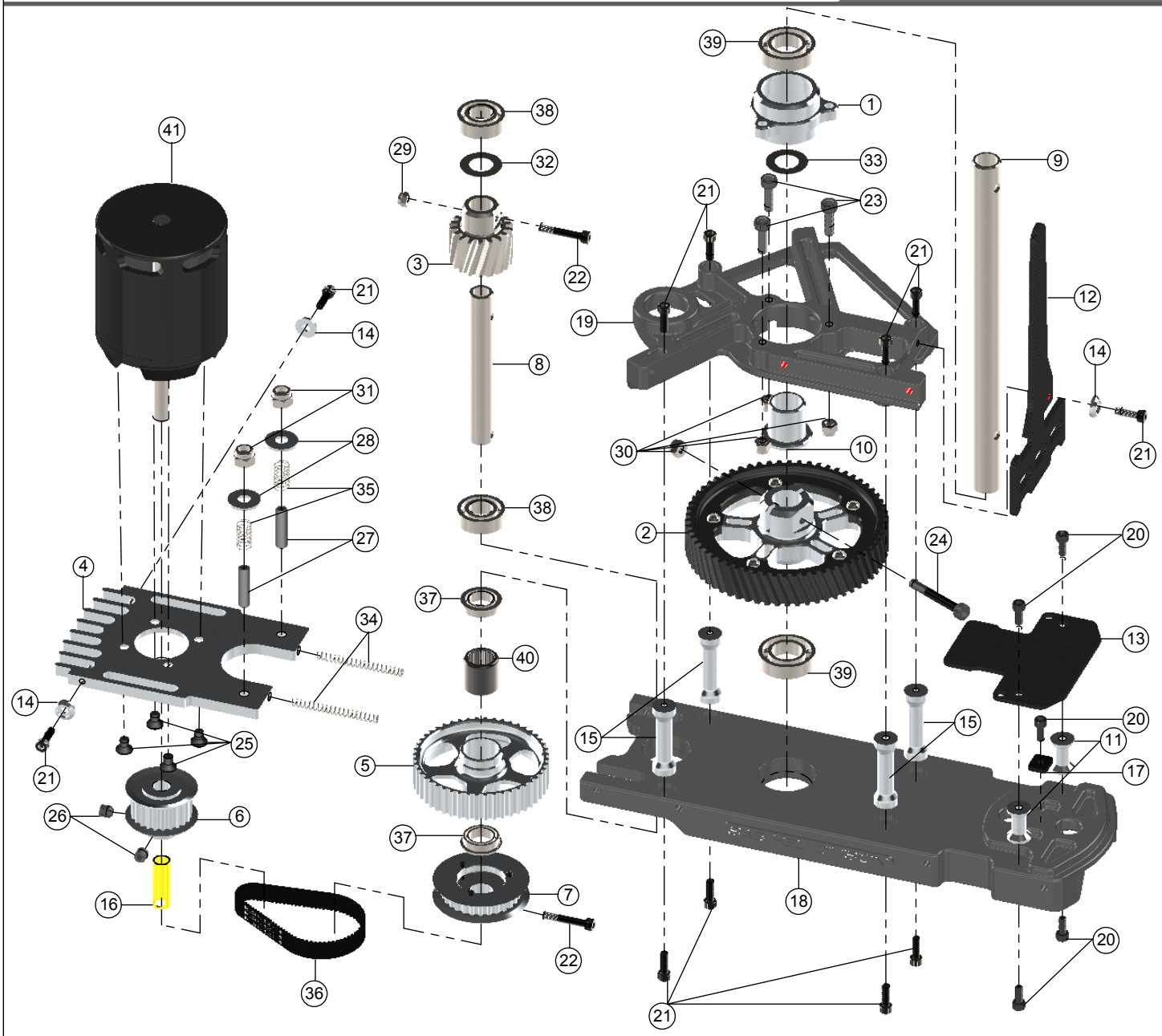
- Proper belt tension (motor belt and tail belt).
- Proper isolation of the wires from the carbon and aluminum parts.
- All screws remain tight.

After a crash, it is very important inspect all parts.



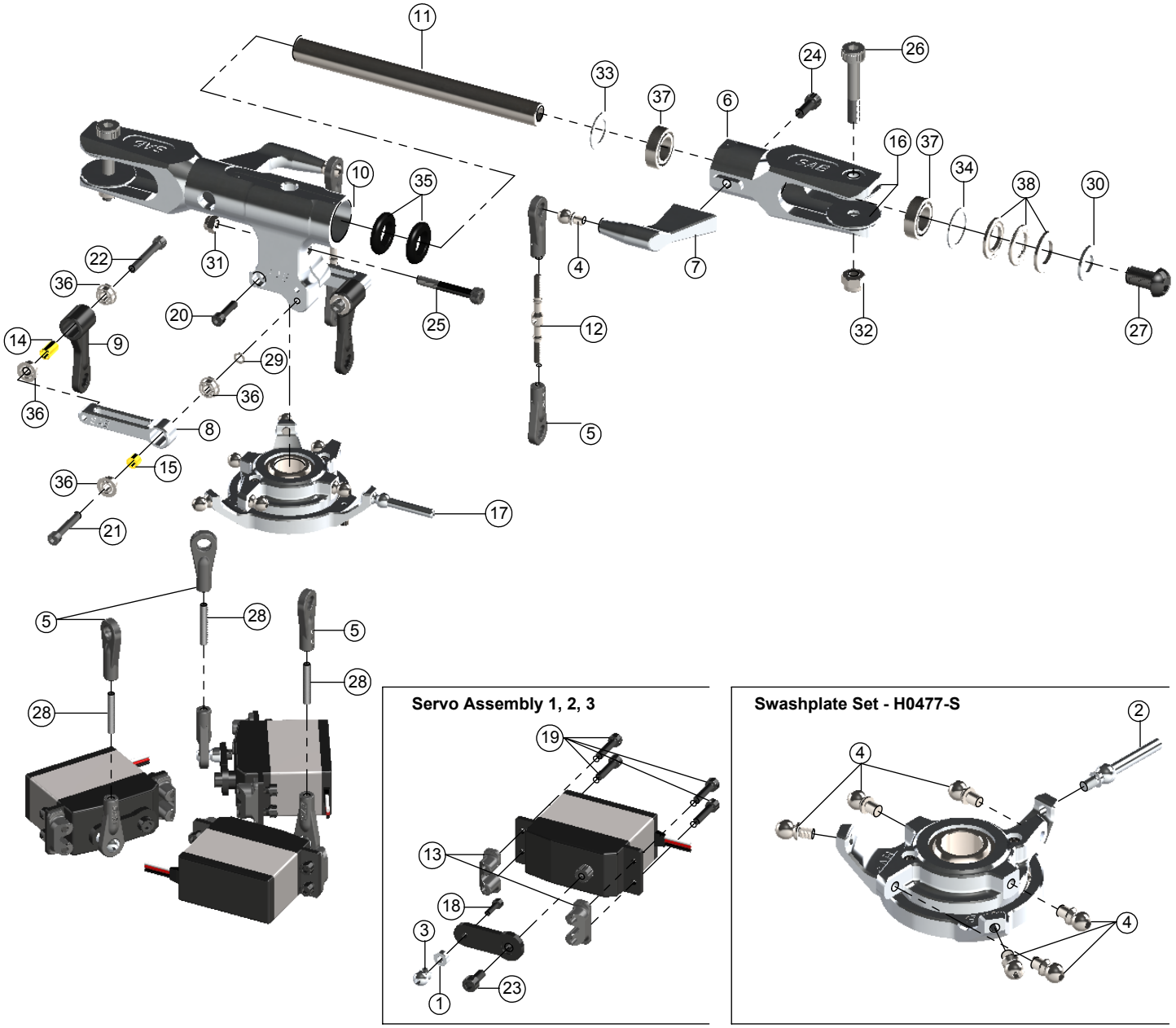


Main Frame				
POS	**COD**	**Name**	**Specification**	**Quantity**
1	H0064	Uniball M2	Aluminum	1
2	H0075	Servo Spacer	Carbon Fiber	2
3	H0239	Frames Spacer	Aluminum	6
4	H0634	Main Frame	Carbon Fiber	2
5	H0252	Battery Tray	Carbon Fiber	1
6	H0255	Finishing Washers	M2.5	8
7	H0256	Battery Block	Aluminum	1
8	H0258	Battery Support Sx	Plastic	1
9	H0259	Battery Support Sx	Plastic	1
10	H0637	Plastic Landing Gear	Plastic	1
11	H0638	Font Landing Gear	Plastic	2
12	HC004	Socket Head Cap Screws	M2x6mm	1
13	HC005	Button Head Cap Screws	M2x5mm	1
14	HC019	Button Special Screws	M2.5x6mm	2
15	HC020	Socket Head Cap Screws	M2.5x8mm	6
16	HC022	Socket Head Cap Screws	M2.5x10mm	4
17	HC026	Socket Head Cap Screws	M2.5x12mm	4
18	HC028	Socket Head Cap Screws	M2.5x15mm	2
19	HC200	Nylon Nut	M2.5	2
20	HA106	Antenna Guide	Rubber	2



TRANSMISSION ASSEMBLY				
POS	COD	Name	Specification	Quantity
1	H0207	Bearing Support		1
2	H0423	Main Gear	62T	1
3	H0210	Pinion	18T	1
4	H0211	Motor Support		1
5	H0214	Main Pulley	48T	1
6	H0215	Motor Pulley	18T	1
7	H0218	Pront Tail Pulley	28T	1
8	H0221	Secondary Shaft		1
9	H0222	Main Shaft		1
10	H0223	Spacer		1
11	H0224	Sensor Suport		2
12	H0643	Anti-Rotation Guide		1
13	H0250	FBL Support		1
14	H0255	Finishing Washer	M2.5	3
15	H0263	Column		4
16	H0266	Bush		1
17	H0287	Boom Bolt Safety lock		1
18	H0635	Main Structure	Plastic	1
19	H0627	Servo Support	Plastic	1
20	HC018	Head Cap Screws	M2.5x6mm	5
21	HC020	Head Cap Screws	M2.5x8mm	11

TRANSMISSION ASSEMBLY				
POS	COD	Name	Specification	Quantity
22	HC031	Head Cap Screws	M2.5x15mm	2
23	HC064	Head Cap Screws	M3x14mm	3
24	HC082	Head Cap Shouldered	M3x20mm	1
25	HC132	Flat Head Socket Cap	M3x5mm	4
26	HC152	Cone Point Set Screws	M4x4mm	2
27	HC154	Cup Point Set Screws	M4x15mm	2
28	HC184	Washer	∅4.3x∅11x1	2
29	HC200	Metrix Hex Nylon Nut	M2.5xH3.5	1
30	HC206	Metrix Hex Nylon Nut	M3	4
31	HC212	Metrix Hex Nylon Nut	M4H5	2
32	HC228	Washer	∅8x∅14x0.2	1
33	HC234	Washer	∅10x∅16x0.1	1
34	HC311	Sping		2
35	HC316	Sping		2
36	HC344	Belt Gates		1
37	HC418	Flanged Bearing	∅8x∅12x3.5	2
38	HC419	Bearing	∅8x∅16x5	2
39	HC422	Bearing	∅10x∅19x	2
40	HC440	One Way Bearing	∅8x∅12x12	1
41	Motor			1



Servo Assembly 1, 2, 3

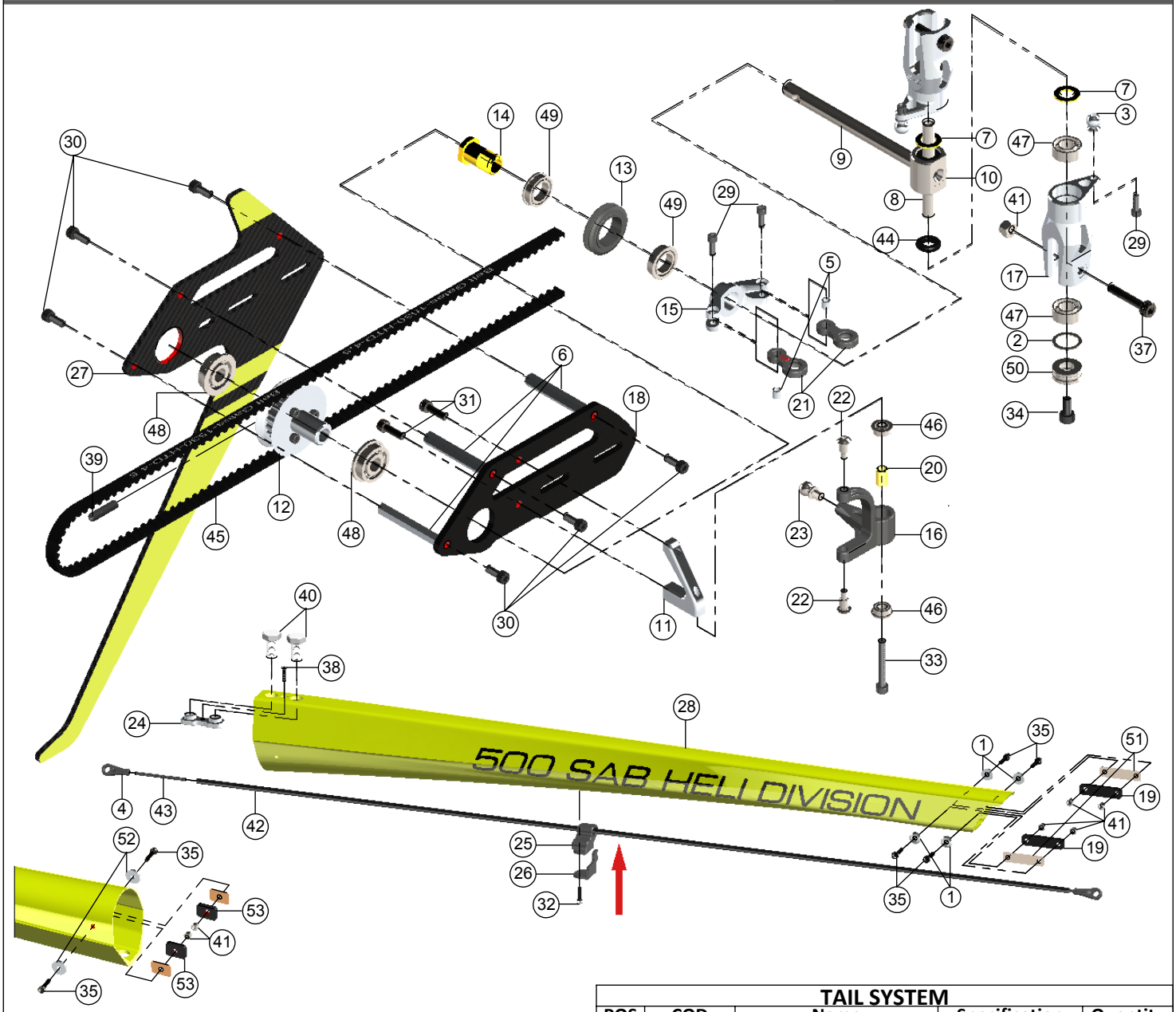
Swashplate Set - H0477-S

Head System

POS	COD	Name	Specification	Quantity
1	H0031	Uniball Spacers	∅2 x ∅5 x 2mm	2
2	H0063	Uniball	M3 x 4 ∅5 H18	1
3	H0064	Uniball	M2.5 ∅5 H6	1
4	H0065	Uniball	M3 x 4 ∅5 H3	8
5	H0066	Plastic Ball Linkages	Plastic	10
6	H0202	Blade Grips	Aluminum	2
7	H0203	Blade Grip Arms	Aluminum	2
8	H0204	Radius Arms	Aluminum	2
9	H0205	Unibal Radius Arms	Plastic	2
10	H0206	Center Hub	Aluminum	1
11	H0213	Spindle Shaft	∅8 x 89mm	1
12	H0237	Linkage Rod	M2.5 x 33mm	2
13	H0251	Servo Spacers	Plastic	6
14	H0253	Spacer Arm	∅2.5x∅4x6.3mm	2
15	H0254	Spacer Arm	∅2.5x∅4x3mm	2
16	H0265	Blade Spacer		4
17	H0477	Swashplate SET		1
18	HC004	Head Cap Screws	M2 x 6mm	3
19	HC022	Head Cap Screws	M2.5 x 10mm	12

Head System

POS	COD	Name	Specification	Quantity
20	HC026	Head Cap Screws	M2.5 x 12mm	2
21	HC028	Head Cap Screws	M2.5 x 15mm	2
22	HC032	Head Cap Screws	M2.5 x 18mm	2
23	HC044	Head Cap Screws	M3 x 6mm	3
24	HC050	Head Cap Screws	M3 x 8mm	2
25	HC082	Head Cap Screws Shoulder	M3 x 20mm	1
26	HC111	Head Cap Screws Shoulder	M4 x 24mm	2
27	HC122	Button Cap Screws	M6 x 10mm	2
28	HC146	Set Screws	M2.5 x 15mm	3
29	HC172	Washers	∅2.5x∅4x0.3	3
30	HC193	Washers	∅6.1x∅12x1	2
31	HC206	Metric Hex Nylon Nut	M3 h4	1
32	HC212	Metric Hex Nylon Nut	M4 h5	2
33	HC225	Spacers	∅8x∅12.5x0.75	2
34	HC226	Spacers	∅11x∅13.8x0.5	2
35	HC330	Oring		4
36	HC400	Flanged Bearings	∅2.5x∅6x2.5	8
37	HC417	Bearings	∅8x∅14x4	4
38	HC437	Thrust Bearings	∅8x∅14x4	2



TAIL SYSTEM				
POS	COD	Name	Specification	Quantity
1	H0007	Finishing Washer M3	Aluminum	4
2	H0062	Spacer	∅ 7x ∅ 9x0.5	2
3	H0064	Uniball	M2 ∅ 5H6	2
4	H0066	Plastic Ball Linkages	Plastic	2
5	H0076	Spacer	∅ 2x ∅ 3x3	2
6	H0216	Tail Case Spacer	Aluminum	3
7	H0219	Spacer	∅ 4x ∅ 6.9x0.5	2
8	H0220	Spindle Shaft	Carbon Steel	1
9	H0227	Tail Shaft	Carbon Steel	1
10	H0228	Tail Rotor Hub	Aluminum	1
11	H0229	Bell Crank Support	Aluminum	1
12	H0230	Pulley	21T	1
13	H0231	Tail Pitch Slider 01	Aluminum	1
14	H0232	Tail Pitch Slider 02	Aluminum	1
15	H0233	Tail Pitch Slider 03	Aluminum	1
16	H0234	Bell Crank Lever	Plastic	1
17	H0236	Tail Blade Grips		2
18	H0243	Tail Side Plate	Carbon Fiber	1
19	H0249	Locking Element Tail	Carbon Fiber	2
20	H0253	Spacer Arm	∅ 2.5x ∅ 4x6.3	1
21	H0261	Tail Pitch Slider links	Plastic	2
22	H0264	Tail Pins	Aluminum	2
23	H0279	Uniball	M3x4 ∅ 5H5	1
24	H0296	Boom Block	Aluminum	1
25	H0394	Carbon Rod Support	Derlin POM	1

TAIL SYSTEM				
POS	COD	Name	Specification	Quantity
26	H0395	Carbon Rod Support	Derlin POM	1
27	H0621	Yellow Vertical Fin	Carbon Fiber	1
28	H0622	Tail Boom		1
29	HC004	Head Cap Screws	M2 x 6mm	4
30	HC018	Head Cap Screws	M2.5 x 6mm	6
31	HC020	Head Cap Screws	M2.5 x 8mm	2
32	HC026	Head Cap Screws	M2.5 x 12mm	1
33	HC032	Head Cap Screws	M2.5 x 18mm	1
34	HC044	Head Cap Screws	M3 x 6mm	2
35	HC062	Head Cap Screws	M3 x 12mm	6
37	HC074	Head Cap Shoulder	M3 x 16mm	2
38	HC132	Flat Head Cap Screws	M3x8mm	1
39	HC148	Set Screw	M3 x 8mm	1
40	HC164	Nylon Screw	M8x14mm	2
41	HC206	Hex Nylon Nuts	M3	8
42	HC235	Carbon Rod	∅ 2.5x ∅ 4x596	1
43	HC242	Set Screws	M2.5 x 40mm	2
44	HC334	Orings		2
45	HC342	Bell Gates	1530-HTD-4.5	1
46	HC400	Flanged Bearings	∅ 2.5x ∅ 6x 2.5	2
47	HC403	Bearings	∅ 4x ∅ 9x2.5	4
48	HC412	Flanged Bearings	∅ 5x ∅ 13x4	2
49	HC416	Flanged Bearings	∅ 7x ∅ 11x3	2
50	HC434	Thrust Bearings	∅ 4x ∅ 9x4	2
51	HA022	Double Sided Tapes		2
52	H0078	Spacer		2
53	H0298	Boom Block	Carbon Ficber	2

Finishing Washer M3
[H0007-S]

- 10 x Finishing Washer M3.

Spacer Ø7 X Ø9 X 0,5
[H0062-S]

- 4 x Spacer Ø7xØ9x0,5mm.

Uniball Goblin M3Ø5H18
[H0063-S]

- 2 x Uniball Goblin M3H18.

Uniball Goblin M2Ø5H3.5
[H0064-S]

- 5 x Uniball Goblin M2H3.5.
- 5 x Uniball Spacer.
- 5 x Head Cap Screw M2x8mm.
- 5 x Head Cap Screw M2x6mm.

Uniball Goblin M3Ø5H3.5
[H0065-S]

- 5 x Uniball Goblin M3H3.5.

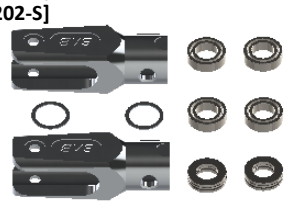
Plastic Ball Linkages
[H0066-S]

- 10 x Plastic Ball Linkages.

Carbon Servo Spacer
[H0075-S]

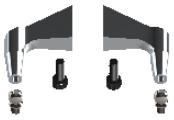
- 10 x Carbon Servo Spacer.

Blade Grip
[H0202-S]



- 2 x Main Blade Grip.
- 2 x Spacer ∅11x∅13.8x0.5mm.
- 4 x Bearing ∅8x∅14x4mm.
- 2 x Thrust Bearing ∅8x∅14x4mm.

Blade Grip Arm
[H0203-S]



- 2 x Main Blade Arm.
- 2 x Head Cap Screw M3x8mm.
- 2 x Uniball M3 ∅4H3.

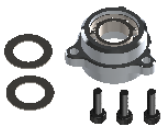
Radius Arm HPS
[H0204-S]

- 2 x Radius Arm.
- 2 x Spacer Arm 2.5x4x6.3mm.
- 2 x Spacer Arm 2.5x4x3mm.
- 2 x Uniball Radius Arm.
- 8 x Flanged Bearing ∅2.5x∅6x2.5mm.
- 2 x Washer 2.5x4x0.3mm.
- 2 x Socket Head Cap Screw M2.5x15mm.
- 2 x Socket Head Cap Screw M2.5x18mm.

Center Hub
[H0206-S]

- 1 x Center Hub.
- 2 x Socket Head Cap Screw M2.5x12.
- 1 x Socket Head Cap Screw M3x20.
- 1 x Metrix Hex Nylon Nut M3.

Bearing Support
[H0207-S]

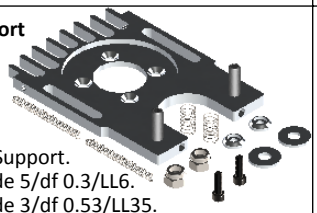


- 1 x Bearing Support.
- 1 x Bearing ∅10x∅19x5mm.
- 3 x Socket Head Cap Screws M3x10.
- 2 x Washer ∅10x∅16x0.1mm.

18T Pinion
[H0210-S]

- 1 x 18T Pinion.
- 1 x Head Cap Screw M2.5x15.
- 1 x Hex Nylon Nut M2.5H3.5.
- 1 x Washer 8x∅14x0.2mm.

Motor Support
[H0211-S]



- 1 x Motor Support.
- 2 x Spring de 5/df 0.3/LL6.
- 2 x Spring de 3/df 0.53/LL35.
- 2 x Washer ∅4.3x∅11x1mm.
- 2 x Hex Nylon Nut M4H5.
- 2 x Head Cap M2.5x8mm.
- 2 x Finishing Washer M2.5mm.
- 2 x Set Screw M4x15mm.

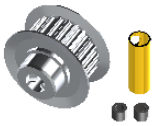
Spindle
[H0213-S]

- 1 x Spindle.
- 2 x Button Cap Screw M6x10mm.
- 2 x Washers ∅6.1x∅12x1mm.

48T Pulley
[H0214-S]

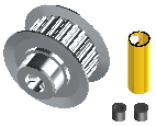
- 1 x 48T Pulley.
- 2 x Flanged Bearing ∅8x∅12x3.5mm.
- 1 x One Way Bearing ∅8x∅12x12mm.
- 1 x Washer ∅8x∅14x0.2mm.

15T Pulley
[H0215-15-S]



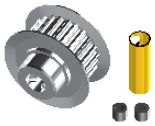
- 1 x 15T Pulley.
- 2 x Set Screw M4x4mm.
- 1 x Bushing ∅5x∅6x18mm.

16T Pulley
[H0215-16-S]



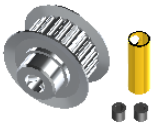
- 1 x 16T Pulley.
- 2 x Set Screw M4x4mm.
- 1 x Bushing ∅5x∅6x18mm.

17T Pulley
[H0215-17-S]



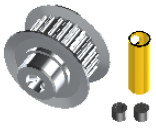
- 1 x 17T Pulley.
- 2 x Set Screw M4x4mm.
- 1 x Bushing ∅5x∅6x18mm.

18T Pulley
[H0215-18-S]



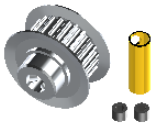
- 1 x 18T Pulley.
- 2 x Set Screw M4x4mm.
- 1 x Bushing ∅5x∅6x18mm.

19T Pulley
[H0215-19-S]



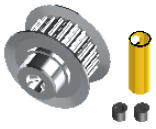
- 1 x 19T Pulley.
- 2 x Set Screw M4x4mm.
- 1 x Bushing ∅5x∅6x18mm.

20T Pulley
[H0215-20-S]



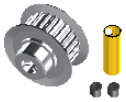
- 1 x 20T Pulley.
- 2 x Set Screw M4x4mm.
- 1 x Bushing ∅5x∅6x18mm.

21T Pulley
[H0215-21-S]



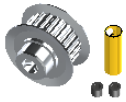
- 1 x 21T Pulley.
- 2 x Set Screw M4x4mm.
- 1 x Bushing ∅5x∅6x18mm.

22T Pulley
[H0215-22-S]



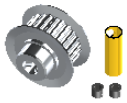
- 1 x 22T Pulley.
- 2 x Set Screw M4x4mm.
- 1 x Bushing ∅5x∅6x18mm.

23T Pulley
[H0215-23-S]



- 1 x 23T Pulley.
- 2 x Set Screw M4x4mm.
- 1 x Bushing ∅5x∅6x18mm.

24T Pulley
[H0215-24-S]



- 1x 24T Pulley.
- 2x Set Screw M4x4mm.
- 1x Bushing ∅5x∅6x18mm.

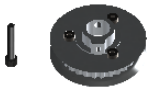
Spacer 26mm
[H0216-S]

- 3 x Spacer 26mm.

Canopy Positioner
[H0217-S]

- 2 x Canopy Positioner.

28T Pulley
[H0218-S]



- 1 x 28T Pulley.
- 3 x Head Cap Screw M2x8mm.
- 1 x Head Cap Screw M2.5x15.

Tail Spindle
[H0220-S]

- 1 x Tail Spindle.
- 2 x Head Cap Screw M3x6mm.

Secondary Shaft
[H0221-S]

- 1 x Secondary Shaft.
- 2 x Head Cap ScrewM2.5x15mm.
- 1 x Metrix Hex Nylon Nut M2.5H3.5.
- 1 x Washer ∅8x∅14x0.2mm.

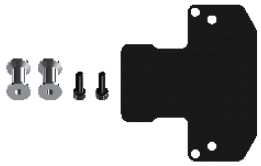
Main Shaft
[H0222-S]

- 1 x Main Shaft.
- 2 x Metrix Hex Nylon Nut M3H4.
- 1 x Head Cap Shoulder M3x20mm.
- 1 x Head Cap Shoulder M3x22mm.

Spacer Main Shaft
[H0223-S]

- 1 x Spacer Main Shaft.
- 4 x Washer ∅10x∅16x0.1mm.

Sensor Support
[H0224-S]



- 2 x Sensor Support.
- 1 x FBL Support.
- 2 x Head Cap Screw M2.5x8mm.

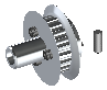
Tail Rotor Shaft
[H0227-S]

- 1 x Tail Rotor Shaft.
- 1 x Set Screw M3x8mm.
- 1 x Tail Hub.

Bell Crank Support
[H0229-S]

- 1 x Bell Crank Support.
- 2 x Head Cap Screw M2x8mm.

21T Pulley
[H0230-S]



- 1 x 21T Pulley.
- 3 x Head Cap Screw M2x12mm.
- 1x Set Screws M3x8mm.

Tail Pitch Slider
[H0233-S]

- 1 x Tail Pitch Slider 01.
- 1 x Tail Pitch Slider 02.
- 1 x Tail Pitch Slider 03.
- 2 x Flanged Bearing ∅7x ∅11x3mm.

Bell Crank Level
[H0234-S]

- 1 x Bell Crank level.
- 2 x Tail Pin.
- 2 x Flanged Bearing ∅2.5x ∅6x2.5.
- 1 x Spacer Arm ∅2.5x ∅4x6.3mm.
- 1 x Head Cap Screws M2.5x18.
- 1 x Uniball M3x 4 H5.

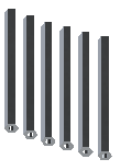
Tail Blade Grip
[H0236-S]

- 2 x Tail Blade Grip.
- 4 x Bearing ∅4x∅9x2.5mm.
- 2 x Spacer ∅7x∅9x0.5mm.
- 2 x Thrust Bearing ∅4x∅9x4mm.
- 2 x Socket Head Cap Screw M3x6mm.
- 2 x Button Head Cap Screw M2x8mm.

Linkage HPS
[H0237-S]

- 2 x Linkage Rod M2.5x33mm.
- 4 x Linkage Ball Link.

Spacer 54mm
[H0239-S]

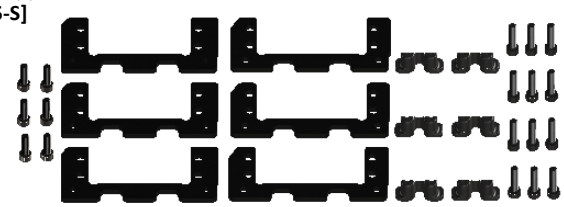


- 6 x Spacer 54mm.

Tail Slider Plate
[H0243-S]

- 1 x Tail Slider Plate.

Servo Support
[H0245-S]



- 3 x Servo Support (for servo 36mm).
- 3 x Servo Support (for servo 34mm).
- 6 x Servo Spacer.
- 12 x Head Cap Screw M2.5x10mm.
- 6 x Head Cap Screw M2.5x8mm.

Canopy Locking
[H0248-S]

- 2 x Canopy Locking.

Locking Element Tail
[H0249-S]

- 2 x Locking Element Tail.
- 4 x Metric Hex Nylon Nut M3.
- 4 x Head Cap Screw M3x10mm.
- 2 x Double Side Tape.

Servo Block
[H0251-S]

- 6 x Servo Block.

Battery Tray
[H0252-S]

- 2 x Battery Tray.
- 2 x Straps Goblin 500

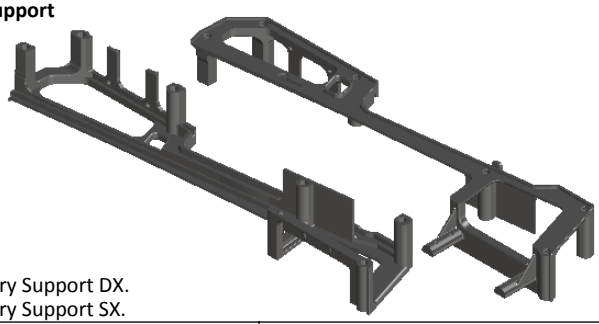
Finishing Washer
[H0255-S]

- 10 x Finishing Washer.

Battery Block
[H0256-S]

- 1 x Battery Block.
- 1 x Head Cap Screw M2.5x5mm.

Battery Support
[H0258-S]



- 1 x Battery Support DX.
- 1 x Battery Support SX.

Tail Linkage
[H0261-S]

- 2 x Tail Linkage.
- 2 x Spacer.
- 2 x Head Cap Screws M2x6mm.

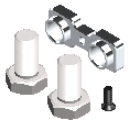
Column
[H0263-S]

- 4 x Column.

Spacer ∅4x∅18x1
[H0265-S]

- 4 x Spacer ∅4x∅18x1mm.

Boom Block
[H0296-S]



- 1 x Boom Block.
- 2 x Nylon Screw M8x14mm.
- 1 x Flat Cap Screws M3x8mm.

Carbon Road Support
[H0394-S]

- 1 x Carbon Road Support A.
- 1 x Carbon Road Support B.
- 1 x Head Cap Screws M2.5x12mm.

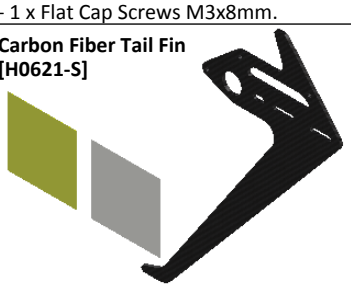
62T CNC Derlin Main Gear
[H0423-S]

- 1 x 62T CNC Derlin Main Gear .

SwashPlate
[H0477-S]

- 1 x Swashplte Assembly.
- 1 x Uniball M3x4∅5H18.
- 6 x Uniball M3x4∅5H3.
- 5 x Socket Head Cap M2x5mm.
- 1 x Bearing Rad ∅30∅37x4mm.

Carbon Fiber Tail Fin
[H0621-S]

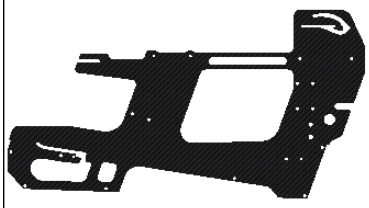


- 1 x Carbon Fiber Tail Fin.
- 1 x Sticker White.
- 1 x Sticker Yellow.

Plastic Servo Support
[H0627-S]

- 1 x Plastic Servo Support.
- 1 x Bearing ∅8x∅16x5mm.

Main Frame
[H0634-S]

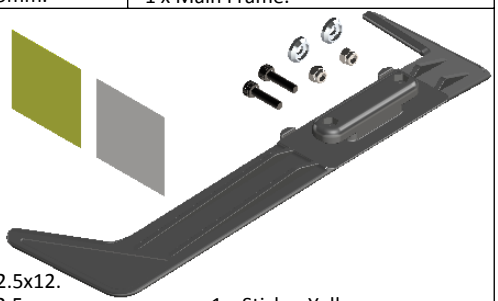


- 1 x Main Frame.

Plastic Main Structure
[H0635-S]

- 1 x Plastic Main Structure.
- 1 x Bearing ∅8x∅16x5mm.
- 1 x Bearing ∅10x∅19x5mm.

Plastic Landing Gear
[H0637-S]



- 1 x Plastic Lading Gear.
- 2 x Head Cap Screws M2.5x12.
- 2 x Finishing Washer M2.5.
- 2 x Nylon Nut M3.
- 1 x Sticker Yellow.
- 1 x Sticker White.

Plastic Front Landing Gear
[H0638-S]

- 2 x Plastic Front Landing Gear.

Anti-Rotation Guide
[H0643-S]

- 1 x Anti-Rotation Guide.
- 1 x Head Cap Screw M2.8x8mm.
- 1 x Finisching Washer M2.5.

Yellow Tail Boom
[H0622-S]

- 1 x Yellow Tail Boom.
- 2 x Nylon Screw M8x14mm.
- 2 x Metric Hex Nylon Nut M8H6.5.
- 2 x Locking Element Tail.
- 4 x Metric Hex Nylon Nut M3.
- 2 x Double Side Tape.

White Tail Boom
[H0623-S]

- 1 x White Tail Boom.
- 2 x Nylon Screw M8x14mm.
- 2 x Metric Hex Nylon Nut M8H6.5.
- 2 x Locking Element Tail.
- 4 x Metric Hex Nylon Nut M3.
- 2 x Double Side Tape.

Yellow Canopy
[H0624-S]

- 1 x Yellow Canopy.
- 2 x Canopy Groummet.
- 1 x Canopy Mouse.

White Canopy
[H0625-S]

- 1 x White Canopy.
- 2 x Canopy Groummet.
- 1 x Canopy Mouse.

Main Blade
[BW0500-S]

- 2 x Main Blade.

Tail Blade
[BW5080-S]

- 2 x Tail Blade.

[HC002-S]

- 5 x Socket Head Cap Screws M2x5mm.

[HC004-S]

- 5 x Socket Head Cap Screws M2x6mm.

[HC005-S]

- 5 x Button Head Cap Screws M2x5mm.

[HC008-S]

- 5 x Socket Head Cap Screws M2x8mm.

[HC014-S]

- 5 x Socket Head Cap Screws M2x12mm.

[HC018-S]

- 5 x Socket Head Cap Screws M2.5x6mm.

[HC020-S]

- 5 x Socket Head Cap Screws M2.5x8mm.

[HC022-S]

- 5 x Socket Head Cap Screws M2.5x10mm.

[HC026-S]

- 5 x Socket Head Cap Screws M2.5x12mm.

[HC028-S]

- 5 x Socket Head Cap Screws M2.5x15mm.

[HC032-S]

- 5 x Socket Head Cap Screws M2.5x18mm.

[HC033-S]

- 4 x Socket Head Cap Shouder M2.5x19mm.
- 4 x Metrix Hex Nylon Nut M2.5.

[HC044-S]

- 5 x Socket Head Cap Screws M3x6mm.

[HC056-S]

- 5 x Socket Head Cap Screws M3x10mm.

[HC074-S]

- 2 x Socket Head Cap Shouldereds M3x16.
- 2 x Metric Hex Nylon Nuts M3H4.

[HC082-S]

- 5 x Socket Head Cap Shouldereds M3x20.

[HC083-S]

- 5 x Socket Head Cap Shouldereds M3x22.

[HC111-S]

- 5 x Socket Head Cap Shouldereds M4x24.

[HC122-S]

- 5 x Button Head Cap Screws M6x10mm.

[HC128-S]

- 5 x Flat Head Cap Screws M2.5x5mm.

[HC132-S]

- 5 x Flat Head Cap Screws M3x5mm.

[HC146-S]

- 5 x Set Screws M2.5x15mm.

[HC148-S]

- 5 x Set Screws M3x8mm.

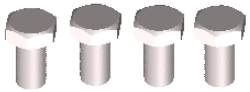
[HC152-S]

- 5 x Set Screws 4x4mm.

[HC154-S]

- 5 x Set Screws 4x15mm.

[HC164-S]

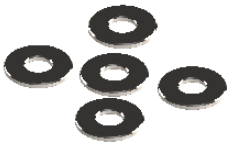


- 4 x Vite Nylon Esa Caps M8x14mm.

[HC172-S]

- 10 x Washers ∅2.5x∅4x0.3mm.

[HC184-S]



- 5 x Washers ∅4.3x∅11x1mm.

[HC193-S]

- 10 x Washers ∅6.1x∅12x1mm.

[HC200-S]

- 10 x Metric Hex Nylon Nuts M2.5H3.5.

[HC206-S]

- 10 x Metric Hex Nylon Nuts M3H4.

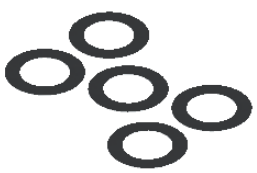
[HC212-S]

- 10 x Metric Hex Nylon Nuts M4 H5.

[HC228-S]

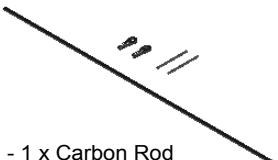
- 4 x Shim Washers ∅8x∅14x0.2mm.

[HC234-S]

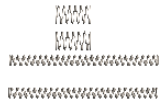


- 5 x Shims Washer ∅10x∅16x0,1mm.

[HC235-S]



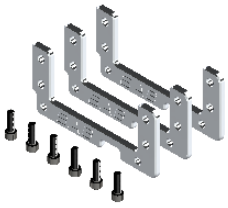
- 1 x Carbon Rod ∅2.5 x∅4 x596mm.
- 2 x Plastic Ball Links.
- 2 x Threaded Rods M2.5x40mm.

[HC316-S]  - 2 x Springs de 3 / df 0.53 / LL35. - 2 x Springs de 5 / df 0.3 / LL6.	**[HC342-S]**  - 1 x Tail Belt 1692-HTD-6mm.	**[HC344-S]**  - 1 x Motor Belt 240-3GT-09.	**[HC351-S]**  - 5 x Flat Cap Screws M4x6mm.
[HC400-S]  - 4 x Flanged Bearings ∅2.5x∅6x2.5mm.	**[HC403-S]**  - 4 x Bearings ∅4x∅9x2.5mm.	**[HC412-S]**  - 4 x Flanged Bearings ∅5x∅13x4mm.	**[HC416-S]**  - 2 x Flanged Bearings ∅7x∅11x2.5mm.
[HC417-S]  - 2 x Bearings ∅8x∅14x4mm.	**[HC419-S]**  - 2 x Bearings ∅8x∅16x5mm.	**[HC420-S]**  - 2 x Bearings ∅10x∅15x4mm.	**[HC422-S]**  - 4 x Bearings ∅10x∅19x5mm.
[HC430-S]  - 2 x Bearings Rads ∅30x∅37x4mm.	**[HC434-S]**  - 2 x Thrust Bearings ∅4x∅9x4mm.	**[HC437-S]**  - 2 x Thrust Bearings ∅8x∅14x4mm.	**[HC442-S]**  - 1 x One Way Bearing ∅10x∅14x12mm.
[HA006-S]  - 1 x Canopy Mousse 80cm.	**[HA016-S]**  - 1 x Plastic Wrench Nut M8 & M6.	**[HA023-S]**  - 3 x Straps 20x440mm.	**[HA027-S]**  - 2 x Strap 25x540mm.
[HA106-S]  - 2 x Antenna Guide.	**[HA111-S]**  - 4 x Canopy Grommets.	**[HA112-S]**  - 1 x Canopy Edge Protection 1000mm.	

UPGRADES and ACCESSORIES

Aluminum Mini Servo Support
[H0314-S]

Alluminum servos support for the best precision of cyclic pith control.



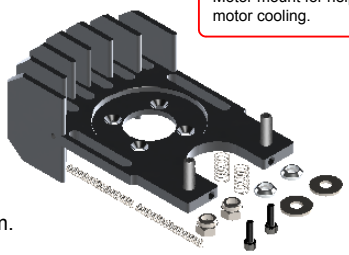
- 2 x Aluminum Servo Support.
- 6 x Socket Head Cap Screws M2.5x8mm.

Quick Release Canopy Mount
[H0321-S]

- 2 x Quick Release Canopy .
- 2 x Flat Head Cap Screws M3x8mm.
- 2 x Canopy Grommet.

Motor Mount Cooling
[H0317-S]

Motor mount for helps the motor cooling.



- 1 x Motor Mount Cooling.
- 2 x Spring de 5 / df 0.3 / LL6.
- 2 x Spring de 3 / df 0.53 / LL35.
- 2 x Washer ∅4.3x∅11x1mm.
- 2 x Metrix Hex Nylon Nut M4H5.
- 2 x Socket Head Cap M2.5x8mm.
- 2 x Finishing Washer M2.5mm.
- 2 x Set Screw M4x15mm.

Delrin Tecno Dampener
[H0425-S]

- 2 x CNC Delrin Dampener.
- 4 x Steel Shims Ø8x Ø14 x 0,2mm.
- 2 x O-ring Damperner.

HPS3 Rotor Head
[H0489-K]

- 1 x HPS3 Rotor Head (SET).

SAB HELI DIVISION
[HA050-S]

- 4 x Plastic Servo Horn.

SAB HELI DIVISION
New Black T-shirt
[HM025-S-M-L-XL-XXL]

- SAB HELI DIVISION
  New Black T-shirt.

SAB HELI DIVISION
Black Polo Shirt
[HM027-S-M-L-XL-XXL]

- SAB HELI DIVISION
  Black Polo Shirt.

SAB HELI DIVISION
Black Hoodies
[HM029-S-M-L-XL-XXL]

- SAB HELI DIVISION
  Black Hoodies.

SAB HELI DIVISION
Neck Strap
[HM034]

- 1 x Neck Strap.

SAB Goblin 500/570
Carry Bag - Green
[HM046-S]

- 1 x Carry Bag.

SAB HELI DIVISION
Transmitter Case
[HM055]

- 1 x Transmitter Case.

- Carefully check your model before each flight to ensure it is airworthy.
- Consider flying only in areas dedicated to the use of model helicopters.
- Check and inspect the flying area to ensure it is clear of people orbstacles.
- Rotor blades can rotate at very high speeds! Be aware of the danger they pose.
- Always keep the model at a safe distance from other pilots and spectators.
- Avoid maneuvers with trajectories towards a crowd.
- Always maintain a safe distance from the model.

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