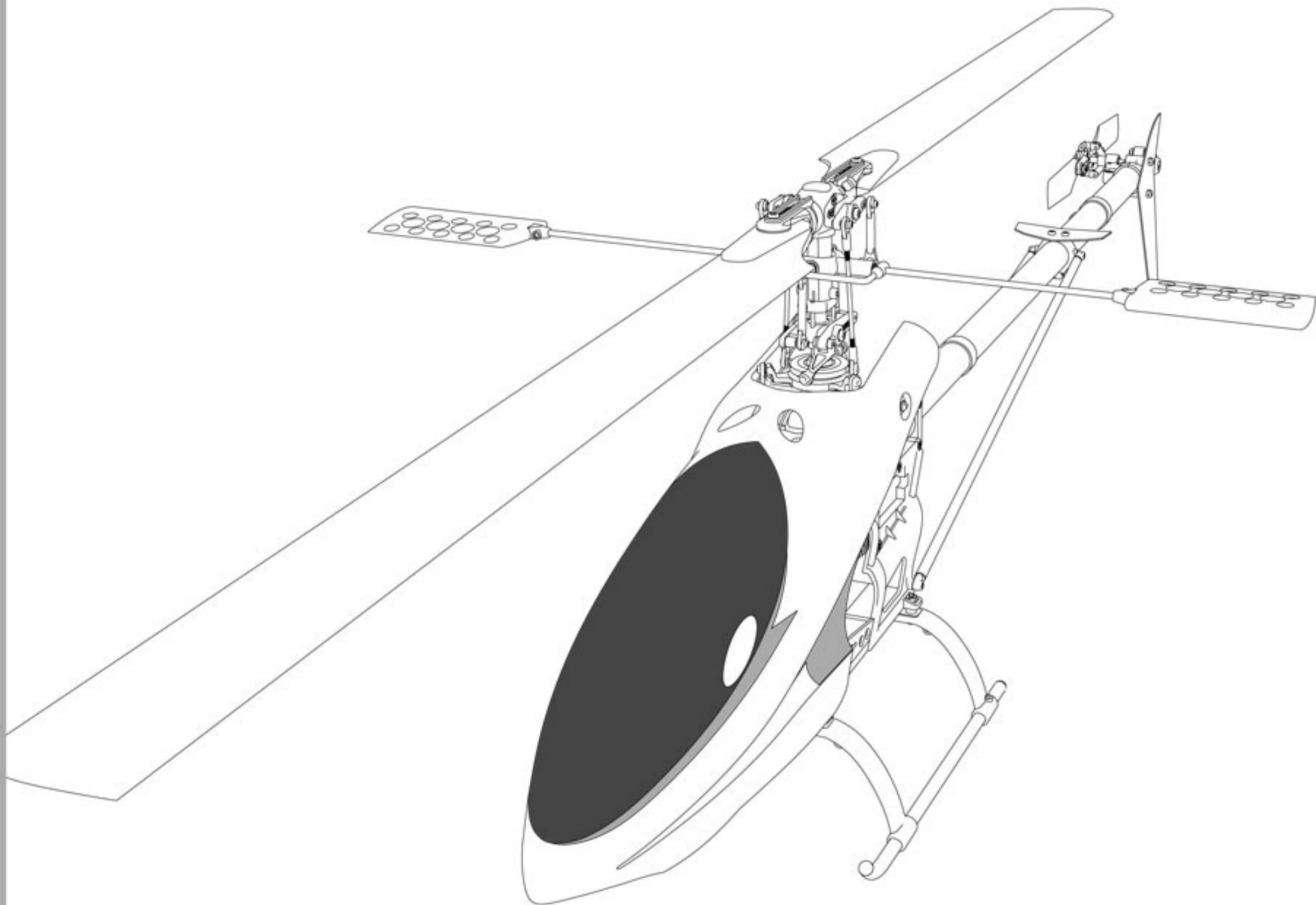


Hurricane 550

颶風

ASSEMBLY INSTRUCTION



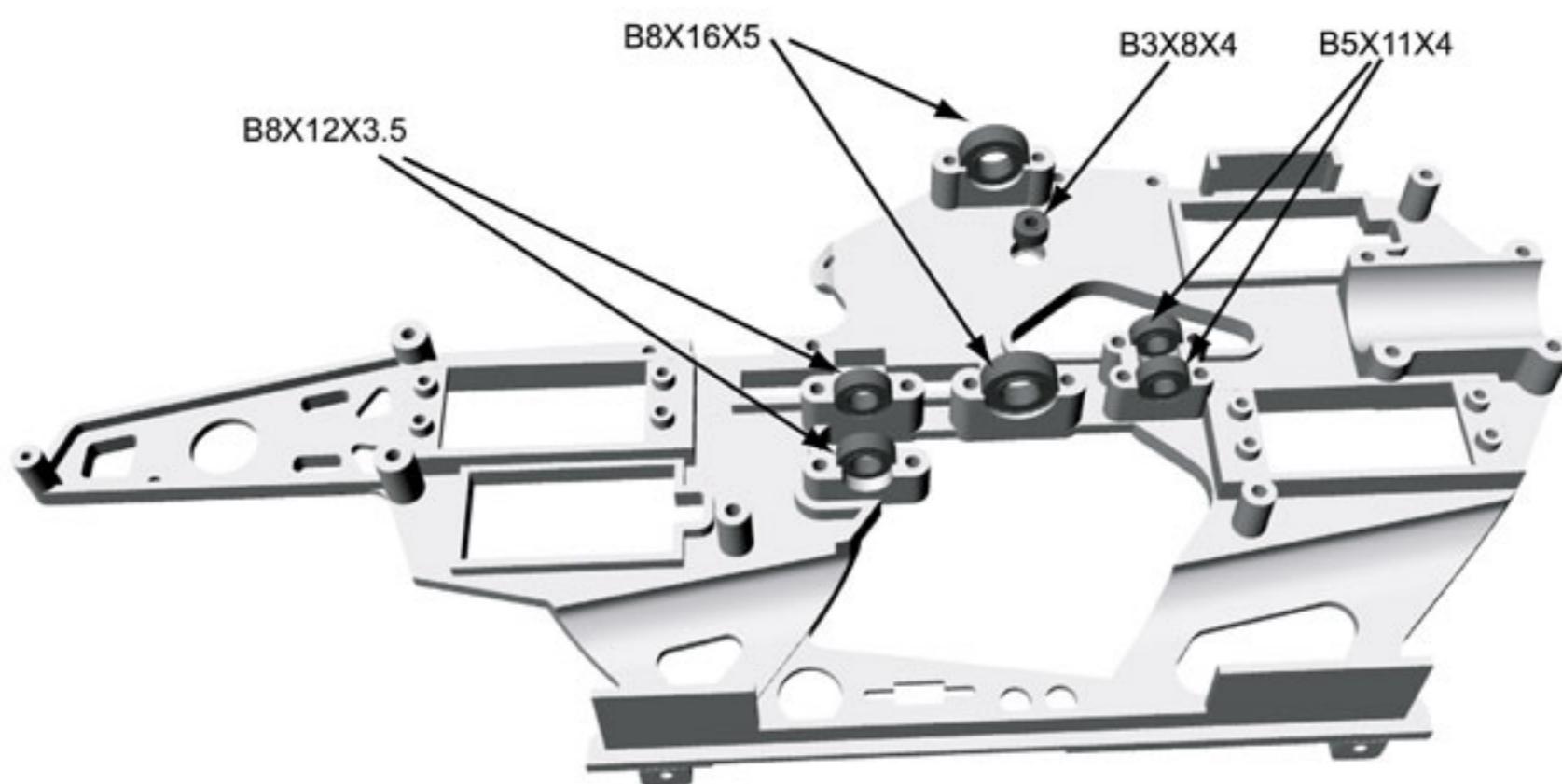
3D

Specification :

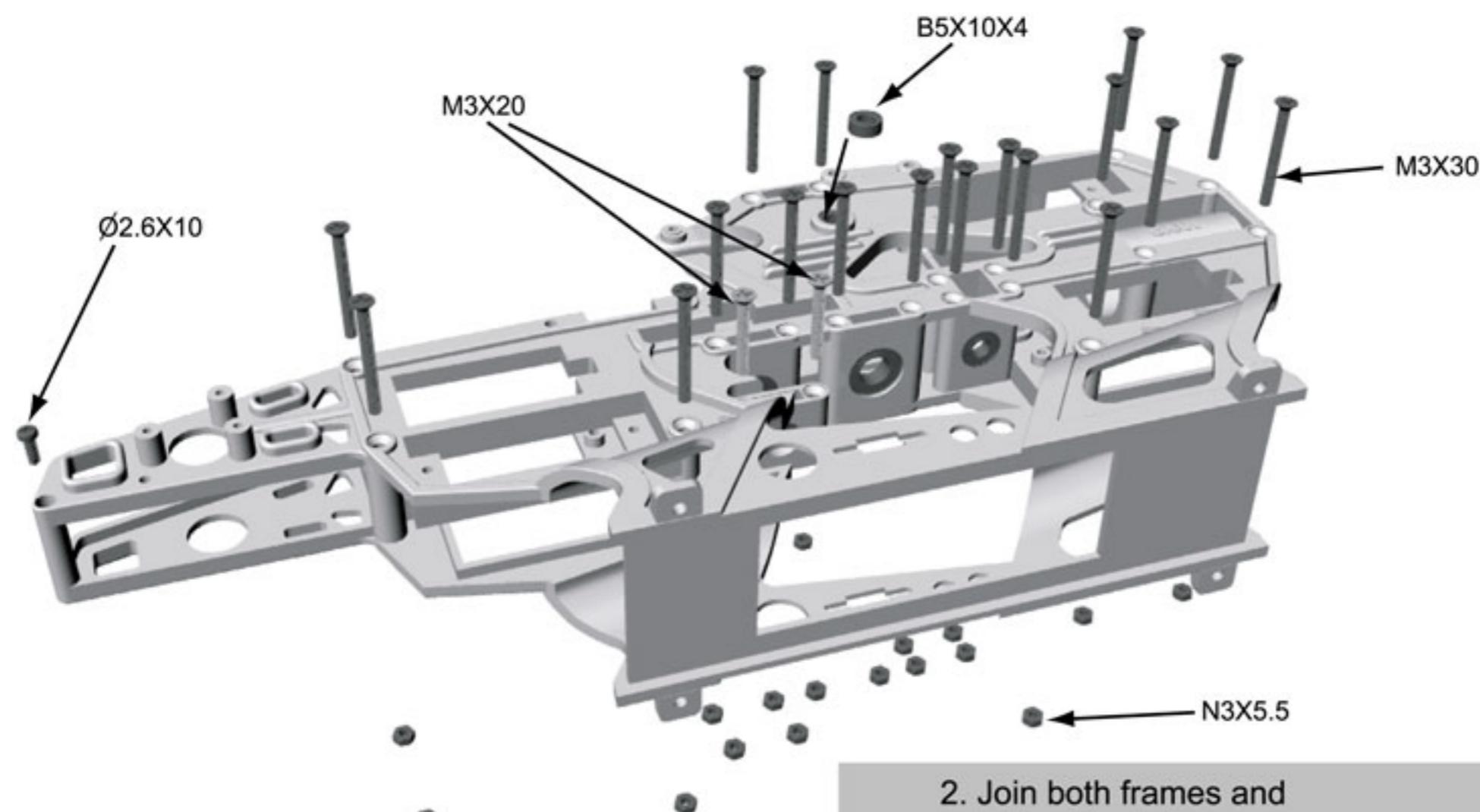
| | | | |
|---|---|----------------------|--|
| Overall Length(w/o Blades) : 1150mm | Overall Height: 310mm | Overall Width : 85mm | Skid Width: 165mm |
| Main Blade Length: 500~550mm | Main Rotor Diameter: 500-1110mm | 550-1210mm | Flybar Paddle Length: 485mm |
| Tail Blade Length: 80mm | Tail Rotor Diameter: 224mm | | Speed Ratio (Main and Tail) : 1:4.36 |
| Speed Ratio (Motor and Main) : 8.99:1 (Varied by Gear Ratio changed) | Flying Weight: 2000g (Approx.) | | |
| Power System (Recommended) : Motor -- 800 ~ 1200 KV | Battery -- 11.1V 2200mah 25C Li - Po in series(22.2V) | | |
| Important : The gear ratio, motor and battery should be set properly if the power system changed !! | | | |

| | |
|--|---------|
| Frame Assembly ----- | P1~P3 |
| Rotor Head Assembly ----- | P4~P5 |
| Tail Assembly ----- | P6~P7 |
| Electronics Installation and Wiring ---- | P8 |
| Helicopter Setup ----- | P9 |
| Carbon Frame Assembly (Option) ----- | P10 |
| Replacement Parts ----- | P11~P14 |
| Optional Parts ----- | P15~P16 |

Assembly 1

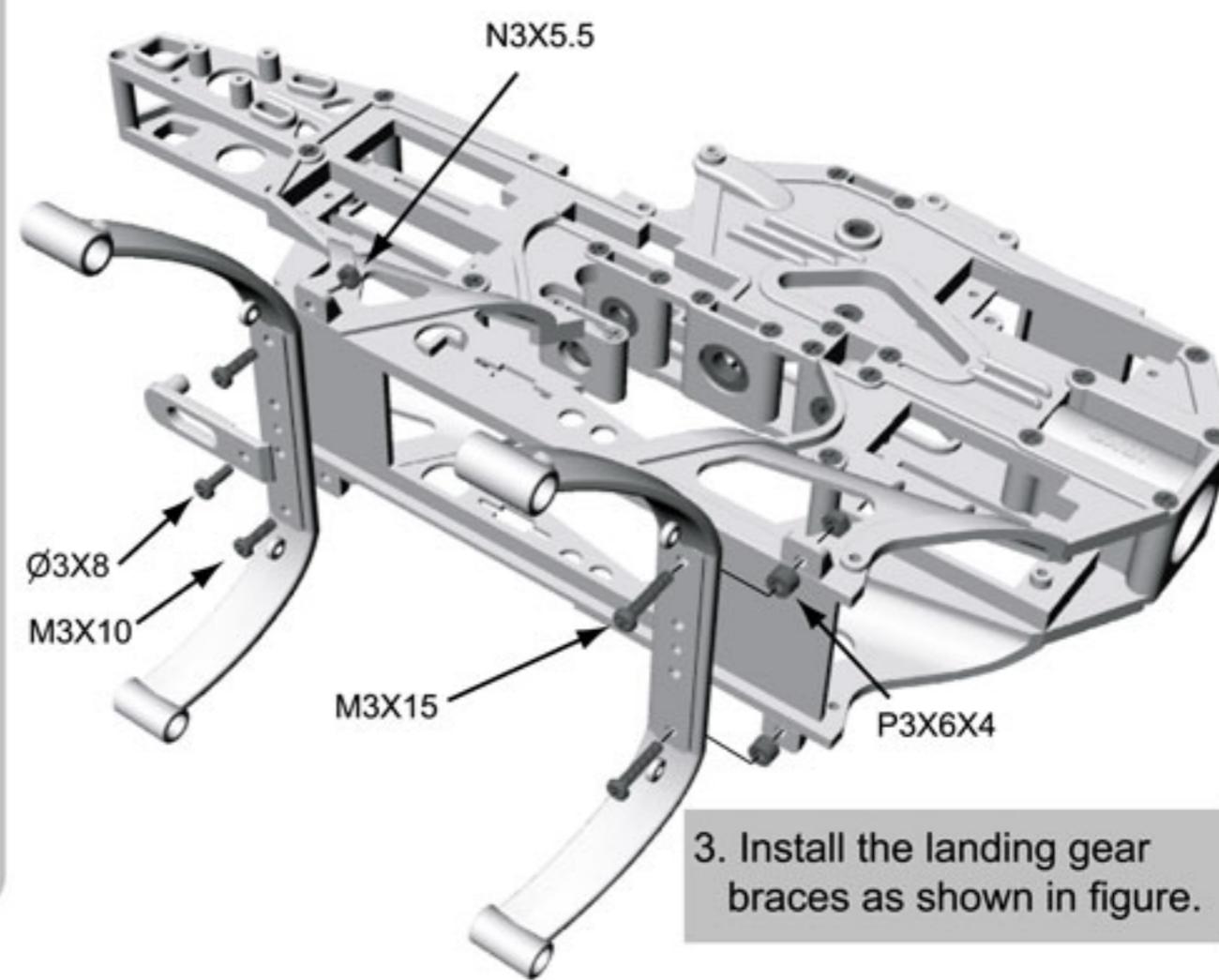


1. Install the bearings onto the frame.



2. Join both frames and tighten the bolts.

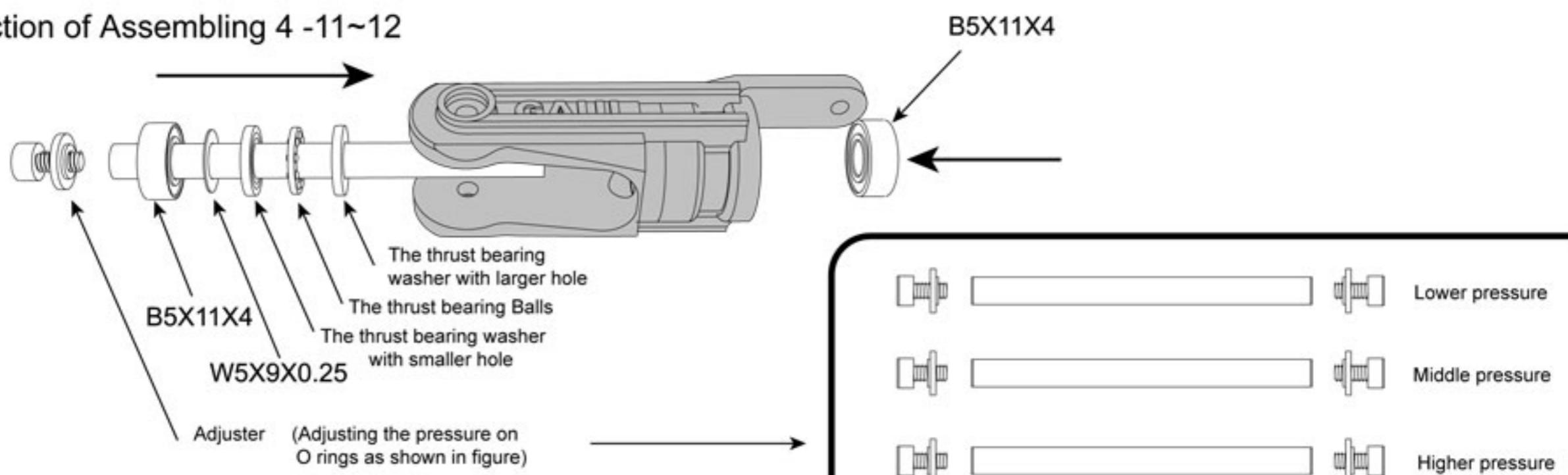
| Mark | Indication (mm) |
|-----------------|---|
| B-Bearing | B(Dia.in)x(Dia.out)x(Thickness) |
| O-Tap Screw | O(Dia.out)x(Length) |
| M-Machine Screw | M(Dia.out)x(Length) |
| N-Nut | N(Dia.in)x(Width) |
| P-Tube Pillar | P(Dia.in)x(Dia.out)x(Length) P(Dia.out)x(Length) |
| W-Washer | W(Dia.in)x(Dia.out)x(Thickness) |



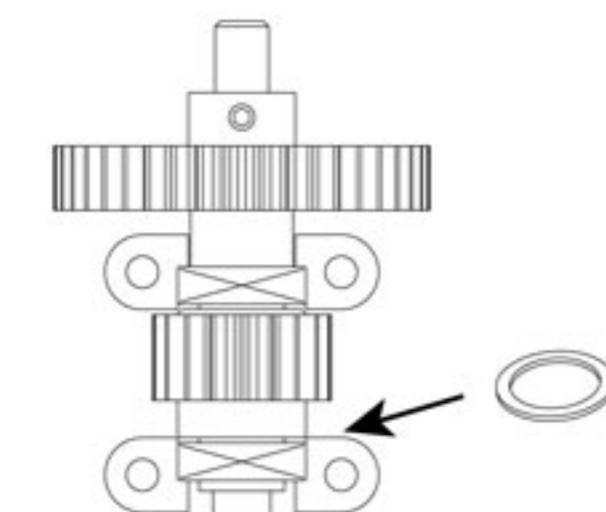
3. Install the landing gear braces as shown in figure.

Correction

(1) Correction of Assembling 4 -11~12



(2) Correction of Assembling 2 -6



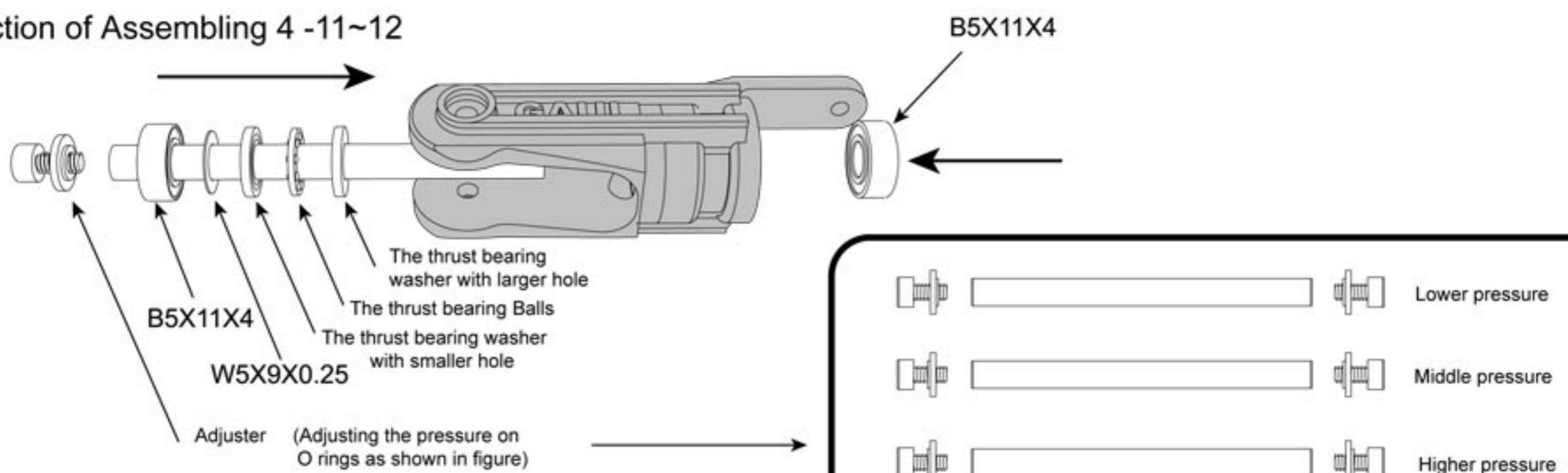
Just one washer(W8x10.5x0.5) is needed to be installed onto the bottom of the one-way gear

(3) The plastic spacer of the main rotor grip should be removed.

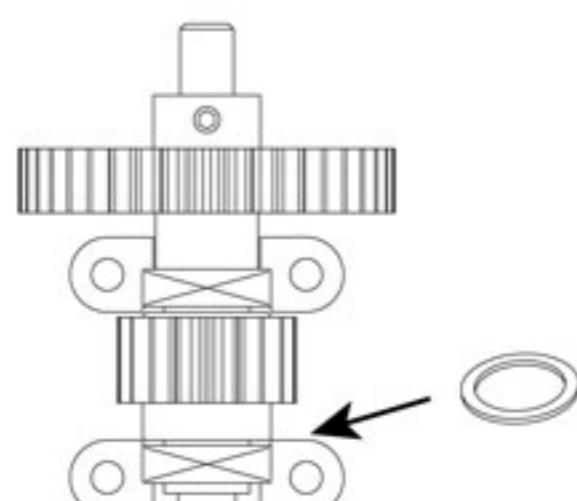


Correction

(1) Correction of Assembling 4 -11~12

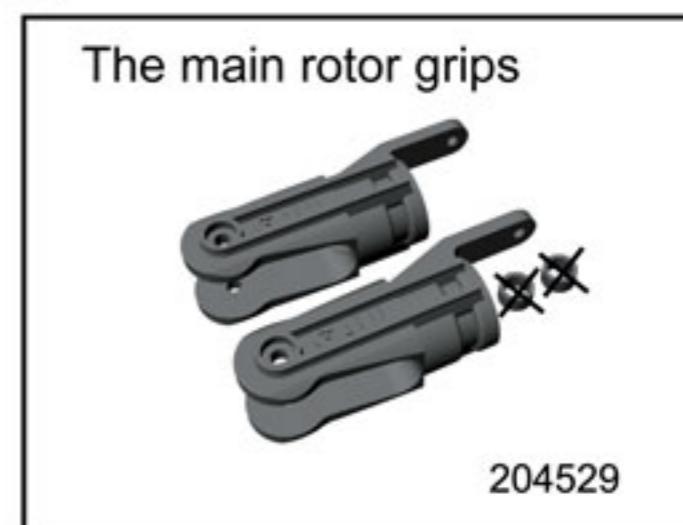


(2) Correction of Assembling 2 -6

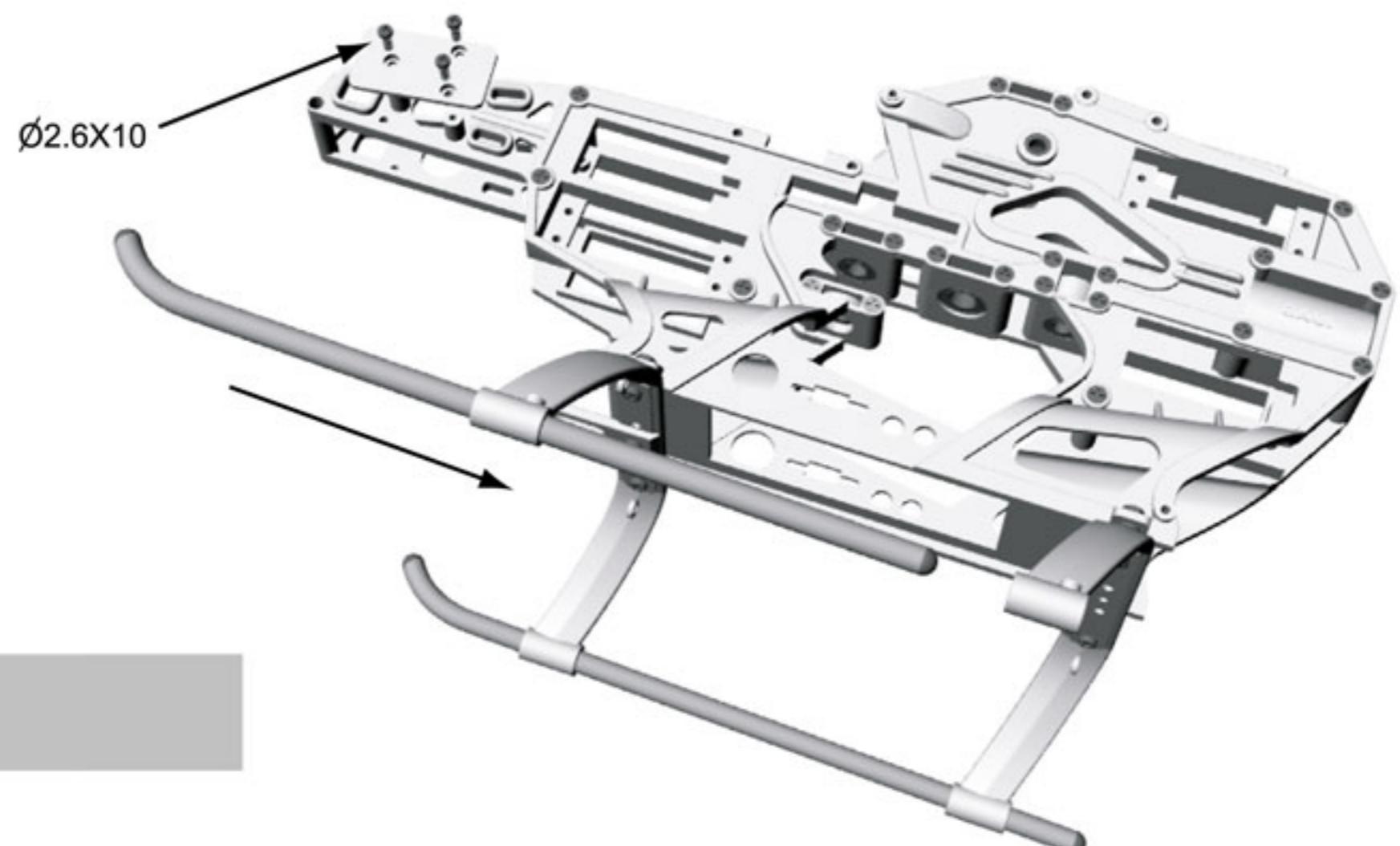


Just one washer(W8x10.5x0.5) is needed to be installed onto the bottom of the one-way gear

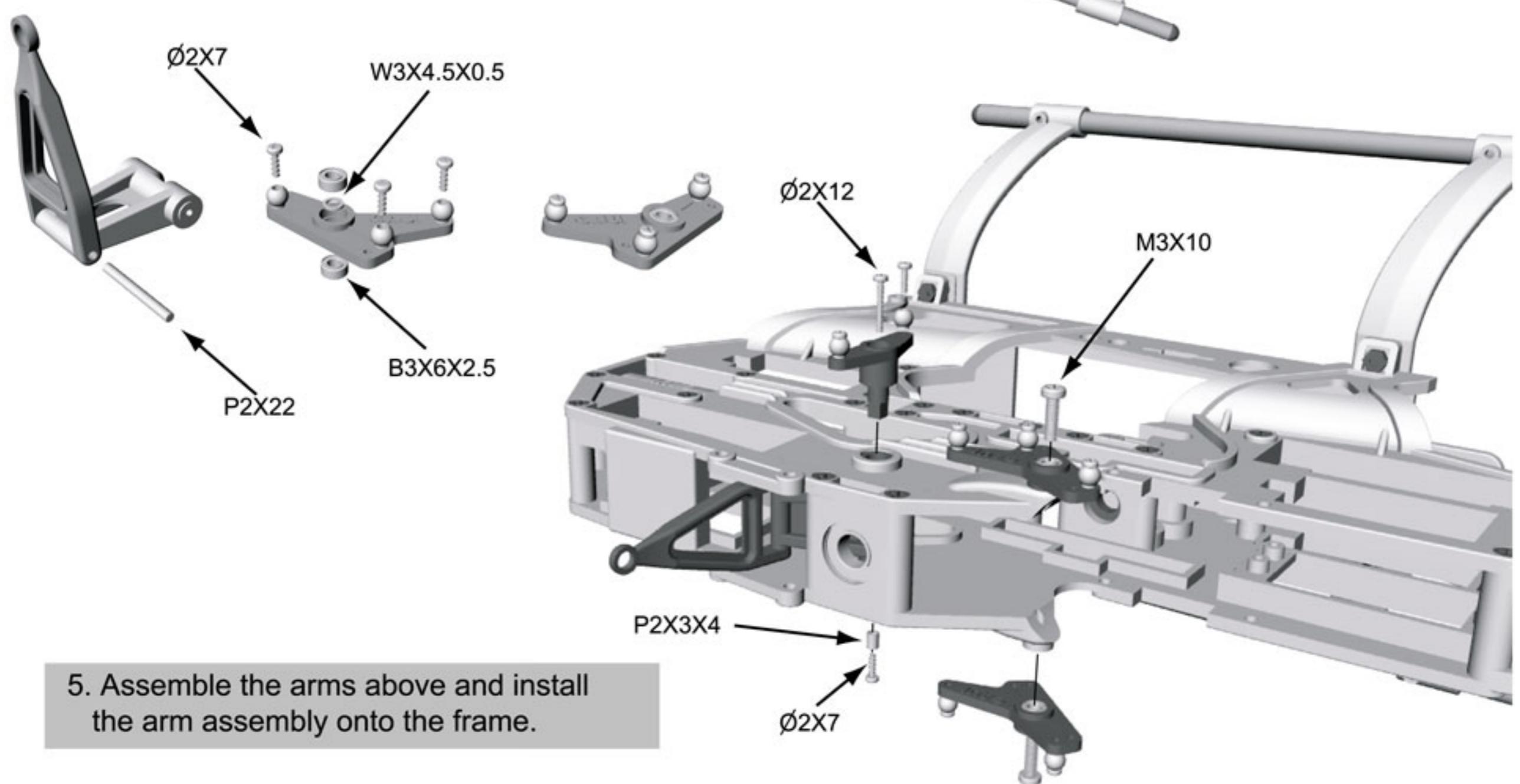
(3) The plastic spacer of the main rotor grip should be removed.



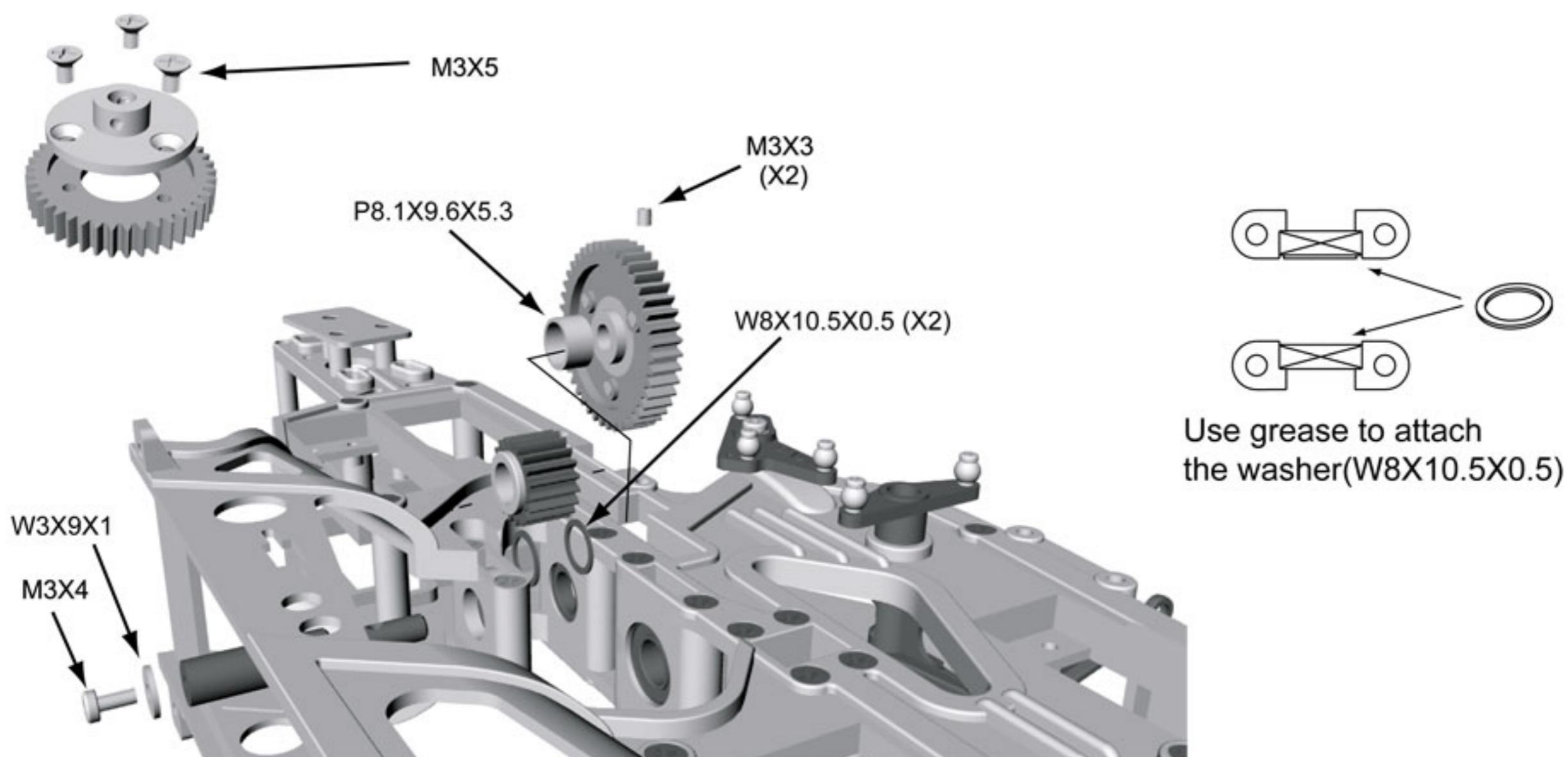
Assembly 2



4. Install the ESC mount
and the skids.

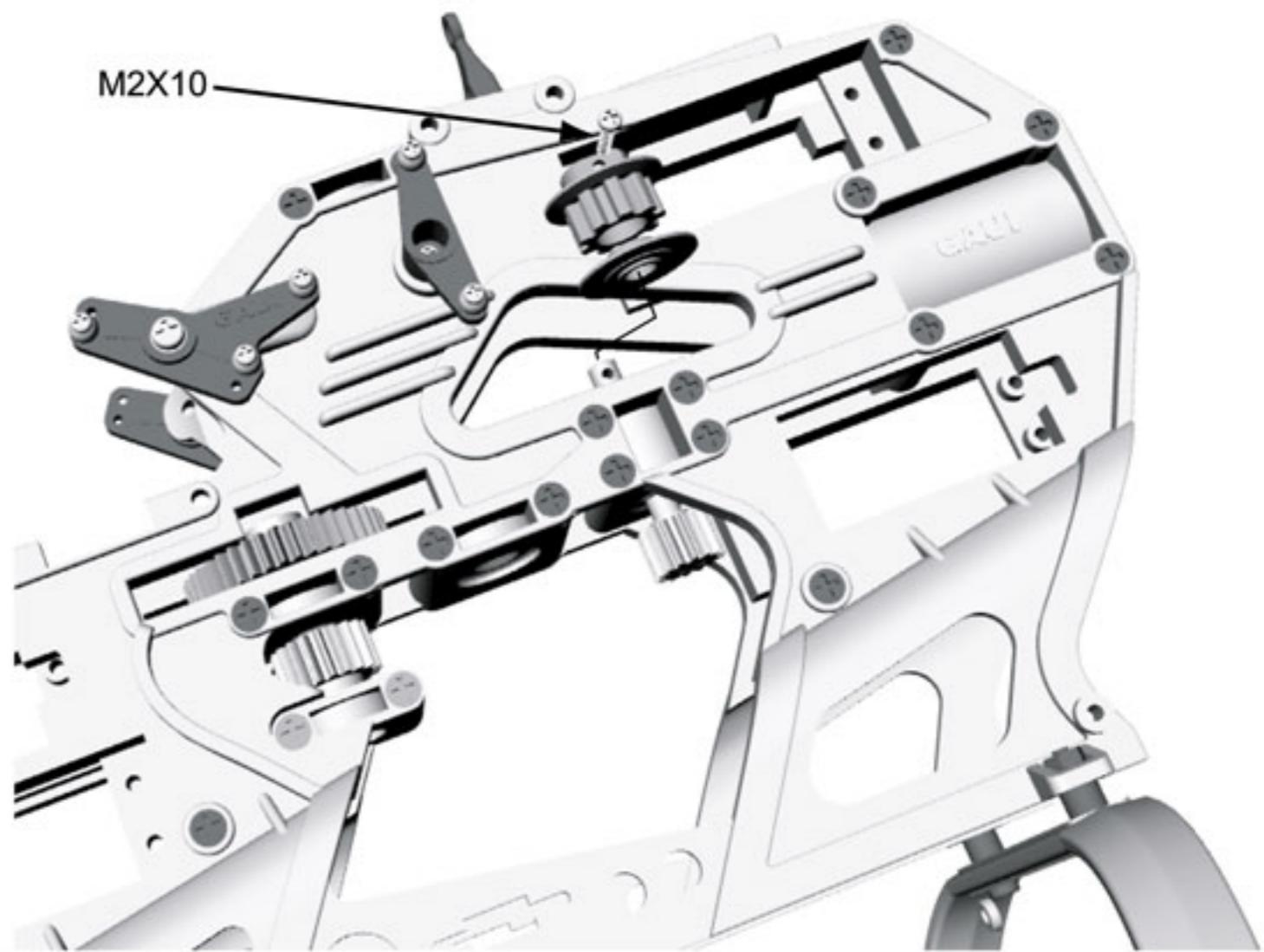
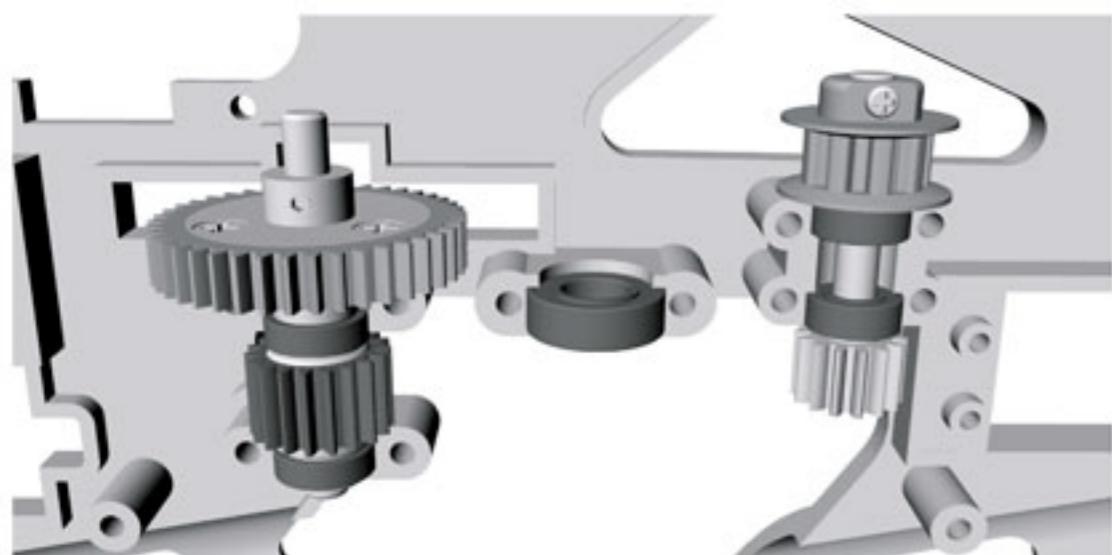


5. Assemble the arms above and install
the arm assembly onto the frame.

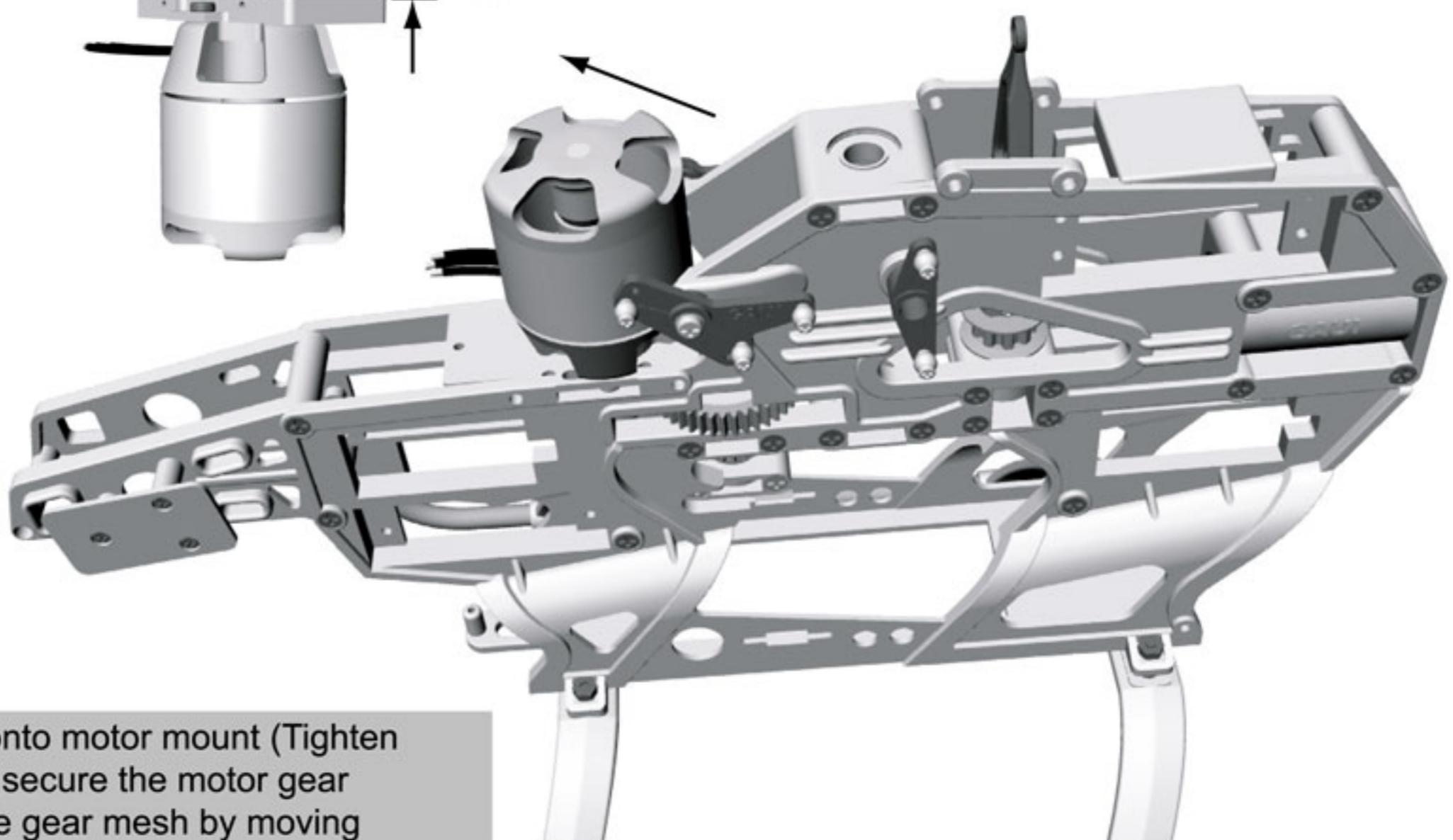
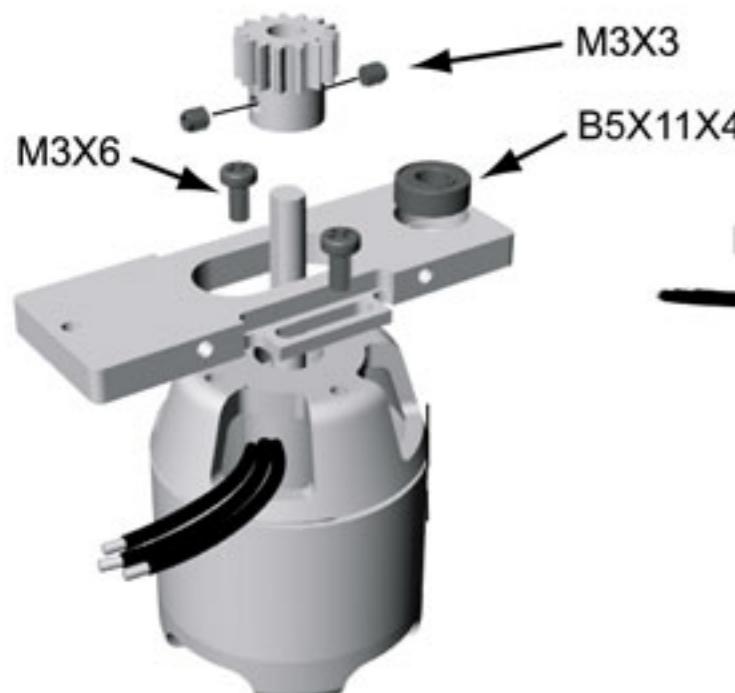


6. Assemble the front main gear and hub, join the
one way gear and shaft and the front main gear
assembly.(as shown in perspective)

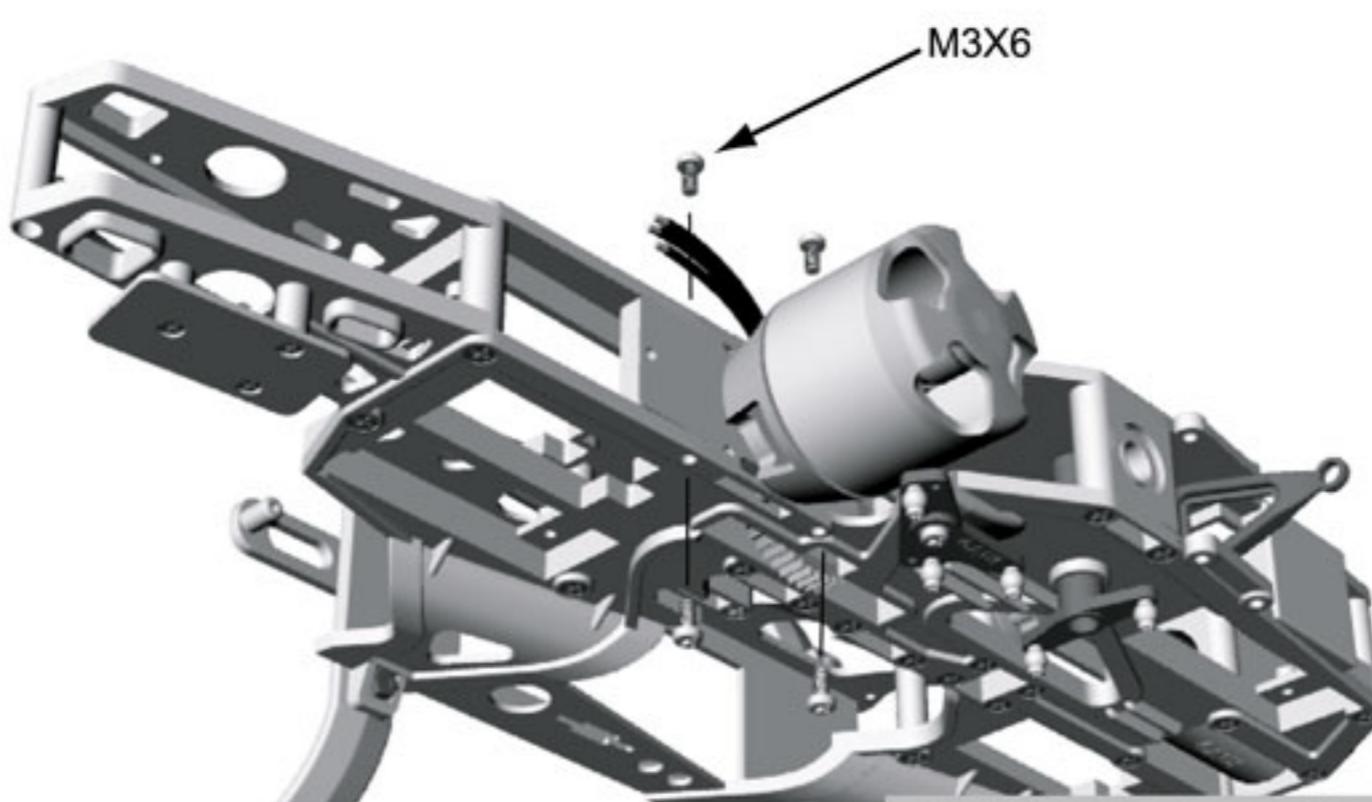
Assembly 3



7. Install the pullet shaft and the front pulley, tighten the screw(M2x10) at the flat side of the pulley race.(as shown in perspective)

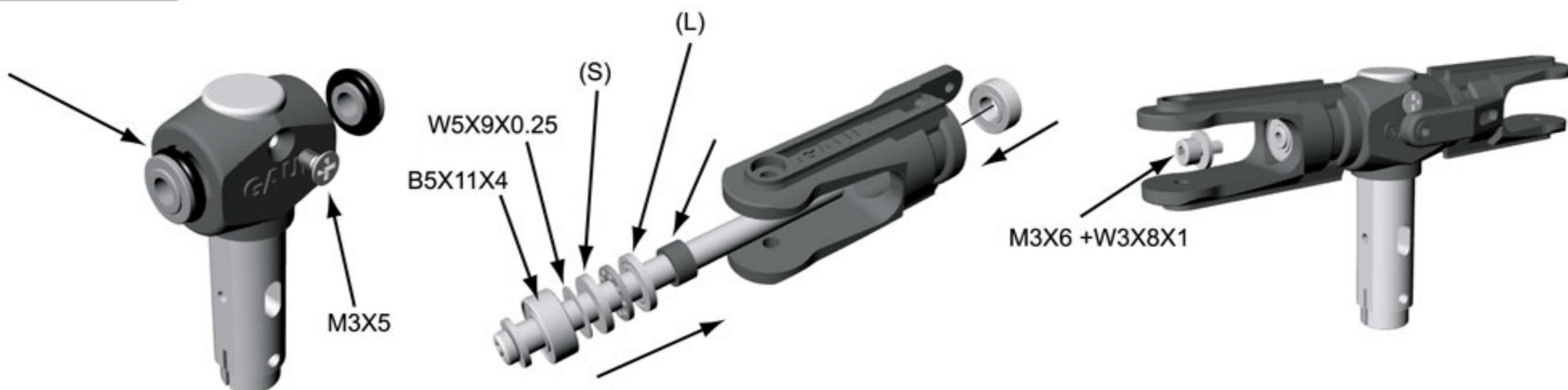


8. Install the motor onto motor mount (Tighten the screw slightly), secure the motor gear and then adjust the gear mesh by moving the motor forward or backward.



9. After the gear mesh is set properly, remove the mount (with motor and gear), then tighten the motor screws and install them onto frame.

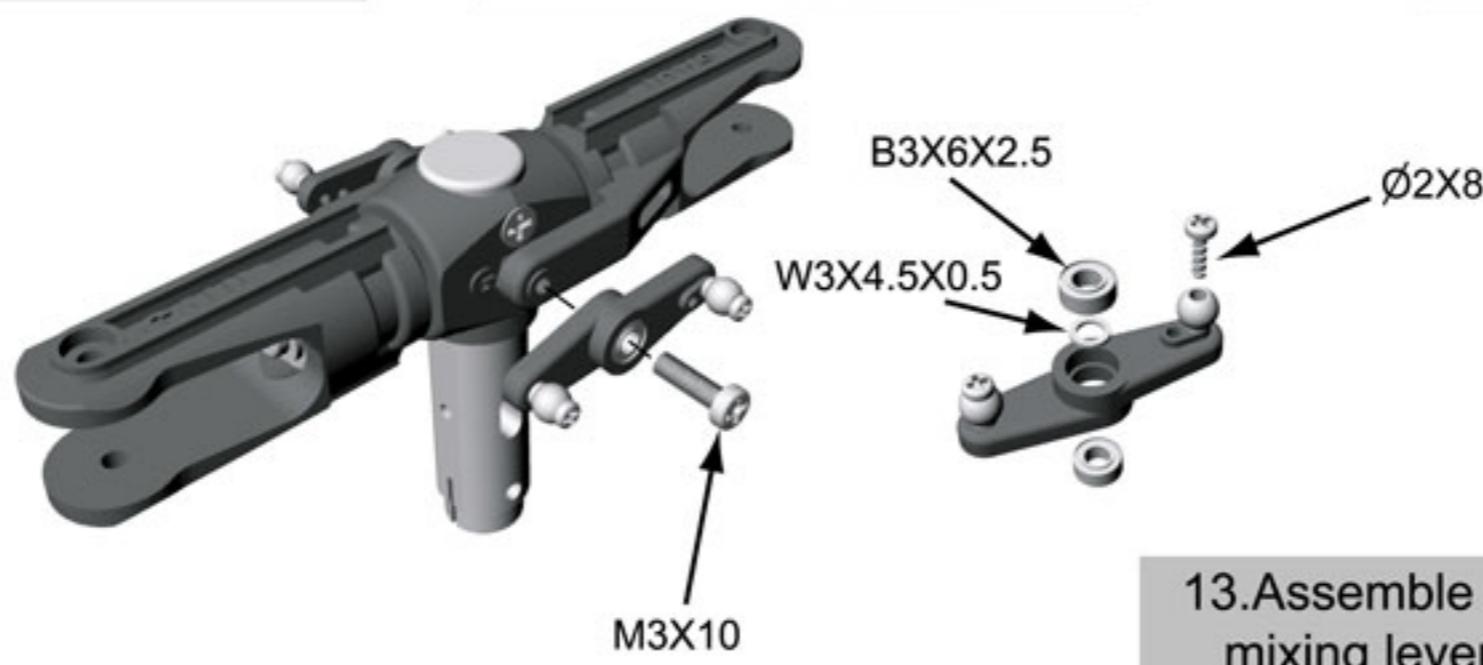
Assembly 4



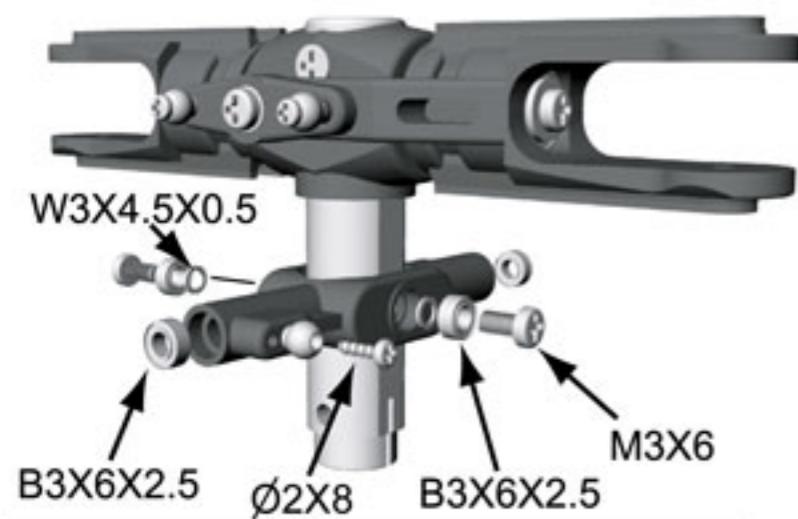
10.Join the yoke and center hub,install the head spacer & damper as shown in figure.

11.Install the parts in that order.(Notice:S - smaller hole,L - Larger hole)

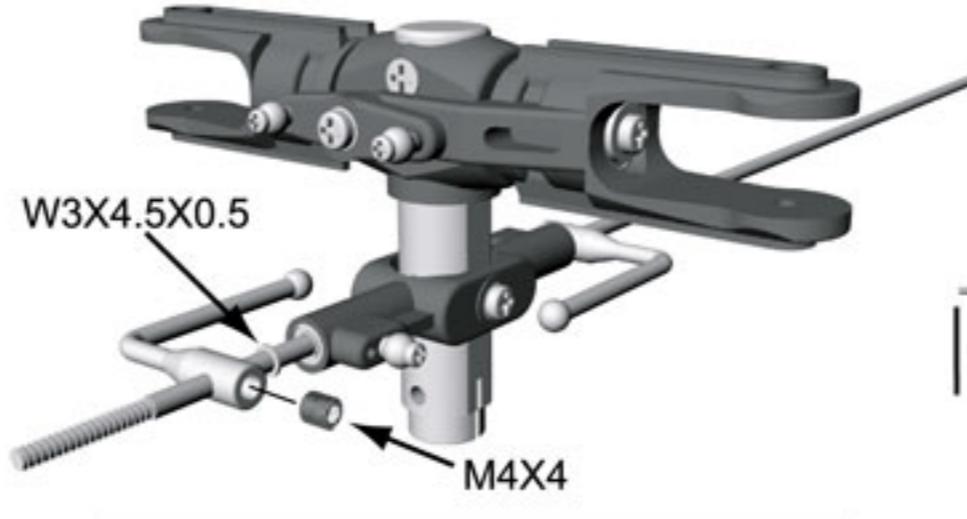
12.Asemble grips and yoke, tighten the two screws of spindle shaft.



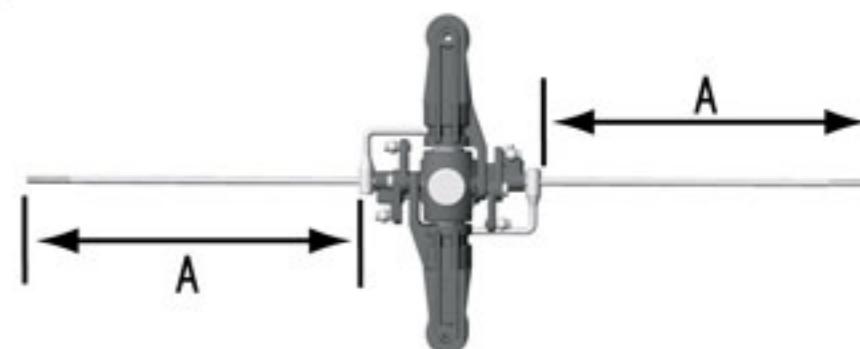
13.Asemble both of the mixing levers and join them to the grips.



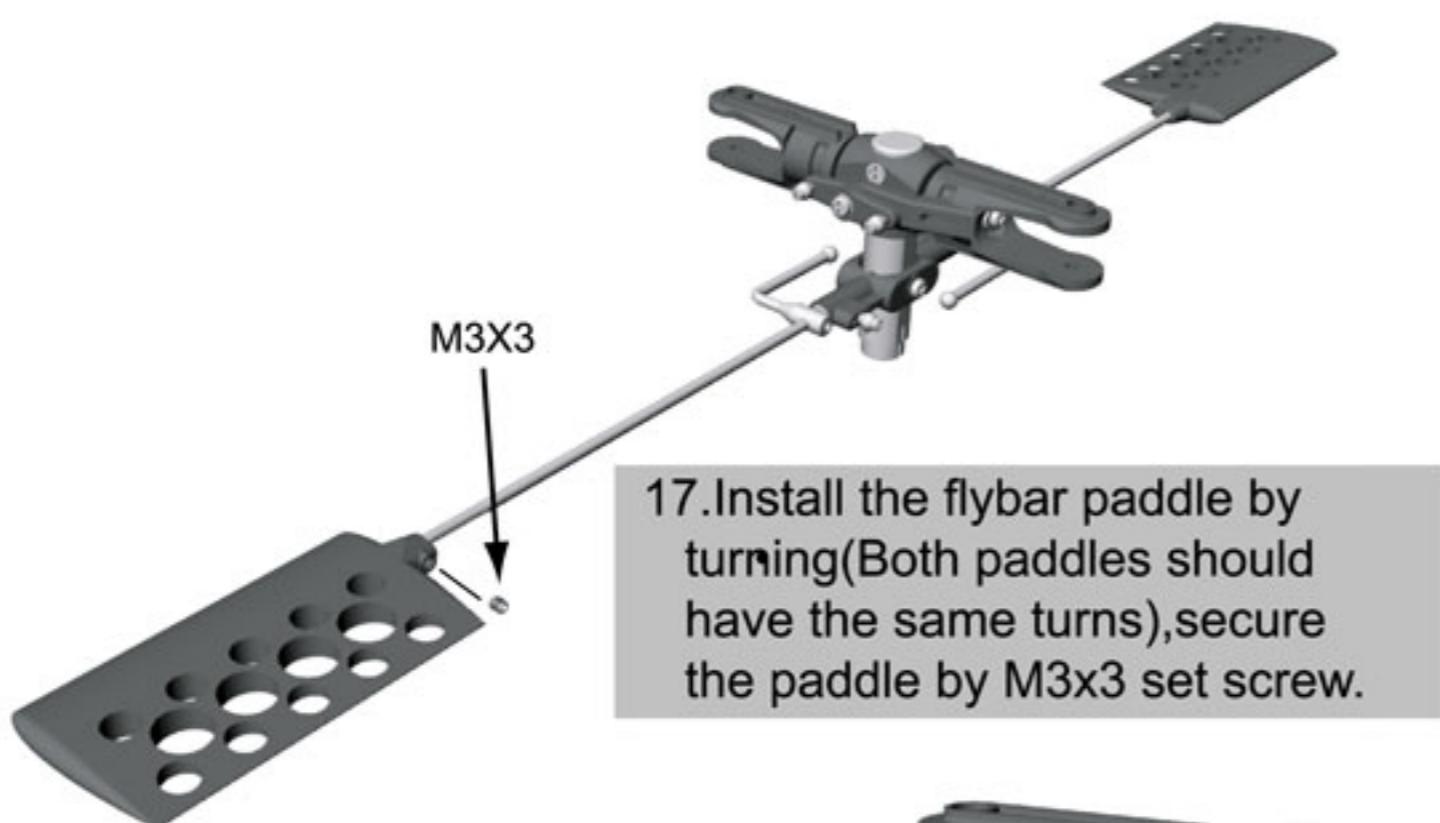
14.Install the seesaw onto center hub.



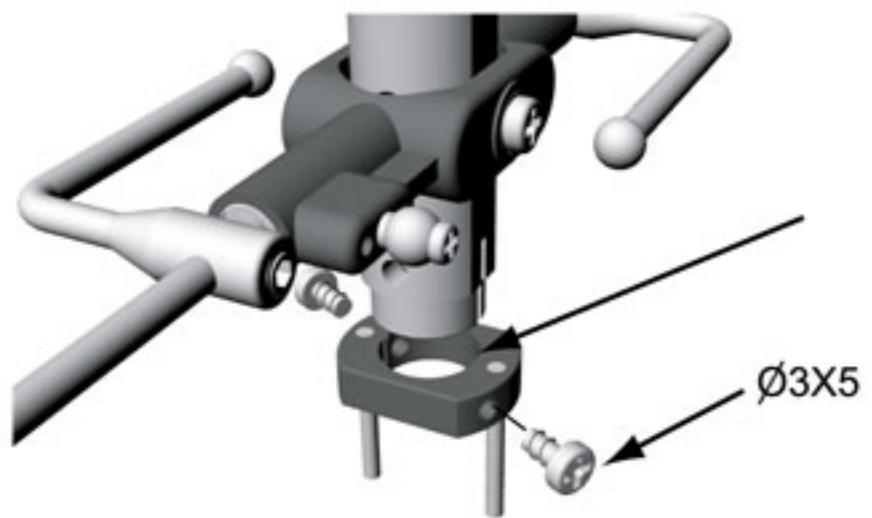
15.Install the flybar arms onto the flybar.



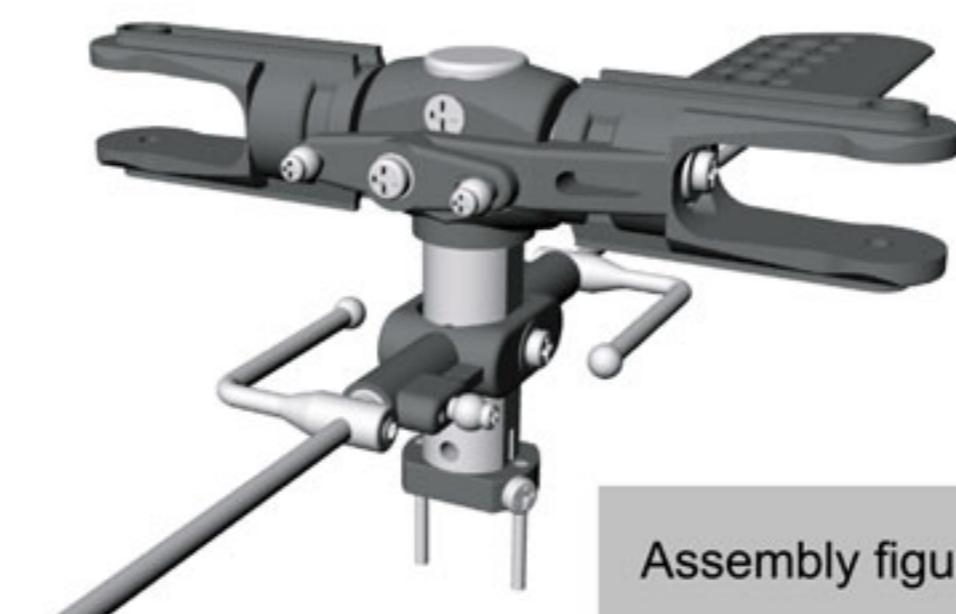
16.Make sure the both length of the flybar should be exact the same.



17.Install the flybar paddle by turning(Both paddles should have the same turns),secure the paddle by M3x3 set screw.



18.Install washout guide. (The slot should be in the exact position and do not overtight the screw.)

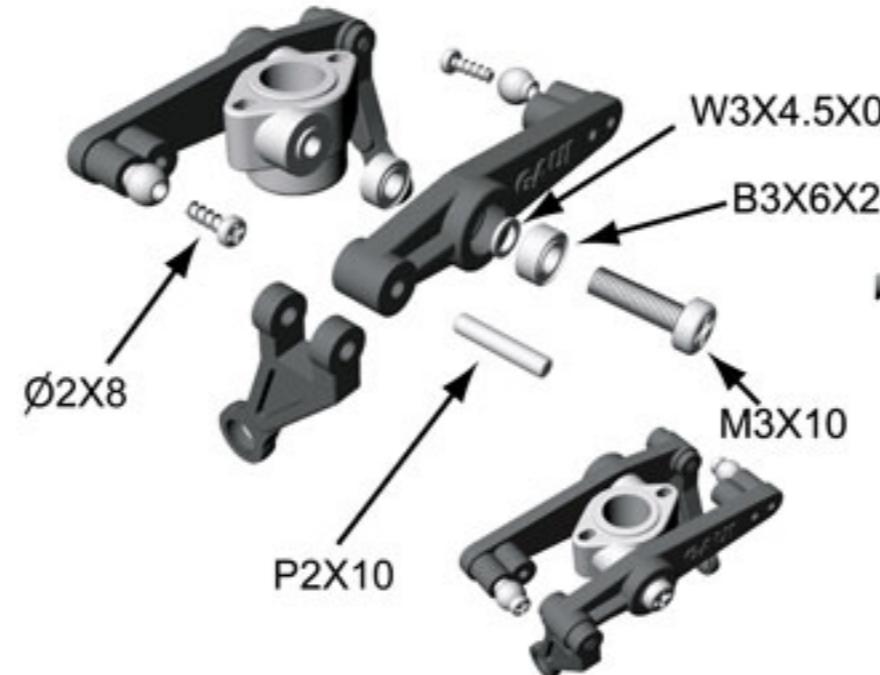


Assembly figure

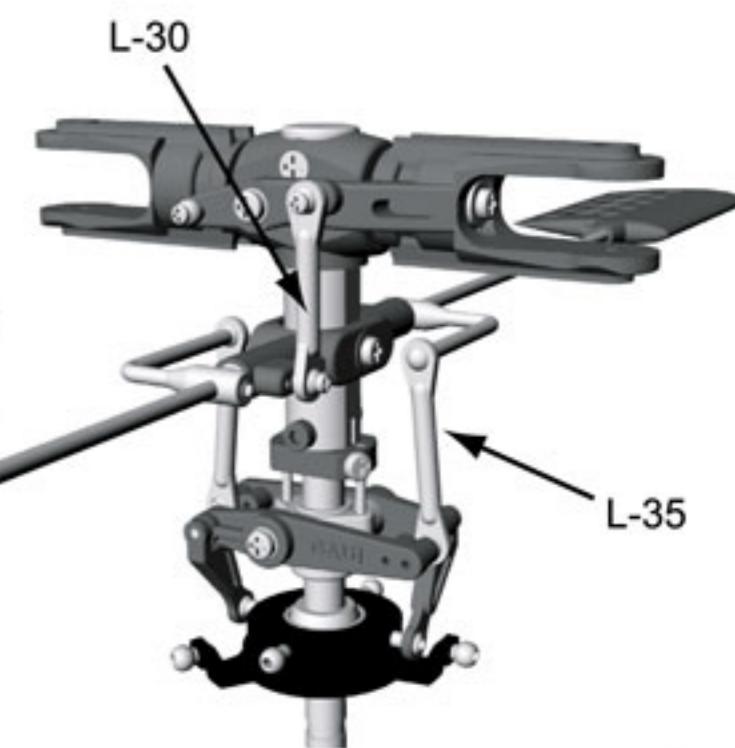
Assembly 5



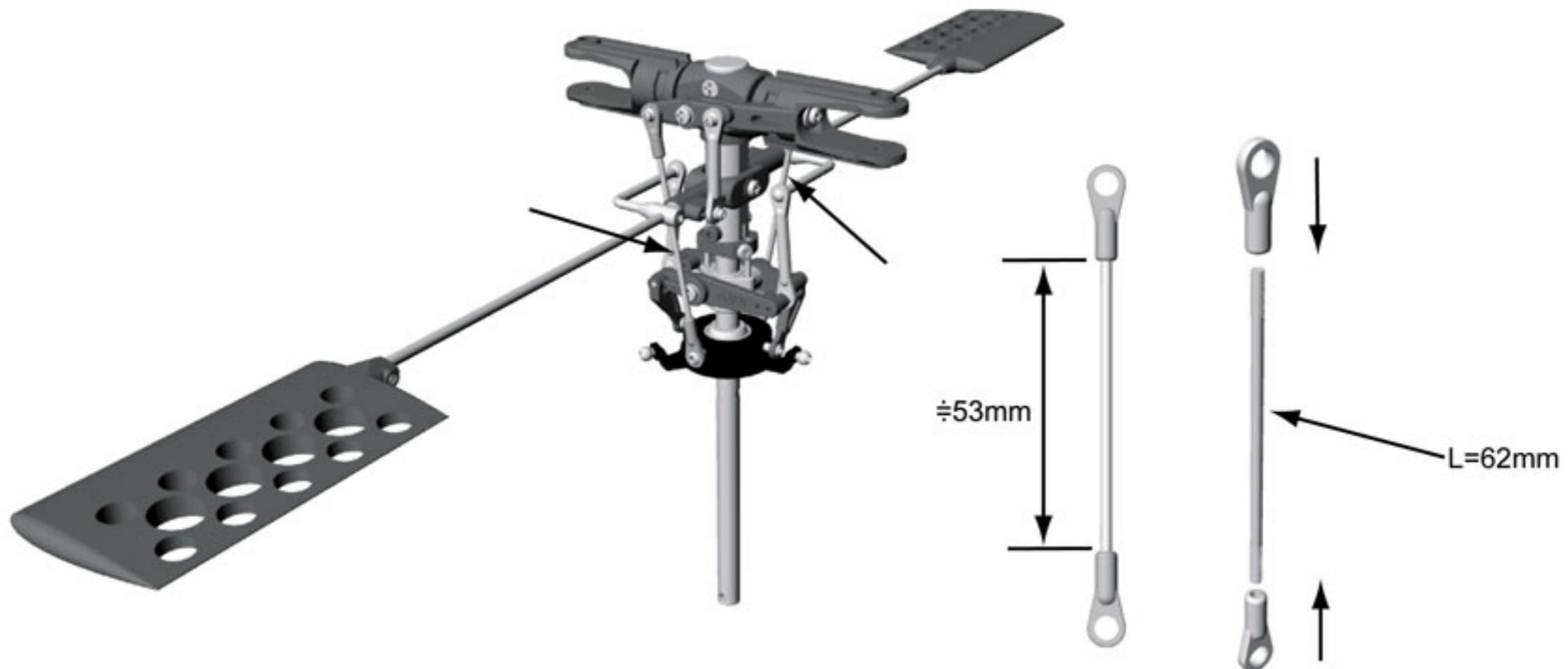
19. Install the main mast.
(Be sure not to install
the mast up side down)



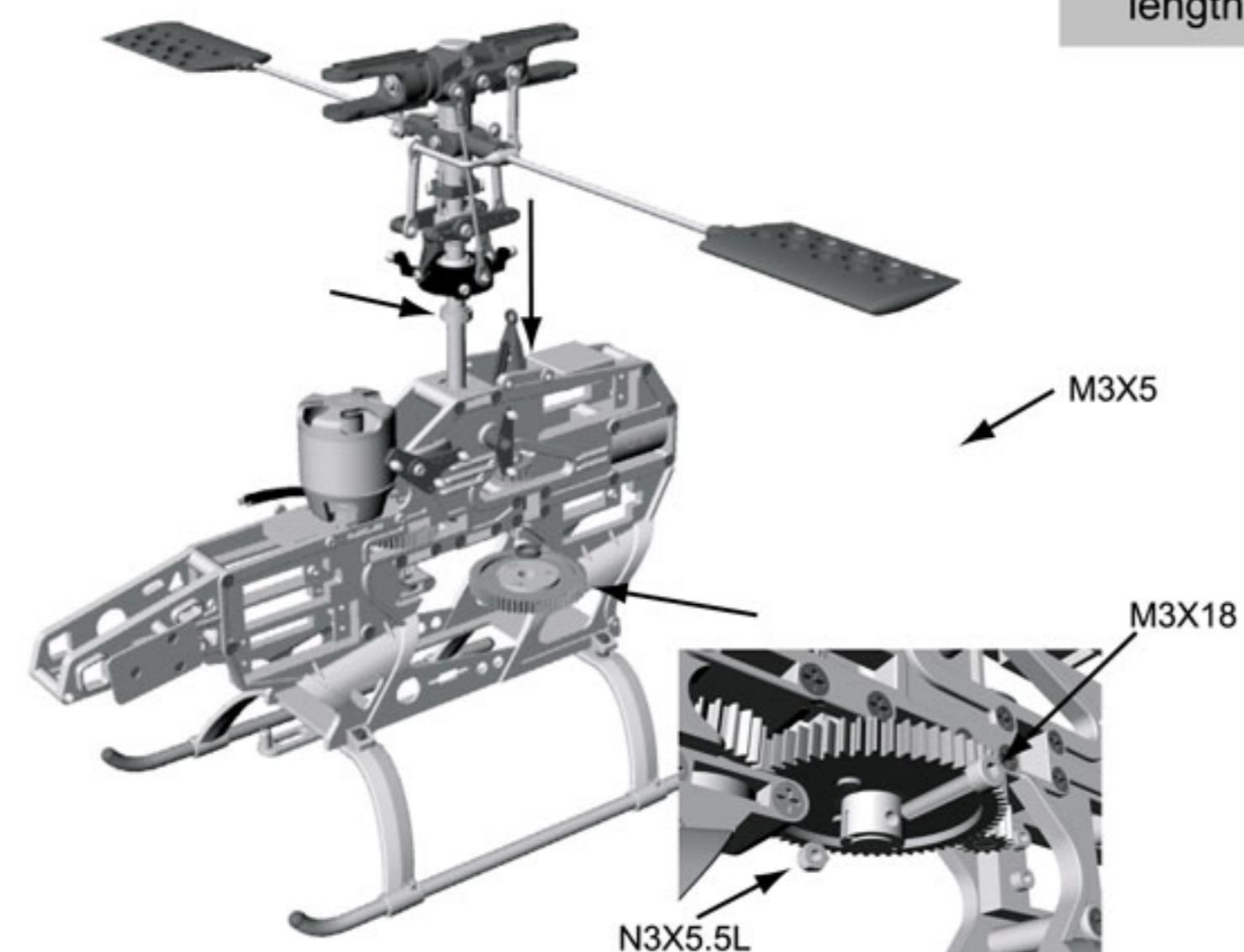
20. Assemble the washout
base & the arms.



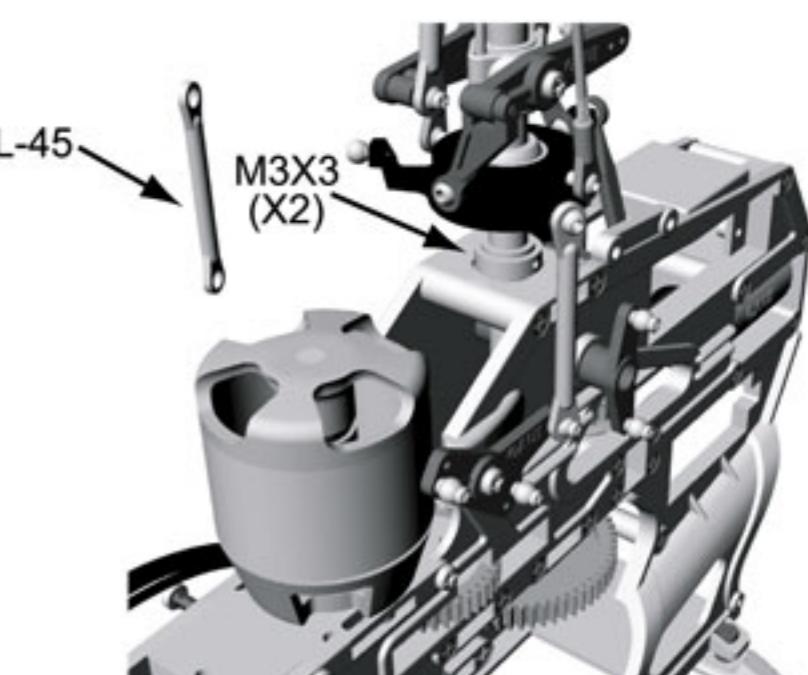
21. Install the double
links.



22. Assemble the pitch linkages.(The
length should be set properly)

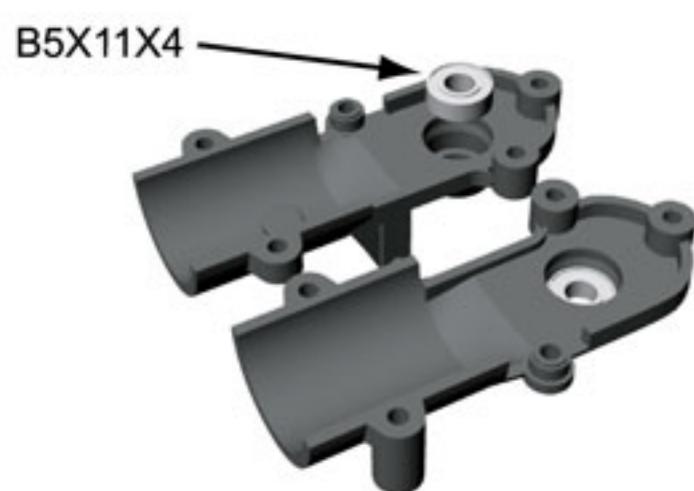


23. Assemble the rear main gear and hub, join
it with the main mast and frame assembly.



24. Install the mast collar and double link. The
mast should not able to be moved up and down.

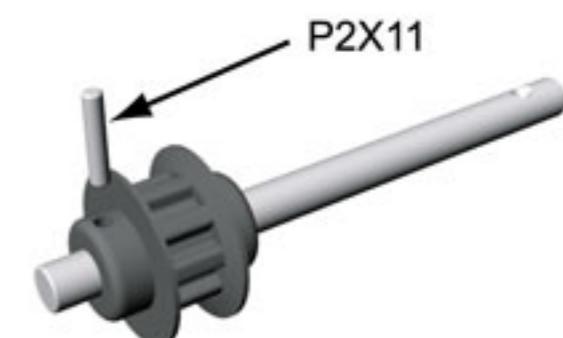
Assembly 6



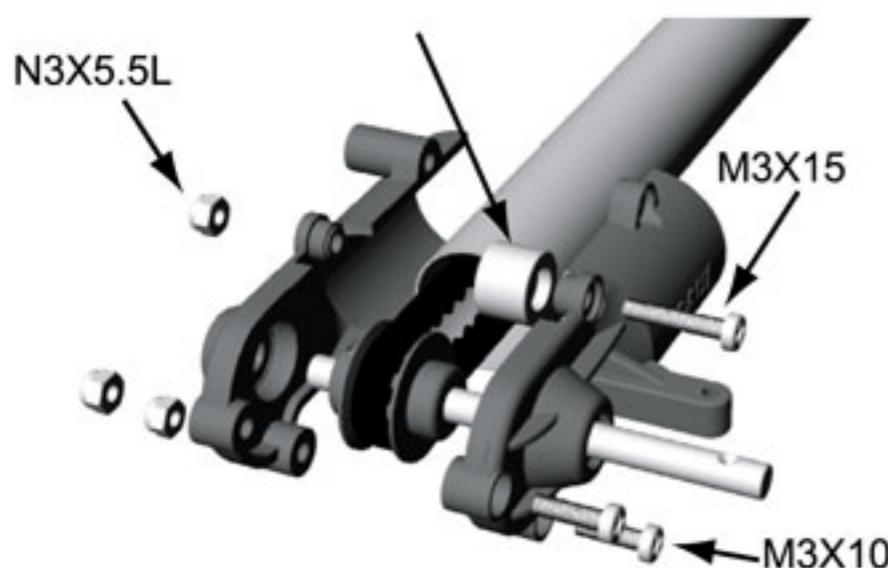
25. Install the bearings.



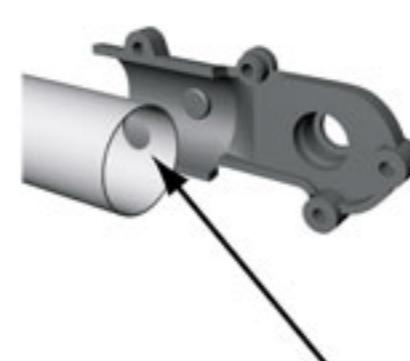
26. Install the tail pulley and the shaft.



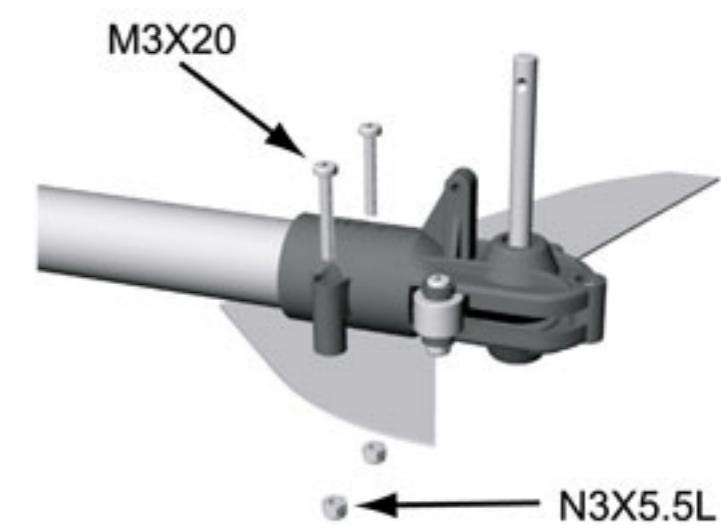
27. Secure the tail pulley with the pin.



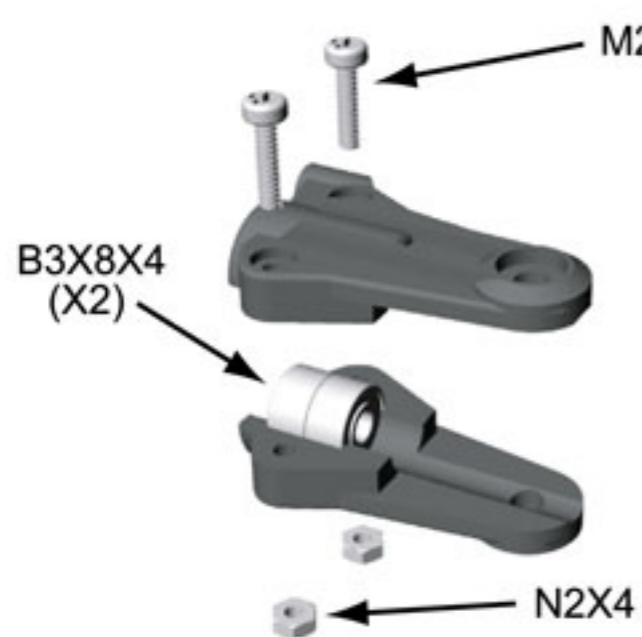
28. Install the tail pulley and the tail gear cases.



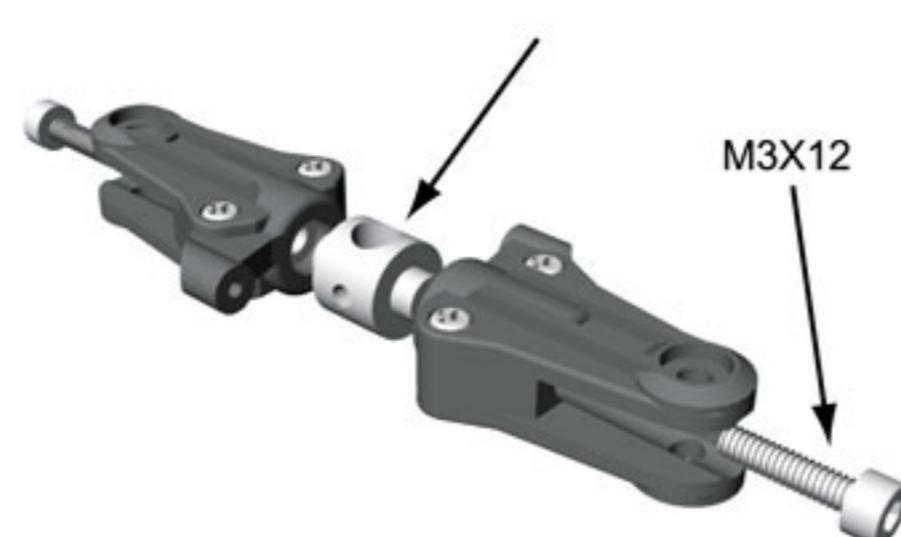
Notice: The tail gear case should be installed exactly.



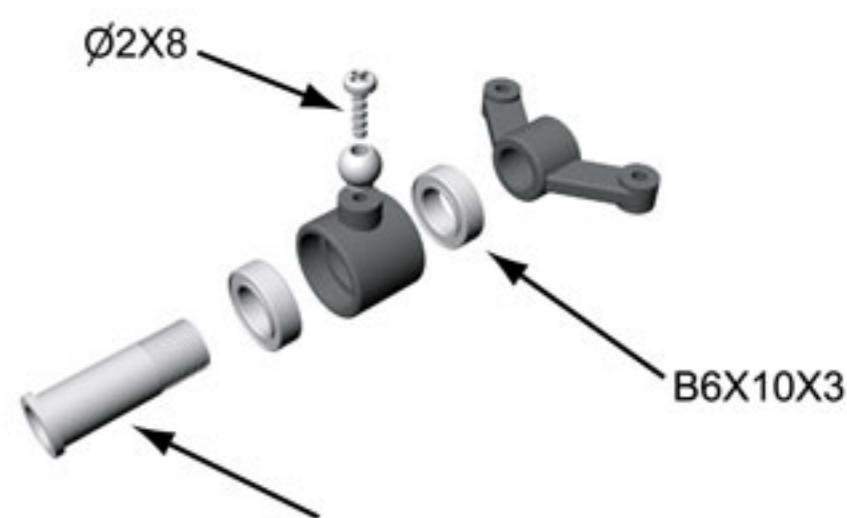
29. Install the vertical fin.



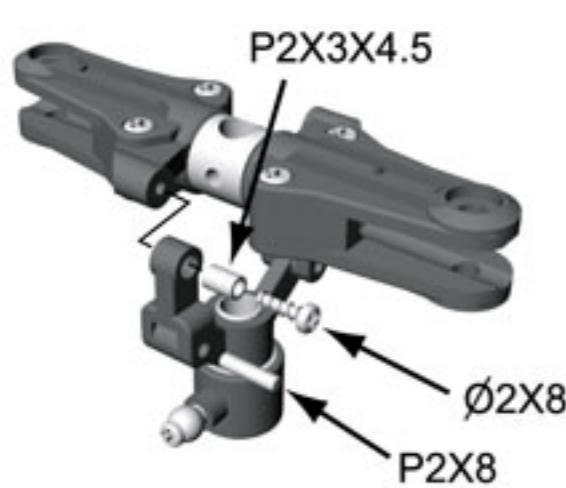
30. Assemble the tail rotor grips.



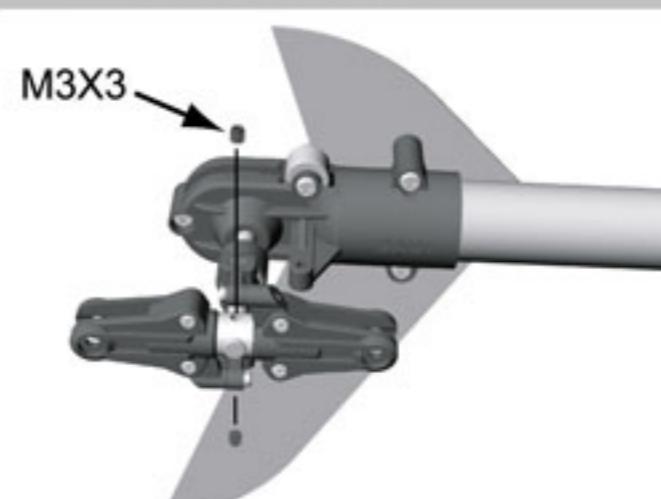
31. Assemble the grips and the hub.



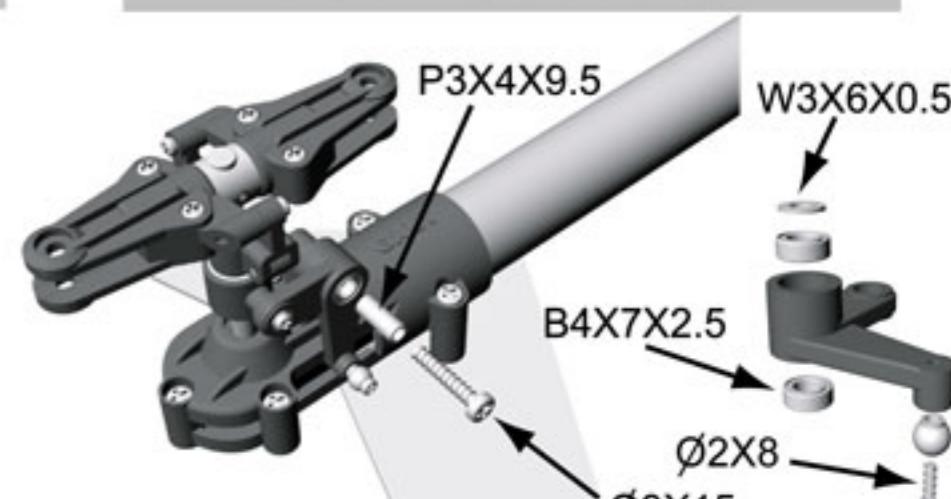
32. Assemble the tail pitch slider and the bush.



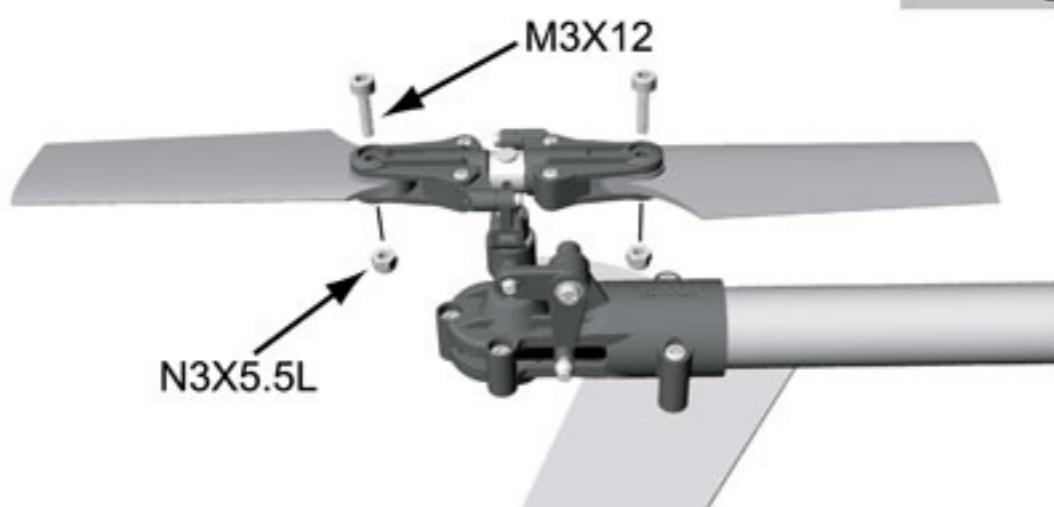
33. Assemble the grips assembly & the pitch slider assembly.



34. Install the grips & the pitch slider assembly, tighten the set screws.



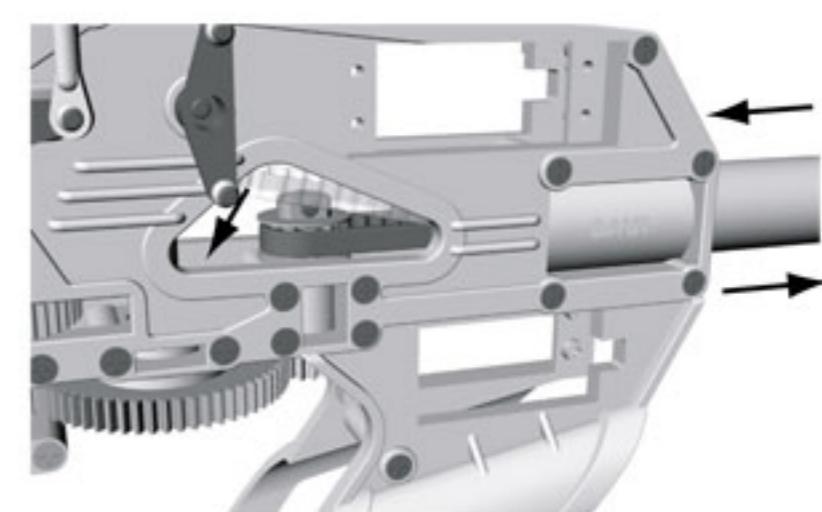
35. Assemble the tail pitch control lever and install it onto tail gear case.



36. Install the tail rotor blades.



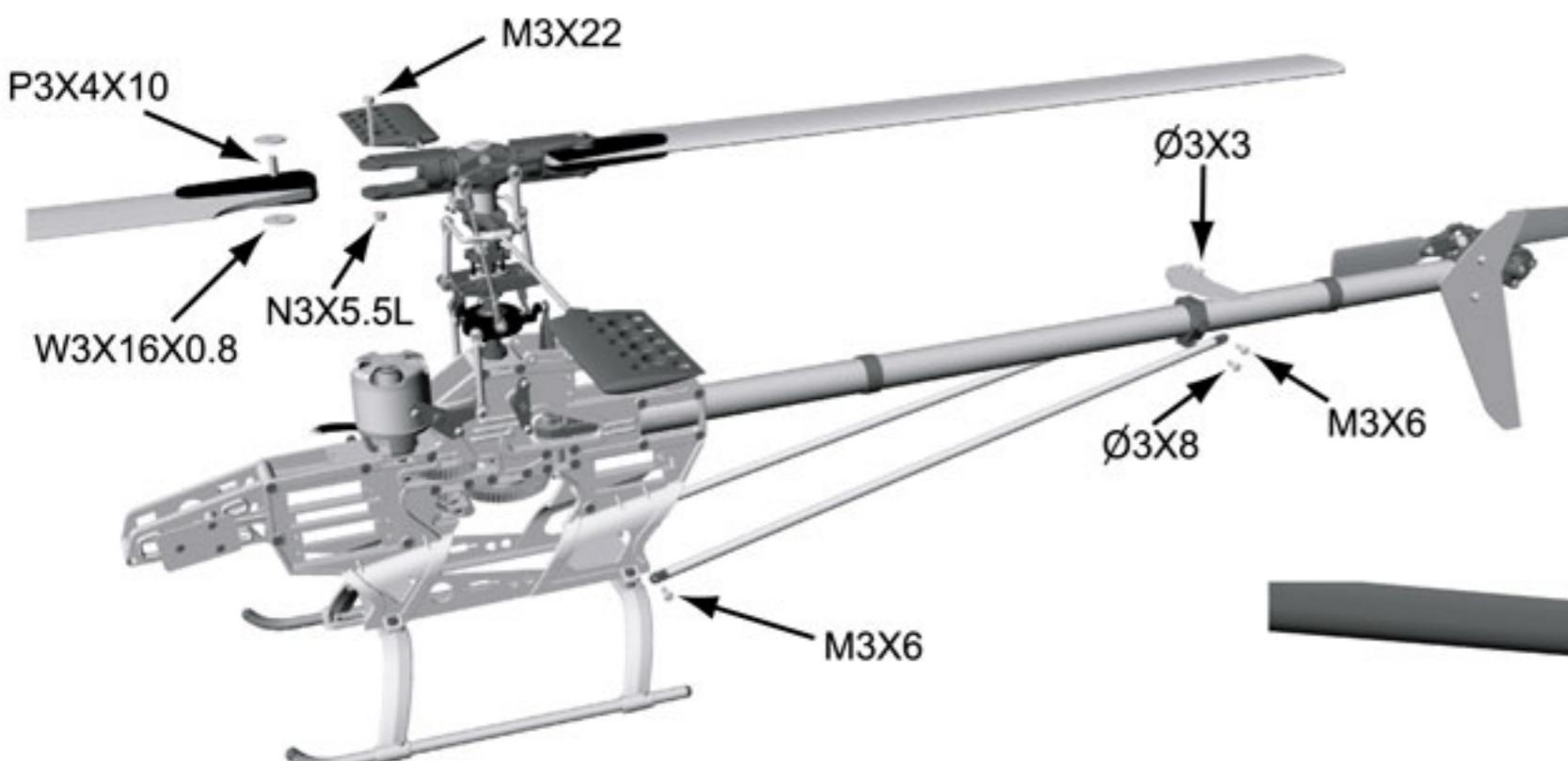
Assembly 7



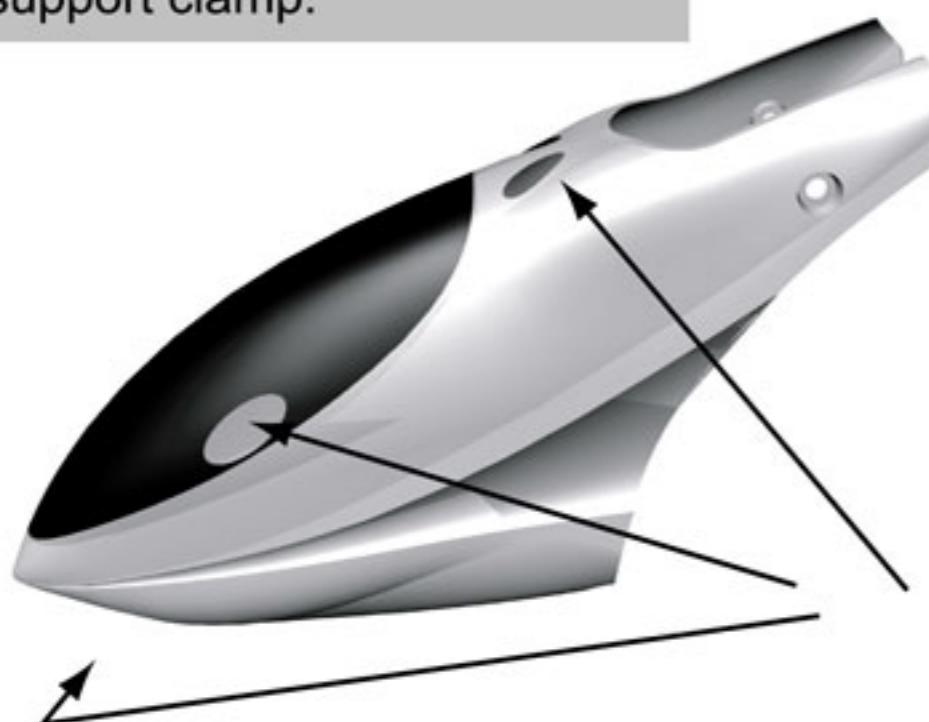
38. Make sure the belt is not winding in tail boom, rotate it 90 degrees clockwise.
(Front view)

39. Loosen the 4 screws and install the tail boom.

40. Hook the belt onto the pulley, set the belt tension properly and retighten the screws.



41. Install the main blades, the tail support pipes and the stabilizer fin, secure the tail support clamp.



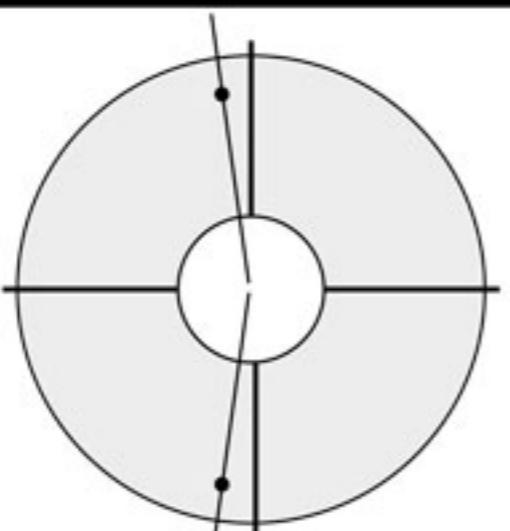
Cut out the air intake holes for the better cooling.

42. Install the body retainers and the dampers, join the body and helicopter.



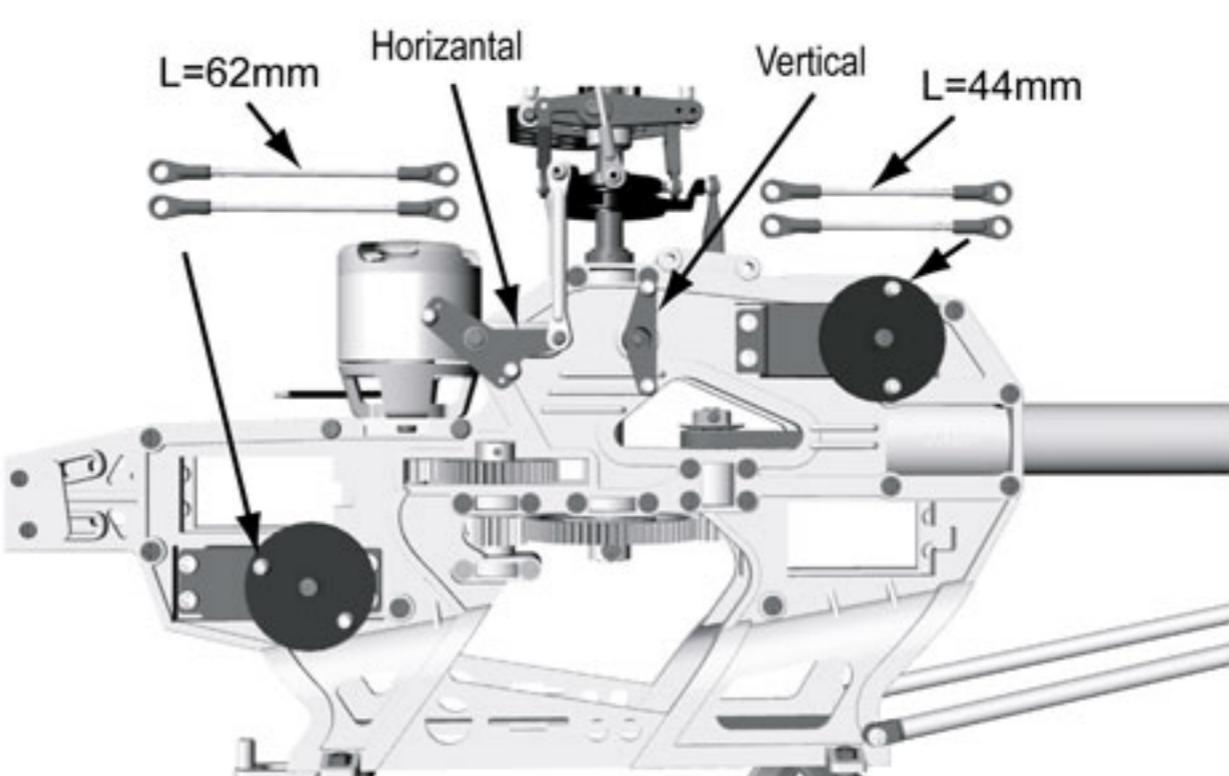
Assembly figure

Servo and electrics installation

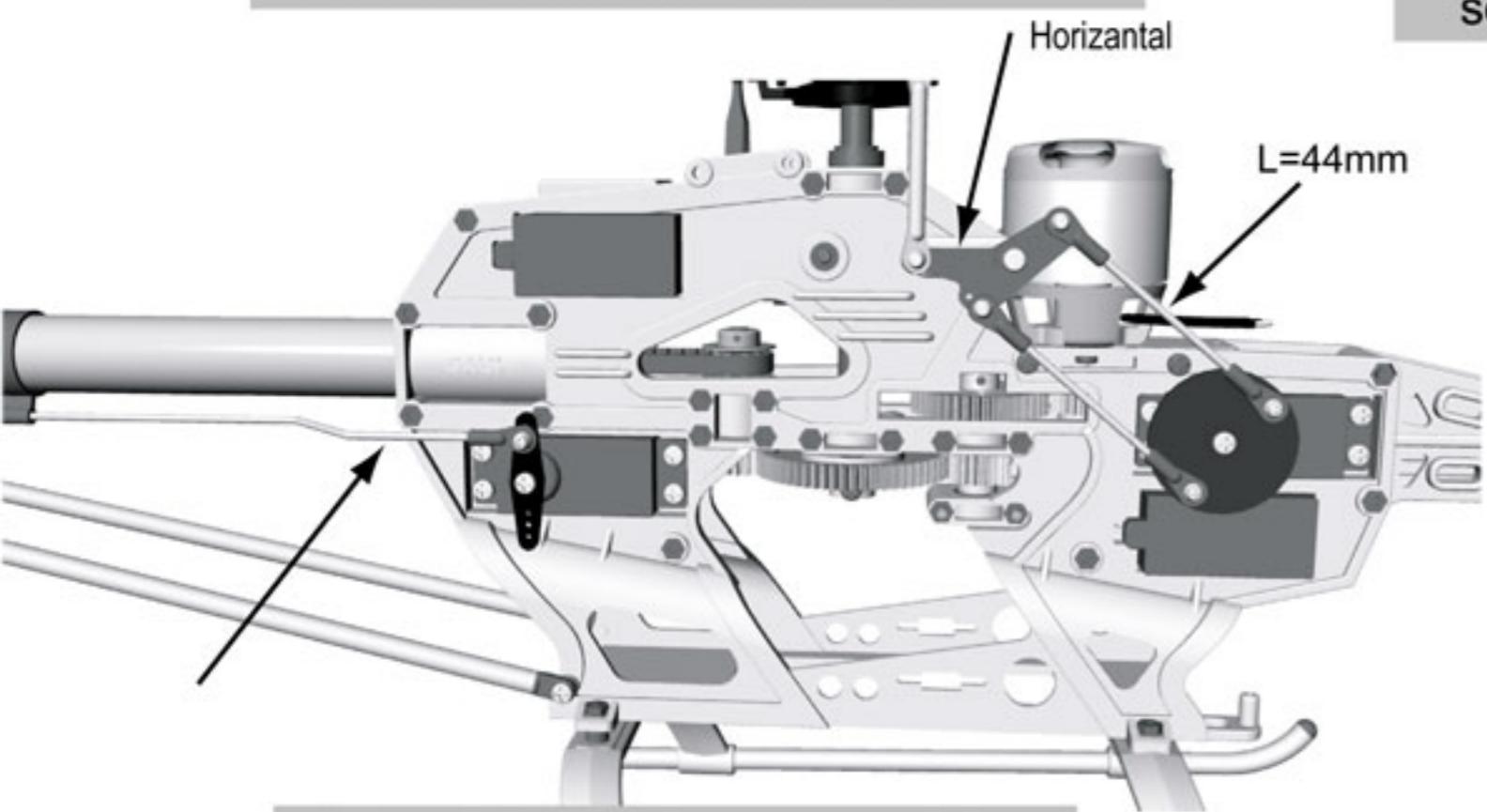


*Drill the holes on servo horn as mentioned below if using the parts of 204511 and 204514. Use the standard 180 degrees servo horn for the CNC parts 204612 and 204614 (No drilling necessary)

- 1.Cut off this diagram and drill two holes on servo horn,secure the metal balls onto the horn.

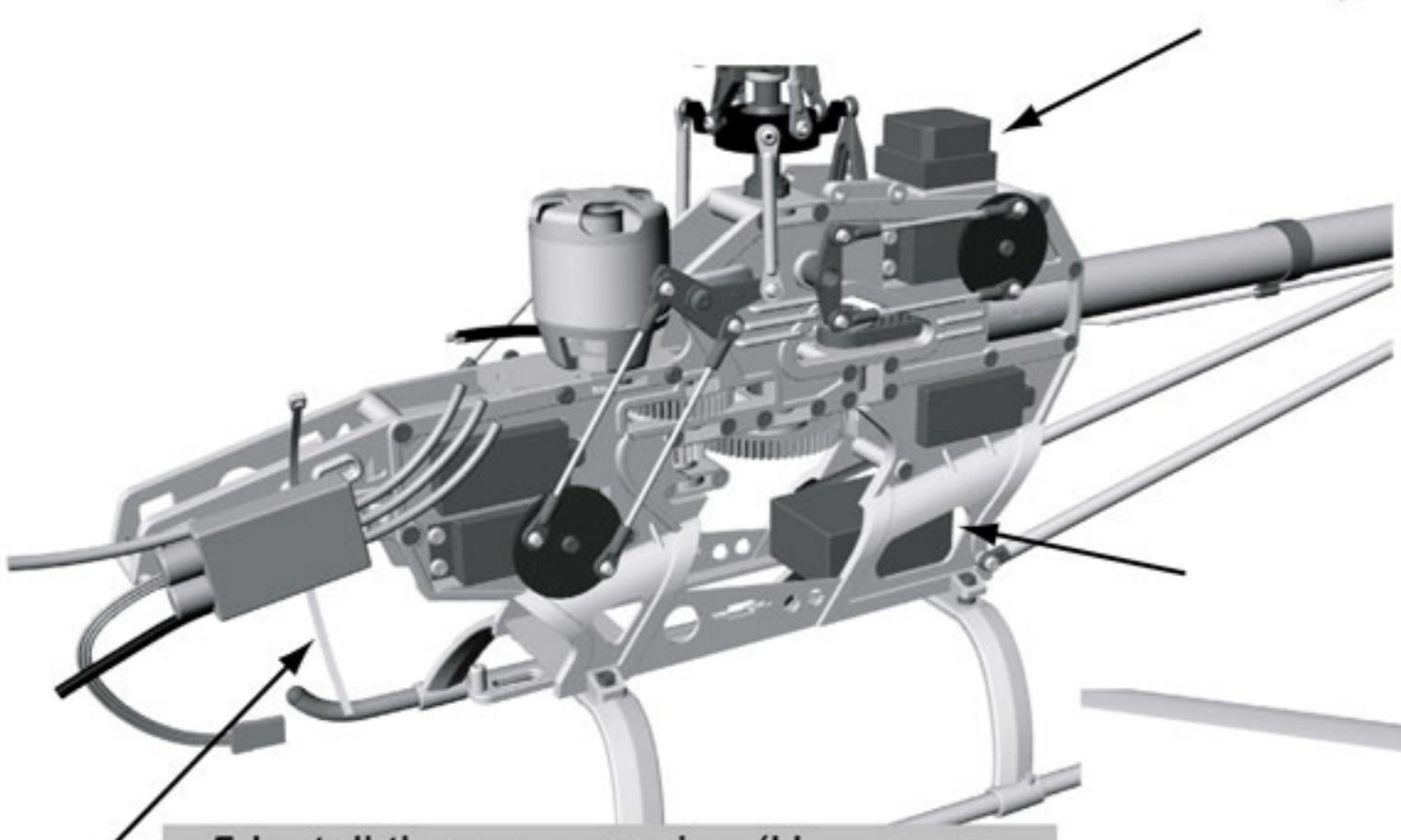
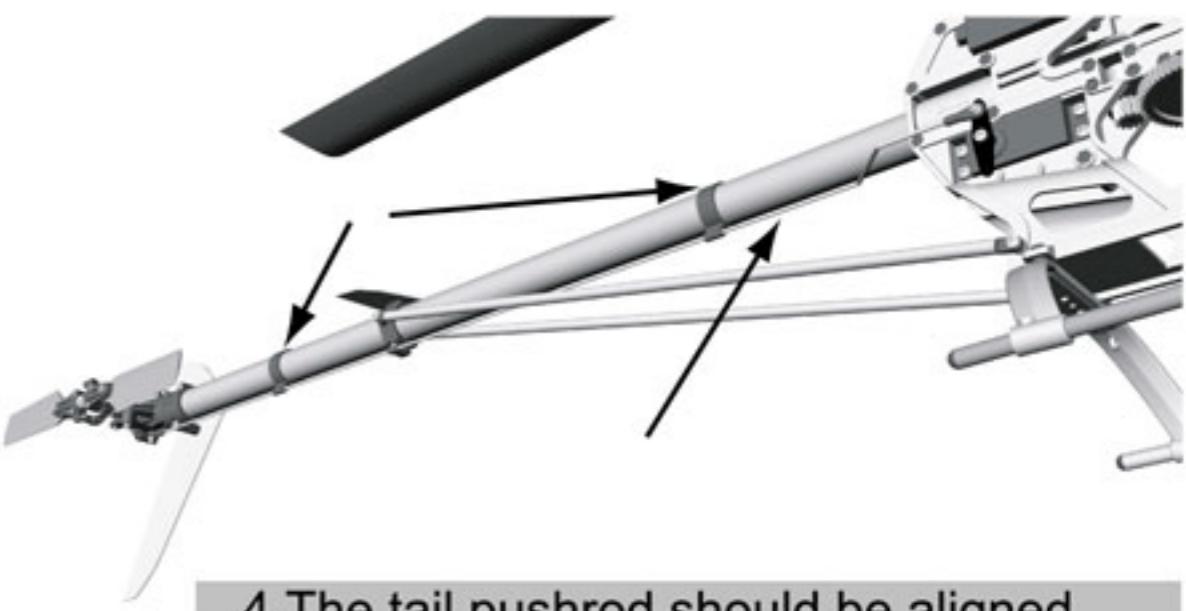


- 2.Install the servos and the linkages, the length of the linkage should be set exactly.



- 3.Install the rudder servo and the tail pushrod as shown in figure.

Notice: With the servo at its neutral position,make sure the four control sticks are all in middle position, and the setting of CCPM SWASH AFR are all in 50%.

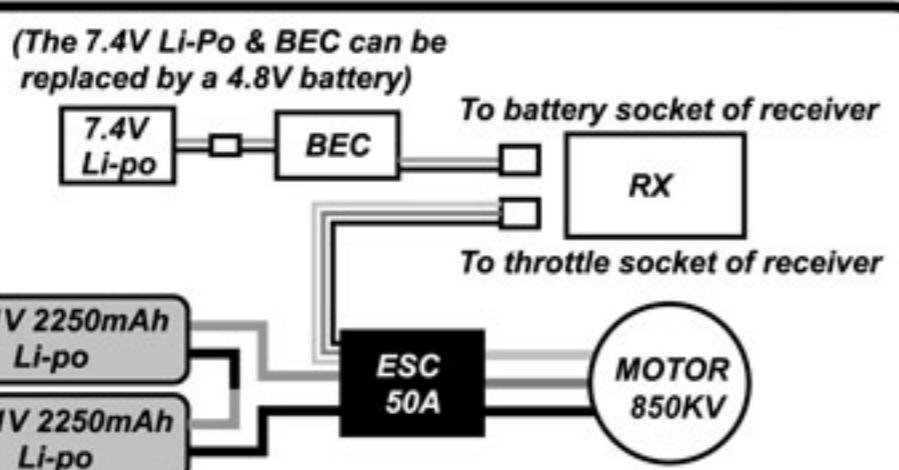


- 5.Install the gyro ,receiver(Use the double side tape) and the ESC.(Use the cable tie)

- 4.The tail pushrod should be aligned with the tail boom,use C/A to adhere rudder control guide onto tail boom.



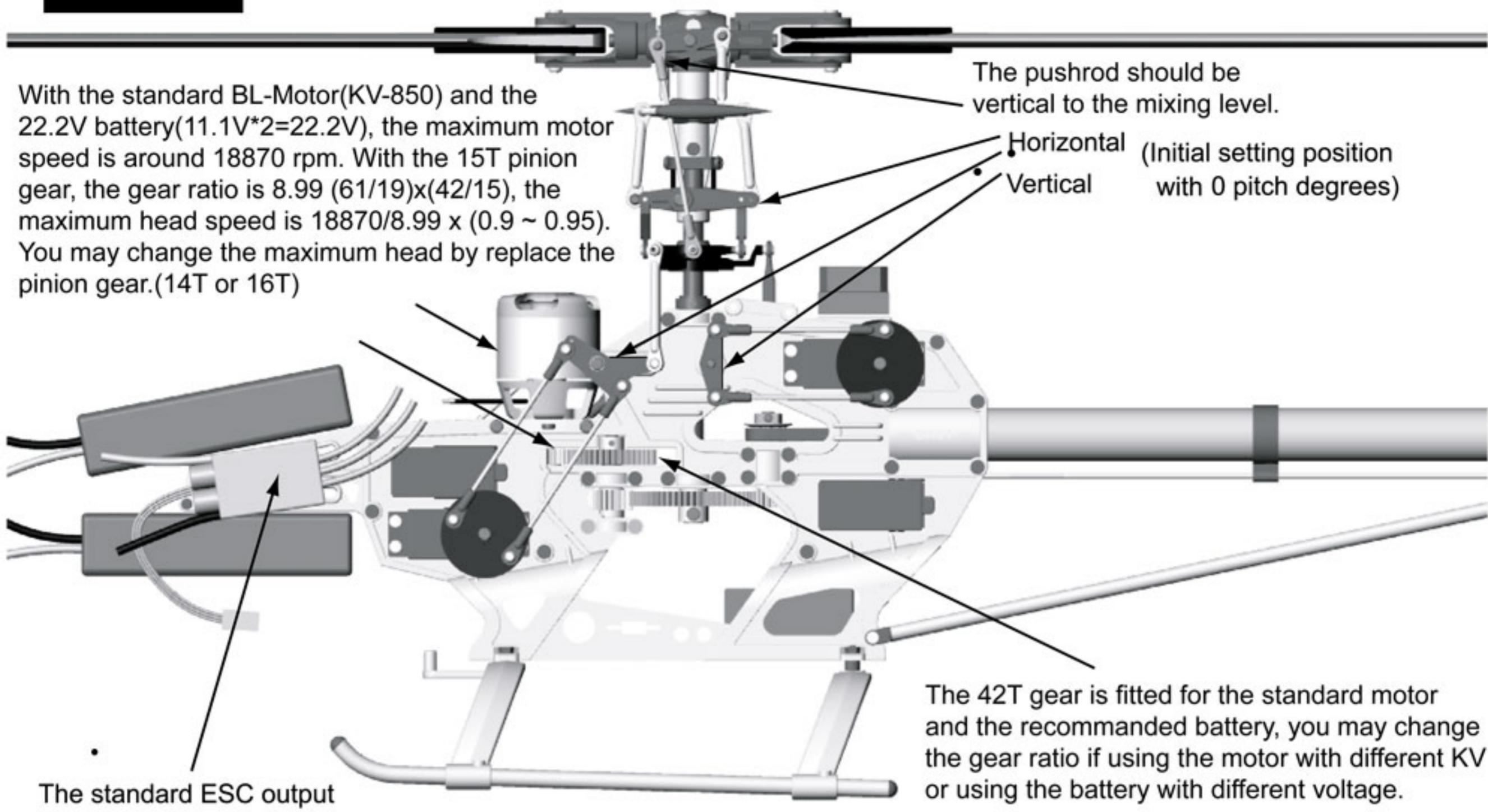
Circuit



Notice : Before flying,turn on the power of transmitter,then connect the 7.4V Li-Po battery & BEC (or the 4.8V battery) to the receiver, and finally connect the 22.2V batrey to the ESC. Disconnect the circuit in reverse order after flying.

- 6.Use the releasable cable tie to secure the batterie.

With the standard BL-Motor(KV-850) and the 22.2V battery($11.1V \times 2 = 22.2V$), the maximum motor speed is around 18870 rpm. With the 15T pinion gear, the gear ratio is $8.99 (61/19) \times (42/15)$, the maximum head speed is $18870/8.99 \times (0.9 \sim 0.95)$. You may change the maximum head by replace the pinion gear.(14T or 16T)



The standard ESC output current is 50A(25V), refer to the next page to change the setting.(If necessary)

The pushrod should be vertical to the mixing level.
Horizontal (Initial setting position with 0 pitch degrees)
Vertical

The 42T gear is fitted for the standard motor and the recommended battery, you may change the gear ratio if using the motor with different KV or using the battery with different voltage.

Initial pitch setting

| Pitch Stick | 100% | 50% | 0% |
|-------------|------|-----|------|
| Normal | 8° | 3° | -3° |
| Idle | 10° | 0° | -10° |

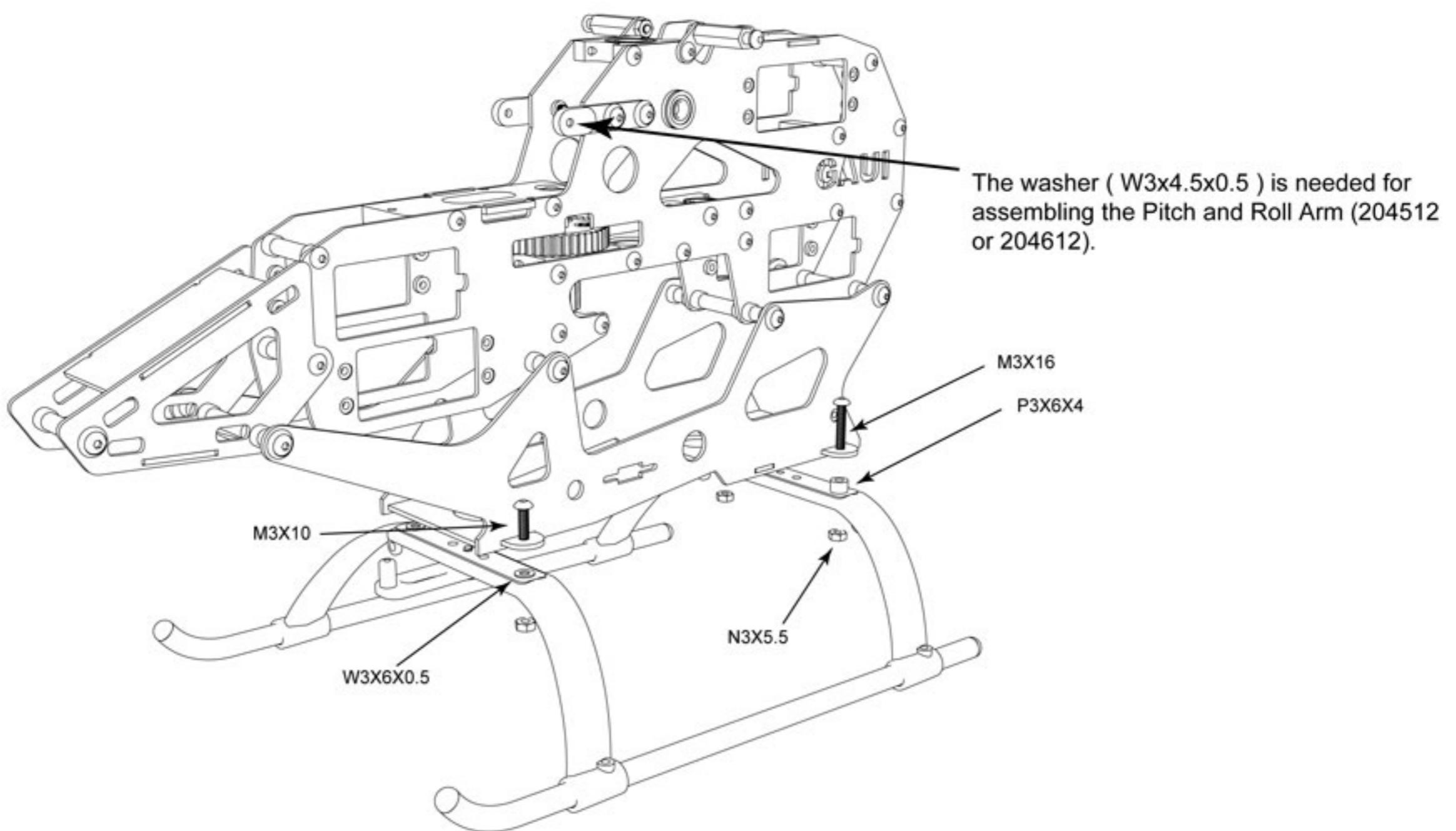
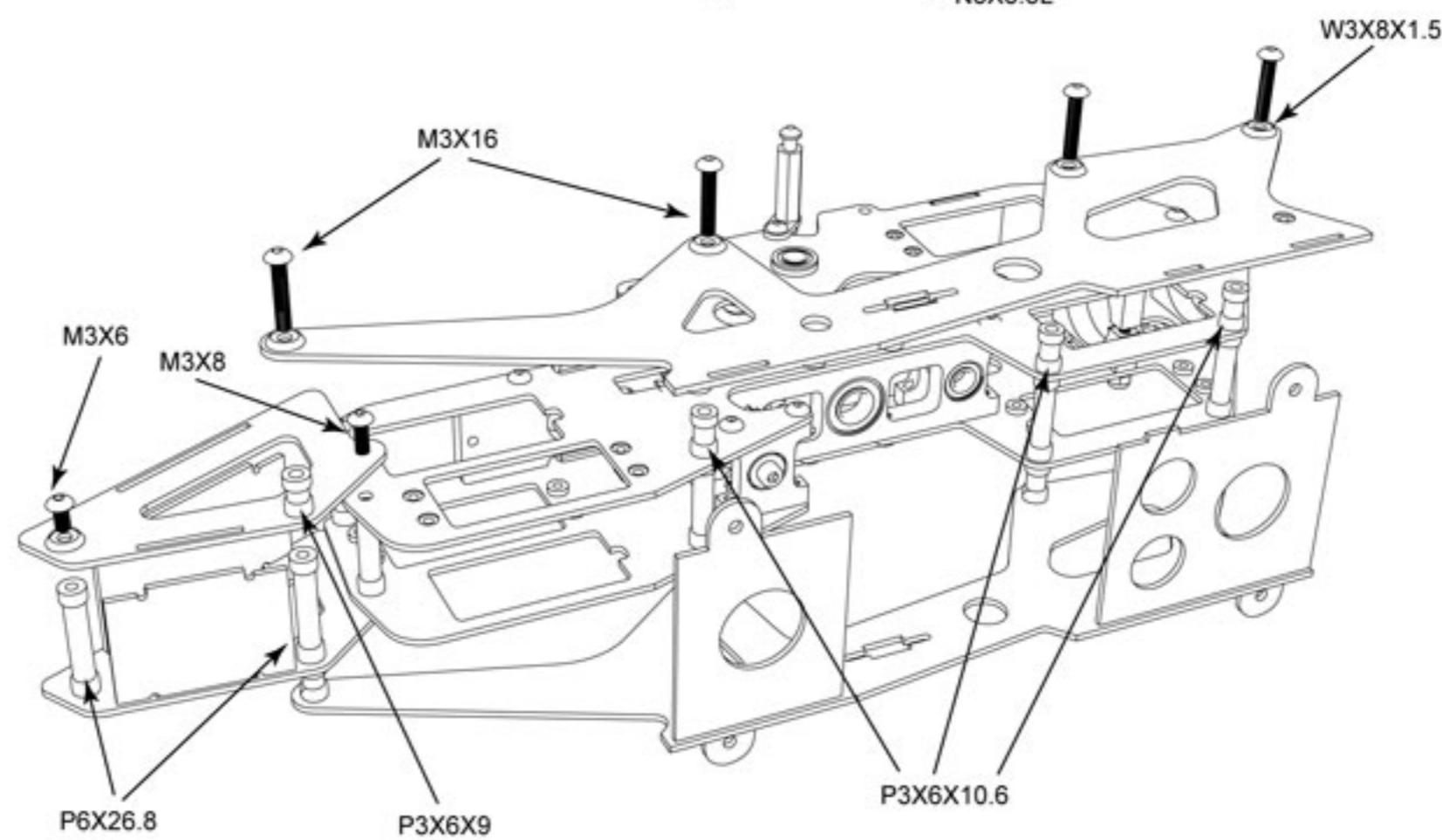
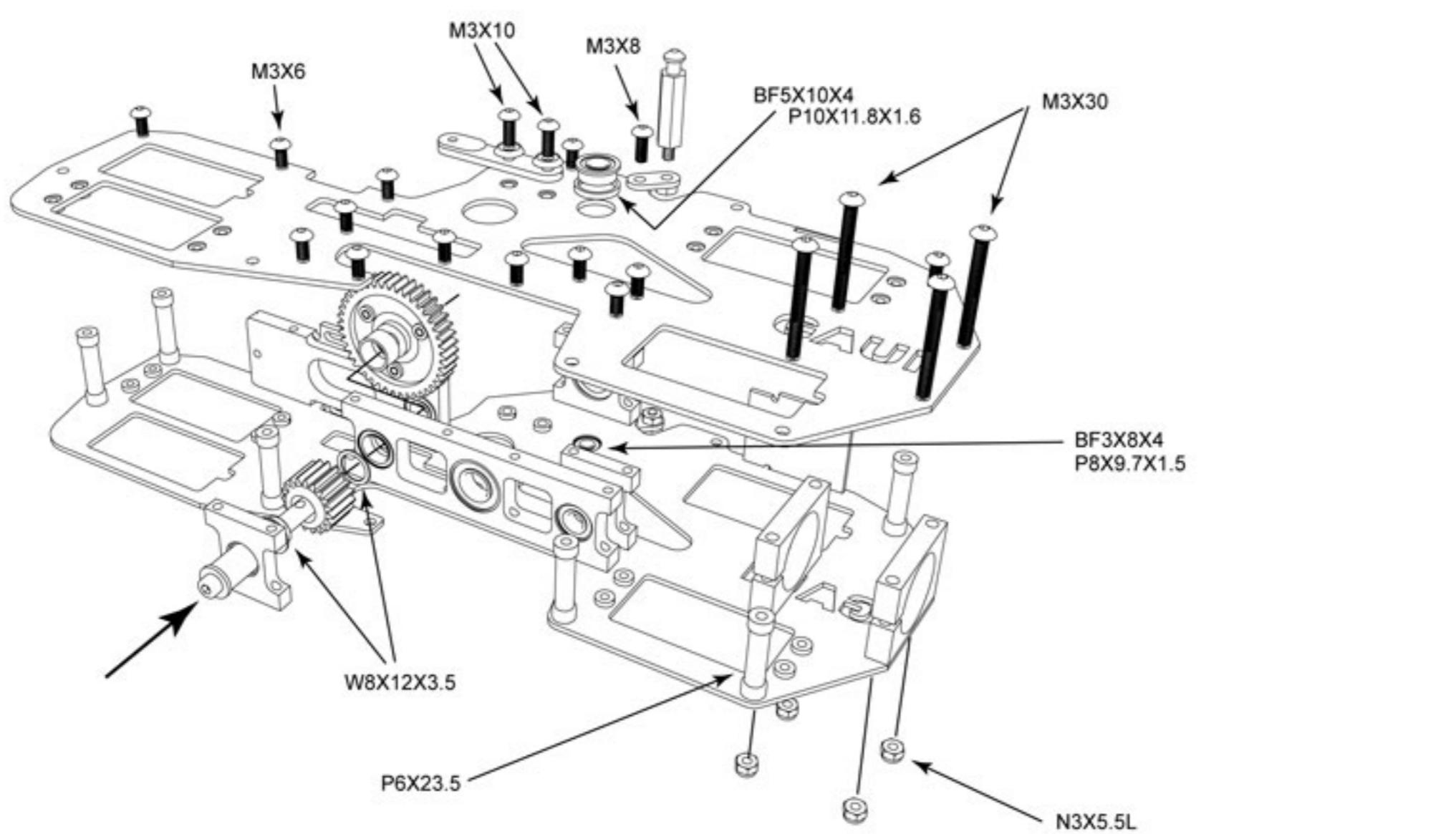
ESC Setting

Initial setting is for Li-Po battery and helicopter mode.

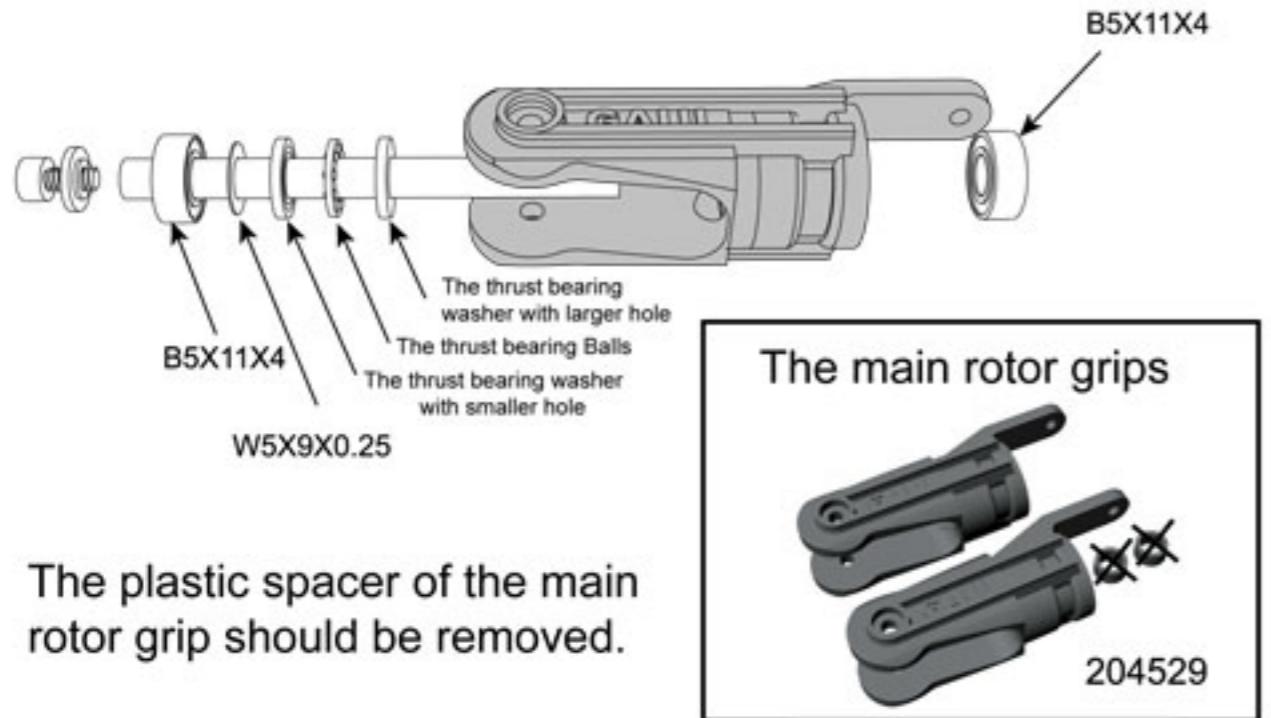
- A. Initial setting: Turn on the power of transmitter, move the throttle stick to the low position, turn on the power of receiver(the servos should be able to be controled now), connect the 22.2V battery and the ESC,it is ready for flying after hearing the acknowledge tones.
- B. Manual setting: Turn on the power of transmitter, move the throttle stick to the high position, turn on the power of receiver, connect the 22.2V battery and the ESC,you will hear the acknowledge tones bi--bi--bi--bi--bi,move the throttle stick to the low position,after hearing the acknowledge tones bi--bi--bi--bi,it is ready for manual setting and get into function-1 directly, and then comes the acknowledge tones bi--bi(Li-Po battery mode),if you use the Li-Po battery,move the throttle stick to the high position now ,you will hear the acknowledge tones bi--bi--bi--bi(You had get into Li-Po battery mode already),or leave the stick at the low position and wait until hearing the acknowledge tones bi--bi--bi(NiMH battery mode),then move the throttle stick to the high position to get into NiMH battery mode.Now it will get into function-2 directly,if you intend to choose the option of Helicopter with Governor,wait until hearing the acknowledge tones bi--bi--bi--bi and move the throttle stick to the high position,disconnect the 22.2V battery and ESC,turn off the power of receiver(You had get into Governor mode already).

The Throttle Curve must be over than 80% if you choose the option of Helicopter with Governor.

CF Frames Assembly (Option)

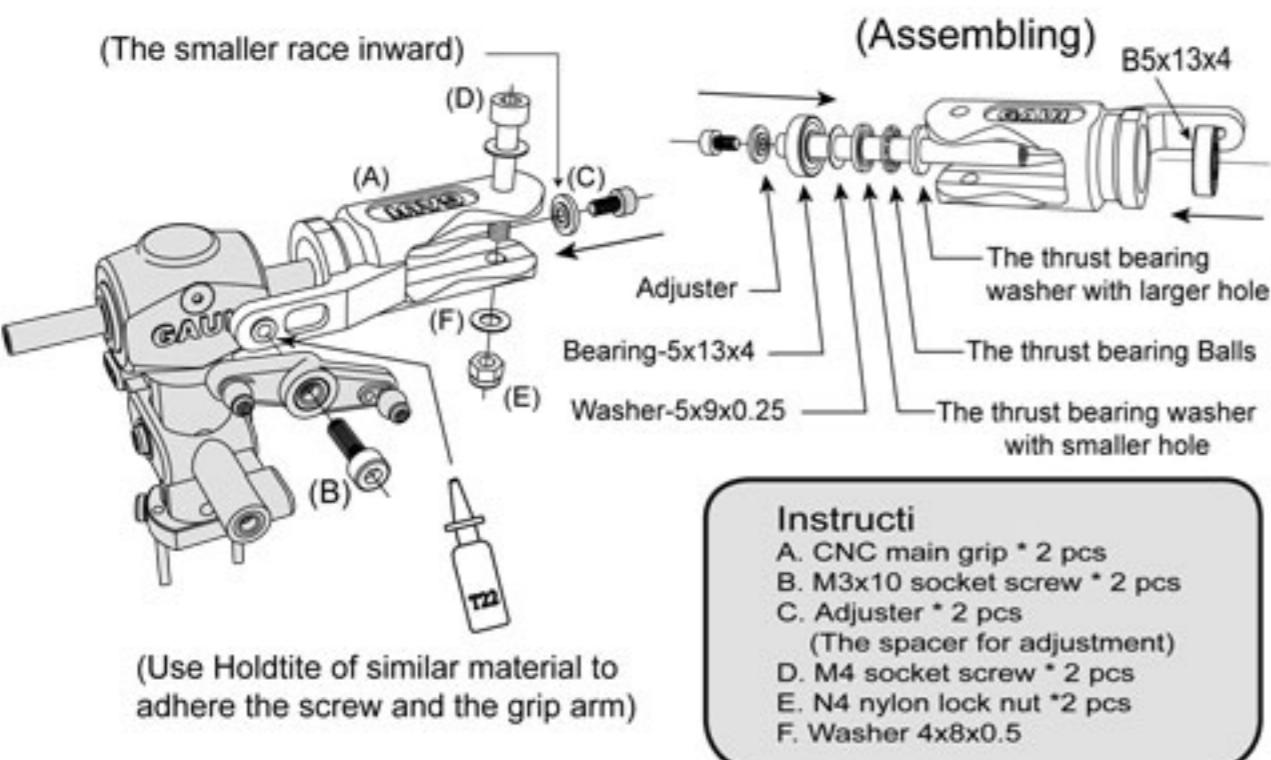


The Plastic Main Grip Set-204529

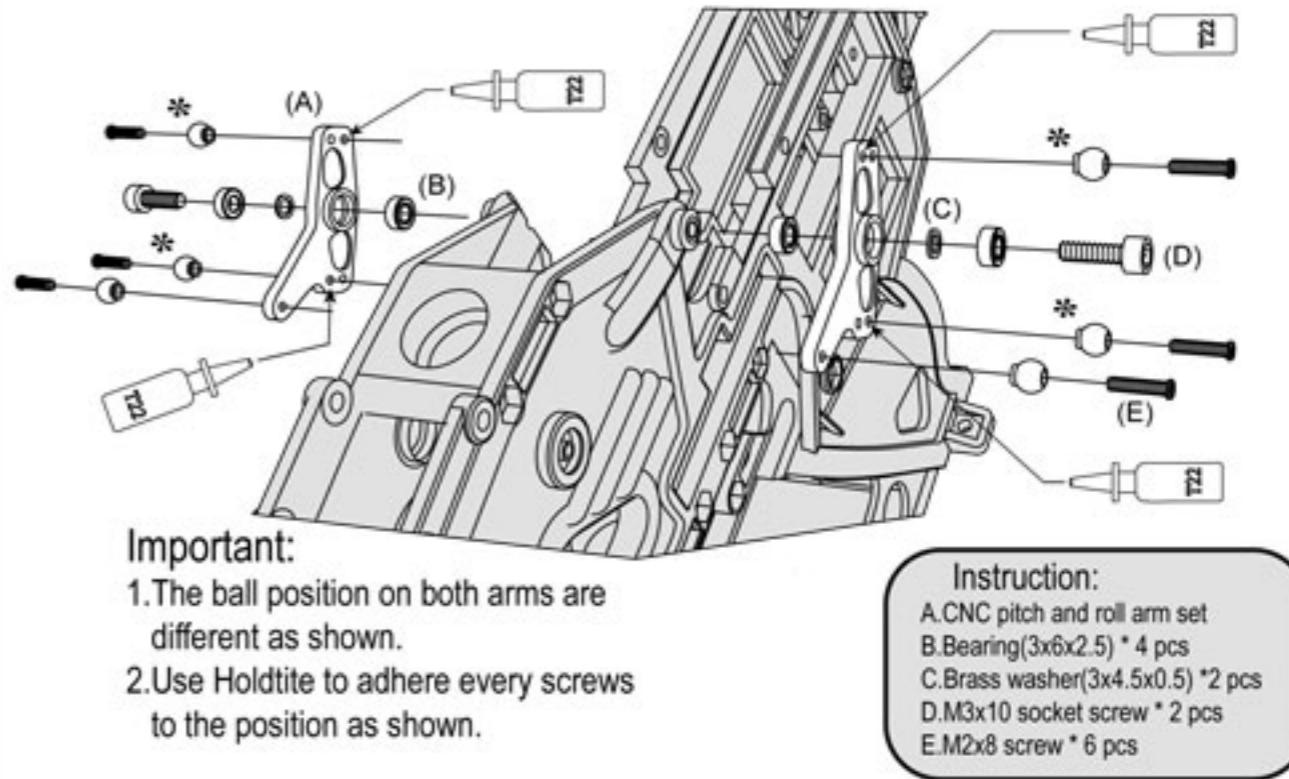


The plastic spacer of the main rotor grip should be removed.

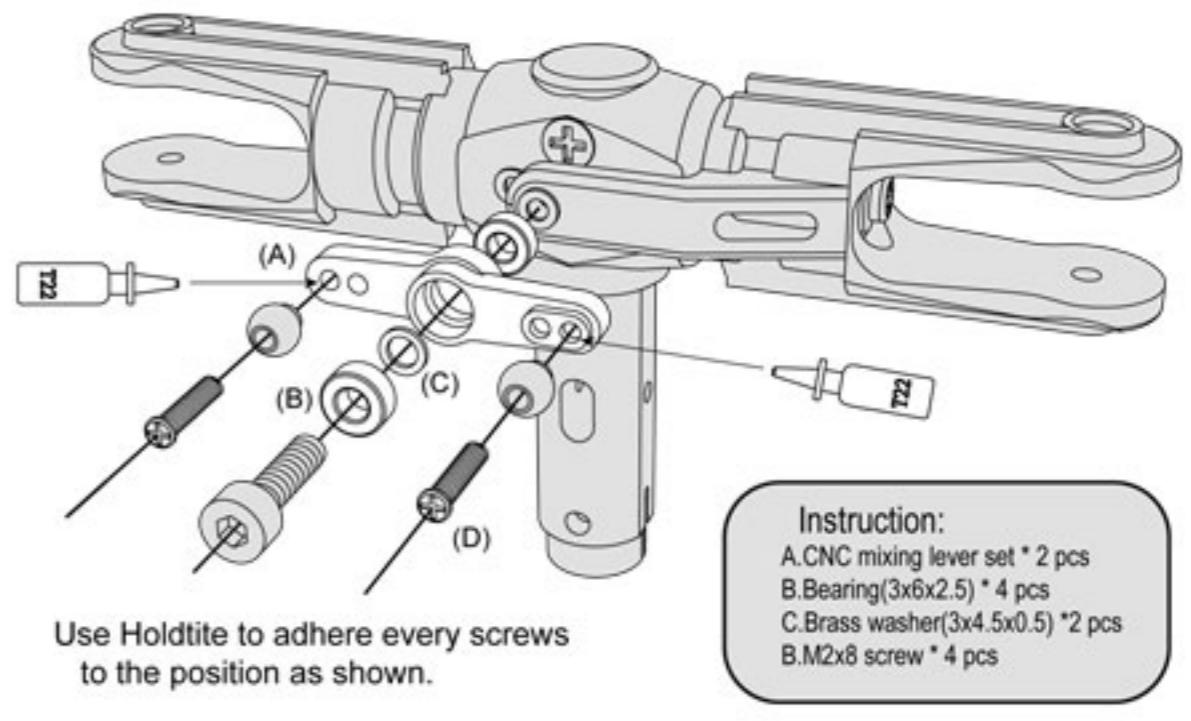
The CNC Main Grip Set-204629



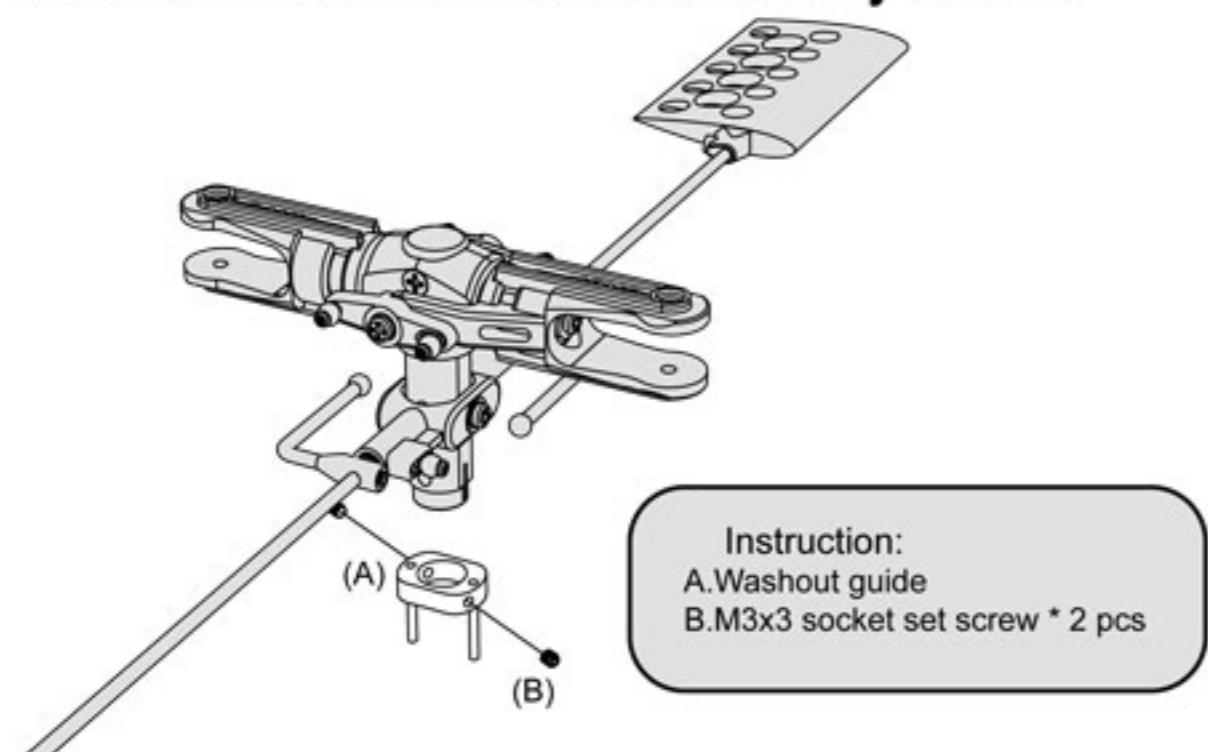
The CNC Pitch & Roll Arm Set-204612



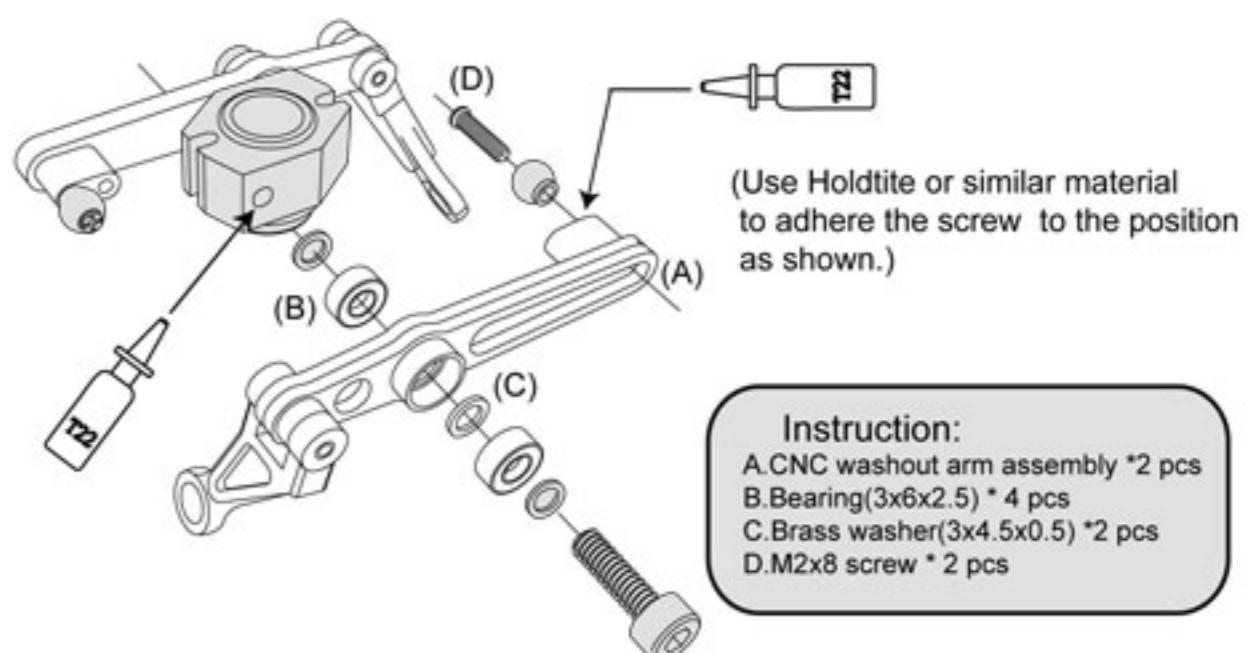
The CNC Mixing Lever Set-204632



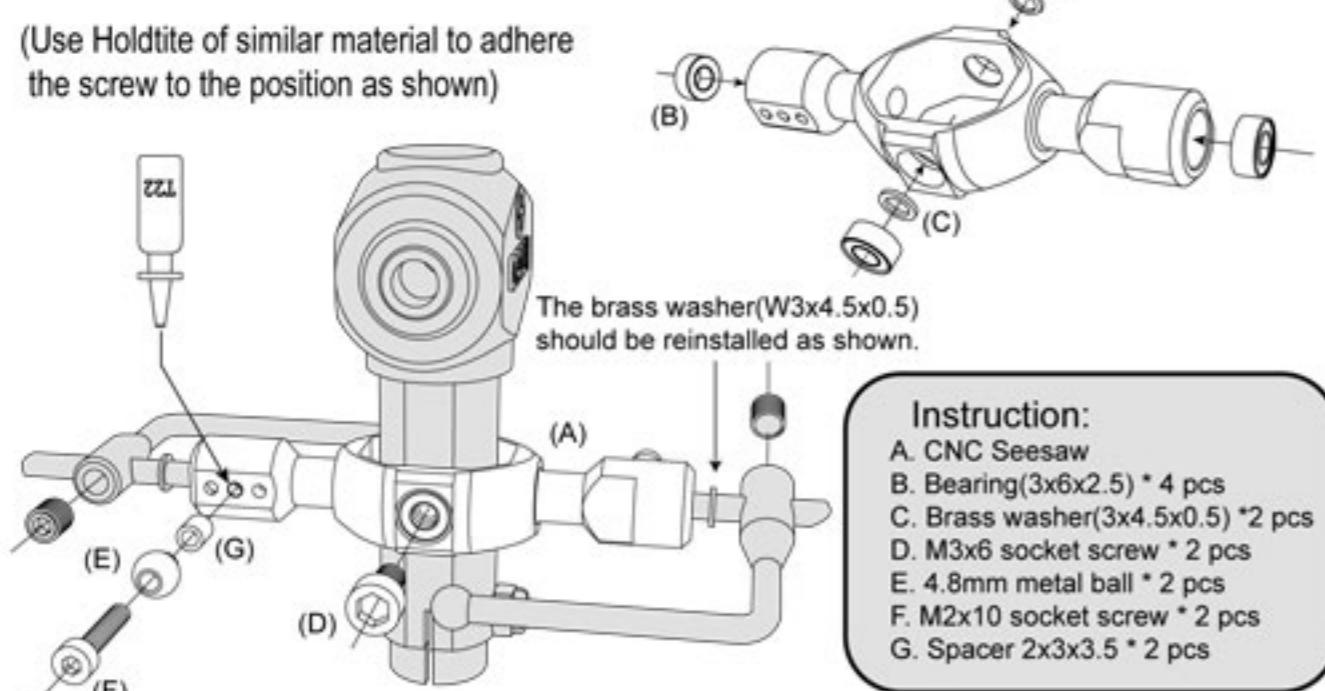
The CNC Washout Guide Assembly-204635



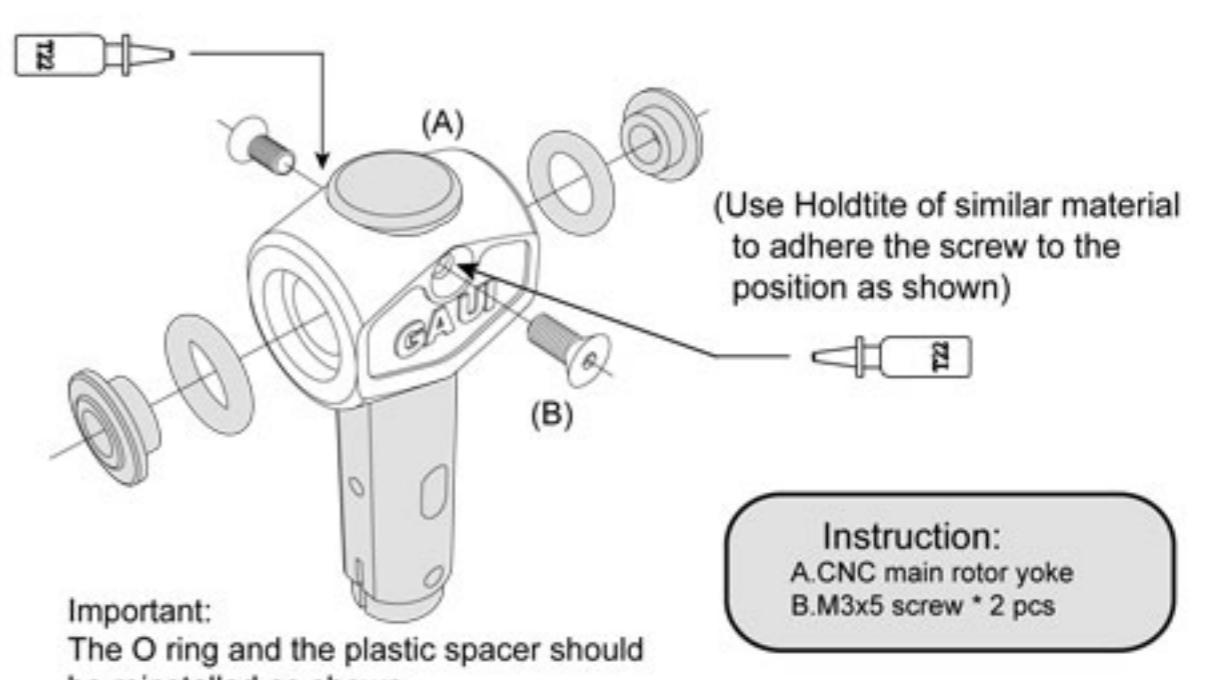
The CNC Washout Arm Assembly-204637



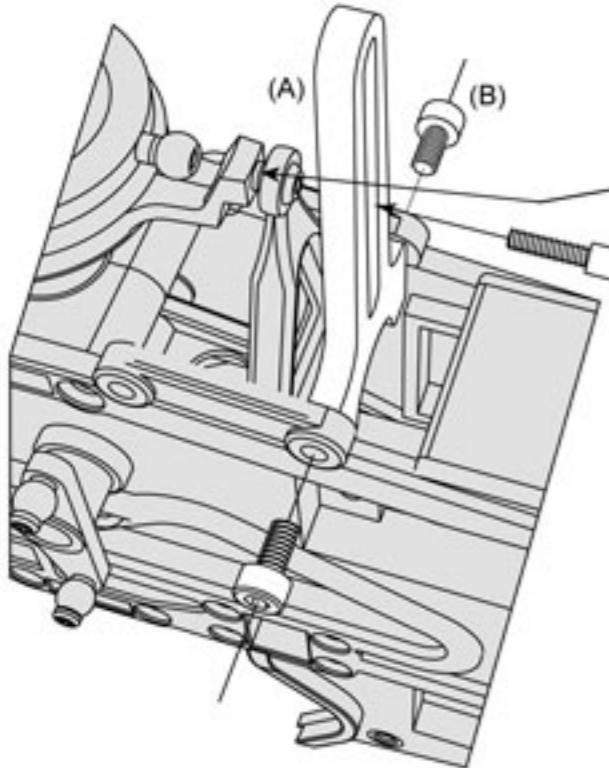
The CNC Seesaw-204641



The CNC Main Rotor Yoke-204676



The CNC Swashplate Guide-204677

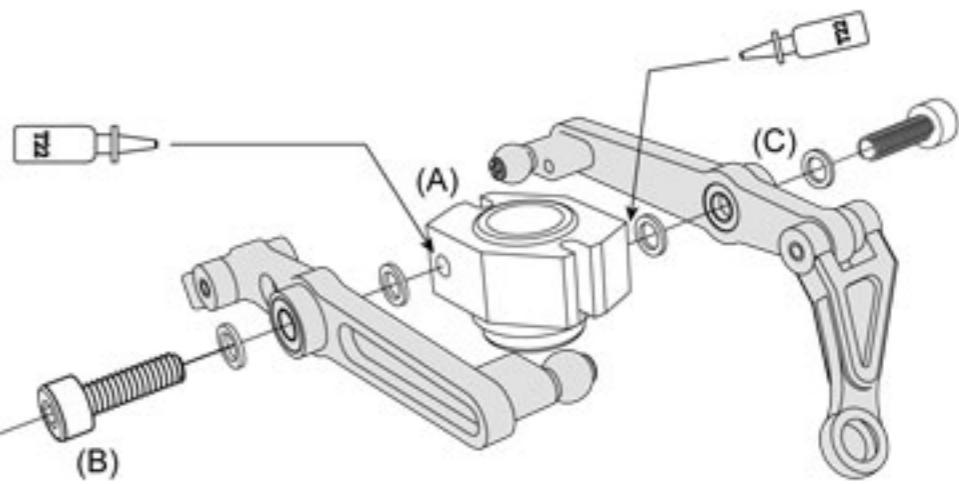


(Use Holdtite or similar material to adhere the screw and the grip arm)

Important:
The slot width of each side of the swaplate guide are different, make sure the narrow side should be forward.

Instruction:
A.CNC swashplate guide
B.M3x6 socket screw * 2 pcs
C.Swashplate estension

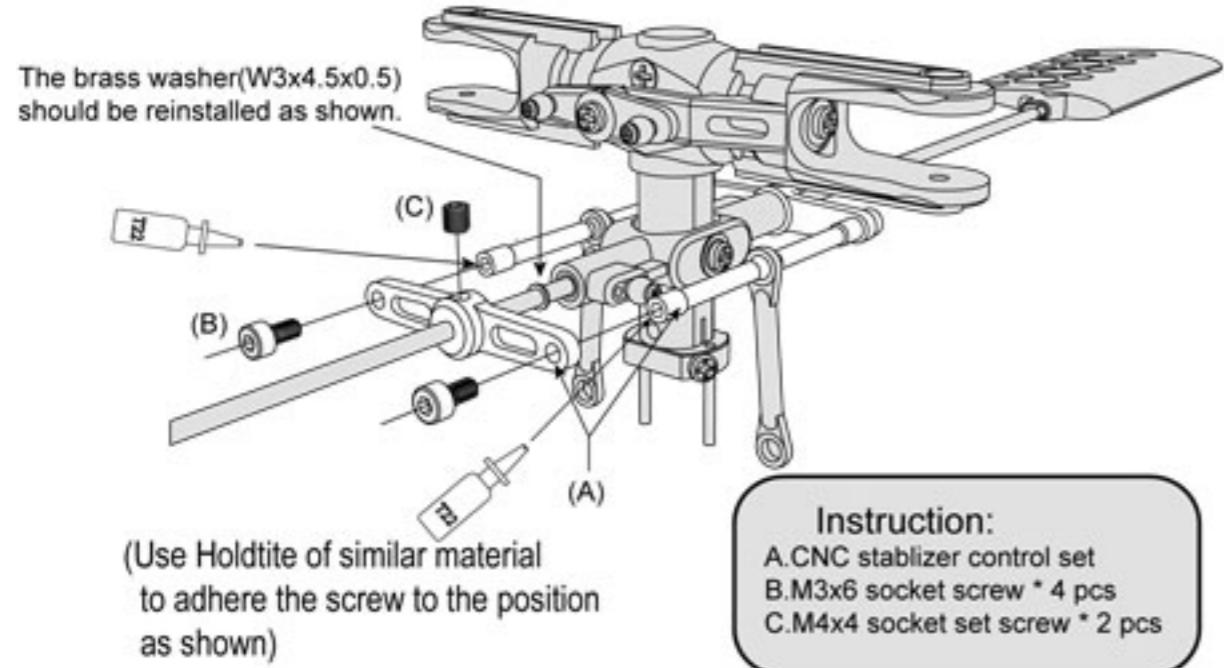
The CNC Washout Base-204678



(Use Holdtite or similar material to adhere the screw to the position as shown.)

Instruction:
A.CNC washout base
B.M3x10 socket screw * 2 pcs
C.Brass washer(3x4.5x0.5) *4 pcs

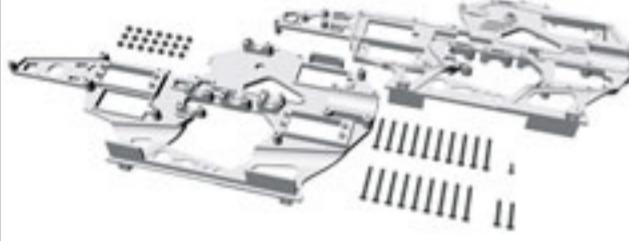
The CNC Stablizer Control Set-204679



(Use Holdtite of similar material to adhere the screw to the position as shown)

Instruction:
A.CNC stablizer control set
B.M3x6 socket screw * 4 pcs
C.M4x4 socket set screw * 2 pcs

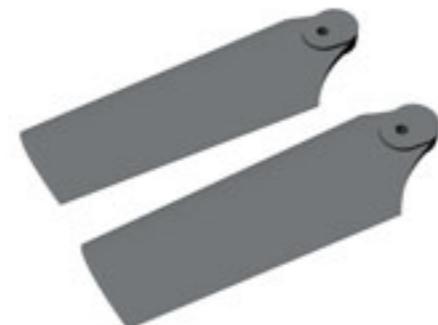
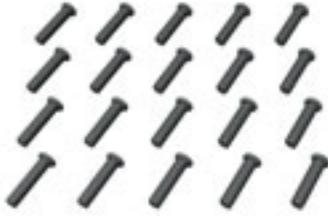
Replacement Parts - 1

| | | | |
|--|--|--|---|
| Main Frame Set  204010 | Brace & Skid Set  204180 | ESC Mount  204511 | Pitch & Roll Arm Set  204512 |
| Elevator Arm (F&R) Set  204513 | Elevator Lever  204514 | Front Main Gear  42T-204021 50T-204621 60T-204622 | Rear Main Gear (61T)  204022 |
| Front Gear Hub Set  204521 | Rear Gear Hub Set  204522 | Pulley shaft with Gear  204523 | Front Pulley Set  204524 |
| One Way Gear Assembly (19T)  204576 | One Way Gear Shaft Set  204582 | 550 Brushless Motor (1000W-850KV)  855501 | Motor Mount Set  204581 |
| Main Rotor Yoke Set  204528 | Main Grip Set  204529 | Head Spacer & Damper Set  204530 | Spindle Shafts Pack  204531 |
| Mixing Lever Set  204532 | Seesaw  204041 | Flybar Arms Set  204533 | Flybar  204042 |

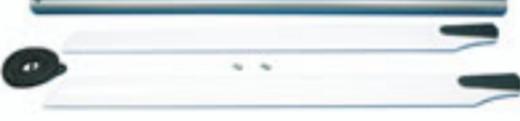
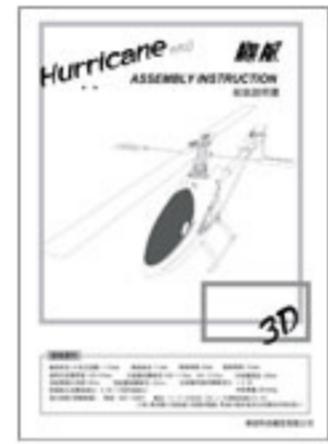
Replacement parts - 2

| | | | |
|---|--|---|---|
| Flybar Paddles Set  204534 | Washout Guide Assembly  204535 | Main Masts Pack  204536 | Washout Base  204051 |
| Washout Arm Assembly  204537 | Double Link(L-30)  204538 | Double Link(L-35)  204539 | Double Link(L-45)  204540 |
| Adjust Rods Pack  204541 | Ball Links Pack  204542 | Ball with Stand(4.8mm)  204543 | Swash Plate Assembly  204544 |
| Mast Collar Set  204545 | Tail Gear Case Set  204546 | Tail Pulley Set  204547 | Tail Output Shaft  204123 |
| Guide Wheel Assembly  204548 | Tail Rotor Belt(572XL)  865001 | Tail Boom  204191 | Fin & Stabilizer Set  204549 |
| Tail Grips Set  204550 | Tail Hub Set  204551 | Tail Pitch Slider Set  204552 | Tail Pitch Slider Bush  204141 |

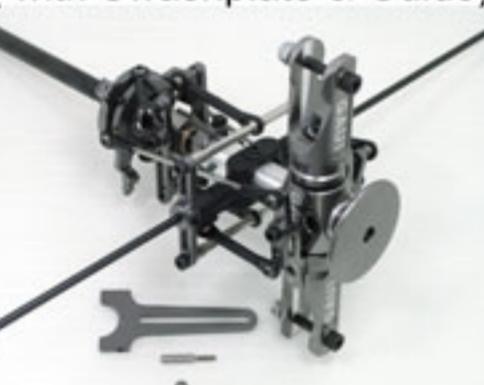
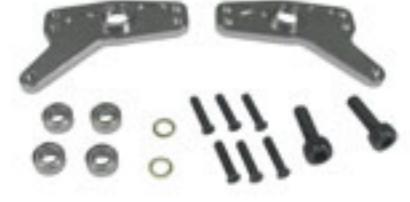
Replacement parts - 3

| | | | |
|--|---|---|---|
| Tail Pitch Control Lever Set  204553 | Tail Rotor Blade Set  204554 | Tail Support Clamp  204555 | Rudder Control Guide  204556 |
| Tail Supporter Pipe  204557 | Wooden Main Rotor Blades  475L-- 204301 500L-- 204302 550L-- 204303 204160 | Canopy & Body Assembly (White)  | Body Retainers Pack  204558 |
| Pinion Gear (Steel)  13T -- 901301 14T -- 901401 15T -- 901501 16T -- 901601 204560 | Ball Bearings Pack(3x6x2.5)x4  | Ball Bearings Pack(3x8x4)x4  | Ball Bearings Pack(4x7x2.5)x2  204562 |
| Ball Bearings Pack(5x10x4)  805104 | Ball Bearings Pack(5x11x4)x4  | Ball Bearings Pack(6x10x3)x2  | Ball Bearing with washer (8x12x3.5)x2  204578 |
| Ball Bearings Pack(8x16x5)x2  204566 | Thrust Bearings Pack(5x10x4)x2  | M3 Bolts Pack(M3x30&20)  | M2 Bolts Pack(M2x8)x20  204570 |
| Self Taping Screw(2x7)  204571 | N2 Nut  204572 | N3 Nut  204573 | N3 Nylon Lock Nut  204574 |

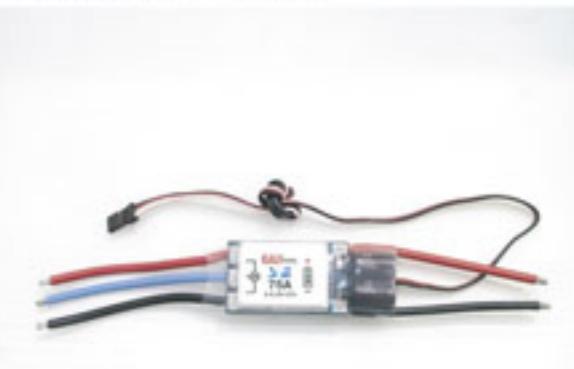
Replacement parts - 4

| | | | |
|--|---|--|--|
| Tail Control Rod  | Brace Set  | Skid Set  | Skid Damper Rubber  |
| 204195 | 204188 | 204189 | 204580 |
| ESC 50A(GE-050)  | BEC(GB-003)  | Li-Po Battery (11.1v 2200mah 25C)  | Li-Po Battery (7.4v 800mah)  |
| 923501 | 923502 | 926220 | 926080 |
| Short Tail Boom (for 475L ~ 500L Blades)  | Tail Rotor Belt(522XL)  | Tail Control Rod (for short tail boom)  | Short Tail conversion Set Including 204192 204301 204194 865002  |
| 204192 | 865002 | 204194 | 204579 |
| Blade Support  | Assembly Instruction  | Bearing Washer Pack (W3x4.5x0.5)  | Washer Pack for Wooden Blade  |
| 910010 | 204902 | 204351 | 204352 |
| Decal(1)  | Heading Hold Gyro(NT-400)  | Reusable Cable Tie(Set of 4)  | |
| 204903 | 924201 | 910020 | |

Optional parts - 1

| | | | |
|---|--|---|--|
| Carbon Frame Set  204690 | Carbon Frame Left  204691 | Carbon Frame Right  204692 | Gyro Mount (Silver Fiber)  204693 |
| Side Frame (Silver Fiber)  204694 | Bottom Plates (Silver Fiber)  204695 | Battery Mount (Silver Fiber)  204696 | Body Retainer Bracket  204697 |
| Mount for Pitch & Roll arm  204698 | Bearing Mounts for CF Frames  204699 | Boom Clamps for CF Frames  204700 | Spacer & Screw pack for CF Frames  204701 |
| CNC Main Rotor Head Ass'y (with Swashplate & Guide)  204680 | CNC Main Rotor Yoke Set  204628 | CNC Main Rotor Yoke  204676 | CNC Main Grip Set  204629 |
| CNC Mixing Lever Set  204632 | CNC Washout Guide Assembly  204635 | CNC Washout Arm Assembly  204637 | CNC Swashplate Guide  204677 |
| CNC Washout Base  204678 | CNC Stabilizer Control Set  204679 | CNC Stop Plate  204675 | CNC Pitch & Roll Arm Set  204612 |

Optional parts - 2

| | | | |
|--|---|---|--|
| CNC Elevator Lever  204614 | Pulley Shaft with Steel Gear  204577 | One Way Gear Assy.(20T)  204583 | CF Main Rotor Blades (500L)  204312 |
| Light-weight Flybar Paddles Set  204734 | Light-weight Tail Rotor Blade Set  204754 | Brushless Motor(1500W-kv1100)  855502 | ESC 75A(GE-075)  923751 |
| Fiberglass Painted Canopy & Body  204162 | Decal(2)  204904 | Li-Po Battery (22.2v 3300mah 22C)  926331 | CF Main Rotor Blades (550L)  204393 |
| Ultimate Performance Upgrade kit  204500 | CNC Seesaw Set  204641 | Tail Pushrod Conversion  204655 | Tail Servo Mount  204710 |
| Lever Spacers for CF Frames  204702 | Tail Grips Set with Thrust bearings  204720 | | |