

TREX 600 Nitro Pro Kit

ALIGN

KX0160NPA White Canopy 白色機殼 / KX0160NPB Red Canopy 紅色機殼

INSTRUCTION MANUAL 使用說明書



- ★Fuel Tank Capacity 440cc.
- ★Heavy duty tail with thrust bearings.
- ★Main Gear Ratio 8.5:1, 1500-2200 Rotor RPM.
- ★Torque Tube driven tail for incredible 50 sized performance.
- ★+14° collective pitch is possible for extreme 3D performance.
- ★New main gear with one-way bearing design for high torque.
- ★Very efficient airflow to provide unequaled cooling and horsepower.
- ★Simple and light weight design provides awesome flight performance.
- ★Rigid frame design that can also handle hard crashes without damage.
- ★Clutch, Fan and Bell assembly provide a very smooth operation even at high RPM.
- ★Beautiful factory painted fiberglass canopy and Rigid carbon fiber frame design.
- ★Clutch/Start shaft feature a 10mm ID one way bearing to eliminate any bearing problems during starting and flight.
- ★Ready to fly weight (no fuel) is an incredible 3.20Kg (7lbs)

Thank you for buying ALIGN products. The **T-REX 600 Nitro PRO** is the latest technology in Rotary RC models. Please read this manual carefully before assembling and flying the new **T-REX 600 Nitro PRO** helicopter. We recommend that you keep this manual for future reference regarding tuning and maintenance.

承蒙閣下選用亞拓遙控世界系列產品，謹表謝意。進入遙控世界之前必須告訴您許多相關的知識與注意事項，以確保您能夠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，相信一定能夠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。

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Thank you for buying ALIGN Products. The T-REX 600 Nitro Helicopter is designed as an easy to use, full featured Helicopter R/C model capable of all forms of rotary flight. Please read the manual carefully before assembling the model, and follow all precautions and recommendations located within the manual. Be sure to retain the manual for future reference, routine maintenance, and tuning. The T-REX 600 Nitro is a new product developed by ALIGN. It features the best design available on the Micro-Heli market to date, providing flying stability for beginners, full aerobic capability for advanced fliers, and unsurpassed reliability for customer support.

感謝您選購亞拓產品，為了讓您容易方便的使用 T-REX 600 Nitro 直昇機，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台直昇機，同時請您妥善的保存這本說明書、作為日後進行調整以及維修的參考。T-REX 600 Nitro 是由亞拓自行研發的新產品，不論你是需求飛行穩定性的初學者或是追求性能的飛行愛好者。T-REX 600 Nitro 將是你最佳的選擇。

THE MEANING OF SYMBOLS 標誌代表涵義

 WARNING 警告	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財產損失或嚴重傷害。
 CAUTION 注意	Mishandling due to failure to follow these instructions may result in danger. 因為疏忽這些操作說明，而使用錯誤可能造成危險。
 FORBIDDEN 禁止	Do not attempt under any circumstances. 在任何禁止的環境下，請勿嘗試操作。

IMPORTANT NOTES 重要聲明

R/C helicopters, including the T-REX 600 Nitro are not toys. R/C helicopter utilize various high-tech products and technologies to provide superior performance. Improper use of this product can result in serious injury or even death. Please read this manual carefully before using and make sure to be conscious of your own personal safety and the safety of others and your environment when operating all ALIGN products.

Manufacturer and seller assume no liability for the operation or the use of this product.

Intended for use only by adults with experience flying remote control helicopters at a legal flying field. After the sale of this product we cannot maintain any control over its operation or usage.

T-REX 600 Nitro 遙控直昇機並非玩具，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！任何遙控直昇機的使用，製造商和經銷商是無法對使用者於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昇機經驗的成人或有相當技術的人員在旁指導於當地合法遙控飛行場飛行，以確保安全無虞下操作使用，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。

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 600Nitro 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 warrantee 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 or maintenance.

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，將無法於保固條件內更換新品或退貨，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。

2. SAFETY NOTES 安全注意事項



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 of a result of R/C aircraft models.

遙控模型飛機、直昇機屬高危險性商品，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，並需了解自負疏忽所造成任何意外之責任。



LOCATE AN APPROPRIATE LOCATION 遠離障礙物及人群

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.

直昇機飛行時具有一定的速度，相對的也潛在著危險性，場地的選擇也相對的重要，請需遵守當地法規到合法搖控飛行場地飛行。必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並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、打雷等惡劣天候下操作，以確保本身及機體的安全。



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

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.)

至飛行場飛行前，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干擾等意外危險。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，需有經驗的人士在旁指導，才可以操控飛行。
(動練電腦模擬器及老手指導是入門必要的選擇)



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

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.

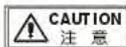
當直昇機主旋翼與尾旋翼運轉時，切勿觸摸並遠離任何物件，以避免造成危險及損壞。



PREVENT MOISTURE 遠離潮濕環境

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.

直昇機內部也是由許多精密的電子零組件組成，所以必須絕對的防止潮濕或水氣，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！



KEEP AWAY FROM HEAT 遠離熱源

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.

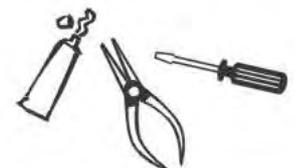
遙控飛機多半是以 PA 纖維或聚乙烯、電子商品為主要材質，因此要盡量遠離熱源、日曬，以避免因高溫而變形甚至熔毀損壞的可能。



PROPER OPERATION 勿不當使用本產品

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.

請勿自行改造加工，任何的升級改裝或維修，請使用亞拓產品目錄中的零件，以確保結構的安全。請確認於產品界限內操作，請勿過載使用，並勿用於安全、法令外其它非法用途。



SAFE OPERATION 安全操作

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

請於自己能力及需要一定技術範圍內操作這台直昇機，過於疲勞、精神不佳或不當操作，意外發生風險將可能會提高。



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

 <p>Transmitter (6-channel or more, helicopter system) 發射機 (六動以上直昇機模式遙控器)</p>	 <p>Receiver(6-channel or more) 接收機 (六動以上)</p>	 <p>Standard Servo x4pcs 標準伺服器x4</p>
 <p>Head Lock Gyro x1 pc 鎖定式陀螺儀x1</p>	 <p>Specialized Servo x1 pc 尾舵控制專用伺服器x1</p>	 <p>600 Blade x1 set 600主旋翼x1組</p>
 <p>Pitch Gauge x1 pc 螺距規x1</p>	 <p>50 Muffler x1 pc 50消音器x1</p>	 <p>50 Engine x1 pc 50引擎x1</p>
 <p>Engine Starter/Starter Shaft x1pc 啟動器/啟動棒x1</p>	 <p>11.1~14.8V Li-Po 2500mAh Starter Battery x1 pc 11.1~14.8V Li-Po 2500mAh啟動電池x1</p>	 <p>2 in 1 Regulator (RX and Glow plug power) x1 pc 接收器&火星塞電源2 IN 1降壓器x1</p>
 <p>7.4V 1900mAh Li-Po Battery for Regulator x1 pc 降壓器用7.4V 1900mAh Li-Po電池x1</p>	 <p>Fuel Pump x1 pc 加油器x1</p>	 <p>Engine Fuel x1pc 引擎燃油x1</p>

ADDITIONAL TOOLS REQUIRED FOR ASSEMBLY 自備工具

 <p>Scissors 剪刀</p>	 <p>Cutter Knife 刀子</p>	 <p>Diagonal Cutting Pliers 斜口鉗</p>	 <p>Needle Nose Pliers 尖嘴鉗</p>
 <p>Grease 潤滑油</p>	 <p>CA 瞬間膠</p>	 <p>Hexagon Screw Driver 六角螺絲起子 3mm/2.5mm/2mm/1.5mm</p>	 <p>Phillips Screw Driver 十字螺絲起子 φ 3.0/ φ 1.8mm</p>

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

- ☆ **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.**

- ★ 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。
- ★ 開機前確認油門搖桿是否位於最低點，熄火降落開關，定速開關(IDLE)是否於關閉位置。
- ★ 關機時必須遵守電源開關機的程序，開機時應先開發射機後，再開接收機電源；關機時應先關閉接收機後，再關閉發射機電源。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。
- ★ 開機請先確定直昇機的各個動作是否順暢，及方向是否正確，並檢查伺服器的動作是否有干涉或崩齒的情形，使用故障的伺服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，仔細檢查主旋翼是否有損壞，特別是接近主旋翼夾座的部位。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查重要性。
- ★ 檢查所有的連桿頭是否有鬆脫的情形，過鬆的連桿頭應先更新，否則將造成直昇機無法操控的危險。
- ★ 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，可能造成連桿接頭鬆脫而造成失控的危險。

Standard Equipment 標準配備

					
600NC	600NB	600NB1	600NB2	600NB3	600NB4
					
600NH	600NG	600NT1	600NT2	600NT3	600NZ



Original manufacture package of T-REX 600 Nitro is not including main blades. This unit is a large-sized high power helicopter, and we recommend you to choose safe main blades with good brand, reputation. We recommend you do not use general wooden blades and do not equip the power of main blade over 2150rpm to avoid any accident caused by broken structure of the blades and parts.

本公司T-REX 600 Nitro遙控模型直昇機原裝出廠商品未附主旋翼，由於此商品屬大型高動力直昇機，具有一定危險性，為了安全在你選購搭配主旋翼時，務必注意慎選使用耐安全轉速在2150rpm以上有品牌、有認證、安全的商品，建議禁止使用一般木槳，並嚴格禁止於任何情況下主旋翼轉速超過2150rpm，以避免主旋翼或機體零件結構斷裂造成不可預期的意外。

When you see the marks as below, please use glue or grease to ensure flying safety.

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。



- CA: Apply CA Glue to fix.**
- R48: Apply Anaerobics Retainer to fix.**
- T43: Apply Thread Lock to fix.**
- OIL: Add Grease.**
- CA: 使用瞬間膠固定
- R48: 使用金屬管狀固定缺氧膠固定
- T43: 使用螺絲膠
- OIL: 添加潤滑油



潤滑油 (牛油)



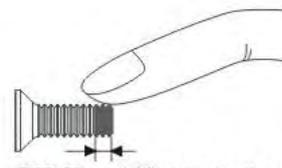
Green 綠色



Blue 藍色



Self-furnished 瞬間膠 (自備)



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

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.)

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，欲拆卸時可於金屬接合部位熱烤約15秒。(注意！塑膠件避免接近熱源)

When assembling ball links, make sure the "A" character faces outside.

各項塑膠製連桿頭扣接時，A字請朝外。

600NH1A

Linkage ball B1

球頭B1 (φ 4.75x12.77mm)x2

Bearing MR148ZZ

MR148ZZ軸承 (φ 8x φ 14x4mm)x4

Thrust bearing

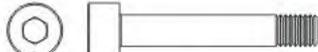
止推軸承 (φ 6x φ 14x5mm)x2

Washer

華司 (φ 10.25x φ 14x0.8mm)x2

Main Blade Fixing Screw

鎖主旋翼用螺絲



Socket collar screw
圓頭內六角軸套螺絲(M4x27mm)x2

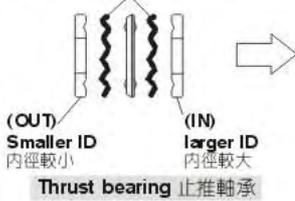


M4 Nut
M4防鬆螺帽x2

CAUTION
注意

Apply grease on thrust bearing.

止推軸承塗上潤滑油(牛油)



CAUTION
注意

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.
球頭鎖入塑膠件請務必注意，使用少量CA膠並適當扭力鎖緊即可，而過緊的扭力可能會導致滑牙。

Apply a little amount of T43 thread lock when fixing a metal part.
螺絲鎖附於金屬件請使用適量T43(螺絲膠)

Thrust bearing

止推軸承
φ 6x φ 14x5mm

Washer

華司
φ 10.25x φ 14x0.8mm

Bearing MR148ZZ

MR148ZZ軸承
φ 8x φ 14x4mm

Obverse of bearing faces inside.
軸承面凹腔口朝內

Main rotor holder
主旋翼夾座

Linkage ball B1
球頭B1
φ 4.75x12.77mm

600NH2A

Socket screw

圓頭內六角螺絲(M4x10mm)x2

Washer

橫軸華司(φ 4x φ 12x1mm)x2

Damper rubber

橫軸墊圈(φ 8.1x φ 13.1x3.2mm)x4

Spacer

橫軸套圈(φ 8x φ 11.5x1.3mm)x2

Metal main rotor housing

金屬主旋翼固定座

Apply a little amount of T43 thread lock when fixing a metal part.
螺絲鎖附於金屬件請使用適量T43(螺絲膠)

Feathering shaft
橫軸
φ 6x φ 8x93.2mm

Apply grease

塗上潤滑油(牛油)

灰色適用於一般飛行，適合初階者使用
黑色適用於3D飛行，適合高階者使用

Damper rubber

橫軸墊圈(橡膠)
φ 8.1x φ 13.1x3.2mm

Spacer(Copper)

橫軸套圈(銅)
φ 8x φ 11.5x1.3mm

Pin
定位插梢
φ 2x32mm

CAUTION
注意

ALIGN logo on the top
字樣朝上

Washer

橫軸華司
φ 4x φ 12x1mm

Socket screw

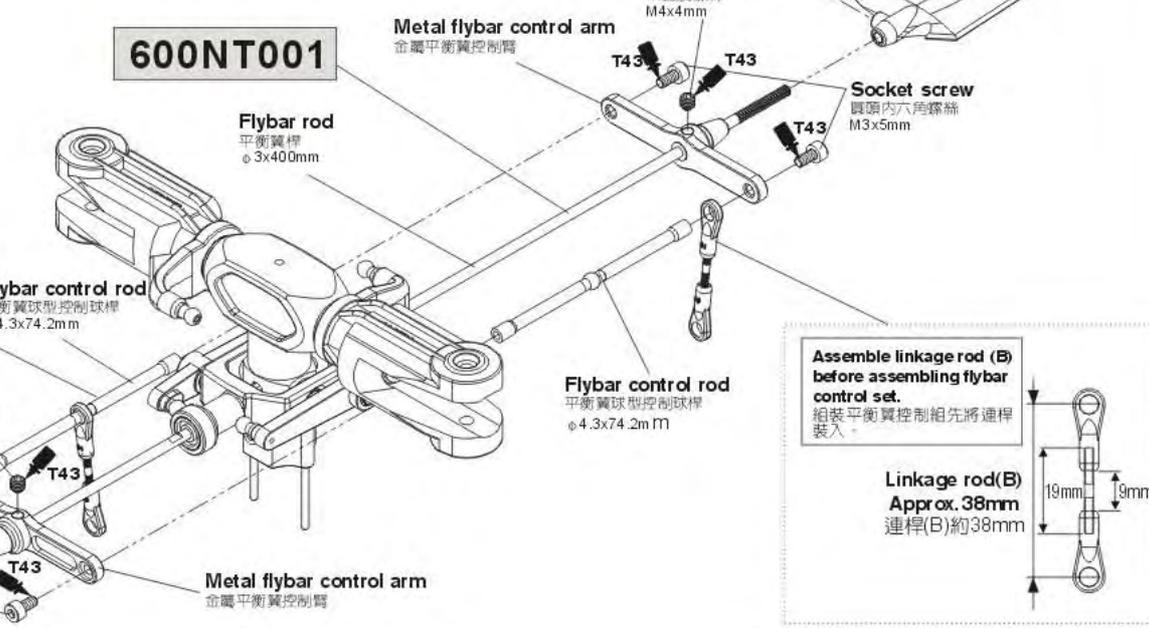
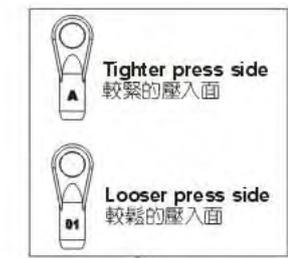
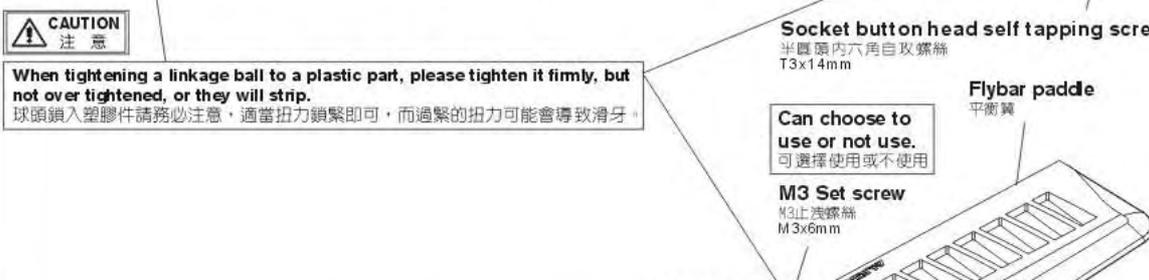
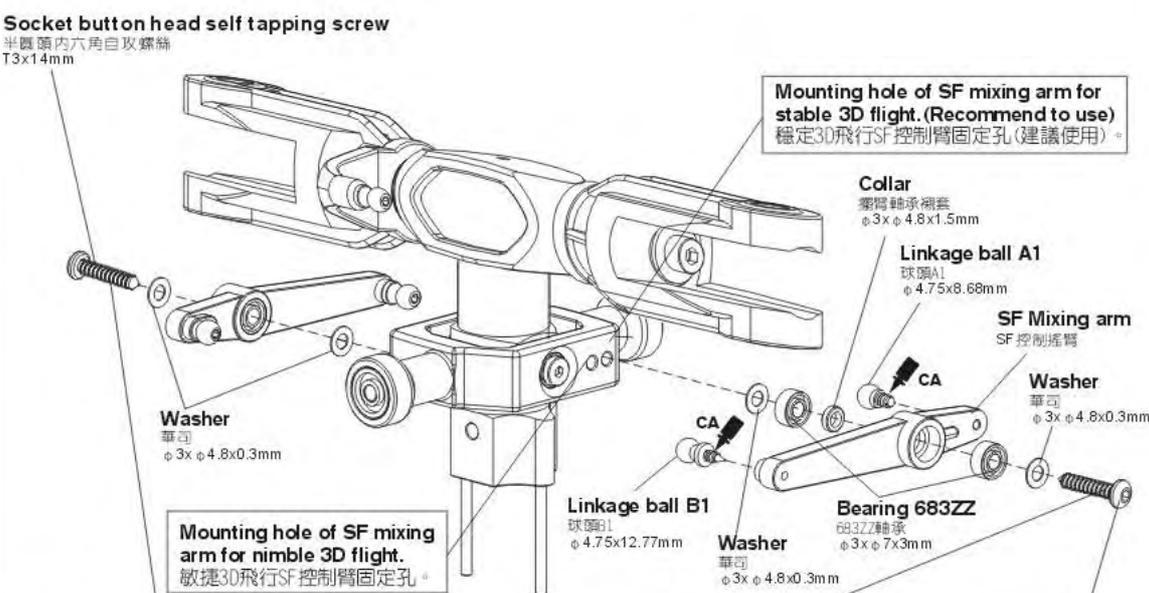
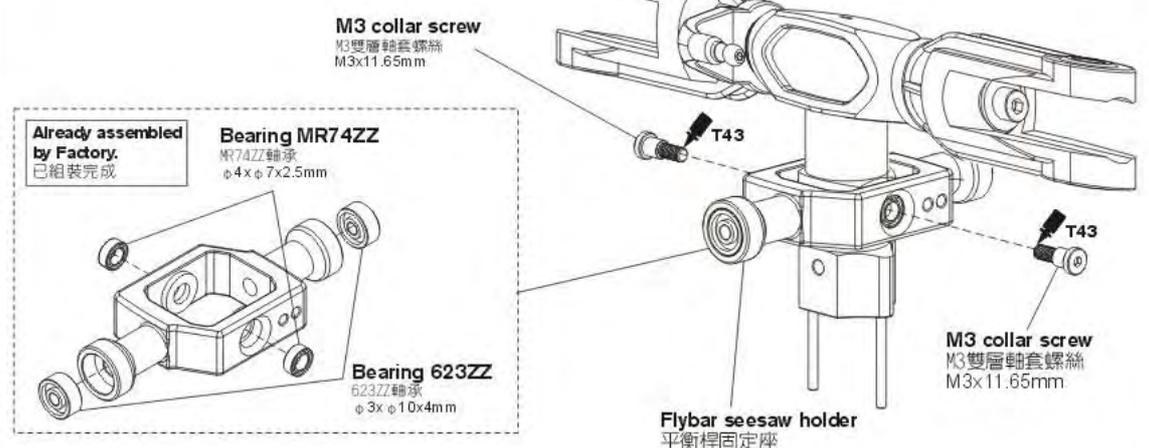
圓頭內六角螺絲
M4x10mm

T43

600NH3A

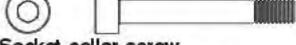
Apply a little amount of T43 thread lock when fixing a metal part.
 螺絲鎖固於金屬件請使用適量T43(螺絲膠)

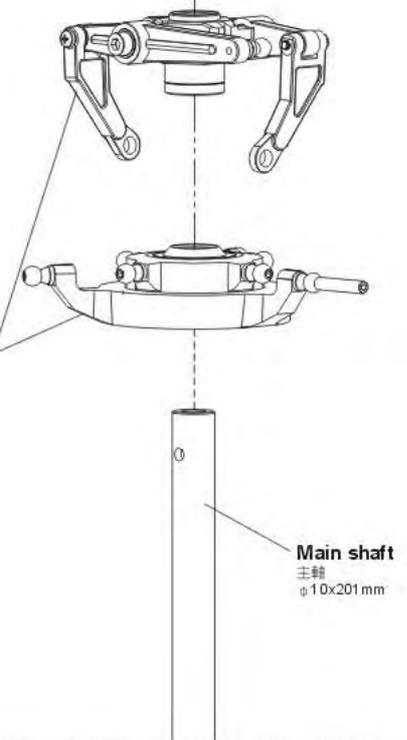
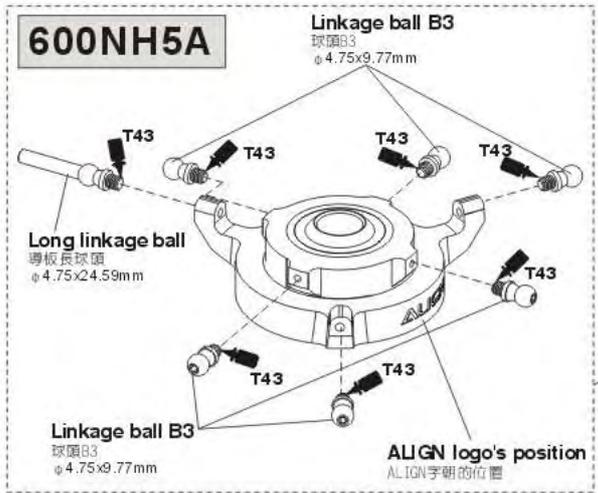
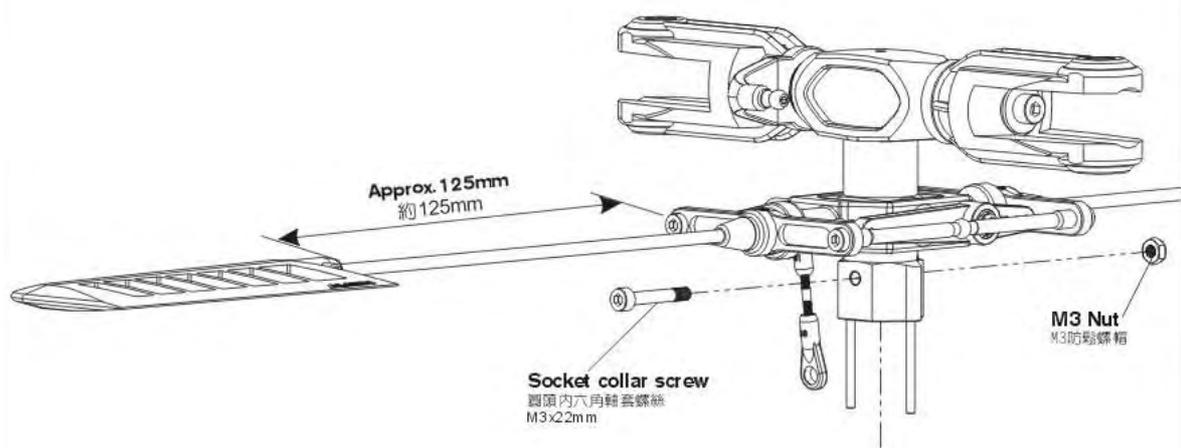
- Linkage ball A1**
球頭A1 (φ4.75x8.68mm)x2
- Linkage ball B1**
球頭B1 (φ4.75x12.77mm)x2
- Socket button head self tapping screw**
半圓頭內六角自攻螺絲(T3x14mm)x2
- M3 collar screw**
M3雙層軸套螺絲(M3x11.65mm)x2
- Washer**
華司(φ3xφ4.8x0.3mm)x4
- Collar**
鋼臂軸承襯套(φ3xφ4.8x1.5mm)x2
- Bearing 623ZZ**
623ZZ軸承(φ3xφ10x4mm)x2
- Bearing 683ZZ**
683ZZ軸承(φ3xφ7x3mm)x4
- Bearing MR74ZZ**
MR74ZZ軸承(φ4xφ7x2.5mm)x2
- M3 Set screw**
M3止洩螺絲(M3x6mm)x2
- M4 Set screw**
M4止洩螺絲(M4x4mm)x2
- Socket screw**
圓頭內六角螺絲(M3x5mm)x4
- Linkage rod(B)**
連桿(B) φ2x19mmx2
- Ball link**
連桿頭x4



600NH4A

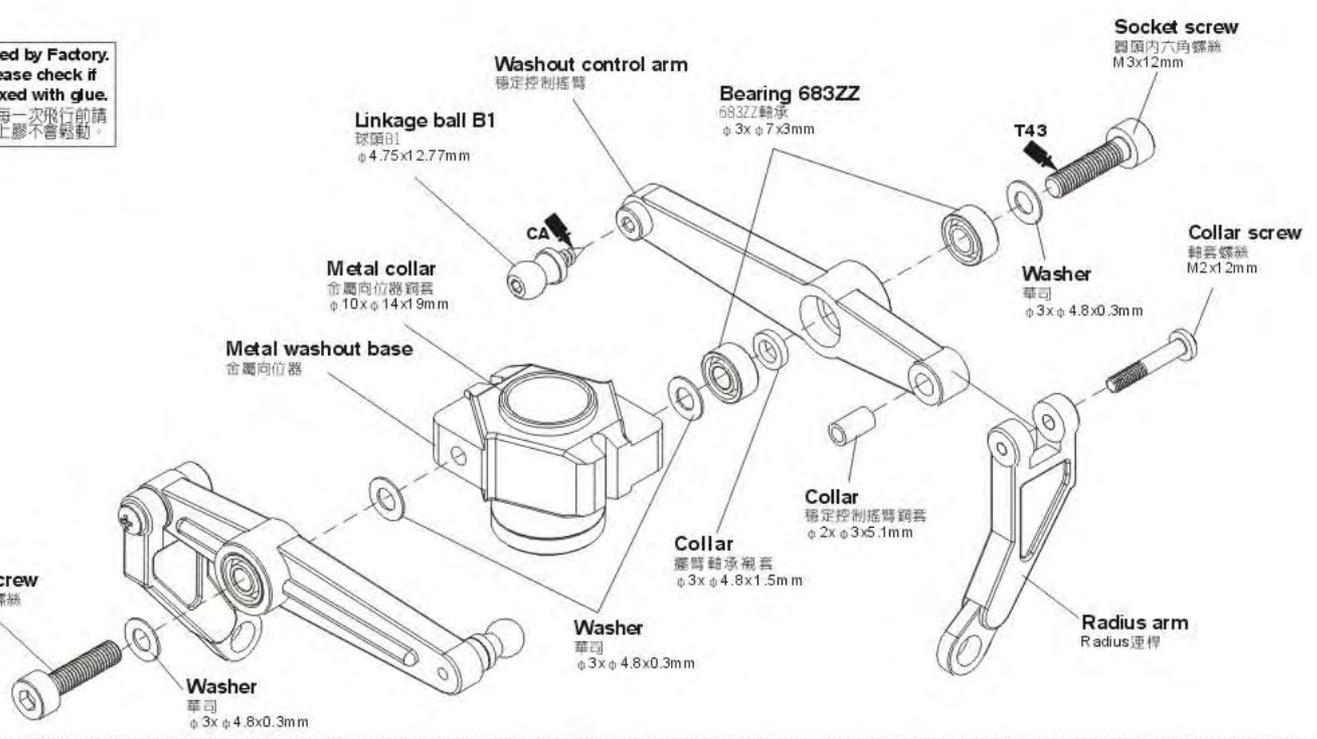
Apply a little amount of T43 thread lock when fixing a metal part.
螺絲鎖劑於金屬件處使用適量T43(螺絲膠)

-  **Linkage ball B1**
球頭B1(φ4.75x12.77mm)x2
-  **Bearing 683ZZ**
683ZZ軸承(φ3xφ7x3mm)x4
-  **Collar screw**
軸套螺絲(M2x12mm)x2
-  **Socket screw**
圓頭內六角螺絲(M3x12mm)x2
-  **Washer**
華司(φ3xφ4.8x0.3mm)x4
-  **Collar**
鷹臂軸承襯套(φ3xφ4.8x1.5mm)x2
-  **Collar**
穩定控制搖臂襯套(φ2xφ3x5.1mm)x2
-  **Socket collar screw**
圓頭內六角軸套螺絲(M3x22mm)x1
-  **M3 Nut**
M3防鬆螺帽x1



CAUTION 注意

Already assembled by Factory.
Before flying, please check if the screws are fixed with glue.
原裝組裝完成品，每一次飛行前請先確認螺絲是否已上膠不會鬆動。



600N22



Linkage rod (A)
連桿(A) $\phi 2 \times 1.4 \text{ mm} \times 2$



Linkage rod (B)
連桿(B) $\phi 2 \times 1.9 \text{ mm} \times 2$



Linkage rod (C)
連桿(C) $\phi 2 \times 4.8 \text{ mm} \times 2$

Apply a little amount of T43 thread lock when fixing a metal part.
螺絲鎖劑於金屬件請使用適量T43(螺絲膠)

Socket screw
圓頭內六角螺絲
M3x10mm

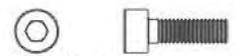
Metal head stopper
金屬旋翼頭制動器

600N22A

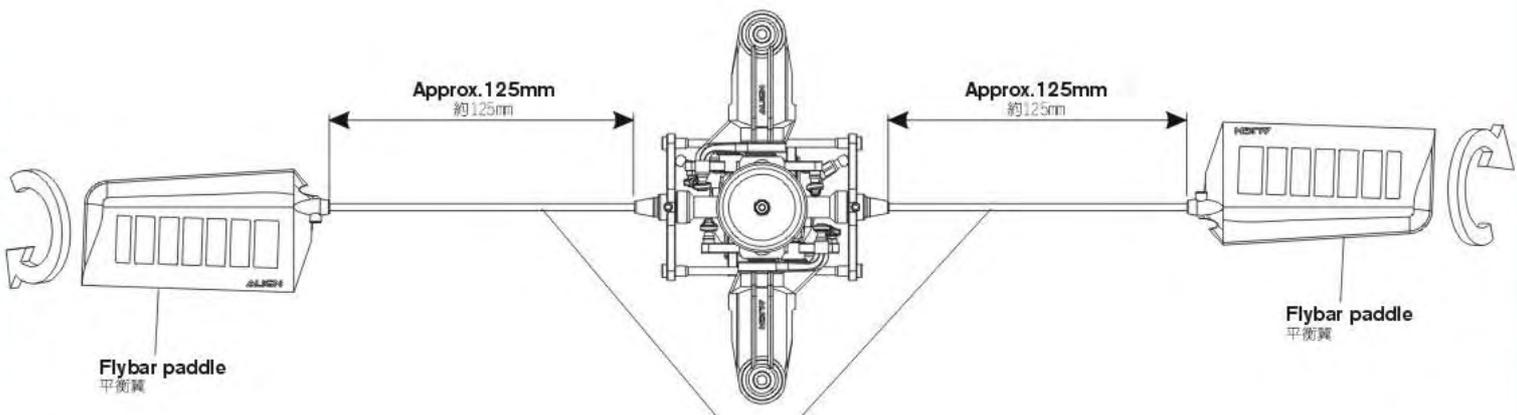
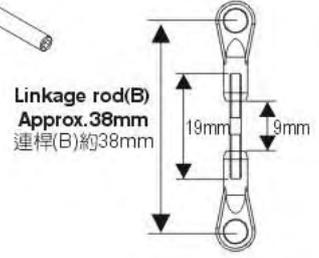
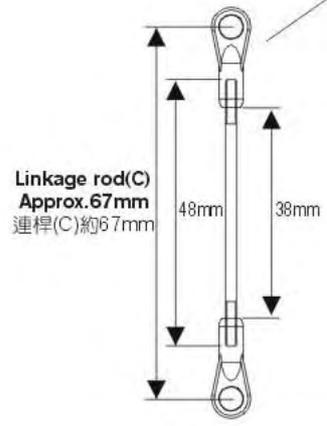
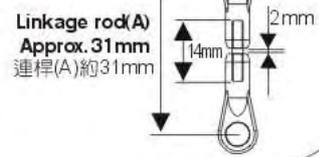


Ball link
連桿頭x8

600NH2A



Socket screw
圓頭內六角螺絲(M3x10mm)x1



Make sure both sides are equal in length.
請保持平衡桿兩邊長度相等。

600NB1C



Linkage ball A1
球頭A1(φ4.75x8.68mm)x1



Linkage ball B1
球頭B1(φ4.75x12.77mm)x1



Socket button head self tapping screw
半圓頭內六角自攻螺絲(T3x10mm)x2



Socket button head collar screw
半圓頭內六角軸套螺絲(M3x10mm)x12



Socket screw
圓頭內六角螺絲(M3x8mm)x10



Socket screw
圓頭內六角螺絲(M3x10mm)x4



Socket screw
圓頭內六角螺絲(M3x14mm)x2



Socket button head screw
半圓頭內六角螺絲(M3x12mm)x1



Collar
尾控制臂鋁套(φ3xφ4.4x3mm)x1



Washer
華可(φ3xφ4.8x0.3mm)x2

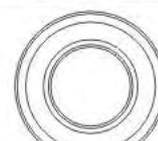


M3 Specialty washer
M3特殊華可(φ3xφ8x2mm)x14



M3 Washer
M3華可(φ3xφ8x1mm)x2

600NB1A



Bearing 6800ZZ
6800ZZ軸承(φ10xφ19x5mm)x2



Bearing 689ZZ
689ZZ軸承(φ9xφ17x5mm)x1

600NB4B



Socket button head collar screw
半圓頭內六角軸套螺絲(M3x10mm)x4

Glow plug plate

火星塞點火接地板
23.73x0.8mm

Engine mount (R)

引擎座(右)
39.3x16x8.5mm

M3 Specialty washer
M3特殊華可
φ3xφ8x2mm

Socket screw
圓頭內六角螺絲
M3x10mm

Option / Unnecessary equipment: Governor sensor
另選配備(非必要品):
定速器感應器

Canopy support
機頭罩支撐柱
φ3xφ5xφ6.5x7.3mm

Canopy spacer
機頭罩墊圈
φ4.8xφ11x22mm

Socket screw
圓頭內六角螺絲
M3x14mm

Main frames (R/L)
左右主體側板
1.6mm

M3 Specialty washer
M3特殊華可
φ3xφ8x2mm

Socket button head collar screw
半圓頭內六角軸套螺絲
M3x10mm

Socket screw
圓頭內六角螺絲
M3x8mm

Socket screw
圓頭內六角螺絲
M3x10mm

M3 Specialty washer
M3特殊華可
φ3xφ8x2mm

Socket screw
圓頭內六角螺絲
M3x8mm

M3 Specialty washer
M3特殊華可
φ3xφ8x2mm

Hex mounting bolt
六角鋁柱

Frame mounting bolt
機身鋁柱

Bearing 6800ZZ
6800ZZ軸承
φ10xφ19x5mm

Socket button head collar screw
半圓頭內六角軸套螺絲
M3x10mm

Upper bearing block (Mark A)
主軸上固定座(標記A)

Canopy mounting bolt
機頭罩固定柱

Socket screw
圓頭內六角螺絲
M3x8mm

Bearing 689ZZ
689ZZ軸承
φ9xφ17x4mm

Lower bearing block (Mark B)
主軸下固定座(標記B)

Engine mount (R)
引擎座(右)
39.3x16x8.5mm

Socket button head self tapping screw
半圓頭內六角自攻螺絲
T3x10mm

M3 Washer
M3華可
φ3xφ8x1mm

Washer
華可
φ3xφ4.8x0.3mm

Bearing MR63ZZ
MR63ZZ軸承
φ3xφ6x2.5mm

Frame mounting block
機身固定塊
14x12.5x8mm

Linkage ball B1
球頭B1
φ4.75x12.77mm

Collar
尾控制臂鋁套
φ3xφ4.4x3mm

Socket button head screw
半圓頭內六角螺絲
M3x12mm

Linkage ball A1
球頭A1
φ4.75x8.68mm

Tail control arm
尾控制臂

Bearing MR63ZZ
MR63ZZ軸承
φ3xφ6x2.5mm

Washer
華可
φ3xφ4.8x0.3mm

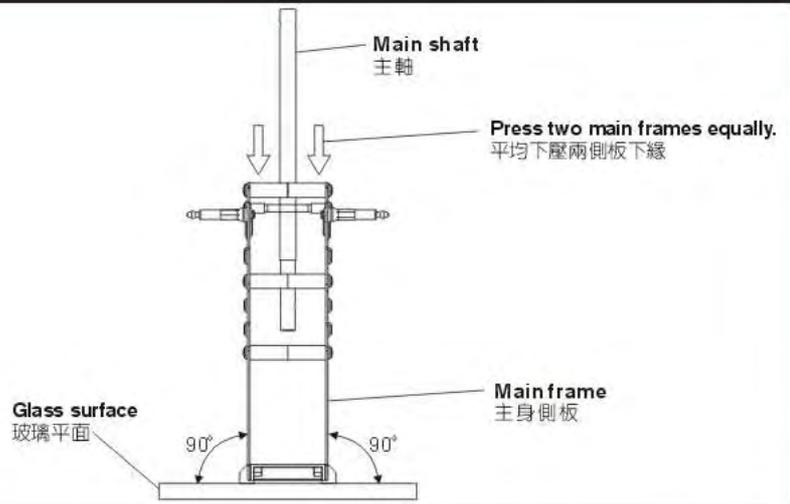
Frame mounting block
機身固定塊
14x12.5x8mm

Apply a little amount of T43 thread lock when fixing a metal part.
螺絲鎖附於金屬件請使用適量T43(螺絲膠)

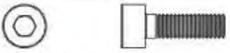
Main frame assembly point:

First do not fully tighten the screws of main frames and put three bearings through the main shaft to check if the movements 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. This assembly can help for the power and flight performance.

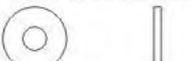
機身側板組立重點：
側板螺絲先不完全鎖緊，放入主軸貫穿三顆軸承確認上下移動必需滑順，主體底板必須與水平桌面（玻璃平面）踏實緊貼；請保持主軸滑順與底板平行桌面後慢慢鎖緊螺絲。正確側板的組裝對動力與飛行性能有顯著幫助。



600NB1C



Socket screw
圓頭內六角螺絲(M3x10mm)x2



M3 Washer
M3華司(φ3xφ8x1mm)x2

600NG1



Socket screw
圓頭內六角螺絲(M3x12m)x4



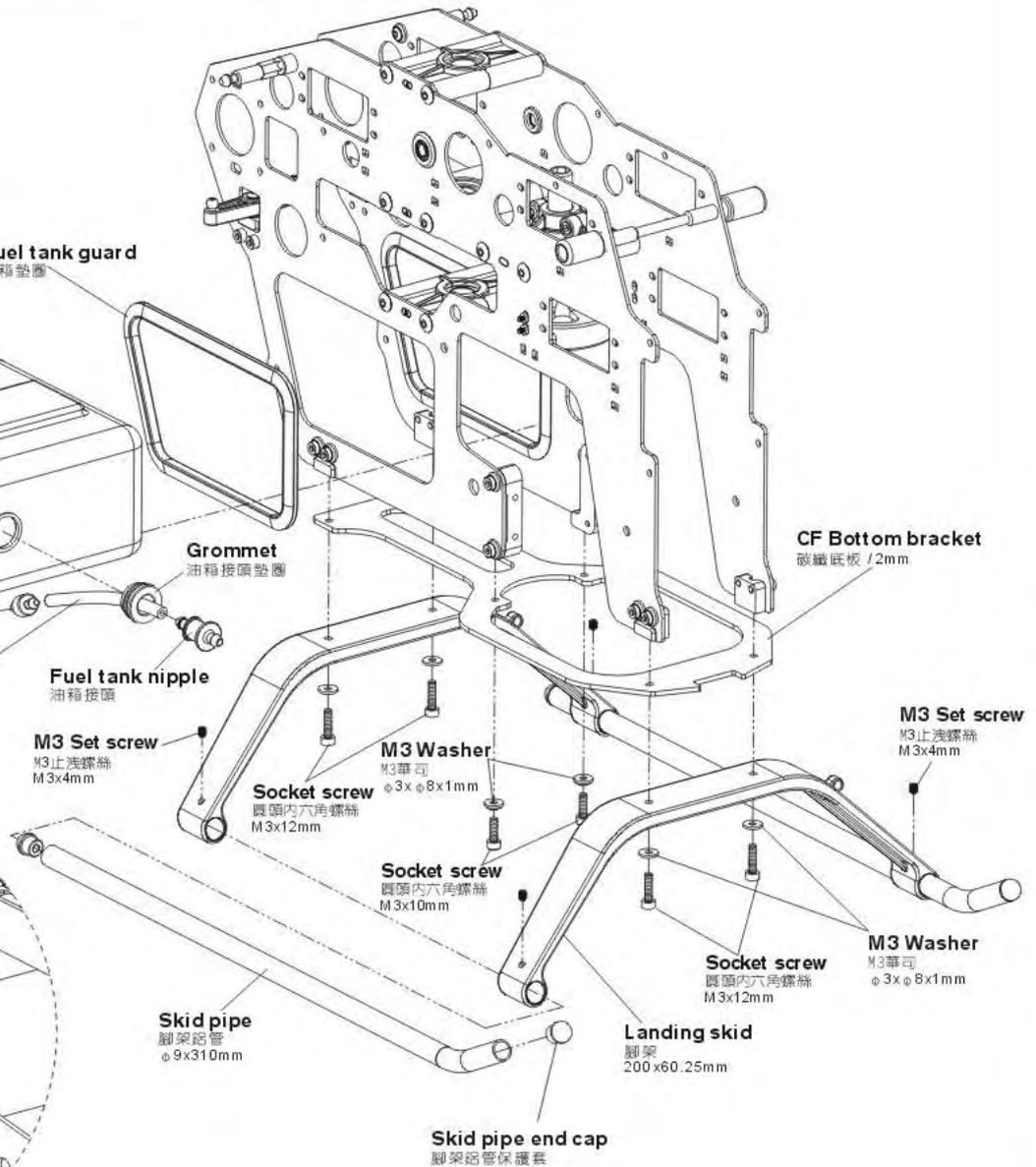
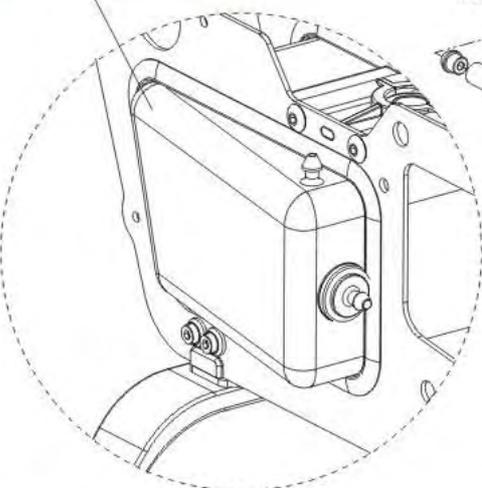
M3 Washer
M3華司(φ3xφ8x1mm)x4



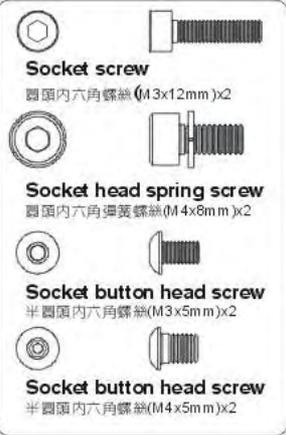
M3 Set screw
M3止淺螺絲(M3x4mm)x4

Apply a little amount of T43 thread lock when fixing a metal part.
螺絲鎖附於金屬件請使用適量T43(螺絲膠)

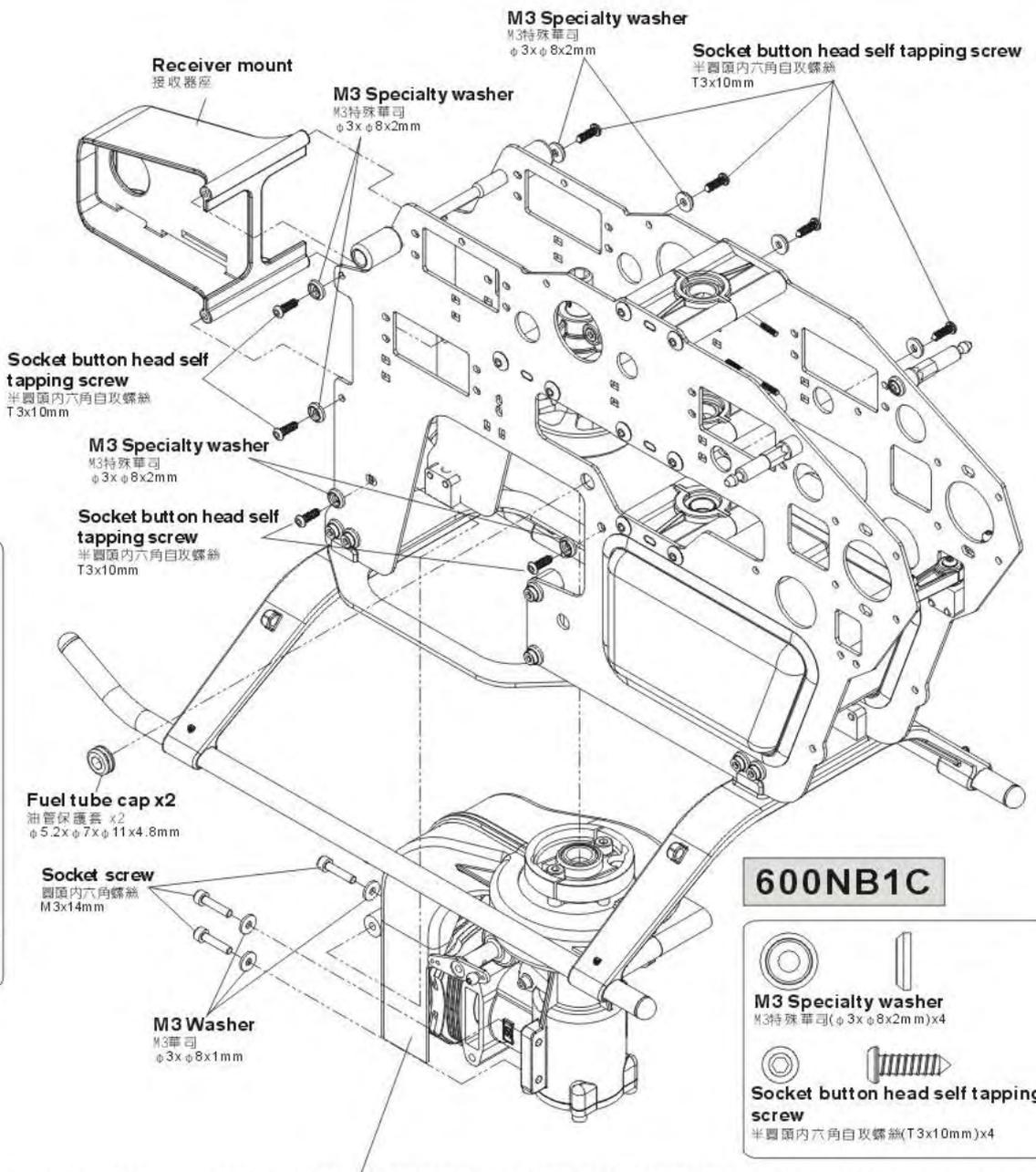
600NZ003



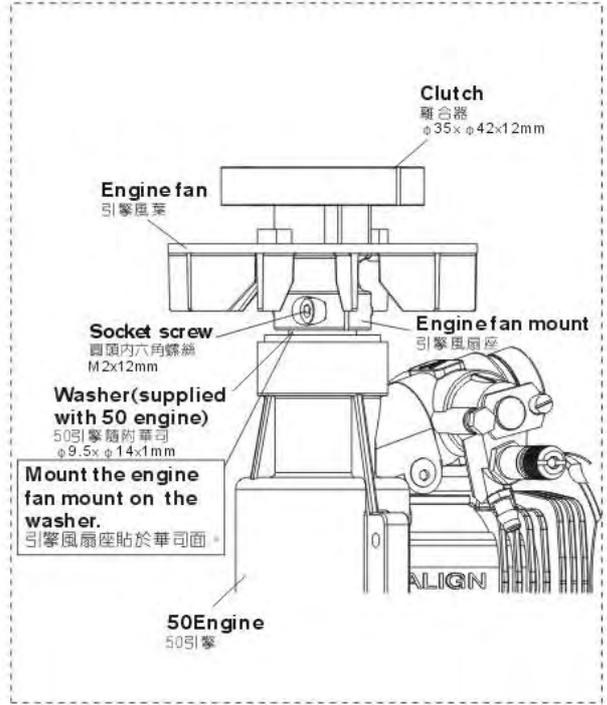
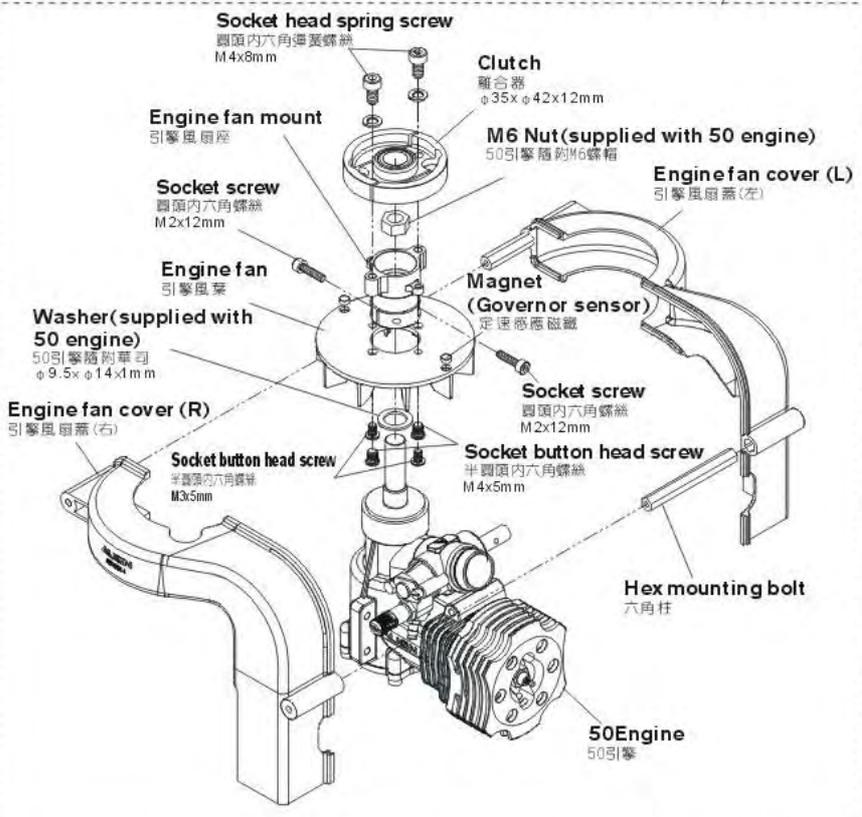
600NB4A



600NB1B



600NB1C

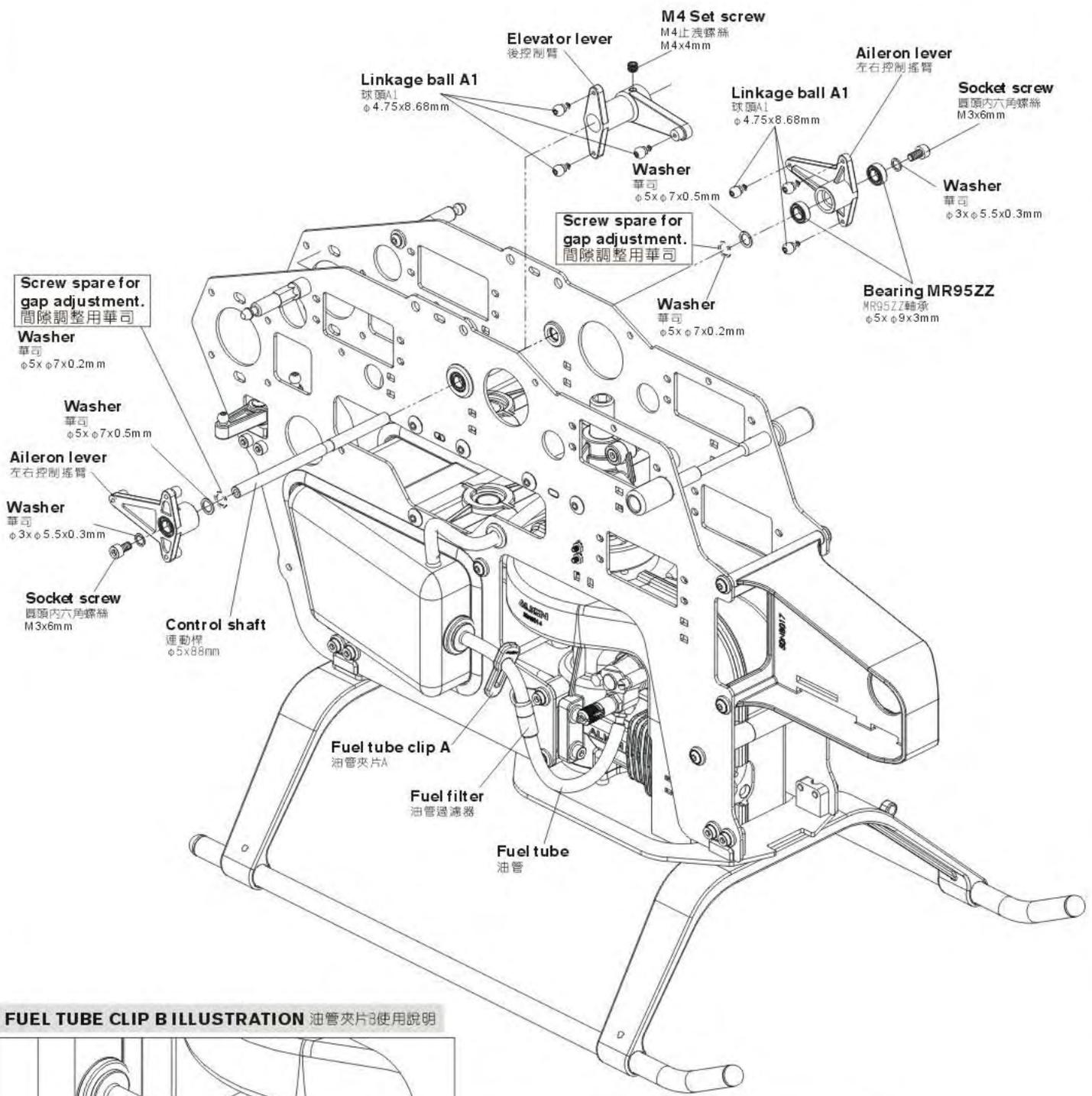


Apply a little amount of T43 thread lock when fixing a metal part.
螺絲鎖劑於金屬件請使用適量T43(螺絲膠)

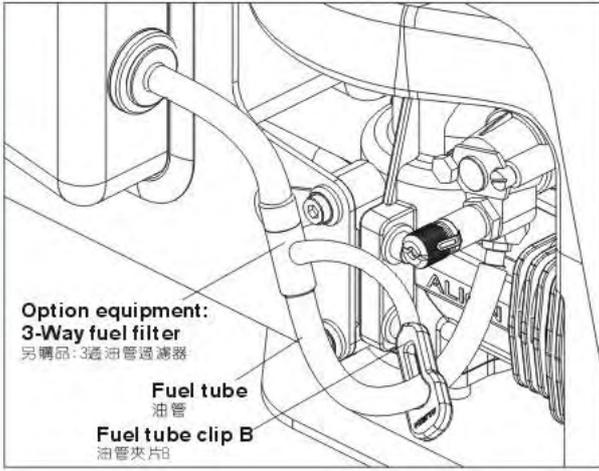
600NB1B

Apply a little amount of T43 thread lock when fixing a metal part.
 螺絲鎖附於金屬件請使用適量T43(螺絲膠)

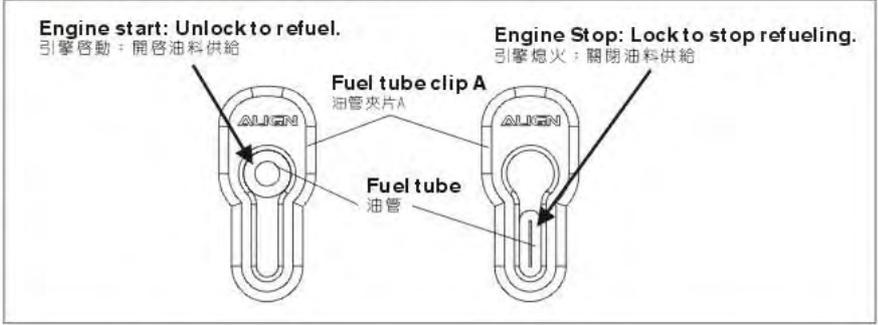
 Linkage ball A1 球頭A1(φ4.75x8.68mm)x9	 Washer 華司(φ5xφ7x0.5mm)x2	 Washer 華司(φ3xφ5.5x0.3mm)x2	 Bearing MR95ZZ MR95ZZ軸承(φ5xφ9x3mm)x4
 Socket screw 圓頭內六角螺絲(M3x6mm)x2	 Washer 華司(φ5xφ7x0.2mm)x2	 M4 Set screw M4止洩螺絲(M4x4mm)x1	



FUEL TUBE CLIP B ILLUSTRATION 油管夾片B使用說明



FUEL TUBE CLIP ILLUSTRATION 油管夾使用方法



600NZ4



Linkage ball A
球頭A(φ4.75x8.68mm)x5



Socket button head self tapping screw
半圓頭內六角自攻螺絲(T3X14mm)x12

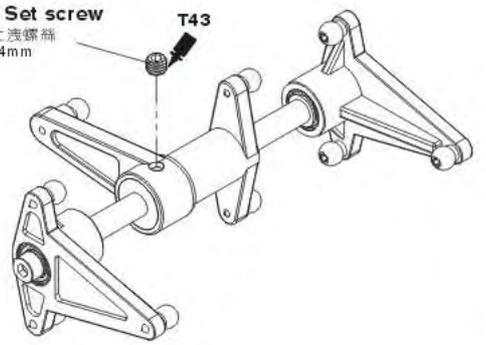


M2 Nut
M2螺帽x5

M4 Set screw

M4止沖螺絲
M4x4mm

T43



Plastic servo nut
伺服器塑膠螺帽

M2 Nut
M2螺帽

Linkage ball A
球頭A
φ4.75x8.68mm

Servo
伺服器

Plastic servo nut
伺服器塑膠螺帽

Socket button head self tapping screw
半圓頭內六角自攻螺絲
T3X14mm

Servo
伺服器

Socket button head self tapping screw
半圓頭內六角自攻螺絲
T3X14mm

Aluminum servo plate
鋁伺服器壓片

M2 Nut
M2螺帽

Aluminum servo plate
鋁伺服器壓片

Servo
伺服器

Linkage ball A
球頭A
φ4.75x8.68mm

M2 Nut
M2螺帽

600NZ2A



Ball link
連桿頭x12

600NZ2



Linkage rod(E)
連桿(E) ϕ 2x32mmx2

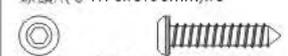


Linkage rod(G)
連桿(G) ϕ 2x61mmx4

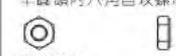
600NZ4



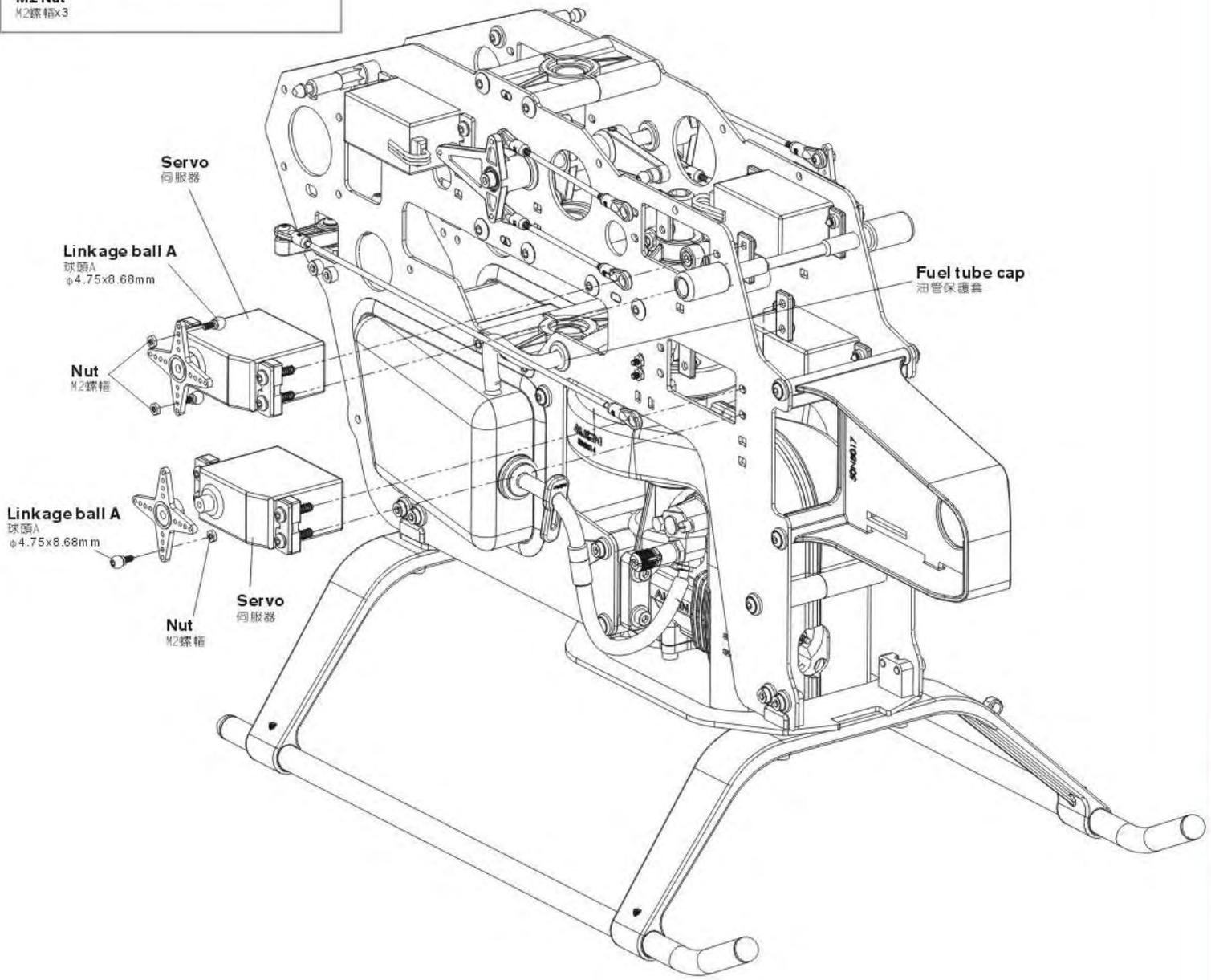
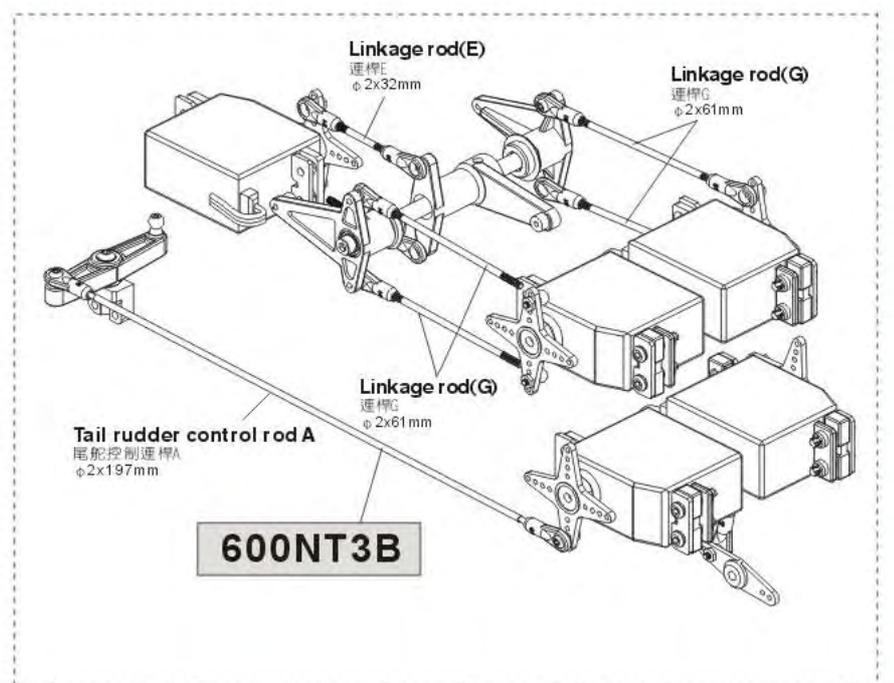
Linkage ball A
球頭A(ϕ 4.75x8.68mm)x3



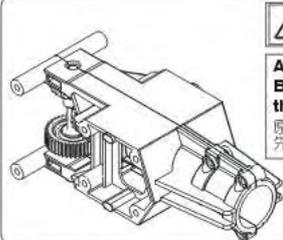
Socket button head self tapping screw
半圓頭內六角自攻螺絲(T3X14mm)x8



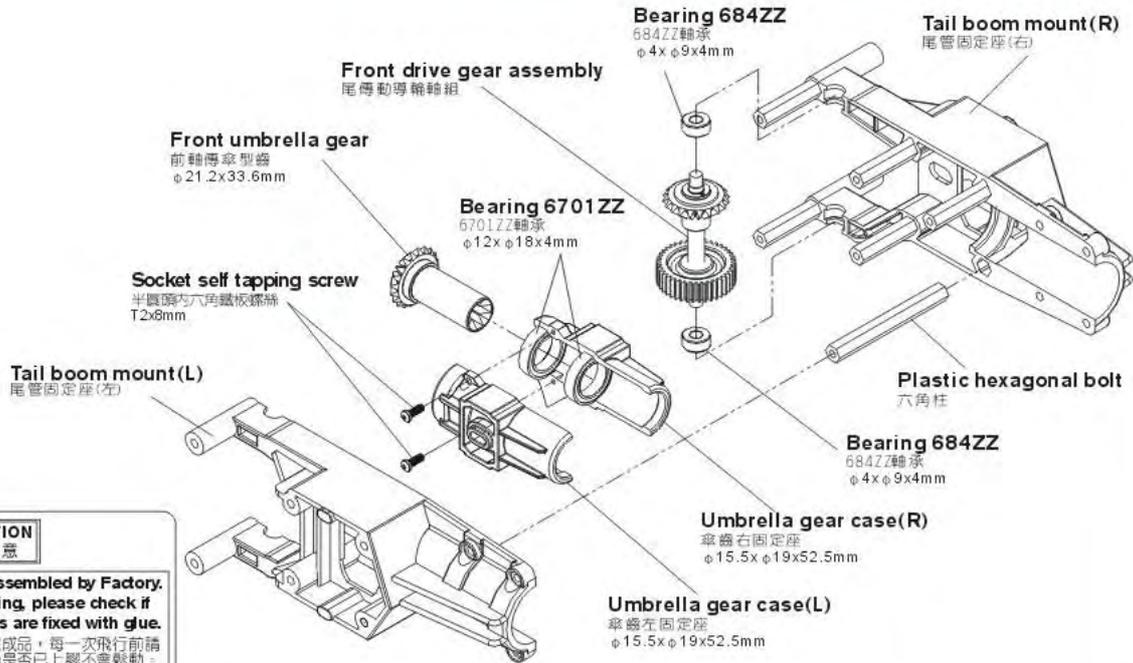
M2 Nut
M2螺帽x3



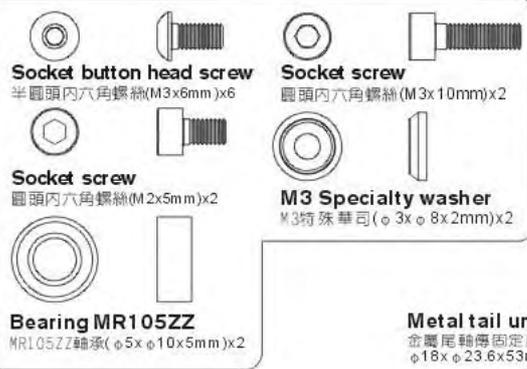
600NT1A



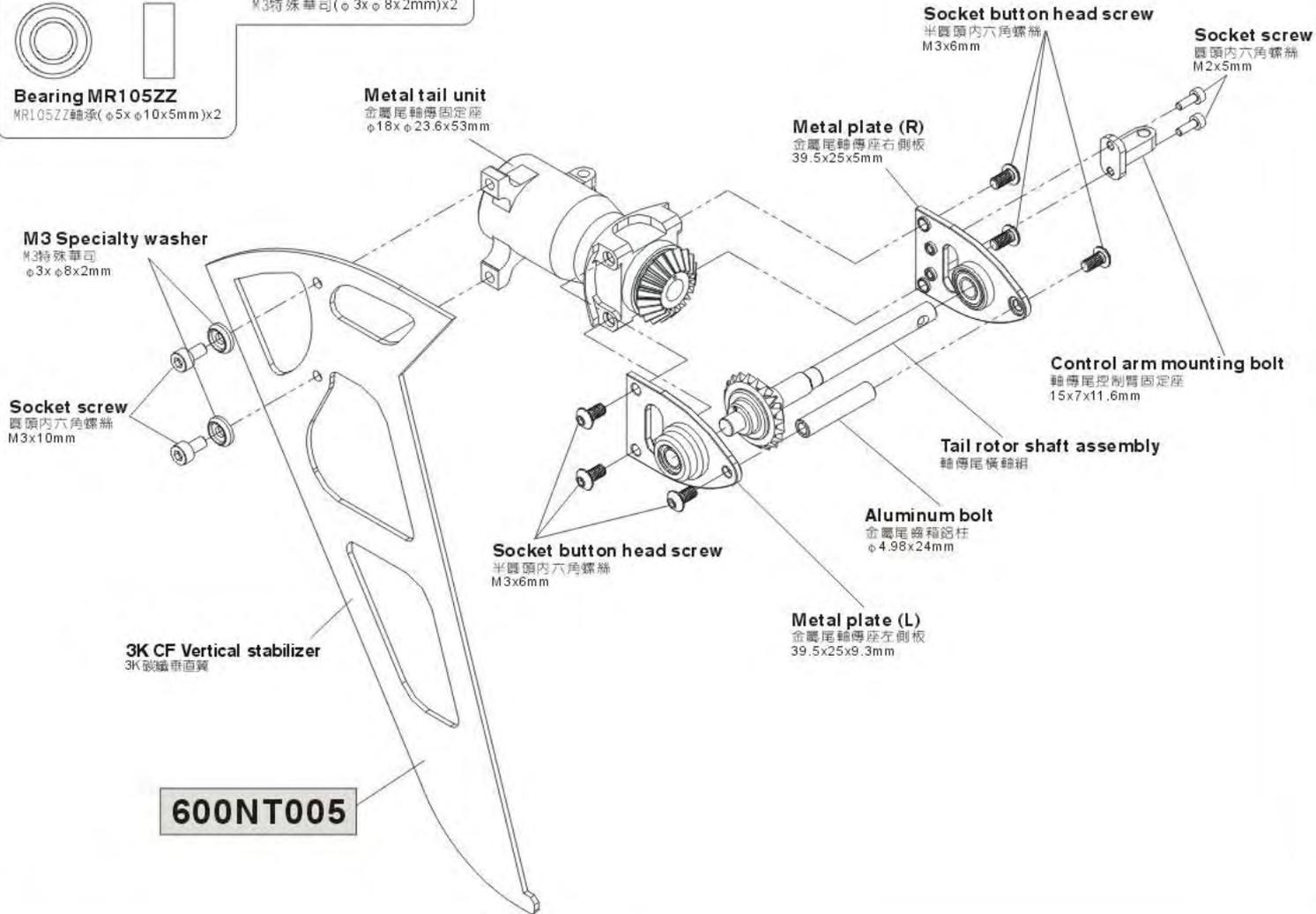
CAUTION 注意
Already assembled by Factory. Before flying, please check if the screws are fixed with glue.
原裝組裝完成品，每一次飛行前請先確認螺絲是否已上膠不會鬆動。



600NT2A

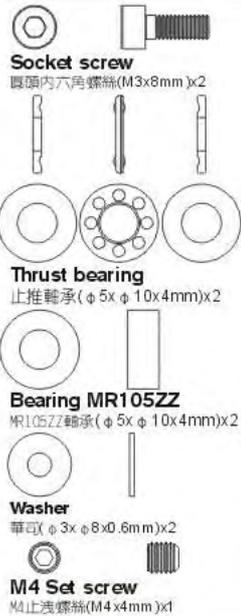


Apply a little amount of T43 thread lock when fixing a metal part.
螺絲鎖附於金屬件請使用適量T43(螺絲膠)



600NT005

600NT2B



CAUTION
注意

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

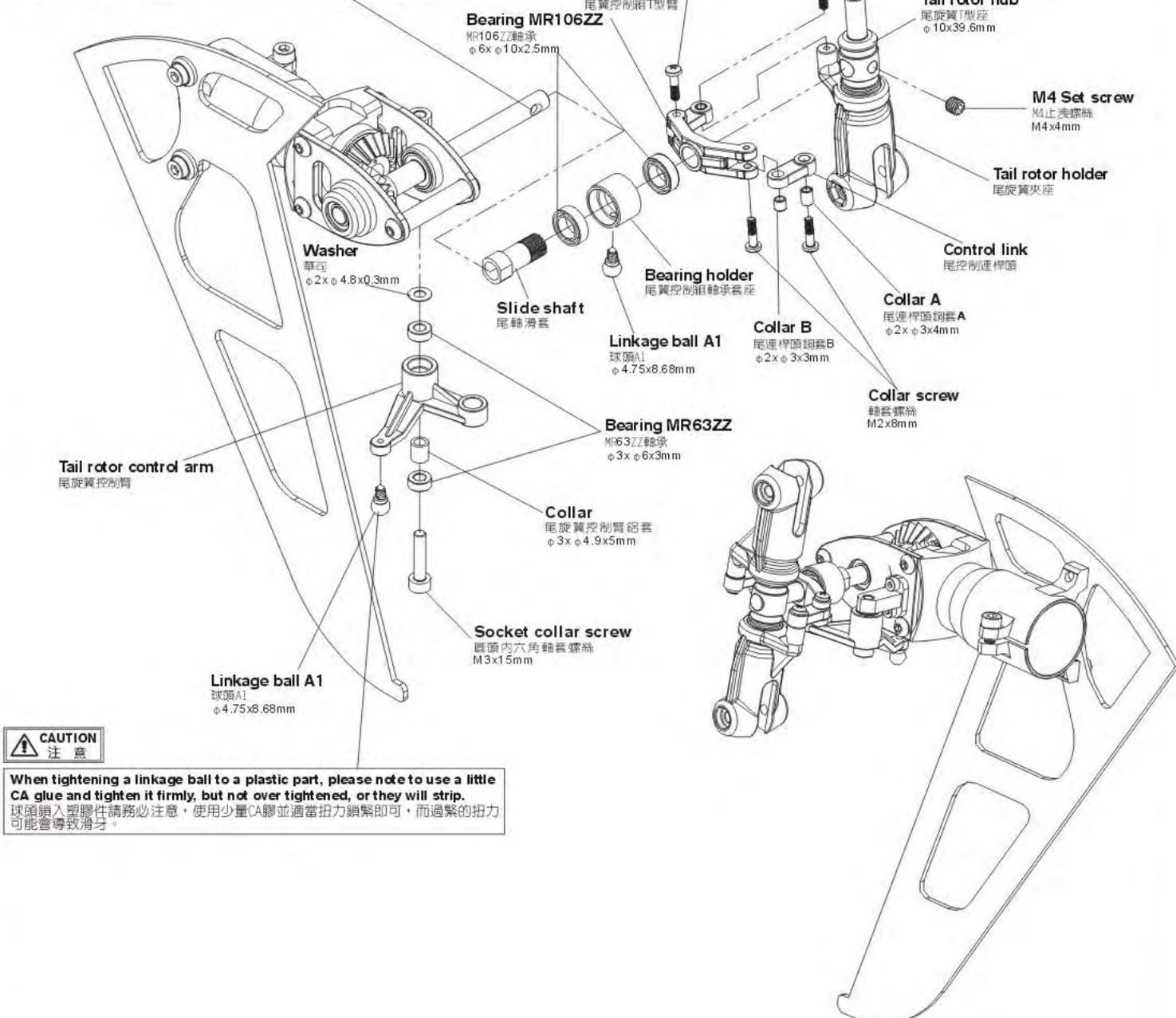
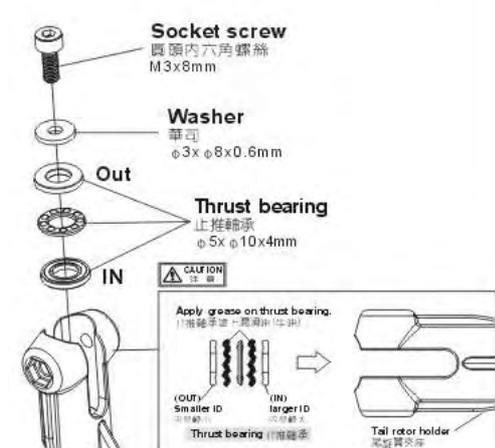
600NT2C



600HT2D



Apply a little amount of T43 thread lock when fixing a metal part.
螺絲鎖劑於金屬件請使用適量T43(藍特膠)

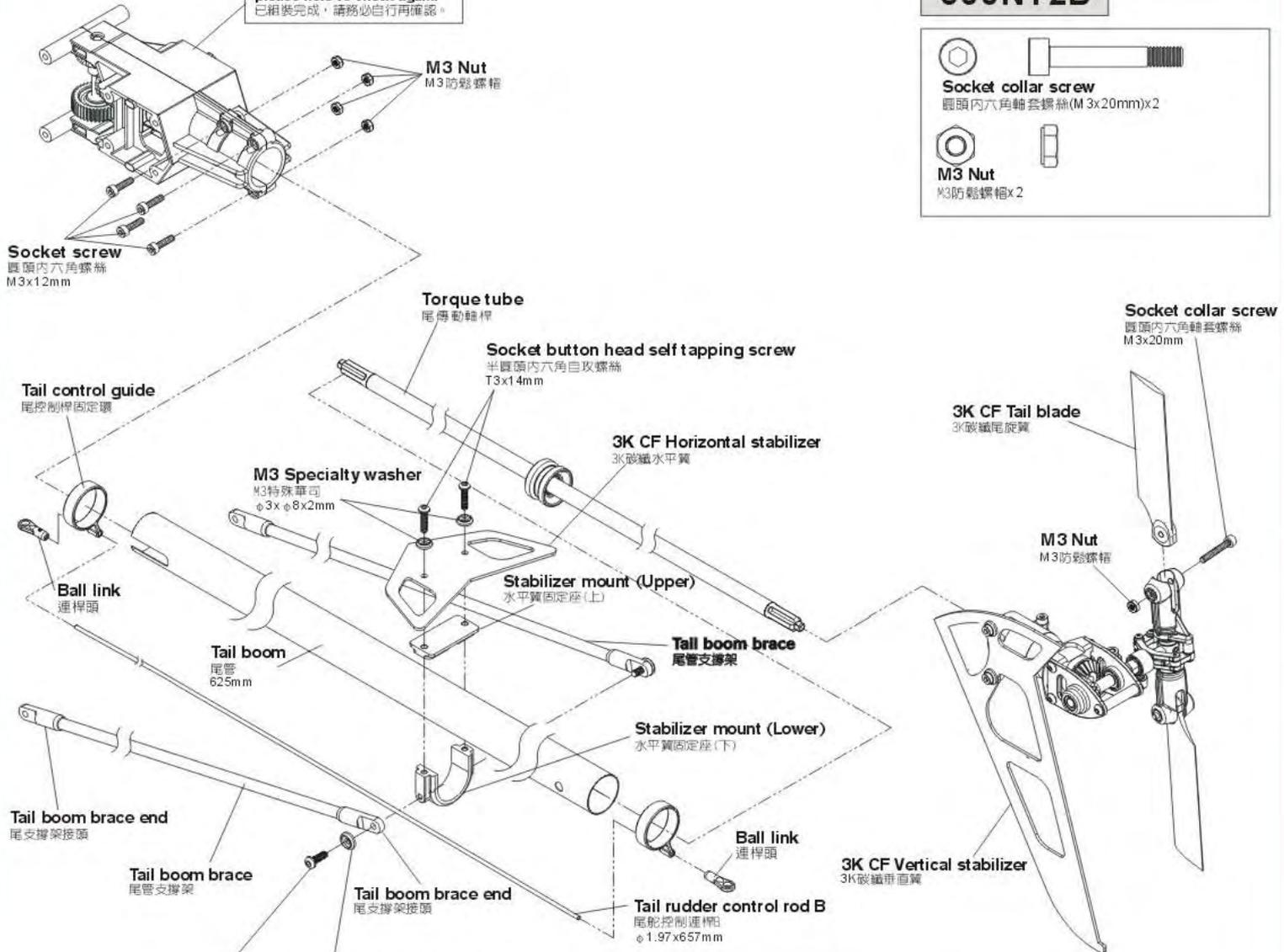
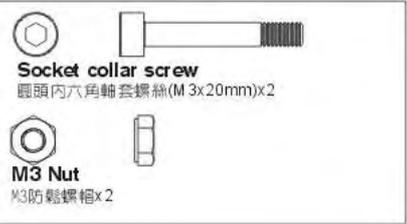


CAUTION
注意

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.
球頭鎖入塑膠件請務必注意，使用少量CA膠並適當扭力鎖緊即可，而過緊的扭力可能會導致滑牙。

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

600NT2B



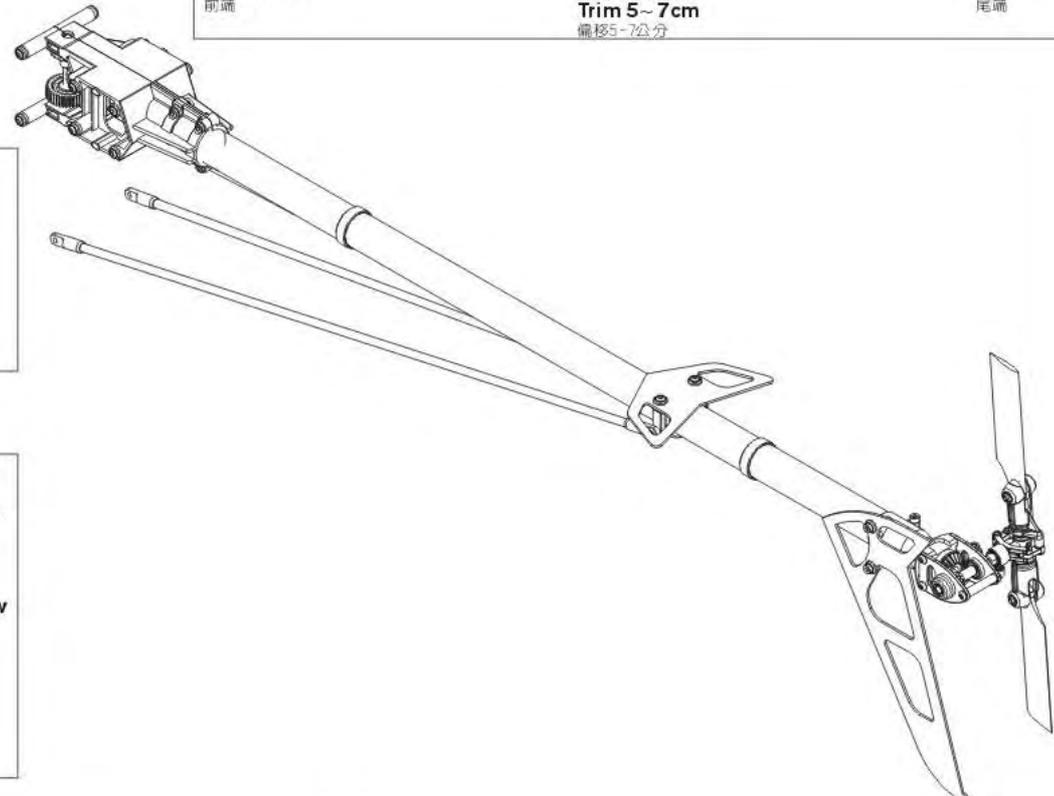
Tip to fix the torque tube 傳動軸軸承固定位置要領



600NT1A

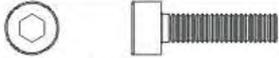


600NT2EA



600NB1A

600NT1A



Socket screw
圓頭內六角螺絲(M3x12mm)x2



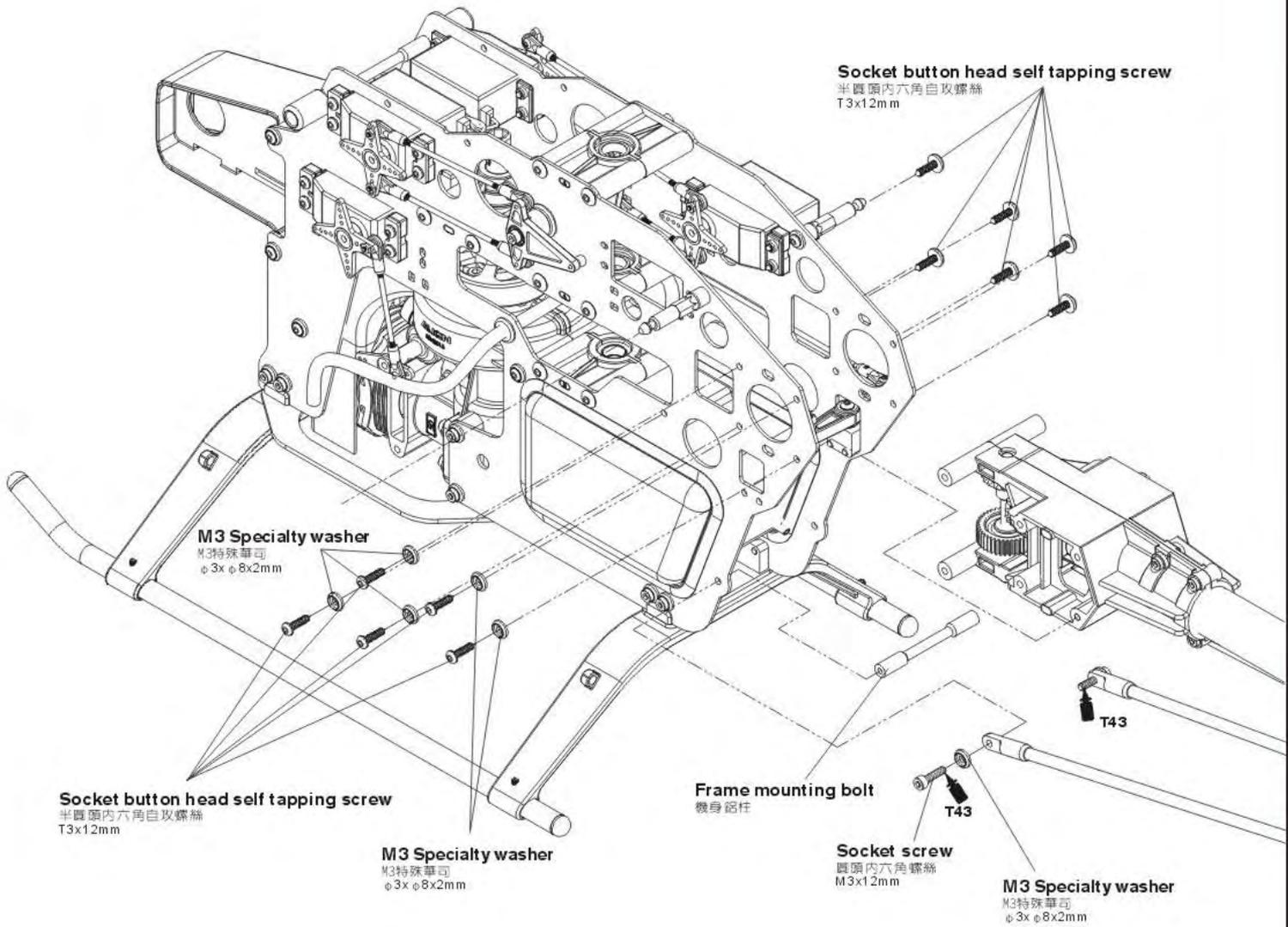
M3 Specialty washer
M3特殊華司(φ3xφ8x2mm)x2



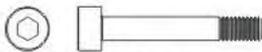
Socket button head self tapping screw
半圓頭內六角自攻螺絲(T3x12mm)x12



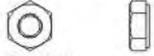
M3 Specialty washer
M3特殊華司(φ3xφ8x2mm)x12



600NB3



Socket collar screw
圓頭內六角軸套螺絲 (M3x20mm)x1



M3 Nut
M3防鬆螺帽x1

600NB1B



Socket button head self tapping screw
半圓頭內六角自攻螺絲 (T3x8mm)x2



M3 Specialty washer
M3特殊華司 (φ3xφ8x2mm)x2

600NZ2



Linkage rod (D)
連桿 (D) 約 39.5mmx3

600NZ2A



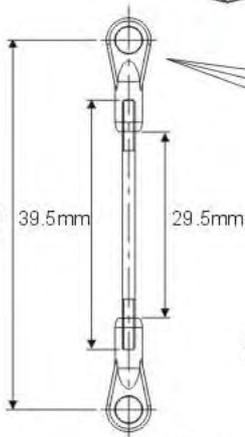
Ball link
連桿頭x6

600NH4



M4 Set screw
M4止洩螺絲 (M4x4mm)x2

Linkage rod (D)
Approx. 58.5mmx3
連桿 (D) 約 58.5mmx3



Anti rotation bracket
十字擋導板

M3 Specialty washer
M3特殊華司
φ3xφ8x2mm

Socket button head self tapping screw
半圓頭內六角自攻螺絲
T3x8mm

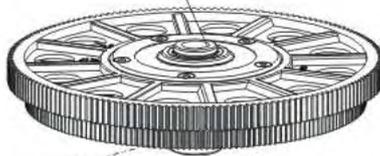
Lock collar
主軸固定環
φ10xφ15x7mm

T43

T43

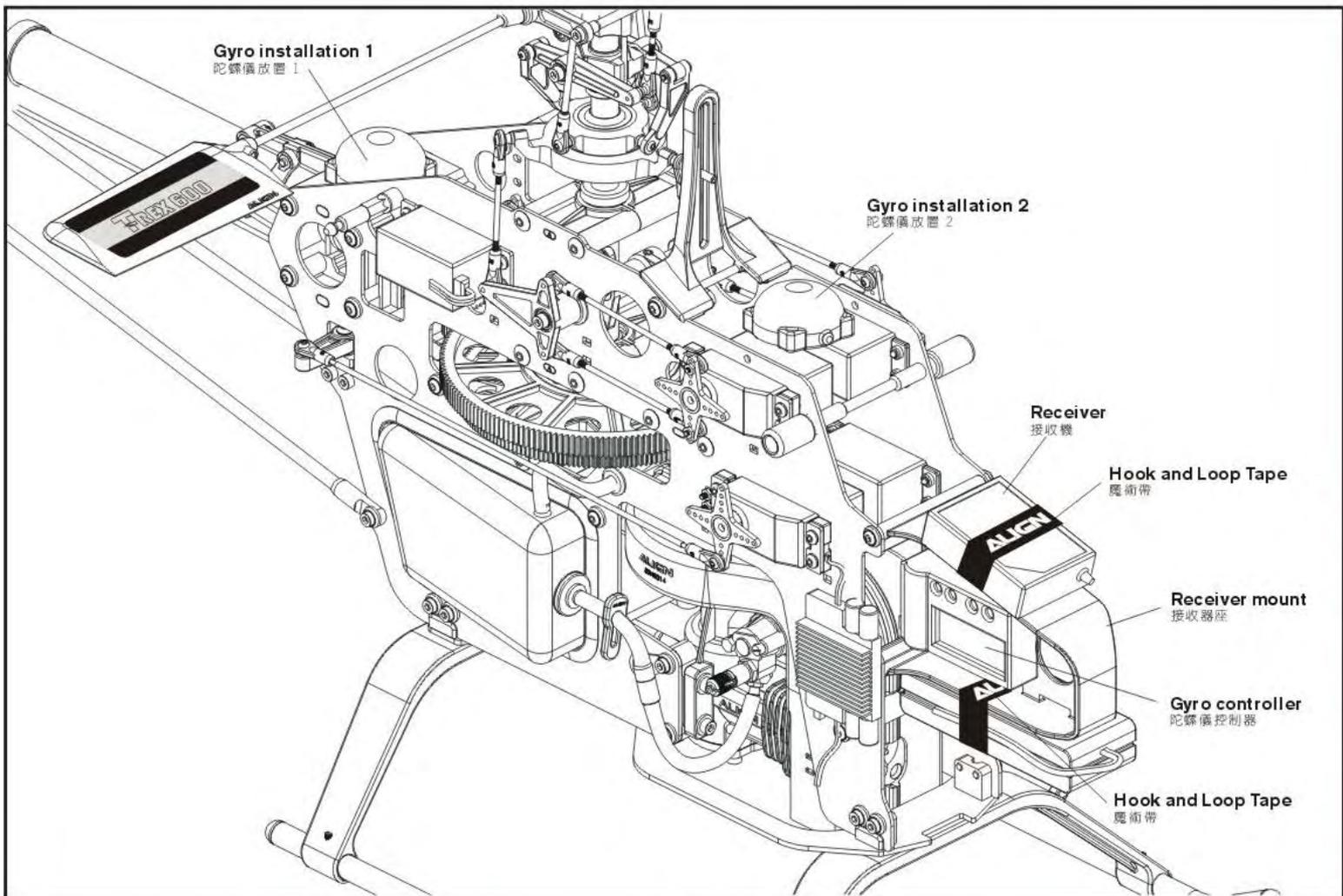
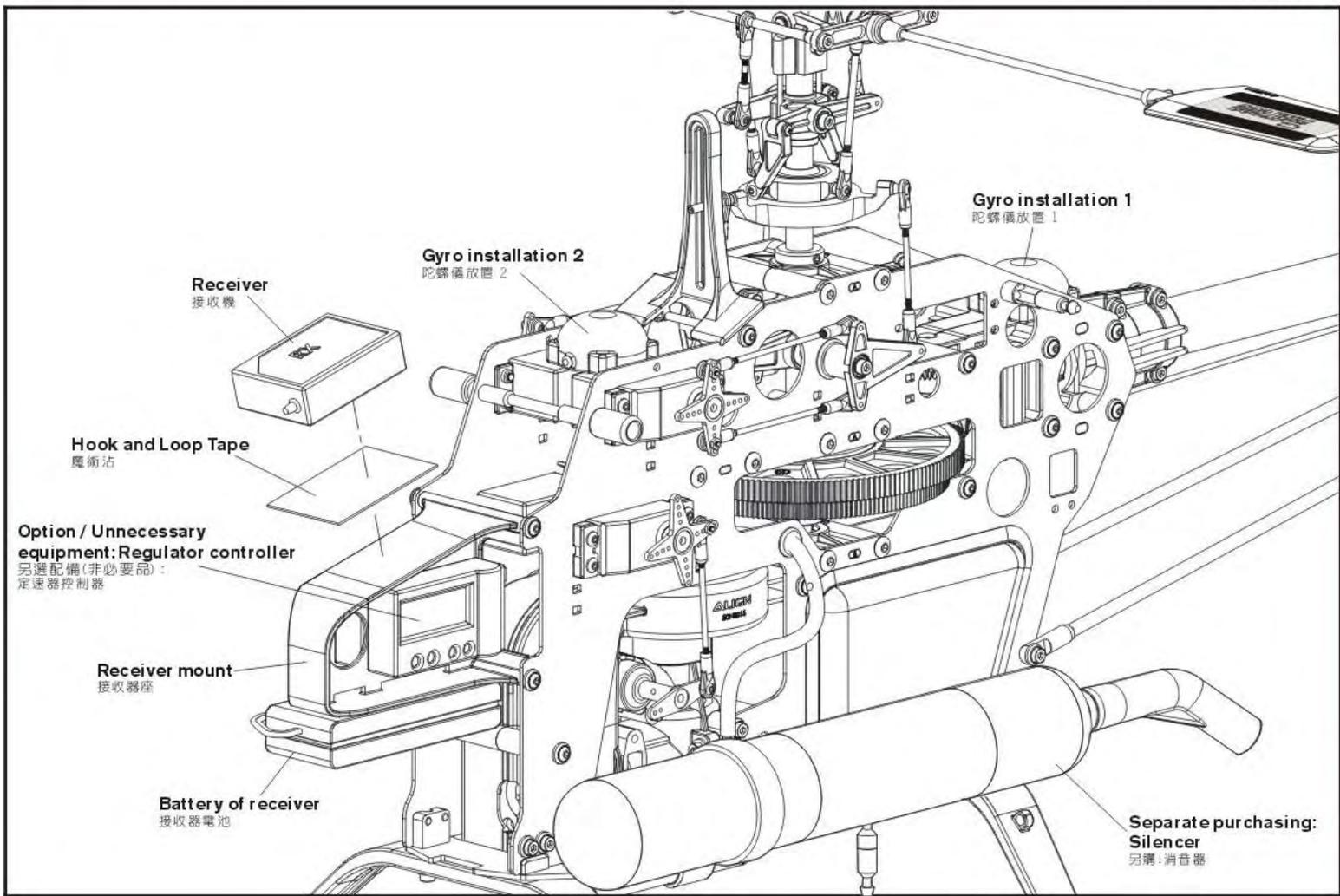
M4 Set screw
M4止洩螺絲
M4x4mm

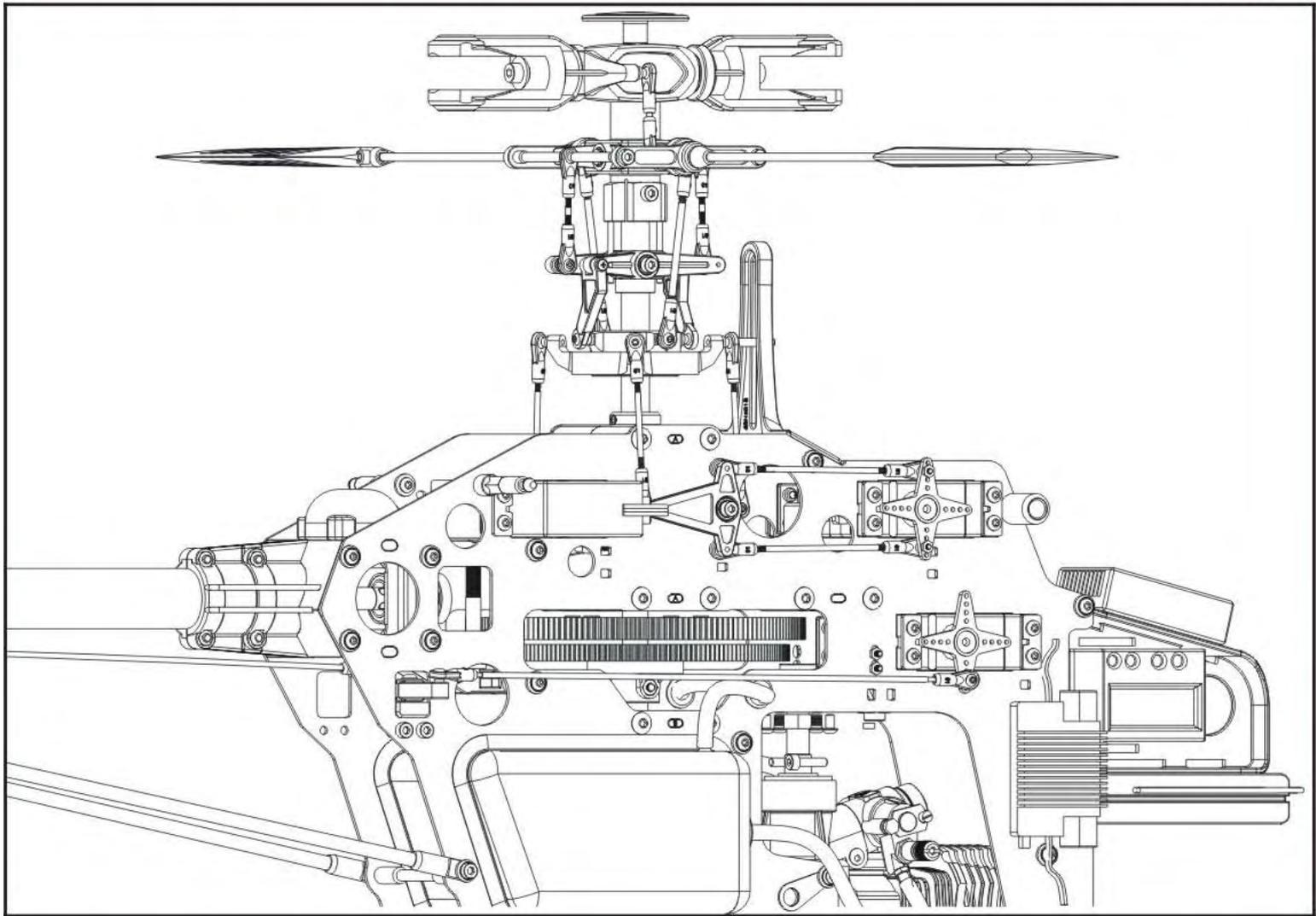
Main drive gear set
主齒輪組



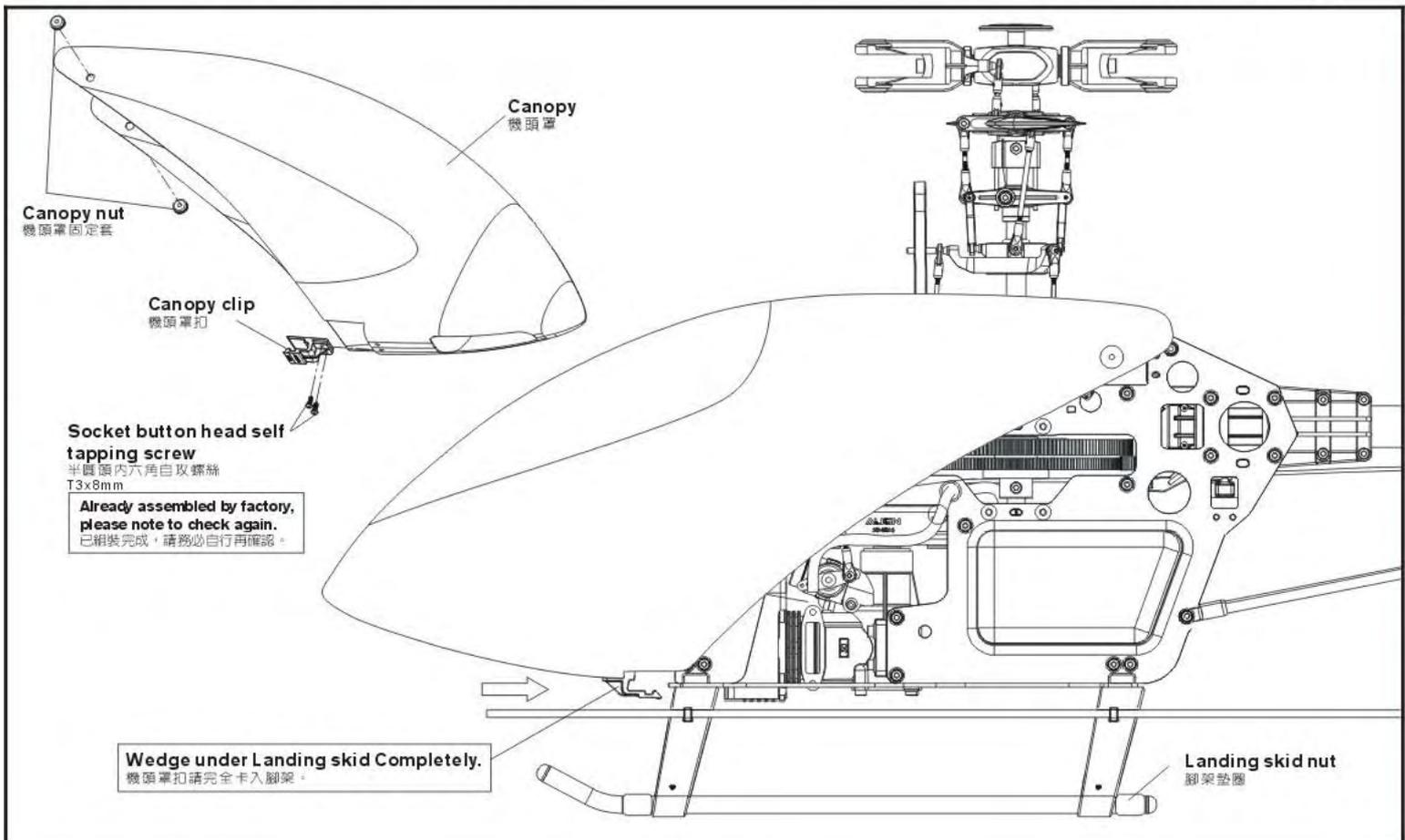
M3 Nut
M3防鬆螺帽

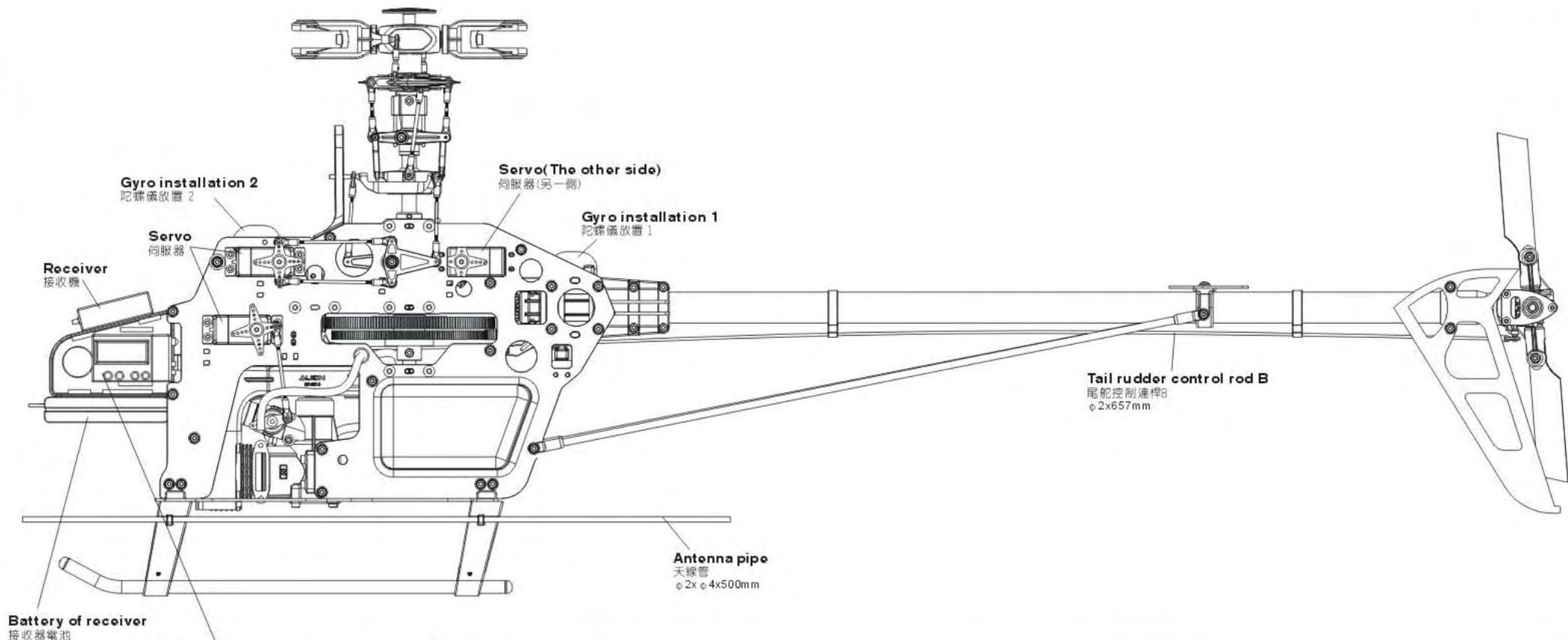
Socket screw
圓頭內六角軸套螺絲
M3x20mm



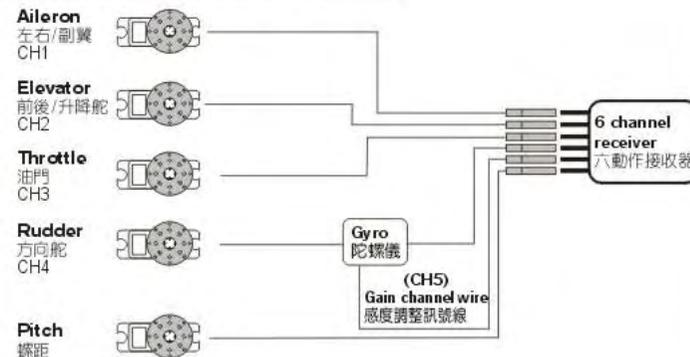


8.CANOPY ASSEMBLY 機頭罩安裝



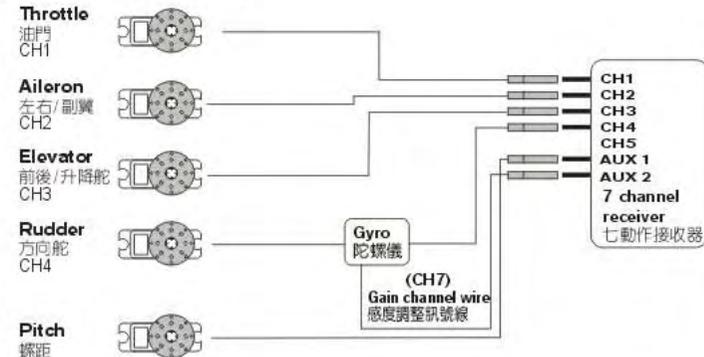


HITEC · FUTABA 6CH receiver wiring
HITEC · FUTABA 6CH接收器接線示意圖



6-Channel Receiver is adequate for the requirements of the T-REX heli. You will need the following channels at a minimum: Throttle, Rudder, Elevator, Aileron, and especially Pitch(CH6) and Gyro(CH5) controls. 六動作的接收器已足夠應對T-REX遙控直昇機的頻道需求，除了油門、方向舵、升降舵、副翼等基本動作外，亦可以對應具備感度調整訊號線的陀螺儀(CH5)與螺距(CH6)。

JR 7CH receiver wiring
JR 7CH接收器接線示意圖



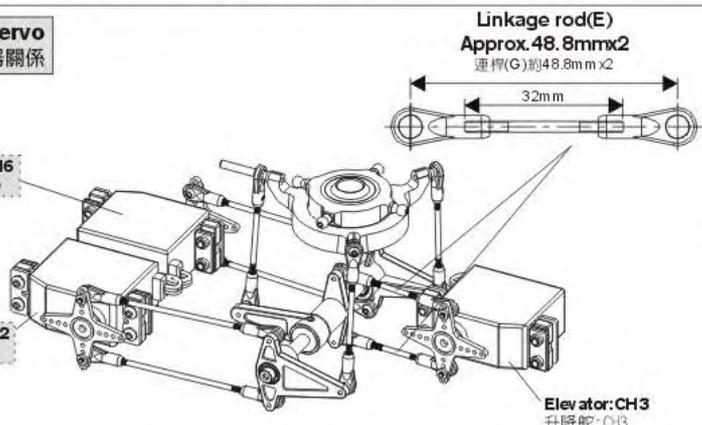
7-Channel Receiver is adequate for the requirements of the T-REX heli. You will need the following channels at a minimum: Throttle, Rudder, Elevator, Aileron, and especially Pitch(AUX 1) and Gyro(AUX 2) controls. 七動作的接收器已足夠應對T-REX遙控直昇機的頻道需求，除了油門、方向舵、升降舵、副翼等基本動作外，亦可以對應具備感度調整訊號線的陀螺儀(AUX 2)與螺距(AUX 1)。

To set this option is to turn on the transmitter and connect to BEC power.
此項設定只要開啓發射器，接上BEC電源即可進行操作。

JR Transmitter/Servo
JR遙控器對應伺服器關係

Aileron:CH2 Pitch:CH6
副翼:CH2 螺距:CH6

Pitch:CH6 Aileron:CH2
螺距:CH6 副翼:CH2



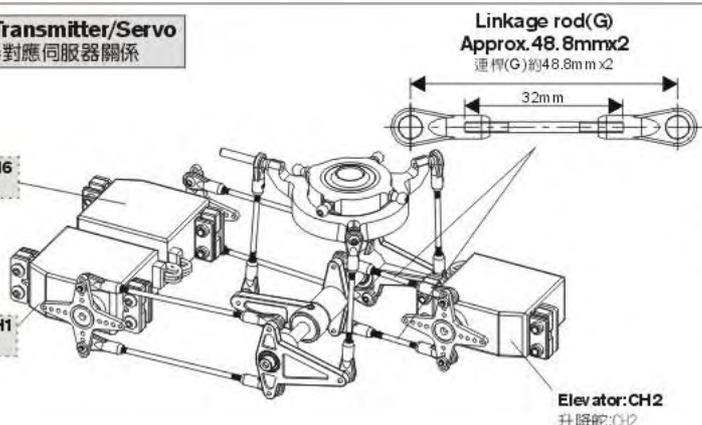
Positions of CH2 · CH6 are exchangeable, After assembling as photo (Note:Set the transmitter under CCPM 120 degrees mode), pull throttle stick (pitch) upward. If one swashplate servo (or two servos) moves downward, adjust reverse switch (REV) on the transmitter to make it moves upward. If three servo move downward, adjust the travel value (+-) of SWASH CH6 on the transmitter to make them move upward. When the actions of Aileron and Elevator are opposite, adjust travel values of SWASH CH2 andCH3.

CH2 · CH6可互換配置，依圖連結後(注意:遙控器須設定於CCPM 120°十字盤模式)，將油門搖桿(Pitch)往上推，若十字盤伺服器有1個或2個往下移時，請調整遙控器的反轉開關(REV)使伺服器往上，若3個伺服器同時往下移時，請調整遙控器SWASH CH6行程量的正負值，使伺服器同時往上平移，副翼與前後動作相反時，同樣調整 SWASH CH2 · CH3行程量正負值。

FUTABA/HITEC Transmitter/Servo
FUTABA/HITEC遙控器對應伺服器關係

Aileron:CH1 Pitch:CH6
副翼:CH1 螺距:CH6

Pitch:CH6 Aileron:CH1
螺距:CH6 副翼:CH1



Positions of CH2 · CH6 are exchangeable, After assembling as photo (Note:Set the transmitter under CCPM 120 degrees mode), pull throttle stick (pitch) upward. If one swashplate servo (or two servos) moves downward, adjust reverse switch (REV) on the transmitter to make it moves upward. If three servo move downward, adjust the travel value (+-) of SWASH CH6 on the transmitter to make them move upward. When the actions of Aileron and Elevator are opposite, adjust travel values of SWASH CH2 andCH3.

CH1 · CH6可互換配置，依圖連結後(注意:遙控器須設定於CCPM 120°十字盤模式)，將油門搖桿(Pitch)往上推，若十字盤伺服器有1個或2個往下移時，請調整遙控器的反轉開關(REV)使伺服器往上，若3個伺服器同時往下移時，請調整遙控器SWASH CH6行程量的正負值，使伺服器同時往上平移，副翼與前後動作相反時，同樣調整 SWASH CH1 · CH2行程量正負值。

11.AJUSTMENTS FOR GYRO AND TAIL NEUTRAL SETTING 陀螺儀與尾翼中立點設定調整

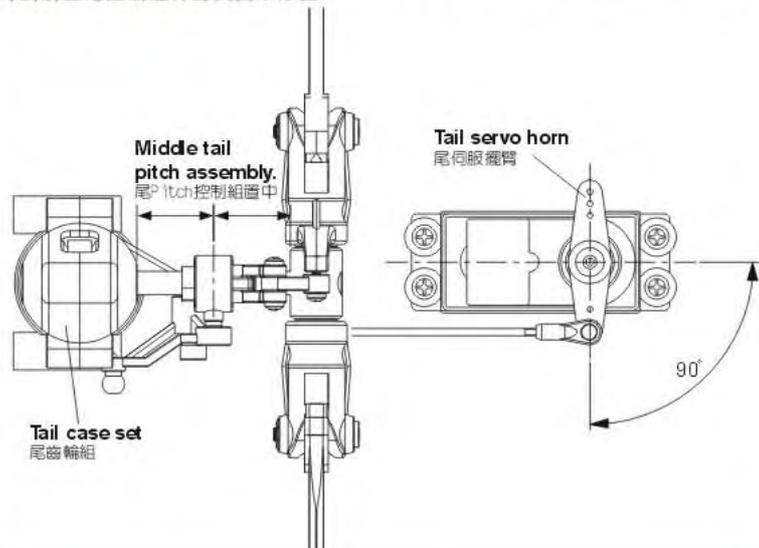
Recommend to choose Head Lock type for Gyro and turn off Revolution mixing(RVMX) mode on the transmitter, then set the gain switch on the transmitter and the gyro to Head lock mode. The gain setting is about 70%, and after transmitter setting, connect to BEC power to work on tail neutral setting. Note: When turn on BEC power, please do not touch tail rudder stick and the helicopter. Then wait for 3 seconds, make tail servo arm and tail servo at a right angle(90 degrees), tail pitch assembly must be correctly fixed about in the middle of the travel of tail rotor shaft for standard neutral setting.

陀螺儀選擇，建議選用鎖定式陀螺儀，其發射器內陀螺儀設定請關閉根軸混控模式，並將發射器上的感應開關與陀螺儀切至鎖定模式，感度設約 70% 左右，發射器設定完成後接上BEC接收電源，即可進行尾中立點設置。注意:當啓動BEC電源時請勿撥動尾舵搖桿或碰觸機體，待3秒陀螺儀鎖定後尾伺服器需與尾伺服器約成 90°，尾旋翼控制組須正確置於尾橫軸行程約中間位置，即為標準尾中立點設定。

TAIL NEUTRAL SETTING 尾中立點設定

After setting Head Lock mode, correct setting position of tail servo and tail pitch assembly is as photo. If the tail pitch assembly is not at the neutral position, please adjust the length of rudder control rod to trim.

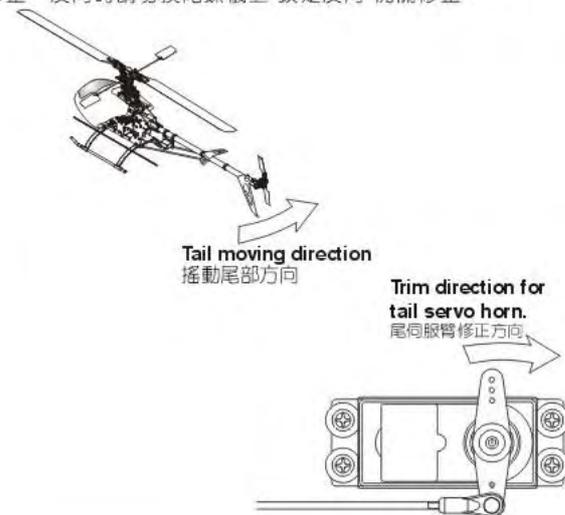
陀螺儀鎖定後尾伺服器與尾 Pitch控制組正確擺置位置。若尾 Pitch控制組未置中時請調整尾控制連桿的長度來修正。



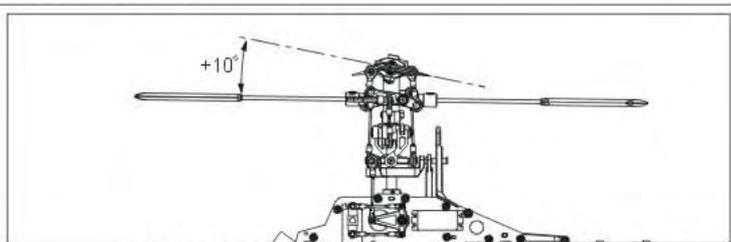
HEAD LOCK DIRECTION SETTING OF GYRO 陀螺儀鎖定方向設定

To check the head lock direction of gyro is to move the tail counterclockwise and the tail servo horn will be trimmed clockwise. If it trims in the reverse direction, please switch the gyro to"REVERSE".

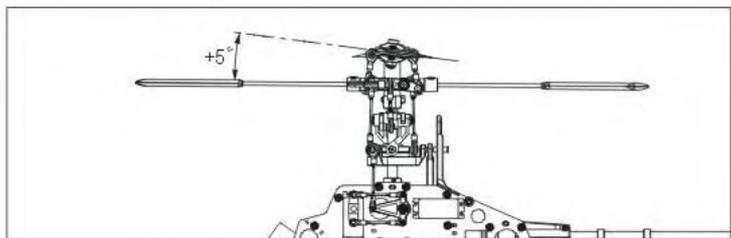
陀螺儀鎖定方向確認，當手搖尾部反時鐘擺動，尾伺服器應順時鐘修正，反向時請切換陀螺儀上"鎖定反向"開關修正。



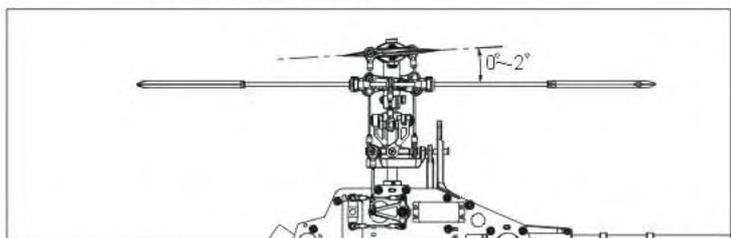
GENERAL FLIGHT 一般飛行模式



Stick position at high/Throttle 100%/Pitch +10°
搖桿高速/油門100%/Pitch+10°



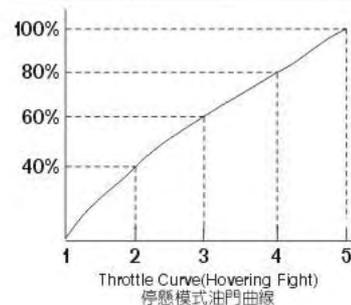
Stick position at Hovering/Throttle 60%/Pitch +5°
搖桿停懸/油門60%/Pitch+5°



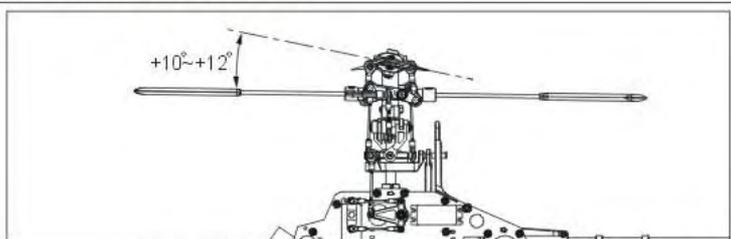
Stick position at low/Throttle 0%/Pitch 0°~ -2°
搖桿低速/油門0%/Pitch 0°~ -2°

GENERAL FLIGHT
一般飛行模式

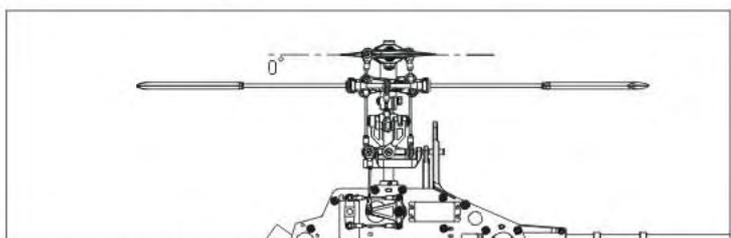
	Throttle 油門	Pitch 螺距
5	100% High speed 100% 高速	+10°
4	80%	
3	60% Hovering 60% 停懸	+5°
2	40%	
1	0% Low speed 0% 低速	0°~ -2°



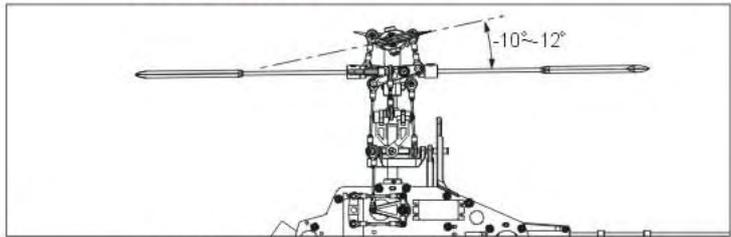
3D FLIGHT 3D特技飛行模式



Stick position at high/Throttle 100%/Pitch +10°
搖桿高速/油門100%/Pitch+10°



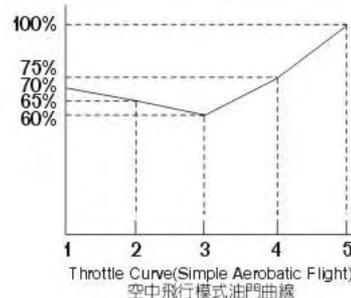
Stick position at middle/Throttle 85%/Pitch 0°
搖桿中速/油門85%/Pitch 0°



Stick position at low/Throttle 100%/Pitch -10°
搖桿低速/油門100%/Pitch-10°

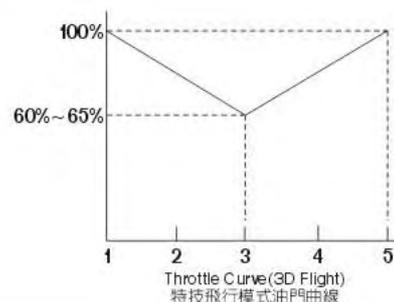
IDLE 1: SPORT FLIGHT

	Throttle 油門	Pitch 螺距
5	100%	+10°~ +12°
4	75%	
3	60%	+5°
2	65%	
1	70%	-5°



IDLE 2: 3D FLIGHT

	Throttle 油門	Pitch 螺距
5	100% High 100% 高	+10°~ +12°
3	60%~ 65% Middle 60%~ 65% 中	0°
1	100% Low 100% 低	-10°~ -12°



1. Pitch range: Approx. ±14 degrees.
2. If the pitch is set too high, it may causing motor overload.



1. 螺距 (Pitch) 總行程約 ±14°
2. 過大螺距設定，可能導致引擎過載。

PLEASE PRACTICE SIMULATION FLIGHT BEFORE REAL FLYING 飛行前請事先熟練模擬飛行

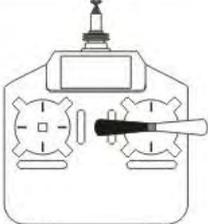
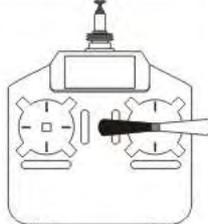
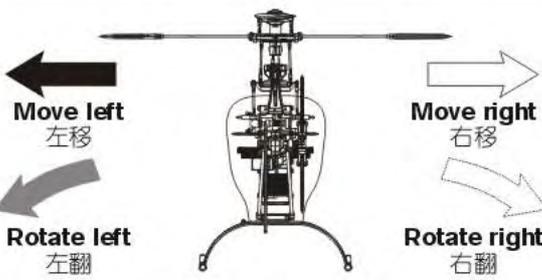
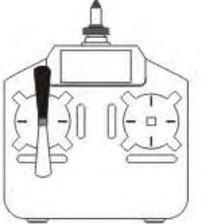
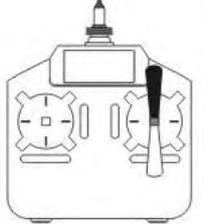
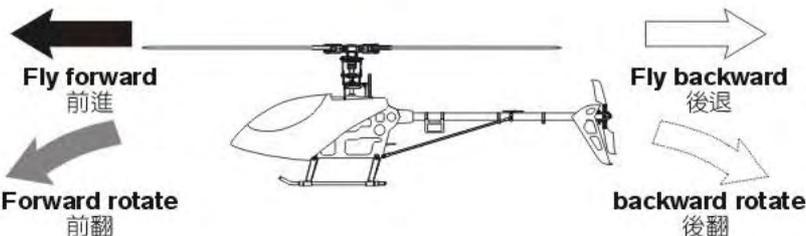
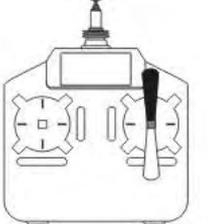
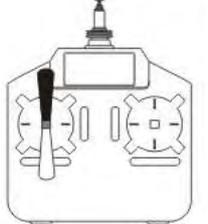
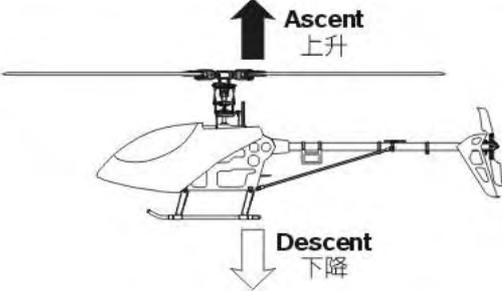
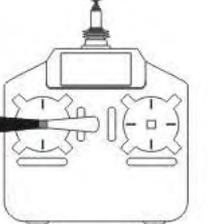
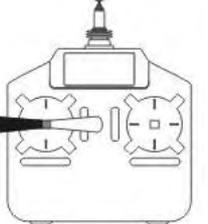
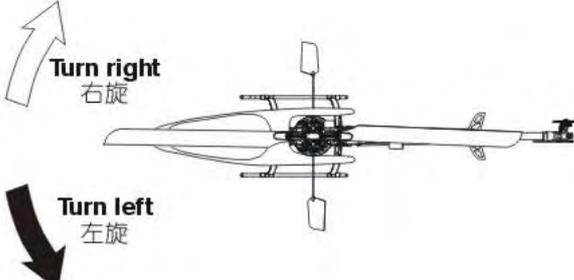
Do a simulation flight until you familiarize your fingers with the movements of the rudders, and keep practicing until the fingers move naturally.

1. Place the helicopter in a clear open field (Make sure the power OFF) and the tail of helicopter point to yourself.
2. Practice to operate the throttle stick(as below illustration) and repeat practicing "Throttle high/low", "Aileron left/right", "Rudder left/right", and "Elevator up/down".
3. The simulation flight practice is very important, please keep practicing until the fingers move naturally when you hear operation orders being call out.
4. Another safe and effective practice method is to use the transmitter flying on the computer through simulator software sold on the market.

在還沒瞭解直昇機各動作的操控方式前，嚴禁實機飛行，請先進行模擬飛行的練習，並不斷的重複，直到手指可熟練的控制各個動作及方向。

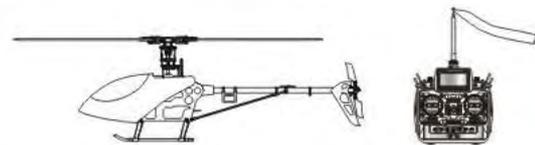
1. 將直昇機放在空曠的地方(確認引擎為熄火狀態)，並將直昇機的機尾對準自己。
2. 練習操作遙控器的各搖桿(各動作的操作方式如下圖)，並反覆練習油門高/低、副翼左/右、升降舵前/後及方向舵左/右操作方式。
3. 模擬飛行的練習相當重要，請重複練習直到不需思索，手指能自然隨著喊出的指令移動控制。
4. 另外一種最有效、最安全的練習方式，就是透過市面販售的模擬軟體，以遙控器在電腦上模擬飛行，熟悉各種方向的操控。



Mode 1	Mode 2	Illustration圖示
 <p data-bbox="220 1115 379 1153">Aileron 副翼</p>		
 <p data-bbox="183 1451 422 1489">Elevator 升降/前後</p>		
 <p data-bbox="231 1787 391 1825">Throttle 油門</p>		
 <p data-bbox="223 2105 383 2143">Rudder 方向</p>		



- Check if the screws are firmly tightened.
- Check if the transmitter and receivers are fully charged.
- 再次確認→螺絲是否鎖固?
- 發射器和接收器電池是否足夠。



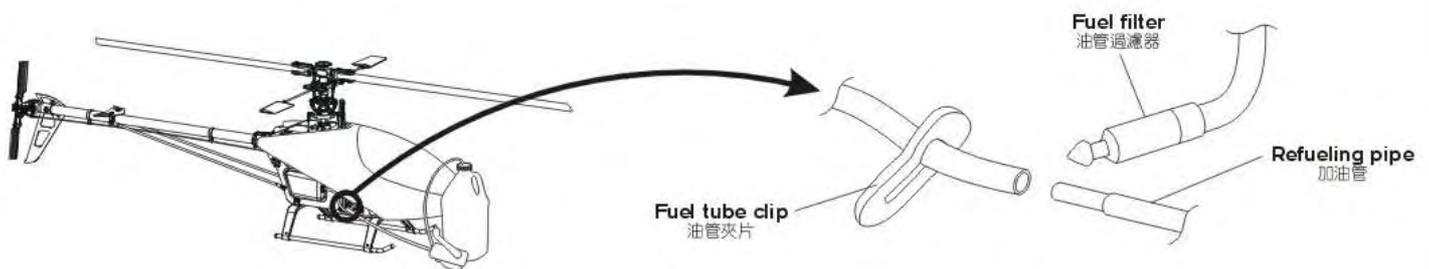
If there are other radio control aircraft at the field, make sure to check their frequencies and tell them what frequency you are using. Frequency interference can cause your model, or other models to crash and increase the risk of danger.

假使飛行場有其他遙控飛機，請確認他們的頻率，並告知他們你正在使用的頻率，相同的頻率會造成干擾導致失控和大大地增加風險。

Engine start preparation 引擎啟動事前準備

Separate the fuel tube and the joint and start to refuel. Please be careful to avoid the dust entering the tube. When the fuel tank is full, please stop refueling and reconnect the tube and the joint.

將油管與其接頭分離，並開始補給燃料。請小心避免灰塵砂粒進入管子內。當油箱已滿，請停止補給燃料並再將管子和接頭接合。



Engine start and stop 引擎啟動和熄火

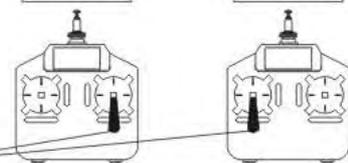


First check to make sure no one else is operating on the same frequency. Then place the throttle stick at lowest position and turn on the transmitter.

首先確認附近沒有其他相同頻率的使用，然後打開發射器將油門搖桿推到低點。

Mode 1

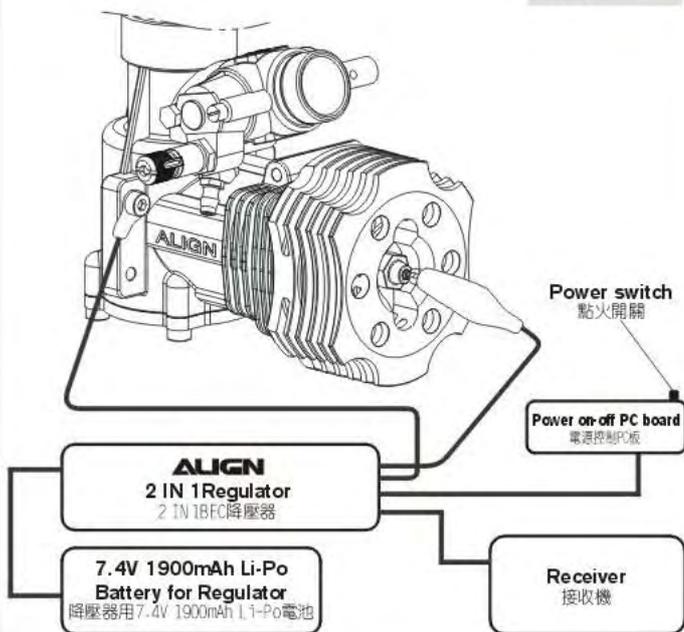
Mode 2



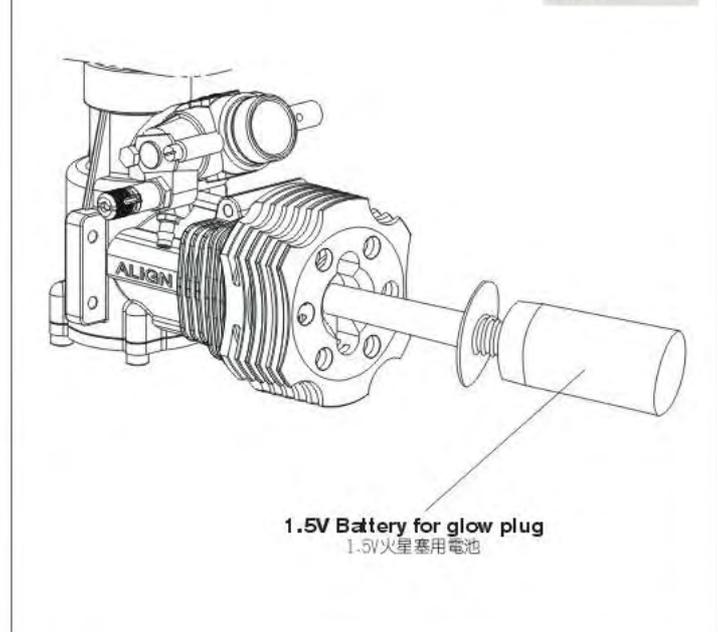
Check if the throttle stick is set at the lowest position. 確認油門搖桿是在最低的位置。

Glow plug ignition method 火星塞點火方式

Method 1
方式一



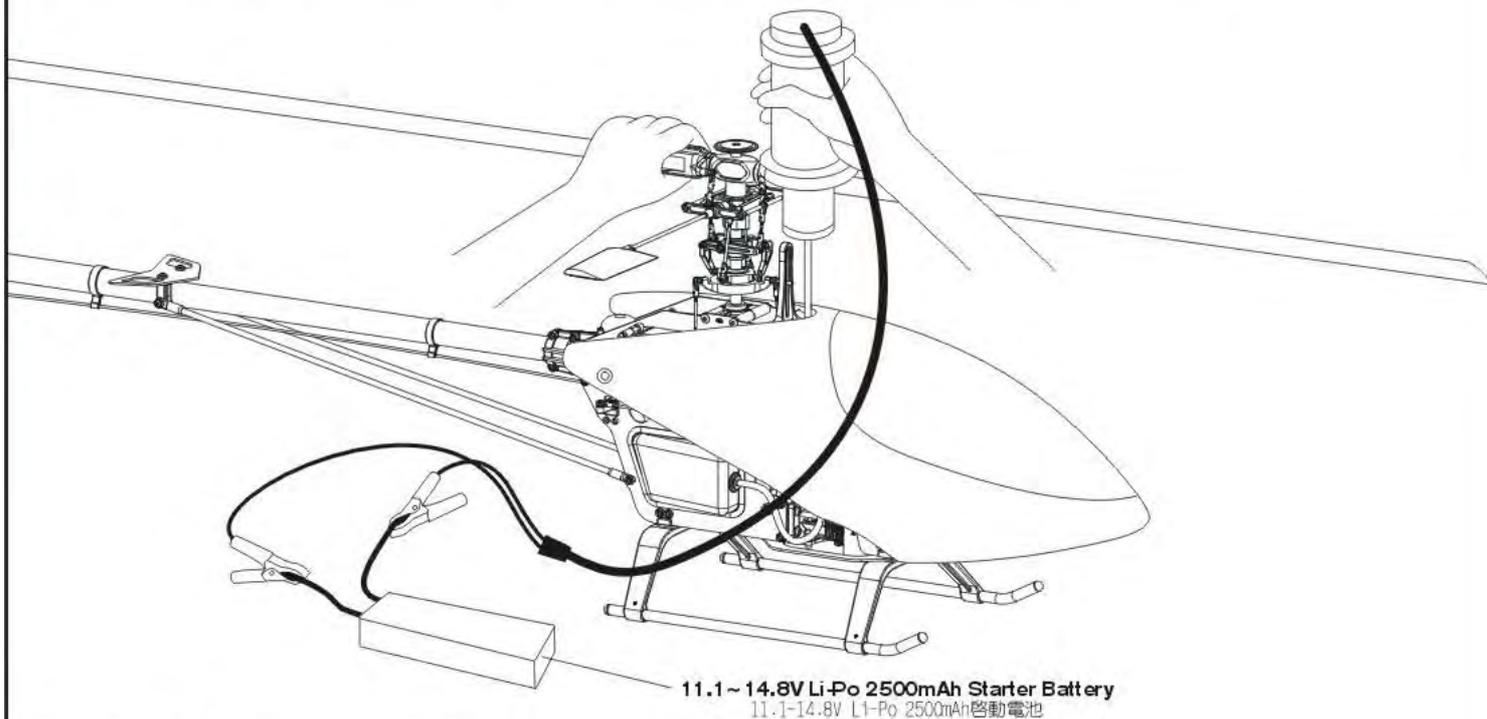
Method 2
方式二



Engine start and stop 引擎啟動和熄火

1. Connect 11V battery to the starter and check the rotation direction. Insert the starter shaft into the starter completely.
2. Tightly hold the main rotor head, and insert the starter shaft into the starter coupling. Then turn the starter to start the engine.
3. When the engine starts, stop the starter and remove it from the starter coupling. Please keep holding the main rotor head tightly.
4. Hold the main rotor head tightly, and turn off the power of glow plug or remove the power.
5. Still hold the main rotor head tightly, turn throttle trim at the lowest position, and keeping engine in lowest regular running.
6. Still hold the main rotor head tightly, and check if the engine stops when the throttle stick and trim is set at the lowest position. If engine doesn't stop, please turn the Fuel Clip into lock position.

1. 將啟動電池連接到啟動器並確認其轉動方向。將啟動軸完全插入啟動器。
2. 緊緊抓住主旋翼頭部，將啟動軸插入引擎啟動頭並以啟動器啟動引擎。
3. 當引擎啟動後，停止啟動器並將啟動頭上的啟動器移開。請保持繼續緊緊抓住主旋翼頭部。
4. 仍然緊緊抓住主旋翼頭部，將火星塞點火電池關閉或移開。
5. 仍然緊緊抓住主旋翼頭部，請保持油門於最低點時，引擎能保持於低怠速下正常運轉。
6. 欲將引擎熄火時，只需將油門搖桿旁的油門微調至最低即可。如果引擎仍無法停止，請將油管夾片推至鎖定位置，關閉油料供給。



Main rotor adjustments 主旋翼雙槳平衡調整



Tracking adjustment is very dangerous, so please keep away from the helicopter at a distance of at least 10m.
調整軌跡非常危險，請於距離飛機最少10公尺的距離。

1. Before adjusting, apply a red piece of tape on one blade, or paint a red stripe with a marker or paint to identify on blade.
2. Raise the throttle stick slowly and stop just before the helicopter lifts-off ground. Look at the spinning blades from the side of the helicopter.
3. Look at the path of the rotor carefully. If the two blades rotate in the same path, it does not need to adjustment. If one blade is higher or lower than the other blade, adjust the tracking immediately.
4. Linkage rod (A): Regular pitch trim (For large variations). Linkage rod (C): Slight pitch trim (For slight variations).

1. 調整前先在其中一支主旋翼的翼端，貼上有顏色的貼紙或畫上顏色記號，方便雙槳調整辨識。
2. 慢慢的推起油門搖桿到高點並且停止，在飛機離開地面前，從飛機側邊觀察主旋翼轉動。
3. 仔細觀察旋翼軌跡(假如兩支旋翼移動都是相同軌跡，則不需要調整;可是如果一支旋翼較高或較低產生“雙槳”的情形時，則必須立刻調整軌跡)。
4. 連桿(A)為一般螺距調整(雙槳翼大時使用)。連桿(C)為螺距微調調整(雙槳微幅差異時使用)。

A. When rotating, the blade with higher path means the pitch too big. Please lengthen pitch linkage rod (A) for regular trim or shorten linkage rod (C) for slight pitch trim.

B. When rotating, the blade with lower path means the pitch too small. Please shorten pitch linkage rod (A) for regular trim or lengthen linkage rod (C) for slight pitch trim.

- A. 旋翼轉動時較高軌跡的主旋翼表示螺距(PITCH)過大，請調長連桿(A)修正，或需要更小的螺距微調時，請調短連桿(C)修正。
- B. 旋翼轉動時較低軌跡的主旋翼表示螺距(PITCH)過小，請調短連桿(A)修正，或需要更小的螺距微調時，請調長連桿(C)修正。



Incorrect tracking may cause vibrations. Please repeat adjusting the tracking to make sure the rotor is correctly aligned. After tracking adjustment, please check the pitch angle is approx. 5° when hovering.

不正確的旋翼軌跡會導致震動，請不斷重複調整軌跡，使旋翼軌跡精準正確。
在調整軌跡後，確認一下Pitch角度在停旋時應為大約5°。





- ◎ Make sure that no one or obstructions in the vicinity.
- ◎ You must first practice hovering for flying safety. This is a basic flight action. (Hovering means keeping the helicopter in mid air in a fixed position)
- ◎ 確認鄰近地區沒有人和障礙物。
- ◎ 為了飛行安全，你必須先練習停旋，這是飛行動作的基礎（停旋：直昇機滯留空中並保持固定位置）。

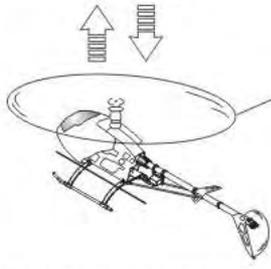
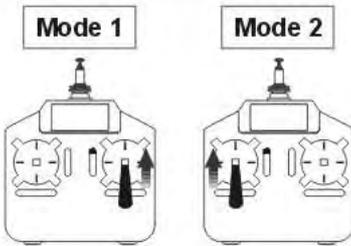


- ◎ Please stand approximately 10m diagonally behind the helicopter.
- ◎ 練習時，請站在直昇機後方10公尺。

Beginner may install a training landing gear to avoid any crash caused by offset effect while landing.
 必要時初學者可以在腳架下方安裝練習架，可避免降落時因重心偏移導致主旋翼或直昇機損毀。

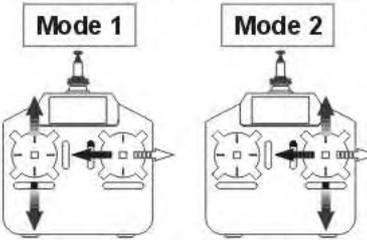


STEP 1 THROTTLE CONTROL PRACTICE 油門控制練習

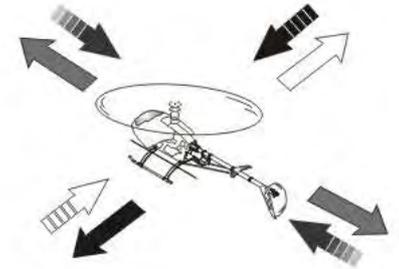


- ◎ When the helicopter begins to lift-off the ground, slowly reduce the throttle to bring the helicopter back down. Keep practicing this action until you control the throttle smoothly.
- ◎ 當直昇機開始離地時，慢慢降低油門將飛機降下。持續練習飛機從地面上升和下降直到你覺得油門控制很順。

STEP 2 AILERON AND ELEVATOR CONTROL PRACTICE 副翼和升降控制練習



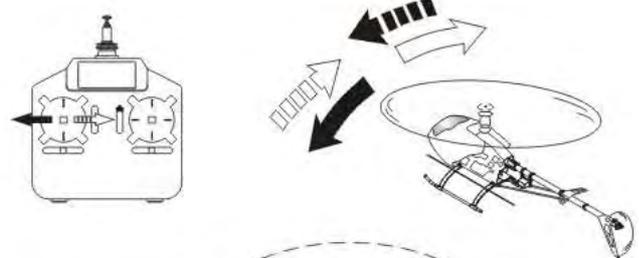
1. Raise the throttle stick slowly.
 2. Move the helicopter in any direction back, forward, left and right, slowly move the aileron and elevator sticks in the opposite direction to fly back to its original position.
1. 慢慢升起油門搖桿。
 2. 使直昇機依指示：移動向後/向前/向左/向右，慢慢的反向移動副翼和升降搖桿並將直昇機開回到原來位置。



- ◎ If the nose of the helicopter moves, please lower the throttle stick and land the helicopter. Then move your position diagonally behind the helicopter 10m and continue practicing.
- ◎ If the helicopter flies too far away from you, please land the helicopter and move your position behind 10m and continue practicing.
- ◎ 當直昇機機頭偏移時，請降低油門並且降落，然後移動自己的位置到直昇機的正後方10公尺再繼續練習。
- ◎ 假如直昇機飛離你太遠，請先降落直昇機，並到直昇機後10公尺再繼續練習。

STEP 3 RUDDER CONTROL PRACTICING 方向舵操作練習

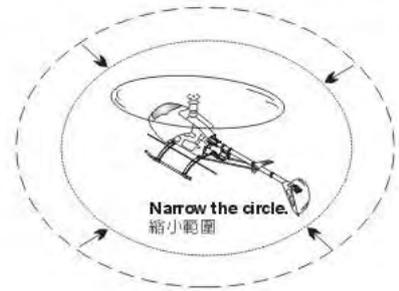
1. Slowly raise the throttle stick.
 2. Move the nose of the helicopter to right or left, and then slowly move the rudder stick in the opposite direction to fly back to its original position.
1. 慢慢升起油門搖桿。
 2. 將直昇機機頭移動左或右，然後慢慢反向移動方向舵搖桿並將直昇機飛回原本位置。



STEP 4

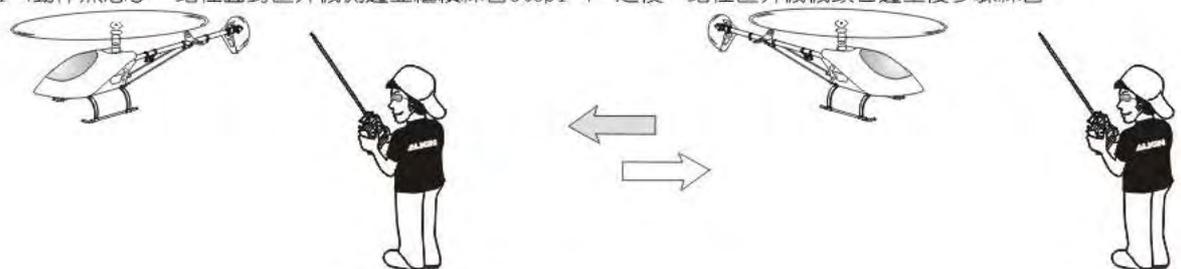
After you are familiar with all actions from Step1 to 3, draw a circle on the ground and practice within the circle to increase your accuracy.
 當你覺得 step1-3 動作熟悉了，在地上畫圈圈並在這個圈圈的範圍內練習飛行，以增加你操控的準確度。

- ◎ You can draw a smaller circle when you get more familiar with the actions.
- ◎ 當你更加習慣操作動作，你可以畫更小的圈圈。



STEP 5 DIRECTION CHANGE AND HOVERING PRACTICE 改變直昇機方向和練習停旋

After you are familiar with Step1 to 4, stand at side of the helicopter and continue practicing Step1 to 4. Then repeat the Step1 to 4 by standing right in front of the helicopter.
 當你覺得step1-4動作熟悉了，站在面對直昇機側邊並繼續練習step1-4。之後，站在直昇機機頭右邊重複步驟練習。



ADJUSTMENT OF EACH TRIM 飛行動作微調

Slowly raise the throttle stick and just as the helicopter lift-off the ground, you can use the trim to correct the action if the helicopter leans in a different direction.

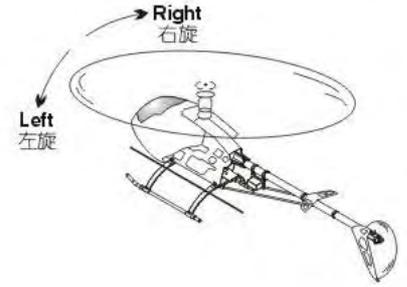
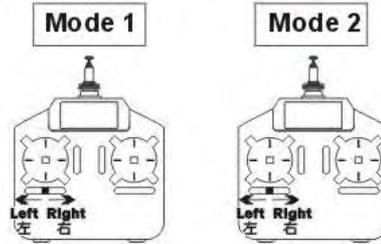
慢慢升起油門搖桿，當直昇機剛剛離開地面時，若直昇機傾向不同方向，可使用微調修正動作。

1. Adjustment of rudder trim 調整方向舵微調

Just before the helicopter lift-off, the nose lean left/right...

When leans right, adjust the trim to left side.
When leans left, adjust the trim to right side.

在直昇機正要起飛時，機頭朝左/右方向偏移...
向右偏移時，微調向左調整。
向左偏移時，微調向右調整。

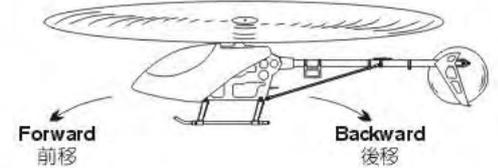
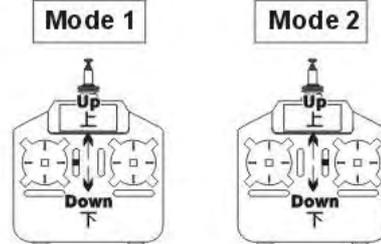


2. Adjustment of elevator trim 調整升降舵微調

Just before the helicopter lift-off, the nose lean forward/backward...

When leans forward, adjust the trim down.
When leans backward, adjust the trim up.

在直昇機正要起飛時，機頭朝前/後方向偏移...
向前偏移時，微調向下調整。
向後偏移時，微調向上調整。

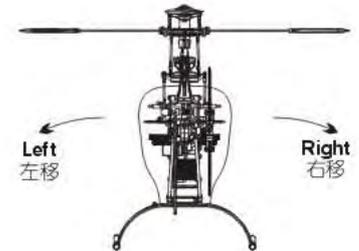
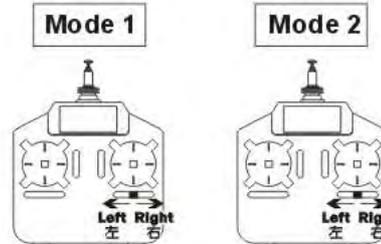


3. Adjustment of Aileron trim 調整副翼微調

Just before the helicopter lift-off, the body lean left/right...

When leans right, adjust the trim to left side.
When leans left, adjust the trim to right side.

在直昇機正要起飛時，機身朝左/右方向偏移...
向右偏移時，微調向左調整。
向左偏移時，微調向右調整。

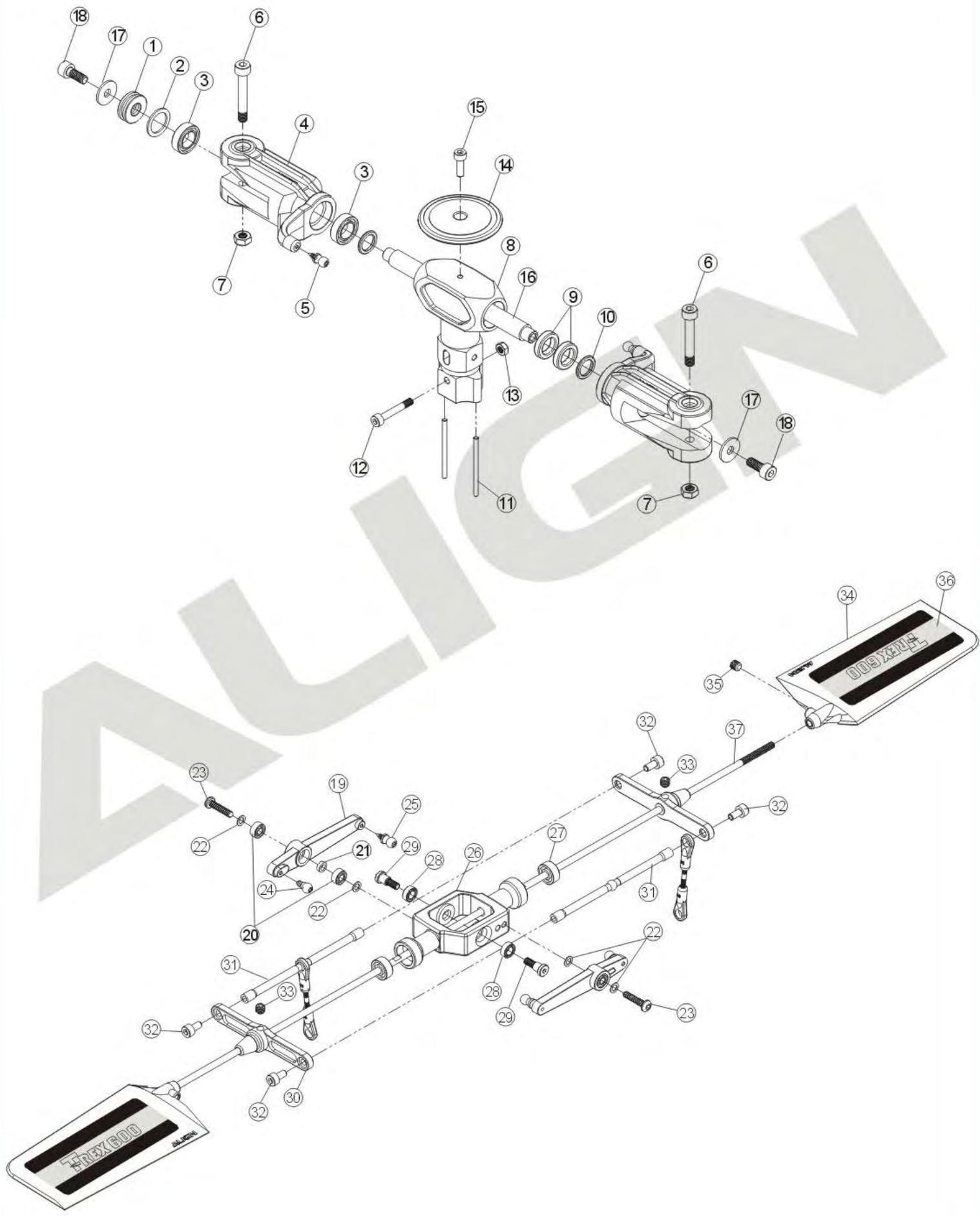


TROUBLE SHOOTING DURING FLIGHT 如何排除飛行中的狀況

	Situation 狀況	Cause 原因	Way to deal 對策
Blade Tracking 雙槳平衡	Out of tracking 雙槳	Adjustment of pitch rod has not been done. PITCH連桿長度調整不平均	Adjust the length of linkage rod(A) → Regular trim Adjust the length of linkage rod(C) → Slight trim 調整連桿(A)長度 → 一般調整 調整連桿(C)長度 → 微調整
During Hovering 停旋	Low rotation of the rotor 主旋翼轉速偏低	★ Pitch of main blade is high. ★ 主旋翼的PITCH偏高 ★ Throttle curve is too low during hovering. ★ 停旋點油門曲線過低	★ Lower the pitch about 4-5 during hovering(The rotation should be about 1,600rpm during hovering). ★ 調低Pitch停旋Pitch約4-5 (停旋時主旋翼需為約1600RPM) ★ Heighten the throttle curve during hovering. ★ 調高停旋點油門曲線
	High rotation of the rotor 主旋翼轉速偏高	★ Pitch of main blade is low. ★ 主旋翼的PITCH偏低 ★ Throttle curve is too high during hovering. ★ 停旋點油門曲線過高	★ Adjust the pitch rod (A) (The rotation should be about 1,600rpm during hovering). ★ 調整連桿(A) (停旋時主旋翼需為約1600RPM) ★ Lower the throttle curve during hovering. ★ 調低停旋點油門曲線
Sensitivity of the gyro 陀螺儀敏感度	The tail leans to one side during hovering, or when trim the rudder and return to the neutral, the tail lags and cannot stay in a control position. 停旋時尾翼向某一邊偏移，或撥動方向舵並向復到中立點時，尾翼產生延遲，無法停頓在所控制位置上。	★ Failure setting of tail neutral point. ★ 尾中立點設定不當 ★ The sensitivity of the gyro is low. ★ 陀螺儀敏感度偏低	★ Reset tail neutral point. ★ 重設尾中立點 ★ Increase the sensitivity. ★ 增加敏感度
	The tail wags left and right during flight at hovering or full speed. 停懸或全油門時尾翼左右來回快速搖擺。	The sensitivity of the gyro is high. 陀螺儀敏感度偏高	Decrease the sensitivity. 降低敏感度

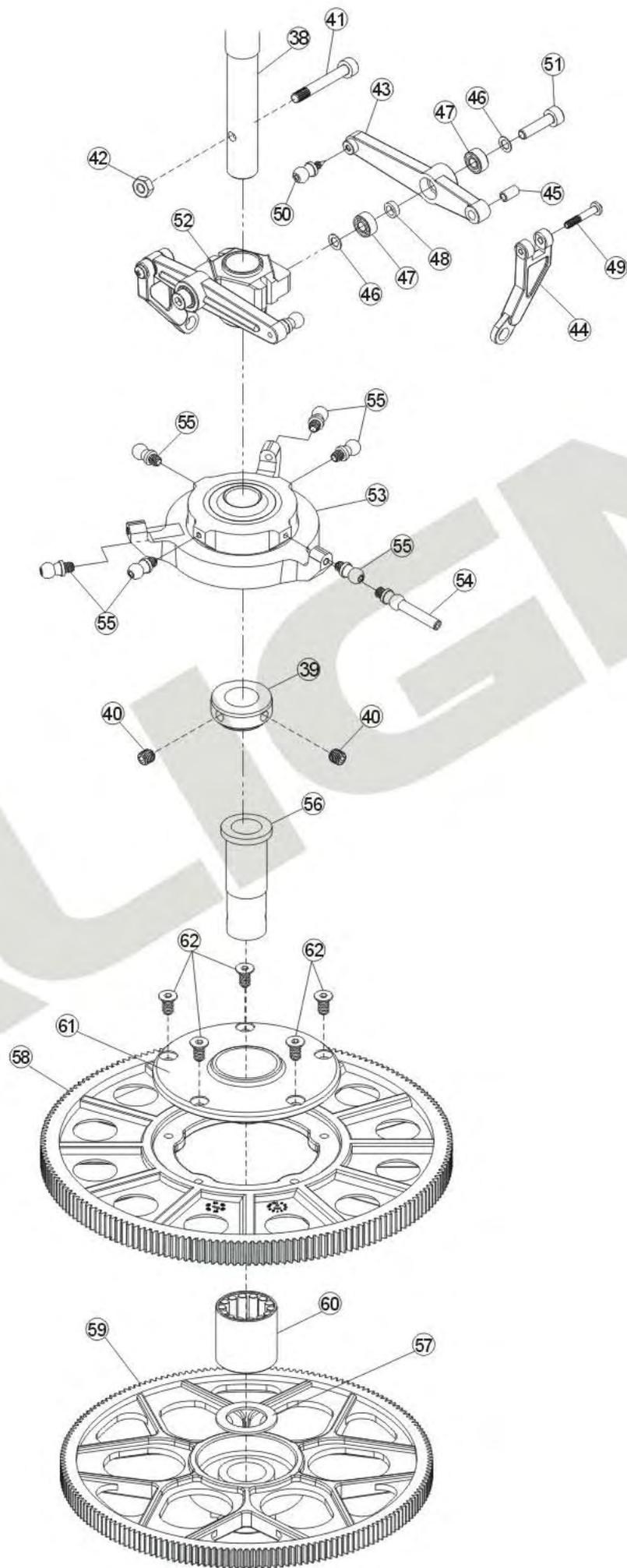
※ If the problem is still there even after tried above, stop flying and contact with your seller.

※ 在做完以上調整後，仍然無法改善情況時，應立即停止飛行並連絡您的經銷商。

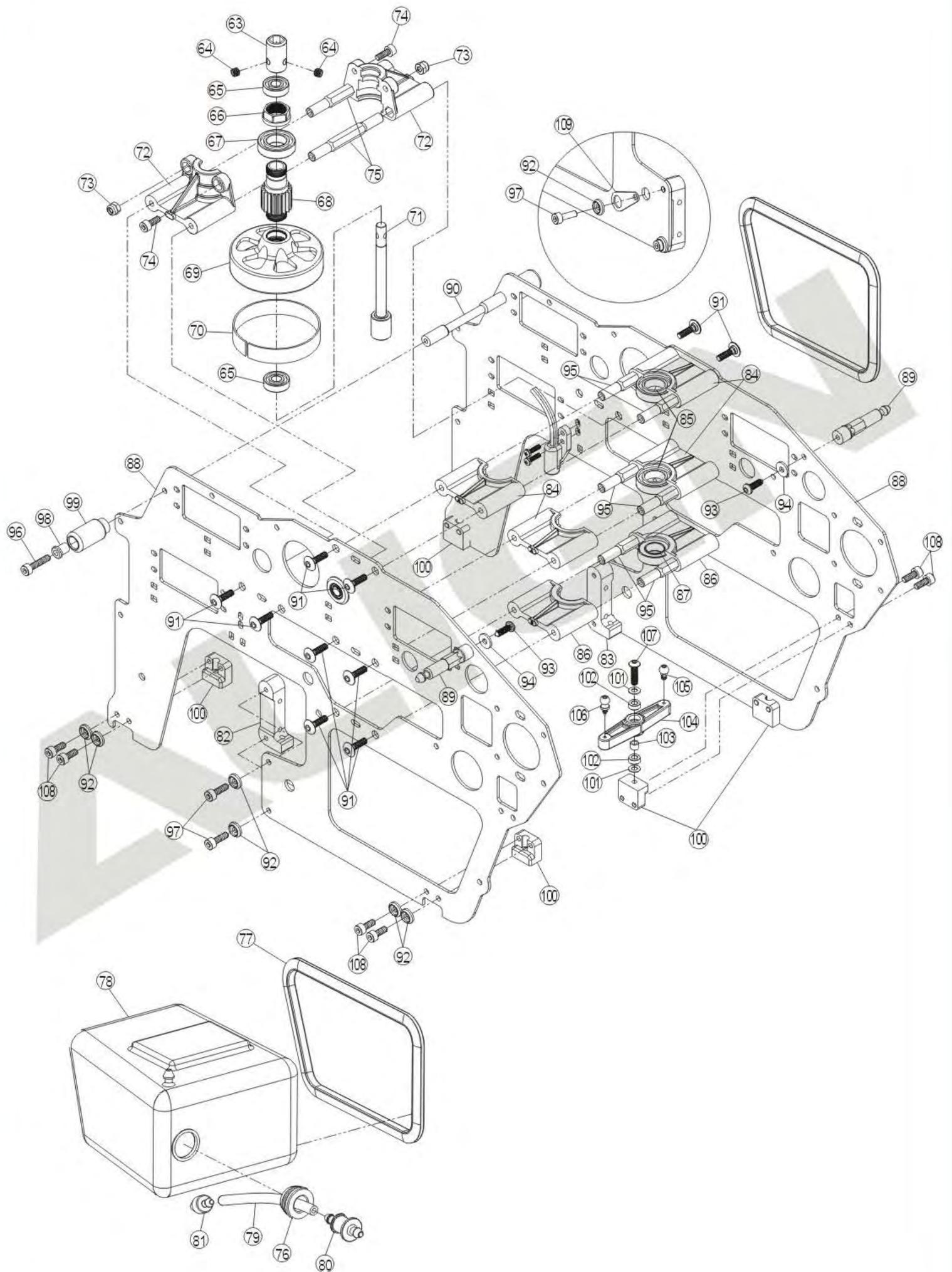


No.	Code No.	Name	Specification	Quantity	Remarks
	H60001	Thrust Bearing / 止推軸承		1	
1	50H009	Thrust bearing 止推軸承	φ 6x φ 14x5mm	2	
2	50H008	Washer 華司	φ 10.25x φ 14x0.8mm	2	
	H60002	Bearing / 軸承MR148ZZ		1	
3	50HMR148ZZ	Bearing MR148ZZ MR148ZZ軸承	φ 8x φ 14x4mm	4	
	H60003	Main Rotor Holder / 主旋翼夾座組		1	
4	50H002-1	Main rotor holder 主旋翼夾座		2	
5	50H145	Linkage ball B1 球頭B1	φ 4.75x12.77mm	2	
6	T64027	Socket collar screw 圓頭內六角軸套螺絲	M4x27mm	2	
7	N14001	M4 Nut M4防鬆螺帽	M4	2	
	H60004	Metal Main Rotor Housing / 金屬主旋翼固定座組		1	
8	50H001	Metal main rotor housing 金屬主旋翼固定座		1	
9	50H005	Damper rubber-black 80° 橫軸緩衝墊圈-黑80°	φ 8.1x φ 13.1x3.2mm	4	
9-1	50H168	Damper rubber-gray 70° 橫軸緩衝墊圈-灰70°	φ 8.1x φ 13.1x3.2mm	4	
10	50H006	Spacer 橫軸套圈	φ 8x φ 11.5x1.3mm	2	
11	50H136	Pin 定位插銷	φ 2x32mm	2	
12	T64027	Socket collar screw 圓頭內六角軸套螺絲	M3x22mm	1	
13	N14001	M3 Nut M3防鬆螺帽	M3	1	
	H60005	Metal Head Stopper / 金屬旋翼頭制動器組		1	
14	50H164	Metal head stopper 金屬旋翼頭制動器		1	
15	T63010	Socket screw 圓頭內六角螺絲	M3x10mm	1	
	H60006	Feathering Shaft / 橫軸		1	
16	50H003-2	Feathering shaft 橫軸	φ 6x φ 8x93.2mm	2	
17	50H010	Washer 橫軸華司	φ 4x φ 12x1mm	2	
18	T64010	Socket screw 圓頭內六角螺絲	M4x10mm	2	
	H60007	SF Mixing Arm / SF控制搖臂組		1	
19	50H025-1	SF Mixing arm SF控制搖臂		2	
20	50H683ZZ	Bearing 683ZZ 683ZZ軸承	φ 3x φ 7x3mm	4	
21	50H024	Collar 擺臂軸承襯套	φ 3x φ 4.8x1.5mm	2	
22	50H022-1	Washer 華司	φ 3x φ 5x0.3mm	4	
23	T63005	Socket button head screw 半圓頭內六角螺絲	T3x14mm	2	
24	50H144	Linkage ball A1 球頭A1	φ 4.75x8.68mm	2	
25	50H145	Linkage ball B1 球頭B1	φ 4.75x12.77mm	2	
	H60008	Metal SF Mixing Arm / 金屬SF控制搖臂組		1	
23	S23014-2	Socket button head screw 半圓頭內六角螺絲	T3x14mm	2	
26-1	50H012	Linkage ball A3 球頭A3	φ 4.75x8.68mm	2	
26-2	50H043	Linkage ball B3 球頭B3	φ 4.75x9.77mm	2	
20	50H683ZZ	Bearing 683ZZ 683ZZ軸承	φ 3x φ 7x3mm	4	
21	50H024	Collar 擺臂軸承襯套	φ 3x φ 4.8x1.5mm	2	
22	50H022-1	Washer 華司	φ 3x φ 4.8x0.3mm	4	
	H60009	Flybar Seesaw Holder / 平衡桿固定座組		1	
26	50H016	Flybar seesaw holder 平衡桿固定座		1	
27	50H623ZZ	Bearing 623ZZ 623ZZ軸承	φ 3x φ 10x4mm	2	
28	50HMR74ZZ	Bearing MR74ZZ MR74ZZ軸承	φ 4x φ 7x2.5mm	2	
29	50H119-1	M3 collar screw M3雙層軸套螺絲	M3x11.65mm	2	
	H60010	Metal Flybar Control Arm / 金屬平衡翼控制臂組		1	
30	50NH002	Metal flybar control arm 金屬平衡翼控制臂		2	
31	50H018-1	Flybar control rod 平衡翼球型控制球桿	φ 3.4x71.2mm	2	
32	T63005	Socket screw 圓頭內六角螺絲	M3x5mm	4	
33	T74004	M4 Set screw M4止洩螺絲	M4x4mm	2	
	H60011	Flybar Paddle / 平衡翼組		1	
34	50NH001	Flybar paddle 平衡翼17g		2	
35	T73006	M3 Set screw M3止洩螺絲	M3x6mm	2	
36	D03958	Sticker 平衡翼貼紙		2組	
	H60012	Flybar Rod / 平衡翼桿		1	
37	50H028-1	Flybar rod 平衡翼桿	φ 3x100mm	2	

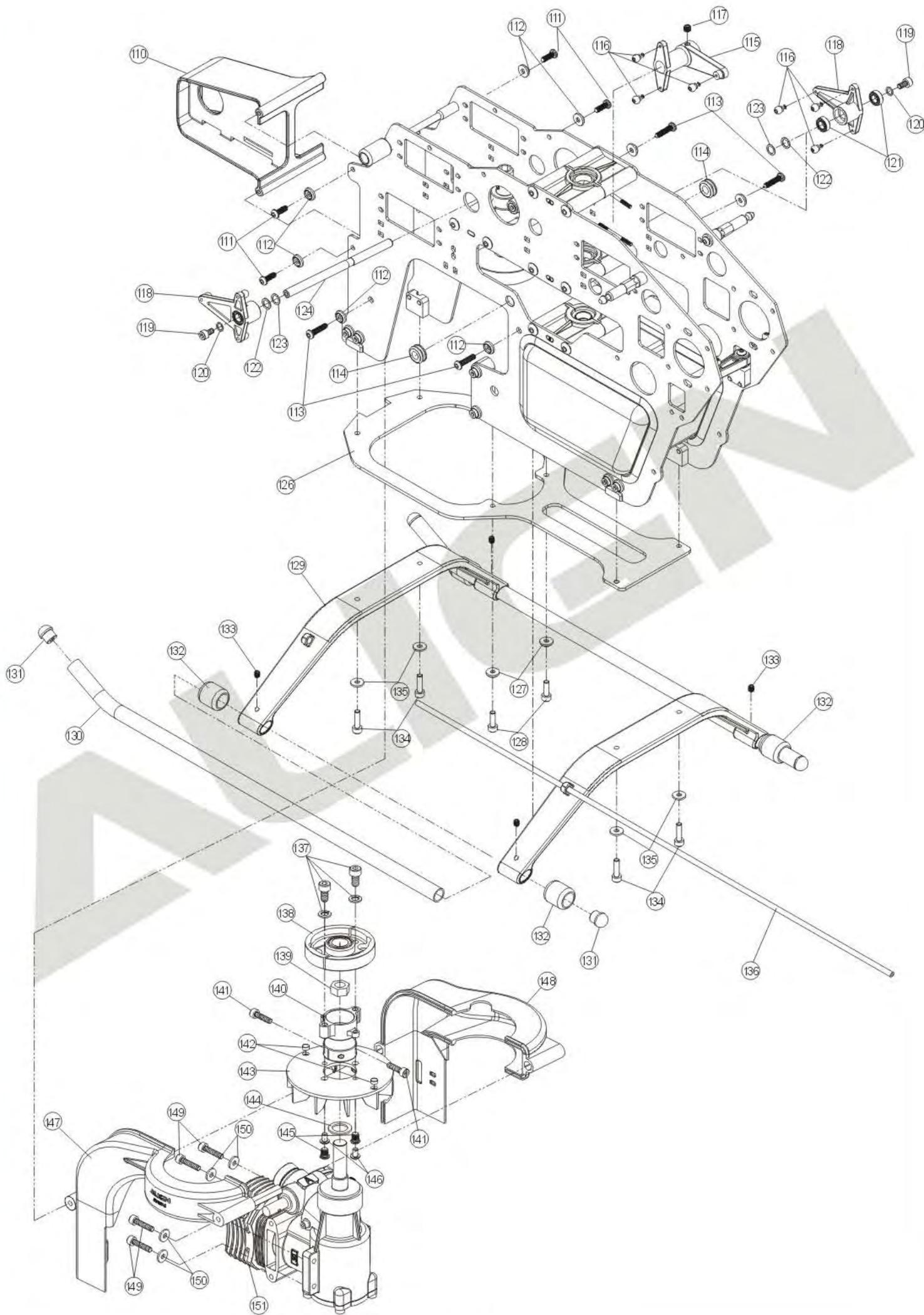
Specifications, contents of parts and availability are subject to change, Align RC is not responsible for inadvertent errors in this publications. 本說明書內的材質、規格或零件包裝之內容物僅供參考。本公司將不對此印刷物之異動負責，也無法主動通知消費者，任何更新或異動，請以亞拓網頁為主。



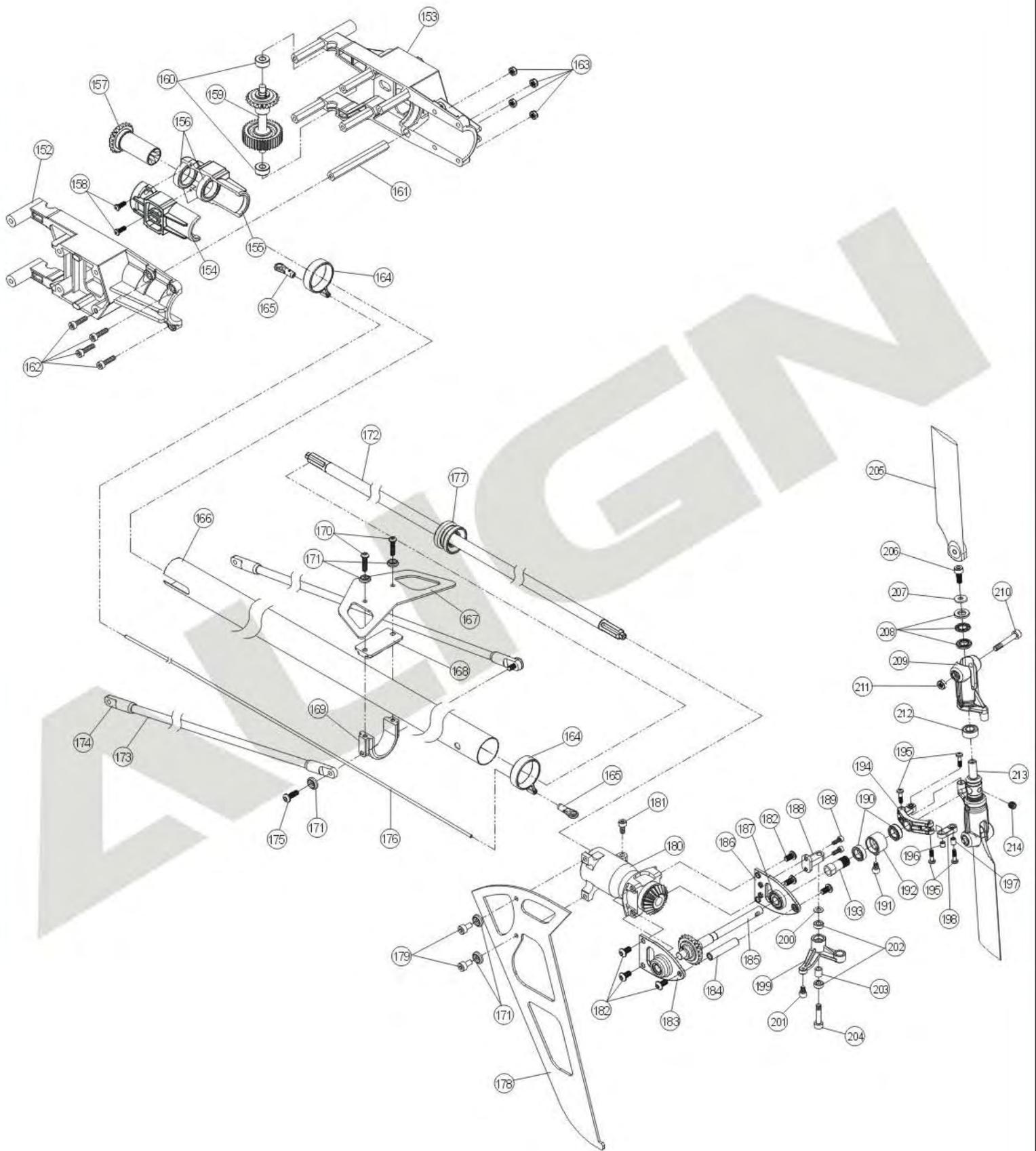
No.	Code No.	Name	Specification	Quantity	Remarks
	H60013	Main Shaft/主軸組		1	
38	50H047	Main shaft 主軸	φ 10x201x29.3mm	1	
39	50H045	Lock collar 主軸固定環	φ 10x φ 15x7mm	1	
40	T74004	M4 Set screw M4止洩螺絲	M4x4mm	2	
41	T63020	Socket collar screw 圓頭內六角軸套螺絲	M3x20mm	1	
42	N10030	M3 Nut M3防鬆螺帽	M3	1	
	H60014	Washout Control Arm/穩定控制組		1	
43	50H031-1	Washout control arm 穩定控制搖臂		2	
44	50H035	Radius arm Radius連桿		2	
45	50H126	Collar 穩定控制搖臂銅套	φ 2x φ 3x5.1mm	2	
46	50H022-1	Washer 華司	φ 3x φ 4.8x0.3mm	4	
47	50H683ZZ	Bearing 683ZZ 683ZZ軸承	φ 3x φ 7x3mm	4	
48	50H024	Collar 擺臂軸承襯套	φ 3x φ 4.8x1.5mm	2	
49	T12012-2	Collar Screw 軸套螺絲	M2x12mm	2	
50	50H145	Linkage ball B1 球頭B1	φ 4.75x12.59mm	2	
	H60015	Metal Washout Base/金屬向位器		1	
51	T63012	Socket screw 圓頭內六角螺絲	M3x12mm	2	
52	50H147	Metal washout base 金屬向位器		1	
	H60017-1	CCPM Metal Swashplate/金屬CCPM十字盤組		1	
53	50H040-1	CCPM Metal Swashplate 金屬CCPM十字盤組		1	
54	50H041-1	Long linkage ball 導板長球頭	φ 4.75x24.59mm	1	
55	50H044	Linkage ball B3 球頭B3	φ 4.75x9.59mm	6	
	H60018	One-way Bearing Shaft/單向軸承套		1	
56	50B048-1	One-way bearing shaft 單向軸承套	φ 9x φ 12x34.55mm	1	
57	50B050	Washer 單向軸承華司	φ 11.5x φ 18x0.8mm	1	
	H60019	Main Drive Gear 170T/170T 主齒輪		1	
58	50B158	Main drive gear(170T) 主齒盤(170T)		1	
	H60020	Autorotation Tail Drive Gear/尾驅動主齒		1	
59	50B054	Autorotation tail drive gear(180T) 尾驅動主齒(180T)		1	
	H60021	One-way Bearing /單向軸承		1	
60	50B049-1	One-way bearing HF1216 單向軸承HF1216	φ 12x φ 18x16mm	1	
	H60022	Main Gear Case/主齒中心座		1	
61	50B051-1	Main gear case 主齒中心座	φ 55x14.5mm	1	
62	S83007	Hex socket self tapping screw 圓頭內六角自攻螺絲	T3x7mm	5	



No.	Code No.	Name	Specification	Quantity	Remarks
63	50NB010	Starter coupling 六角啓動頭	φ 8x φ 10x18mm	1	
64	T74004	M4 Set screw M4止洩螺絲	M4x4mm	2	
65	50NB695ZZ	Bearing 695ZZ 695ZZ軸承	φ 5x φ 13x4mm	2	
66	50NB007	Clutch nut 離合器齒輪螺帽	φ 14x6mm	1	
67	50B6800ZZ-1	Bearing 6800ZZ 6800ZZ軸承	φ 10x φ 19x5mm	1	
68	50NB011	Clutch gear 離合器齒輪	φ 15.4x φ 7x31.5mm	1	
69	50NB006	Clutch bell 600N離合器輪	φ 44x φ 47x20mm	1	
70	50NB033	Clutch liner 離合器來令片	0.8x9x136mm	1	
71	50NB009	Clutch/Start shaft 啓動軸	φ 7.5x φ 10x70.5mm	1	
72	50NB008	Clutch bearing block 離合器軸承座		2	
73	N10030	M3 Nut M3防鬆螺帽	M3xT2	2	
74	T63008	Socket screw 圓頭內六角螺絲	M3x8mm	2	
75	50NB035	Hex mounting bolt 六角鋁柱	φ 5x49mm	2	
76	50NB030	Grommet 油箱接頭墊圈	φ 8.4x φ 16.8x9mm	1	
77	50NB031	Fuel tank guard 油箱墊圈		2	
78	50NB023	Fuel tank 油箱		1	
79	50NB041	Fuel tube 油管	φ 2.5x φ 4x70mm	1	
80	50NB026	Fuel tank nipple 油箱接頭		1	
81	50NB027	Fuel tank sinker 油管接頭		1	
82	50NB020	Engine mount (L) 引擎座(左)	39.3x16x8.5mm	1	
83	50NB021	Engine mount (R) 引擎座(右)	39.3x16x8.5mm	1	
84	50NB003	Upper bearing block (Mark A) 主軸上軸承固定座	刻A	4	
85	50B6800ZZ-1	Bearing 6800ZZ 6800ZZ軸承	φ 10x φ 19x5mm	2	
86	50NB004	Lower bearing block (Mark B) 主軸下固定座	刻B	2	
87	50B689ZZ-1	Bearing 689ZZ 689ZZ軸承	φ 9x φ 17x4mm	1	
88	50NB005	Main frames (R/L) 左右主體側板		2	
89	50B121	Canopy mounting bolt 機頭罩固定柱		2	
90	50NB025	Frame mounting bolt 機身鋁柱		2	
91	T53010-3	Socket button head collar screw 半圓頭內六角軸套螺絲	M3x10mm	16	
92	50B072	M3 Specialty washer M3特殊華司	φ 2x φ 8x2mm	14	
93	S93010	Socket button head self tapping screw 半圓頭內六角自攻螺絲	T3x10mm	2	
94	W10030	M3 washer M3華司	φ 3x φ 8x1mm	2	
95	50NB035	Aluminum hexagonal bolt 六角鋁柱		6	
96	T53014-2	Socket screw 圓頭內六角螺絲	M3x14mm	2	
97	T63010	Socket screw 圓頭內六角螺絲	M3x10mm	4	
98	50NB038	Canopy support 機頭罩支撐柱	φ 3x φ 5x φ 6.5x7.3mm	2	
99	50NB039	Canopy spacer 機頭罩墊圈	φ 4.8x φ 11x22mm	2	
100	50NB019	Frame mounting block 機身固定塊	14x12.5x8mm	5	
101	50H022-1	Washer 華司	φ 3x φ 4.8x0.3mm	2	
102	50TMR63ZZ	Bearing MR63ZZ MR63ZZ軸承	φ 4x φ 7x2.5mm	2	
103	50NB034	Collar 尾控制臂鋁套	φ 3x φ 4.4x3mm	1	
104	50NB024	Tail control arm 尾控制臂		1	
105	50H144	Linkage ball A1 球頭A1	φ 4.75x8.68mm	1	
106	50H145	Linkage ball B1 球頭B1	φ 4.75x12.77mm	1	
107	T53012	Socket button head screw 半圓頭內六角螺絲	M3x12mm	1	
108	T63008	Socket screw 圓頭內六角螺絲	M3x8mm	10	
109	50NB032	Glow plug plate 火星塞點火器接地板	23.73x0.8mm	1	



No.	Code No.	Name	Specification	Quantity	Remarks
110	50NB017	Receiver mount 接收器座	90x64x50mm	1	
111	S93010	Socket button head self tapping screw 半圓頭內六角自攻螺絲	T3x10mm	4	
112	50B072	M3 Specialty washer M3特殊華司	φ3xφ8x2mm	8	
113	S93014	Socket button head self tapping screw 半圓頭內六角自攻螺絲	T3x10mm	4	
114	50NB037	Fuel tube cap 油管保護套	φ5.2xφ7xφ11x4.8mm	2	
115	50B068-1	Elevator lever 後控制臂	M3孔x2	1	
116	50H144	Linkage ball A1 球頭A1	φ4.75x8.68mm	9	
117	T74004	M4 Set screw M4止洩螺絲	M4x4mm	1	
118	50B056	Aileron lever 左右控制搖臂		2	
119	T63006	Socket screw 圓頭內六角螺絲	M3x6mm	2	
120	50H022-1	Washer 華司	φ3xφ5.5x0.3mm	2	
121	50BMR95ZZ	Bearing MR95ZZ MR95ZZ軸承	φ5xφ9x3mm	4	
122	50B058	Washer 華司	φ5xφ7x0.5mm	2	
123	50B059	Washer 華司	φ5xφ7x0.2mm	2	
124	50NB036	Control shaft 連動桿	φ5x88mm	1	
126	50NB022	CF Bottom bracket 碳纖底板	2mm	1	
127	W10030	M3 Washer M3華司	φ3xφ8x1mm	2	
128	T63010	Socket screw 圓頭內六角螺絲	M3x10mm	2	
129	50F179	Landing skid 腳架	300x60.25mm	2	
130	50F083	Skid pipe 腳架鋁管	φ9x310mm	2	
131	50F084	Skid pipe end cap 腳架鋁管保護套		4	
132	50F130	Landing skid nut 腳架墊圈		4	
133	T73004	M3 Set screw M3止洩螺絲	M3x4mm	4	
134	T63012	Socket screw 圓頭內六角螺絲	M3x12mm	4	
135	W10030	M3 Washer M3華司	φ3xφ8x1mm	4	
136	50F128	Antenna pipe 天線管	φ2xφ3.9x500mm	1	
137	T64008-1	Socket head spring screw 圓頭內六角彈簧螺絲	M4x8mm	2	
138	50NB016	離合器	φ35xφ42x12mm	1	
139		M6 Net(supplied with 50 engine) 50引擎隨附M6螺帽	M6	1	
140	50NB012	Engine fan mount 引擎風扇座	φ9x19.97x26mm	1	
141	T52012	Socket screw 圓頭內六角螺絲	M2x12mm	2	
142		Magnet(Governor sensor) 定速感應磁鐵		2	Option Parts
143	50NB013	Engine fan 引擎風葉	φ60xφ26x2mm	1	
144		Washer(supplied with 50 engine) 50引擎隨附華司	φ9.5xφ14x1mm	1	
145	T54005	Socket butt on hrad screw 半圓頭內六角螺絲	M4x5mm	2	
146	T53005-1	Socket butt on hrad screw 半圓頭內六角螺絲	M3x5mm	2	
147	50NB015	Engine fan cover(L) 引擎風扇蓋(左)	123x100x30mm	1	
148	50NB014	Engine fan cover(R) 引擎風扇蓋(右)	123x100x30mm	1	
149	T53014-2	Socket screw 圓頭內六角螺絲	M3x14mm	4	
150	W10030	Washer M3華司	φ3xφ8x1mm	4	
151	KZ0859102	50Engine 50引擎		1	



No.	Code No.	Name	Specification	Quantity	Remarks
152	50NB002	Tail boom mount (L)	尾管固定座(左)	1	
153	50NB001	Tail boom mount (R)	尾管固定座(右)	1	
154	50T199	Umbrella gear case (L)	傘齒左固定座 $\phi 15.5 \times \phi 19 \times 52.5 \text{mm}$	1	
155	50T200	Umbrella gear case (R)	傘齒右固定座 $\phi 15.5 \times \phi 19 \times 52.5 \text{mm}$	1	
156	50T6701ZZ	Bearing 6701 ZZ	6701ZZ軸承	1	
157	50T194-03	Front umbrella gear	前軸傳傘型齒 $\phi 21.2 \times 33.6 \text{mm}$	1	
158	T52008-1	Socket button head screw	半圓頭內六角螺絲 T2x8mm	2	
159		Front drive gear assembly	尾傳動導輪軸組	1	
160	50B684ZZ	Bearing 684ZZ	684ZZ軸承 $\phi 4 \times \phi 9 \times 4 \text{mm}$	2	
161	50NB029	Plastic hexagonal bolt	六角柱	6	
162	T63012	Socket screw	圓頭內六角螺絲 M3x12mm	4	
163	N10030	M3 Nut	M3防鬆螺帽 M3xT2	4	
164	50T125	Tail control guide	尾控制桿固定環	2	
165	50Z124	Ball link	連桿頭	2	
166	50T085	Tail boom	尾管 $\phi 20 \times \phi 21.5 \times 625 \text{mm}$	1	
167	50T167	3K CF Horizontal stabilizer	3K碳纖水平翼	1	
168	50T088-1	Stabilizer mount (Upper)	水平翼固定座(上) 34x16x4mm	1	
169	50T089-1	Stabilizer mount (Lower)	水平翼固定座(下) 34x23.5x12mm	1	
170	S93014	Socket button head self tapping screw	半圓頭內六角自攻螺絲 T3x14mm	2	
171	50B072	M3 Specialty washer	M3特殊華司 $\phi 2 \times \phi 8 \times 2 \text{mm}$	6	
172	50T188	Torque tube	尾傳動軸桿 $\phi 6.7 \times \phi 8 \times 653 \text{mm}$	1	
173	50T132	Tail boom brace	尾管支撐架組 $\phi 5 \times 460 \text{mm}$	2	
174	50T123	Tail boom brace end	尾支撐架接頭	4	
175	S93010	Socket button head self tapping screw	半圓頭內六角自攻螺絲 T3x10mm	2	
176	50NT002	Tail rudder control rod B	尾舵控制連桿B $\phi 1.97 \times 657 \text{mm}$	1	
177	50T193		尾傳動軸承墊圈 $\phi 14 \times \phi 20.7 \times 13 \text{mm}$	1	
178	50T166	3K CF Vertical stabilizer	3K碳纖垂直翼	1	
179	T63010	Socket screw	圓頭內六角螺絲 M3x10mm	2	
180	T53010-3	Metal tail unit	金屬尾軸傳固定座 $\phi 18 \times \phi 23.6 \times 53 \text{mm}$	1	
181	T63008	Socket screw	圓頭內六角螺絲 M3x8mm	1	
182	T53006	Socket button head screw	半圓頭內六角螺絲 M3x6mm	6	
183	50T182	Metal plate (L)	金屬尾軸傳座左側板 39.5x25x9.3mm	1	
184	50T192	Aluminum bolt	金屬尾齒箱鋁柱 $\phi 4.98 \times 24 \text{mm}$	1	
185		Tail rotor shaft assembly	軸傳尾橫軸組	1	
186	50T183	Metal plate (R)	金屬尾軸傳座右側板 39.5x25x5mm	1	
187	50TMR105ZZ	Bearing 105ZZ	MR105ZZ軸承 $\phi 5 \times \phi 10 \times 4 \text{mm}$	2	
188	50T185	Control arm mounting bolt	軸傳尾控制臂固定座 15x7x11.6mm	1	
189	T52005	Socket screw	圓頭內六角螺絲 M2x5mm	2	
190	50T106ZZ	Bearing MR106ZZ	MR106ZZ軸承 $\phi 6 \times \phi 10 \times 2.5 \text{mm}$	2	
191	50H144	Linkage ball A1	球頭A1 $\phi 4.75 \times 8.68 \text{mm}$	1	
192	50T102	Bearing holder	尾翼控制組軸承套座	1	
193	50T101-2		尾軸滑套 $\phi 5 \times \phi 7.2 \times 16.7 \text{mm}$	1	
194	50T116	T type arm	尾翼控制組T型臂	1	
195	T12008-4	Collar screw	軸套螺絲 M2x8mm	4	
196	50T127	Collar B	尾連桿頭銅套B $\phi 2 \times \phi 3 \times 3 \text{mm}$	2	
197	50T106	Collar A	尾連桿頭銅套A $\phi 2 \times \phi 3 \times 4 \text{mm}$	2	
198	50T105	Control link	尾控制連桿頭	2	
199	50T096	Tail rotor control arm	尾旋翼控制臂	1	
200	50H022-1	Washer	華司 $\phi 3 \times \phi 4.8 \times 0.3 \text{mm}$	1	
201	50H144	Linkage ball A1	球頭A1 $\phi 4.75 \times 8.68 \text{mm}$	1	
202	50TMR63ZZ	Bearing MR63ZZ	MR63ZZ軸承 $\phi 3 \times \phi 6 \times 3 \text{mm}$	2	
203	50T097	Collar	尾旋翼控制臂鋁套 $\phi 3 \times \phi 4.9 \times 5 \text{mm}$	1	
204	T63015	Socket collar screw	圓頭內六角軸套螺絲 M3x15mm	1	
205	50T159	3K CF Tail blade	3K碳纖尾旋翼	2	
206	T63008	Socket screw	圓頭內六角螺絲 M3x8mm	2	
207	W10030-1	Washer	華司 $\phi 3 \times \phi 8 \times 0.6 \text{mm}$	2	
208	50TF510M	Thrust bearing	止推軸承 F5-10M	2	
209	50T171	Tail rotor holder	尾旋翼夾座	2	
210	T63020	Socket collar screw	圓頭內六角軸套螺絲 M3x20mm	2	
211	N10030	M3 Nut	M3防鬆螺帽 M3xT2	2	
212	50TMR105ZZ-1	Bearing MR105ZZ	MR105ZZ軸承 $\phi 5 \times \phi 10 \times 4 \text{mm}$	2	
213	50T172	Tail rotor holder	尾旋翼T型座 $\phi 10 \times 39.6 \text{mm}$	1	
214	T74004	M4 Set screw	M4止洩螺絲 M4x4mm	1	



Specifications & Equipment/規格配備:

Length/機身長: 1160mm

Height/機身高: 410mm

Main Blade Length/主旋翼長: 600mm

Main Rotor Diameter/主旋翼直徑: 1350mm

Tail Rotor Diameter/尾旋翼直徑: 240mm

Motor Pinion Gear/引擎主齒: 20T

Autorotation Tail Drive Gear/尾驅動主齒: 180T

Drive Gear Ratio/齒輪傳動比: 8.5:1:4.5 (E:M:T)

Flying Weight/全配重: Approx. 3.2kg

