

OXY 3

Instructions Manual

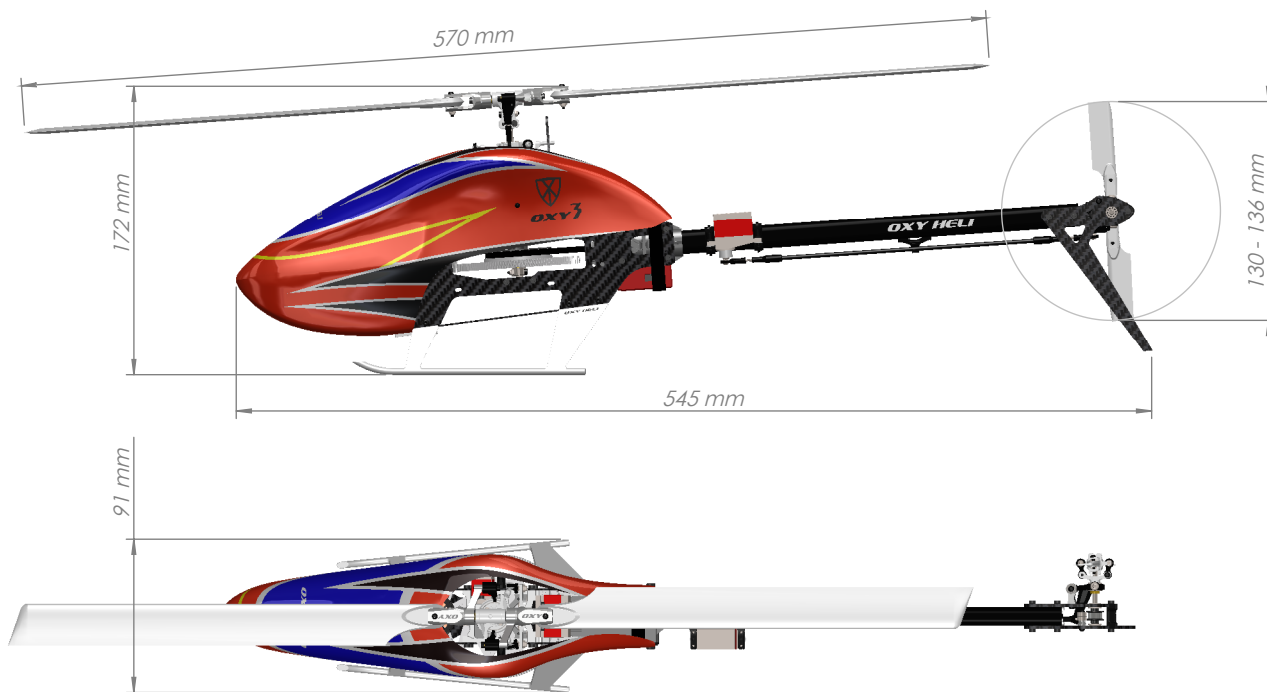


VERY IMPORTANT NOTE:

- Inside Box 02 you will find CD Rom - Instructions Manual PDF format.
- Visit Oxy Heli web site www.oxyheli.com to verify the latest revision.
- In the same box you will also find the serial number card, Please take a moment to visit Oxy Heli web site and follow the instruction how to register your personal information and serial number.
- Is extremely important you take few minutes to register your helicopter and serial number with us. This is the only way to be in connection with us and receive news, promotion and technical tips.
- We will also extract 5 serial numbers each year that will win a discount coupon of 200 USD each to spend in Oxy Heli +or Lynx Heli web.
- Thanks you for your new purchase, we wish the best enjoyment with your new Oxy 3 Heli.

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SPECIFICATIONS

-Standard main rotor diameter	: 570mm (with 255mm blades).
-Standard main blade length	: 255mm.
-Main Grip Clamping	: M2 / 5.6 mm root.
-Standard tail rotor diameter	: 130-136mm.
-Standard tail blade length	: 47 - 50mm.
-Tail Blade Clamping	: M2 / 3.5 mm root.
-Weight	: 450g (ready to fly excluding batteries)
-Maximum motor size	: diameter 28mm.
-Maximum battery size	: length 76mm, height 35mm, width 37mm, weight 180gr

IMPORTANT NOTE.

This model helicopter has been designed and produced to be a high performance 3D machine. With its simple design and low parts count, pilots of all skill levels will appreciate its easy reparability. This is not a toy. Please take care assembling the model, and take care and responsibility when you fly it. We take no responsibility for any damage or injuries, either direct or consequential, from the use of this product. If you are not experienced in the assembly and flying of a high performance model helicopter we recommend you seek the assistance of an experienced pilot. Above all, fly safely and we hope you enjoy this model.

SAFETY GUIDELINES.

Only fly this model in areas designated for the use of model aircraft. Ensure you obtain indemnity insurance, normally available through your National model aircraft association. Remain at least 6 meters (20 feet) from the model at all times. Never allow spectators or animals any closer than 30 meters (100 feet) from the model.

NOTES FOR ASSEMBLY.

Please read this instruction manual fully before beginning assembly of this model helicopter. Be sure to use quality tools during the assembly process, and remember not to overtighten small fasteners. Note the following symbols which are used in this manual. Use thread lock sparingly where indicated. If you are unsure about an assembly step, please seek the advice of an experienced pilot. Warranty on any parts is only applicable prior to assembly of the part on the model.

ALL PRE ASSEMBLED PARTS HAVE NOT LOCK THREAD ON THE SCREW. IS MANDATORY READ AND FOLLOW CAREFULLY NOTES IN EACH ASSEMBLY DIAGRAMS STEP. WRONG ASSEMBLY OR LOCK THREAD MISSING WILL CAUSE FLY ISSUE OR INJURES.



Important note

Use Loctite 243
Medium StrengthUse Loctite 262
High StrengthUse Loctite 648
Bonding

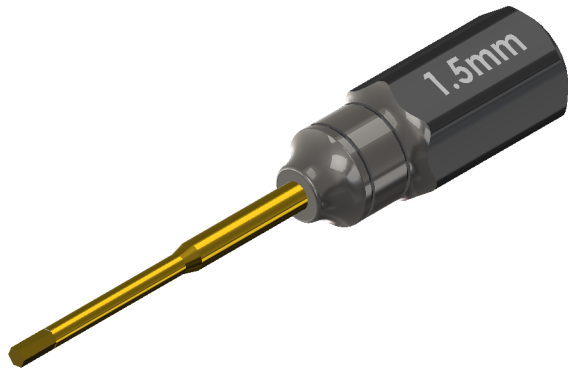
Use CA Glue




Use Silicone Grease

TOOLS REQUIRED

1.5mm Hex Screw Driver
(High quality)

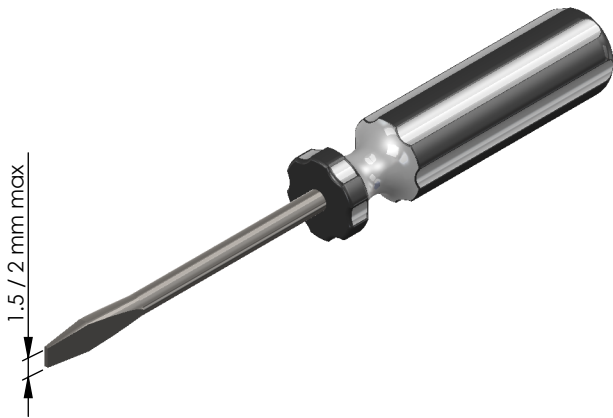


 Two Tool Required

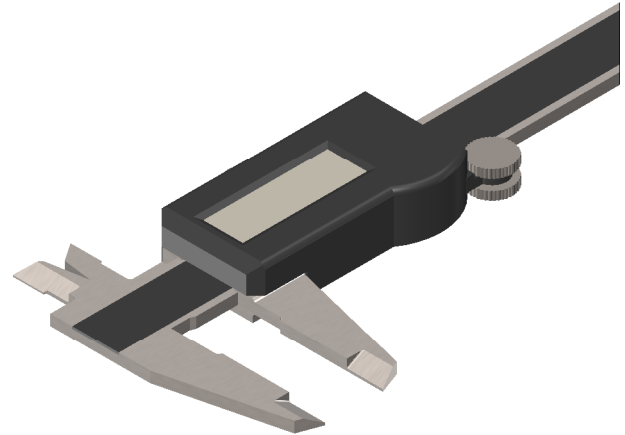
2mm Hex Screw Driver
(High quality)



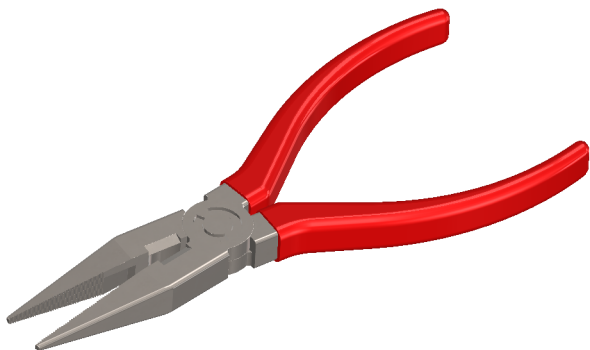
Small Tip - Flat Screw Driver



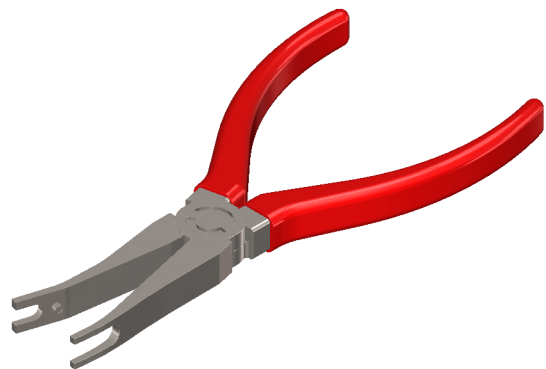
Caliper



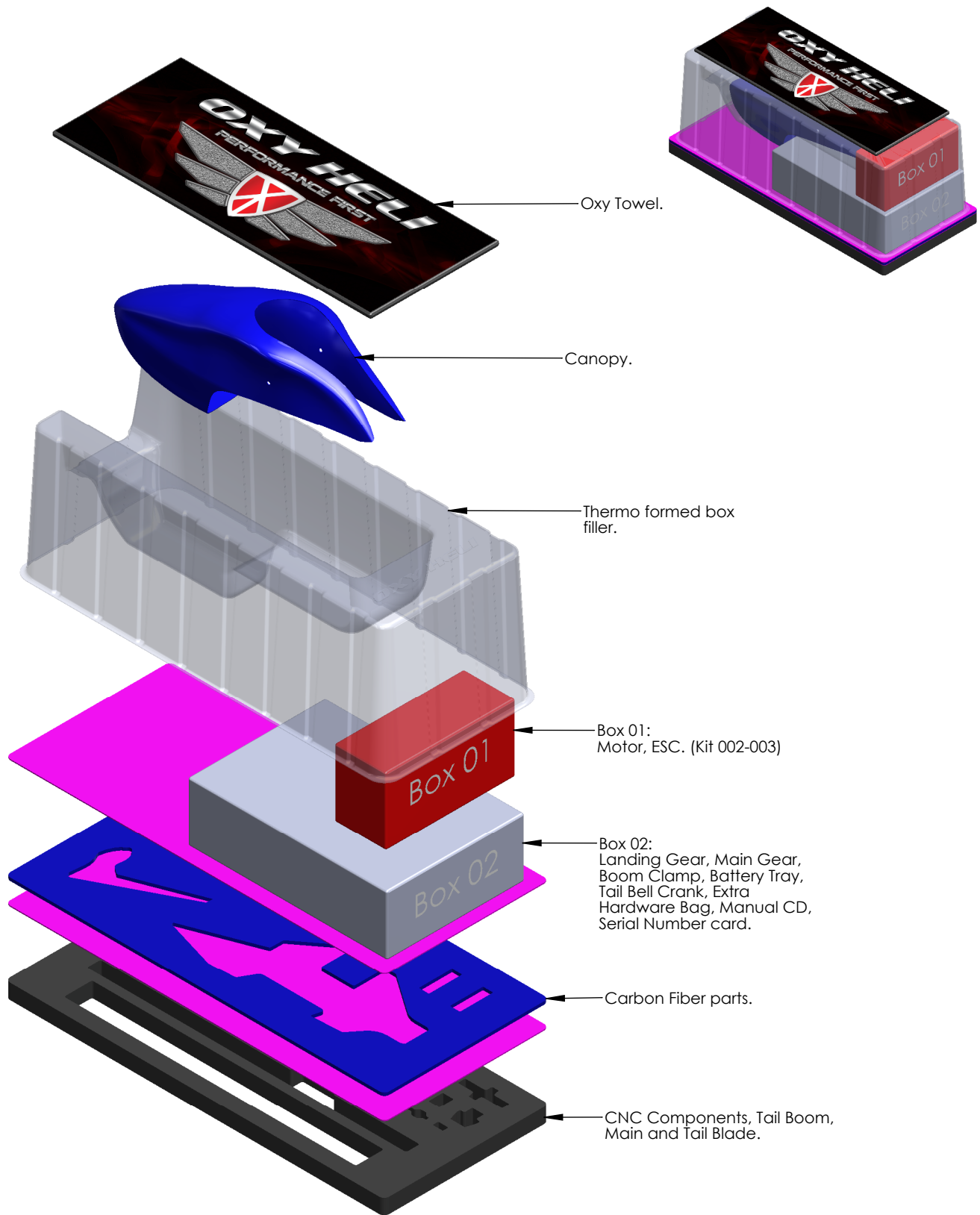
Flat nose Pliers



Uniball Pliers



INSIDE THE BOX

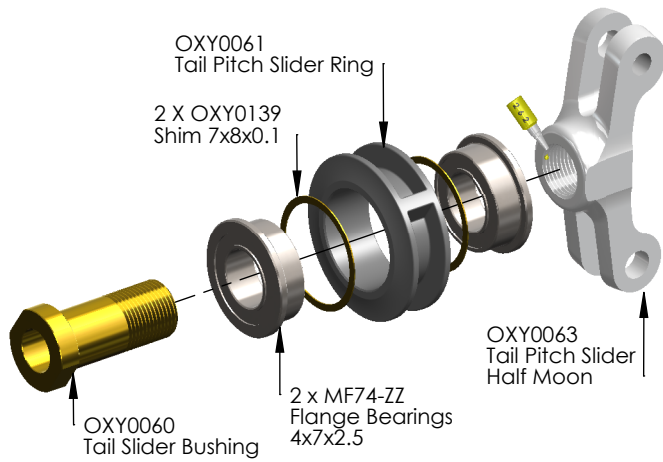


ASSEMBLY PARTS FINDER HELP NOTE:

In each Manual step, you can find a parts finder note. Follow this information to find necessary step parts inside Oxy 3 box.

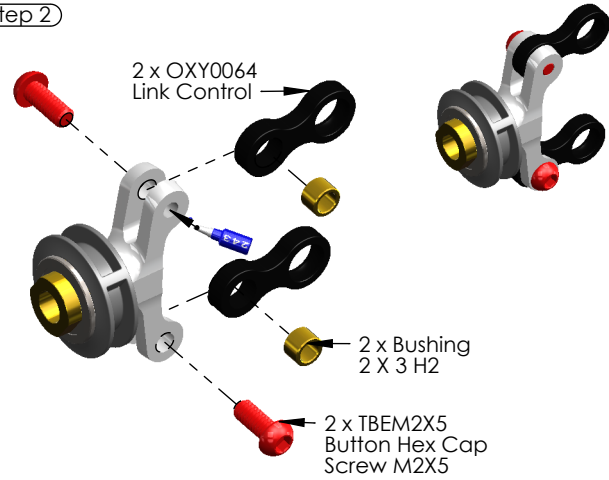
Tail Pitch Slider Assembly. (Box 02 / Bag 1)

Step 1



Important Note:
This part, for tuning reason come factory pre assembled with grease and loctite. Ready to use.

Step 2

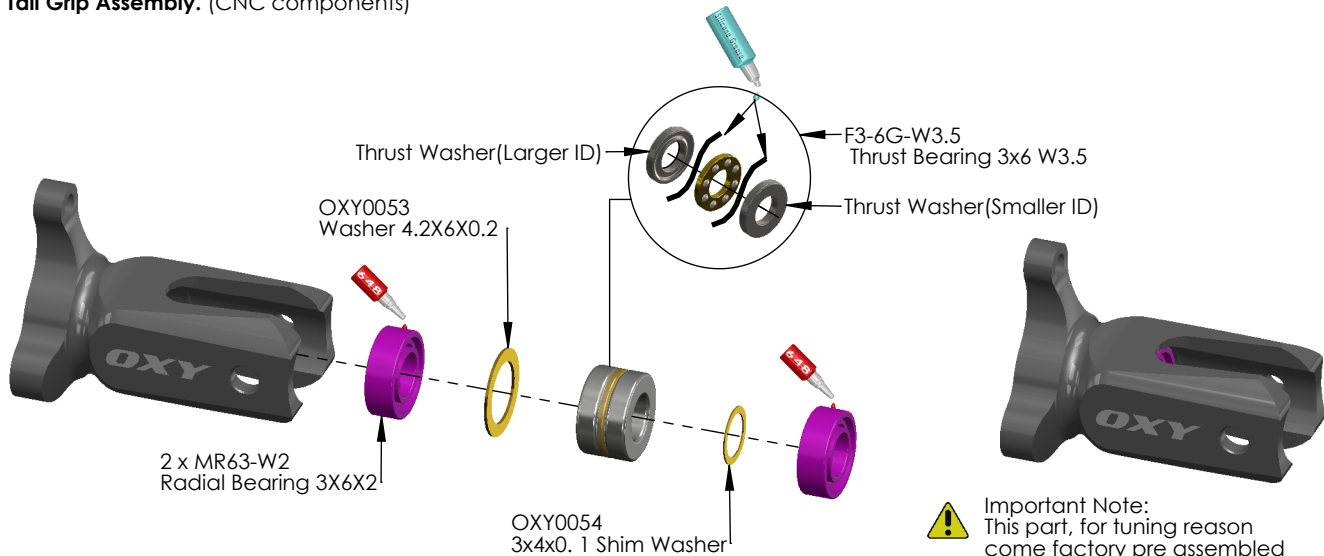


Assure lock thread don't contaminate the bushing sliding. In case of friction reassembly after cleaning.



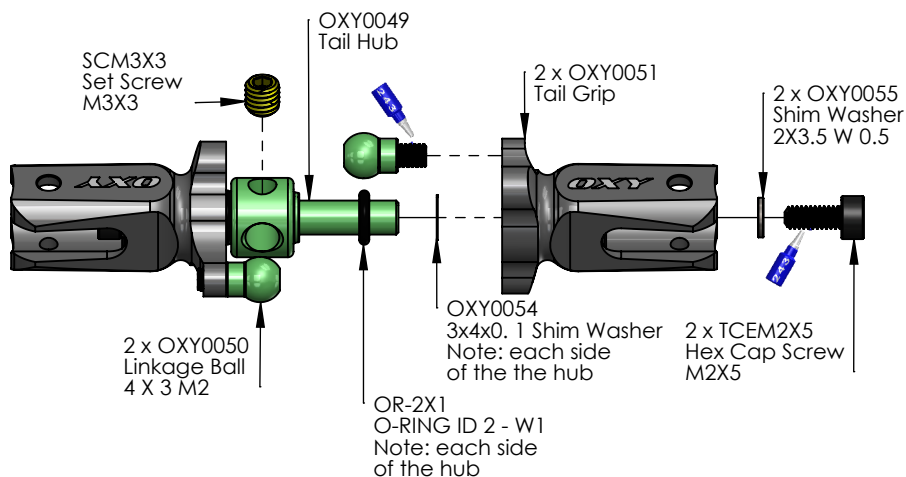
Important Note:
This part come pre assembled without lock thread for quality reason. Follow instruction per final assembly.

Tail Grip Assembly. (CNC components)



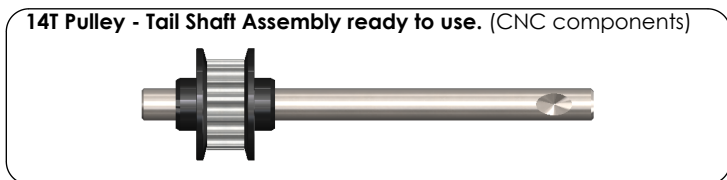
Important Note:
This part, for tuning reason come factory pre assembled with grease and loctite. Ready to use.

Tail Hub Assembly. (CNC components)



Important Note:
This part come pre assembled without lock thread for quality reason. Follow instruction per final assembly.





Pre Tensioner Belt Pulley Assembly. (Box 02 / Bag 2)

OXY0071 Bearing Bushing

TBEM2X5 Button Hex Cap Screw M2X5

2 x MR52-W2.5 Radial Bearing 3X6X2.5

TBEM2X3 Button Hex Cap Screw M2X3

Important Note:
This part come pre assembled without lock thread for quality reason. Follow instruction per final assembly.

Tail Bell Crank Assembly. (Box 02 / Bag 3)

OXY0056 Tail Bell Crank

2 x OXY0057 Tail Pin Screw

OXY0092 4X2X4.2 M2 Linkage Ball

Important Note:
This part come pre assembled without CA superglue for quality reason. Follow instruction per final assembly, install without overlock.

Vertical Fin Assembly. (Carbon Fiber parts)

MF73ZZ Flange Bearing 3x7x3

OXY0069 Vertical Fin Block

Important Note:
This part come pre assembled with CA superglue for quality reason. Ready to use

Tail Case Plate Assembly. (Carbon Fiber parts)

OXY0070 Tail Case Bearing Block

MF73ZZ Flange Bearing 3x7x3

Important Note:
This part come pre assembled with CA superglue for quality reason. Ready to use

Pre Tensioner Belt Pulley Assembly.

TBEM2X5 Button Hex Cap Screw M2X5

Pre Tensioner Belt Pulley Assembly

Note: screw come pre assembled into Pre Tensioner Belt Pulley

Bell Crank Assembly. (Box 02 / Bag 3)

2 x TBEM2X5 Button Hex Cap Screw M2X5

OXY0058 Bell Crank Arm

2 x MF682ZZ Flange Bearings 2x5x2.3

Important Note:
This part, for tuning reason come factory pre assembled with Loctite. Ready to use.

Bell Crank Arm Assembly.

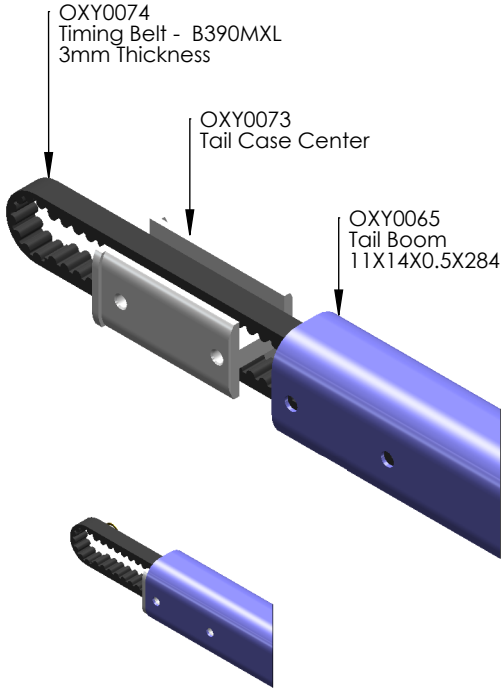
Bell Crank Arm Assembly

2 x TBEM2X5 Button Hex Cap Screw M2X5

Note: screw come pre assembled into Bell Crank Arm

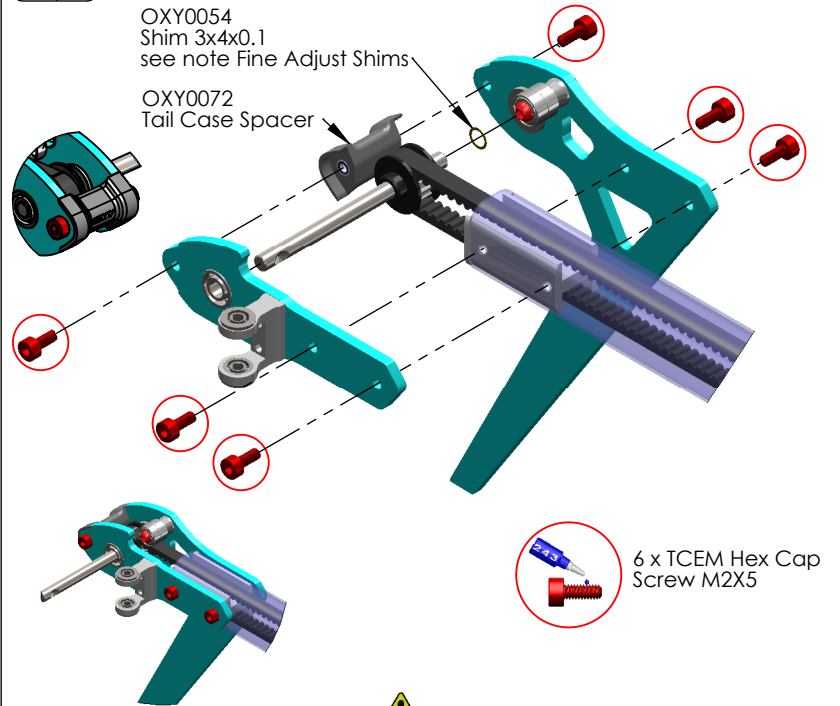
Tail Case Assembly. (CNC components)
Box 02 / Bag 4)

(Step 1)



Tail Case Assembly.

(Step 2)



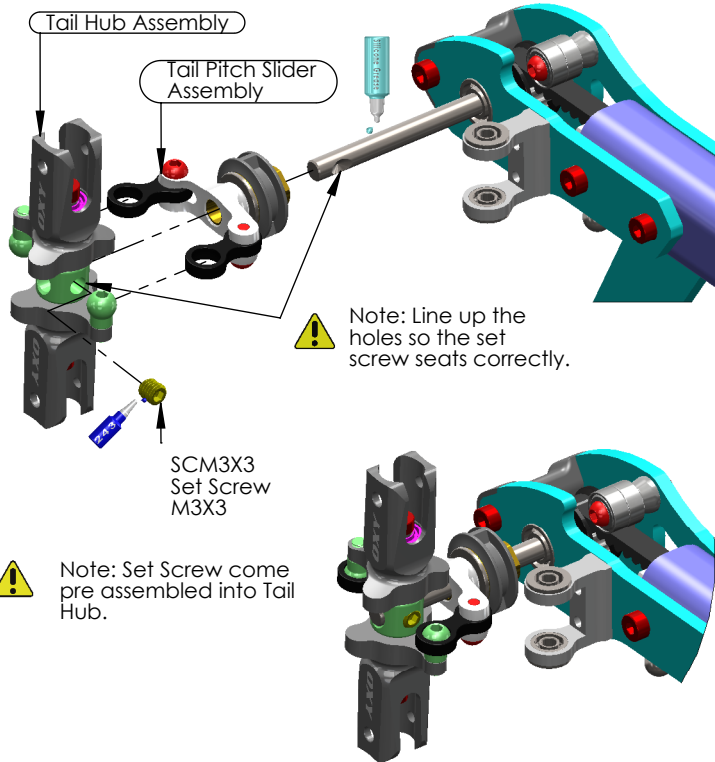
Note: screw come pre assembled into Tail Boom & Tail Case Spacer.



Fine Adjust Shims note:
In order to give fine adjustment options, into Extra Hardware Bag you can find extra Shims 3x4x0.1 Start assembly without shims, if Tail Assembly have sideways play, add shims per need only on the shown side.

Tail Assembly.

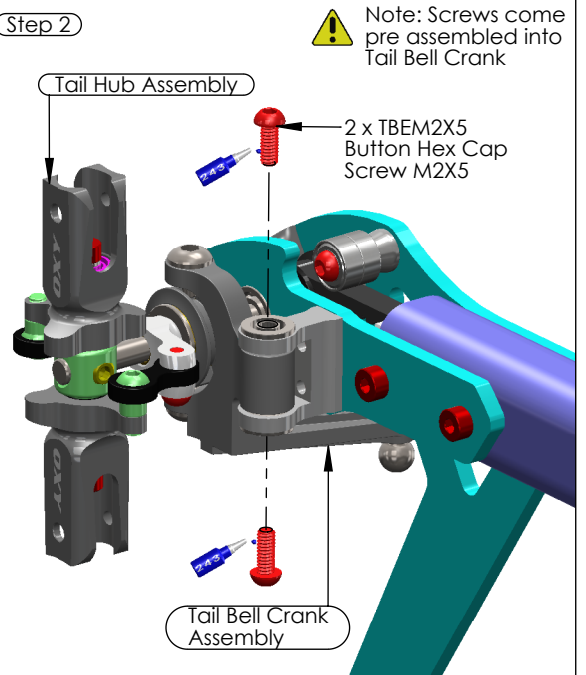
(Step 1)



Note: Set Screw come pre assembled into Tail Hub.

Tail Assembly.

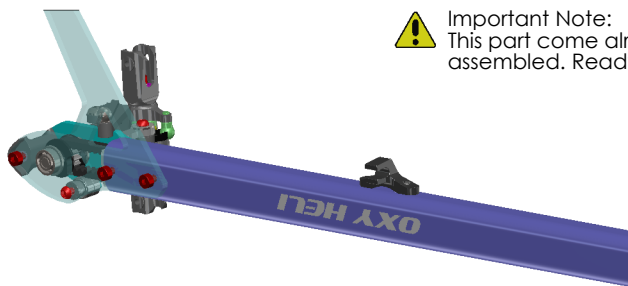
(Step 2)



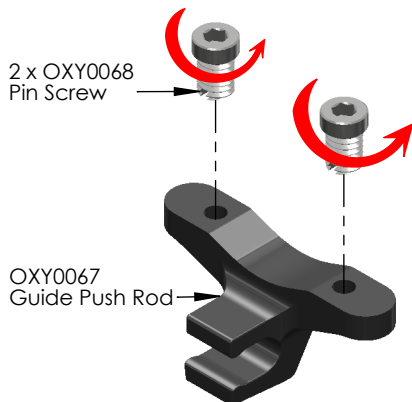
Important Note:
Once finish the assembly, assure the system can slide and move without friction. If tail system is assembled correctly, sliding should be smooth and without play. In case of friction or play recheck each single components and re assembly per need. If necessary adjust position of Bell Crank Arm.

Tail Push Rod Guide Assembly.
(CNC components).

Important Note:
This part come already pre assembled. Ready to Use.



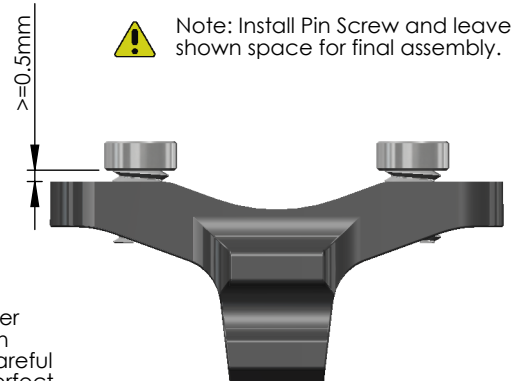
Step 1



Note: To install this pin screw rotate counter clock wise.

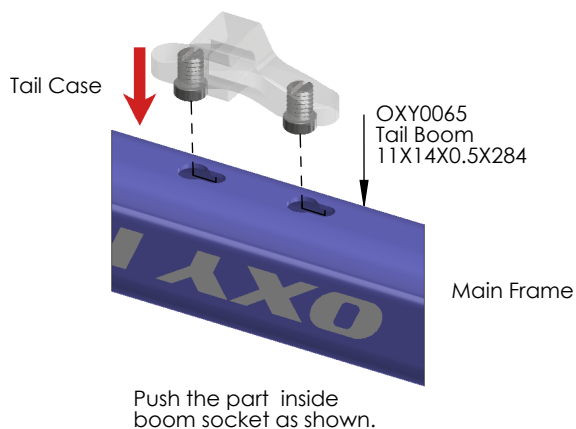
Note Pin Screw Thread : Oxy design Pin Screw with counter clockwise thread. This will help on the final locking operation. Be careful to follow our instruction to get perfect assembly.

Step 2



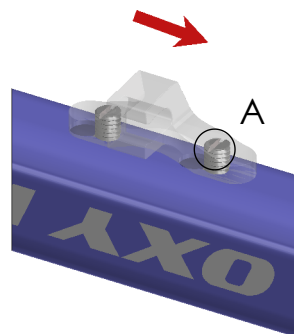
Note: Install Pin Screw and leave shown space for final assembly.

Step 3



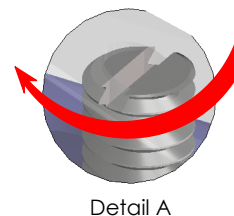
Push the part inside boom socket as shown.

Step 4



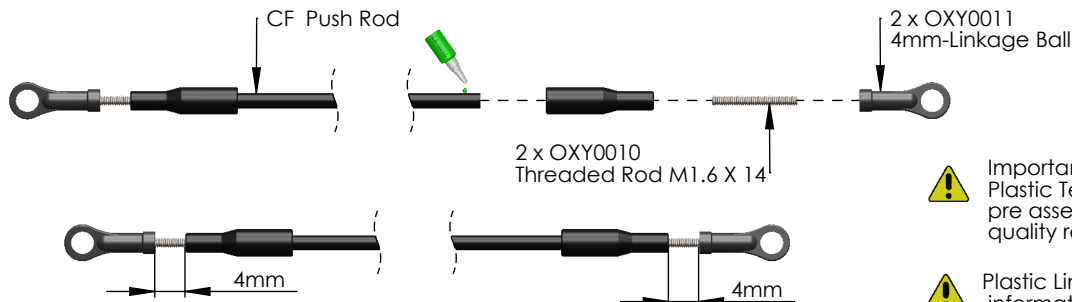
Slide the parts as shown.

Step 5



In order to lock tail push rod support, use Flat Screw Driver and turn clockwise. Do not over tighten.

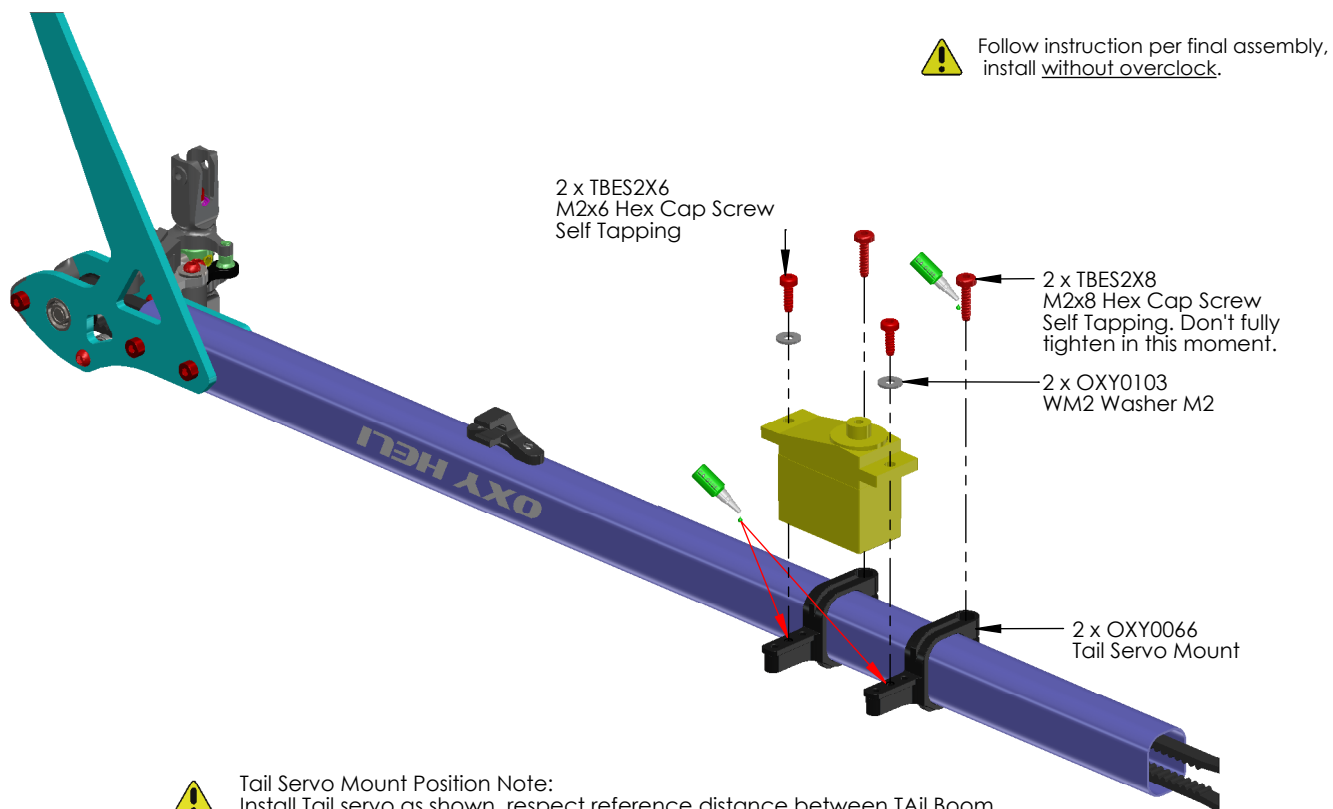
Carbon Fiber Tail Push Rod Assembly. (CNC components - Inside Tail Boom)



Important Note:
Plastic Terminals and CF Push Rod come pre assembled with CA superglue for quality reason. Ready to use.

Note: Plastic Linkage have Lynx logo to give you information about the turn adjustment, but have symmetrical ball socket shape and can be installed in both directions to achieve the best fine tuning operation.

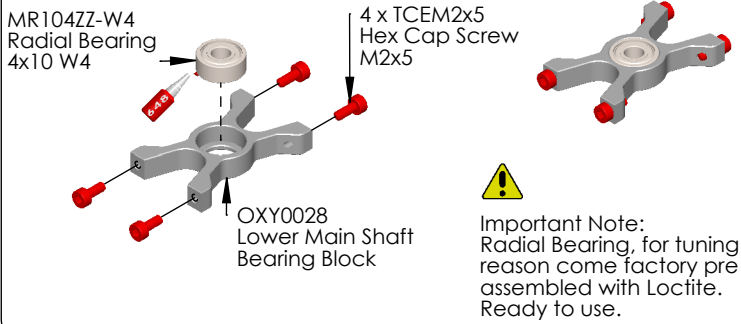
Tail Servo Mount Assembly. (Box 02 / Bag 5)



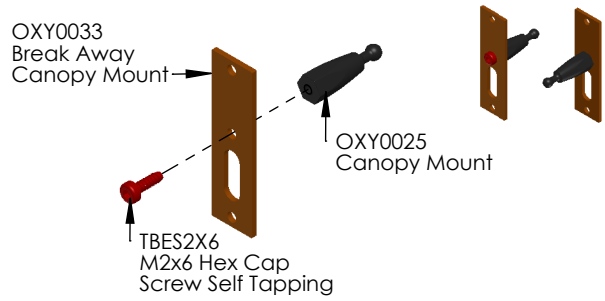
Tail Servo Mount Position Note:
Install Tail servo as shown, respect reference distance between Tail Boom End and Tail Servo Mount as shown. Lock all 4 Self Tapping Screw and add CA superglue. Don't install Servo Arm in this moment, see page 29 for final Tail Servo Set-up.



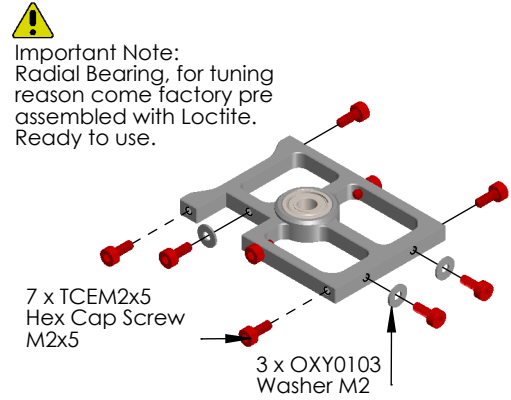
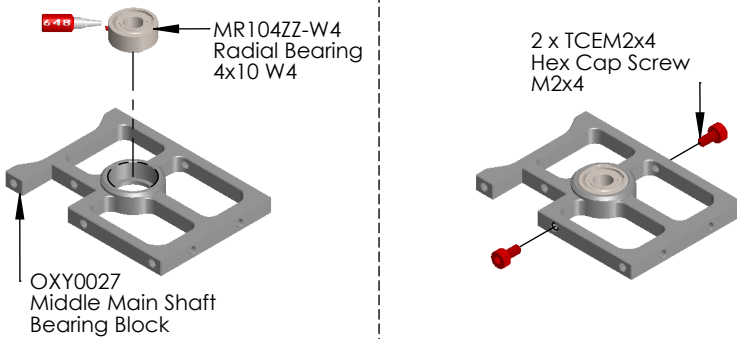
Lower Bearing Block Assembly. (CNC components)



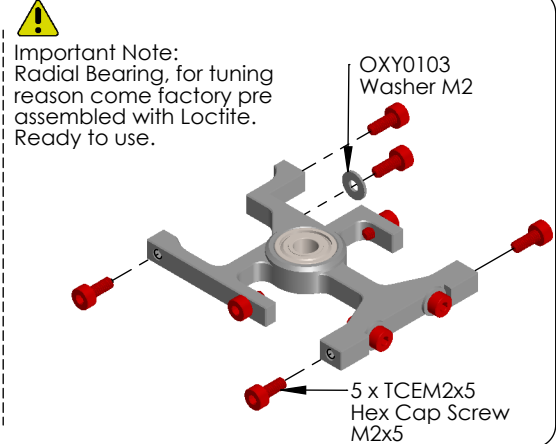
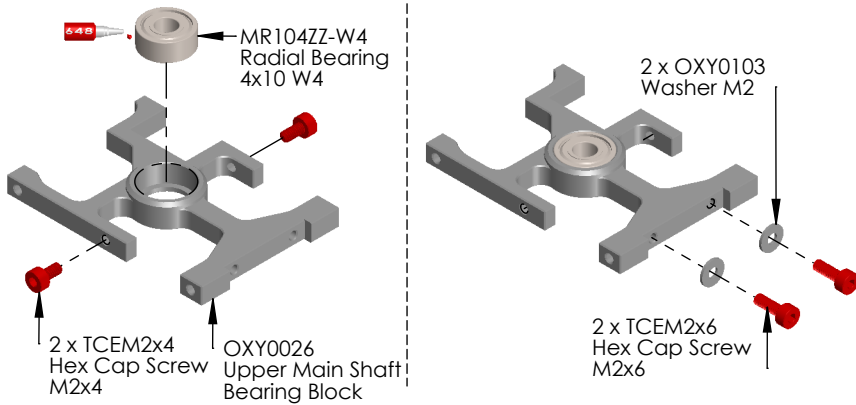
Break Away Canopy Assembly. (Box 02 / Bag 6-1 Carbon Fiber parts)



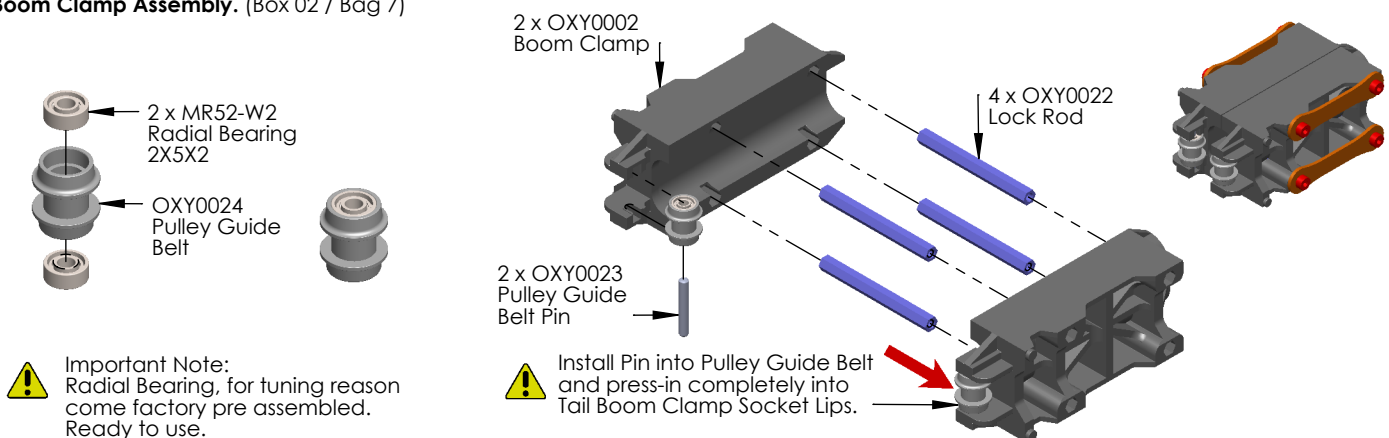
Middle Bearing Block Assembly. (CNC components)



Upper Bearing Block Assembly. (CNC components)

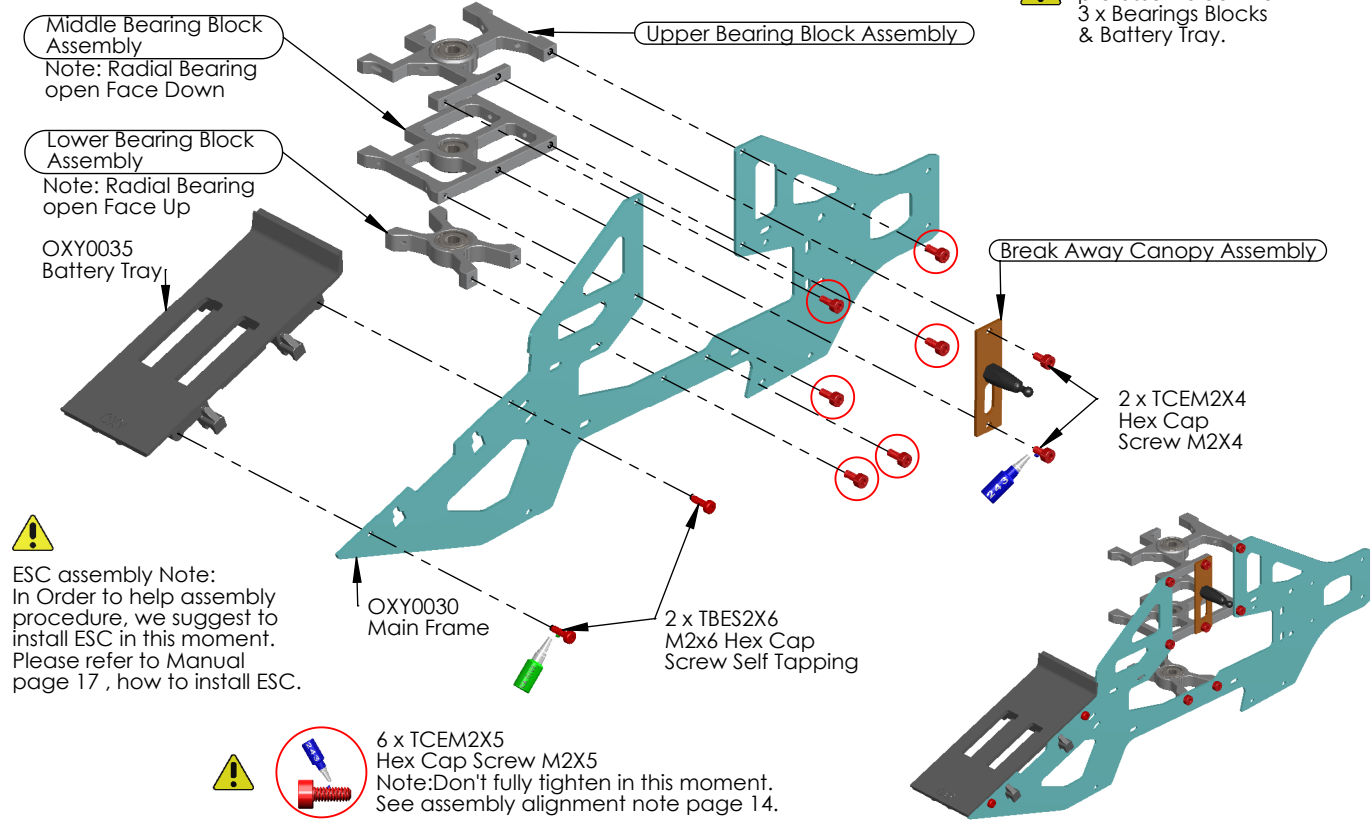


Boom Clamp Assembly. (Box 02 / Bag 7)



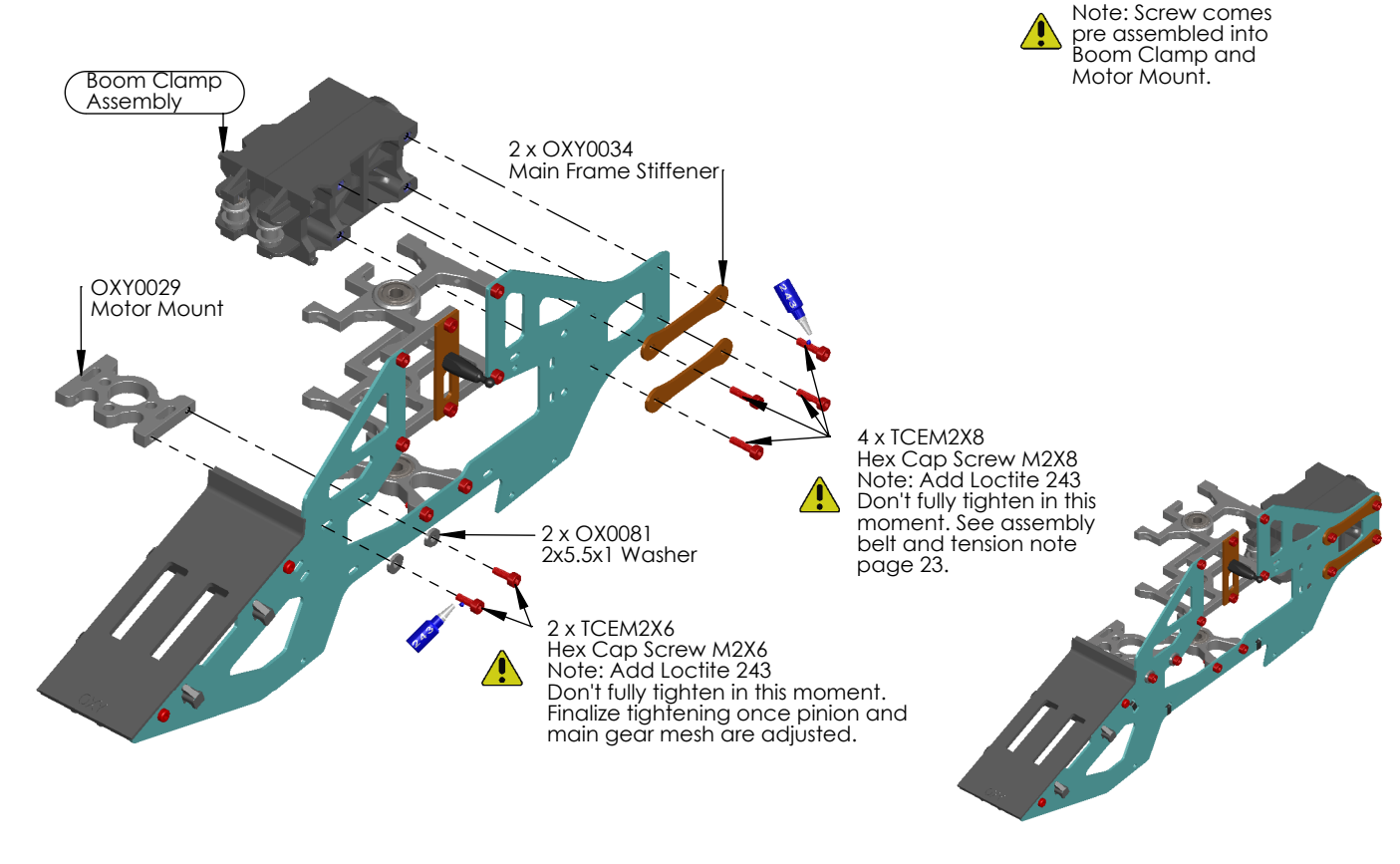
Main Frame Assembly. (Carbon Fiber parts + Box 02 / Bag 6)

(Step 01)



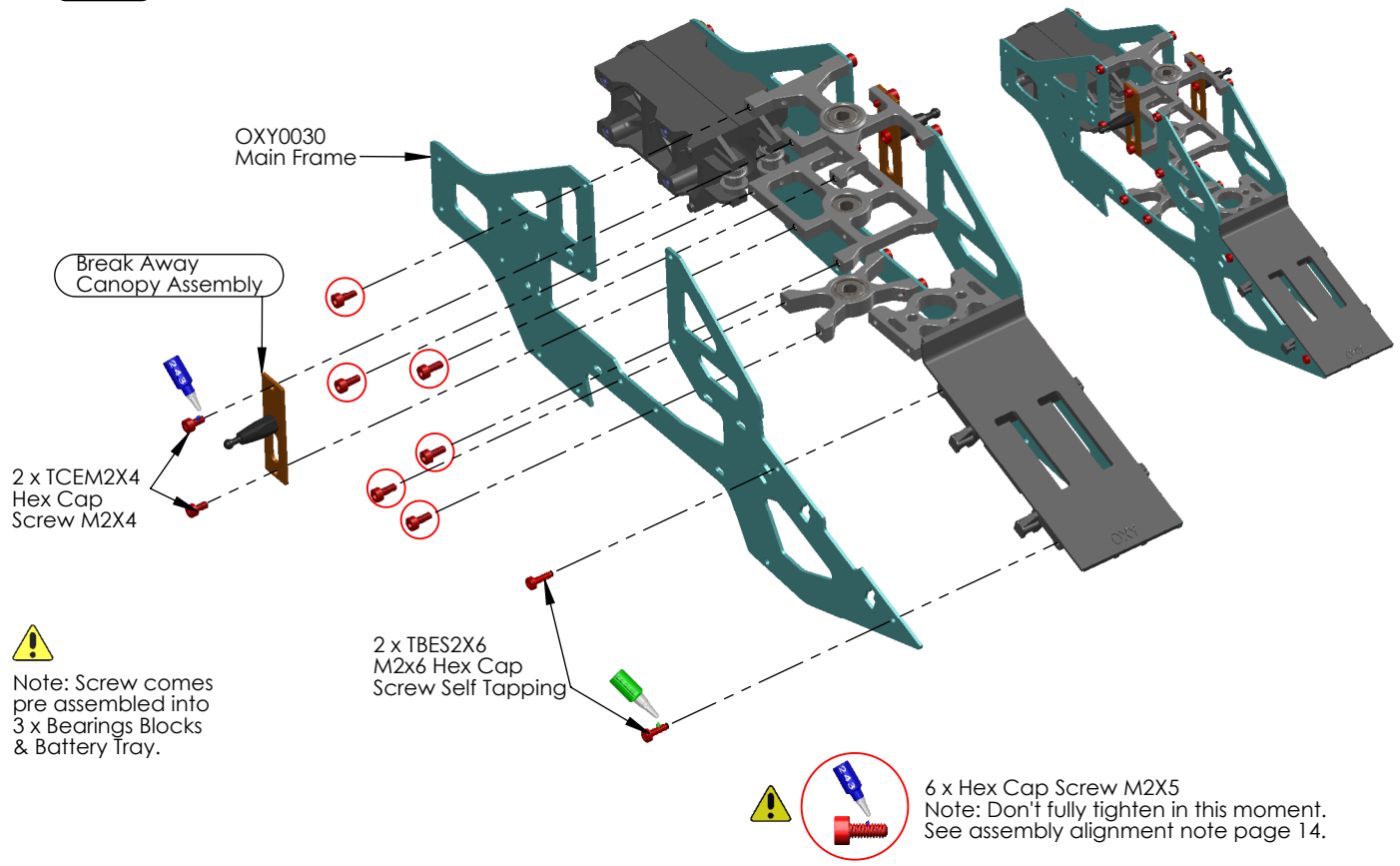
Main Frame Assembly. (CNC components)

(Step 02)



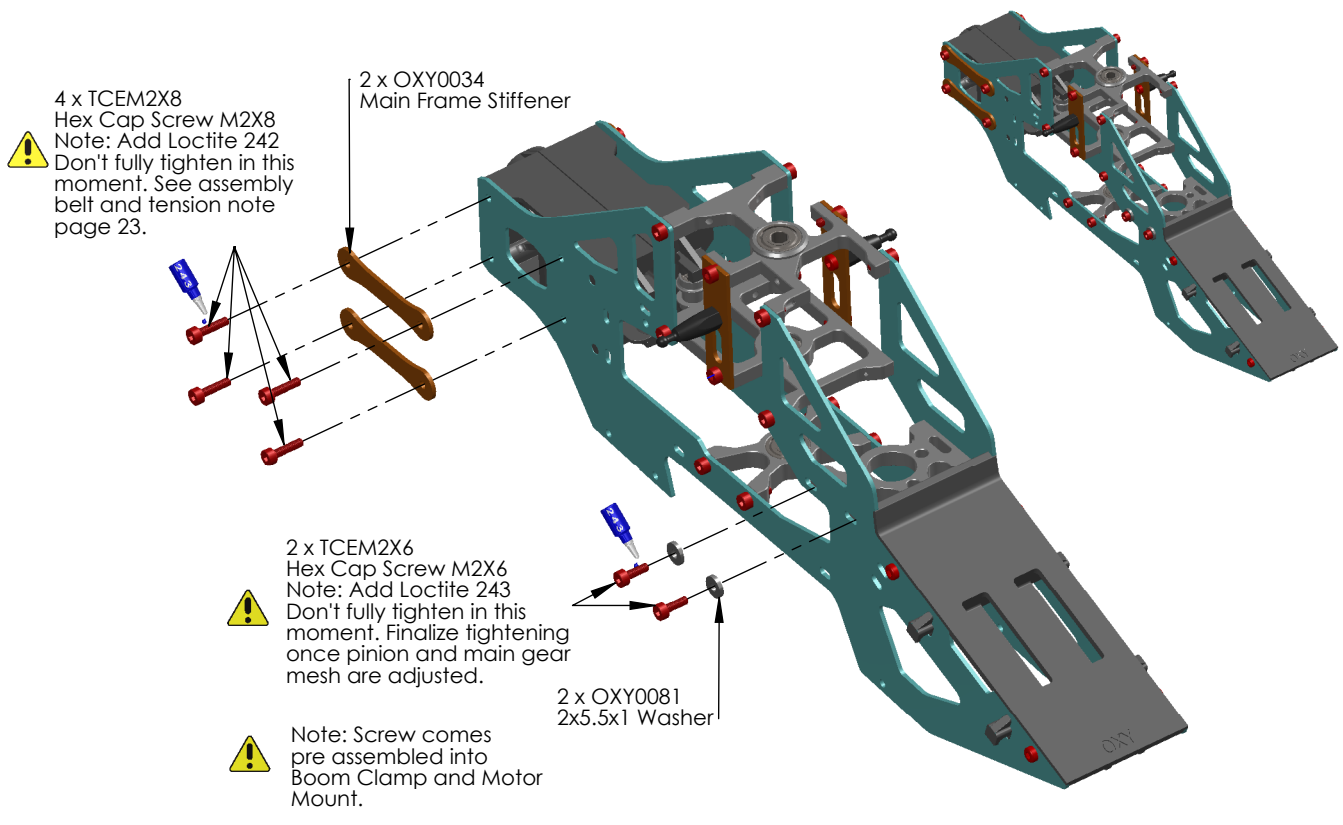
Main Frame Assembly

Step 03



Main Frame Assembly

Step 04

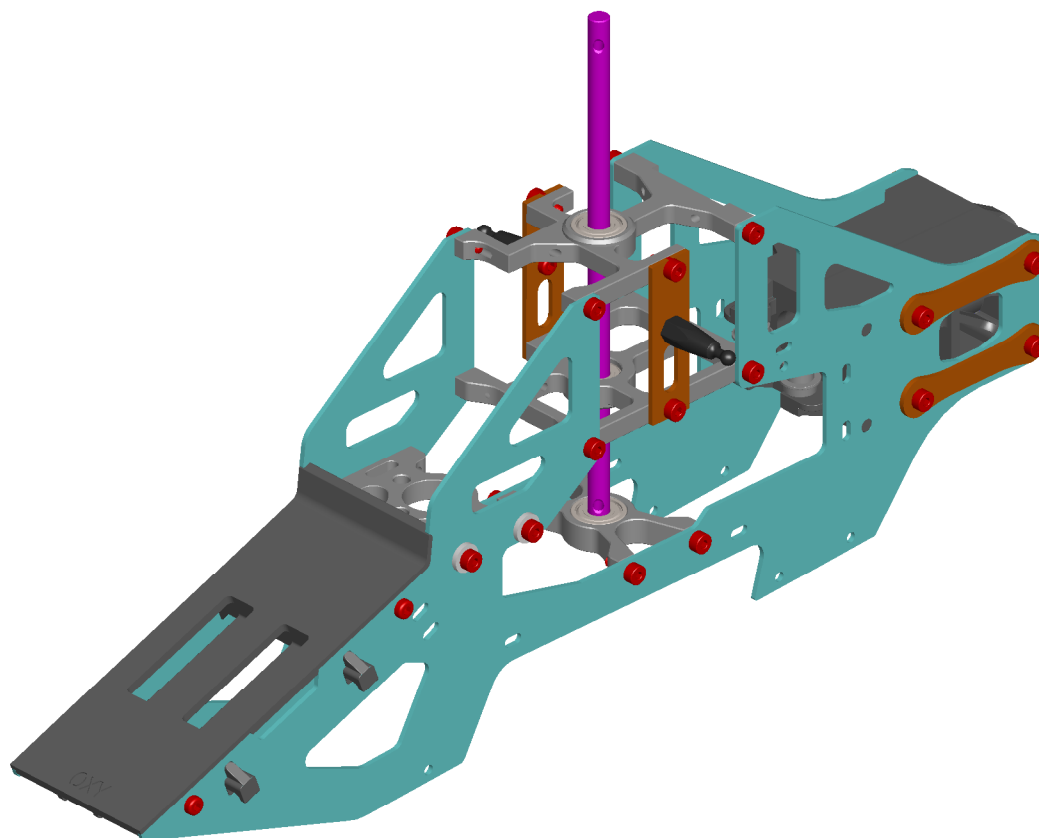
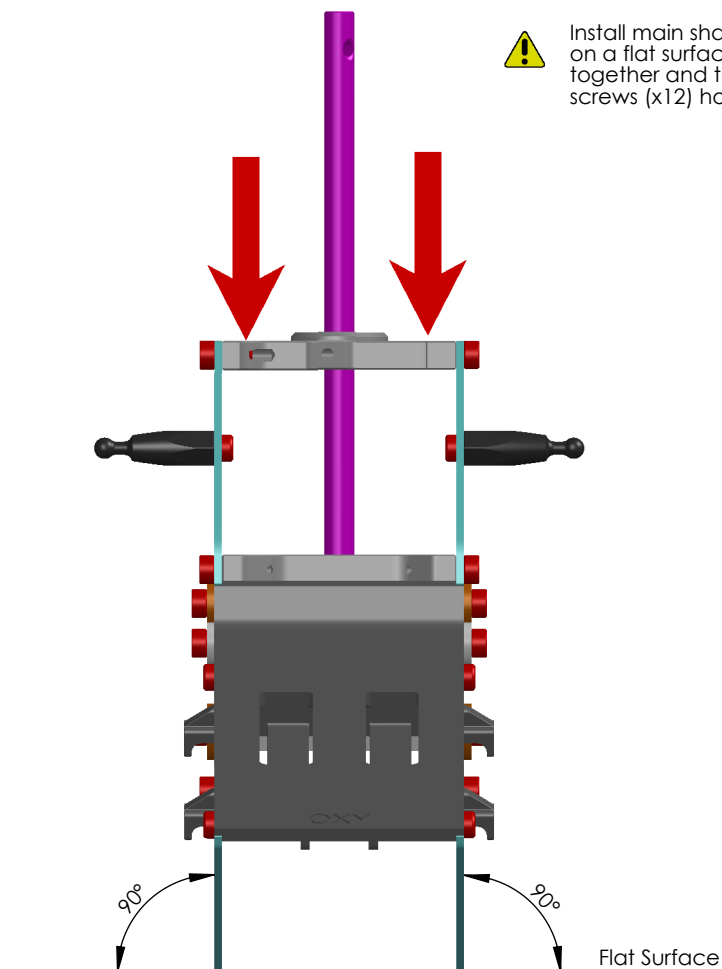


Main Frame Assembly. (CNC components)


Step 05



Install main shaft with frame assembly on a flat surface, push down on both frames together and then fully tighten all M2x5 hex cap screws (x12) holding the bearing blocks.



Motor Installation. (Box 02 / Bag 8)

 Keep motor wire pointed front.

 Pinion Installation.

SCM3X3
Set Screw M3X3

REF 14.5 mm

Oxy 3 Slant Pinion
(11T - 14T Standard)
See page 16 - Table for
best pinion choice.

3 x TBEM3X8
Button Hex Cap
Screw M3X8

OXY 3 POWER SYSTEM AND HEAD SPEED SET-UP

In order to choose the best setup for your Oxy 3, and optimize performance, is important know some basic information:

- 1- Motor Kv – the standard motor is the EOX 2214 – 4100 KV
- 2- Battery Pack – (3s or 4s)
- 3- Your target head speed

If you use a head speed calculator, use **140T** for the main gear and one of the available pinions 10T – 11T – 12T – 13T – 14T – 15T. The kit comes with two pinions (11T and 14T) which enables a wide head speed range with both 3 and 4s batteries for novice and expert pilots.

Oxy 3 gear ratio chart

Oxy P/n	Description	Ratio	Note
OXY0104	Pinion 10T-M0.5 - 3.17 Motor Shaft	14	
OXY0094	Pinion 11T-M0.5 - 3.17 Motor Shaft	12.727	Included
OXY0095	Pinion 12T-M0.5 - 3.17 Motor Shaft	11.667	
OXY0096	Pinion 13T-M0.5 - 3.17 Motor Shaft	10.769	
OXY0042	Pinion 14T-M0.5 - 3.17 Motor Shaft	10.000	Included
OXY0086	Pinion 15T-M0.5 - 3.17 Motor Shaft	9.333	

Oxy 3 Fly Style / Head Speed / Main Blade / Tail Blade / Max Pitch suggestion chart:

Fly Style	Head Speed	Main Blade	Tail Blade	Max Pitch
Hover	2500 / 3000	245 Plastic 255 CF	50	+ 10 / -3
Fly 2D	3000 / 3500	245 Plastic 255 CF	50	+ 10 / -5
Soft 3D	3000 / 3500	250 CF 255 CF	50	+/- 12
Hard 3D	3500 / 4000	250 CF 255 CF	47	+/- 14
Extreme 3D	4000 / 4500	250 CF 255 CF	47	+/- 14

Head Speed Note: Although Oxy 3 can handle very high Head Speed, we suggest don't exceed 4500 RPM to maintain a good compromise btw performances and efficiency.

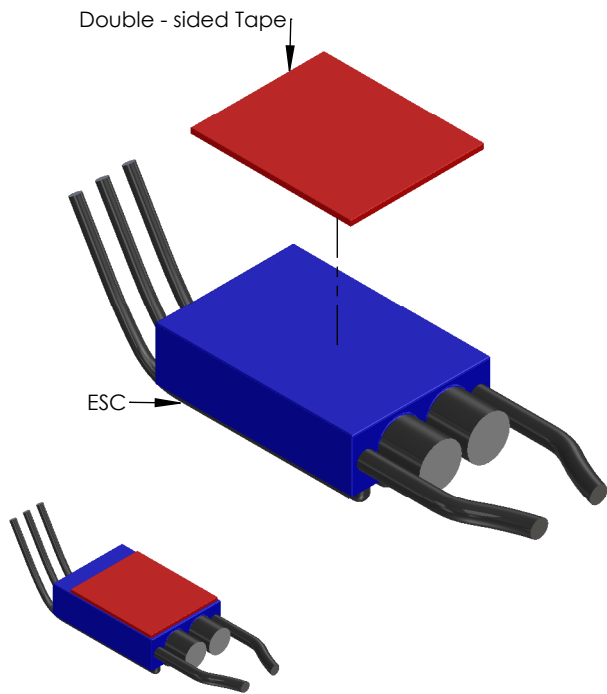
Configuration examples

Since the Oxy 3 is a high performance 3D RC helicopter, we suggest using high quality power components including motor, battery and ESC. Remember the Oxy 3 is a 300 class heli – use light components to maximize flight time and performance.

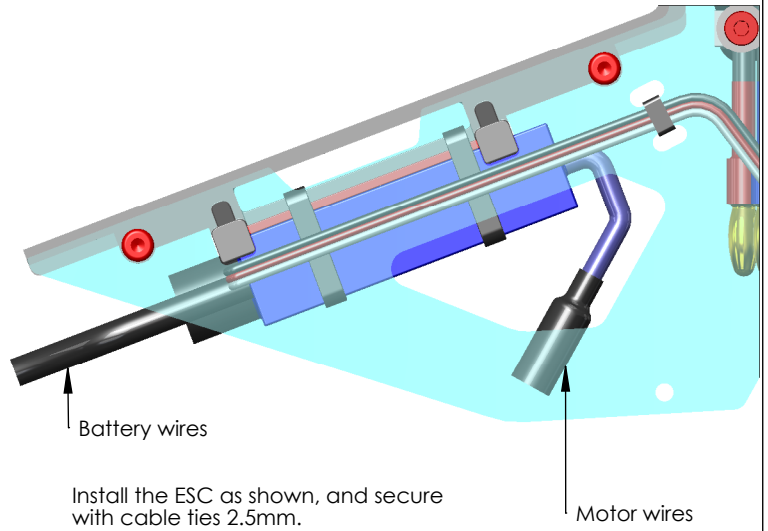
Here are some suggestions:

- Motor: Suggested KV 3000KV to 4500KV, 21-08 to 22-14 caliber series (stator diameter – stator length).
- Battery: 3 or 4S with capacity from 1300 to 1500mAh / 35C discharge rate. Maximum size: length 76mm, height 35mm, width 37mm, weight 180g.
- ESC: 35 to 40A – with BEC 6V or higher. Or use an external 5A BEC. The Oxy 3 Kit 002 comes with a 40A ESC, preset with 6V BEC and settings for the EOX 2214-4100KV motor.
- Cyclic servos: Standard MICRO size servo with metal gear – speed: =>0.06 sec/60 at 6V.
- Rudder servo: Standard MICRO size servo – speed =>0.06 sec/60 at 6V – a specific rudder servo is suggested for best tail authority.
- FBL system: The Oxy 3 was designed around the Ikon / Brain and Mini V-Bar Systems. But many other good quality FBL systems can be used, depending on your personal choice.
- Main blade: The Oxy 3 can fly with plastic or CF main blades from 245 to 255mm. Our testing was with Lynx 245mm plastic main blades, and Zeal 250mm and 255mm CF main blades. The Oxy 3 main grips use M2 clamp screw and have a 5.6mm root.
- Tail blades: The Oxy 3 uses our own OEM tail blades, either 47 or 50mm (included with the kit). They use a M2 clamp screw and 3.5 root.
We offer 47 and 50mm tail blades to suit different head speeds. Use 50mm tail blades when your head speed is lower than 3500rpm and 47mm with higher head speeds.

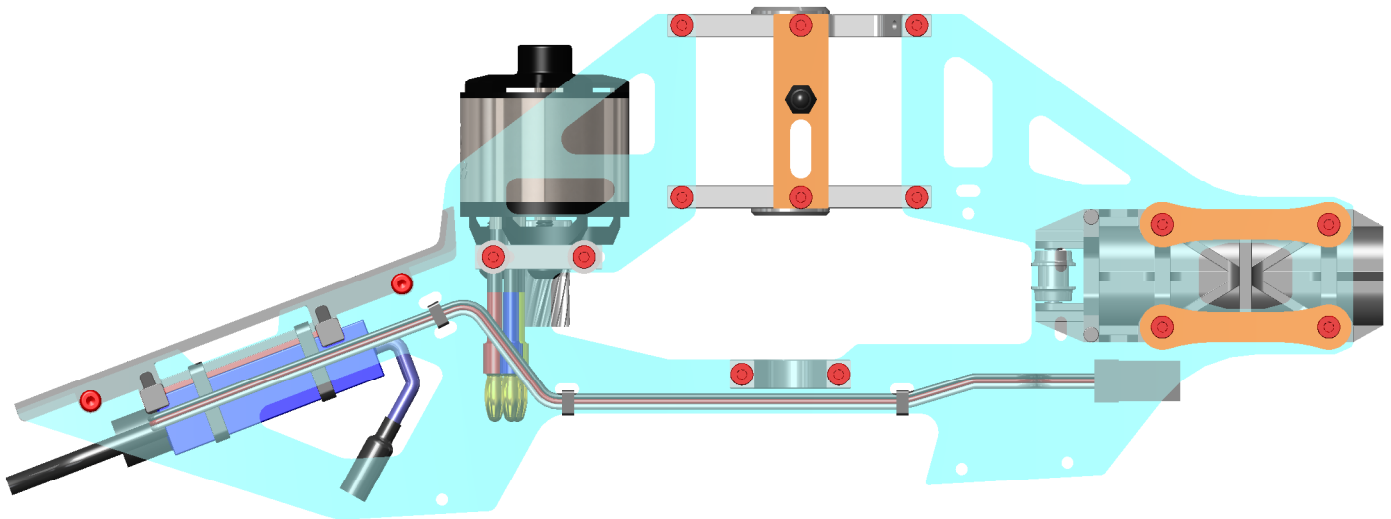
Step 1 Accessories Bag



Step 2




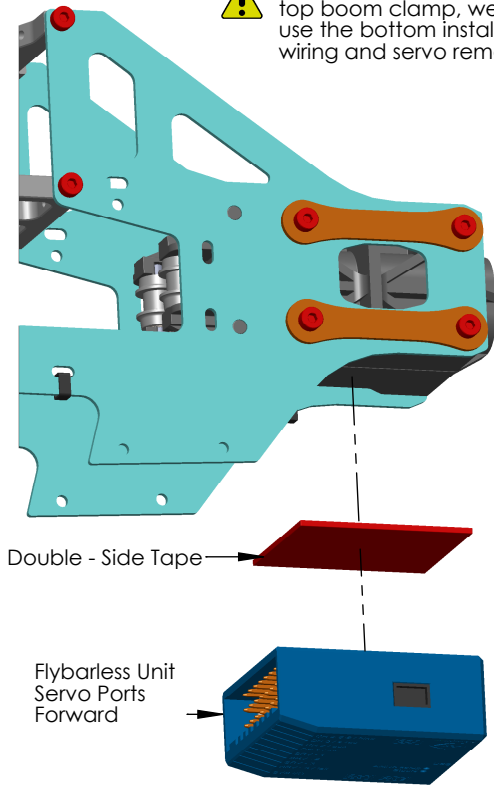
Step 3



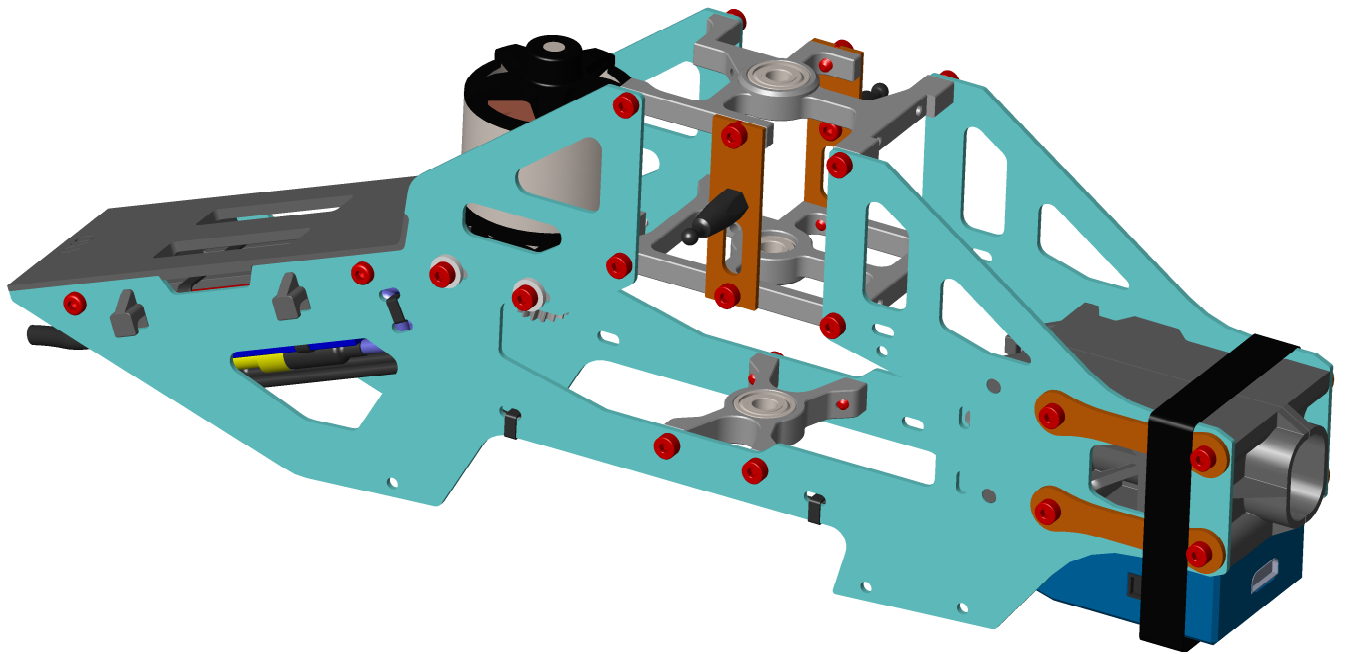
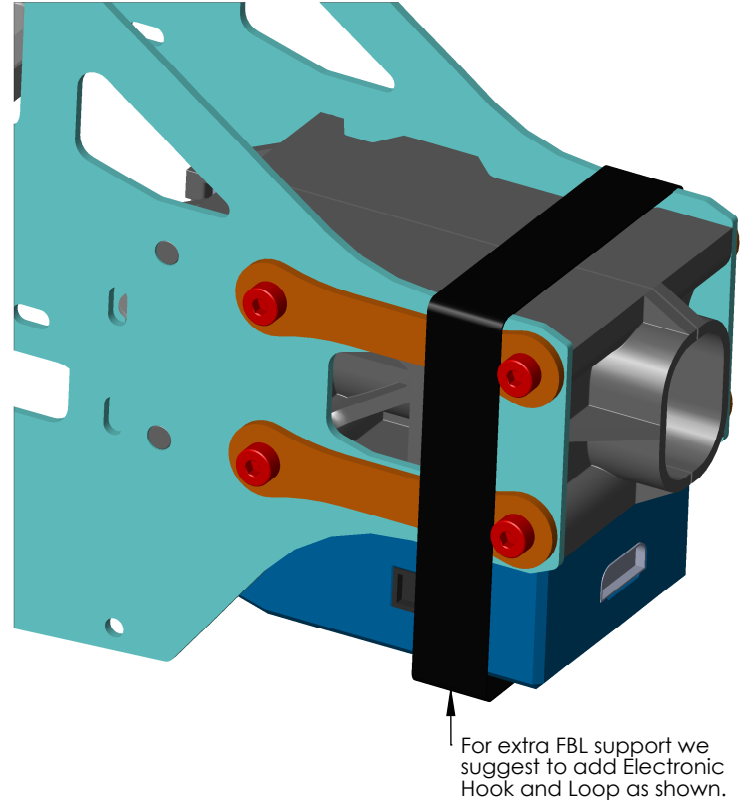
Use 3 x cable ties, to hold Throttle ESC wire to main frame. Use Frame built-in socket for best holding. In this Step connect Motor and ESC Wires but don't fix. Wait the final motor rotation check, once FBL system will set. NOTE: To reverse Motor rotation direction , just switch 2 of the 3 wires.

Step 1

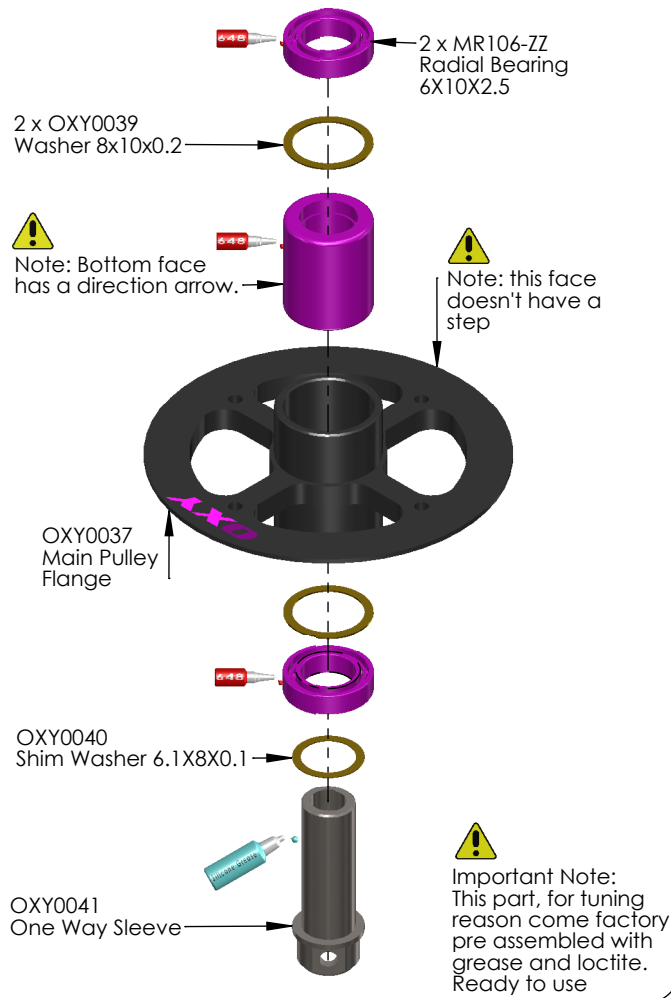
 FBL system can install in bottom or top boom clamp, we suggest to use the bottom install for easy wiring and servo remove.



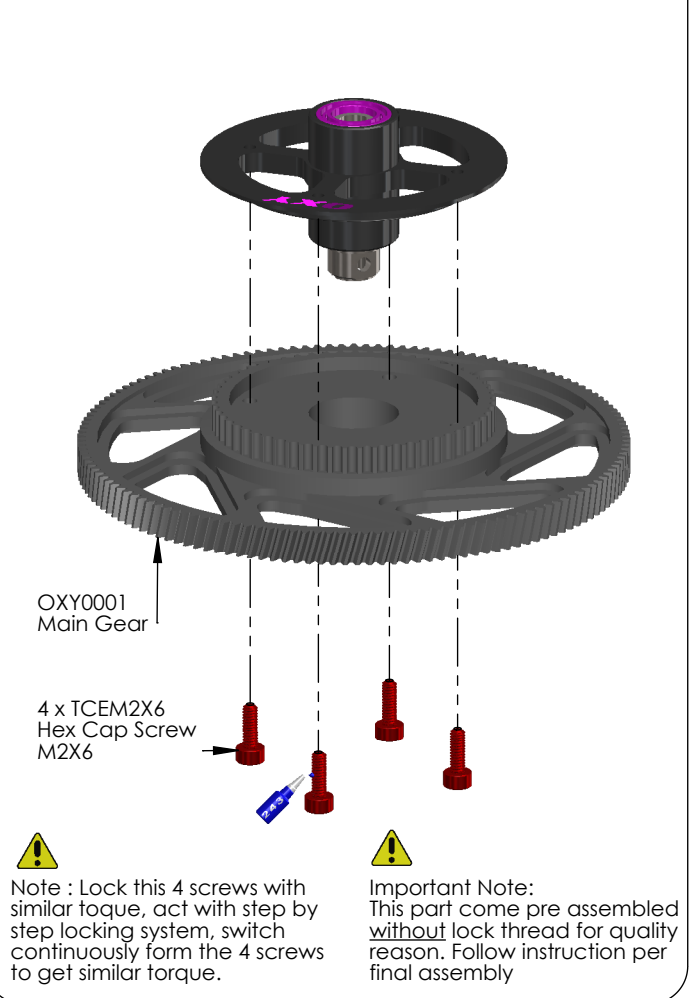
Step 2



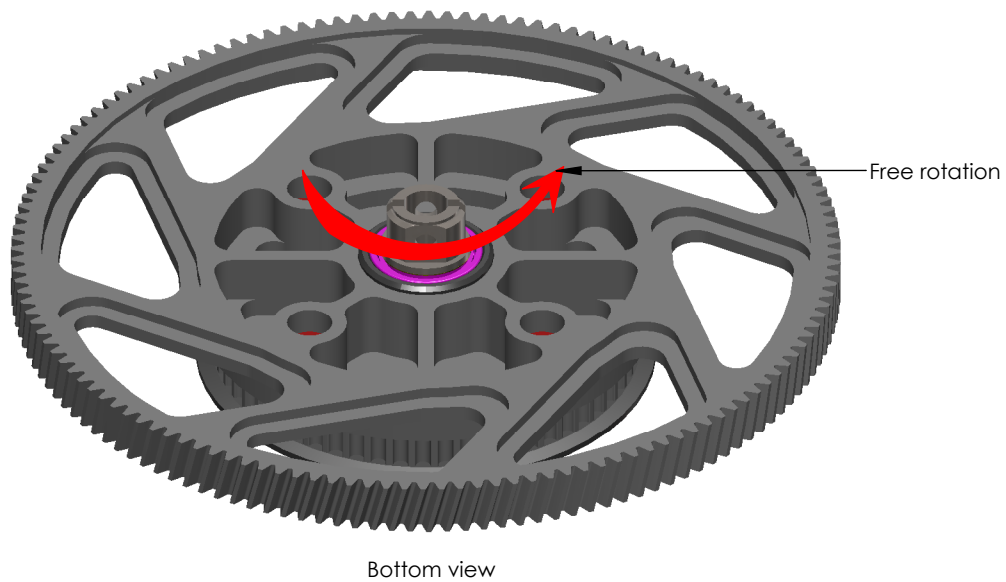
One Way Hub Assembly. (Box 02 / Bag 9)



Main Gear Assembly.



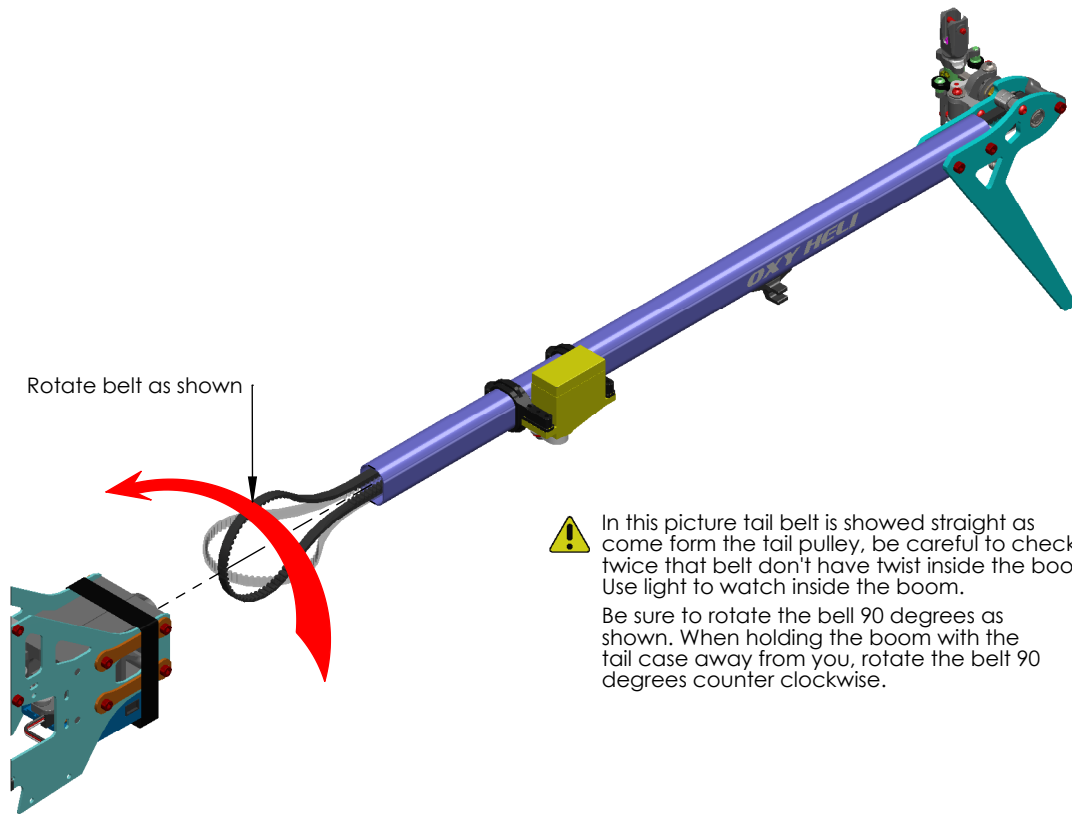
One Way System Direction Check.



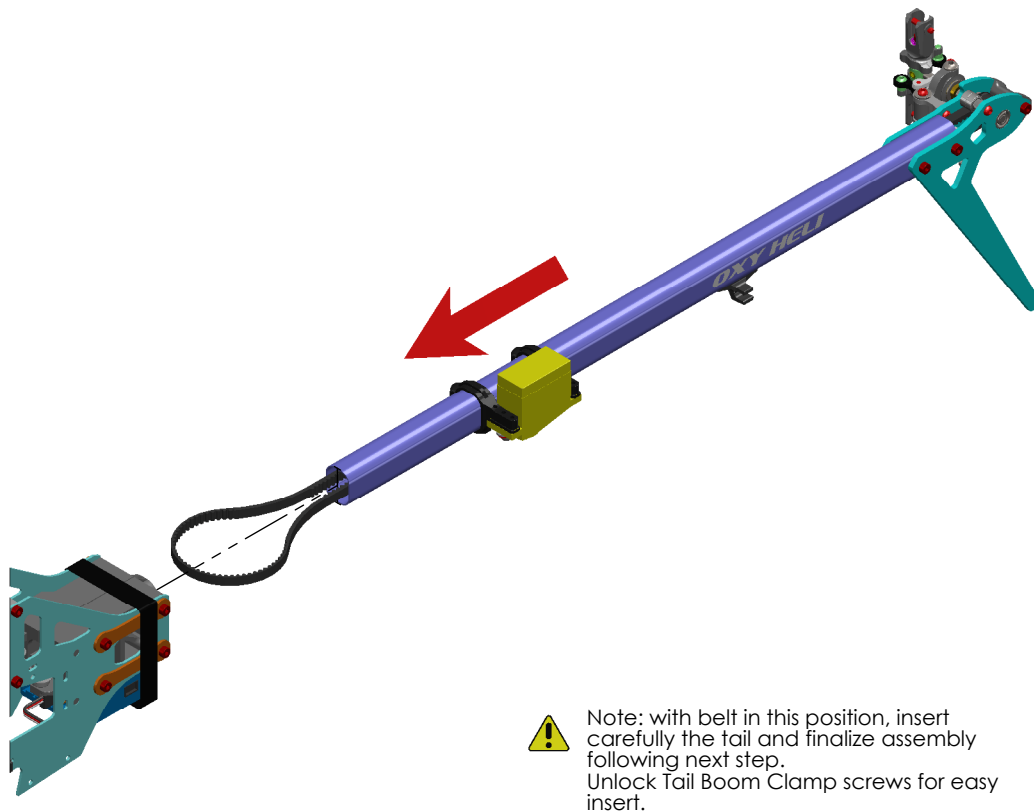
! Note: use one way sleeve to check rotation direction of one way bearing as shown

Belt Adjustment.

Step 1

**Belt Adjustment.**

Step 2




Install Main Gear, Main Shaft into Main Frame. (Box 02 / Bag 9-1
CNC components)

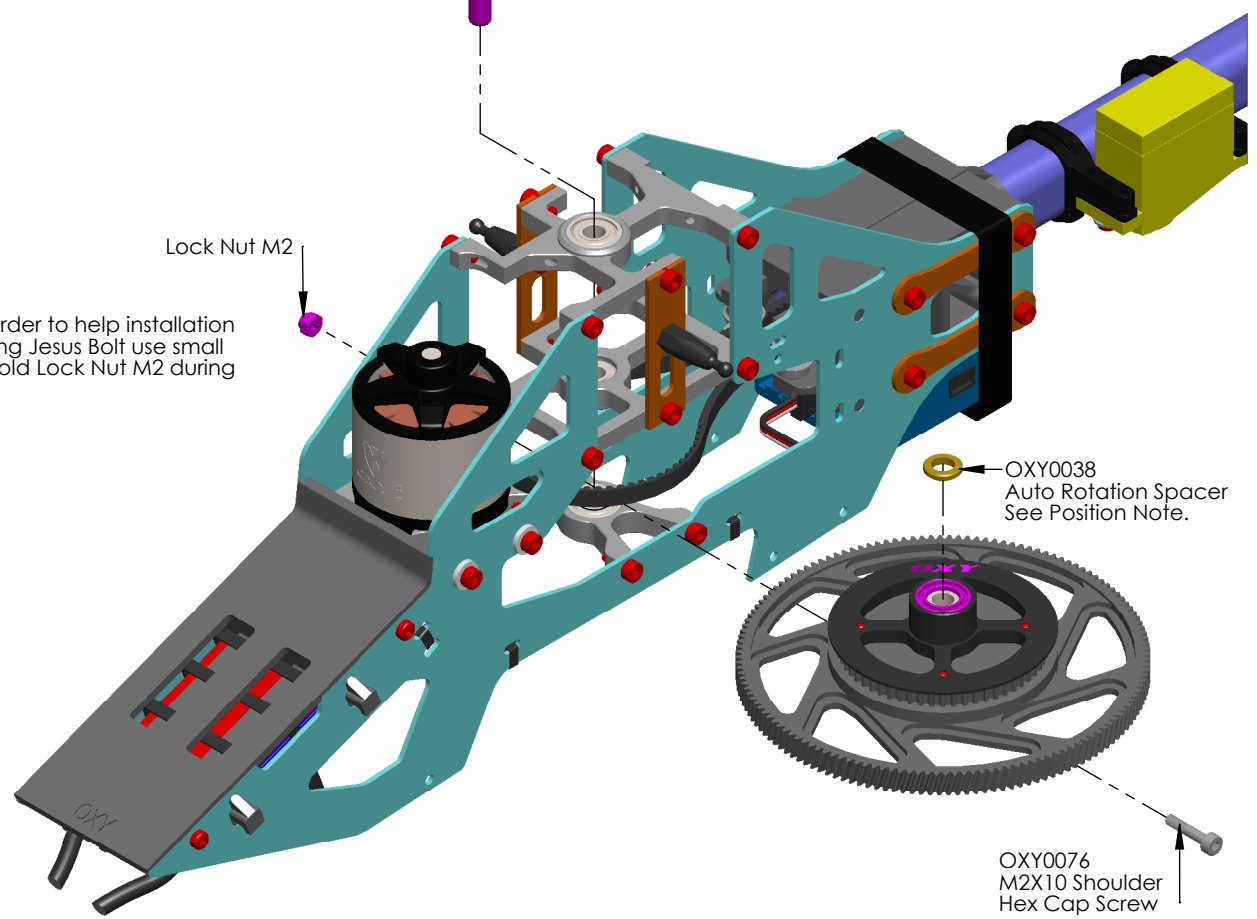
 Note: hole's position on main shaft.



OXY0003
Main Shaft


Lock Nut M2

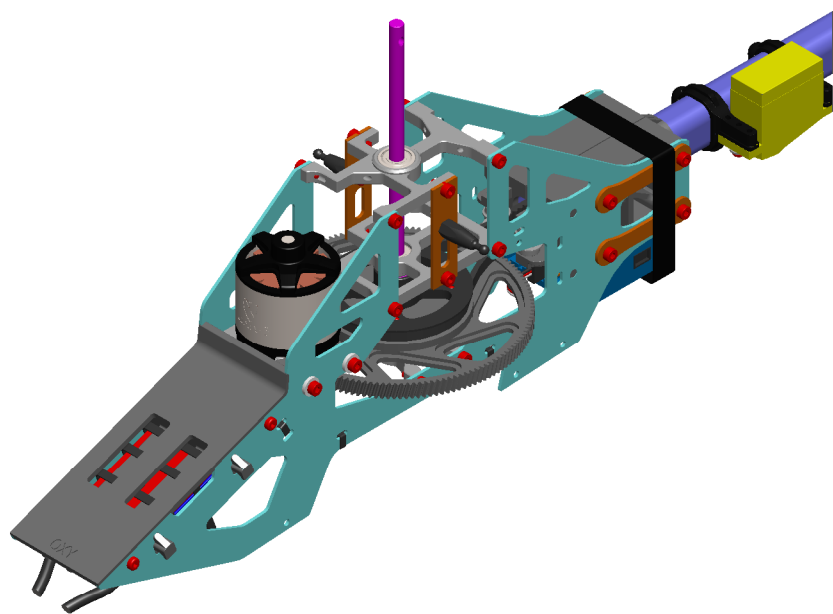
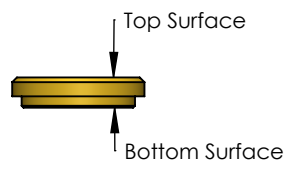
 Note: In order to help installation and locking Jesus Bolt use small pliers to hold Lock Nut M2 during install.



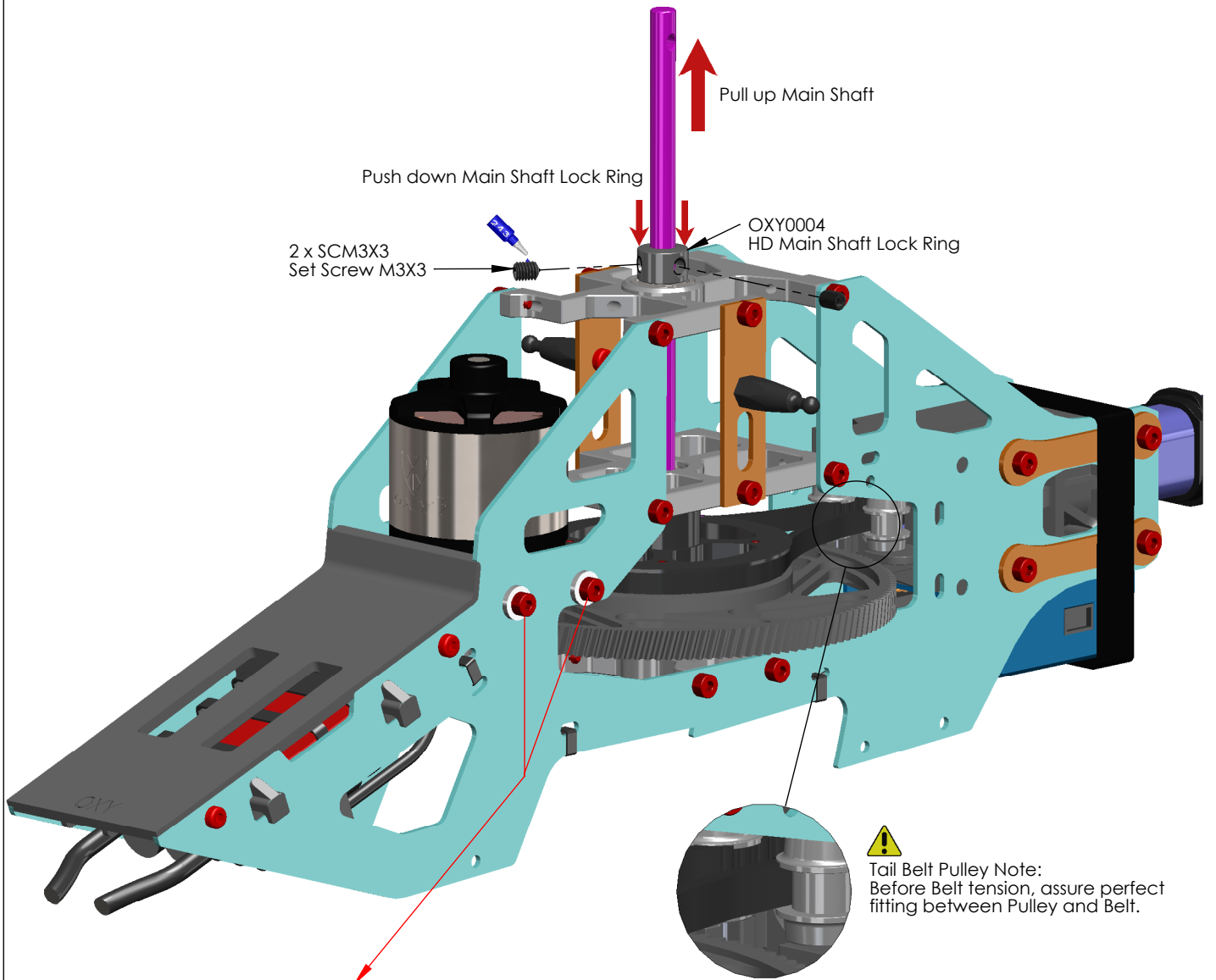
OXY0038
Auto Rotation Spacer
See Position Note.

OXY0076
M2X10 Shoulder
Hex Cap Screw

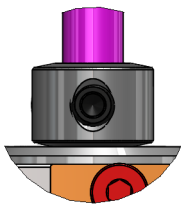
 Note: Auto Rotation Spacer's position:



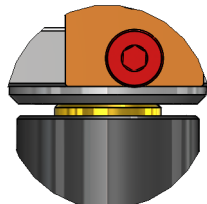
Install Main Shaft Lock Ring into Main Shaft.



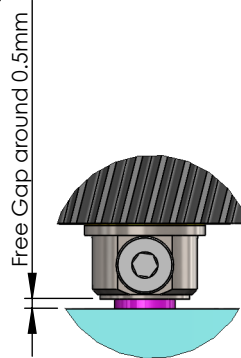
⚠ Once Main Shaft is lock, adjust Main Gear mesh and lock Motor Mount. Pinion and Main Gear must have little play. Don't use the paper system, is not suggested for Oxy 3 Slant Main gear with 0.5mm Pitch. Adjust the mesh that give very little amount of play. Before to lock completely Motor Mount, test the play all around the Main Gear. In case re adjust. To increase system efficiency the main gear must rotate free without mesh binding.



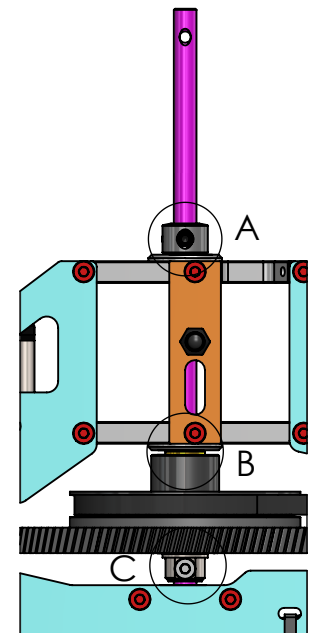
DETAIL A



DETAIL B



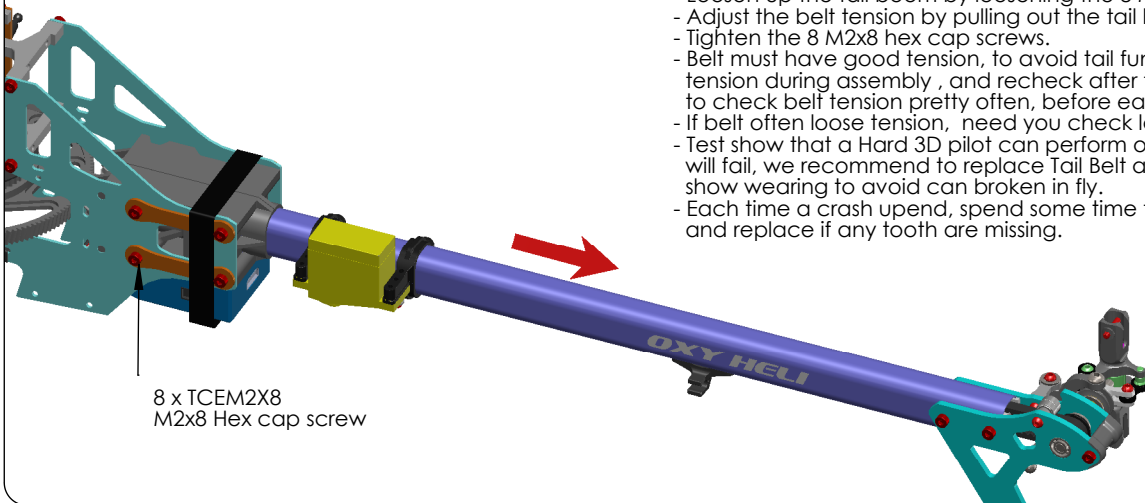
DETAIL C



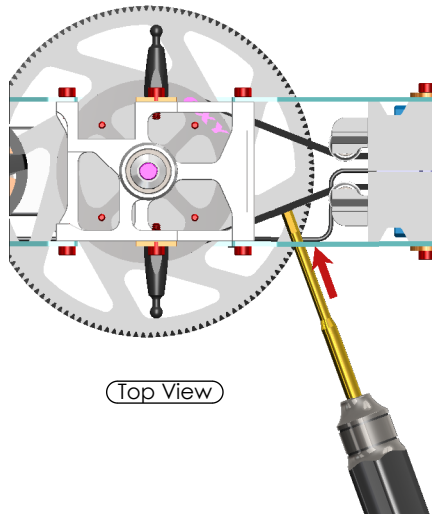
Belt Tension.

Belt Tension Note:

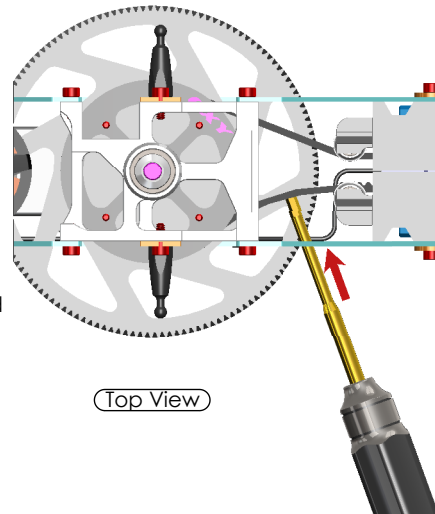
- Make sure the boom is assembled and installed correctly.
- Loosen up the tail boom by loosening the 8 M2x8 hex cap screws.
- Adjust the belt tension by pulling out the tail boom
- Tighten the 8 M2x8 hex cap screws.
- Belt must have good tension, to avoid tail function we suggest to tension during assembly, and recheck after few fly. We suggest to check belt tension pretty often, before each fly session.
- If belt often loose tension, need you check lock system or belt integrity.
- Test show that a Hard 3D pilot can perform over 400 fly before the belt will fail, we recommend to replace Tail Belt after 300 fly, even if don't show wearing to avoid can broken in fly.
- Each time a crash upend, spend some time to check Belt integrity and replace if any tooth are missing.



Belt Tension Check.



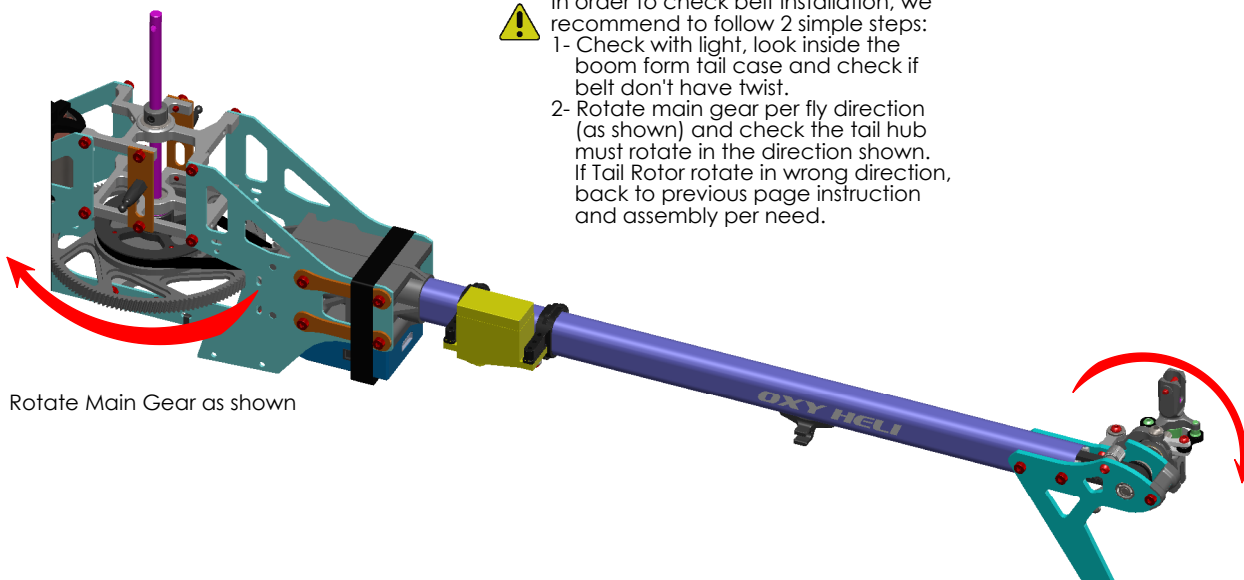
- Use Screw Driver to check Belt Tension (suggested max deflection is 1mm)
- Note :In any case we recommends to made heavy pre tensioning.
- Check again the belt tension after the first 2 fly.
- With new Tail Belt once moved slowly, is normal to ear tooth sound engaged with Main Pulley. This low sound is normal and will disappear after few fly and the necessary "break-in".



Tail Rotor Rotation Direction Check.

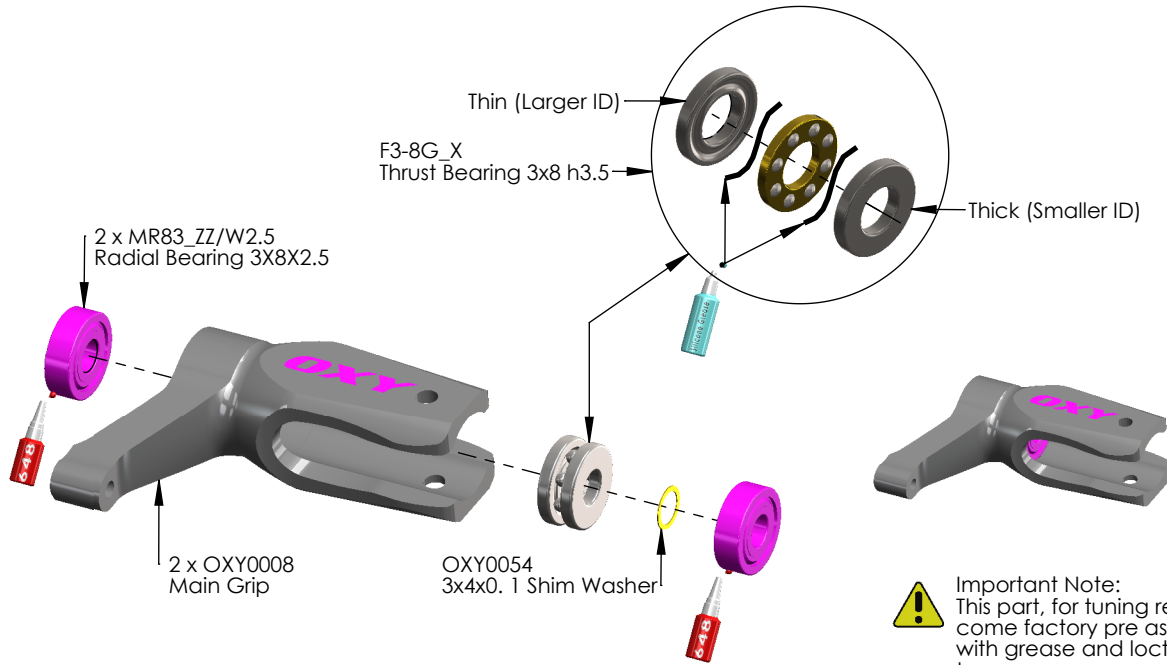


- In order to check belt installation, we recommend to follow 2 simple steps:
- 1- Check with light, look inside the boom form tail case and check if belt don't have twist.
 - 2- Rotate main gear per fly direction (as shown) and check the tail hub must rotate in the direction shown. If Tail Rotor rotate in wrong direction, back to previous page instruction and assembly per need.

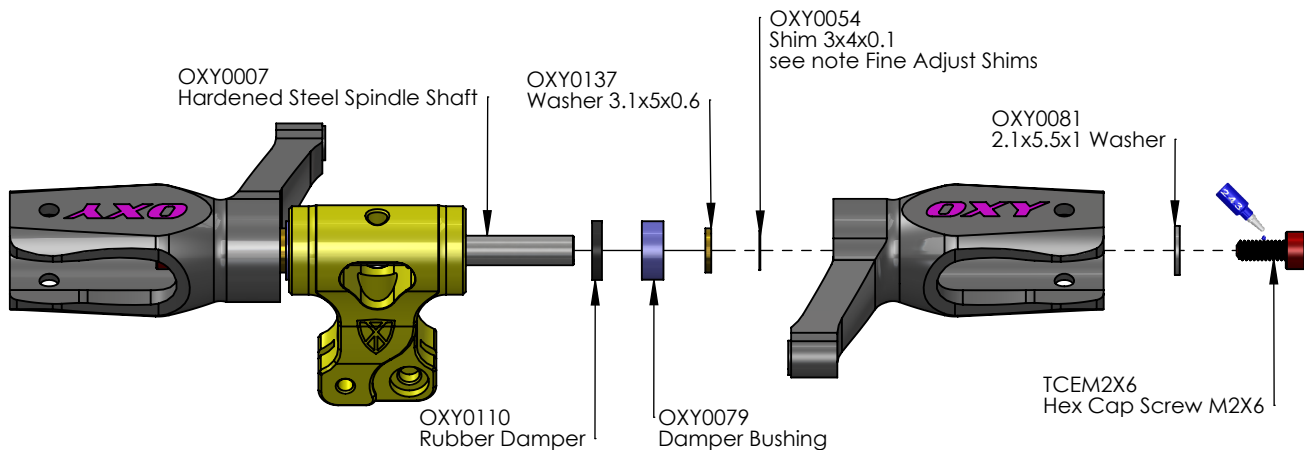


Head Assembly. (CNC components)

Step 1



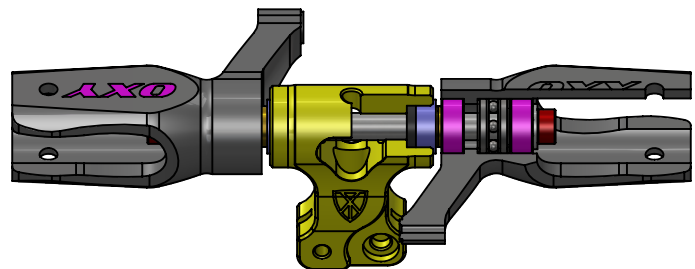
Step 2



Important Note:
This part come pre assembled without lock thread for quality reason. Follow instruction per final assembly.

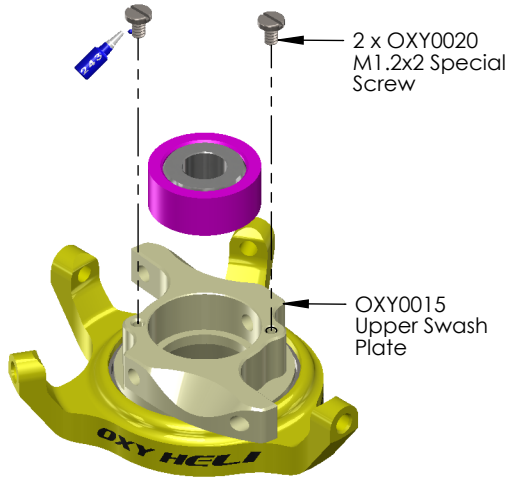


Fine Adjust Shims note:
In order to give fine adjustment options, into Extra Hardware Bag you can find extra Shims 3x4x0.1 Start assembly with factory pre setting shims, if Main Grip have sideway play, add shims per need. Each Grips must have the same amount of shims. Exp: If you add one shim on the left side, you need also add one shims on the right side.



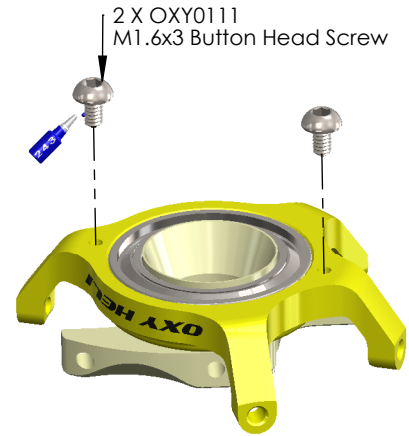
Swash Plate Assembly. (CNC components)

(Step 1)



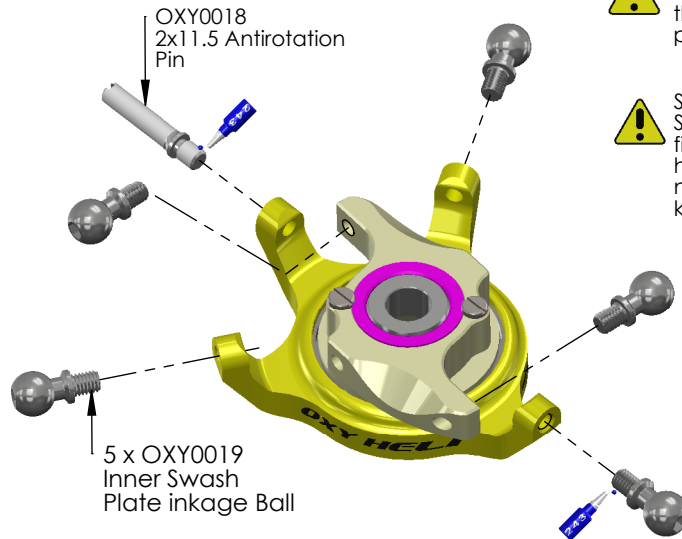
Important Note:
This part, for tuning reason come factory pre assembled with loctite. Ready to use.

(Step 2)



Important Note:
This part, for tuning reason come factory pre assembled with loctite. Ready to use.

(Step 3)

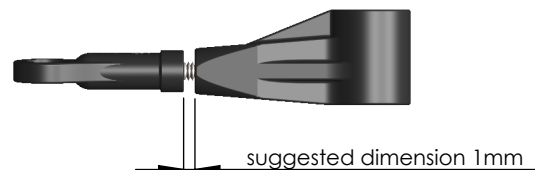


Important Note:
This part come pre assembled without lock thread for quality reason. Follow instruction per final assembly.

Swivel Ball Note:
Swivel Ball is pre-assembled with precise fitting. With new Swash Plate, center ball have little friction. After few fly and the necessary "break-in" will come smooth, keeping the best precision without play.

DFC Arm Assembly.

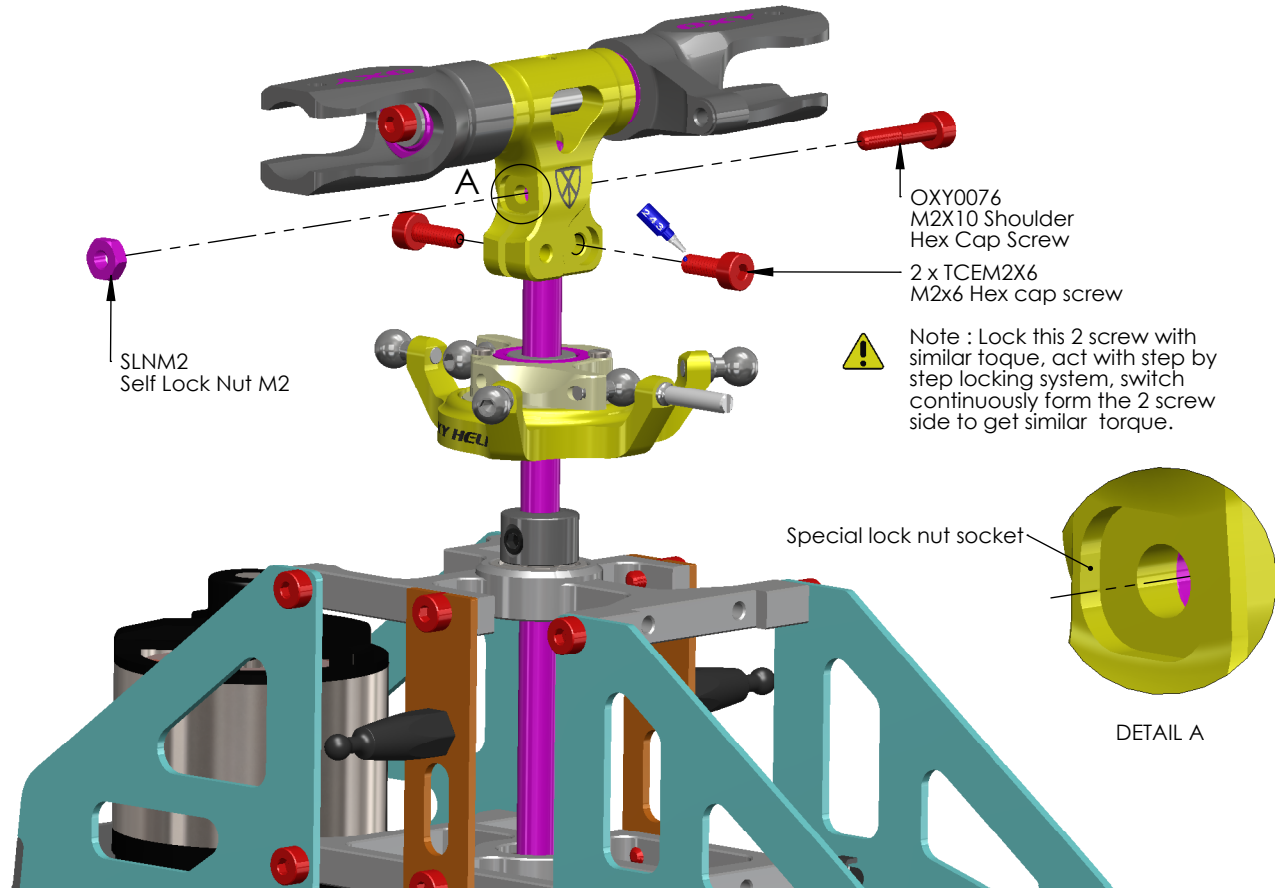
OXY0012
DFC Arm Spacer



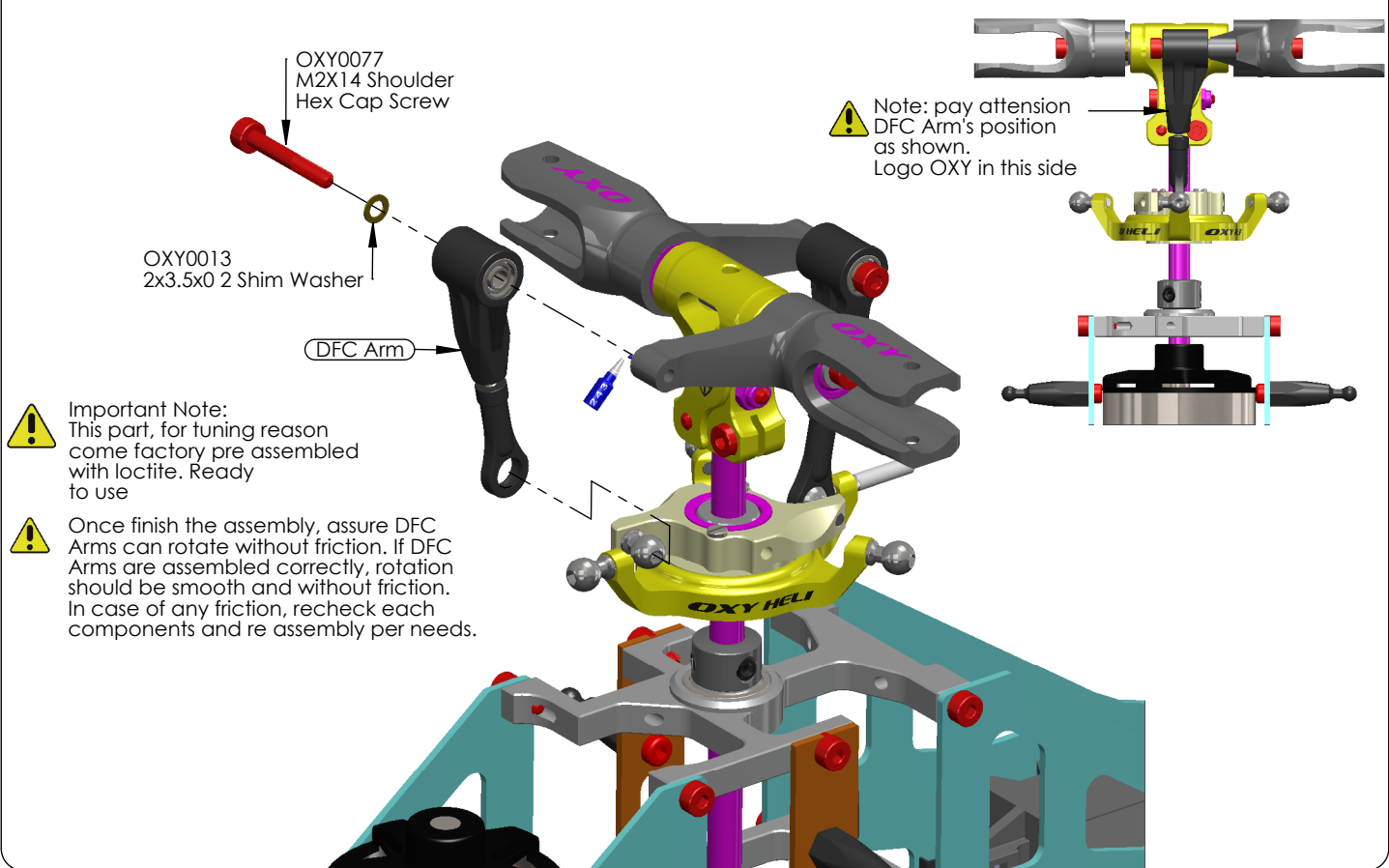
Important Note:
Oxy Plastic Linkage have logo to give you information about the turn adjustment, but have symmetrical ball socket shape and can be install in both direction to achieve the best fine tuning operation.

Head Assembly.

Step 3

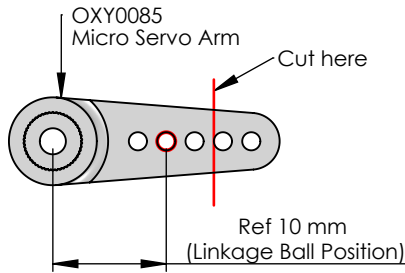


Step 4



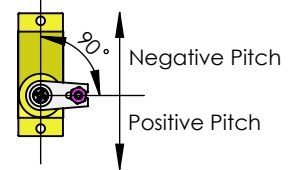
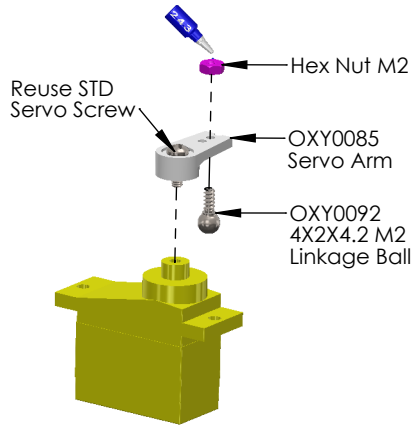
- You should now do some initial setup of your FBL unit and servos.
- We recommend you select a new model in your transmitter, and reset your FBL unit and start with a clean setup in it as well.
- After binding your transmitter to the receiver system used with the FBL unit, work your way through the FBL setup instructions to the point you plug in your servos.
- Now set your collective stick in the middle position, and position the servo arms as close to the correct positions you can on each servo see the following pages for arm orientations on the various servos.
- Next confirm the servos work in the correct direction, then return the collective stick to the center position.
- Now use your FBL unit to trim the servos so the arms are exactly horizontal (see pictures below).
- This procedure varies between units. Carefully label the position of the servos, then proceed with the installation of the servos as shown.

Front Cyclic Servo. (Box 02 / Bag 10)



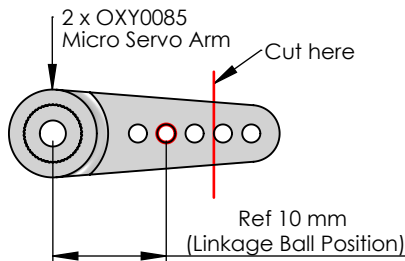
! Linkage Ball Direction: Front cyclic servo Linkage Ball, must installed as shown.

! Arm position with zero deg pitch and centered cyclic stick.



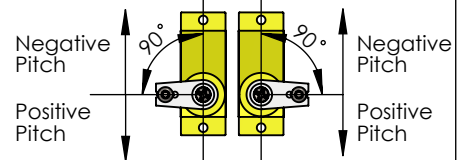
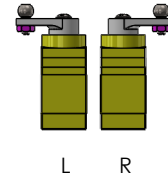
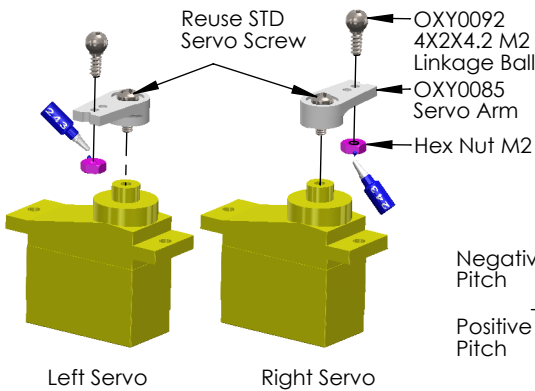
! For easy set up check servo arm move and set need.

Left, Right Servos. (Box 02 / Bag 10)



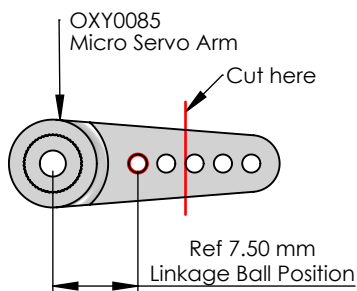
! Linkage Ball Direction: Left Right servo Linkage Ball, must installed as shown.

! Arm position with zero deg pitch and centered cyclic stick.



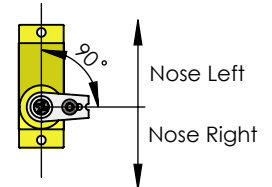
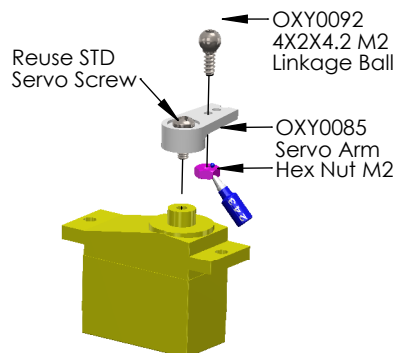
! For easy set up check servo arm move and set need.

Tail Servo. (Box 02 / Bag 10)



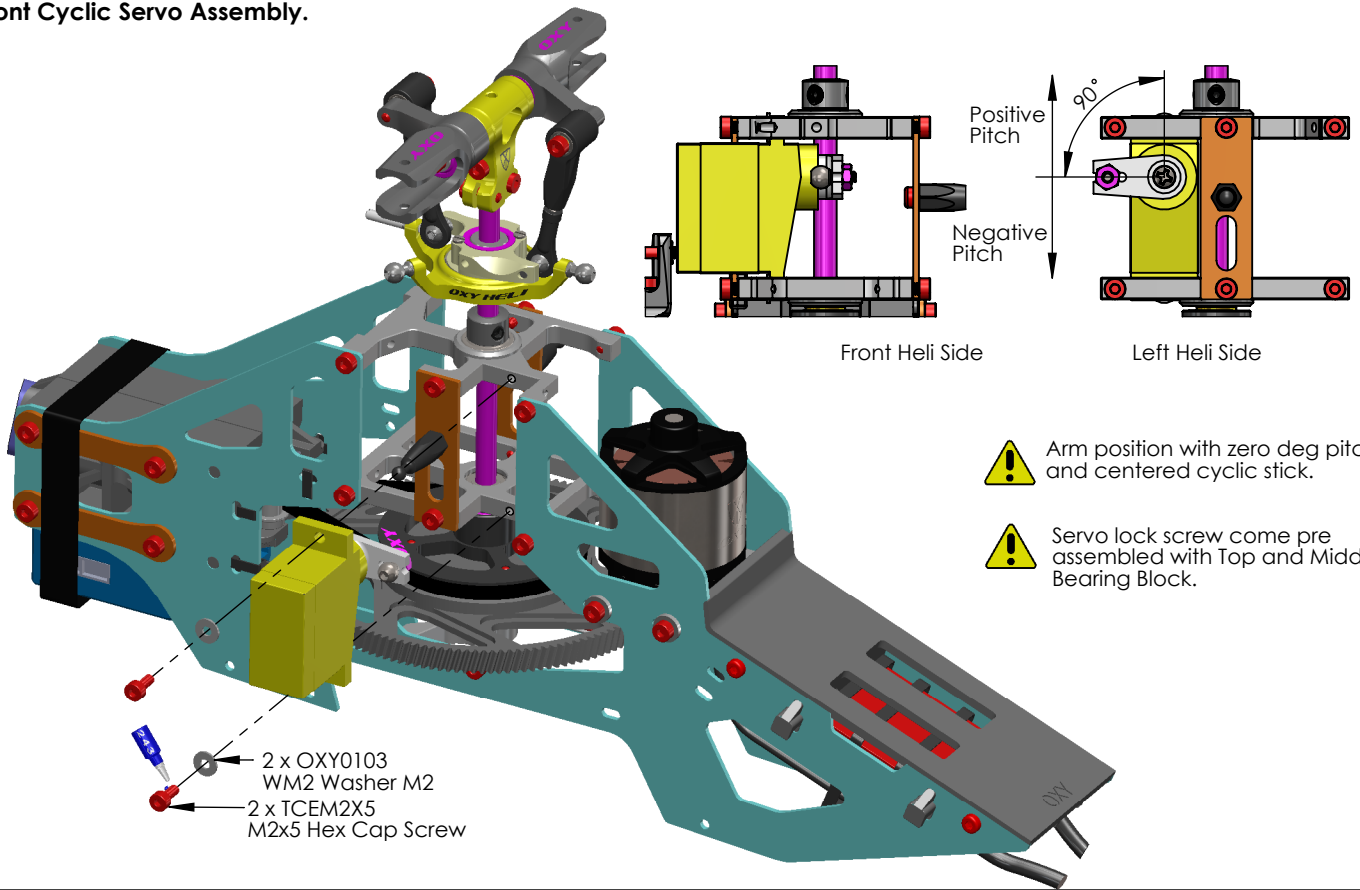
! Linkage Ball Direction: Tail servo Linkage Ball, must installed as shown.

! Arm position with zero deg pitch and centered rudder stick.

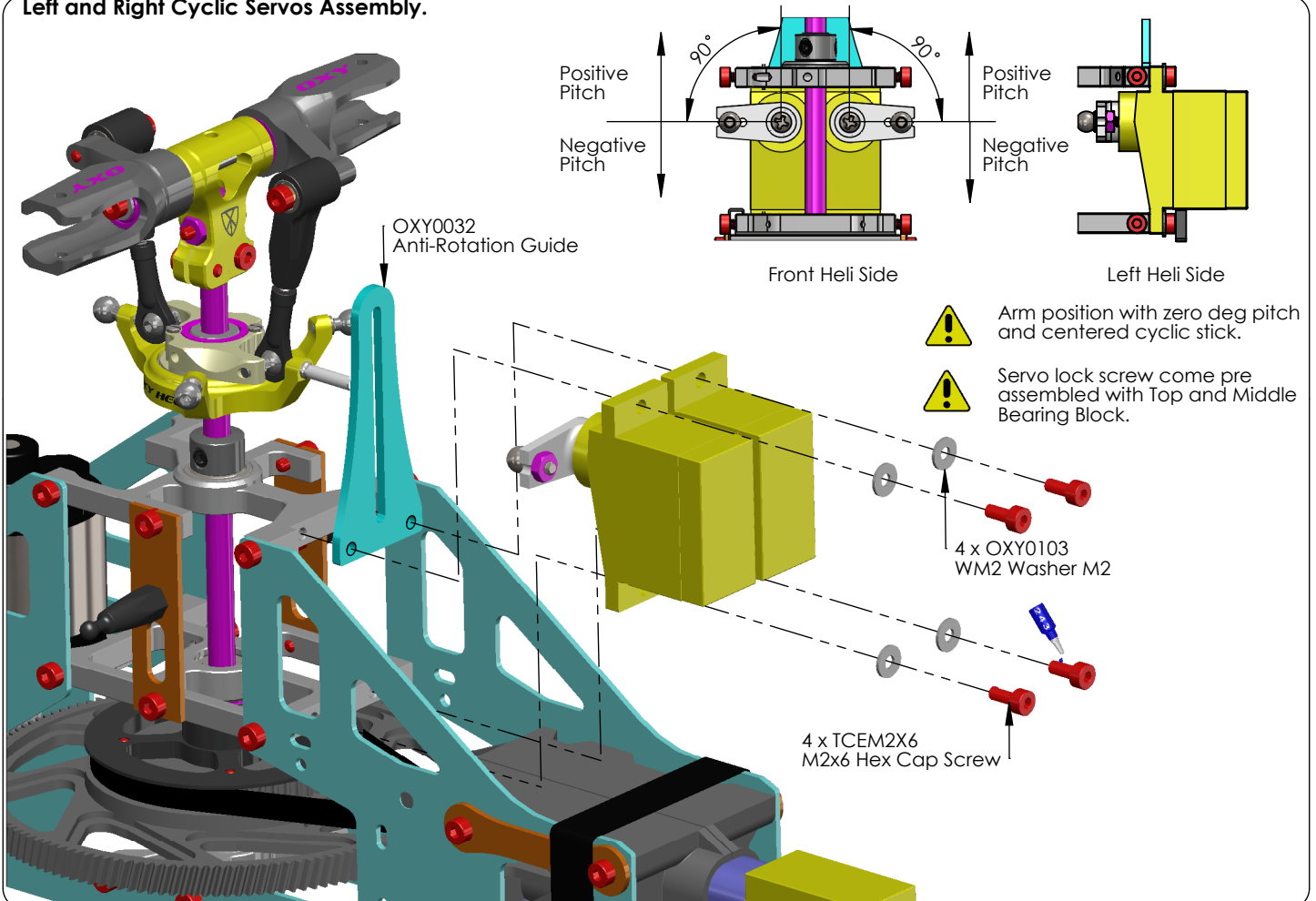


! For easy set up check servo arm move and set need.

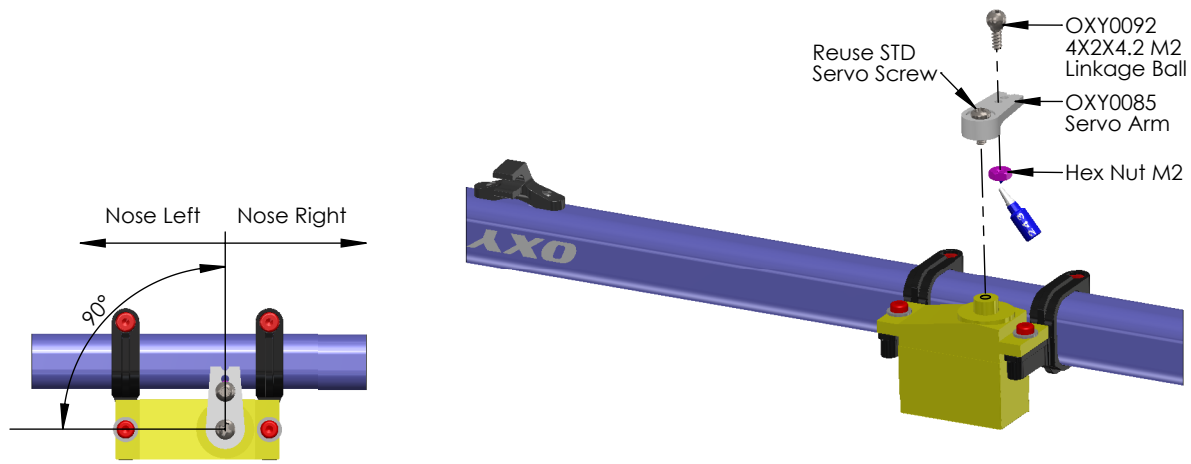
Front Cyclic Servo Assembly.



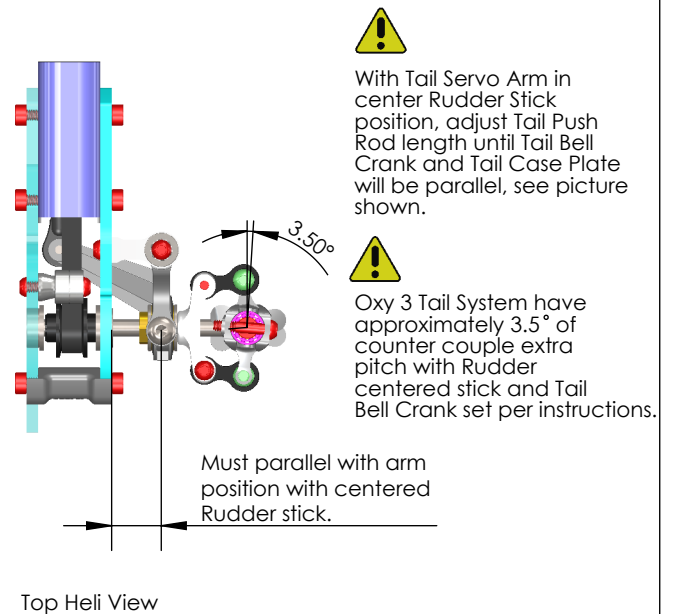
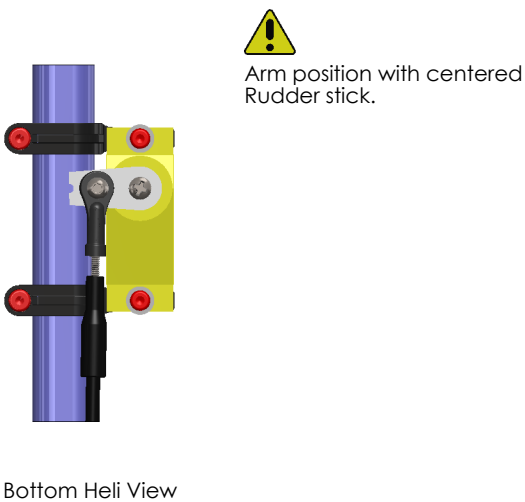
Left and Right Cyclic Servos Assembly.

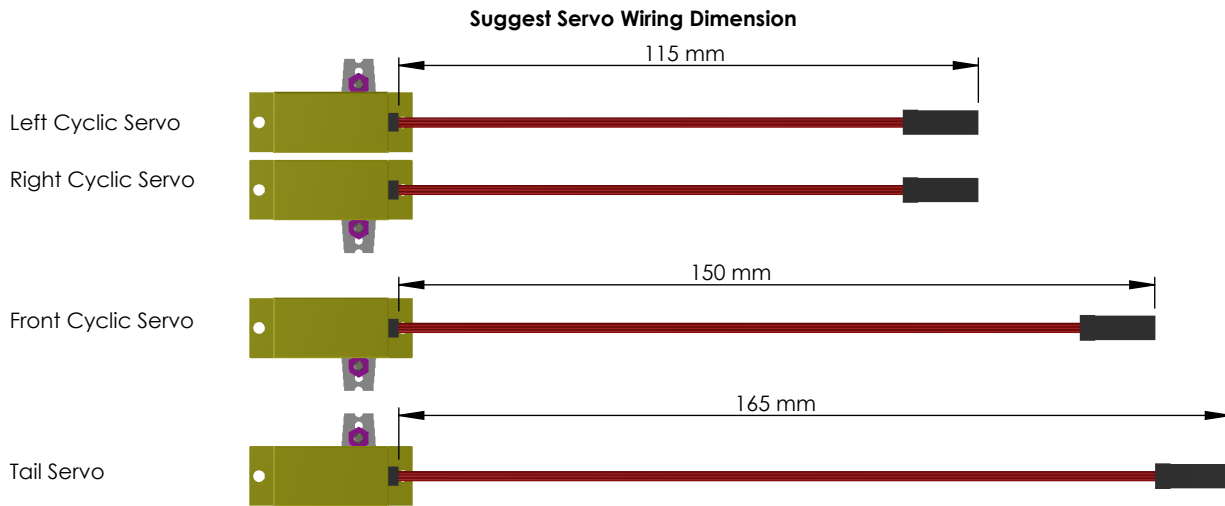


Tail Servo Assembly.



Tail Push Rod Assembly.

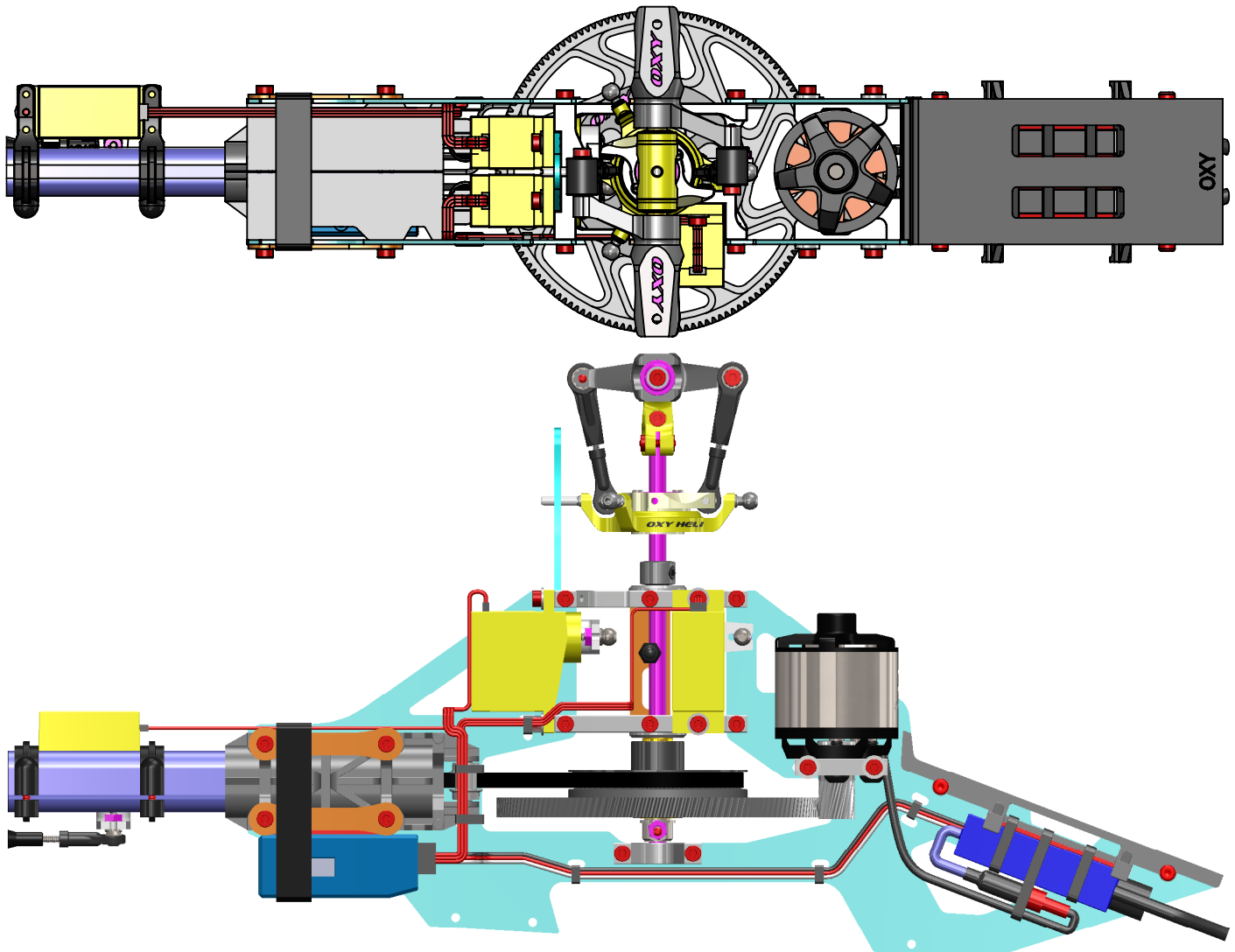


Finalize servo connection, wiring.**Servo Wiring Length Note:**

In order to make a clean wiring, we suggest trim servo wires per instructions. Are important use specific tools as: Servo Terminals and Crimp Pliers. If you don't dispose of specific tools, better you keep Servo wires per standard length and use Cable Ties to lock and secure wires avoiding binding or potential cut.

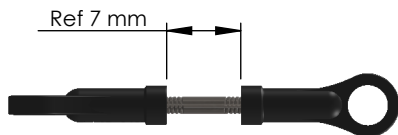
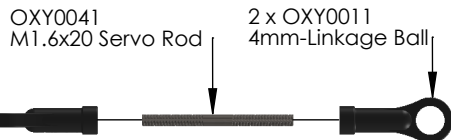
Electronics Wiring.

Follow our schematics suggestion for the cleanest wiring set up.



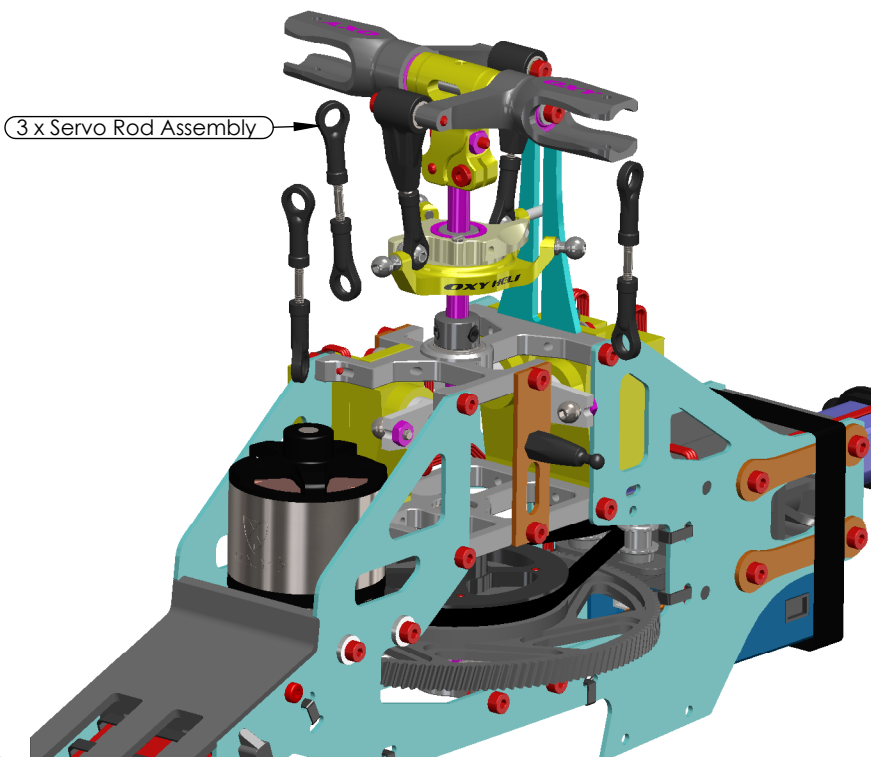
Use Cable Ties to hold and secure Servo Wires to Main frame, follow suggestions and Main Frame built-in sockets. For Extra information about wiring, visit oxyheli.com web site under Tutorials Tips.

Servo Rod Assembled. (Box 02 / Bag 10)



Really important servo rod will screw on the linkage for the same length. Plastic Linkage have Lynx logo to give you information about the turn adjustment, but have symmetrical ball socket shape and can be installed in both directions to achieve the best fine tuning operation.

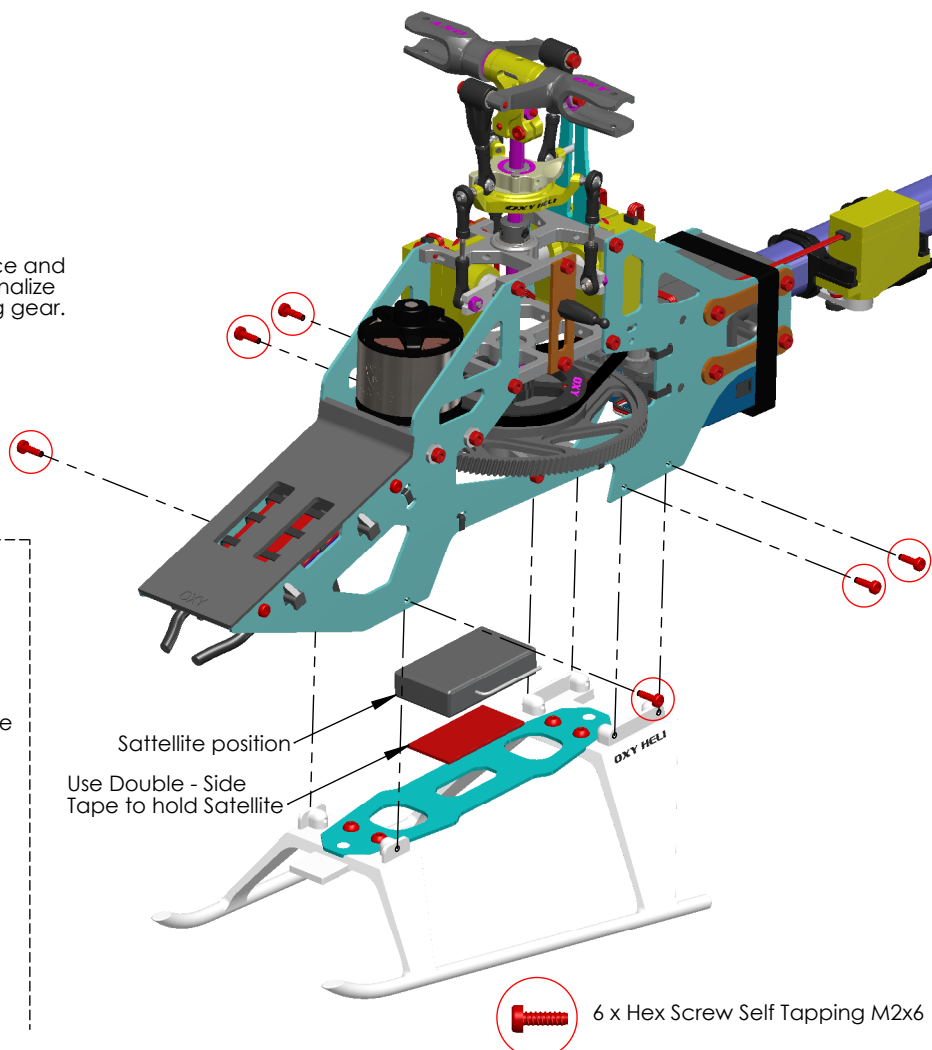
Install Sevo rod into Swash Plate and Servo.



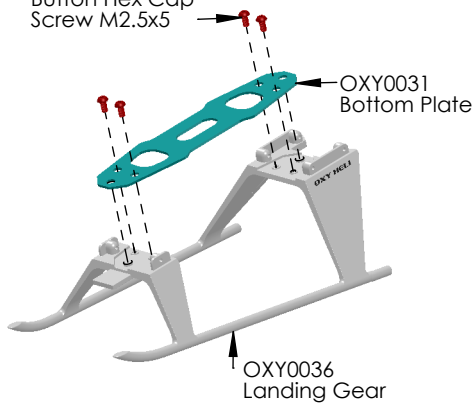
Landing Gear Assembly. (Box 02 / Bag 11)



Once servo connector are in place and secured with cable tie, you can finalize the assembly installing the landing gear.



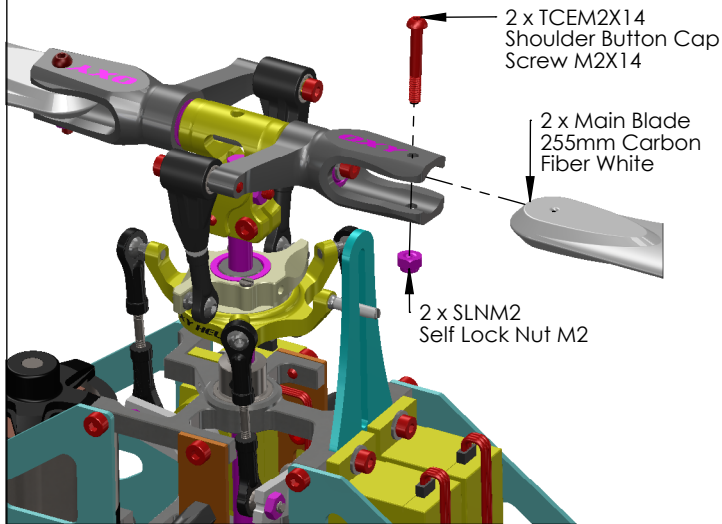
4 x TBEM2.5x5
Button Hex Cap
Screw M2.5x5



Before Flight.

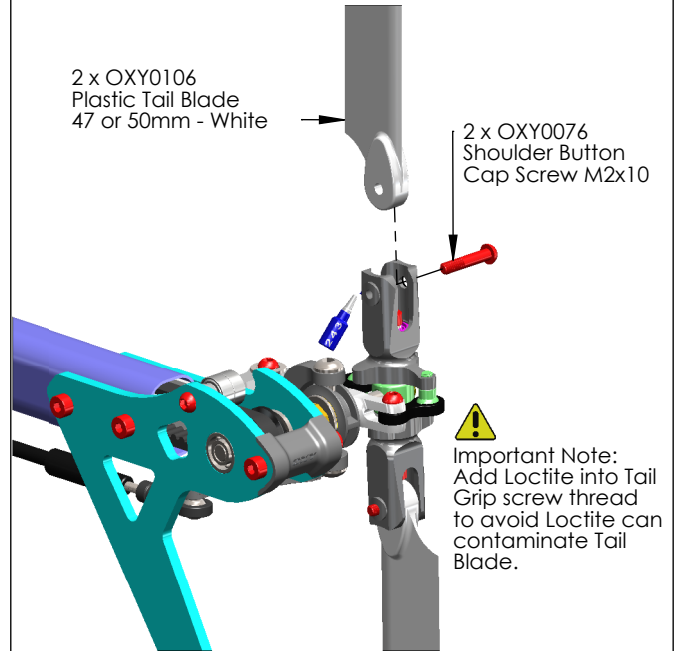
Now complete the setup of your FBL system. Into Accessories Bag you can find Oxy 3 Swash Plate Leveler Tools. This Tool is designed to fit under the Swash Plate without disassembly any parts. This simple tool will give planarity and Zero Pitch Position. About Gyro Gain, Oxy 3 was designed around few famous FBL System (IKON / Brain / m V-Bar) we suggest to start with follow standard set up and adjust later for your feeling and set up:
 Cyclic Set Up:
 Use suggested setting for 450 Heli and adjust later per your fly feeling.
 See table page 15 for RPM and Pitch Setting. Cyclic Max pitch +/- 10.5 deg.
 Tail Set Up:
 Use suggested setting for 450 Heli BUT start with lower Tail Gain
 IKON / Brain = 20%
 M V-Bar = 250 Heli Suggested Set Up.

Main Grip assembly.



! Note: Oxy Main Grip have 5.5mm root cavity in order to work with any std 245 / 255 main blade root. Use main blade shims if necessary. Shims are supply with main blade.

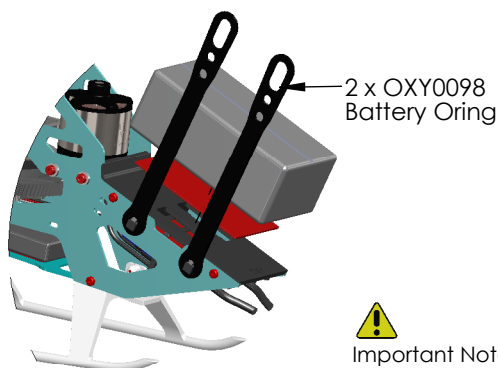
Tail Grip assembly.



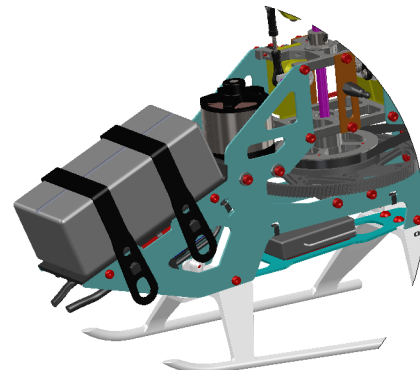
! Oxy tail blade dimension note: In order to assure the best performance Oxy made custom tail blade with 3.5mm root. In case you will use different tail blade with 2.5mm root you must install not include shims.

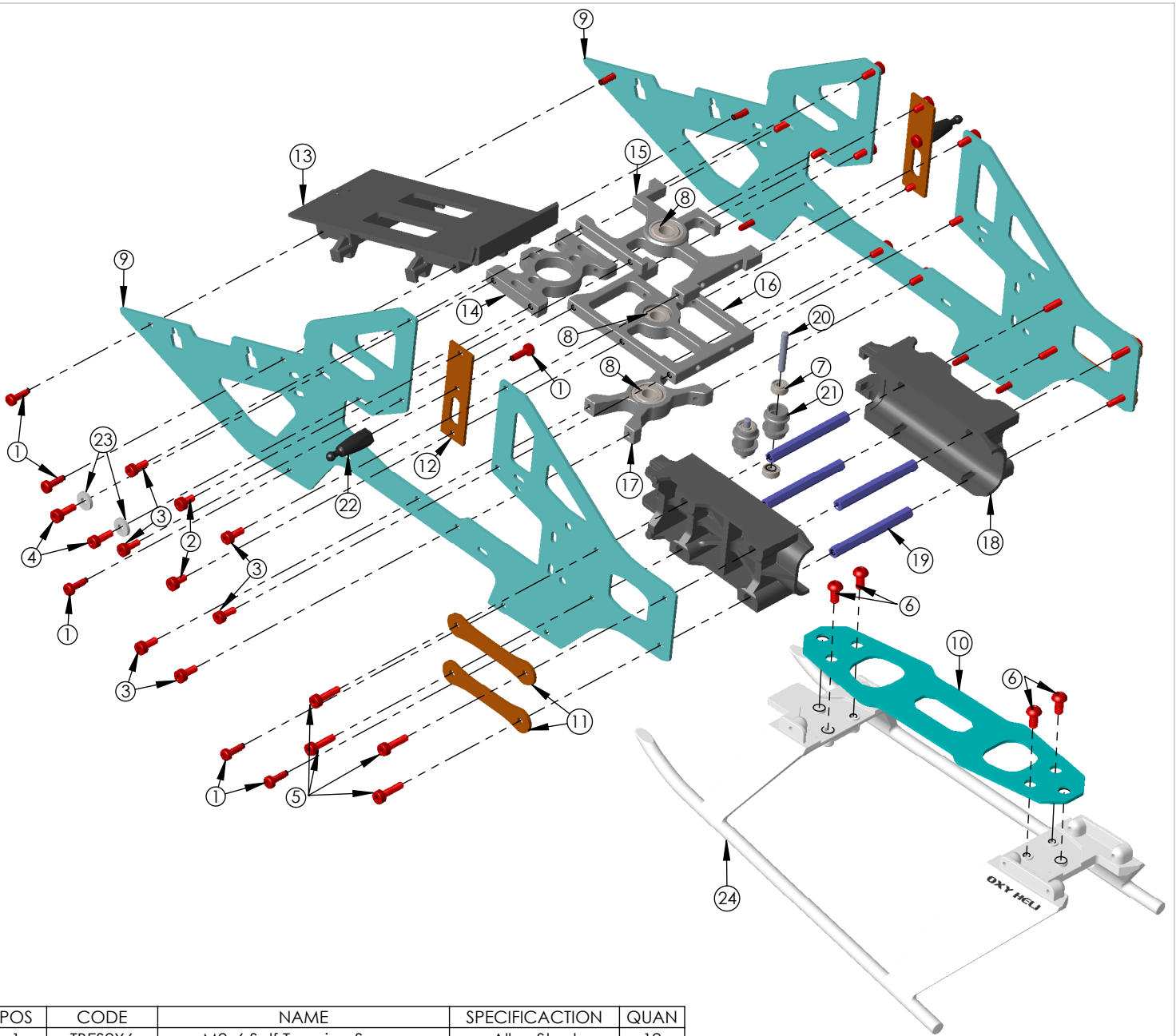
Information about 47 and 50 mm tail blade effect: In the kit we support 2 set of tail blade, the 47 mm are designed for high head speed, the 50 mm are designed for low head speed. We recommends use 47 mm when head speed is higher than 4000 rpm.

Battery Assembly.

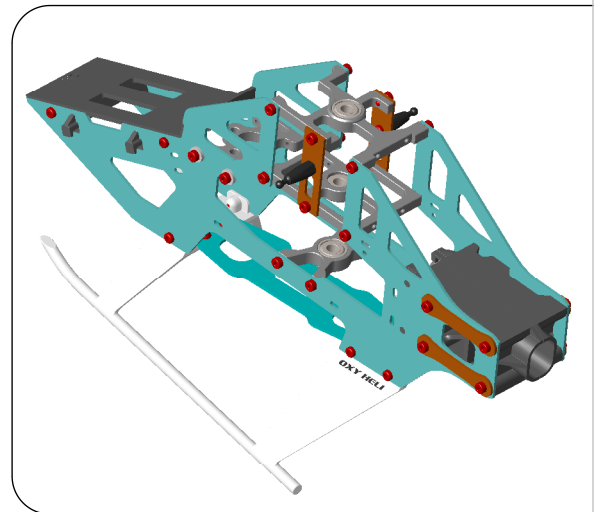


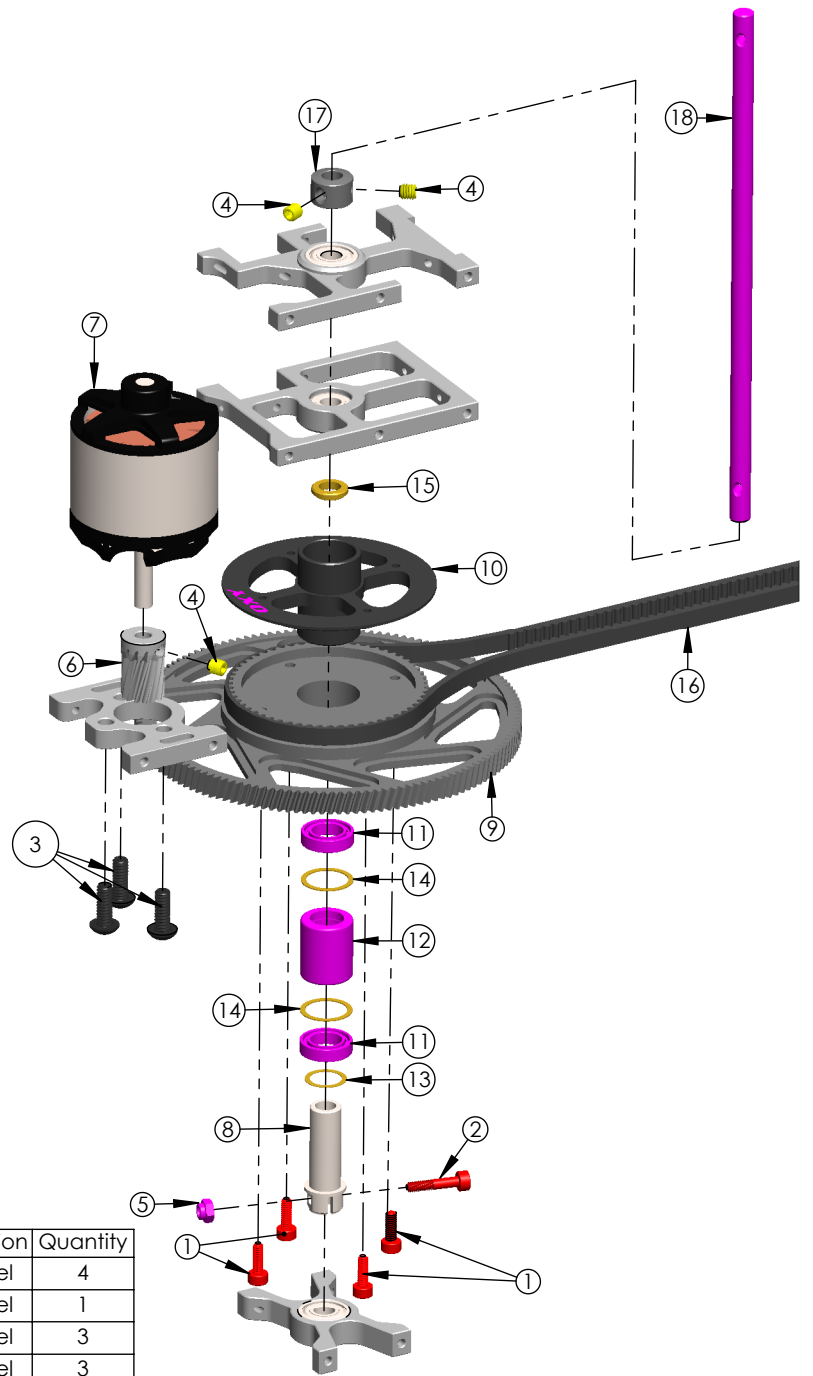
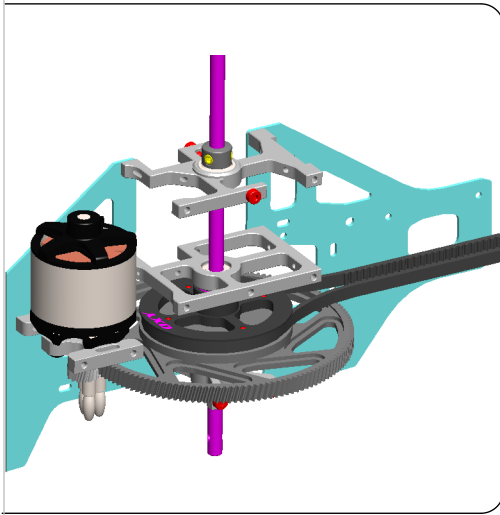
! Important Note: Use double side Hook and Loop Velcro sticker to assure battery against dangerous sliding.



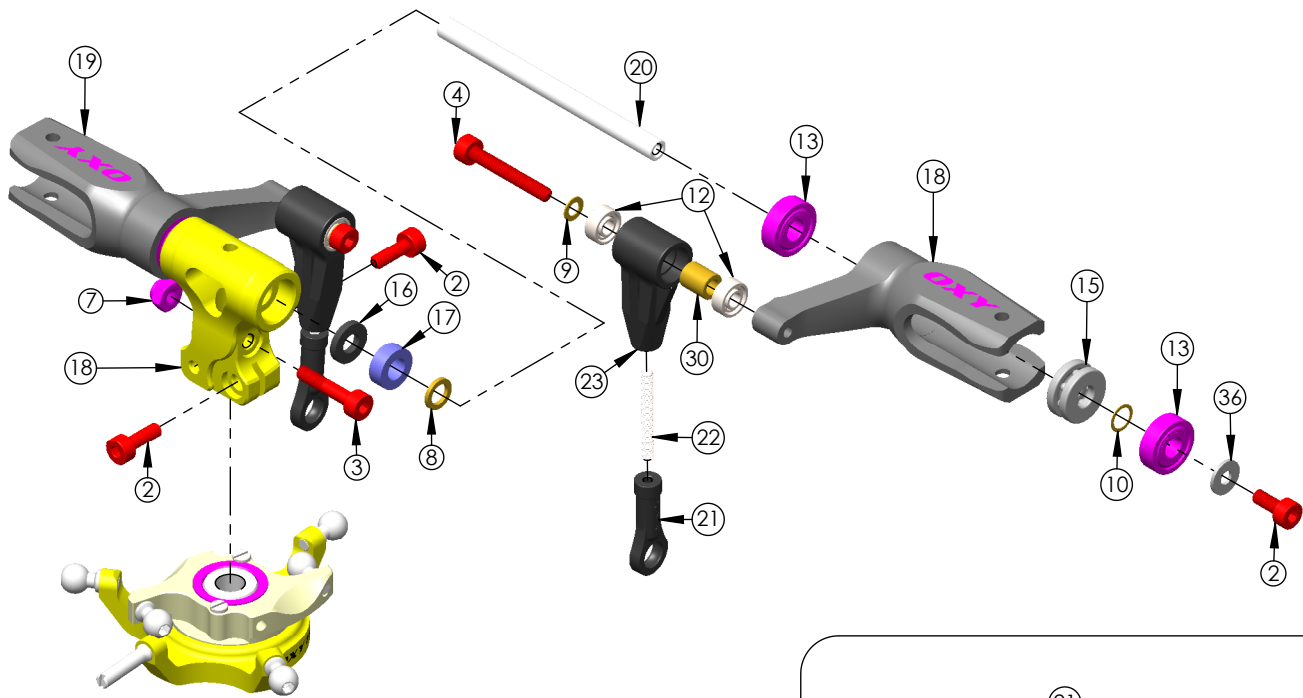


POS	CODE	NAME	SPECIFICATION	QUAN
1	TBES2X6	M2x6 Self Tapping Screw	Alloy Steel	12
2	TCEM2X4	M2x4 Hex Cap Screw	Alloy Steel	4
3	TCEM2X5	M2x5 Hex Cap Screw	Alloy Steel	12
4	TCEM2x6	M2x6 Hex Cap Screw	Alloy Steel	4
5	TCEM2X8	M2x8 Hex Cap Screw	Alloy Steel	8
6	TBEM2.5x5	M2.5x5Button Hex Cap Screw	Alloy Steel	4
7	MR52-W2	Radial Bearing 2x5x2	STD	4
8	MR104ZZ-W4	Radial Bearing 4x10x4	STD	3
9	OXY0030	Main Frame	CF 1mm	2
10	OXY0031	Bottom Plate	CF 1mm	1
11	OXY0034	Main Frame Stiffener	CF 1mm	4
12	OXY0033	Break Way Canopy Mount	CF 1mm	2
13	OXY0035	Battery Tray	POM	1
14	OXY0029	Motor Mount	6061-T6	1
15	OXY0026	Upper Main Shaft Bearing Block	6061-T6	1
16	OXY0027	Middle Main Shaft Bearing Block	6061-T6	1
17	OXY0028	Lower Main Shaft Bearing Block	6061-T6	1
18	OXY0002	Boom Clamp	POM	2
19	OXY0022	Lock Rod	6061-T6	4
20	OXY0023	2x13.5 Pin	SST	2
21	OXY0024	Pulley Guide Belt	POM	2
22	OXY0025	Canopy Mount	POM	2
23	OXY0081	2X5.5X1 Washer	SST	4
24	OXY0036	Landing Gear	POM	1

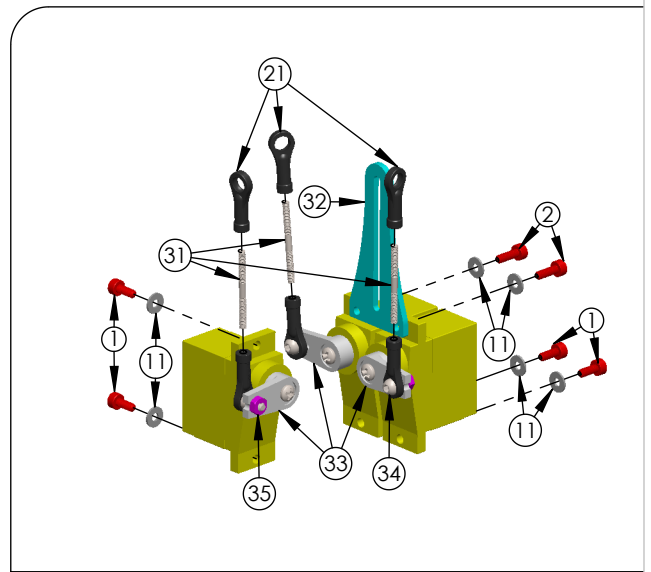




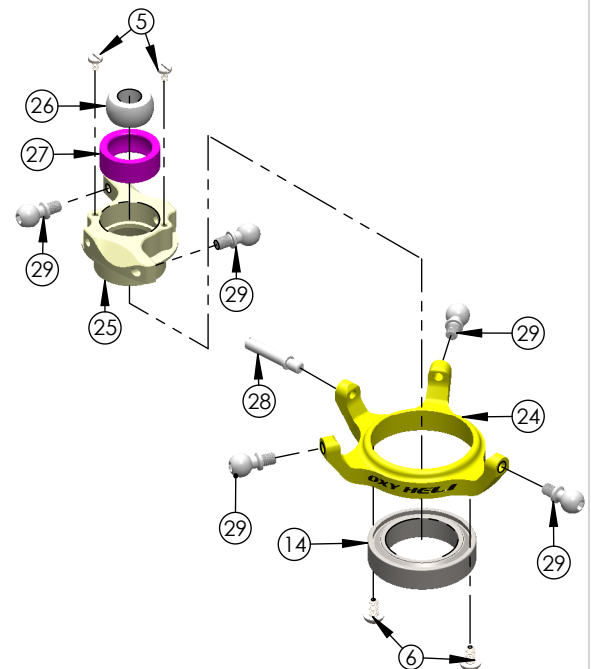
POS	COD	Name	Specification	Quantity
1	TCEM2X6	M2x6 Hex Cap Screw	Alloy Steel	4
2	OXY0076	M2x10 Hex Cap Screw	Alloy Steel	1
3	TBEM3X8	M3x8 Bottom Screw M3x8	Alloy Steel	3
4	SCM3X3	M3X3 Set Screw	Alloy Steel	3
5	SLNM2	Self Lock Nut M2	Alloy Steel	1
6	OXY0104	Pinion 10t- M0.5 - 3.17 Motor Shaft	Steel	1
	OXY0094	Pinion 11t- M0.5 - 3.17 Motor Shaft	Steel	1
	OXY0095	Pinion 12t- M0.5 - 3.17 Motor Shaft	Steel	1
	OXY0096	Pinion 13t- M0.5 - 3.17 Motor Shaft	Steel	1
	OXY0042	Pinion 14t- M0.5 - 3.17 Motor Shaft	Steel	1
	OXY0086	Pinion 15t- M0.5 - 3.17 Motor Shaft	Steel	1
7		LX8005 - EOX Motor 2214-3S-4100KV		1
8	OXY0041	One Way Sleeve	C40	1
9	OXY0001	Main Gear	PA66	1
10	OXY0037	Main Pulley Flange	6061-T6	1
11	MR104ZZ-W4	Radial Bearing 6X10X2.5	STD	2
12	HF0612	One Way Bearing 6X10X12	STD	1
13	OXY0040	Shim Washer 6.1X8X0.1	Brass	1
14	OXY0039	Washer 8x10x0.2	Brass	2
15	OXY0038	Auto Rotation Spacer	Brass	1
16		Timing Belt - B390MXL - 3MM Thickness		1
17	OXY0004	Main Shaft Lock Ring	SUS 304	1
18	OXY0003	Main Shaft	Hard Steel	1

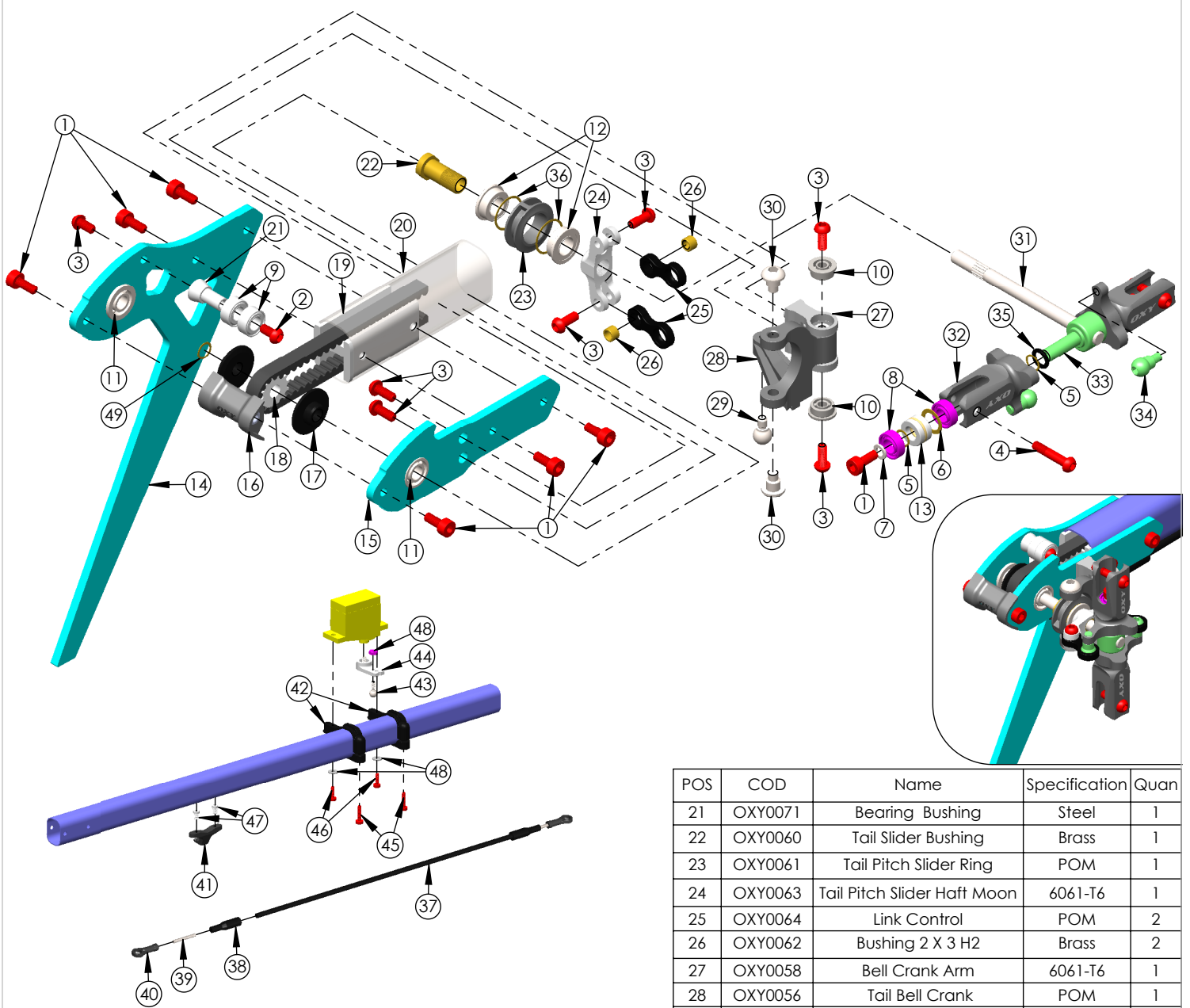


POS	COD	Name	Specification	Quantity
1	TCEM2X5	M2x5 Hex Cap Screw	Alloy Steel	4
2	TCEM2X6	M2x6 Hex Cap Screw	Alloy Steel	6
3	OXY0076	M2X10 Hex Cap Screw	Alloy Steel	1
4	TCEM2X14	M2x14 Hex Cap Screw	Alloy Steel	2
5	OXY0020	M1.2x2 Special Screw	SST	2
6	OXY0111	M1.6X3 Button Head Screw	Alloy Steel	2
7	SLNM2	Self Lock Nut M2	Alloy Steel	1
8	OXY0137	3.1x5x0.6 Washer	Brass	2
9	OXY0055	2x3.5x0.2 Washer	Brass	2
10	Oxy0054	3x4x0.1 Washer	Brass	2
11	WM2	WM2 Washer M2	SST	6
12	MR52-W2	Radial Bearing 2X5X2	STD	4
13	MR83_ZZ/W2.5	Radial Bearing 3X8X2.5	STD	4
14	MR6701_ZZ	Radial Bearing 12x18 H4	STD	1
15	F3-8G_X	thrust bearing 3x8 h3.5	STD	2
16	OXY0110	Rubber Dampener	Rubber	2
17	OXY0079	Dampener Bushing	POM	2
18	OXY0005	Center Hub	6061-T6	1
19	OXY0008	Main Grip	6061-T6	2
20	OXY0007	Spindle Shaft	SS420	1
21	OXY0011	4mm-linkage ball	POM	8
22	OXY0010	Thread Rod M1.6 X 14	SST	2
23	OXY0009	DFC Arm	POM	2
24	OXY0014	Lower Swash Plate	6061-T6	1
25	OXY0015	Upper Swash Plate	6061-T6	1
26	OXY0017	Center Ball	SST	1
27	OXY0016	Ball Holder	POM	1
28	OXY0018	Antirotation Pin	Steel	1
29	OXY0019	Swash Plate Ball	Steel	5
30	OXY0012	2x3.7x4.4 Bushing	Brass	2
31	OXY0075	Servo Rod M1.6x18	Steel	3
32	OXY0032	Anti-Rotation Guide	CF 1.5 mm	1
33	OXY0085	Servo Arm	POM	3
34	OXY0092	4X2X4.2 M2 Linkage Ball	SST	3
35		Hex Nut M2	Alloy Steel	3
36	OXY0081	2.1X5.5X1 Washer	Brass	2



Swash Plate Set





POS	COD	Name	Specification	Quan
1	TCEM2x5	M2x5 Hex Cap Screw	Alloy Steel	8
2	TBEM2x4	M2x4 Button Screw	Alloy Steel	1
3	TBEM2x5	M2x5 Button Screw	Alloy Steel	7
4	OXY0078	M2X10 Buttom Screw	Alloy Steel	2
5	OXY0054	3x4x0.1 Shim Washer	Brass	4
6	OXY0053	4.2X6X0.2 Washer	Brass	2
7	OXY0055	2X3.5 W 0.5 Shim Washer	SST	2
8	MR63-W2	Radial Bearing 3X6X2	STD	4
9	MR63_ZZC	Radial Bearing 3X6X2.5	STD	2
10	MF682ZZ	Flange_Bearings_2x5x2.3	STD	2
11	MF73_ZZ/W3	Flange_Bearings_3x7x3	STD	2
12	MF74-ZZ	Flange_Bearings_4x7x2.5	STD	2
13	F3-6G-W3.5	Thrust Bearing 3x6 W3.5	STD	2
14	OXY0069	Vertical Fin Block	CF 2mm	1
15	OXY0070	Tail Case Bearing Block	CF 2mm	1
16	OXY0072	Tail Case Cover	POM	1
17	OXY0046	Flange Tail Pulley	POM	2
18	OXY0045	14T Tail Pulley	6061-T6	1
19	OXY0073	Tail Case Center	6061-T6	1
20	OXY0065	Square Boom 11X14X0.5X284	6061-T6	1

POS	COD	Name	Specification	Quan
21	OXY0071	Bearing Bushing	Steel	1
22	OXY0060	Tail Slider Bushing	Brass	1
23	OXY0061	Tail Pitch Slider Ring	POM	1
24	OXY0063	Tail Pitch Slider Haft Moon	6061-T6	1
25	OXY0064	Link Control	POM	2
26	OXY0062	Bushing 2 X 3 H2	Brass	2
27	OXY0058	Bell Crank Arm	6061-T6	1
28	OXY0056	Tail Bell Crank	POM	1
29	OXY0043	4x2 Linkage Ball	Steel	1
30	OXY0057	Tail Pin Screw	Steel	2
31	OXY0044	Tail Shaft	SST	1
32	OXY0051	Tail Grip	6061-T6	2
33	OXY0049	Tail Hub	SST 304	1
34	OXY0050	Linkage Ball 4 X 3 M2	SST	2
35	OR-2X1	O-RING ID 2 - W 1	Rubber	2
36	OXY0139	Shim 7x8x0.1	Brass	2
37	OXY0048	CF Rod 170 mm	CF	1
38	OXY0047	Tail Push Rod Terminal	POM	1
39	OXY0010	Thread Rod M1.6X14	SST	1
40	OXY0011	4 mm Linkage Ball	POM	2
41	OXY0067	Guide Push Rod	POM	1
42	OXY0066	Tail Servo Mount	POM	2
43	OXY0092	4X2X4.2 M2 Linkage Ball	SST	1
44	OXY0085	Servo Arm	POM	1
45	TBES2X8	M2x8 Self Tapping Screw	Alloy Steel	2
46	TBES2X6	M2x6 Self Tapping Screw	Alloy Steel	2
47	OXY0068	Pin Screw	SST	2
48		Hex Nut M2	Alloy Steel	1
49	OXY0054	Shim 3x4x0.1	Brass	1