



PRO TREX 450 V2 FBL

使用說明書

INSTRUCTION MANUAL

承蒙閣下選用ALZRC系列產品，謹表謝意。

Thanks for choosing ALZRC series products

選入遙控世界之前必須告訴您許多相關的知識與注意事項，以確保您能够在學習的過程中較得心應手。在開始操作之前，請務必詳閱本說明書，相信一定能够給您帶來相當大的幫助，也請您妥善保管這本說明書，以作為日後參考。

When coming into the RC world, you should get to know many related knowledges and precautions to ensure that you can make the operation process more easily. At the beginning, make sure to read the manual, I believe we can give you great helps, also please keep this manual for future reference.

ALZRC

PRO
T-REX 450 V2

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感謝您選擇富萊特公司產品，為了讓您容易方便的使用該遙控直升機，請您詳細的閱讀完這本說明書之後再進行組裝以及操作這臺直升機。同時請您妥善的保存這本說明書，作為日後進行調整已經維修的參考。

Thank you for choosing ALZRC products. To make it simple and convenient to use this RC helicopter, please do read through the instructions carefully before assembling and operating this helicopter. Also please keep the instructions as references for adjusting and maintaining in the future.

標志代表含義 THE MEANING OF SYMBOLS



因為疏忽這些操作說明，而使用錯誤可能造成財產損失或者嚴重傷害。
Mishandling due to failure to follow these instructions may result in damage or injury.



因為疏忽這些操作說明，而使用錯誤可能造成危險。
Mishandling due to failure to follow these instructions may result in danger.



在任何禁止的環境下，請勿嘗試操作。
Do not attempt under any circumstances.

重要聲明 IMPORTANT NOTES

遙控直升機并非玩具，它是結合了許多高科技產品所設計出來的休閒用品，所以商品的使用不當或不熟悉都可能造成嚴重傷害甚至死亡，使用之前請務必詳讀本說明書，勿輕忽並注意自身安全。注意！任何遙控直升機的使用，製造商和經銷商是無法對使用者于零件使用的損耗異常或組裝不當所發生之意外負任何責任。本產品是提供給有操作過模型直升機經驗的成人或有相當技術的人員在旁指導于當地合法遙控飛行場飛行，以確保安全無誤下操作使用，產品售出後本公司將不負任何操作和使用控制上的任何性能與安全責任。

RC helicopter is not a toy, it is used for leisure activities combined with many high-tech things, so it may cause serious injury or even death under inappropriate operations. Do read this instructions carefully before operating it and pay more attentions to the security. Warning! In the use of remote control helicopters, manufacturers and dealers are not in any responsibilities for the accidents caused by the loss of the parts in the abnormal operation or improperly assembling of the helicopter, this product is available for the experienced adults who have operated the helicopters before and the operators who have the substantial technical staff standing by in the local legitimate remote control flying field to ensure the safety. After the sale of the products, ALZRC shall have no responsibilities in the performance and security issues causing in the operations and uses.

模型商品屬於需高操作技術且為消耗性之商品，如經拆裝使用後，會造成不等情況零件損耗，任何使用情況所造成商品不良或不滿意，將無法于保固條件內更換新產品或退貨，如遇有使用操作維修問題，本公司全省分公司或代理商將提供技術指導，特價零件供應服務。

We recommend that you obtain the assistance of an experienced pilot before attempting to fly our products for the first time. A local expert is the best way to properly assemble, setup, and fly your model for the first time. The T-REX 450 PRO requires a certain degree of skill to operate, and is a consumer item. Any damage or dissatisfaction as a result of accidents or modifications are not covered by any warranty and cannot be returned for repair or replacement. Please contact our distributors for free technical consultation and parts at discounted rates when you experience problems during operation maintenance.

2.安全注意事項 SAFETY NOTES



遙控模型飛機，直升機屬高危險性商品，飛行時務必遠離人群，人為組裝不當或機件損壞，電子控制設備不良，以及操控上的不熟悉，都有可能導致飛行失控損傷等不可預期的意外，請飛行者務必注意飛行安全，并需了解自負疏忽所造成任何意外之責任。

Fly only in safe areas away from other people. Do not operate R/C aircraft within the vicinity of homes or crowds of people. R/C aircraft are prone to accidents, failures, and crashes due to a variety of reasons including lack of maintenance, pilot error, and radio interference. Pilots are responsible for their actions and damage or injury occurring during the operation or as a result of R/C aircraft models.



安全操作 SAFE OPERATION

請于自己能力內及需要一定技術範圍內操作這臺直升機，過于疲勞、精神不佳或不當操作，意外發生風險將可能提高。

Operate this unit within your ability. Do not fly under tired condition and improper operation may cause in danger.





遠離障礙物及人群 LOCATE AN APPROPRIATE LOCATION

直升機飛行是具有一定的速度，相對的也潛在着危險性，場地的選擇也相對的重要，請遵守當地法規到合法遙控飛行場地飛行，必須注意周遭有没有人、高樓、建築物、高壓電綫、樹木等等。避免操控的不當造成自己與他人財產的損壞。初次練習時，務必選擇在空曠合法專屬飛行場地并適當搭配練習架練習飛行，這對飛行失誤所造成的損傷將會大幅的降低。

請勿在下雨、打雷等惡劣天氣下操作，以確保本身及機身的安全。

R/C helicopters fly at high speed, thus posing a certain degree of potential danger. Choose an a legal flying field consisting of flat, smooth ground without obstacles. Do not fly near buildings, high voltage cables, or trees to ensure the safety of yourself, others and your model. For the first practice, please choose a legal flying field and can use a training skid to fly for reducing the damage. Do not fly your model in inclement weather, such as rain, wind, snow or darkness.



遠離潮濕環境 PREVENT MOISTURE

直升機內部也是由許多精密的電子零組件組成，所以必須絕對的防治潮濕或水氣，避免在浴室或雨天時使用，防止水氣進入機身內部而導致機件及電子零件故障而引發不可預期的意外！

R/C models are composed of many precision electrical components. It is critical to keep the model and associated equipment away from moisture and other contaminants. The introduction or exposure to water or moisture in any form can cause the model to malfunction resulting in loss of use, or a crash. Do not operate or expose to rain or moisture.



勿不當使用本產品 PROPER OPERATION

請勿自行改造加工，任何的升級改裝或維修，請使用亞托產品目錄中的零件，以確保結構的安全。請確認于產品限界內操作，請勿過載使用，并勿用于安全、法令外其他非法用途。

Please use the replacement of parts on the manual to ensure the safety of instructors. This product is for R/C model, so do not use for other purpose.



避免獨自操作 OBTAIN THE ASSISTANCE OF AN EXPERIENCED PILOT

至飛行場飛行時，需確認是否有相同頻率的同好正進行飛行，因為開啓相同頻率的發射機將導致自己與他人立即幹擾等意外危險。遙控飛機操控技巧在學習初期有着一一定的難度，要盡量避免獨自操作飛行，需有經驗的人士在旁指導，才可以操作飛行。
(勸導電腦模擬器及老手指導是入門必要的選擇)

Before turning on your model and transmitter, check to make sure no one else is operating on the same frequency. Frequency interference can cause your model, or other models to crash. The guidance provided by an experienced pilot will be invaluable for the assembly, tuning, trimming, and actual first flight. (Recommend you to practice with computer-based flight simulator.)



遠離運轉中零件 ALWAYS BE AWARE OF THE ROTATING BLADES

當直升機主旋翼與尾旋翼運轉時，切勿觸摸并遠離任何物件，以避免造成危險及損壞。

During the operation of the helicopter, the main rotor and tail rotor will be spinning at a high rate of speed. The blades are capable of inflicting serious bodily injury and damage to the environment. Be conscious of your actions, and careful to keep your face, eyes, hands, and loose clothing away from the blades. Always fly the model a safe distance from yourself and others, as well as surrounding objects. Never take your eyes off the model or leave it unattended while it is turned on. Immediately turn off the model and transmitter when you have landed the model.



遠離運轉中零件 ALWAYS BE AWARE OF THE ROTATING BLADES

遙控飛機多半是以PA纖維或聚乙烯、電子商品為主要材質，因此要盡量遠離熱源、日曬，以避免因高溫而變形甚至熔毀損壞的可能。

R/C models are made up various forms of plastic. Plastic is very susceptible to damage or deformation due to extreme heat and cold climate. Make sure not to store the model near any source of heat such as an oven, or heater. It is best to store the model indoors, in a climate-controlled room temperature environment.

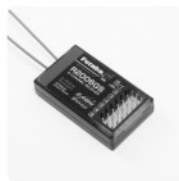


3. 自備設備 EQUIPMENT REQUIRED FOR ASSEMBLY

自備遙控及電子設備 RADIO TRANSMITTER AND ELECTRONIC EQUIPMENT REQUIRED FOR ASSEMBLY



發射機
(六動以上直昇機模式遙控器)
Transmitter
(6-channel or more, helicopter system)



接收機
(六動以上)
Receiver
(6-channel or more)



11.1V 3S 2100-2500mAh
Li-Po Battery x 1pc
11.1V 3S 2100-2500mAh
Li-Po電池 x 1



旋轉式螺距規 x 1
Dial Pitch Gauge x 1pc

自備工具 ADDITIONAL TOOLS REQUIRED FOR ASSEMBLY



剪刀
Scissors



刀子
Cutter Knife



斜口鉗
Diagonal Cutting Pliers



尖嘴鉗
Needle Nose Pliers



潤滑油
Oil



瞬間膠
CA

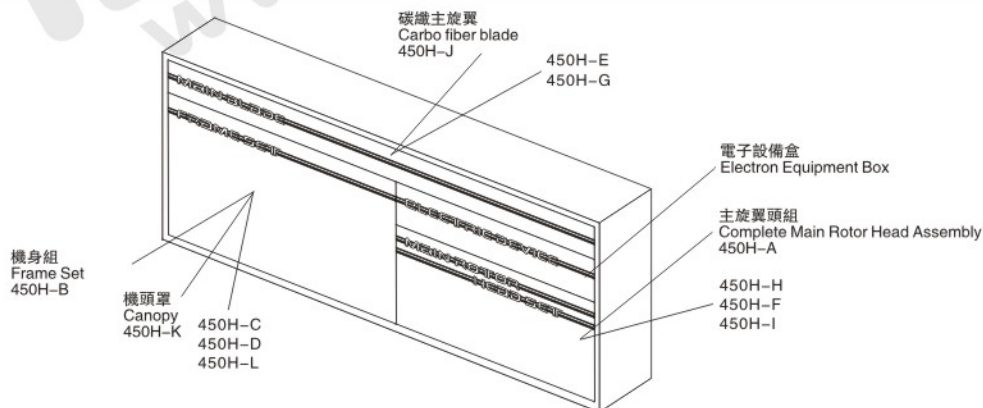


六角螺絲起子 2.5mm/2mm/1.5mm/0.9mm
Hexagon Screw Driver



十字螺絲起子 PH1(3.0mm)
Phillips Screw Driver

4. 包裝說明 PACKAGE ILLUSTRATION



實機飛行前請嚴格執行飛行前檢查義務 CAREFULLY INSPECT BEFORE REAL FLIGHT

- 每次飛行前應先確認所使用的頻率是否會干擾他人，以確保你自身與他人的安全。
- 每次飛行前確定您發射機與接收機電池的電量是在足夠飛行的狀態。
- 開機前確認油門游動杆是否位於最低點，熄火降落開關，定速開關 (IDLE) 是否於關閉位置。
- 開機時必須遵守電源開關機的程序，開機時應先開啓發射機後，再開啓接收機電源；關機時應先關閉接收機後，再開啓發射機電源。不正確的開關程序可能會造成失控的現象，影響自身與他人的安全，請養成正確的習慣。
- 開機請先確認直升機的各個動作是否順暢，及方向是否正確，並檢測服務器的動作是否有干涉或崩齒的情形，使用故障的服務器將導致不可預期的危險。
- 飛行前確認沒有缺少或鬆脫的螺絲與螺帽，確認沒有組裝不完整或損毀的零件，仔細檢測主旋翼是否有損壞，特別是接近主旋翼夾座的位置。損壞或組裝不完整的零件不僅影響飛行，更會造成不可預期的危險。注意：對損耗，有裂痕零件更新及定期保養檢測的重要性。
- 檢查所有的連杆頭是否有鬆脫的情形，過鬆的連杆頭應先更新，否則將造成直升機無法操控的危險。
- 確認電池及電源接頭是否固定牢靠，飛行中的震動或激烈的飛行，可能造成電源接頭鬆脫而造成失控的危險。

- Before flying, please check to make sure no one else is operating on the same frequency for the safety.
- Before flight, please check if the batteries of transmitter and receiver are enough for the flight.
- Before turn on the transmitter, please check if the throttle stick is in the lowest position. IDLE switch is OFF.
- When turn off the unit, please follow the power on/off procedure. Power ON—please turn on the transmitter first, and then turn on receiver. Power OFF—Please turn off the receiver first and then turn off the transmitter. Improper procedure may cause out of control, so please to have this correct habit.
- Before operation, check every movement is smooth and directions are correct. Carefully inspect servos for interference and broken gear.
- Check for missing or loose screws and nuts. See if there is any cracked and incomplete assembly of parts. Carefully check main rotor blades and rotor holders. Broken and premature failures of parts possibly cause resulting in a dangerous situation.
- Check all ball links to avoid excess play and replace as needed. Failure to do so will result in poor flight stability.
- Check the battery and power plug are fastened. Vibration and violent flight may cause the plug loose and result out of control.

標準配備 Standard Equipment



標有下符號之組裝步驟，請配合上膠或上油，以確保使用之可靠度。
When you see the marks as below, please use glue or grease to ensure flying safety.

CA: 使用瞬間膠固定
R48: 使用金屬管狀固定缺膠膠固定
T43: 使用螺絲膠
OIL: 添加潤滑油

CA: Apply CA Glue to fix.
R48: Apply Anaerobics Retain to fix.
T43: Apply Thread Lock to fix.
OIL: Add Grease.



Grease
潤滑油 (標配)



R48
軸承膠 (自備)



T43
螺絲膠 (標配)



CA
瞬間膠 (自備)



T43 上膠寬度約 1mm
T43 Glue width: approx. 1mm

R48 為強力金屬管狀 (如軸承) 接著劑，T43 為螺絲膠，膠合螺絲或金屬內外徑請務必少量使用，必要時請用手去除多餘膠量，欲拆卸時可于金屬接合部位熱烤約 15 秒。(注意！塑料件避免接近熱源)
R48 metal tubular adhesive (eg. Bearings). T43 thread lock, apply a small amount on screws or metal parts and wipe surplus off. When disassembling, recommend to heat the metal joint about 15 SECONDS. (NOTE: Keep plastic parts away from heat.)

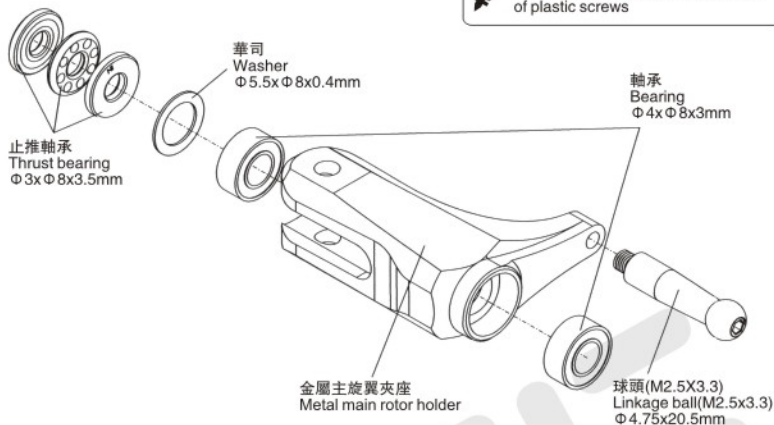
450H-A1

球頭 (Φ 4.75x20.5mm) x 2
Linkage ball(M2.5x3.3)

軸承 (Φ 4x Φ 8x3mm) x 4
Bearing

止推軸承 (Φ 3x Φ 8x3.5mm) x 2
Thrust bearing

華司 (Φ 5.5x Φ 8x0.4mm) x 2
Washer

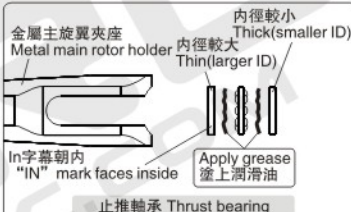
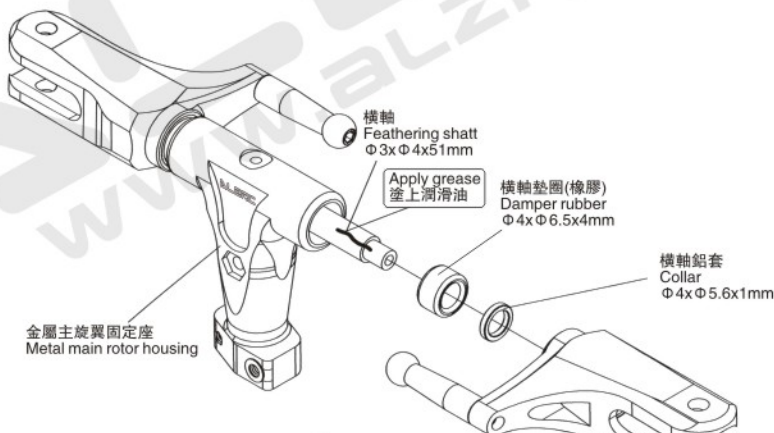


螺絲鎖附于金屬件請使用適量螺絲膠
Please use the appropriate amount of plastic screws

注意 CAUTION

原廠零件出廠包裝如果是組裝品，請需再確認各螺絲是否鎖緊上膠。
For original manufacturer package, If the product is already assembled by Factory, please check again if screws are firmly secured and applied with some glr.

止推軸承及橫軸墊圈屬於飛行消耗品，建議每20趟定期檢查及更換，高主旋翼轉速飛行時，請縮短定期檢查之週數，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 reduced to ensure flight safety.



450H-A1

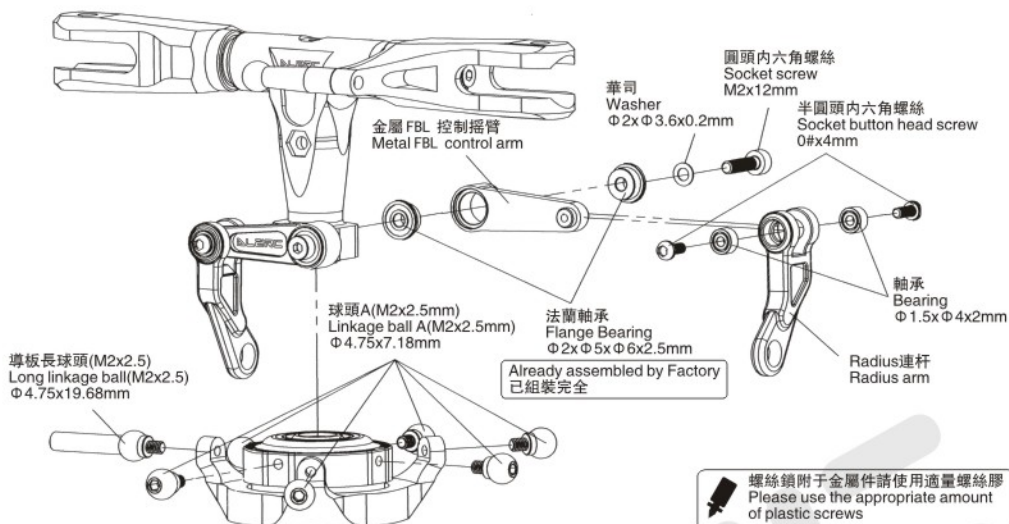
圓頭內六角螺絲 (M2x6mm) x 2
Socket screw

華司 (Φ 2x Φ 6x0.6mm) x 2
Washer

橫軸鋁套 (Φ 4x Φ 5.6x1mm) x 2
Collar

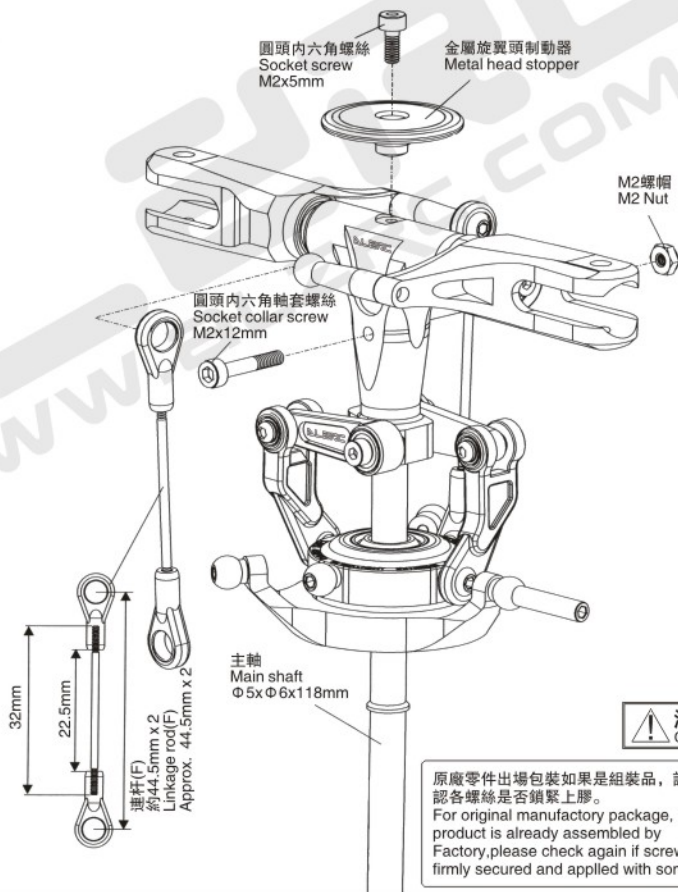
橫軸墊圈(橡膠)
Damper rubber
Φ 4x Φ 6.5x4mm x 2

華司 (Washer Φ 2x Φ 6x0.6mm)
圓頭內六角螺絲 (Socket screw M2x6mm)

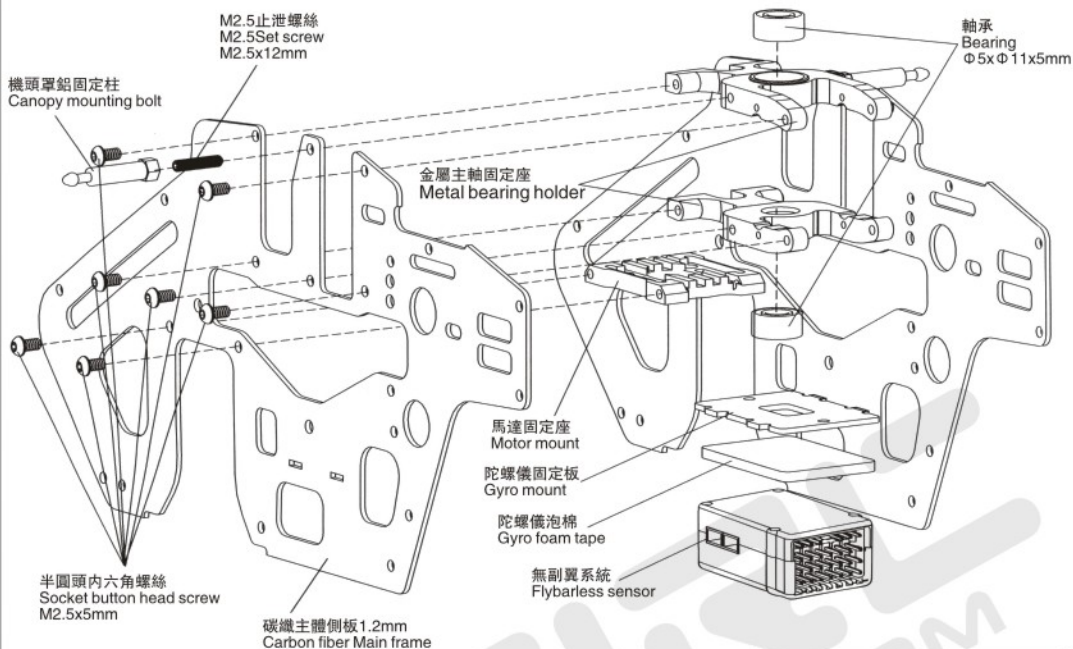


450H-A1

- 半圓頭內六角螺絲(0#x4mm) x 4
Socket button head screw
- 圓頭內六角軸套螺絲(M2x12mm) x 1
Socket collar screw
- M2螺帽 M2 Nut x 1
- 法蘭軸承(Φ2xΦ5xΦ6x2.5mm) x 4
Flange Bearing
- 軸承(Φ1.5xΦ4x2mm) x 4
Bearing
- 華司(Φ2xΦ3.6x0.2mm) x 2
Washer
- 圓頭內六角螺絲(M2x5mm) x 1
Socket screw
- 球頭A(M2x2.5mm)(Φ4.75x7.18mm) x 6
Linkage ball A(M2x2.5mm)
- 導板長球頭(Φ4.75x19.68mm) x 1
Long linkage ball(M2x2.5)
- 圓頭內六角螺絲(M2x12mm) x 2
Socket screw



原廠零件出廠包裝如果是組裝品，請需再確認各螺絲是否鎖緊上膠。
For original manufactory package, if the product is already assembled by Factory, please check again if screws are firmly secured and applied with some glre.

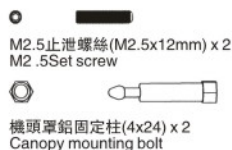
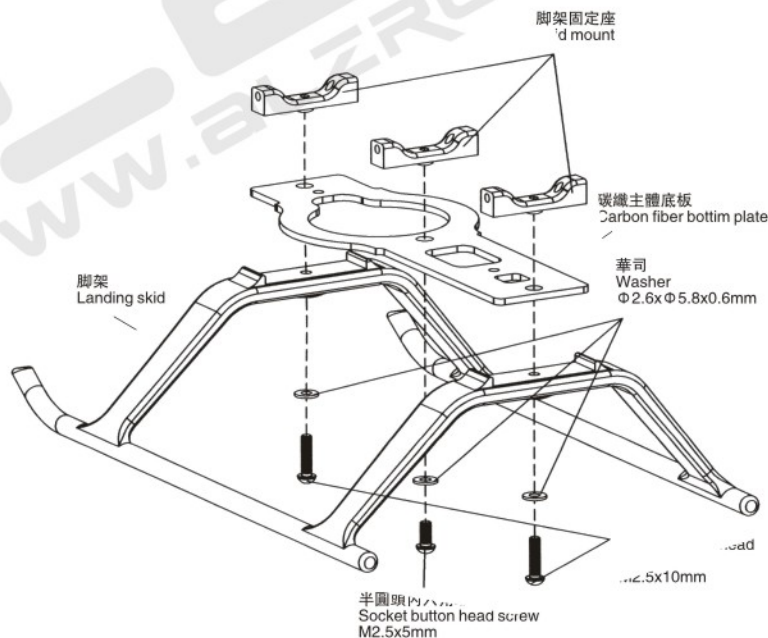


螺絲鎖附于金屬件請使用適量螺絲膠
Please use the appropriate amount of plastic screws

450H-B1



450H-B2



圓頭內六角螺絲
Socket screw
M2x6mm

華司
Washer
Φ2xΦ6x0.6mm

M2螺帽
M2 Nut

舵機臂
Servo horn

球頭A(M2x2.5mm)
Linkage ball A(M2x2.5mm)
Φ4.75x8.18mm

舵機
Servo

華司
Washer
Φ2xΦ6x0.6mm

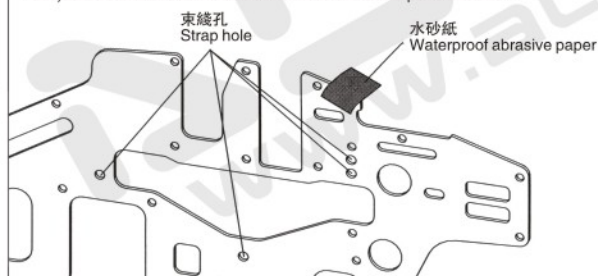
圓頭內六角螺絲
Socket screw
M2x6mm

舵機
Servo



螺絲鎖附于金屬件請使用適量螺絲膠
Please use the appropriate amount
of plastic screws

建議于下圖色塊標示處，可使用#800-1000水砂紙打磨，可防止電子設備電綫被刮破。
Recommend sanding the marked position with a waterproof abrasive paper (#800-1000) as below illustration to avoid the wires of electric parts to be cut.



450H-11

圓頭內六角螺絲(M2x6mm) x 6
Socket screw

華司(Φ2xΦ6x0.6mm) x 6
Washer

M2螺帽 M2 Nut x 3

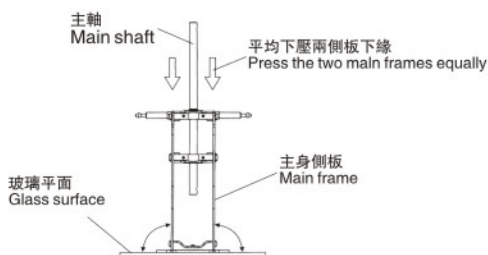
球頭A(M2x2.5mm)(Φ4.75x8.18mm) x 3
Linkage ball A(M2x2.5mm)

機身側板組立重點:

側板螺絲先不完全鎖緊，放入主軸貫穿二顆軸承確認上下移動必需滑順，主體底板必須與水平桌面（玻璃平面）踏實緊貼；請保持主軸滑順與底板平行桌面後慢慢鎖緊螺絲。正確側板的組裝對動力與飛行性能有顯著幫助。

Main frame assembly point:

First do not fully tighten the screws of main frames, Put the main shaft through the two bearings and check if the movements (up/down) are smooth. The bottom bracket must be firmly touched the level table top (glass surface); please keep the smooth movements on main shaft and level bottom bracket, then slowly tighten the screws. A correct assembly can help for the power and flight performance.



螺絲鎖附于金屬件請使用適量螺絲膠
Please use the appropriate amount
of plastic screws

軸承
Bearing
Φ3xΦ8x3mm

軸傳尾傳動道輪軸組
Torque tube drive
gear assembly

軸傳長傘齒
Long umbrella gear
Φ2.6xΦ13.8x19.25mm

軸承
Bearing
Φ6xΦ10x3mm

尾管固定座(右)
Tail boom mount

尾管固定座(左)
Tail boom mount

機身六角鉛柱
Hexagonal bolt

450H-B1

軸承(Φ3xΦ8x3mm) x 2
Bearing

軸承(Φ6xΦ10x3mm) x 2
Bearing

450H-F

軸承(Φ3xΦ8x3mm) x 2
Bearing

軸承(Φ6xΦ10x3mm) x 2
Bearing

圓頭內六角螺絲(M2x6mm) x 6
Socket screw

金屬軸傳尾齒箱
Metal tail unit set
Φ8.5xΦ13.5x32.5mm

軸承
Bearing
Φ6xΦ10x3mm

軸傳長傘齒
Long umbrella gear
Φ2.6xΦ13.8x19.25mm

軸傳齒箱襯套
Collar
Φ8xΦ10x7mm

金屬尾軸傳左側板
Metal plate
28.75xΦ15x15mm

金屬軸傳尾齒箱鉛柱
Aluminum bolt
Φ4x15.5mm

軸承
Bearing
Φ3xΦ8x3mm

軸傳尾橫軸組
Tail rotor shaft assembly

圓頭內六角螺絲
Socket screw
M2x5mm

金屬尾軸傳左側板
Metal plate(L)
26xΦ15x6.05mm

軸套螺絲(M2x6mm) x 2
Collar screw

軸套螺絲(M2x8mm) x 2
Collar screw

軸套螺絲(M2x9mm) x 1
Collar screw

圓頭內六角螺絲(M2x8mm) x 2
Socket screw

M3止泄螺絲(M3x3mm) x 1
M3 Set screw

球頭A(M2x2.5mm)(Φ4.75x7.18mm) x 1
Linkage ball A(M2x2.5mm)

軸承(Φ2xΦ5x2.5mm) x 4
Bearing

軸承(Φ3xΦ6x2.5mm) x 2
Bearing

軸承(Φ4xΦ7x2.5mm) x 2
Bearing

尾連杆頭銅套A(Φ2xΦ3x4mm) x 2
Collar A

尾連杆頭銅套B(Φ2xΦ3x2.5mm) x 2
Collar B

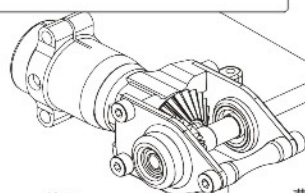
尾軸滑套 x 1
Slide shaft

尾控制組軸套座鋁墊
(Φ4xΦ5.1x0.3mm) x 1
Collar

華司(Φ2xΦ3.6x0.5mm) x 2
Washer



尾旋翼T型座瞄準尾橫軸的凹刻并鎖上，請確認止泄螺絲上膠。
Align tail rotor hub at the concave of tail rotor shaft and fix it, please apply a little glue on the set screw.



軸承
Bearing
Φ2xΦ5x2.5mm

華司
Washer
Φ2xΦ3.6x0.5mm

Already assembled by Factory
已組裝完全

尾旋翼控制臂
Tail rotor control arm

華司
Washer
Φ2xΦ3.6x0.2mm

球頭A(M2x2.5mm)
Linkage ball A(M2x2.5mm)
Φ4.75x7.18mm

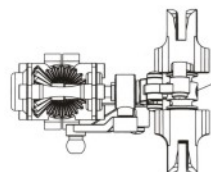
軸套螺絲
Collar screw
M2x9mm



螺絲鎖入塑膠件時務必注意，適當扭力鎖緊即可，而過緊的扭力可能會導致滑牙。
When tightening a screw to a plastic part, please tighten it firmly, but not over tightened, or they will strip.

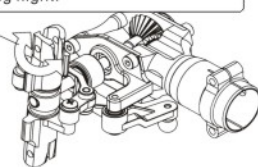
原廠零件出廠包裝如果是組裝品，請需再確認各螺絲是否鎖緊上膠。
For original manufactory package, if the product is already assembled by Factory, please check again if screws are firmly secured and applied with some glue.

球頭鎖入塑膠件時務必注意，使用少量CA膠并適當扭力鎖緊即可，而過緊的扭力可能會導致滑牙。
When tightening a linkage ball to a plastic part, please note to use a little CA glue and tighten it firmly, but not over tightened, or they will strip.



尾T型座與尾橫軸平齊以保持行程量足夠。
Tail pitch bell crank must be parallel to tail output shaft to ensure sufficient pitch travel range.

組裝時，確保尾夾座滑順，些微幹沙將可能導致飛行時尾動作不順暢。
Care must be taken during assembly to ensure tail grips operate smoothly without binding. Any slight binding may affect tail action during flight.



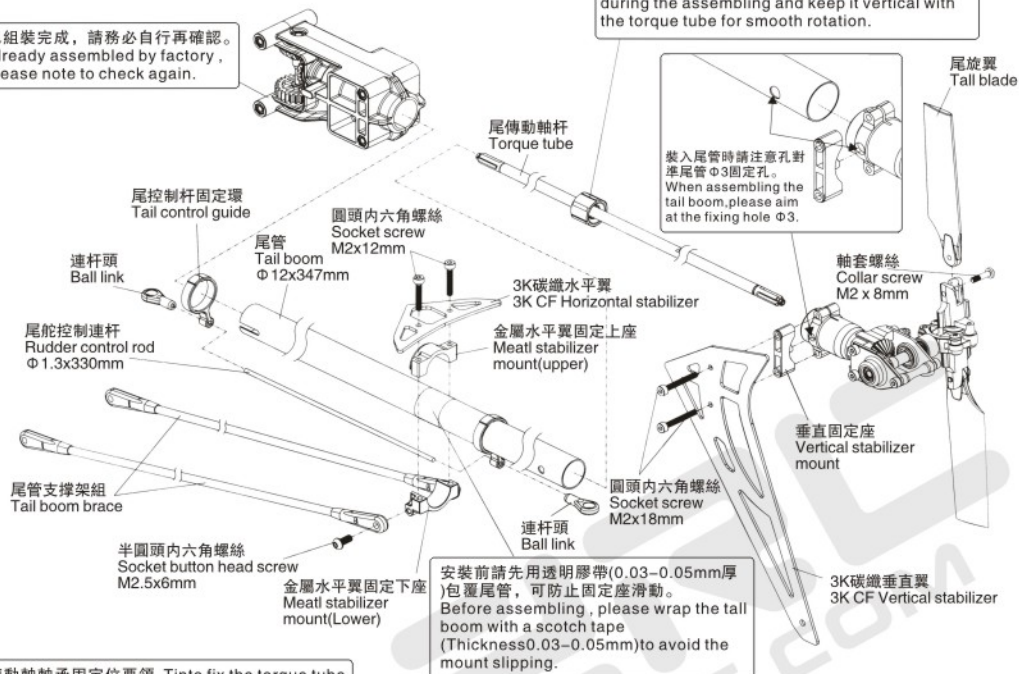
螺絲鎖附于金屬件請使用適量螺絲膠
Please use the appropriate amount of plastic screws



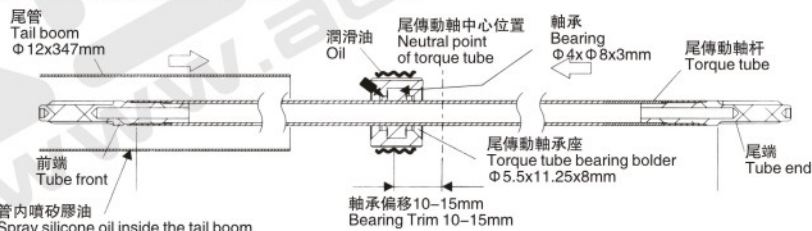
螺絲鎖附于金屬件請使用適量螺絲膠
Please use the appropriate amount
of plastic screws

已組裝完成，請務必自行再確認。
Already assembled by factory,
please note to check again.

插入尾管內時，外表抹些潤滑油，以確保平順壓入
尾管中并與尾傳動軸保持垂直，讓尾軸傳動順暢。
When assembling into the tail boom, please
apply some oil on the surface, to make it smooth
during the assembling and keep it vertical with the
torque tube for smooth rotation.



請以少量CA將MR84ZZ軸承固定于尾傳動軸上，避免CA沾到軸承的防塵蓋面導致軸承卡死，插入尾管內時，尾傳動軸承墊圈外表抹些潤滑油，將尾傳動軸承墊圈平行壓入尾管中不可歪斜。
Please apply some CA glue to fix MR84ZZ bearing on the torque tube, avoid CA glue adhering to the dust cover or it may cause the bearing stuck. when assembling into the tail boom, please apply some oil on the bearing holder and press the holder into the tail boom horizontally.



450H-F1

圓頭內六角螺絲(M2x18mm) x 2
Socket screw

軸套螺絲(M2 x 8mm) x 2
Collar screw

450H-G1

圓頭內六角螺絲(M2x12mm) x 2
Socket screw

半圓頭內六角螺絲(M2.5x5mm) x 2
Socket button head screw



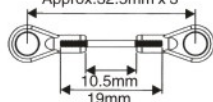
螺絲鎖附于金屬件請使用適量螺絲膠
Please use the appropriate amount
of plastic screws



注意
CAUTION

螺絲鎖入塑膠件請務必注意，適當扭力鎖緊即可，而過緊的扭力可能會導致滑牙。
When tightening a screw to a plastic part, please tighten it firmly, but not over tightened, or they will strip.

連杆(D) 約32.5mm x 3
Linkage rod(D)
Approx. 32.5mm x 3



連杆(M)
Linkage rod(M)

十字盤導板
Anti rotation bracket

半圓頭內六角自攻螺絲
Socket button head
self tapping screw
T2.6x6mm

450H-H1

連杆(Φ1.3x19mm) x 3
Linkage rod



連杆頭 x 6
Ball link

半圓頭內六角螺絲
Socket button
head screw
M2.5x5mm

主齒輪組
Main drive gear set



圓頭內六角螺絲
Socket screw
M2x12mm

請以適當扭力鎖附即可，過度鎖緊易造成尾驅動主齒輪變形。
Please do not over tighten, a over tighten may cause the autorotation tail drive gear deformed.

M2螺帽
M2 Nut

半圓頭內六角螺絲
Socket button head screw
M2.5x5mm

450H-B3



半圓頭內六角自攻螺絲(T2.6x6mm) x 2
Socket button head self tapping screw

450H-B1



半圓頭內六角螺絲(M2.5x5mm) x 8
Socket button head screw

450H-C



圓頭十字螺絲(M2x4mm) x 4
Cross screw



單向軸套圈(Φ6xΦ8x1.6mm) x 1
One-way Shaft ring



圓頭內六角軸套螺絲(M2x12mm) x 1
Socket collar screw



M2螺帽 M2 Nut x 1

單向軸套圈
One-way Shaft ring
Φ6xΦ8x1.6mm

主齒中心座
Main gear case
Φ10xΦ21.5x7.8mm

主齒輪
Main drive gear
150T

尾驅動主齒
Autorotation tail
drive gear
106T

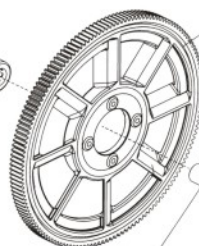
Apply grease
塗上潤滑油

圓頭十字螺絲
Cross screw
M2x4mm

單向軸承
One-way bearing
Φ6xΦ10x12mm

Already assembled by Factory
已組裝完全

六角刻字面朝下
Character side faces down



單向軸承套
One-way bearing shaft
Φ5xΦ6x21.5mm





螺絲鎖附于金屬件請使用適量螺絲膠
Please use the appropriate amount
of plastic screws

450H-I2

馬達固定螺絲
For motor fixing

圓頭內六角螺絲
Socket screw
M2.5x6mm

電池固定座
Battery mount

以泡棉雙面膠或魔術沾固定
Use Adhesive foam of
Hoop & Loop tape to fix

華司
Washer
Φ 2.6x Φ 5.8x0.6mm

圓頭內六角螺絲(M2.5x6mm) x 2
Socket screw

華司 (Φ 2.6x Φ 5.8x0.6mm) x 2
Washer

M3止泄螺絲(M3x3mm) x 1
M3 Set screw

半圓頭內六角自攻螺絲
Socket button head self
tapping screw
T2.6x6mm

馬達齒輪
Motor pinion gear

半圓頭內六角螺絲
Socket button head screw
M2.5x5mm

半圓頭內六角螺絲
Socket button head screw
M2.5x8mm

M3止泄螺絲
M3 Set screw
M3x3mm

馬達
Motor

450H-B1

半圓頭內六角自攻螺絲(T2.6x6mm) x 6
Socket button head self tapping screw

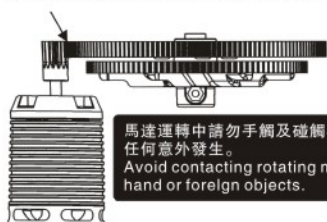
半圓頭內六角螺絲(M2.5x8mm) x 2
Socket button head screw

半圓頭內六角螺絲(M2.5x5mm) x 4
Socket button head screw

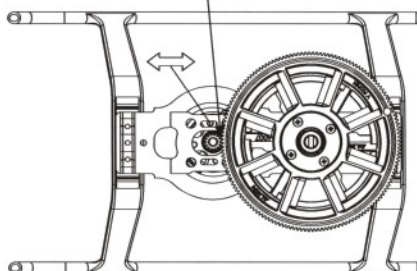


組裝時，馬達齒輪與主齒盤平高
Make sure the motor pinion gear parallel
(match) evenly with the main gear while assembly.

馬達前後可移動以保持兩齒輪咬合處于約有0.1mm間隙，過緊齒咬合將造成動力損失或馬達高阻力的過載，嚴重可能導致馬達燒毀。
Set the motor pinion gear to main drive gear mesh to approximately 0.1mm to avoid excess power consumption or motor burnt due to overload.



馬達運轉中請勿手觸及碰觸異物以免任何意外發生。
Avoid contacting rotating motor by hand or foreign objects.





螺絲鎖入塑膠件請務必注意，適當扭力鎖緊即可，而過緊的扭力可能會導致滑牙。
When tightening a screw to a plastic part, please tighten it firmly, but not over tightened, or they will strip.

原廠零件出廠包裝如果是組裝品，請需再確認各螺絲是否鎖緊上膠。
For original manufactory package, If the product is already assembled by Factory, please check again if screws are firmly secured and applied with some glre.



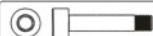
螺絲鎖附于金屬件請使用適量螺絲膠
Please use the appropriate amount of plastic screws

圓頭內六角軸套螺絲
Socket collar screw
M3x14mm

M3防鬆螺帽
M3 Nut

碳纖主旋翼
Carbo fiber blade

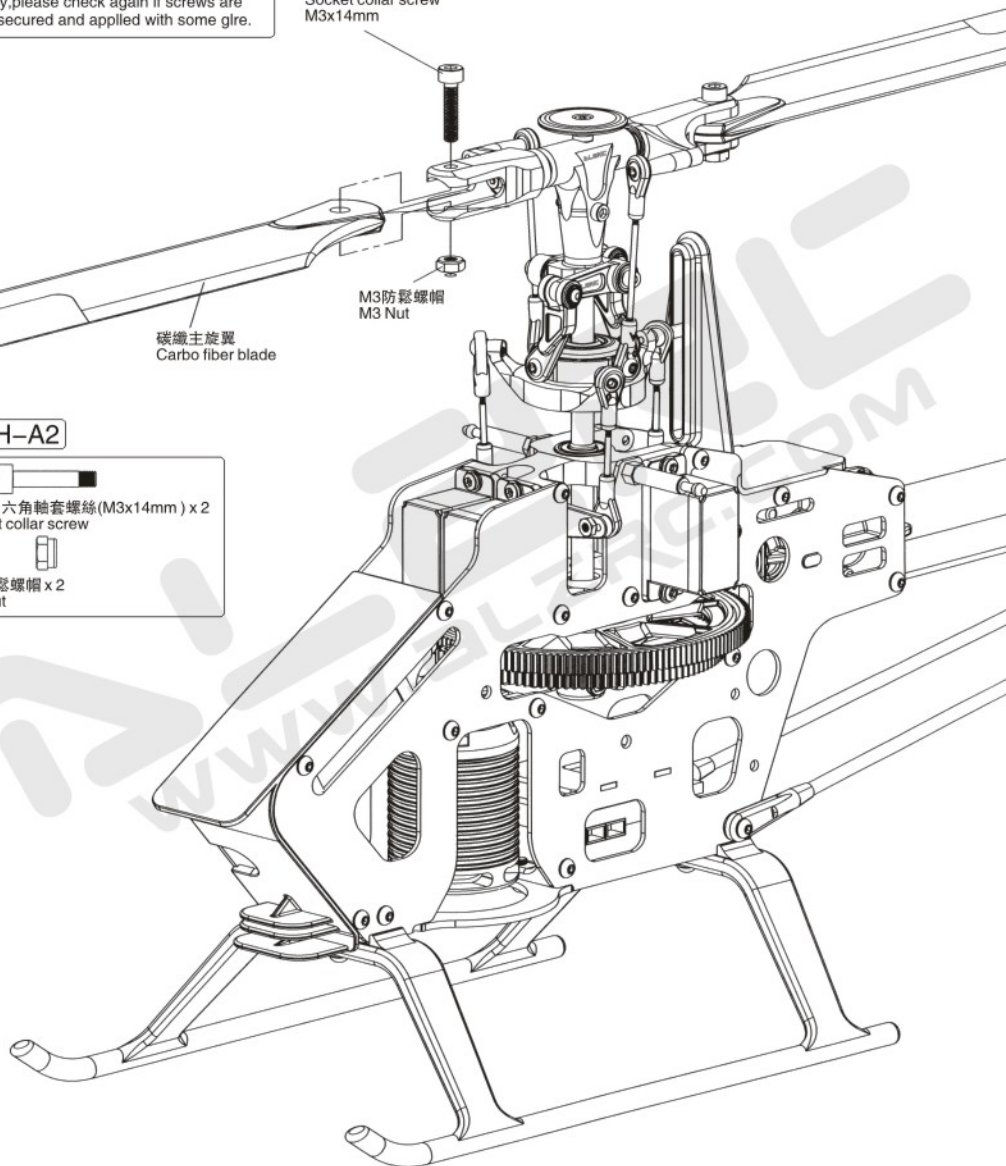
450H-A2



圓頭內六角軸套螺絲(M3x14mm) x 2
Socket collar screw



M3防鬆螺帽 x 2
M3 Nut





注意
CAUTION

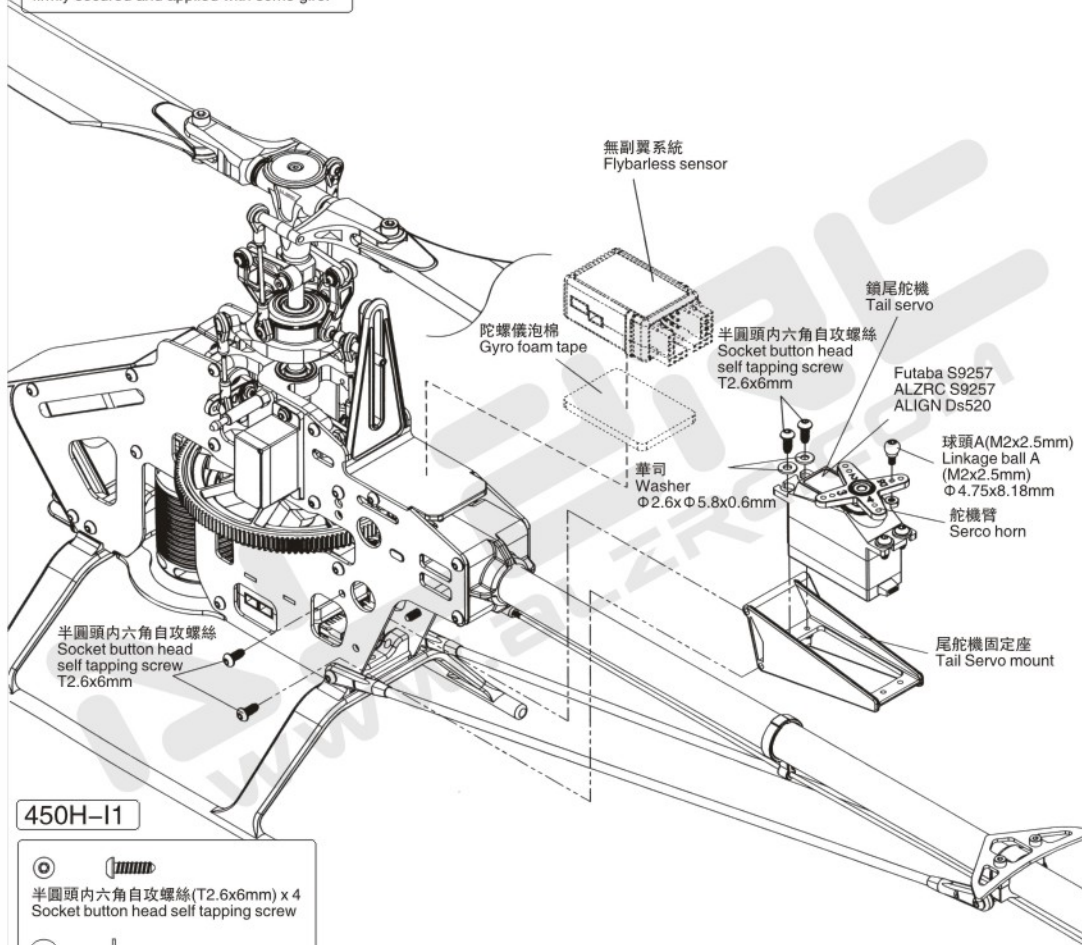
螺絲鎖入塑膠件請務必注意，適當扭力鎖緊即可，而過緊的扭力可能會導致滑牙。
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螺絲鎖附于金屬件請使用適量螺絲膠
Please use the appropriate amount of plastic screws



450H-I1



半圓頭內六角自攻螺絲(T2.6x6mm) x 4
Socket button head self tapping screw



華司(Φ2xΦ6x0.6mm) x 4
Washer



M2螺帽 M2 Nut x 1



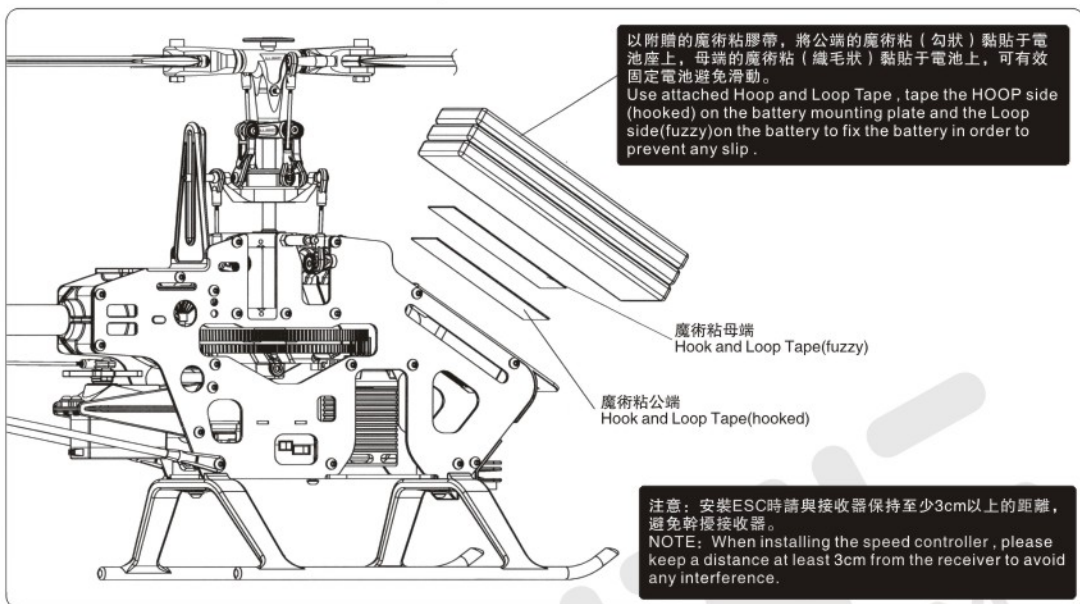
球頭A(M2x2.5mm)(Φ4.75x8.18mm) x 1
Linkage ball A(M2x2.5mm)

450H-B1

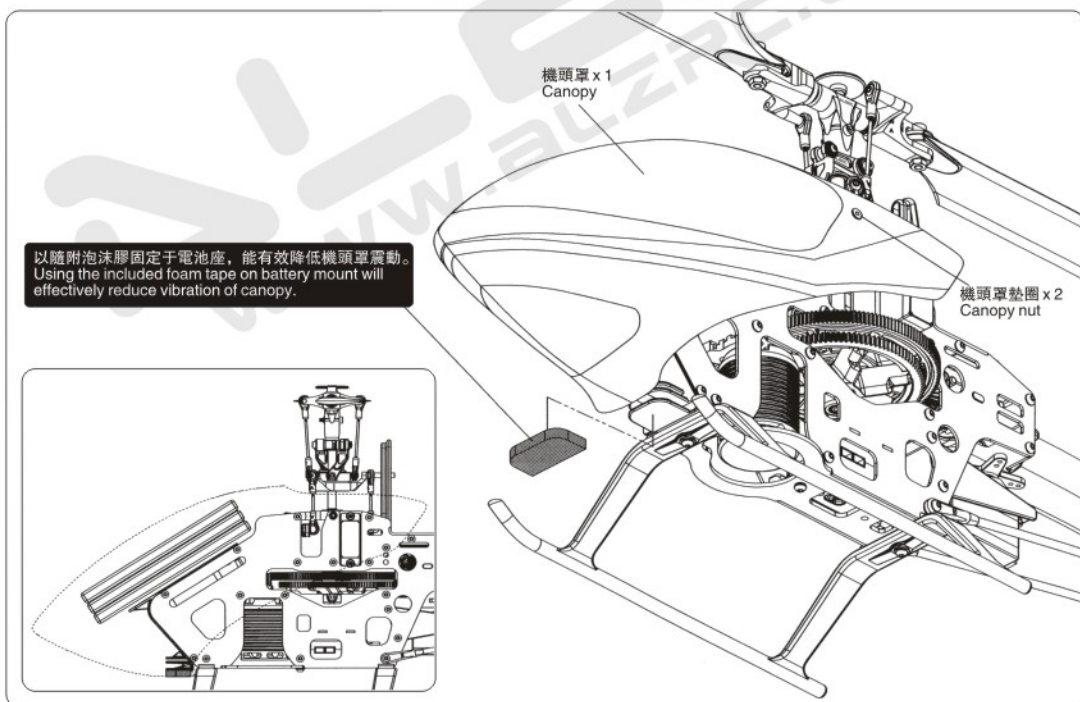


半圓頭內六角自攻螺絲(T2.6x6mm) x 4
Socket button head self tapping screw

8. 電池安裝示意圖 BATTERY INSTALLATION ILLUSTRATION



9. 機頭罩安裝 CANOPY ASSEMBLY



PRO T-REX 450 V2

Design Features

• T-Rex 450 Pro V2 is a newly revised flybarless helicopter model. The first sight of T-Rex 450 PRO V2 will surely leave a lasting impression of its attractive designs. The aerodynamic canopy is the most noticeable feature of T-Rex 450 PRO V2. The rotor head is precision made with CNC aluminum alloy for higher mechanical rigidity, contributing to optimal flight stability and aerobatic agility.

• Custom designed side frame allows for ease of electronics install and wire routing, while improving exterior aesthetics at the same time.

• 450 size is the most ideal practice heli for beginners and seasoned pilots alike. With beautiful aesthetics and superior performance, the T-Rex 450 Pro V2 is your obvious choice.

• Newly improved low wind resistance specialized flybarless rotor head assembly, with reduced distance between rotor head and frame, effectively lowering the CG for better 3D performance.

• Unibody main shaft and servo mount, with modified side frame connecting points, simplifying servo replacement and improving ease of maintenance.

• Longer battery mounting plate with integrated ESC mount. Not only is the battery mount more rigid, the battery can be shifted based on its dimension for better CG. In addition, the screw count has been reduced to minimize assembly and maintenance time.

• High efficiency tail shaft drive design, dramatically reduce power loss associated with belt driven system, and at the same time increase power output.

• Vertical rudder servo mount design moving the CG closer to center, improving agility during 3D maneuvers.

• Unique opposing weighted tail blade grips effectively increase rudder and gyro performance, for superior tail locking and higher precision.

Specification

- Length: 635mm
- Height: 230mm
- Main Rotor Diameter: 710mm
- Tail Rotor Diameter: 158mm
- Motor Drive Gear: 14T
- Main Drive Gear: 150T

- Autorotation Tail Drive Gear: 106T
- Tail Drive Gear: 25T
- Drive Gear Ratio: 1:10:4.24
- Weight(w/o power system): 530g
- Flying Weight: Approx. 640g