

前言 / Introduction

感謝您選購明達科技MD直升機產品，為了讓您更順暢的操作此型直昇機，懇請您詳細的閱讀完這本明書再進行組裝，並且請您妥善保存這本說明書、為往後進行調整以及維修之參考。這台MD直昇機是由明達科技企業社所自行研發的新機種，不論你是穩定的飛行或是追求性能的3D飛行愛好者，MD將實現並帶領您進入飛行之夢想。

Thank you for buying this MD product. The M5 Sport is the latest technology in Rotary RC models.

Thank you for choosing an MD Helicopter. In order to assemble correctly and get the best performance, please read the manual carefully before assembly. Please keep the manual for future reference in case you need to fine tune or do repairs.

警告事項 / Caution

本項遙控直昇機產品並非一般玩具，嚴禁16歲以下青少年與孩童使用，它是結合了許多高科技產品所設計製作出來的，而因組裝、調機、及操作上的不熟悉，都會導致自身或他人的傷害，發生這些傷害時製造公司是免於承擔責任的，所以飛行前請勿輕忽並注意自身及他人安全。模型商品屬於操作技術且為消耗性商品，如經拆裝使用後，而造成零件損耗商品不良或對產品不滿意，本公司無法於保固條件內更換新品或退貨，而若遇操作維修問題，本公司全省經銷商將提供免費技術指導、優惠零件供應服務。

This MD RC Helicopter is not a toy, it is prohibited for ages under sixteen. As it is intergraded with many hi-tech electronic and mechanical parts, incorrect or faulty assembly, setup as well as usage can cause injuries to the user or other people. Please ask a professional hobby shop or an experienced user to help you doing the final check of assembly and setup, and be cautioned to follow your local safety operation requirements. The manufacturer will take no liability of injuries if the product is not properly assembled, setup or operated. RC Helicopter is an product of consumption. Once the customers start to use the product, the parts will be worn and suffer from attrition, the vendor will not accept any replacement or return claims due to normal usage. In case of repair requirements and complaints, please contact our authorized dealers. They will provide free technical support of repairs as well as parts supply services at applicable and discounted prices.

飛行安全注意事項 / Safety Rules

遠離障礙物 / Keep away from Buildings, Trees, and Power Towers

遙控直昇機飛行時具有一定的速度，相對的也潛在著一點危險性，飛場的選擇是非常重要的。首先須注意周遭有沒有人、高樓、建築物、高壓電線、樹木等等。避免操控不當而造成自己與他人財產上損壞。初次練習時，建議選擇在空曠場地並可適當搭配練習架練習飛行，這將會大幅降低飛行時所造成的損失。請勿在雨天、打雷等惡劣天候下操作，以確保本身及機體體的安全。

As RC Helicopter flies at a demanding speed, it is dangerous when crashed. Thus, the flying field becomes very important. It is important to keep away from people, buildings, trees, power lines and power plants. It is especially important to avoid faulty and inaccurate operation to prevent injuring people and damage to private properties. It is recommended to select a wide flying field and use wide safety landing bracket for the first flight. This will reduce the risk of unforeseen damage. It is no recommended to fly during bad weather conditions such as rain, wind, thunder and lightning storms.

避免獨自操控 / Avoid fly alone

至飛行場飛行前，需確認是否有相同頻率的同好進行飛行，相同頻率的發射機一同開機將導致

螺絲固定請上螺絲膠
The screw is regular please have the screw glue / the bearing and please have the glue with meagre oxygen

MING DA Technology corp

無法控制的危險。遙控飛機操控技巧在學習初期有著一定的難度，要盡量避免獨自操作飛行，需有經驗的人士才可進行操作，作為一個稱職的遙控直昇機飛行員，必須要有安全的觀念與負責的態度、(勤練電腦模擬器是入門的最佳選擇)。

It is essential to confirm that no one else is using the same transmitter frequency as you before switch on your transmitter and fly. If there are multiple transmitters with the same frequency they will interfere with each other and cause control function failures. Controlling the helicopter is difficult and it is important to have another experienced pilot nearby and avoid flying alone. To be a good RC helicopter pilot is also respecting and taking in to consideration the safety regulations that apply. It is highly recommended to practice your piloting skills using pc flight simulation software.

遠離運轉中零件 / Keep away from Rotating Parts

當遙控直昇機主旋翼與尾旋翼運轉時，必須確認飛行地點不會有接觸到主尾旋翼的情形發生，且勿觸摸並遠離任何物件，以免造成危險及損壞。

It is important to make sure there is nothing near the running area of Main Rotor and Tail Rotor. To avoid from any dangers, please keep away from the Helicopter when the Main Rotor and Tail Rotor are rotating.

遠離潮濕環境 / Keep away from Humidity

直昇機內部是由多精密的電子零組件所組成，必須絕對的防止潮濕或水氣，避免在浴室或雨天時使用，以免水氣進入機身內部而導致故障或引發不可預期的意外！

As the helicopter consists of many electronical parts of high precision, it is absolutely essential to keep them away from humidity and water vapors. In order to prevent damage to the electronical parts caused by humidity it is strictly prohibited to operate the helicopter in damp conditions and rainy days.

遠離熱源 / Keep Away from heat

遙控直昇機多半是以POM或尼龍、電子商品為主要材質，因此要盡量遠離熱源，以避免因高溫而變形的可能。

As some of the parts of the RC Helicopter are made of POM or nylon others are made of precision electronic components it is absolutely essential to keep them away from heat sources since they can be deformed and damaged.

遵從以上之幾點安全事項，將可讓您沉醉在飛行的樂趣中！

Following the above safety guild lines, you will be able to enjoy the flight.

一般保養方法 / Regular Maintenances

請定期檢查/ Regular inspection

電動遙控直昇機為精密零組件構成之精細模型商品、所以飛行者須注意確保各控制組件及機構之性能良好，使能發揮優異穩定飛行特性，如果您的維護不當，飛行時將可能導致意外或任何損失，建議您注意養成直昇機定期檢查的習慣，以確保讓您的愛機隨時保持於最佳性能。

Electrical Helicopter consists of precision parts and components. In order to keep the helicopter with good and stable performance, pilot should always keep all the parts and components in good condition. If there is any worn or damaged parts caused by the lack

of good maintenance, the helicopter might crash or not able to function properly. It is essential to do the regularly inspection of parts which is the key to keep you helicopter in good condition.

主旋翼檢查重點/ Key check points of Main Rotor

1.主旋翼固定座/ Main Rotor Housing :

當主旋翼運轉發生異常時、飛行當中會發生明顯不明的震動情形，請檢查主旋翼、橫軸、主軸是否有變形或平衡不良，必要時請將主旋翼頭固定座更新。

If there is any unusual rotation of the Main Rotor, or unusual vibration on the fly, please check Main Blade, Feathering Shaft, and Main Rotor Shaft to see if there is a balance issue or deformation. Please replace with a new Main Rotor Housing if needed.

2.主旋翼緩衝墊圈/ The main rotor rubber dampers :

緩衝墊圈長期使用會發生彈性疲乏，會影響飛行穩定性此時建議更新。

The elasticity of rubber damper will get worse after a certain period of use. Replace the rubber dampers if the stability while flying becomes worse due to bad or worn elastic rubber dampers.

3.主旋翼夾座/ Main rotor holders :

主旋翼夾座一般飛行前雖然確認過螺距，但實際飛行時仍需增加螺距行程才足夠使用，如果飛行時升降動作遲緩情形；檢查重點包含了主旋翼本體是否有變形、軸承是否有損壞、以及球頭、軸承是否有明顯間隙、軸承鋼珠是否有脫落，如有上述情況均需要更換新品。

Although the pitch movement of the main blade Holders has been checked on the bench, you might need to increase the pitch after a test flight. If you encountered slow response of elevator or aileron when you fly, you should inspect if there is any deformation of the main blade holders, state of bearings, gap in the linkage balls or balls missing in the bearings. Replace with new parts if any of the above problems are encountered.

4.注意/ Main blade blancing (Notice) :

飛行前主旋翼必須詳細的做好動平衡的動作，並請修正雙槳不良情況，以提昇升力效能，注意因平衡不佳的震動將各導致零件損壞與鬆脫。

The Main Blades have to be well balanced before installation. In order to get the best thrust, adjust pitch control linkage rods to keep blades rotating on the same surface. Any vibrations caused by poor balanced Main Blades will cause wear and tear or damage to the parts, and cause the connected part to loosen.

5.十字盤組/ Swashplate :

當十字盤組發生嚴重虛位時，會導致停懸時穩定性能不穩定、操控性能也會劣化，並可能發生不明原因的雙槳現象，嚴重時必須更新。

When the bearings in the swashplate becomes worn, hovering will become unstable and the control will be inaccurate, the main blades will sometimes not track correctly. Replace with a new Swashplate if you encountered any of the above problems.

機身組檢查重點/ Key check points of the fuselage

1. 主軸軸承 / Main shaft bearings :

主軸軸承經長期重負載運作、正常飛行約100 趟後必須檢查反部軸承性能狀況，建議更換新品維持運作順暢度，但是若經常進行激烈的3D 飛行或嚴重撞擊、建議您必須時常檢查主軸軸承，當發現主軸軸承有明顯的間隙、異音或是轉動有明顯的阻礙都必須更換新品。

The bearings of the main shaft are always worked under heavy load. It is essential to check them after every 100 flights. It is recommended to replace them with new ones after 100 flights. Please check these bearings more frequently if you fly more extreme 3D maneuvers or there is any crash. Please replace new bearings if there is any unusual rotation sound or unsmooth rotation.

2. 單向軸承組 / One-way bearing set :

單向軸承組並不常發生損壞的情形，但是為了保持良好順暢的運作、建議您約50趟的週期當中請拆下來清潔與上油。

One-way Bearing is not an easily worn component. In order to keep it in good operation condition, it is recommended to disassemble, clean and lubricate the bearing every 50 flights.

※如果發生主齒輪明顯晃動，請立即更換單向軸承套。

Please replace new One-way Bearing set in case there is any unusual fluctuation of the main drive gear.

3. 尾傳動皮帶 / Tail drive belt :

尾傳動皮帶雖然採用高強度皮帶、長時間使用時仍然會產生磨損的現象、請隨時檢查皮帶磨損狀況，當皮帶起毛時請更換新皮帶，以維持良好的尾舵控制。

Although the Tail drive belt are made of industrial high strength material, they will still get worn after long time use depending on the flying style. To keep accurate control of the tail, please check how tight the belt is regularly. Also check the belt wear, replace the new belt when the belt is worn to maintain good rudder control.

4. 控制桿拉桿組檢查重點 / Key check points of all linkage rods and linkage balls

控制連桿、控制臂連接座、升降舵連接座主裝時請特別注意各連接部位需保持滑順且盡量減少軸向左右搖晃間隙、此要點將嚴重影響飛行穩定性能各連接桿如因墜機損壞之外、因自然磨損或是因飛行場地惡劣因素也會發生磨損或鬆脫的情形，當您發現任何連接桿發生間隙、或是輕推既可脫出、建議您立即更新，確保飛行性能與安全。

During assembly of all the Linkage Rods and Linkage Balls of the helicopter, it is important to make sure all the Balls and the Ball Links can move smoothly with correct clearance without unusual gaps. Condition of all the Balls and the Ball Links affects flying stability and performance of the helicopter significantly. To keep good flying performance as well as safe use, it is essential to check the clearance of the Balls and the Ball Links particularly after crash or long-time were by dusts or sand. Replace Balls and Ball Links if the clearance is larger than the allowable tolerance as it might cause links to fall off during flight.

尾旋翼系統檢查重點 / Key check points of the tail torque assembly

1.尾齒輪組/ Torque tube drive rear gear set

尾齒輪組請注意尾旋翼軸承的檢查，當您發現軸承有明顯的間隙時請更新，避免軸承咬死，並請注意尾螃蟹爪不可將它鎖死、必須能保持順暢運動以免發生塑膠件熔化的情形。

Please pay special attention to bearing abrasion. Once the gap in the bearing becomes larger than allowable tolerances or rotation is not smooth, replace with new bearings. The abrasion situation of the gears also needs to check, replace new gear in case the gear is seriously worn and affects smooth rotation of any gear.

2.尾旋翼控制滑座/ Tail pitch assembly :

當您於草地飛行時，請注意檢查尾旋翼滑座，是否有發生落地時捲入雜草的狀況，若有必須立即將它清除再進行下一次飛行，否則可能會因為雜草纖維阻礙運作、造成尾旋翼控制失常的情形，平常保養盡量避免使用潤滑油於外部機構，避免沾染灰塵等雜物、嚴重時甚至會發生其他部位軸承磨損及尾旋翼滑座無法運作的情形。

When flying in grass, please check Tail Pitch Assembly to see is there any grass enmeshed after each landing. Clean the Tail Pitch Assembly before a new fly in case there is any grass enmeshed. Fail to clean the grass might cause you to lose tail control as grass will create resistance and affect the smooth movement of the Tail Pitch Assembly. It is important that not to apply any lubricating oil to the Tail Pitch Assembly as it will stick dust and cause abrasion of the bearing, and affect the smooth movement of the Tail Pitch Assembly.

3.尾旋翼固定座 / Tail torque tube unit :

尾旋翼固定座、飛行約50 趟左右請拆卸進行清潔保養，確認軸承間隙是正常、如轉動不順或間隙過大請更換軸承、確保控制系統完善。

Please disassemble the Tail Torque Tube Unit to clean and inspect it every 50 flights. To keep good tail performance, replace with new bearing if the gap of bearing is bigger than allowable tolerance, or the bearing is worn or damaged.

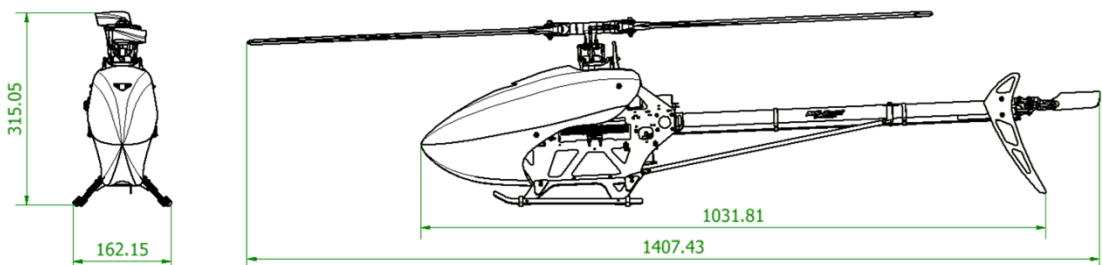
4.尾旋翼/ Tail blade

飛行時發生觸地的情形請立即檢修，若發現尾旋翼有明顯的外觀損傷時請立即更換、以避免發生尾部震動並因此損傷其它零件；確保飛行品質。

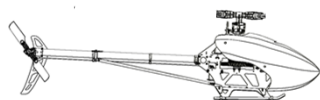
In any event that tail blades touch the ground during a flight, users should inspect the tail blade right after landing. To prevent unusual vibrations which will cause abrasion or damages to other parts, please replace tail blade if there is any damage. This will maintain good condition of the Helicopter and good flight performance.

注意！螺絲鬆動將導致不可預期意外，請務必定期檢查鎖固。

Caution: Any loose bolt/screw might cause malfunction, damage, or crash of a RC Helicopter. Please check all the bolts/screws regularly, and fasten the loose bolts/screws immediately.



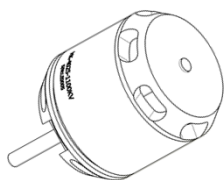
標準配備與選配 Standard equipment and selection



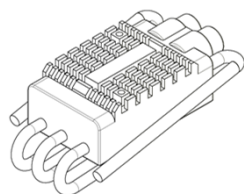
M5 Sport 全套零組件x1
M5 Sport Kit set x1



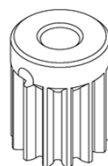
螺絲備用包x1
Backup Screws x1



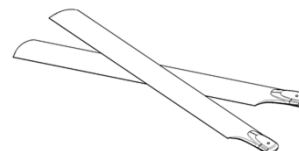
無刷馬達x1(選配)
500 Grade Brushless Motor x1
(optional part)



馬達電子變速器x1(選配)
100A Electrical Speed
Controller x1 (optional part)



馬達主齒x1(選配)
Gear 13T x1

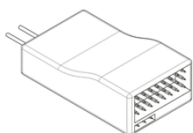


主旋翼組件x1 (選配)
Main Blade (optional Parts)

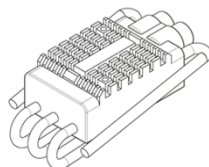
自備遙控及電子設備



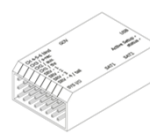
發射機六動以上
直升機模式遙控器
Transmitter with 6 or more
channels are required



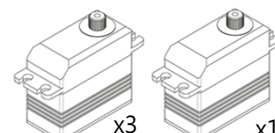
接收機六動以上
Receiver with 6 or more
channels



馬達電子變速器100A以上
At least 100A Electrical
Speed Controller

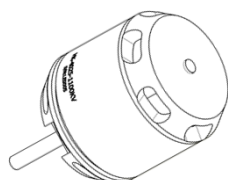


3軸陀螺儀
3 Axis Gyro

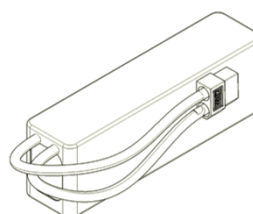


動作控制標準伺服器x3
尾舵控制標準伺服器x1
3 Standard Servos for CCPM
1 Tail rudder servo

建議動力系統



無刷馬達x1(選配)
500 Grade Brushless Motor

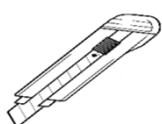


鋰電池22.2V · 6S25C以上 · 3300~4200mah 尺寸最大160mmx47mmx56mm
LiPo battery 22.2v. 6S25C (Minimum). 3300~4200mah Size max160mmx47mmx56mm

自備工具



剪刀
Scissors



美工刀
Pocket Knife



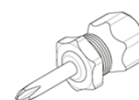
潤滑油
Grease



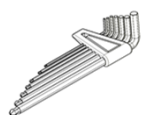
防鬆膠
Anaerobic adhesive



快乾膠
Instant adhesive



十字起子
Screw driver



六角扳手 1.5/2.0/2.5/3.0 mm
Hexagon keys screw driver 1.5/2.0/2.5/3.0 mm



斜口鉗
Diagonal cutting pliers



尖嘴鉗
Noddle Norse pliers



注意 Caution

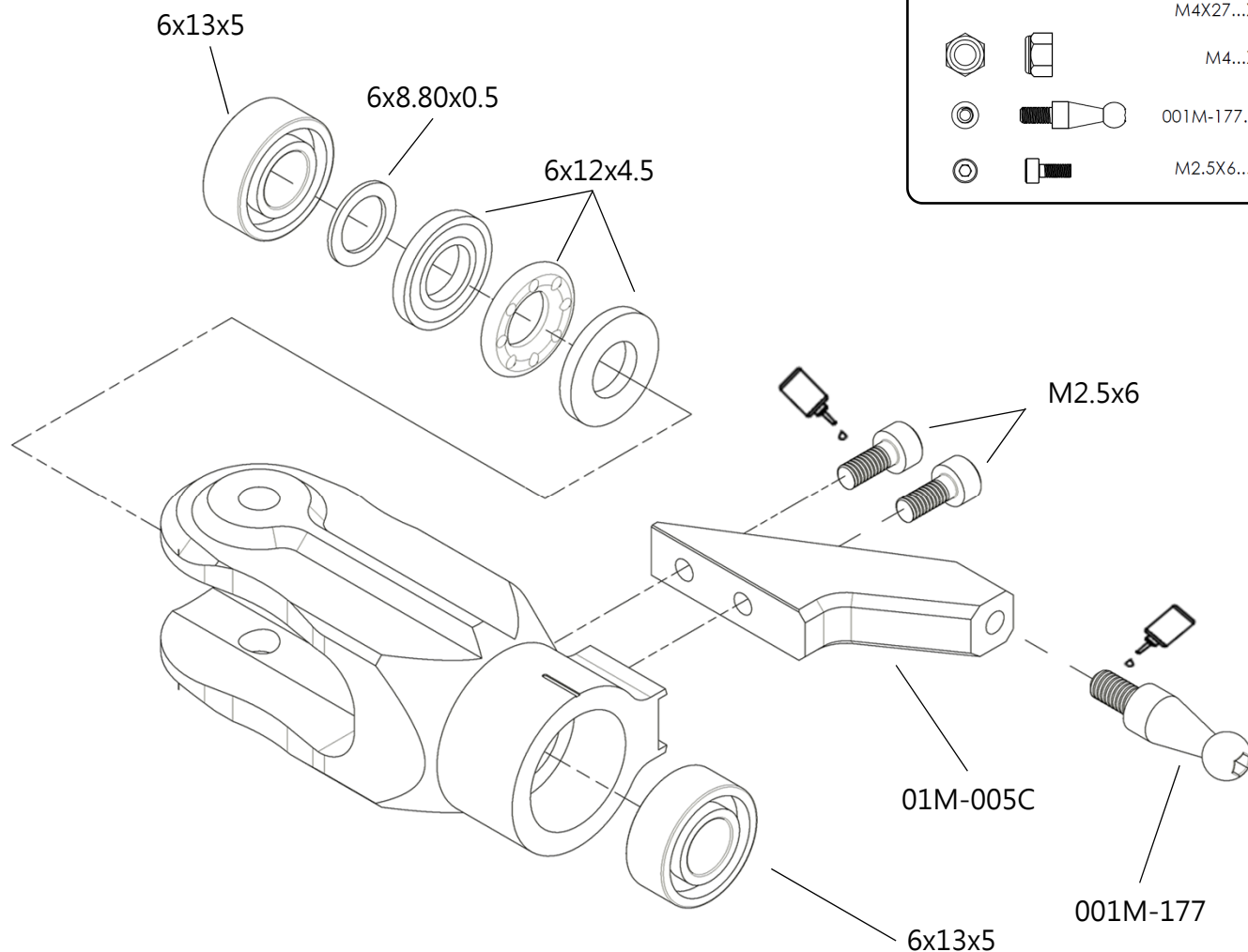


螺絲鎖付金屬零件時，請上螺絲膠。
When fixing the metal parts,
Please apply a little anaerobic
adhesive on it.

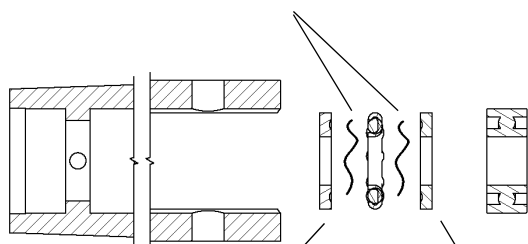
原廠出廠之組裝品，請再次確認螺絲是否鎖
緊上膠。
Please make sure all screws been
tightened even assembled already by
factory.

500M-VB

		6X12.5X4.5...X2
		6X13X5...X4
		6X8.8X0.5...X2
		M4X27...X2
		M4...X2
		001M-177...X2
		M2.5X6...X4



單向軸承請塗上潤滑油
Apply some grease on thrust bearing



內徑較大 Larger Inside Diameter
內徑較小 Smaller Inside Diameter

止推軸承及橫軸墊圈屬於飛行消耗品，建每20趟定期檢查及更換，高主旋翼轉速飛行時，請縮短定期檢之趟數，以確保飛行安全。
Thrust bearing and washer for radial bearing are wear items, and thus should be inspected for replacement after every 20 flights.
For flights with high headspeed, the inspection interval should be reduce to ensure flight safety.



注意 Caution



螺絲鎖付金屬零件時，請上螺絲膠。
When fixing the metal parts,
Please apply a little anaerobic
adhesive on it.

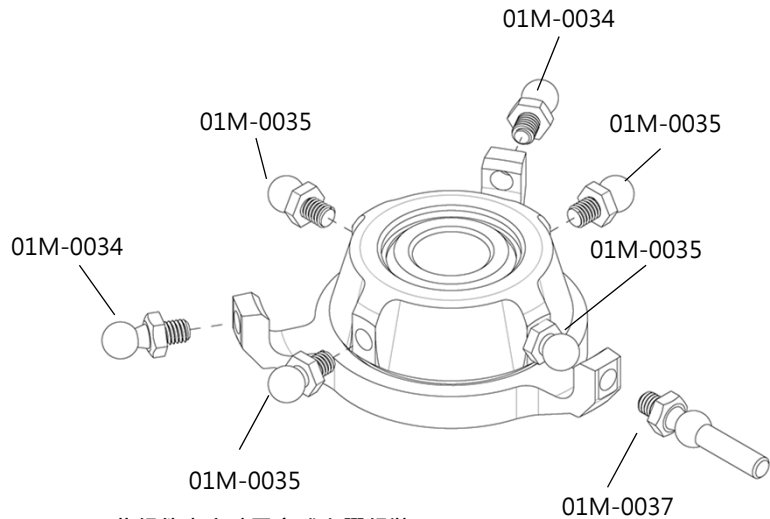
原廠出廠之組裝品，請再次確認螺絲是否鎖
緊上膠。
Please make sure all screws been
tightened even assembled already by
factory.

500M-M

		01M-0034...x2
		01M-0035...x4
		01M-0037...x1

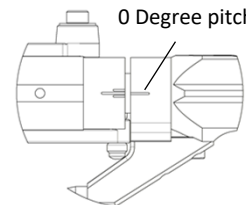
600M-VC

		M2X11...X2
		M4X8...X2
		M3X25...X2
		01M-026...X2
		01M-0170...X2
		01M-0166...X2
		4X8X1...X2
		F4X8X4...X4

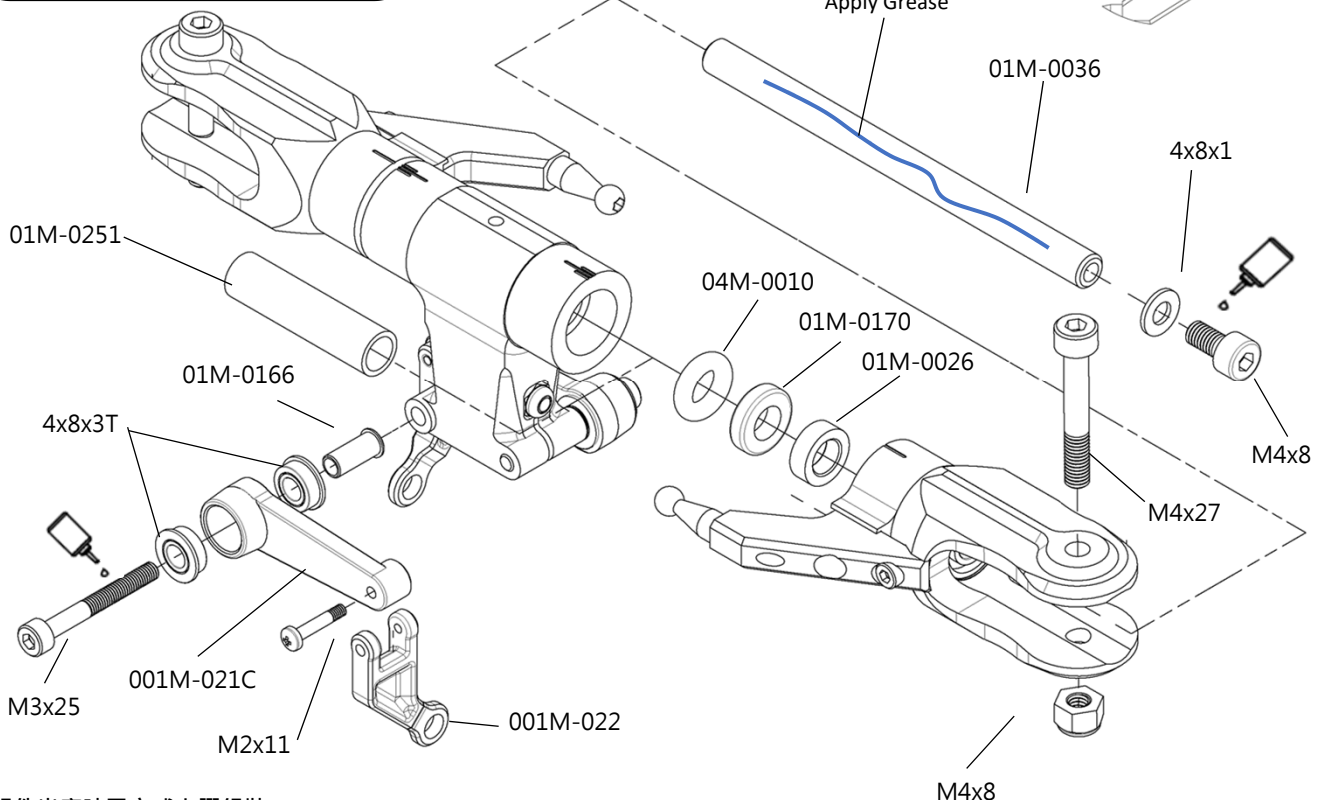


此組件出廠時已完成上膠組裝。
This assembly is ready to fly from factory.

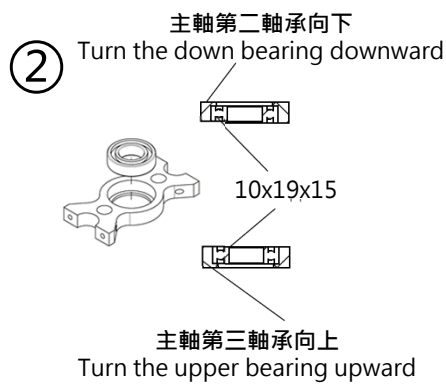
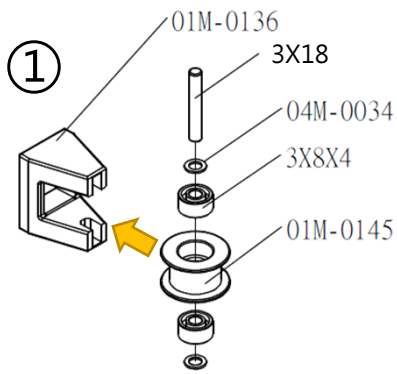
零度螺距刻度線
0 Degree pitch maker



塗上潤滑油
Apply Grease



此組件出廠時已完成上膠組裝。
This assembly is ready to fly from factory.



注意 Caution

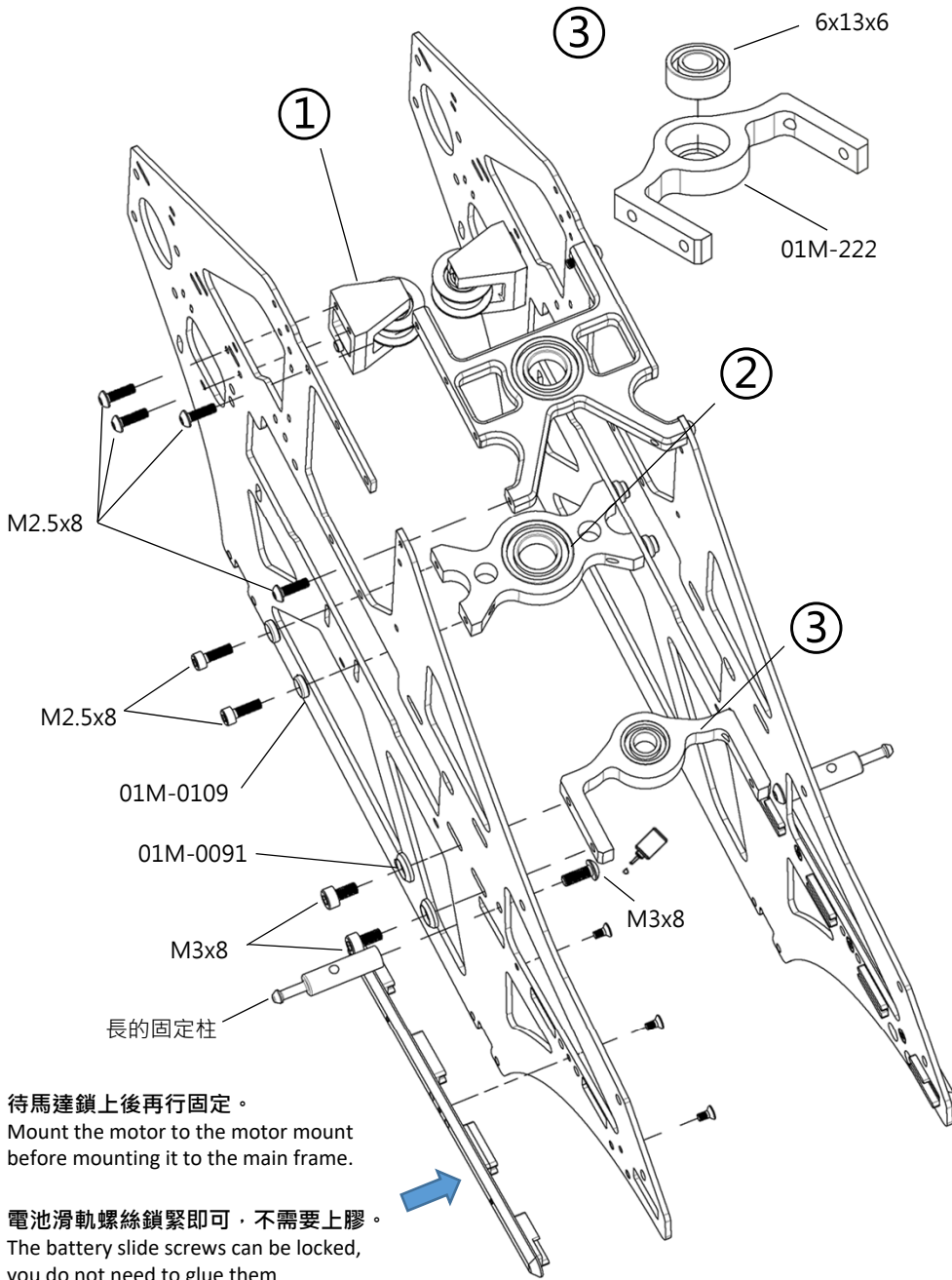


螺絲鎖付金屬零件時，請上螺絲膠。
When fixing the metal parts, Please apply a little anaerobic adhesive on it.

原廠出廠之組裝品，請再次確認螺絲是否鎖緊上膠。
Please make sure all screws been tightened even assembled already by factory.

500MF-FI

		M2.5X8...X4
		M3X8...X2
		01M-0109...X4
		3X18...X2
		3X5X0.5...X4
		10X19X5...X2
		3X8X4...X4

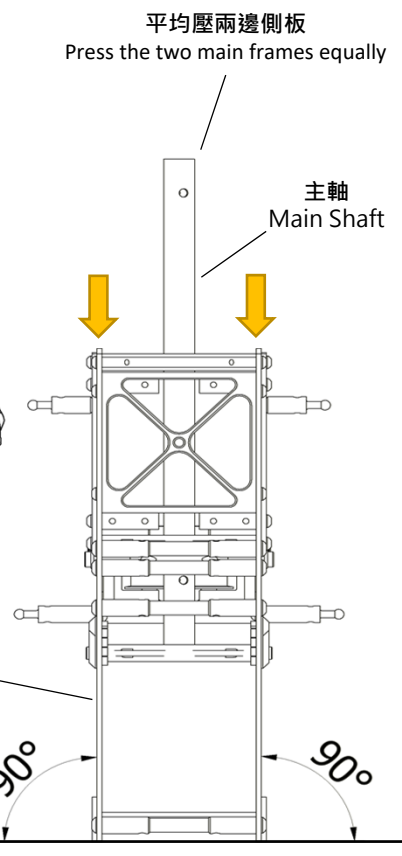


待馬達鎖上後再行固定。
Mount the motor to the motor mount before mounting it to the main frame.

電池滑軌螺絲鎖緊即可，不需要上膠。
The battery slide screws can be locked, you do not need to glue them

機身側板組裝重點：
側板螺絲先不鎖緊，放入主軸貫穿兩軸承，主軸需能上下滑動，機身側板底部需與水平桌面(玻璃平面)貼合，在確保主軸滑順的狀態下，將螺絲鎖緊。

Assembly point : Do not tighten the screws entirely in the main frames, put the mainshaft through the bearings, and then make sure it could move smoothly up and down. The bottom bracket must be placed on a flat surface (preferably a glass surface). Be shure that the mainshaft can be moved up and down and then tighten the screws in the main frame.



請每飛行30次之後，檢查塑膠惰輪。
The plastic idler is checked after fly 30 times.

注意 Caution

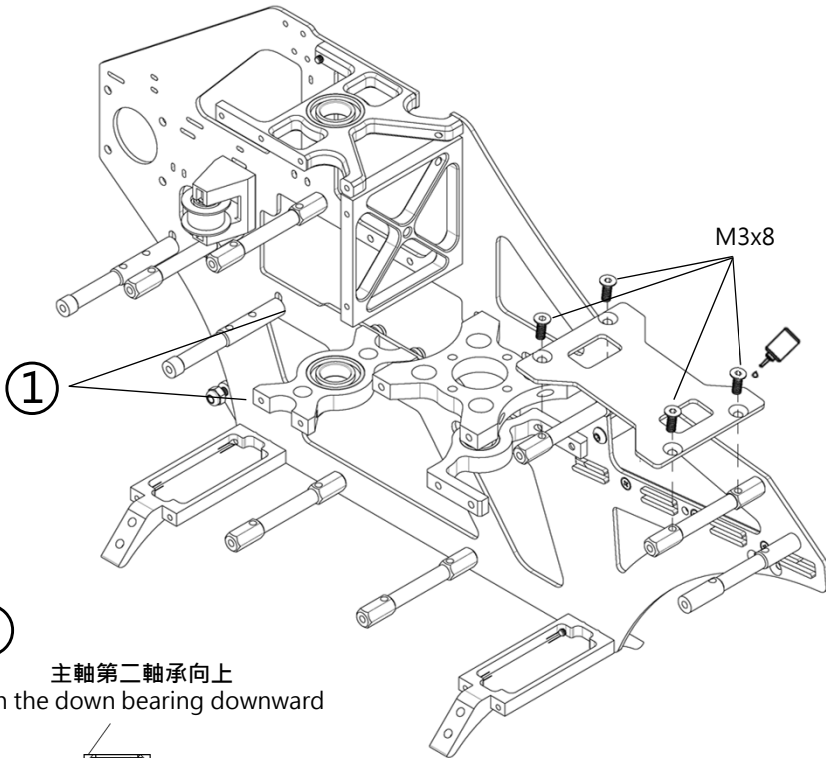


螺絲鎖付金屬零件時，請上螺絲膠。
When fixing the metal parts,
Please apply a little anaerobic
adhesive on it.

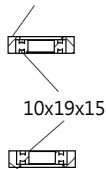
原廠出廠之組裝品，請再次確認螺絲是否鎖緊上膠。
Please make sure all screws been
tightened even assembled already by
factory.

500MF-E

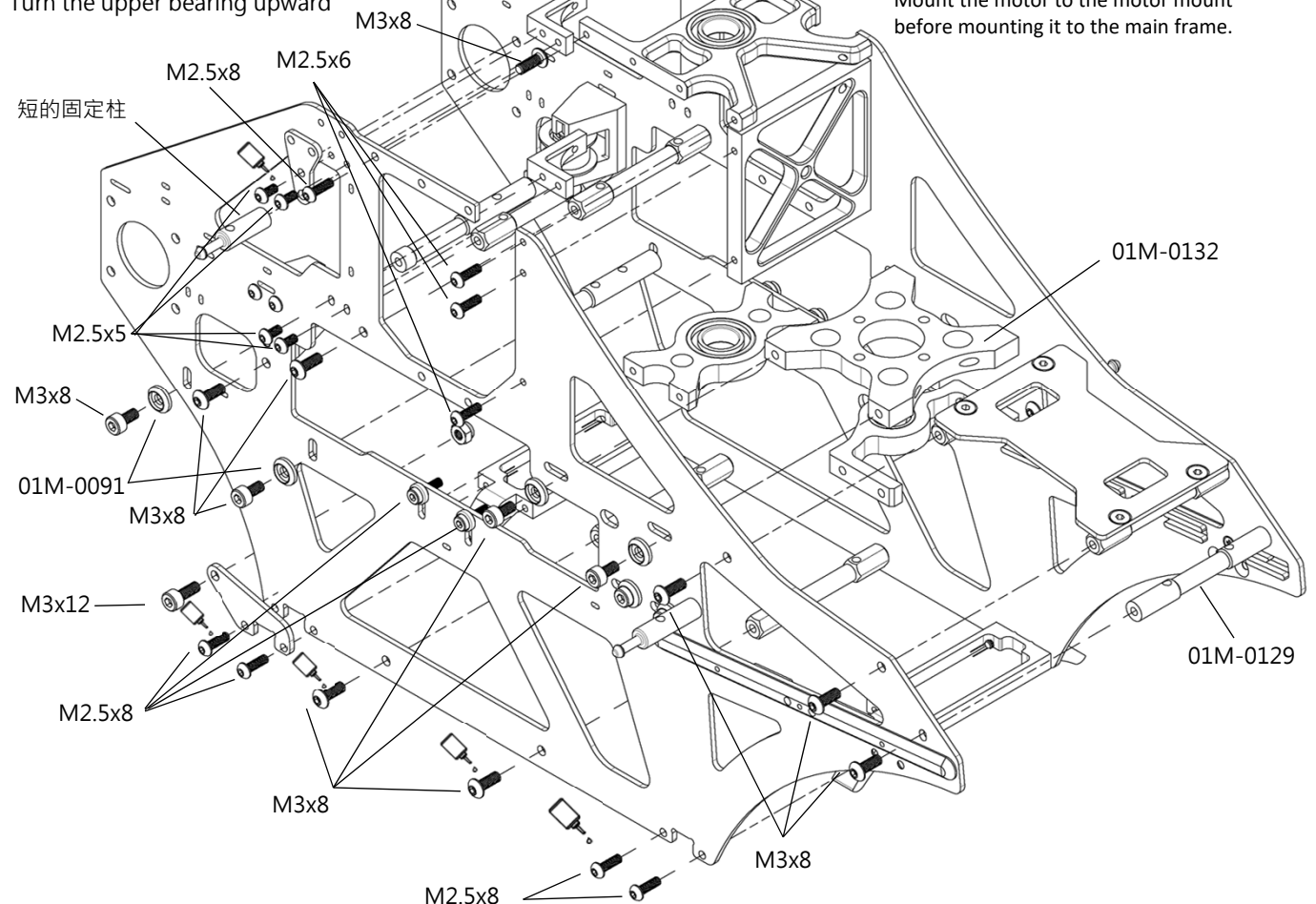
		M2.5x8...x4
		M2.5x12...x8
		M3x8...x16
		M3x10...x4
		01M-0109...x12
		01M-0091...x12



① 主軸第二軸承向上
Turn the down bearing downward

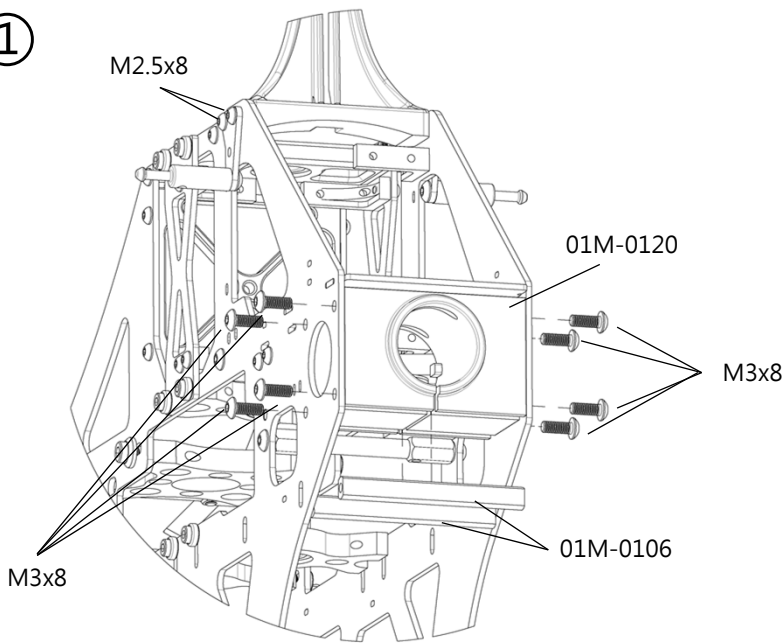


主軸第三軸承向上
Turn the upper bearing upward



馬達座：待馬達鎖上後再行固定。
Mount the motor to the motor mount
before mounting it to the main frame.

①



尾管固定螺絲x4，先不要鎖緊，待尾管組裝後再鎖緊。
Please do not tighten the tail boom screws*4 PCS before the tail boom unit is assembled.



注意 Caution



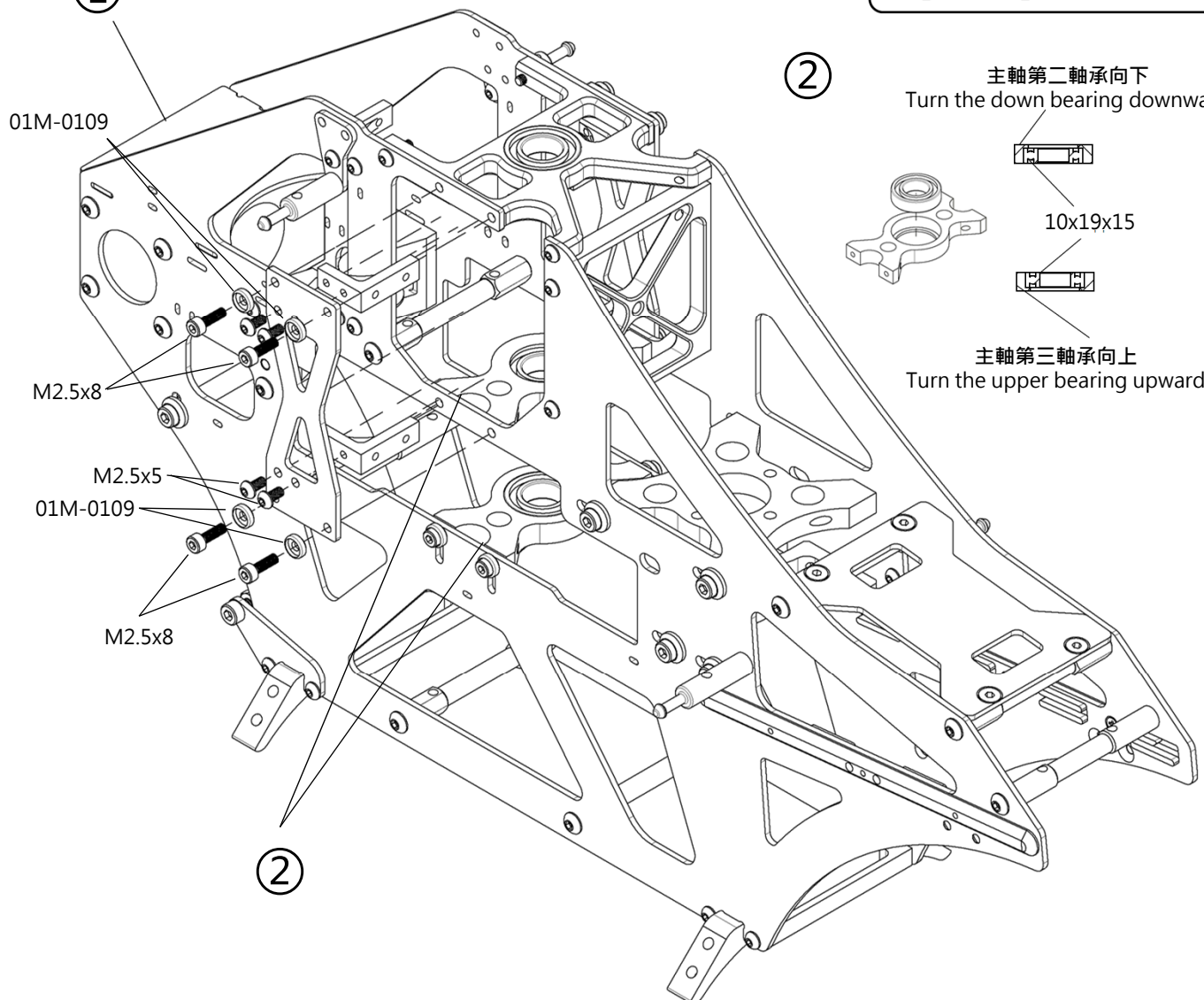
螺絲鎖付金屬零件時，請上螺絲膠。
When fixing the metal parts, Please apply a little anaerobic adhesive on it.

原廠出廠之組裝品，請再次確認螺絲是否鎖緊上膠。
Please make sure all screws been tightened even assembled already by factory.

500MF-E

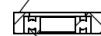
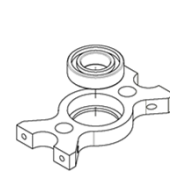
		M2.5x8...x4
		M2.5x12...x8
		M3x8...x16
		M3x10...x4
		01M-0109...x12
		01M-0091...x12

①

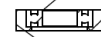


②

主軸第二軸承向下
Turn the down bearing downward



10x19x15



主軸第三軸承向上
Turn the upper bearing upward

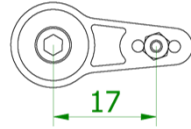
500M-N


 注意 Caution

-  01M-0009...X4
-  M2x12...x4
-  M2螺母...X4
M2 Nut
-  M2.5X14...X12
-  M2.5X18...X4
-  M3X18...X1
-  2.6X6X0.6...X16
-  M3防鬆螺帽...X1
M3 set nut

舵機臂為選購商品，請進行選購或自備。
Servo arm is optional, please purchase or prepare their own.

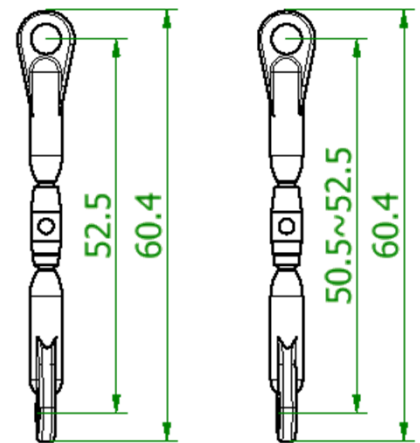
舵機臂孔位建議距離。
Recommended distance of servo arm .



 螺絲鎖付金屬零件時，請上螺絲膠。
When fixing the metal parts, Please apply a little anaerobic adhesive on it.

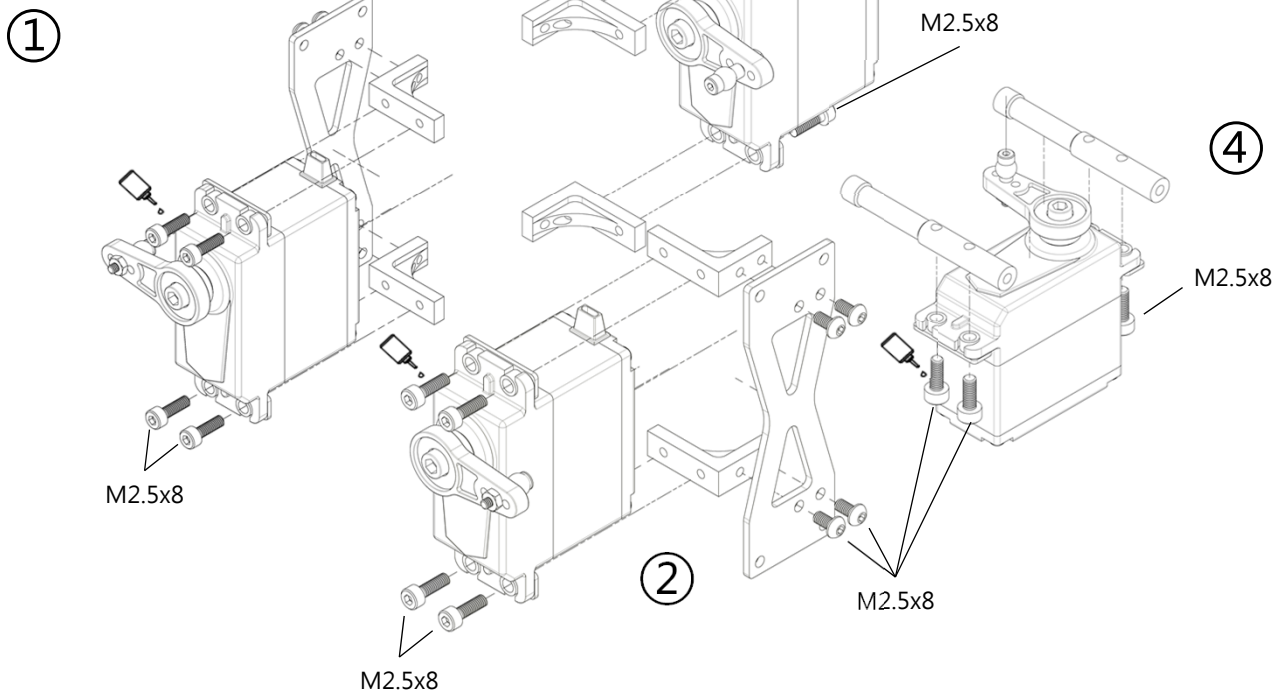
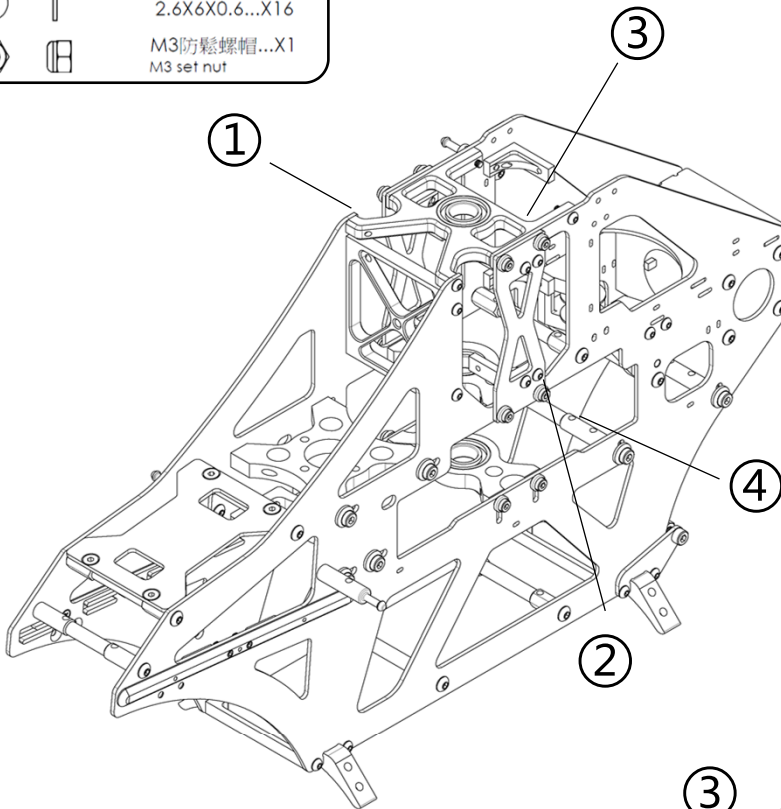
原廠出廠之組裝品，請再次確認螺絲是否鎖緊上膠。
Please make sure all screws been tightened even assembled already by factory.

CCPM / FBL 拉桿孔間距建議距離。
Recommended distance of CCPM / FBL.



CCPMx3

FBLx2



500MF-FI

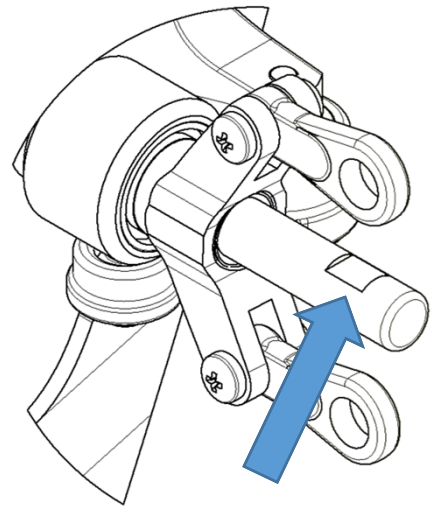
500MF-FI

注意 Caution

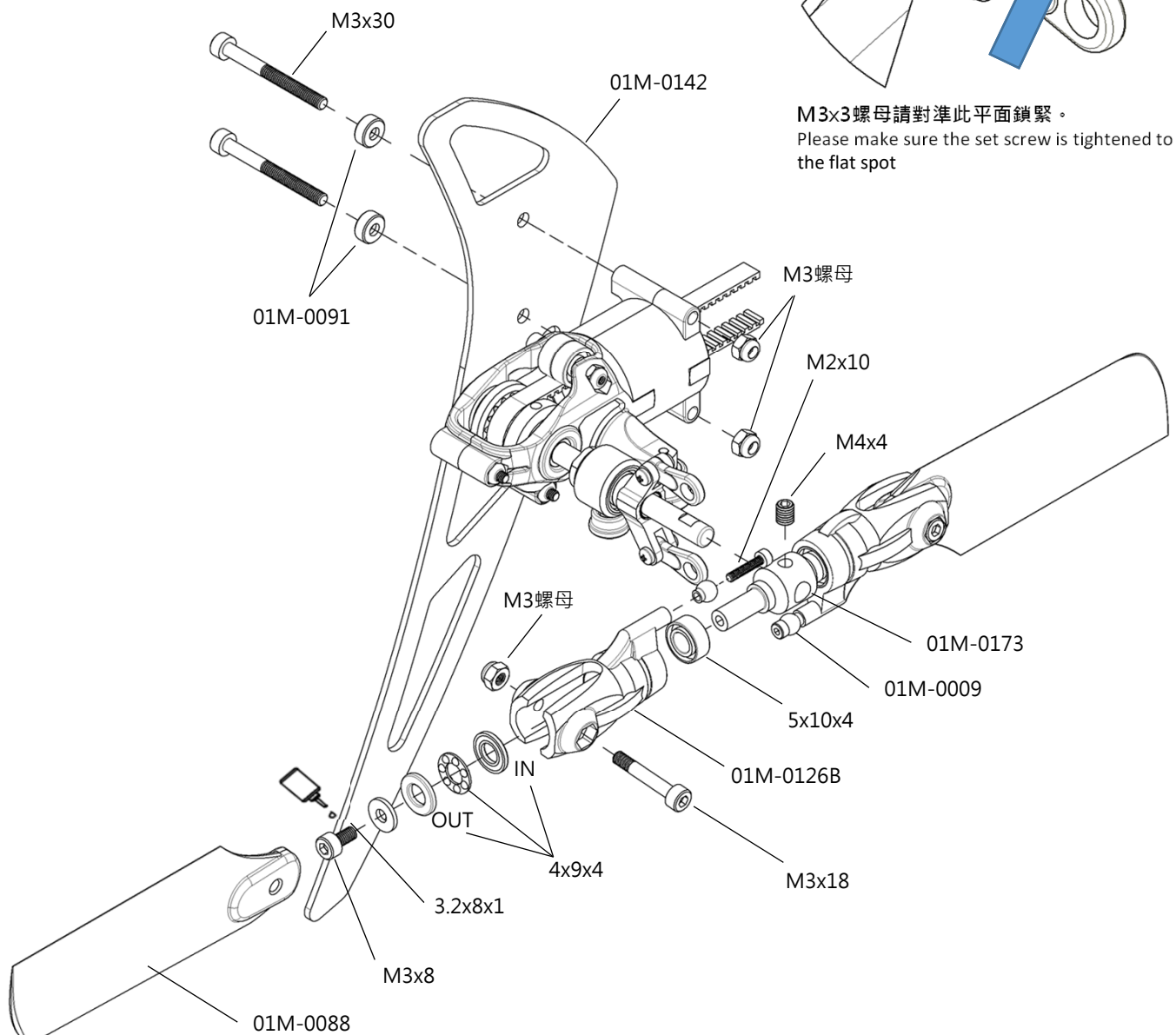
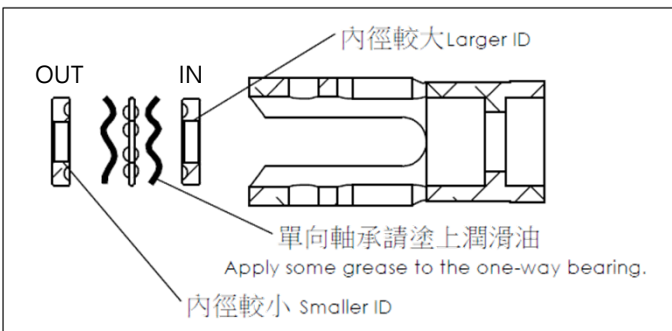
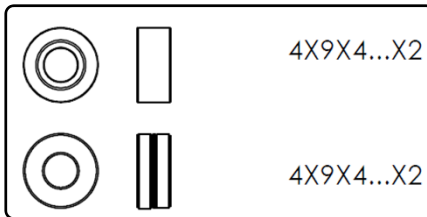
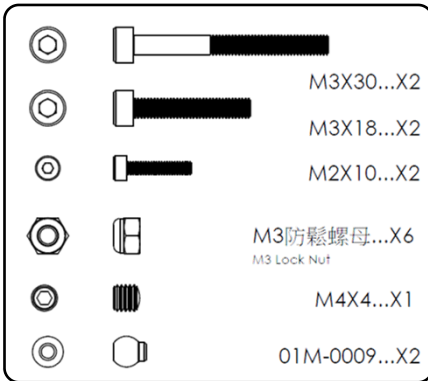


螺絲鎖付金屬零件時，請上螺絲膠。
When fixing the metal parts,
Please apply a little anaerobic
adhesive on it.

原廠出廠之組裝品，請再次確認螺絲是否鎖
緊上膠。
Please make sure all screws been
tightened even assembled already by
factory.

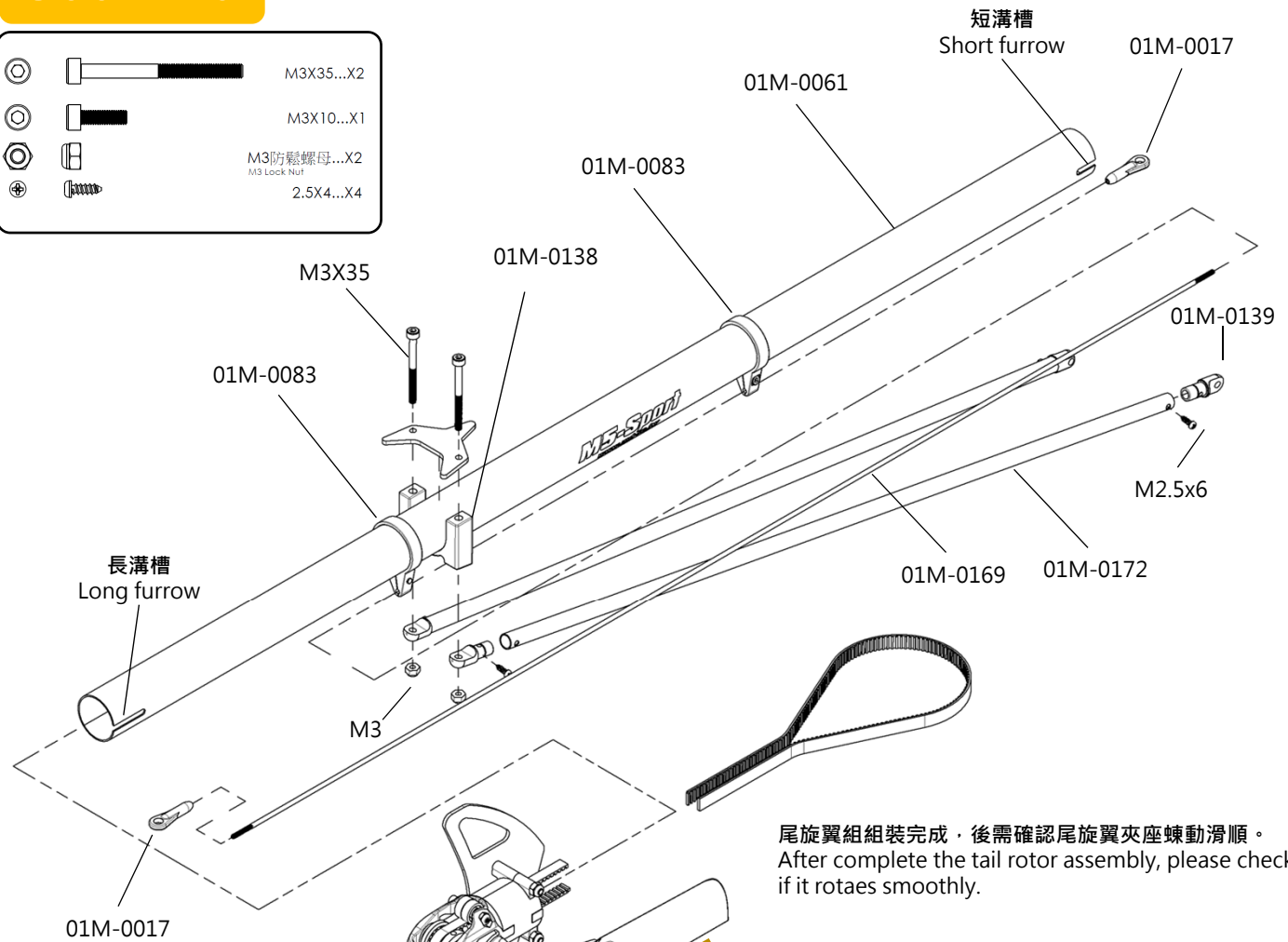


M3x3螺母請對準此平面鎖緊。
Please make sure the set screw is tightened to
the flat spot

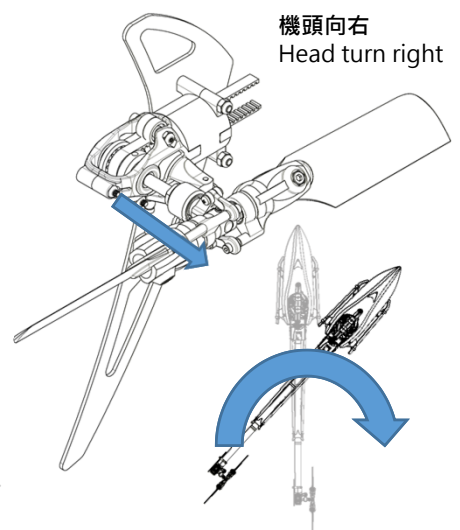
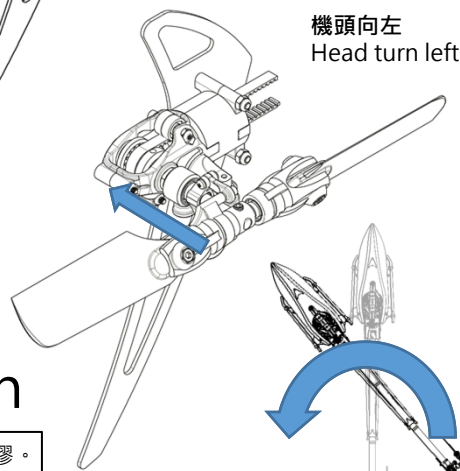
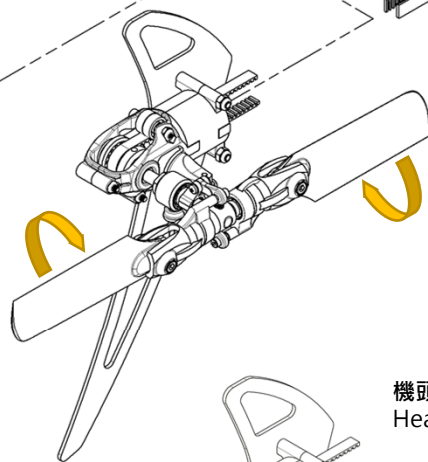


500MF-J

		M3X35...X2
		M3X10...X1
		M3防鬆螺母...X2 M3 Lock Nut
		2.5X4...X4



尾旋翼組裝完成，後需確認尾旋翼夾座轉動滑順。
After complete the tail rotor assembly, please check if it rotates smoothly.



注意 Caution



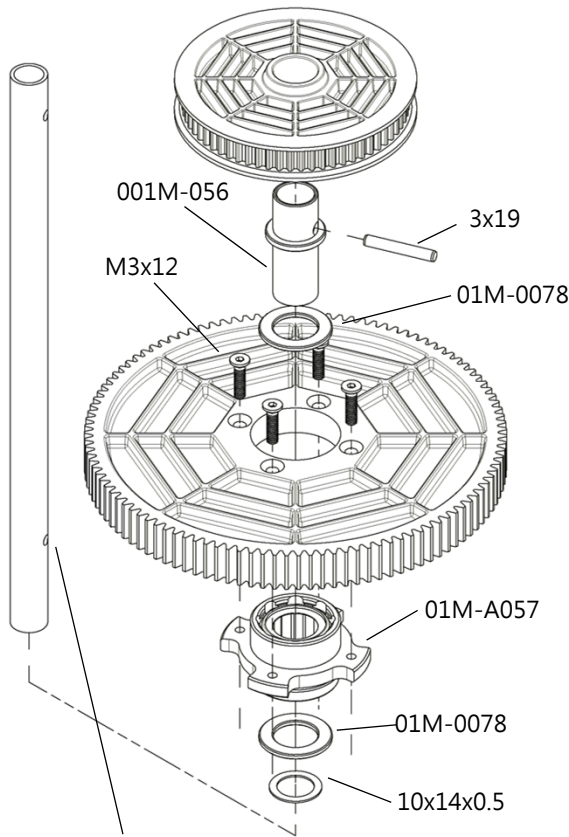
螺絲鎖付金屬零件時，請上螺絲膠。
When fixing the metal parts,
Please apply a little anaerobic
adhesive on it.

原廠出廠之組裝品，請再次確認螺絲是否鎖緊上膠。
Please make sure all screws been tightened even assembled already by factory.

警告：
尾旋翼夾的組裝方式與其它友商不同，且因此組裝方式不同，於尾舵陀螺儀補償方向也不同，敬請特別留意。

Warning: The tail rotor clip is assembled in a different way from other manufacturers. And the direction of the compensation can be different. Double check that the tail rotor is compensating the correct way.

①



3x19 PIN必須穿過主軸定位孔。
3x19 PIN must pass through the shaft positioning holes



注意 Caution

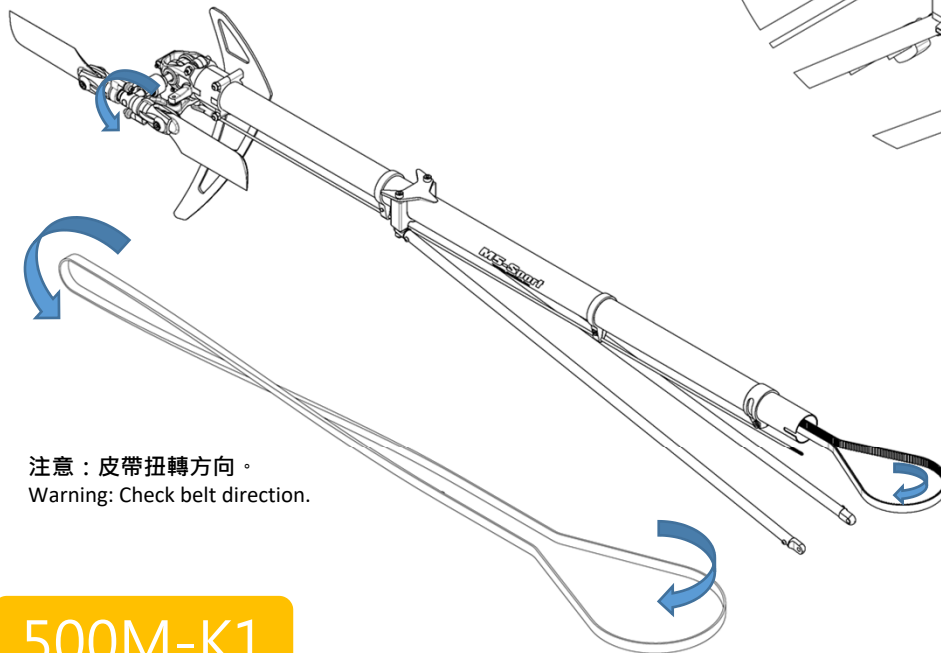
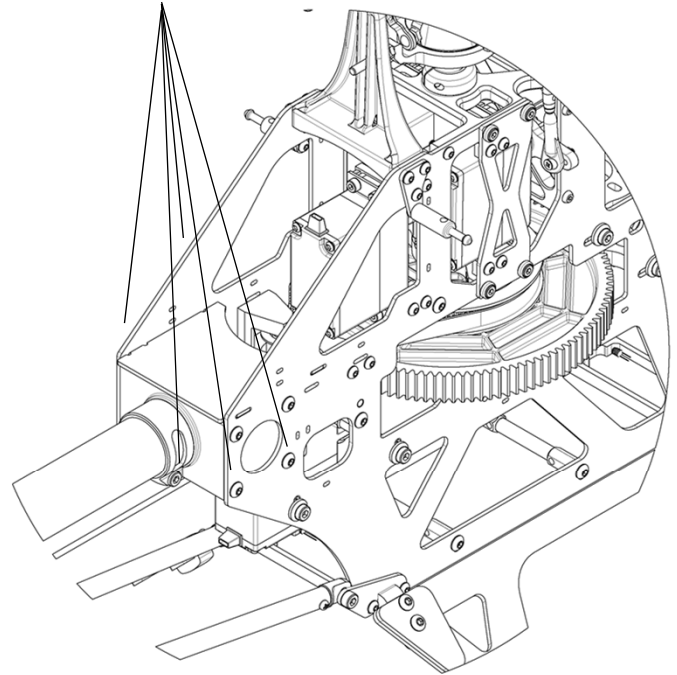


螺絲鎖付金屬零件時，請上螺絲膠。
When fixing the metal parts,
Please apply a little anaerobic
adhesive on it.

原廠出廠之組裝品，請再次確認螺絲是否鎖
緊上膠。
Please make sure all screws been
tightened even assembled already by
factory.

鎖緊螺絲，共五顆。
Locking screw, a total of 5.

②

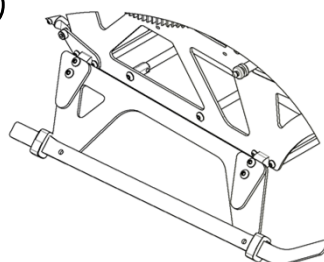


注意：皮帶扭轉方向。
Warning: Check belt direction.

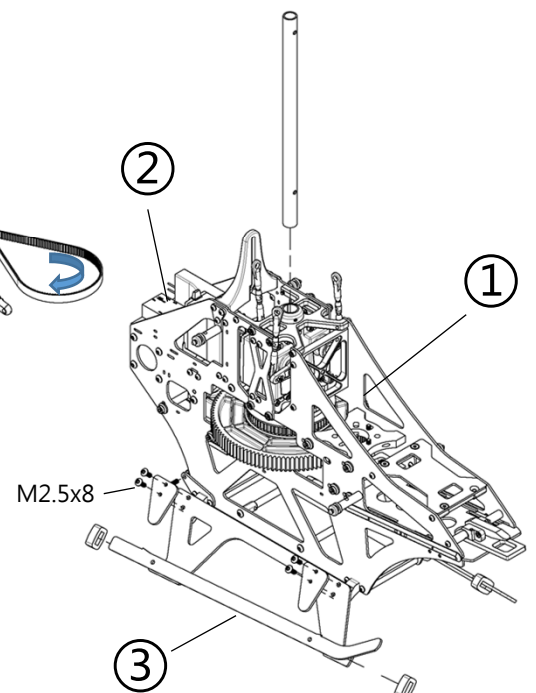
500M-K1

	M3X5...X4
	M3...X4
	M2.5X10...X2
	M3X6...X4
	M3X12...X6
	PIN3X19...X1

③



②



※請參閱第27頁特別建議事項。

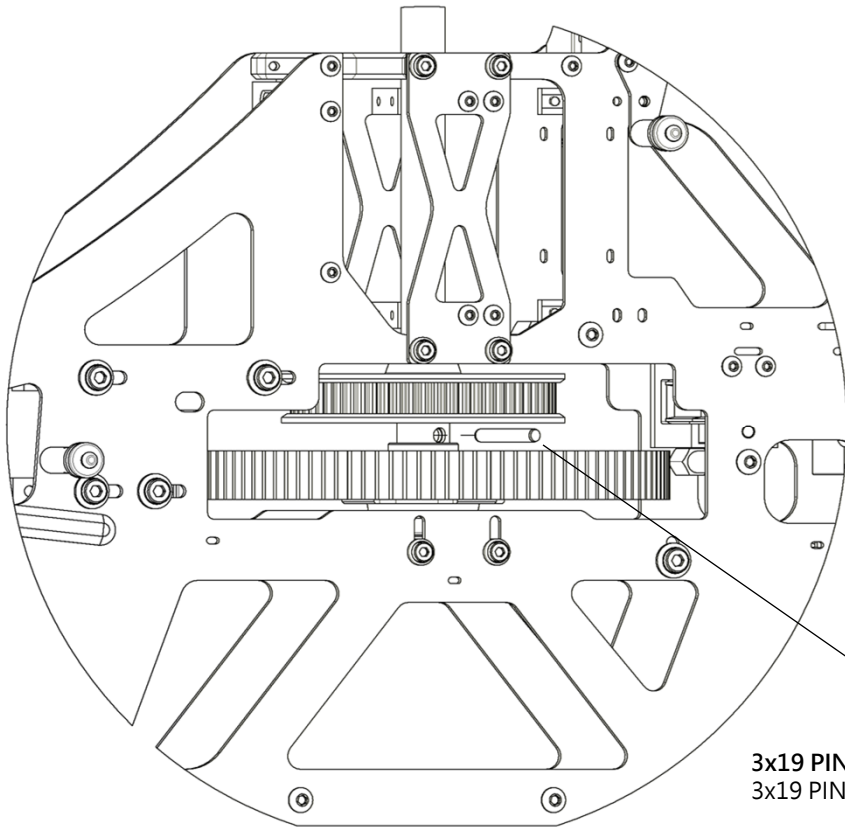
※ Please refer to page 27 for special recommendations.

 注意 Caution

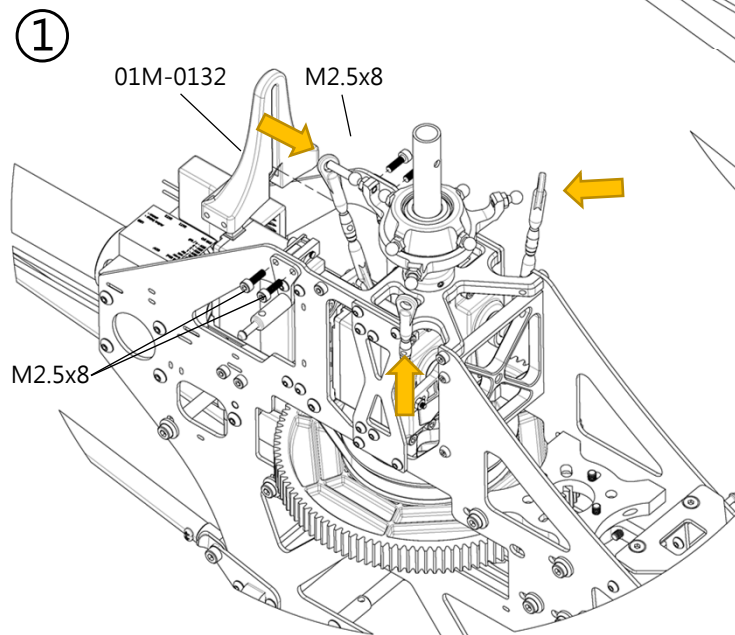


螺絲鎖付金屬零件時，請上螺絲膠。
When fixing the metal parts,
Please apply a little anaerobic
adhesive on it.

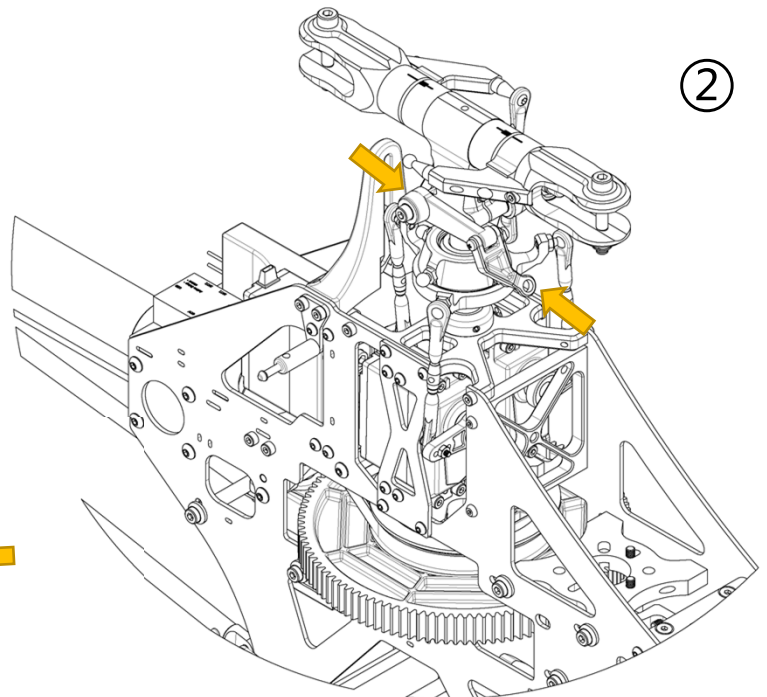
原廠出廠之組裝品，請再次確認螺絲是否鎖
緊上膠。
Please make sure all screws been
tightened even assembled already by
factory.



3x19 PIN必須穿過主軸定位孔。
3x19 PIN must pass through the shaft positioning holes



十字盤裝入後，再行固定。
Mount the swash plate before mounting the phasing control mount.

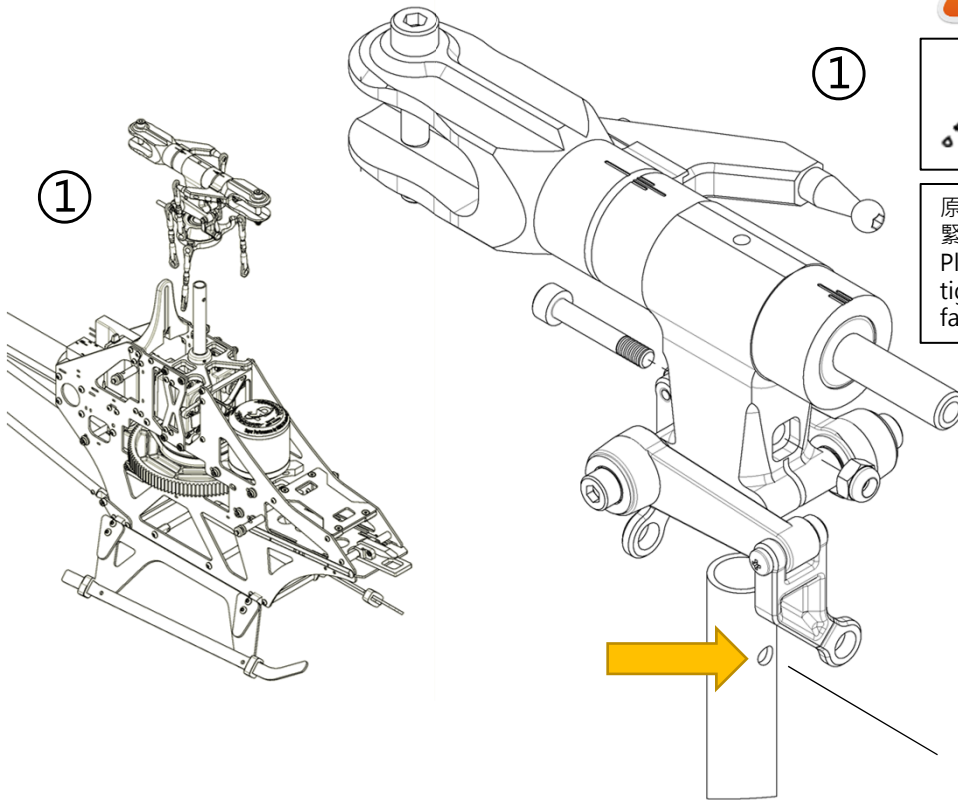


 注意 Caution

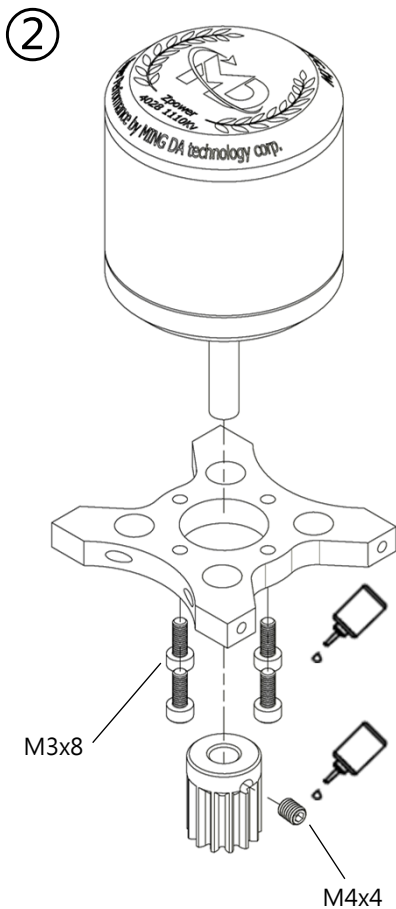


螺絲鎖付金屬零件時，請上螺絲膠。
When fixing the metal parts,
Please apply a little anaerobic
adhesive on it.

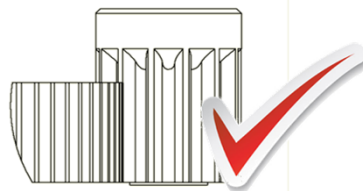
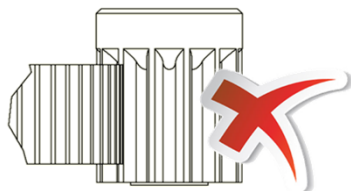
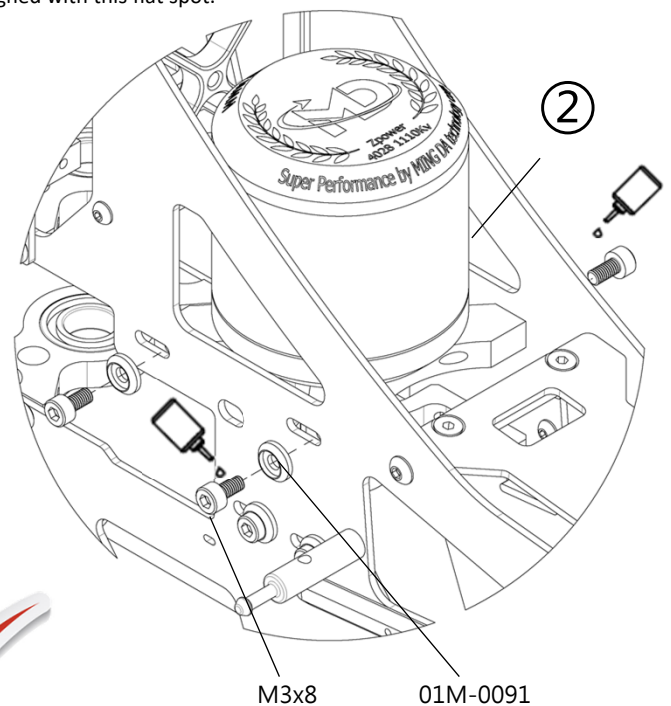
原廠出廠之組裝品，請再次確認螺絲是否鎖
緊上膠。
Please make sure all screws been
tightened even assembled already by
factory.



M3螺絲必須穿過主軸定位孔。
M3 screws must pass through the
shaft positioning holes




齒輪固定螺絲需對準此平面再行鎖緊。
The set screw must be aligned with this flat spot.



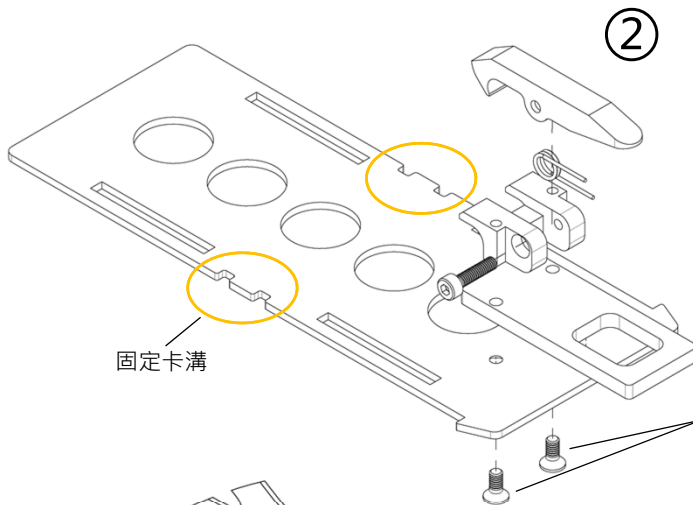
滑軌式電池座使用說明

Quick release battery holder instructions.

 注意 Caution

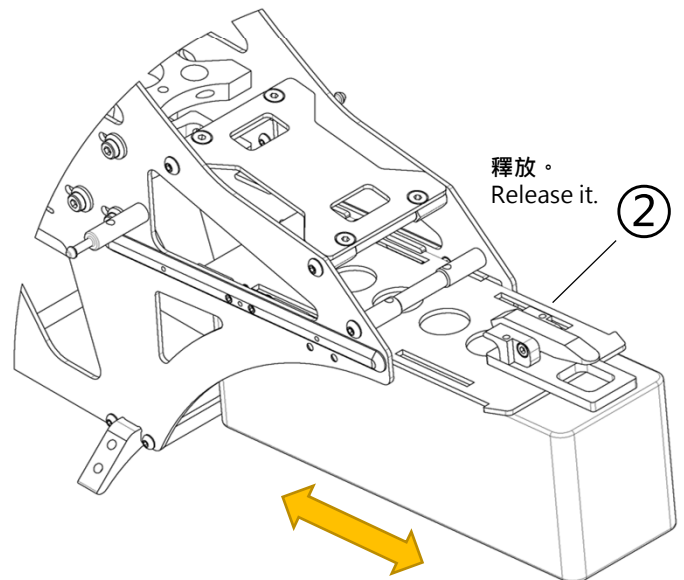
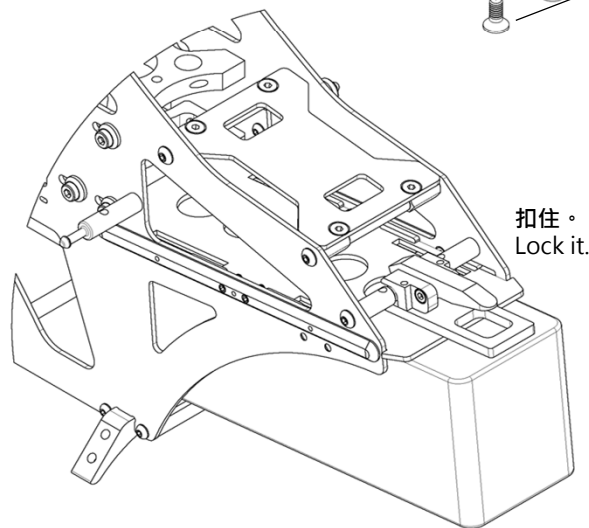
 螺絲鎖付金屬零件時，請上螺絲膠。
When fixing the metal parts, Please apply a little anaerobic adhesive on it.

原廠出廠之組裝品，請再次確認螺絲是否鎖緊上膠。
Please make sure all screws been tightened even assembled already by factory.



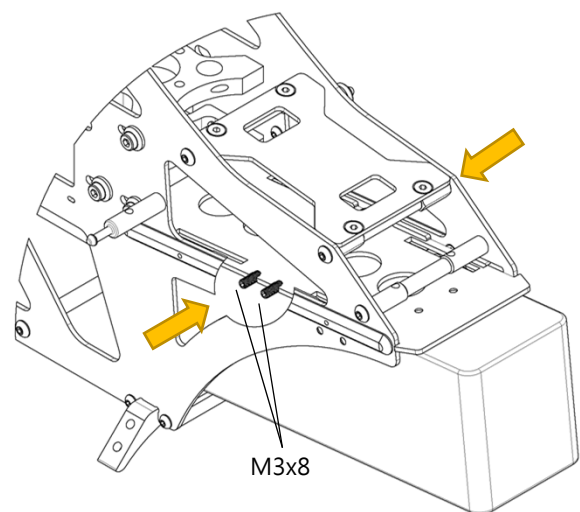
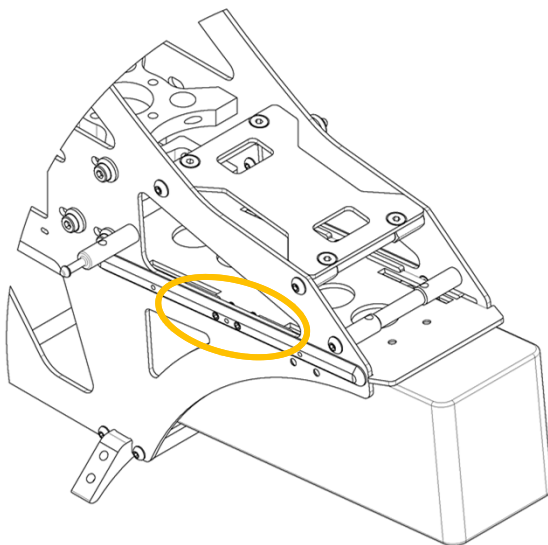
此組件出廠時已完成上膠組裝。
This assembly is ready to fly from factory.

電池滑軌螺絲鎖緊即可，不需要上膠。
The battery slide screw can be locked, do not need to glue

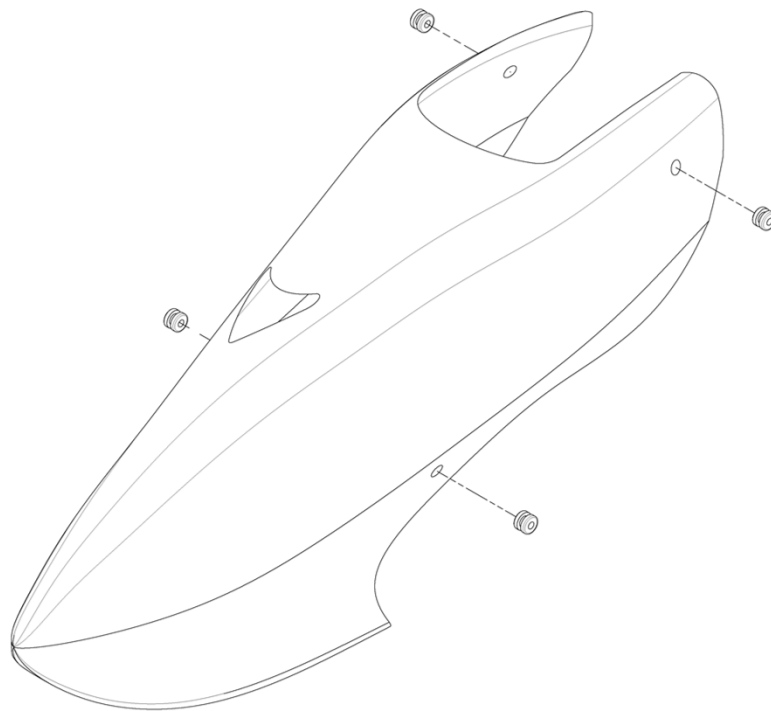
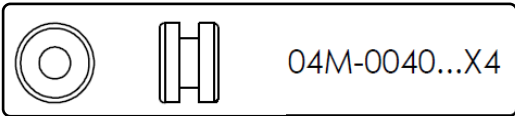


固定式電池座使用說明

Fixed battery holder instructions.

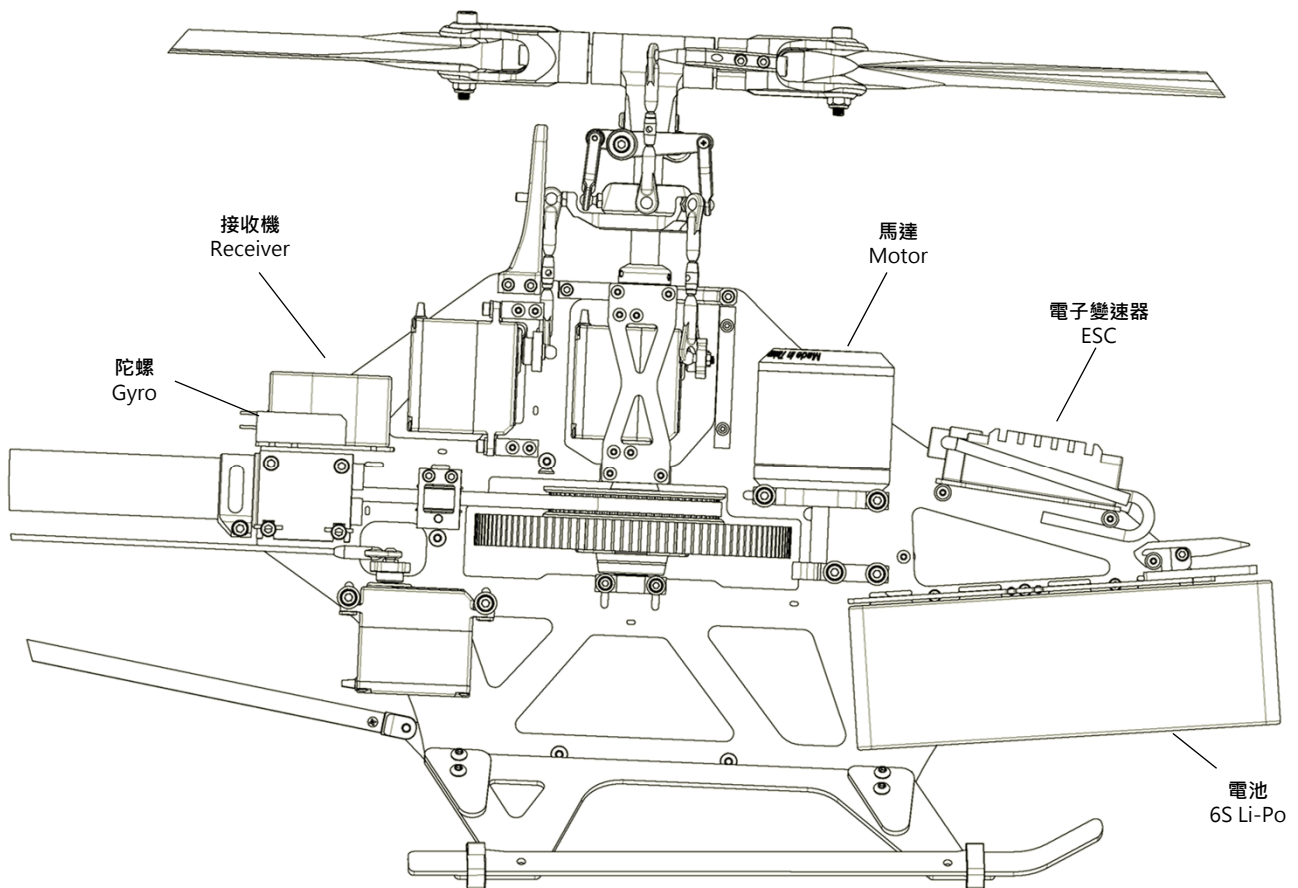


若不想使用快拆電池座的話，可以拆下扣件組之後，於單側使用兩個M3X8止付螺絲進行電池板的固定(兩側共四個)，達到更輕量化的需求。
If you do not want to use the quick release battery holder, you can remove the fastener group. Instead you can use two M3X8 socket set screws for the battery plate (on both sides, a total of four), to achieve a more lightweight model.



電子裝備設備放置建議

Suggested placement of electronic components.



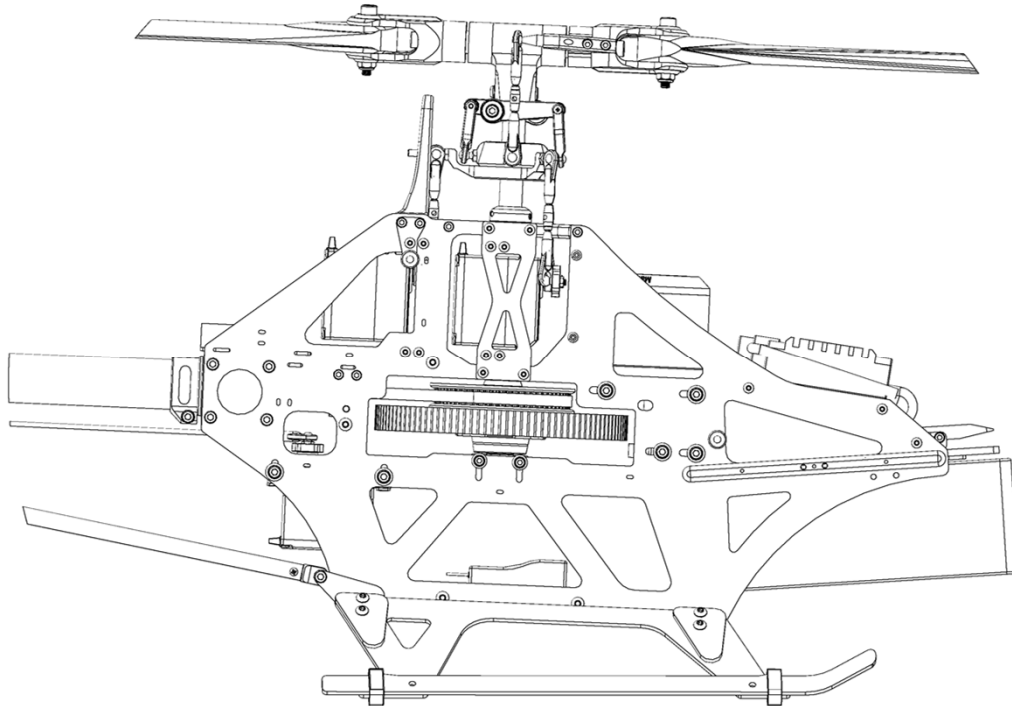
注意 Caution

在進行主旋翼調整時，請保持與直升機的安全距離。

Keep a safe distance from the helicopter when doing the adjustment of blade tracking.

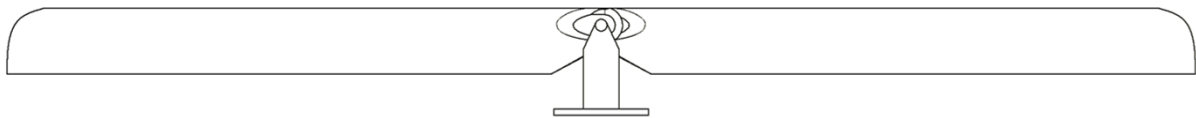
主旋翼Pitch 0度，各相關機構擺位示意圖

Illustration of every mechanism when the main blade is at 0 degrees.



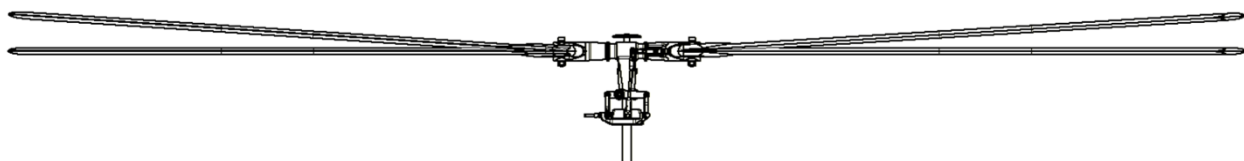
主旋翼平衡與雙槳校正

Adjustment and balancing of the main blade.



平衡校正：將兩支主旋翼使用M3或M4螺絲固定，並保持兩支槳成一直線置於調整台後，可以用膠帶修正，力求兩支主旋翼成水平最佳狀態。

Adjustment of Main blade: Mount the two main blades with M3 or M4 screws, maintain the two blades at the straight line. You may use the tape to adjust the blades and to make sure the two main blades.



可使用貼紙分別貼於兩槳翼兩端，或用筆做標記，方便雙槳做微調時的辨識。

You may use the sticker to label or color pen to marked on the side of two blades.

標示顏色槳偏高表示螺距過大，請於連桿上做調整修正。

Please adjust the linkage rod if the rotating track is higher, it means the pitch is too big.

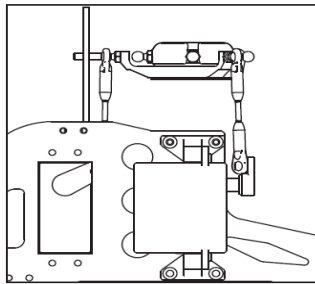
螺絲固定請上螺絲膠
軸承請上缺氧膠

The screw is regular please have the screw glue / the bearing and please have the glue with meagre oxygen

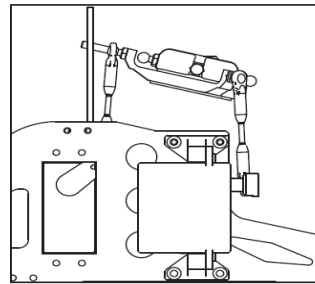
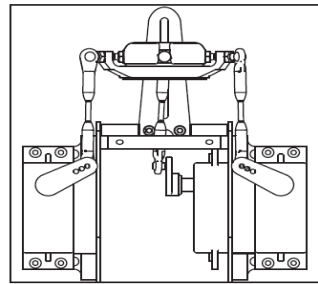
MING DA Technology corp

遙控直升機屬高動力，高危險性模型商品，請在飛行前檢查並確認機子各部位零件，是否有鬆脫或損壞之情形，如有發現問題，應立即做詳細檢修，以免造成不可預期之情形。

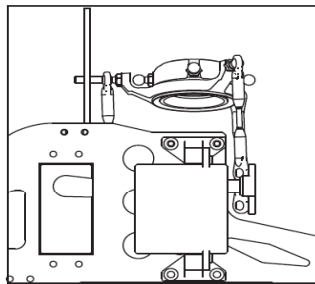
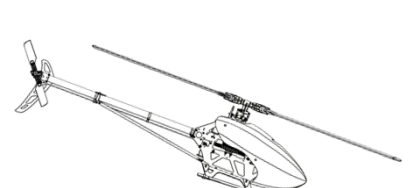
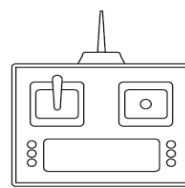
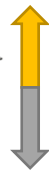
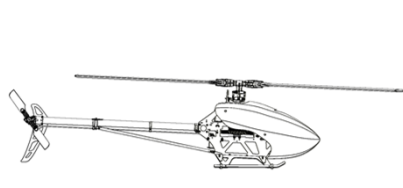
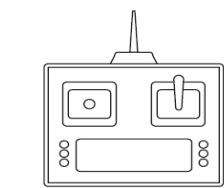
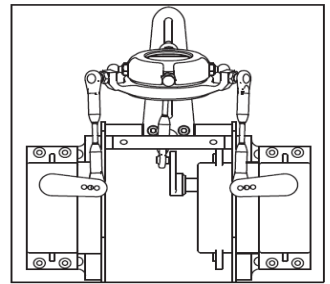
The remote control helicopter is a strong and dangerous toy. Please check and confirm every part of the machine before flying. If there is crash damage or other damage to the model do a complete overhaul of the model so you can make the model safe to use.



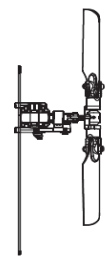
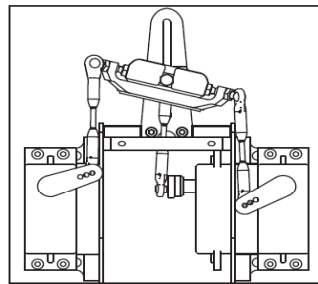
上升／下降飛行操作動作
Rise / drop the flight action



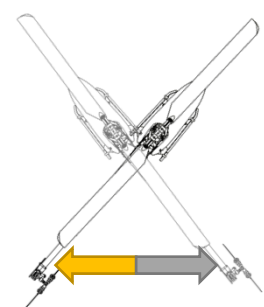
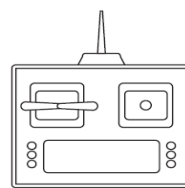
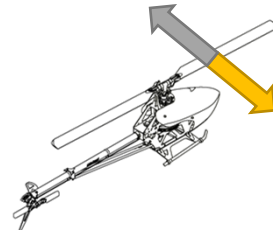
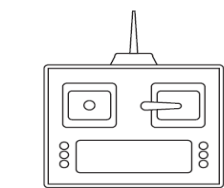
前進／後退飛行操作動作
Advance / go backwards the flight action



橫側飛行操作動作
Flight action of horizontal side



左旋／右旋飛行操作動作
Rise / drop the flight action



如果在操作動作上或是動力上有明顯降低時，可注意下列事項：

If when obviously reduce on the action or on motive force, can pay attention to the following items

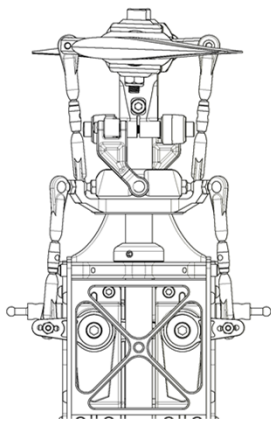
1. 電池電力是否足夠 Whether the battery electricity is enough?
2. Pitch是否過大 Whether pitch is too big?
3. 主旋翼是否出現雙槳情形 Mainly fasten and present the situation of one pair of oars?
4. 模型機構上是口出現明顯震動是否零件鬆散 Whether obviously shake the part loosely on the model organization?
5. 各傳動機構是否有過緊或過鬆情形 Whether every transmission organization has had too loose situations closely?
6. 皮帶是否有過過緊或過鬆情形 Belt had loose passing urgent situation?(Belt version)

The screw is regular please have the screw glue / the bearing and please have the glue with meagre oxygen

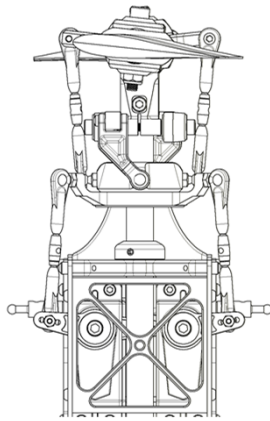
MING DA Technology corp

螺絲固定請上螺絲膠 軸承請上缺氧膠
The screw is regular please have the screw glue / the bearing and please have the glue with meagre oxygen

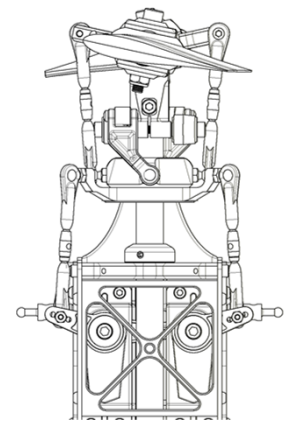
一般飛行設定 / Normal Fly setting :



低速 油門 0% Pitch -2~0
Low speed throttle 0% Pitch -2~0

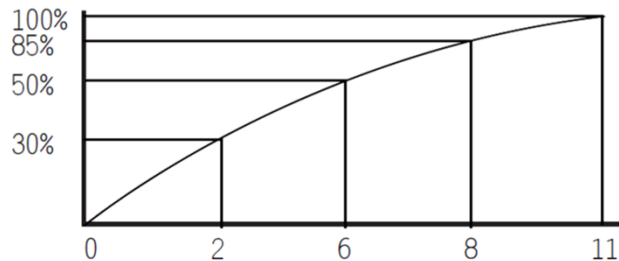


中速 油門 50% Pitch +5~+6
Medium speed throttle 50% Pitch +5~+6

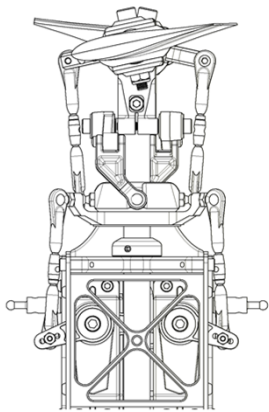


高速 油門 100% Pitch +9~+11
High speed throttle 100% Pitch +9~+11

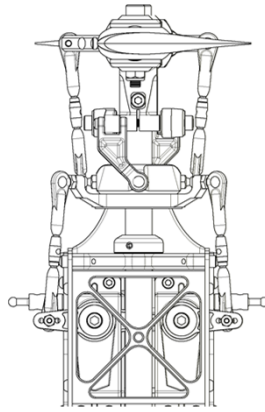
油門	螺距 Pitch
100%高速	+0~+12
85%	
50%停旋	+6~+7
30%	
0%低速	0



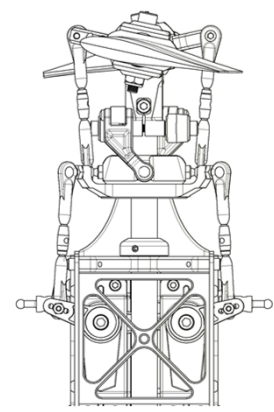
3D飛行設定 / 3D Fly setting :



Low speed throttle 0% Pitch -9-12
低速 油門 100% Pitch -9~-12

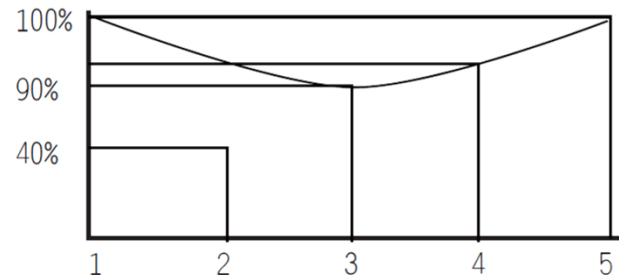


Medium speed throttle 100% Pitch 0
中速 油門 100% Pitch 0



High speed throttle 100% Pitch +9~+12
高速 油門 100% Pitch +9~+12

油門	螺距 Pitch
100%高速	+0~+12
100%停旋	+6~+7
100%低速	0



注意 :

- 螺距(Pitch)總行程量為24度。
- 過大的螺距設定，會導致動力和飛行時間降低。
- 以為力提升適當較高轉速度設定，優於螺距調大的設定方式。

Note:

- Pitch The total stroke is 24 degrees.
- Excessive pitch settings can result in reduced power and flight time.
- Lifting force that appropriate rotation speed is set higher, than the pitch of the setting mode to transfer large.

The screw is regular please have the screw glue / the bearing and please have the glue with meagre oxygen

MING DA Technology corp

	狀況 Problem	原因 Cause	對策 Solution
雙槳平衡 Blade Tracking	雙槳 Tracking is off	Pitch連桿長度調整不平均 Pitch linkage rods are not even length	調整Pitch的連桿頭長度 Adjust length of pitch ball link.
停懸 Hover	主旋翼轉速偏低 Head speed too low	主旋翼的Pitch偏高 Excessive Pitch	調整Pitch連桿頭調低 Pitch約4~5度 (停懸時主旋需為 1700~1800rpm) Adjust Pitch ball link to reduce pitch by 4~5 digress. Hovering head speed should be around 1700~1800 rpm.
		停懸點油門曲線過低 Hovering throttle curve is too low	調高停懸點油門曲線(約60%) Increase throttle curve at hovering point on transmitter (around 60%)
	主旋翼轉速過高 Head speed to high	主旋翼的pitch偏低 Not enough Pitch	調整Pitch連桿頭調高 Pitch約4~5度 (停懸時主旋需為 1700~1800rpm) Adjust Pitch ball link to increase pitch by 4~5 digress. Hovering head speed should be around 1700~1800 rpm.
		停懸點油門曲線過高 Hovering throttle curve is too high	調低停懸點油門曲線(約60%) Decrease throttle curve at hovering point on transmitter (around 60%)
尾舵反應 Rudder Response	停懸時尾翼向某一邊偏移·或撥動方向舵並回復到中立點時·尾翼產生延遲·無法停頓在所控制位置上。 Drifting of tail occurs during hovering, or delay of rudder response when centering rudder stick.	尾中立點設定不當 Rudder neutral point improperly set	重設尾中立點 Reset rudder neutral point
	停懸或全油門時尾翼左右來回搖擺 Tail oscillates(hunts or wags)at hover of full throttle	尾舵陀螺儀感度偏低 Rudder gyro gain too low	增加尾舵陀螺儀感度 Increase rudder gyro gain
		尾舵陀螺儀感度偏高 Rudder gyro gain too high	降低尾舵陀螺儀感度 Reduce rudder gyro gain

※在做完上述的調整之後·依然無法改善情況時·請立即停止飛行並向有經驗的飛手請教連絡您的經銷商。
※If above solution dose not resolve your issues, Please check with experienced pilots or contact your MD dealer.

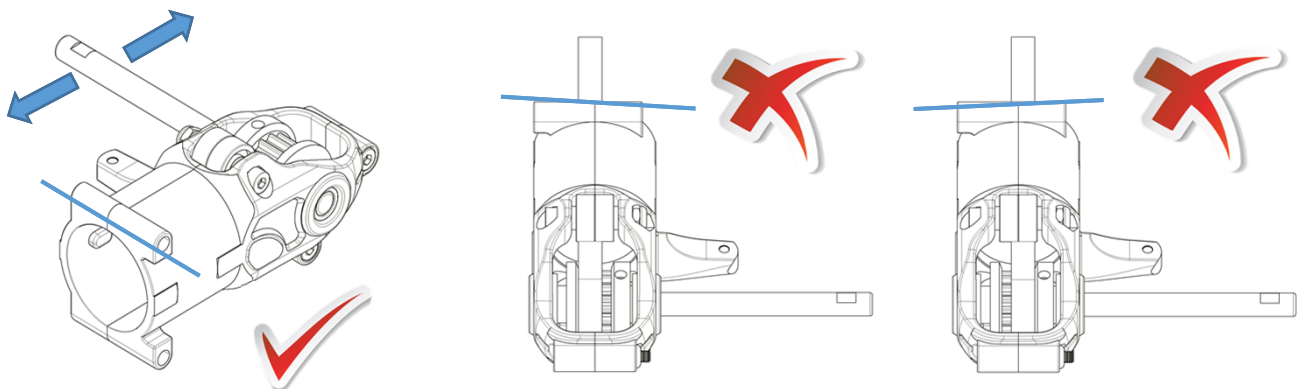
注意：把尾波箱取下，鬆開這2顆螺絲，再將尾波箱立起來放置在桌面平面，以確兩邊的平一致，再將螺絲鎖緊。

Note: Remove the tail box, loosen the two screws, and then set the tail box to stand on the desktop plane, so that both sides of the flat, and then tighten the screws.



請再次確認兩邊平面已經平行，再裝回去尾管處，目的是為了不讓尾軸歪掉，進而造成皮帶在皮帶輪運轉時偏單邊。

Please confirm that both sides of the plane has been parallel, and then loaded back to the tail pipe, the purpose is not to tilt the tail shaft, resulting in the belt when the pulley running partial side.

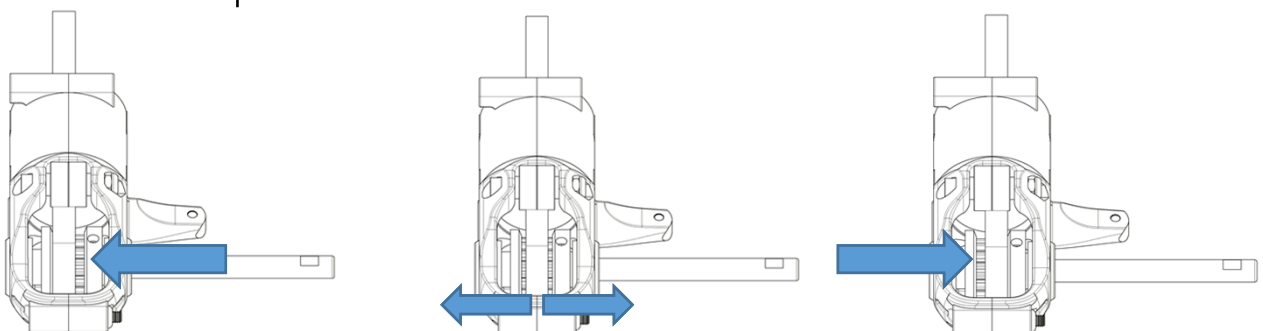


皮帶張力的確認方式

若飛行時，做鐘擺動作會有皮帶敲尾管聲代表太鬆，新款加寬尾皮帶不須拉太緊，緊度在剛剛好不敲尾管的狀態 就不會有跳齒的問題，正常皮帶運轉會在兩側游走，若發現皮帶一直在單邊游走，可能就要進行平面基準要進行確認。

Confirmation of belt tension

If flying, action will have to do a pendulum belt knocking sound on behalf of the tail pipe is too loose, the new tail widening belt must not pull too tight, tightness in question just really knock the tail pipe of the state would not have to jump teeth, Normally, the belt will operate on both sides of the walk, if the belt has been found in the unilateral, it may be necessary to confirm the reference plane.

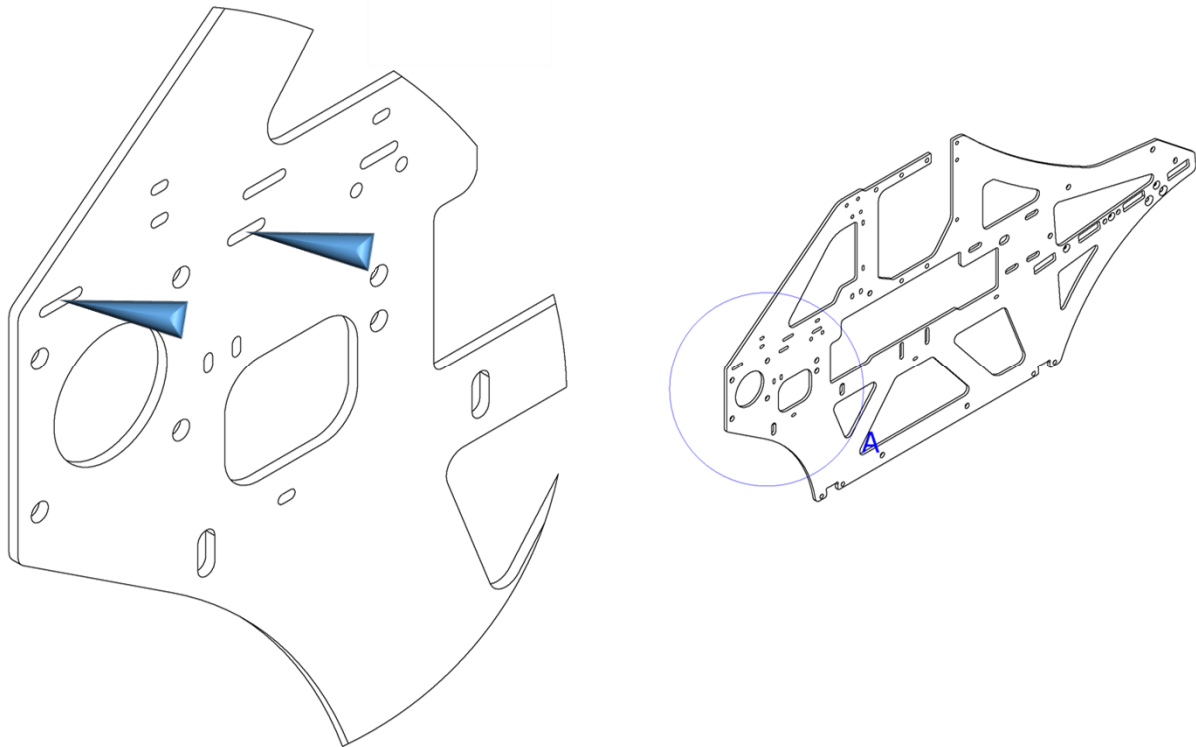


螺絲固定請上螺絲膠 軸承請上缺氧膠
The screw is regular please have the screw glue / the bearing and please have the glue with meagre oxygen

MING DA Technology corp

螺絲固定請上螺絲膠
The screw is regular please have the screw glue / the bearing and please have the glue with meagre oxygen

若在安裝陀螺平台時，發現塞不進去，請把平台板子接合處，用銼刀磨些導角，磨到塞進為止，若發現太鬆建議事後點快乾，讓他穩固在側板上。
If you install the gyro platform and found that plug does not good to go, please put the platform board joints, with a knife grinding some guide angle, grinding into the plug so far, if found too loose after the point of quick to dry, so that he firmly on the side board.



腳架上的膠墊和腳架位置建議要用搓刀去掉銳角，以免飛久或因外力造成膠圈破損，亦可以拿螺絲鎖進預留的孔後，要不要膠墊就依實際需要而定。

The mat and the tripod on the tripod is recommended to use the knife to remove the acute angle, so as to avoid long or due to external damage caused by the apron, you can also take the screws locked into the reserved hole, do not pad according to the actual needs set.

