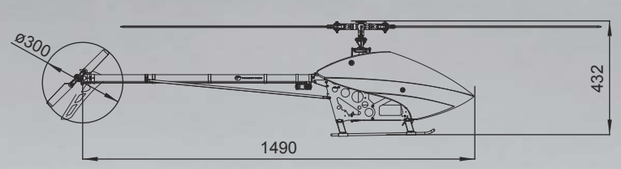


RAPTOR E820

Flybarless No.4793





SPECIFICATION / 規格表

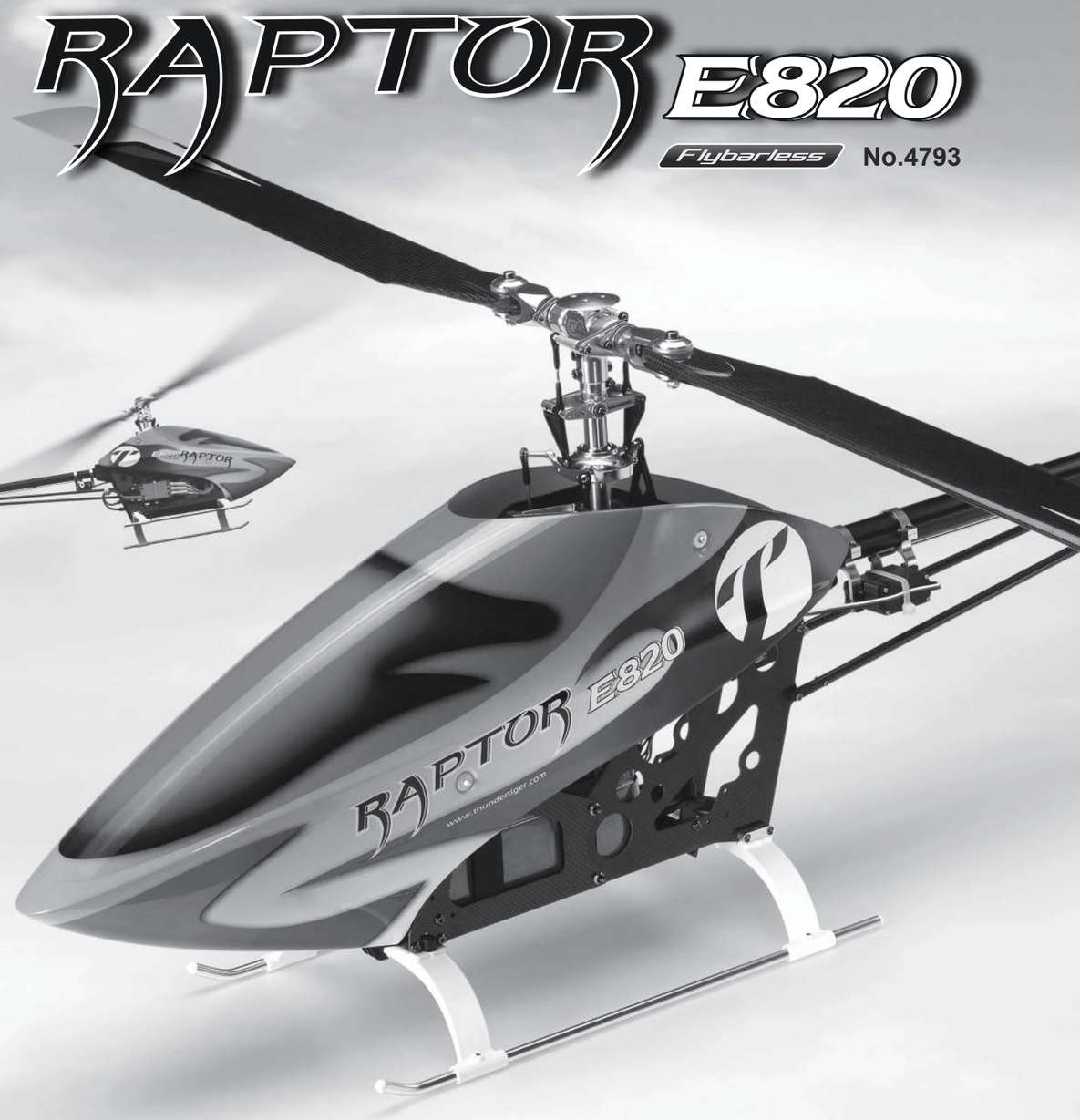
Description / 產品名稱		RAPTOR E820
Item No. / 產品料號		4793
Power / 動力		Electric Motor
Rotor Head / 主旋翼頭型式		Flybarless
Length / 總長		1490 mm / (58.66")
Width / 總寬		221mm / (8.7")
Height / 總高		432 mm / (17.0")
Main Rotor (Req'd) 主旋翼	Length / 長度	813 mm / (32")
	Diameter / 迴轉直徑	1809 mm / (71.2")
Tail Rotor (Req'd) 尾旋翼	Length / 長度	115 mm / (4.52")
	Diameter / 迴轉直徑	300 mm / (11.8")
Main Gear / Pinion 主齒盤 / 驅動齒數		111T (standard), 115T (option) / 11T, 12T
Gear Ratio (E:M:T) / 齒輪比		10.09 (11T) : 1 : 4.67 9.25 (12T) : 1 : 4.67
Full Equipped Weight w/o Battery 全配重量不含電池		3670-gram (129.5 oz)
Max. Battery on Board 電池最大承載量		215 x 62 x 105 mm (8.5 x 2.4 x 4.1")
Recommended Power Configuration 動力搭配建議		Battery: 14S (7S x 2) 5.0~6.0Ah Battery C-rate: Above 30C ESC:160~200A Motor:380~480KV Est. Rotor rpm:1900

FEATURES / 特色

1. Latest fiberglass canopy design w/sleek scheme
2. Collective pitch range +/-15 degrees
3. Reinforced thicker rotor grip plate
4. Carbon tail boom support
5. Innovative quick calibration system
6. Lightened metal main shaft bearing blocks
7. 15mm hardened hollow steel main shaft
8. 2mm aerospace grade true carbon side frame
9. Ultra thick helical main gear 111T(115T OP) V.S. 11T/12T Pinion(8mm)
10. Lite yet rigid one-piece machined AL tail case
11. Precisely and heavy-duty tail rotor system
12. 8mm torque tube driven w/efficient helical bevel tail gear
13. Recommend approx. 400KV outrunner max. O.D. 64mm
14. Quick-release battery tray fits two 7 cells Lipo battery packs
15. Adjustable one-piece U type pinion bearing block w/motor mount(Applicable to a 8mm diameter motor shaft)
16. Adjustable metal rudder servo mount for better precise tail control
17. Lightweight and rugged landing skid for low center of gravity
18. Easy to install tail rotor rod guide
19. Lightweight one-piece metal tail boom support bracket
20. Lengthened FBL rotor grip post for precisely cyclic pitch control
21. All metal servo horns and control arms assembly eliminate the need for upgrades
22. Optional carbon battery tray available

1. 原廠塗裝完成高彩度玻璃纖維機頭罩
2. 主旋翼攻角最大可達+-15度
3. 強化加厚型主旋翼轉座搖臂
4. 碳纖維尾管支撐架
5. 原創中立點快速校正系統
6. 輕量化主軸軸承座
7. 15mm熱處理強化主軸
8. 高強度2mm碳纖維側板
9. 超厚111T螺旋主齒盤(115T選配),並配置兩顆8mm馬達齒(11T與12T)
10. 一體成型輕量化高強度金屬尾座
11. 高精度全金屬尾旋翼系統
12. 8mm尾傳動軸並搭配高負載尾螺旋傘齒
13. 適用馬達外徑可達64mm,建議使用400KV以獲得充足動力
14. 原創電池快拆機構,可容納2組7CELLS鋰電池
15. 一體式U型馬達與驅動齒輪固定座(可適用8mm馬達軸)
16. 可調式尾舵伺服機固定座提供更精準的尾部控制性
17. 高強度輕量化低重心腳架組
18. 快拆式尾舵拉桿導環
19. 一體成型輕量化金屬尾管支撐固定座
20. 加長型主旋翼轉座支柱提供更精準的螺距控制
21. 配備金屬伺服機舵片及控制臂組，無需額外進行升級改裝
22. 可換裝碳纖維電池座(選配)





INSTRUCTION MANUAL

組 裝 說 明 書

This radio control model is not a toy! Before beginning assembly, please read this manual thoroughly.
The contents are subject to change without prior notice due to product improvements and specification changes.

本產品為高性能模型非一般玩具，組裝與操作前請詳閱本產品說明書。
本套件所附之零件可能跟圖示有所差異。因產品後續之設計研發或功能不斷改善之原因，我們將保留產品規格變更權利，不再另行通知使用者。

THUNDER TIGER

RAPTOR E820 Flybarless

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THUNDER TIGER

INTRODUCTION / 簡介

Thank you for purchasing the Thunder Tiger RAPTOR E820 R/C helicopter. This new helicopter is the latest innovation by Thunder Tiger. It has the perfect combination of flying stability and the agility for 3D flying. This helicopter is an excellent choice for flying enthusiasts like you. For convenient assembly and safe operation of the helicopter, please read the instructions carefully. Retain the user manual in case you need it for any information or reference.
感謝您購買雷虎科技RAPTOR E820直昇機產品，本項產品為雷虎科技全新開發機種，兼具高度穩定性與3D飛行特性，是熱衷引擎直昇機的您不可錯過的選擇。請於使用本產品前詳盡閱讀使用手冊，以利於組裝工作順暢進行與安全操控本產品。請妥善保存使用說明書，以利後續調整與維修參考用途。

CAUTION / 警告

1. R/C models are not toys. This product is a high-precision flying machine. Possibilities of unexpected crashes may occur due to electronic interference, incorrect operation, or poor mechanical maintenance. Although it is a R/C model helicopter, the rotor blades rotate at high speeds, which may cause serious damage, injury, or death if the model hits people or property. Therefore, extreme caution must be exercised during operation.
2. Thunder Tiger ensures parts packaged in this product is of the highest quality. However, after assembly and usage, parts damaged due to wear or misuse will not be replaced under any circumstances. If you have any questions regarding its operation and repair, Thunder Tigers service agents are able to provide free technical guidance.
3. This product is only recommended for users ages 16 and up. Because flying a R/C helicopter is difficult, beginners must receive guidance and supervision from experienced pilots to minimize unexpected danger. Practice in spacious areas, far away from obstacles such as buildings, trees, electrical towers, or crowds.
4. To decrease the cost of repair and maintenance for beginners, it is recommended to fly the helicopter with a practice rack and to learn basic flying skills with a computer R/C flying simulator. (Crashes in simulators are free to repair!)

1. 本項遙控直昇機產品並不是玩具，是一項結構精密、高專業度模型產品，如果未經正確組裝與操控，將可能對操控者或其他人造成身體傷害。使用者必須了解，若未確實進行飛行前安全檢查或操控不當，而造成人員受傷或物體損壞，使用者必須負起法律責任。
2. 本產品由高品質零組件組成，雷虎科技對於安裝過程、使用過後..等人為因素造成損壞事件不負損壞賠償之責。如您需要本產品相關組裝、調整或其他協助，可與雷虎科技全省經銷商聯繫。
3. 本項產品禁止十六歲以下青少年與孩童使用。強烈建議初學者應取得技術支援後再進行飛行，以避免危險發生。請於空曠地區操控本產品，並避免於建築物、樹木、電塔..等障礙物區域飛行。
4. 建議初學者可安裝練習架或透過電腦模擬軟體練習，可達到實際練習效果與符合經濟效益。

AMA INFORMATION / 特別注意事項

Operating a model helicopter requires a high degree of responsibility and skill. If you are a newcomer to the hobby, it is best to seek help and guidance from accomplished model helicopter pilots. This will greatly speed up the learning process and have you flying successfully in a reasonable amount of time. We also would strongly urge you to join the Academy of Model Aeronautics, if you are in States. The AMA is a non-profit organization that provides its members with a liability insurance plan as well as monthly magazine entitled Model Aviation. All AMA charter aircraft clubs require all pilots to hold a current AMA sporting license prior to operation of their models at club fields. For further information, contact the AMA at:
Academy of Model Aeronautics
5151 East Memorial Drive
Muncie, IN 47302
(317) 287-1256
http://www.modelaircraft.org

操控遙控直昇機對於飛行安全要求極高，需要高度的負責任態度配合，以及較高的操控技巧。如果您是一位初學者，建議您必須向當地專業模型經銷商，或是遙控直昇機相關組織以及經驗豐富的玩家尋求相關協助，以獲得您所需要的訊息以及專業知識。如此可有效協助您縮短學習的時間，更容易學會遙控直昇機的組裝、設定與操控技巧。

FLIGHT SAFETY CHECKLIST / 飛行前安全確認工作項目

1. Make sure that the transmitter battery is fully charged before flying.
2. Make sure all control surfaces are operated properly before flying.
3. Do a range check of the radio before the first flight. The electronic equipment must operate properly at a range of at least 5 meters (18 ft) even with the transmitter antenna collapsed.
4. Make sure there are no other pilots using the same radio frequency with yours and that there are no other radio interference on your frequency.
5. Be sure to turn on the transmitter first with the throttle stick in the idle position. Plug the battery into the ESC last.
6. The main rotor and the tail rotor spin at very high RPM. Make sure nothing can come in contact with the rotor blades during flight.
7. Always maintain a safe distance from the helicopter during flight.
8. Never fly the helicopter in the rain or in excessive wind conditions.
9. Always operate and fly the helicopter in a safe and responsible manner.
10. Never fly the helicopter over other pilots, spectators, cars or anything that could result in injury or property damage.

1. 確認接收機與發射機電池，均已確實充電完成。
2. 確認所有操控介面運作順暢。
3. 確認無其他無線電波干擾，且不與其他同好同時使用相同頻率。
4. 確實將油門搖桿放置於低速，再將發射機電源開啟，然後再將電池接上。
5. 確認遙控器發射器與接收機工作正常，將機體放至於距離5公尺外，確認遙控器是否正常，機體控制動作是否正確。
6. 主旋翼與尾旋翼轉速相當高，運轉時須避免任何障礙物與旋翼接觸。
7. 飛行時，需與遙控直升機保持安全距離。
8. 勿於下雨天或是強風的狀態下操控遙控直升機。
9. 請以安全為第一考量，並以高度負責任的態度參與遙控直升機活動。
10. 禁止於人群、車輛..或任何其他障礙物上方飛行遙控直升機，避免意外發生。

POST FLIGHT INSPECTION / 飛行結束安全檢查事項

1. Inspect the model thoroughly to insure no parts have come loose or become damaged during the flight and landing. Replace damaged parts and tighten loose screws before flying again.
2. Clean the helicopter body.
3. Lubricate all moving parts to ensure smooth operation for the next flying.
4. Replace any worn ball links and damaged bearings.
5. Store the model in a cool, dry place. Avoid putting it under direct sunlight or near a source of heat.

Following these simple rules will allow you to enjoy the thrill of model helicopter flying for many years.

1. 飛行結束後確認機體所有的零件與螺絲是否有損壞或鬆動，更換損壞零件與確實固定鬆動的螺絲。
2. 機體清潔乾淨。
3. 檢查所有活動零組件是否運作順暢，以利下次飛行。
4. 更換所有鬆動的連桿、接頭，以及損壞的軸承。
5. 將機體存放於陰涼通風處，避免機體放置於陽光直射處或接近熱源。

確實執行上述幾項簡單的步驟，將可確保您的愛機維持數年的壽命！

CAUTION / 注意事項

When the model has crashed, inspect the flybar, rotor shaft and the blade spindle to make sure they are not bent. If any item is damaged, it must be replaced with a new part to ensure safe operation. Do not glue any broken or damaged plastic parts. Do not repair broken rotor blades.

Always inspect the following items:

Gears, Ball links, Link rods, Bearings, Main shaft, Flybar, Spindle, Tail boom and support, Fins, Tail rotor shaft, Main blades, Tail blades, the Motor, the Speed control and the Battery.

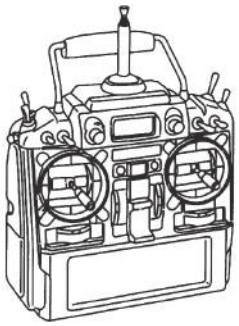
機體一旦發生墜落事件，請確實檢查平衡桿、主軸、橫軸是否有彎曲變形，如果有任何的損壞，請立即更換原廠新的零組件，確認機體操作安全！切勿使用任何接著劑嘗試黏合塑膠零件；請勿使用修復過的主旋翼。

發生機體墜落事件後，請確實檢查下列項目：

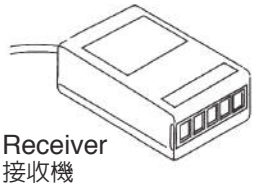
齒輪組、球頭連桿、連桿頭、軸承、主軸、橫軸、尾軸、平衡桿、平衡片、尾管、尾管支撐架、垂直與水平尾翼、尾驅動輪、主旋翼、尾旋翼、馬達、速控器、電池。

OTHER ITEMS REQUIRED / 其餘必須配件

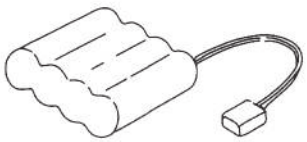
RADIO SET / 遙控系統



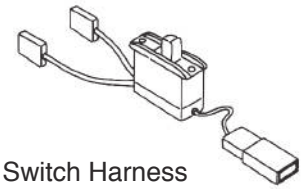
Transmitter (helicopter type only, 6 or more channels)
發射機（需具備直昇機控制功能的6動以上遙控器）



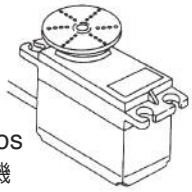
Receiver
接收機



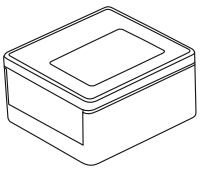
Rx Battery
接收機電池



Switch Harness
具備充電線的開關組

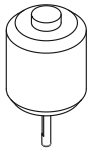


Servos
伺服機

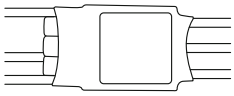


3-AXIS Gyro
3軸陀螺儀

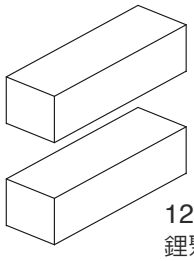
POWER SYSTEM / 動力系統



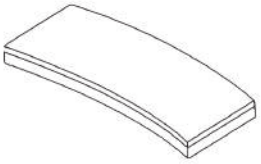
Electric Brushless Motor
無刷馬達



Electronic Speed Controller
速控器

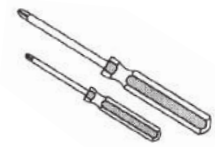


12-14S Li-Po Battery Pack
鋰聚電池組



Foam
雙面膠帶

TOOLS REQUIRED FOR ASSEMBLY / 需要準備的工具



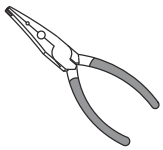
Screw Driver
各種規格的螺絲起子



Needle Nose Pliers
尖嘴鉗



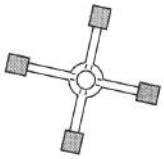
Nipper
斜口鉗



Ball Link Pliers
拆連桿頭的專用鉗子



Scissors
剪刀



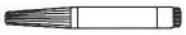
Metric 4-way Wrench
十字套筒板手



Hobby Knife
美工刀



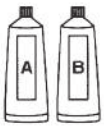
C.A Glue
瞬間膠



Threadlocker
螺絲防鬆膠



Grease
潤滑油



Epoxy
環氧樹酯



Hex Wrench
六角板手



Wrench
開口板手



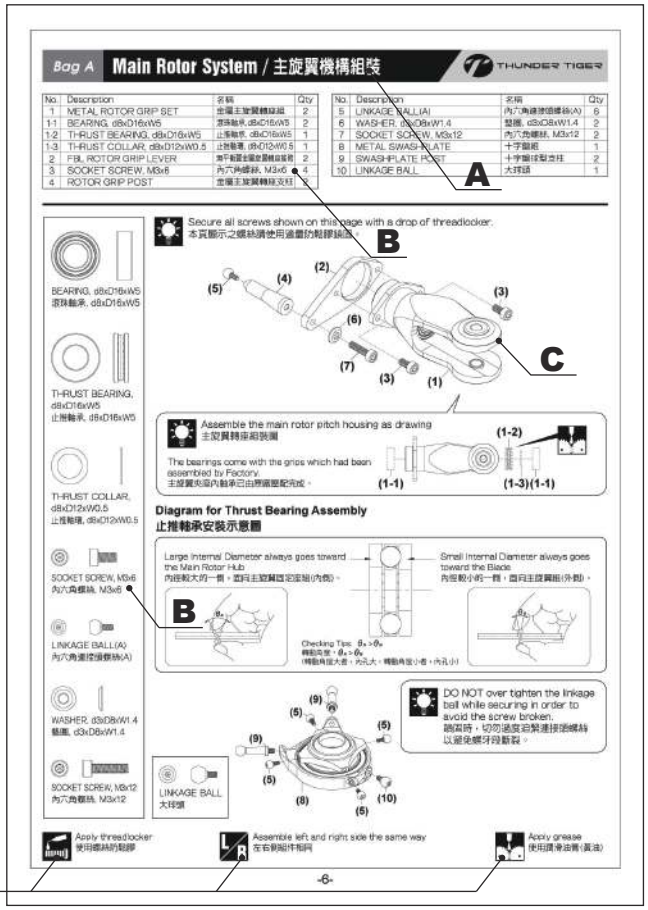
Socket Drivers
套筒螺絲起子

A GUIDE TO THE INSTRUCTION MANUAL / 說明書操作指南

A: Indicates the assembly step number and the parts bags that are to be assembled.
B: Displays actual size drawings, and part quantities used.
C: Refer to parts drawing or exploded view in the last few pages of this manual, order the corresponding item no. for correct replacement parts.
D: This instruction manual uses several symbols. Pay careful attention to them during construction. Details are given at the bottom of each page.

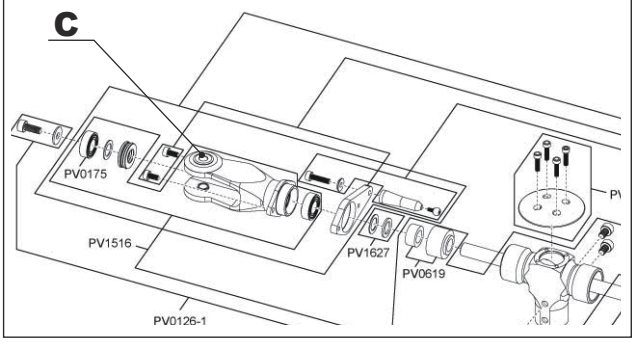
A: 顯示組立步驟及需組立之零件包順序。
B: 零件實際對照尺寸及使用數量。
C: 請比對零件形狀以及後附零件包圖示或爆炸圖找出需求零件料號。
D: 操作說明符號可更有效協助組裝者使用此說明書，請依說明書符號指示進行組裝步驟。

Example 說明範例



Exploded View / 爆炸圖檢索

MAIN ROTOR HEAD



SYMBOLS USED THROUGHOUT THE MANUAL / 符號說明

The parts in the KIT are packed according to each major assembly steps. The part number and quantity are always shown in the table on each page. As good practice, only open up the bag that you need for the paticular assembly.
零件均依照組裝步驟包裝，請依照組裝程序，逐一開啟零件包，避免零件遺失。

Note / 注意
Assembly drawings will contain icons that indicate use of Threadlocker or CA glue as needed.
Examples of the icons are as right shown:
請依組裝步驟圖示，使用防鬆膠或接著劑。
圖示範例如右：

T22(#262) →THREADLOCKER / 螺絲防鬆膠

CA →CA GLUE / 快乾膠

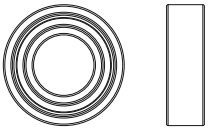
- Apply C.A Glue / 使用快乾膠黏合
- Apply threadlocker / 使用螺絲防鬆膠
- Assemble as many times as specified / 依指示組裝所需數量
- Assemble left and right side the same way / 左右側組件相同
- Assemble in right order / 依標示順序組裝
- Cut off shaded portion / 依標示部分裁切
- Ensure smooth, non-binding movement when assembling / 確認組件靈活度
- Drill holes with the specified diameter / 依標示尺寸鑽孔
- Must be purchased separately / 改裝品需另購
- Cut off excess / 裁剪多餘部分
- Apply grease / 使用潤滑油膏(黃油)
- Pay close attention here / 注意組裝步驟
- Hint / 組裝提示

Bag A Main Rotor System / 主旋翼機構組裝

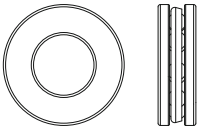
THUNDER TIGER

No.	Description	名稱	Qty
1	METAL ROTOR GRIP SET	金屬主旋翼轉座組	2
1-1	BEARING, d8xD16xW5	滾珠軸承,d8xD16xW5	2
1-2	THRUST BEARING, d8xD16xW5	止推軸承, d8xD16xW5	1
1-3	THRUST COLLAR, d8xD12xW0.5	止推軸環, d8xD12xW0.5	1
2	FBL ROTOR GRIP LEVER	無平衡翼金屬旋翼轉座搖臂	2
3	SOCKET SCREW, M3x6	內六角螺絲, M3x6	4
4	ROTOR GRIP POST	金屬主旋翼轉座支柱	2

No.	Description	名稱	Qty
5	LINKAGE BALL(A)	內六角連接頭螺絲(A)	6
6	WASHER, d3xD8xW1.4	墊圈, d3xD8xW1.4	2
7	SOCKET SCREW, M3x12	內六角螺絲, M3x12	2
8	METAL SWASHPLATE	十字盤組	1
9	SWASHPLATE POST	十字盤球型支柱	2
10	LINKAGE BALL	大球頭	1



BEARING, d8xD16xW5
滾珠軸承, d8xD16xW5



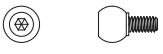
THRUST BEARING, d8xD16xW5
止推軸承, d8xD16xW5



THRUST COLLAR, d8xD12xW0.5
止推軸環, d8xD12xW0.5



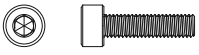
SOCKET SCREW, M3x6
內六角螺絲, M3x6



LINKAGE BALL(A)
內六角連接頭螺絲(A)

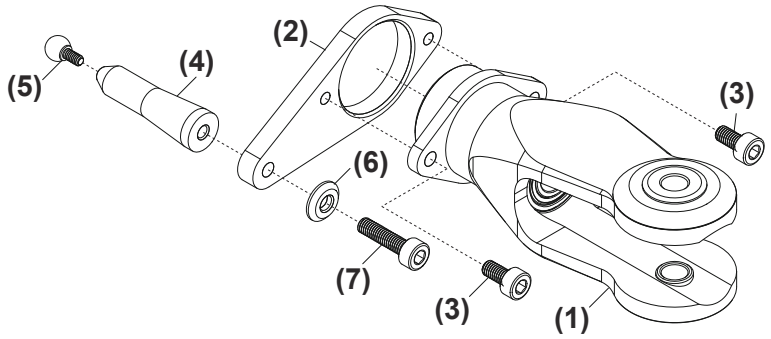


WASHER, d3xD8xW1.4
墊圈, d3xD8xW1.4



SOCKET SCREW, M3x12
內六角螺絲, M3x12

Secure all screws shown on this page with a drop of threadlocker.
本頁顯示之螺絲請使用適量防鬆膠鎖固。



Assemble the main rotor pitch housing as drawing
主旋翼轉座組裝圖

The bearings come with the grips which had been assembled by Factory.
主旋翼夾座內軸承已由原廠壓配完成。

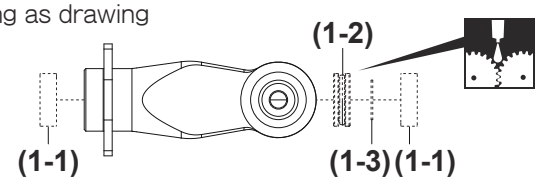
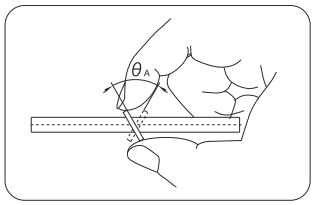
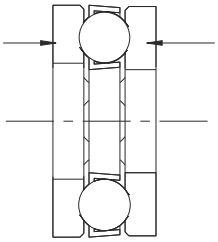


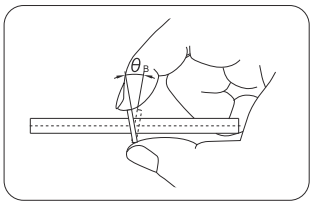
Diagram for Thrust Bearing Assembly
止推軸承安裝示意圖

Large Internal Diameter always goes toward the Main Rotor Hub
內徑較大的一側，面向主旋翼固定座組(內側)。

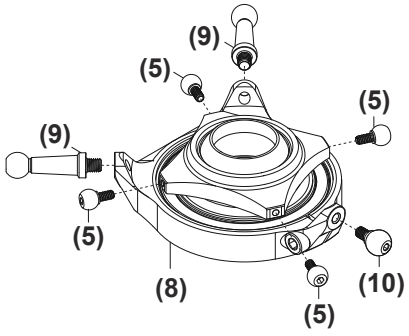




Small Internal Diameter always goes toward the Blade
內徑較小的一側，面向主旋翼組(外側)。



Checking Tips: $\theta_A > \theta_B$
轉動角度：$\theta_A > \theta_B$
(轉動角度大者，內孔大；轉動角度小者，內孔小)





LINKAGE BALL
大球頭

DO NOT over tighten the linkage ball while securing in order to avoid the screw broken.
鎖固時，切勿過度迫緊連接頭螺絲以避免螺牙段斷裂。

Apply threadlocker
使用螺絲防鬆膠

Assemble left and right side the same way
左右側組件相同

Apply grease
使用潤滑油膏(黃油)

Bag A Main Rotor System & Linkage Rod / 主旋翼機構及連桿組裝

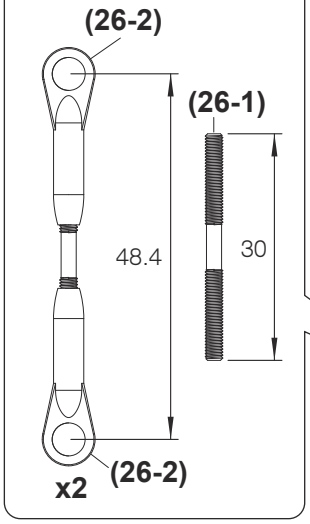
THUNDER TIGER

No.	Description	名稱	Qty
1	HARDENED MAIN SHAFT(15mm)	強化主軸(15mm)	1
2	SOCKET SCREW, M4x6	內六角螺絲, M4x6	4
3	METAL SWASHPLATE	十字盤組	1
4	SOCKET SCREW, M3x10	內六角螺絲, M3x10	1
5	FBL WASHOUT BASE	無平衡翼控制臂座	1
6	FBL CONTROL LEVER	無平衡翼控制搖臂	2
7	BEARING, d4xD8xW3	滾珠軸承, d4xD8xW3	4
8	COLLAR, d3xD4xW8.5	軸套, d3xD4xW8.5	2
9	SOCKET SCREW, M3x14	內六角螺絲, M3x14	2
10	SET SCREW, M3x4	無頭內六角螺絲, M3x4	2
11	PIN, φ2x19	軸承滾針, φ2x19	2
12	FBL WASHOUT LINKAGE	無平衡翼連接座	2
13	LINKAGE BALL(A)	內六角連接頭螺絲(A)	2
14	THRUST COLLAR, d8xD12xW0.5	止推軸環, d8xD12xW0.5	2

No.	Description	名稱	Qty
15	THRUST COLLAR, d8xD12xW1.0	止推軸環, d8xD12xW1.0	2
16	THRUST COLLAR, d8xD12xW0.2	止推軸環, d8xD12xW0.2	2
17	THRUST COLLAR, d8xD12xW0.1	止推軸環, d8xD12xW0.1	2
18	SPINDLE	固定軸	1
19	OUTER DAMPER	外避震墊圈	2
20	INNER DAMPER	內避震墊圈	2
21	WASHER, d5xD11xW1.7	華司, d5xD11xW1.7	2
22	SOCKET SCREW, M5x10	內六角螺絲, M5x10	2
23	FBL MAIN ROTOR HUB	無平衡翼金屬主旋翼固定座	1
24	FBL HEAD BUTTON	無平衡翼煞車盤	1
25	SOCKET SCREW, M2.5x10	內六角螺絲, M2.5x10	4
26	LINKAGE ROD SET(48.4mm)	連接桿組(48.4mm)	2
26-1	LINGAGE ROD(N)	連接桿(鍍鎳)	1
26-2	BALL LINK	單頭連接桿	2

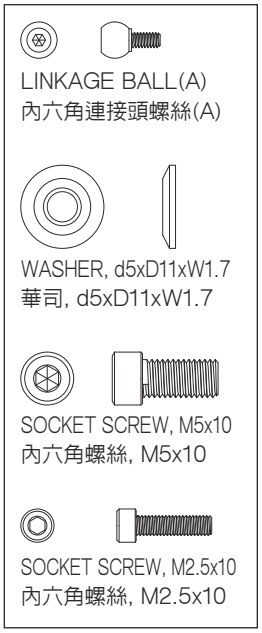
Secure all screws shown on this page with a drop of threadlocker.
本頁顯示之螺絲請使用適量防鬆膠鎖固。

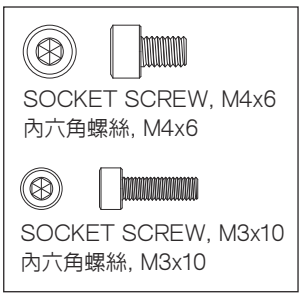
Scale=1:1 (unit:mm)











The holes should point up.
有2孔的一端應朝上

Rotate the Main Rotor Grip to check if it runs effortlessly and smoothly; please reallocate the different thickness of Thrust Collars for getting a proper mesh if too much play or over tight.
完成組裝後，請轉動主旋翼轉座確認作動是否順暢；如間隙過大或過緊，請更改不同厚度之止推軸環組合以獲得適當間隙。

Apply grease
使用潤滑油膏(黃油)

Ensure smooth, non-binding movement when assembling
確認組件靈活度

Assemble left and right side the same way
左右側組件相同

Apply threadlocker
使用螺絲防鬆膠

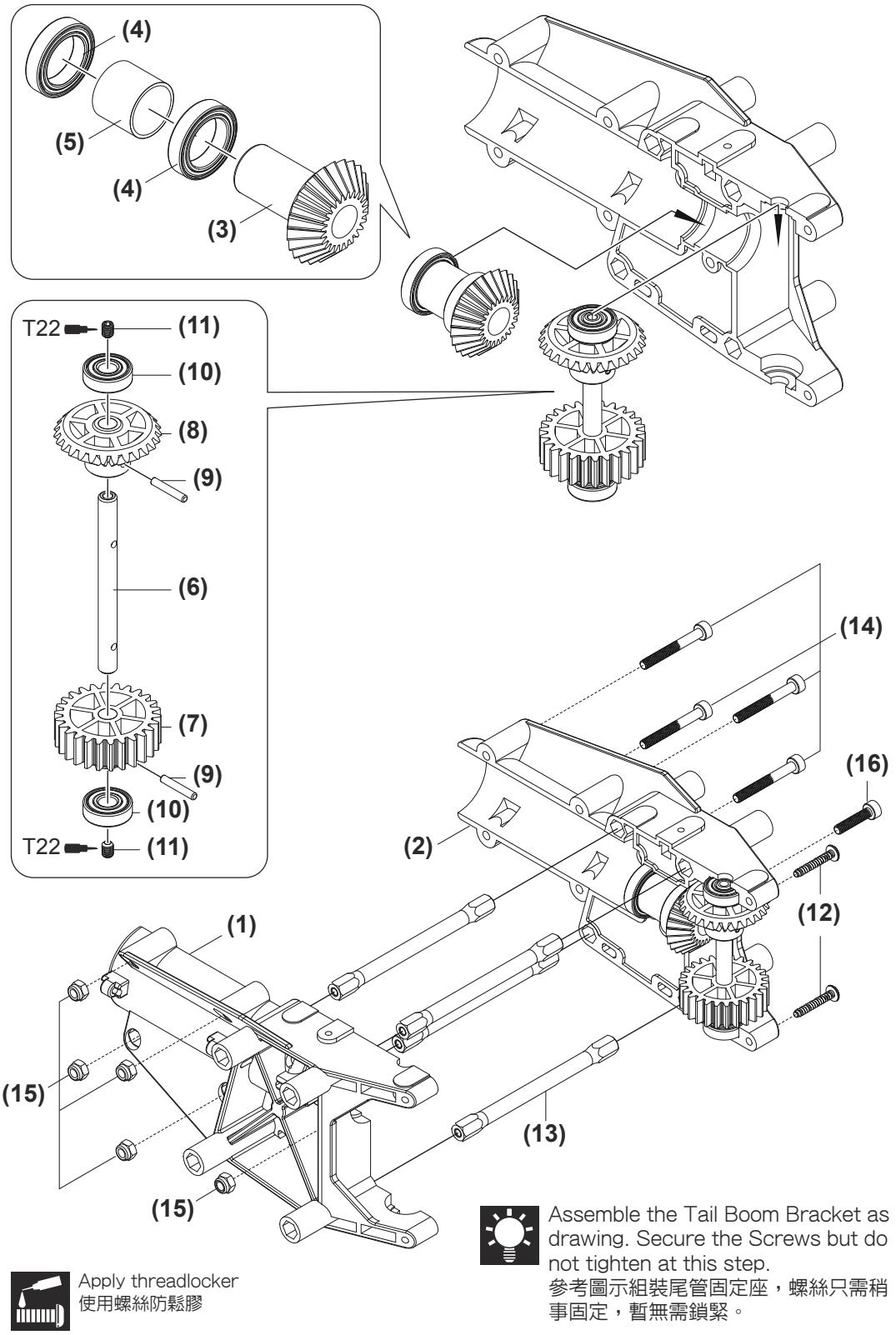
Bag B Tail Boom Bracket Assembly / 尾管固定座組裝

THUNDER TIGER

No.	Description	名稱	Qty
1	TAIL BOOM BRACKET-R	機身尾管固定座(右)	1
2	TAIL BOOM BRACKET-L	機身尾管固定座(左)	1
3	TAIL DRIVE BEVEL GEAR-B	尾驅動傘齒B(24T)	1
4	BEARING, d12xD18xW4	滾珠軸承, d12xD18xW4	2
5	BEVEL COLLAR,d12xD13.6xW11.85	傘齒軸環, d12xD13.6xW11.85	1
6	TAIL DRIVE GEAR SHAFT	尾驅動齒輪軸	1
7	TAIL DRIVE GEAR-26T	尾驅動齒輪26T	1
8	TAIL DRIVE BEVEL GEAR-A	尾驅動傘齒A(27T)	1

No.	Description	名稱	Qty
9	PIN, φ2x12	固定銷, φ2x12	2
10	BEARING, d5xD13xW4	滾珠軸承, d5xD13xW4	2
11	SET SCREW, M3x4	無頭內六角螺絲, M3x4	2
12	SELF-TAPPING SCREW, M2.6x16	扁圓自攻螺絲(粗)	2
13	FRAME SPACER	側板支柱	4
14	SOCKET SCREW, M3x25	內六角螺絲, M3x25	4
15	LOCK NUT, M3	止鬆螺帽, M3	5
16	SOCKET SCREW, M3x14	內六角螺絲, M3x14	1





Bag C+D Main Frame / 本體組裝

THUNDER TIGER

No.	Description	名稱	Qty
1	SIDE FRAME-L	碳纖側板-左	1
2	SIDE FRAME-R	碳纖側板-右	1
3	CANOPY RETAINING POST	機身固定柱	2
4	TORX SCREW, M3x8	星型螺絲, M3x8	22
5	ELEVATOR WASHER MOUNT SET	控制臂軸承座	2
6	NUT	軸承座螺帽	2
7	CONTROL ARM BASE	控制臂固定座	2
8	SINK SOCKET SCREW, M2.5x5	沈頭內六角螺絲, M2.5x5	8
9	BUTTON PHILLIPS TAPPING SCREW, M2.6x12	扁圓自攻螺絲(粗), M2.6x12	1
10	SKID BRACKET	腳架固定座	2

No.	Description	名稱	Qty
11	SOCKET SCREW, M3x8	內六角螺絲, M3x8	2
12	LOCK NUT, M3	止鬆螺帽, M3	2
13	FRAME SPACER	側板支柱	8
14	SERVO TRAY	伺服機座	1
15	SERVO MOUNT	伺服機固定座	1
16	SERVO MOUNT	伺服機固定座	1
17	SOCKET SCREW(N), M2.5x8	內六角螺絲(鍍色), M2.5x8	2
18	GYRO TRAY	陀螺儀座	1
19	SOCKET SCREW, M3x10	內六角螺絲, M3x10	1
20	MAIN SHAFT BRG BLOCK SET	主軸軸承座	2

Secure all screws & Washer Mount shown on this page with a drop of threadlocker.
本頁顯示之螺絲及控制臂軸承座請使用適量防鬆膠鎖固。

TORX SCREW, M3x8
星型螺絲

SINK SOCKET SCREW, M2.5x5
沈頭六角螺絲, M2.5x5

BUTTON PHILLIPSTAPPING SCREW, M2.6x12
扁圓自攻螺絲(粗), M2.6x12

SOCKET SCREW, M3x8
內六角螺絲, M3x8

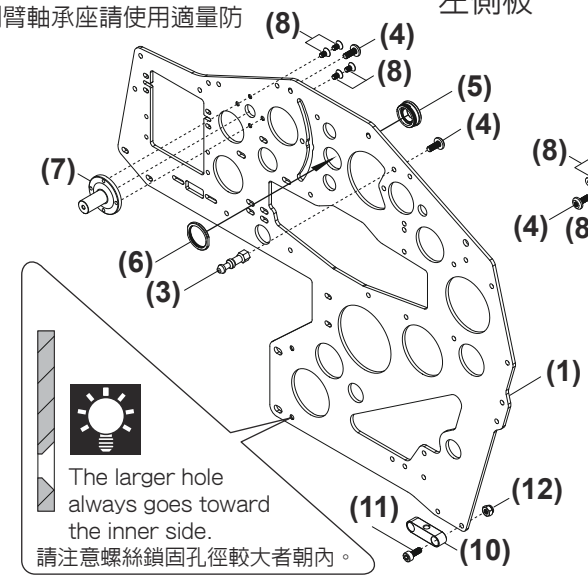
LOCK NUT, M3
止鬆螺帽, M3

SOCKET SRCEW, M2.5x8
內六角螺絲, M2.5x8

SOCKET SRCEW, M3x10
內六角螺絲, M3x10

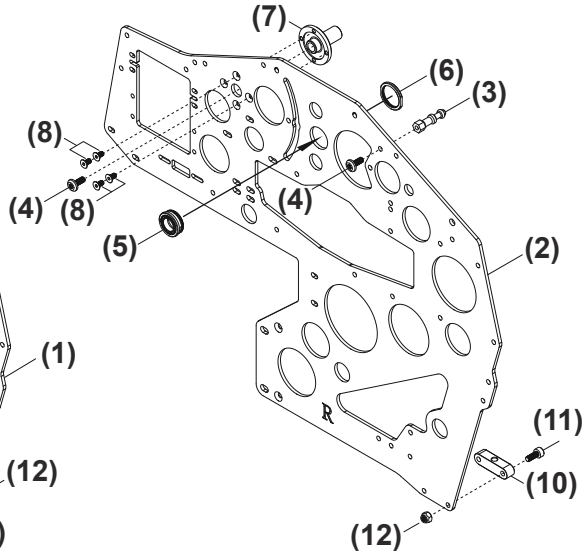
Apply threadlocker
使用螺絲防鬆膠

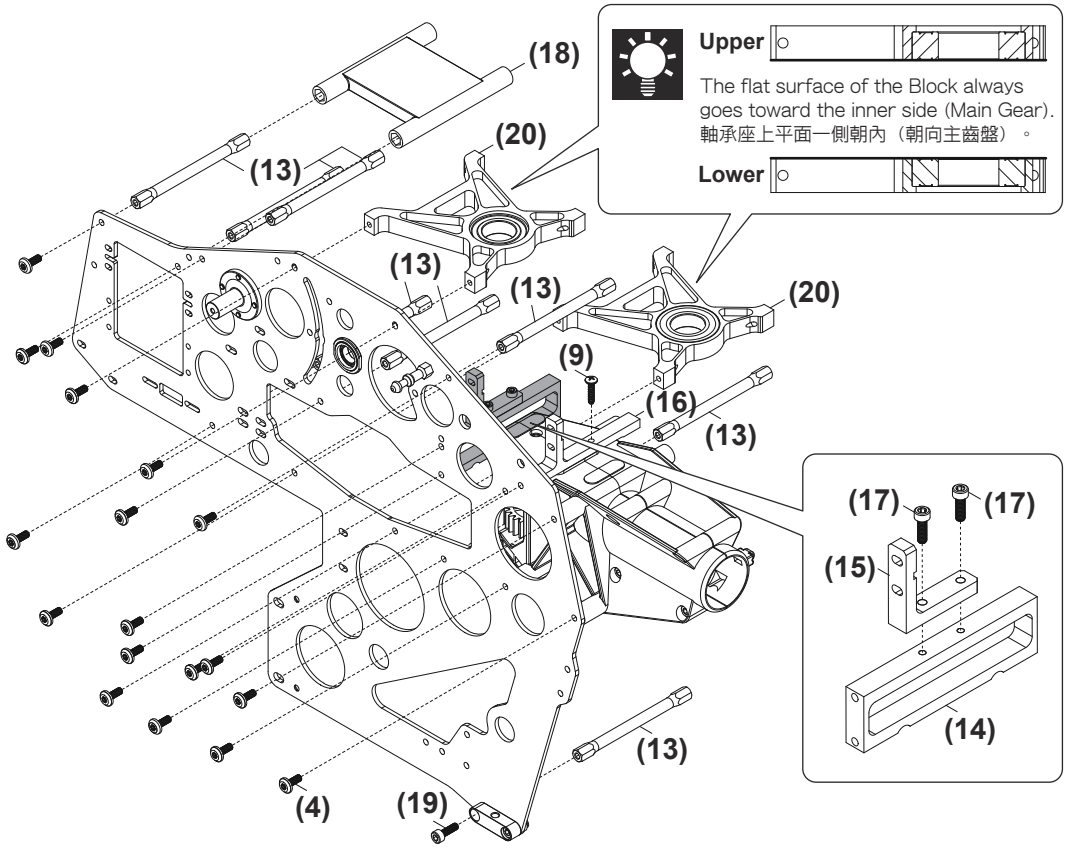
Left Frame
左側板



The larger hole always goes toward the inner side.
請注意螺絲鎖固孔徑較大者朝內。

Right Frame
右側板



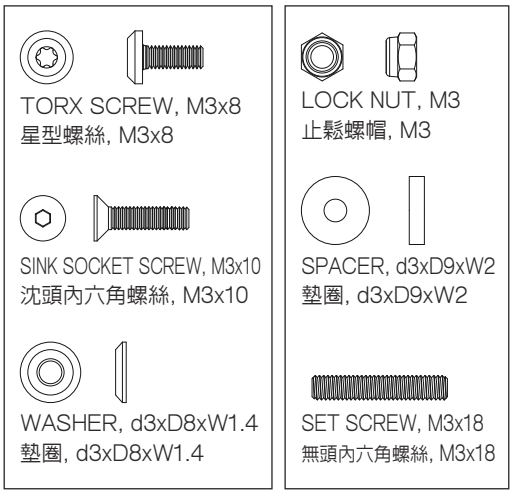


Upper
The flat surface of the Block always goes toward the inner side (Main Gear).
軸承座上平面一側朝內（朝向主齒盤）。
Lower

Bag D Main Frame / 本體組裝

No.	Description	名稱	Qty
1	RADIO TRAY	油門伺服機固定架	1
2	TORX SCREW, M3x8	星型螺絲, M3x8	9
3	FRAME SPACER	側板支柱	3
4	SINK SOCKET SCREW, M3x10	沈頭內六角螺絲, M3x10	4
5	WASHER, d3xD8xW1.4	墊圈, d3xD8xW1.4	4
6	LOCK NUT, M3	止鬆螺帽, M3	4
7	BATTERY PIN	電池盒軸襯	2

No.	Description	名稱	Qty
8	SPACER, d3xD9xW2	墊圈, d3xD9xW2	1
9	LOWER SIDE FRAME	碳纖下側板	2
10	BATTERY POST	電池盒支柱	1
11	REAR SKID BRACKET	支撐架固定座	2
12	SET SCREW, M3x18	無頭內六角螺絲	1
13	CANOPY RETAINING POST(L)	機身固定柱(長)	1



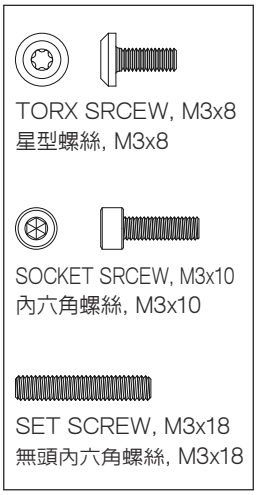
Secure all screwsshown on this page with a drop of threadlocker.
本頁顯示之螺絲請使用適量防鬆膠鎖固。

Apply threadlocker
使用螺絲防鬆膠

Bag D Main Frame / 本體組裝

No.	Description	名稱	Qty
1	TORX SRCEW, M3x8	星型螺絲, M3x8	29
2	SOCKET SRCEW, M3x10	內六角螺絲, M3x10	1
3	SET SCREW, M3x18	無頭內六角螺絲	1
4	CANOPY RETAINING POST(L)	機身固定柱(長)	1
5	SPACER, d3xD9xW2	墊圈, d3xD9xW2	1
6	METAL ELEVATOR CONTROL ARM	升降舵控制臂組	1
7	LINKAGE BALL(A)	內六角連接頭螺絲(A)	2

No.	Description	名稱	Qty
8	ELEVATOR CONTROL ARM LINK	升降舵連接座	1
9	BEARING, d2.5xD7xW3.5	滾珠軸承, d2.5xD7xW3.5	2
10	SOCKET SRCEW, M2.5x8	內六角螺絲, M2.5x8	2
11	U TYPE MOTOR MOUNT	U型馬達座組	1
12	SET SCREW, M4x4	無頭內六角螺絲, M4x4	2
13	MOTOR PINION(8mm),11T	馬達齒輪(8mm,11T)	1
14	MOTOR PINION(8mm),12T	馬達齒輪(8mm,12T)	1

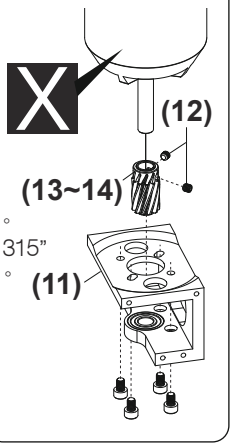


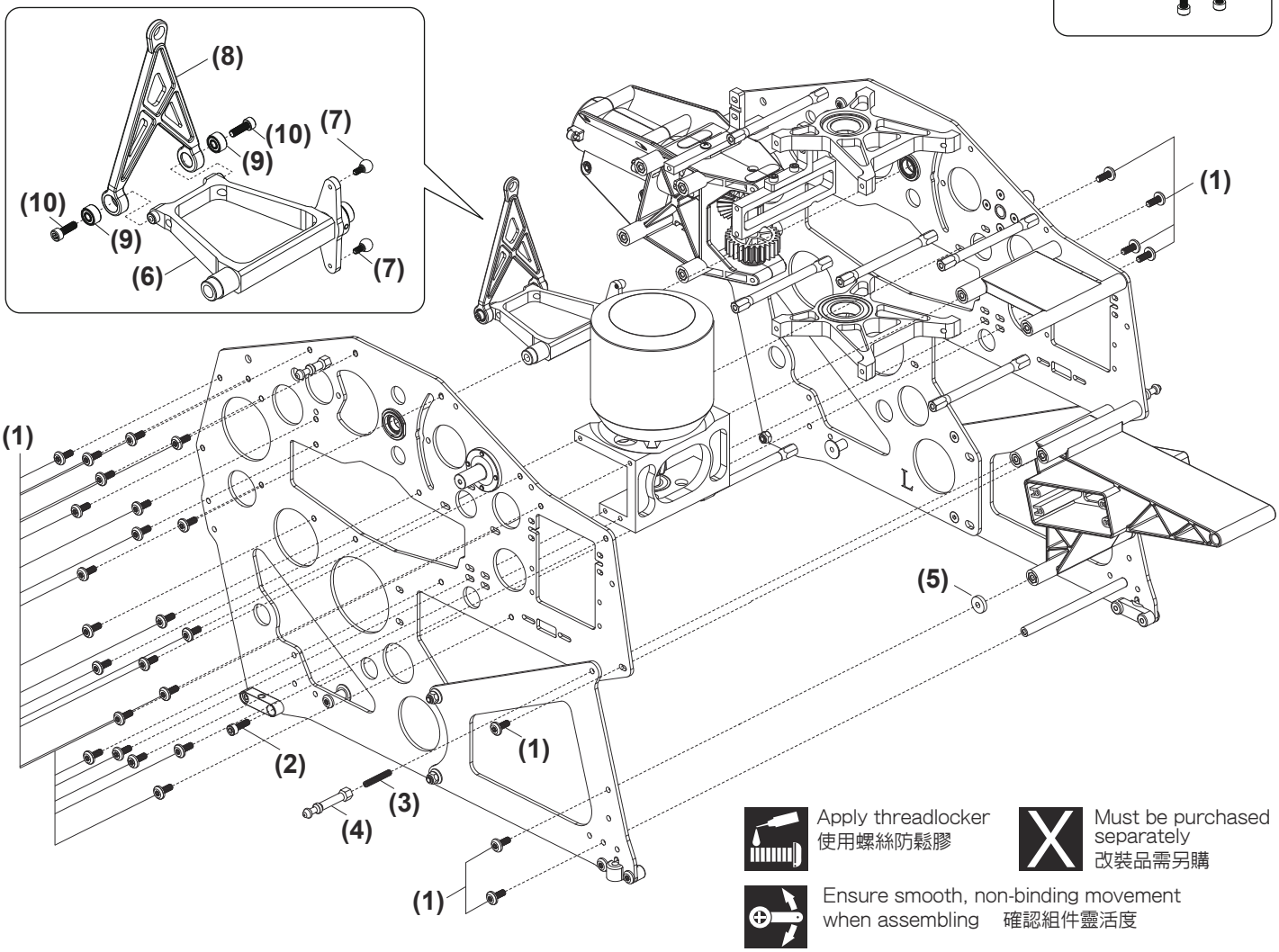




Secure all screws shown on this page with a drop of threadlocker.
本頁顯示之螺絲請使用適量防鬆膠鎖固。

Applicable to a M4x30mm or M4x25mm motors with 4 setting screws installation. A 8.0mm/0.315" diameter motor shaft as standard and 38mm/1.496" long shaft is recommended.
可適用M4x30mm或M4x25mm 鎖固孔位馬達。
原廠馬達齒及馬達齒輪固定座可裝配8.0mm/0.315"軸心馬達，建議馬達軸心長度為38mm/1.496"。





Apply threadlocker
使用螺絲防鬆膠

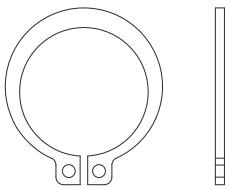
Must be purchased separately
改裝品需另購

Ensure smooth, non-binding movement when assembling 確認組件靈活度

Bag E Main Gear Set / 主齒輪組組裝

No.	Description	名稱	Qty
1	MAIN GEAR SET	主齒輪組	1
1-1	MAIN GEAR,111T	主齒輪(111T)	1
1-2	TAIL DRIVE GEAR,108T	尾驅動輪108T	1
1-3	ONE WAY BEARING SHAFT	單向離合器軸	1
1-4	C-CLIP	C型扣環	1

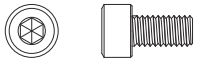
No.	Description	名稱	Qty
1-5	SOCKET SCREW, M2.5x6	內六角螺絲, M2.5x6	8
1-6	ONE WAY CLUTCH HOUSING	單向離合器座	1
2	SOCKET SCREW, M4x8	內六角螺絲, M4x8	2
3	MAIN SHAFT STOPPER	止擋環	1
4	SOCKET SCREW, M3x6	內六角螺絲, M3x6	2



C-CLIP
C型扣環



SOCKET SCREW, M2.5x6
內六角螺絲, M2.5x6

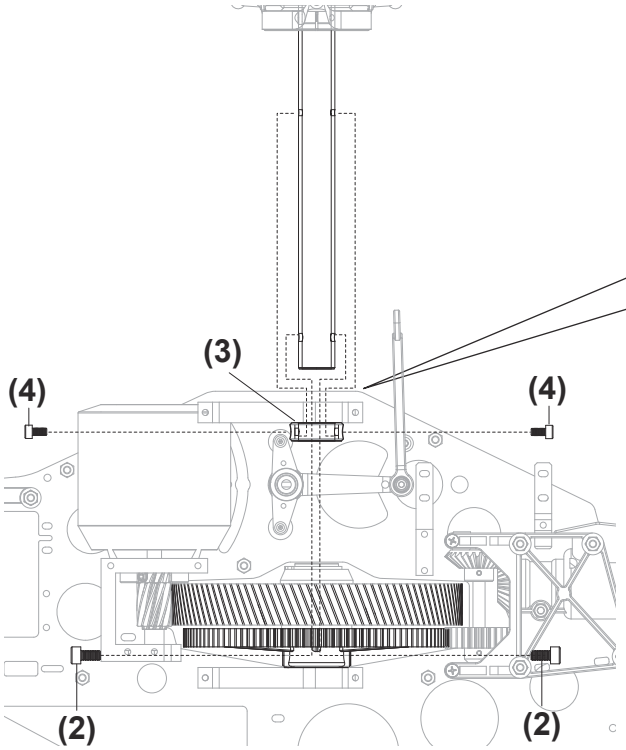


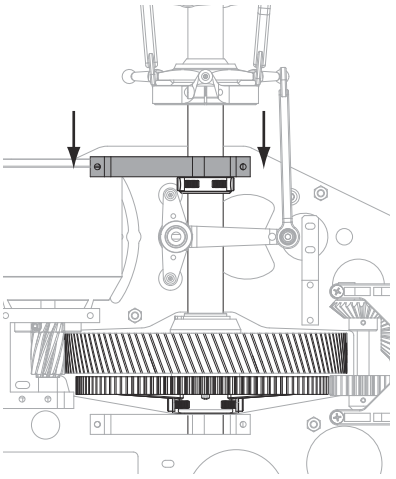
SOCKET SCREW, M4x8
內六角螺絲, M4x8



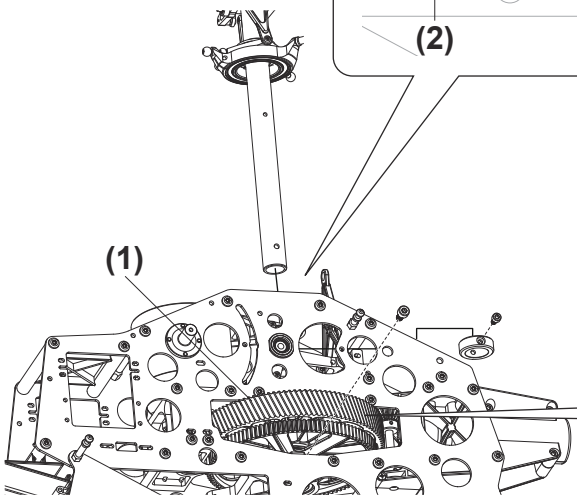
SOCKET SCREW, M3x6
內六角螺絲, M3x6

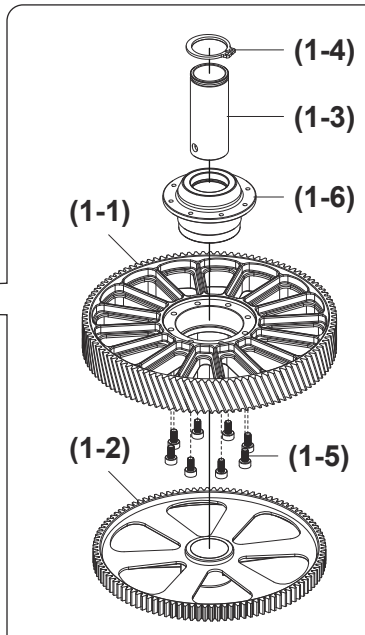
Secure all screws shown on this page with a drop of threadlocker.
本頁顯示之螺絲請使用適量防鬆膠鎖固。





Lower the Upper Main Shaft Bearing Block to eliminate the play after securing all screws.
鎖固定位螺絲後，將上主軸軸承座下壓以消除間隙。





Line up the holes of the Autorotation Tail Drive Gear, One Way Bearing Shaft & Main Shaft, and then insert the Socket Screw to fix. Add a drop of threadlocker when securing, but do not over tighten.
對正尾驅動齒、單向軸套及主軸上孔位後，鎖入內六角螺絲，並使用適量防鬆劑固定。
注意! 請勿過度緊迫螺絲。

Apply threadlocker
使用螺絲防鬆膠

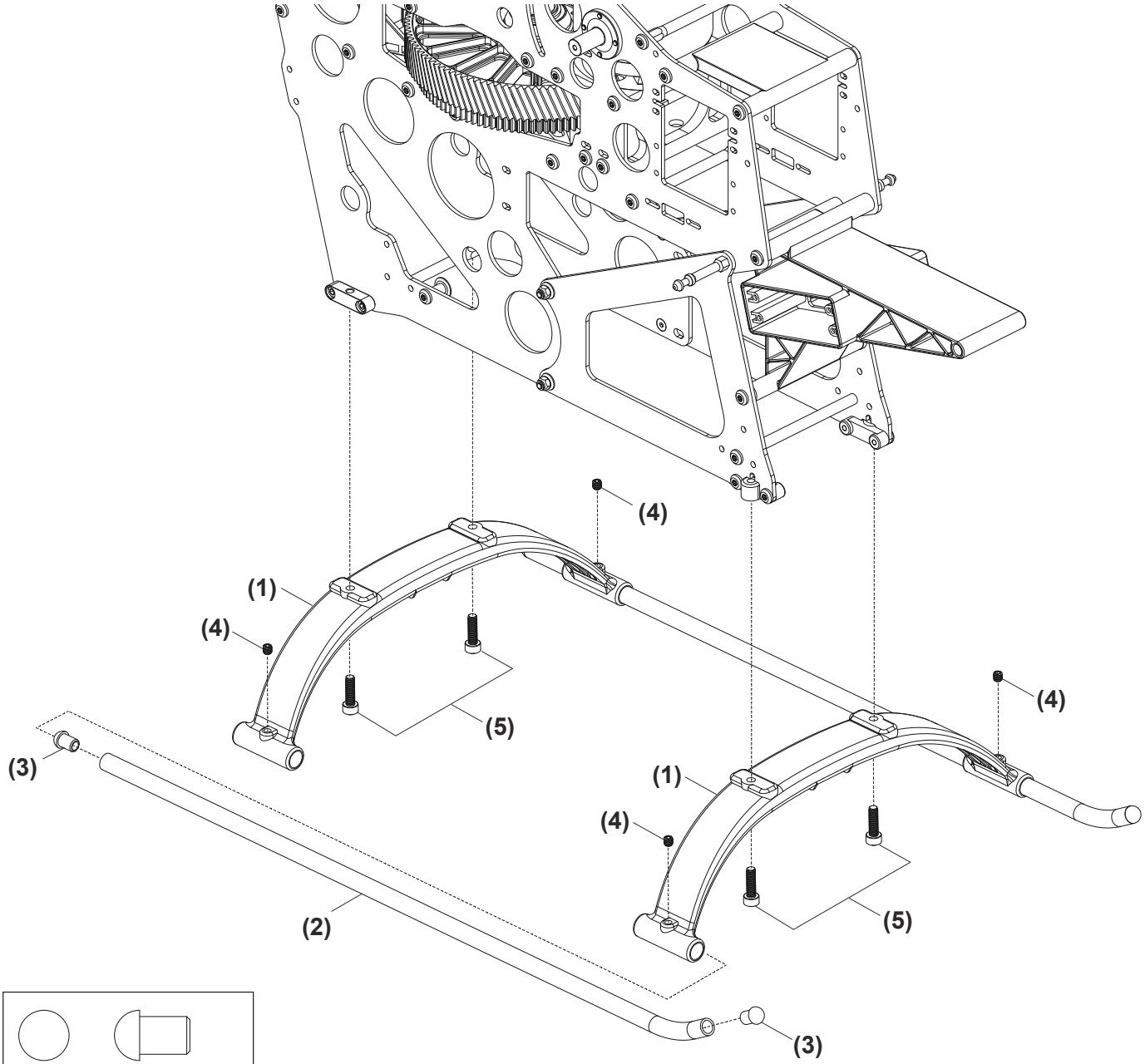
Ensure smooth, non-binding movement when assembling 確認組件靈活度

Bag F Landing Skid / 腳架組組裝

No.	Description	名稱	Qty
1	LANDING SKID BRACE	腳架	2
2	SKID PIPE	底座圓管	2
3	SKID PIPE END CAP	圓管塞	4

No.	Description	名稱	Qty
4	SET SCREW, M4x4	無頭內六角螺絲, M4x4	4
5	SOCKET SCREW, M4x14	內六角螺絲, M4x14	4

Secure all screws shown on this page with a drop of threadlocker.
本頁顯示之螺絲請使用適量防鬆膠鎖固。



SKID PIPE END CAP
圓管塞

SET SCREW, M4x4
無頭內六角螺絲, M4x4

SOCKET SCREW, M4x14
內六角螺絲, M4x14

Apply threadlocker
使用螺絲防鬆膠

Assemble left and right side the same way
左右側組件相同

Bag F Control Arm Set / 控制臂組組裝

No.	Description	名稱	Qty
1	CONTROL ARM SET-L	側轉控制臂座組-左	1
1-1	CONTROL ARM-L	側轉控制臂座-左	1
1-2	LINK BALL	連結球座	2
1-3	SOCKET SCREW, M2x8	內六角螺絲, M2x8	2
1-4	LINKAGE BALL(A)	內六角連接頭螺絲(A)	4
1-5	BEARING, d8xD12xW3.5	滾珠軸承, d8xD12xW3.5	4

No.	Description	名稱	Qty
2	SOCKET SCREW, M2.5x6	內六角螺絲, M2.5x6	2
3	CONTROL ARM SET-R	金屬副翼控制臂組-右	1
3-1	CONTROL ARM-R	金屬副翼控制臂A-右	1
4	LINKAGE ROD SET(67.5mm)	連接桿(67.5mm)	2
5	CONTROL ARM CAP	墊圈	2

Secure all screws shown on this page with a drop of threadlocker.
本頁顯示之螺絲請使用適量防鬆膠鎖固。
Attach the Control Arm onto the Main Frames as drawing, and note the difference of Left & Right Control Arms.
參考圖示將控制臂裝上側板上，請注意左、右邊方向性。

LINK BALL
連結球座

SOCKET SCREW, M2x8
內六角螺絲, M2x8

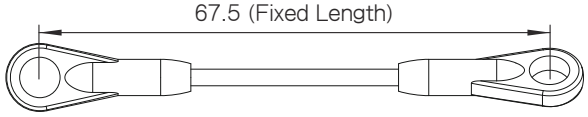
LINKAGE BALL(A)
內六角連接頭螺絲(A)

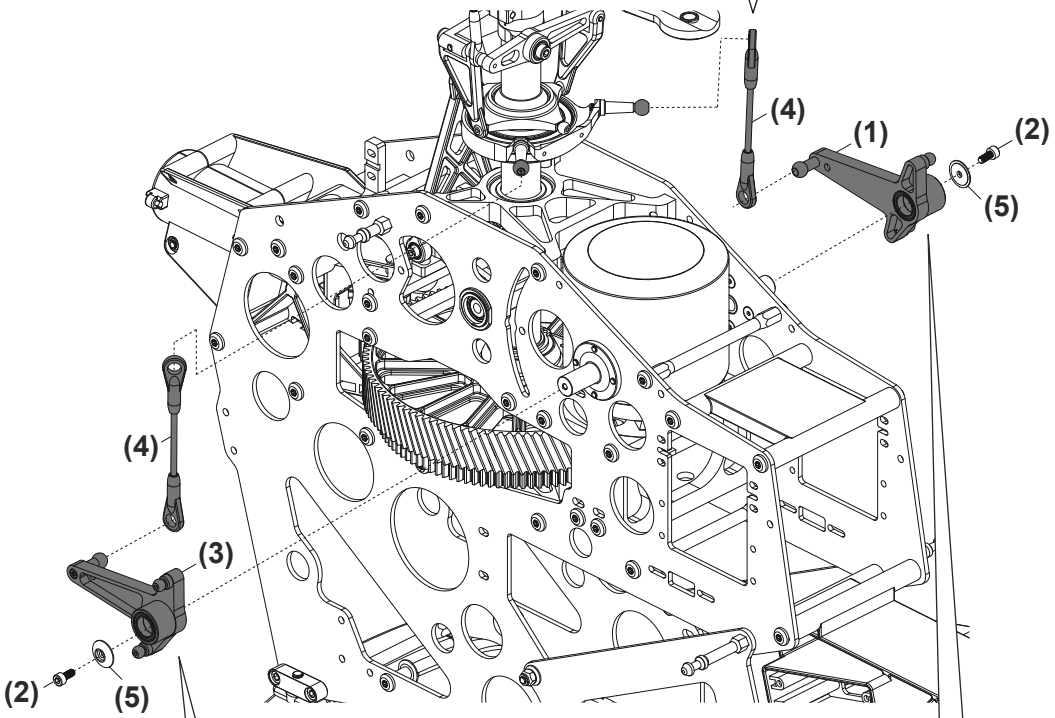
BEARING, d8xD12xW3.5
滾珠軸承, d8xD12xW3.5

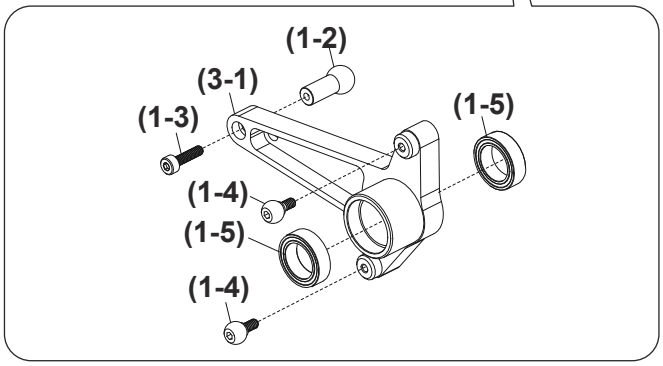
SOCKET SCREW, M2.5x6
內六角螺絲, M2.5x6

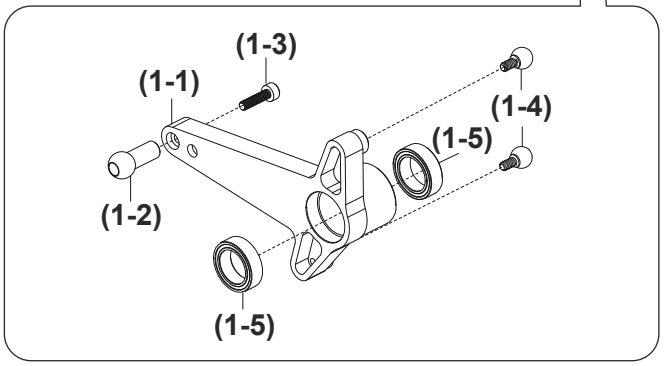
The length of the Linkage Rod Set is fixed (67.5mm) without adjustment req'd.
此處連桿長度固定為67.5mm，長度無需進行調整。

Scale=1:1 (unit:mm)









Apply threadlocker
使用螺絲防鬆膠

Ensure smooth, non-binding movement when assembling　確認組件靈活度

Bag G Tail Rotor System / 尾旋翼機構組裝

THUNDER TIGER

No.	Description	名稱	Qty
1	METAL TAIL GRIP	金屬尾旋翼轉座	2
2	WASHER, d7.5xD10xW0.3	止推軸環, d7.5xD10xW0.3	2
3	WASHER, d7.5xD5xW0.3	止推軸環, d7.5xD5xW0.3	2
4	THRUST BEARING, d5xD10xW4	止推軸承, d5xD10xW4	2
5	BEARING, d5xD10xW4	滾珠軸承, d5xD10xW4	2
6	TAIL ROTOR HUB	尾旋翼座	1
7	SET SCREW, M3x3	無頭內六角螺絲, M3x3	2
8	WASHER, d3xD7xW0.5	墊圈, d3xD7xW0.5	2
9	TORX SCREW, M3x8	星型螺絲, M3x8	2
10	TAIL PITCH CONTROL LINK	尾旋翼連接頭	2

No.	Description	名稱	Qty
11	SOCKET SCREW, M2x8	內六角螺絲, M2x8	2
12	COLLAR, d2xD3xW4.2	軸環, d2xD3xW4.2	2
13	PIN, φ2x19	固定銷, φ2x19	2
14	E-CLIP	E型扣環	2
15	TAIL ROTOR SHAFT	尾旋翼軸	1
16	TAIL PITCH CONTROL FORK	尾旋翼控制座	1
17	METAL TAIL PITCH SLIDER	金屬尾旋翼滑座	1
18	BEARING, d6xD10xW3	滾珠軸承, d6xD10xW3	2
19	TAIL PITCH CONTROL SLIDER BUSHING	尾旋翼控制軸套	1
20	LINKAGE BALL(A)	內六角連接頭螺絲(A)	1

Secure all screws shown on this page with a drop of threadlocker.
本頁顯示之螺絲請使用適量防鬆膠鎖固。

WASHER, d7.5xD10xW0.3
止推軸環, d7.5xD10xW0.3

WASHER d7.5xD5xW0.3
止推軸環 d7.5xD5xW0.3

THRUST BEARING, d5xD10xW4
止推軸承, d5xD10xW4

BEARING, d5xD10xW4
滾珠軸承, d5xD10xW4

SET SCREW, M3x3
無頭內六角螺絲, M3x3

WASHER, d3xD7xW0.5
墊圈, d3xD7xW0.5

TORX SCREW, M3x8
星型螺絲, M3x8

SOCKET SCREW, M2x8
內六角螺絲, M2x8

COLLAR, d2xD3xW4.2
軸環,d2xD3xW4.2

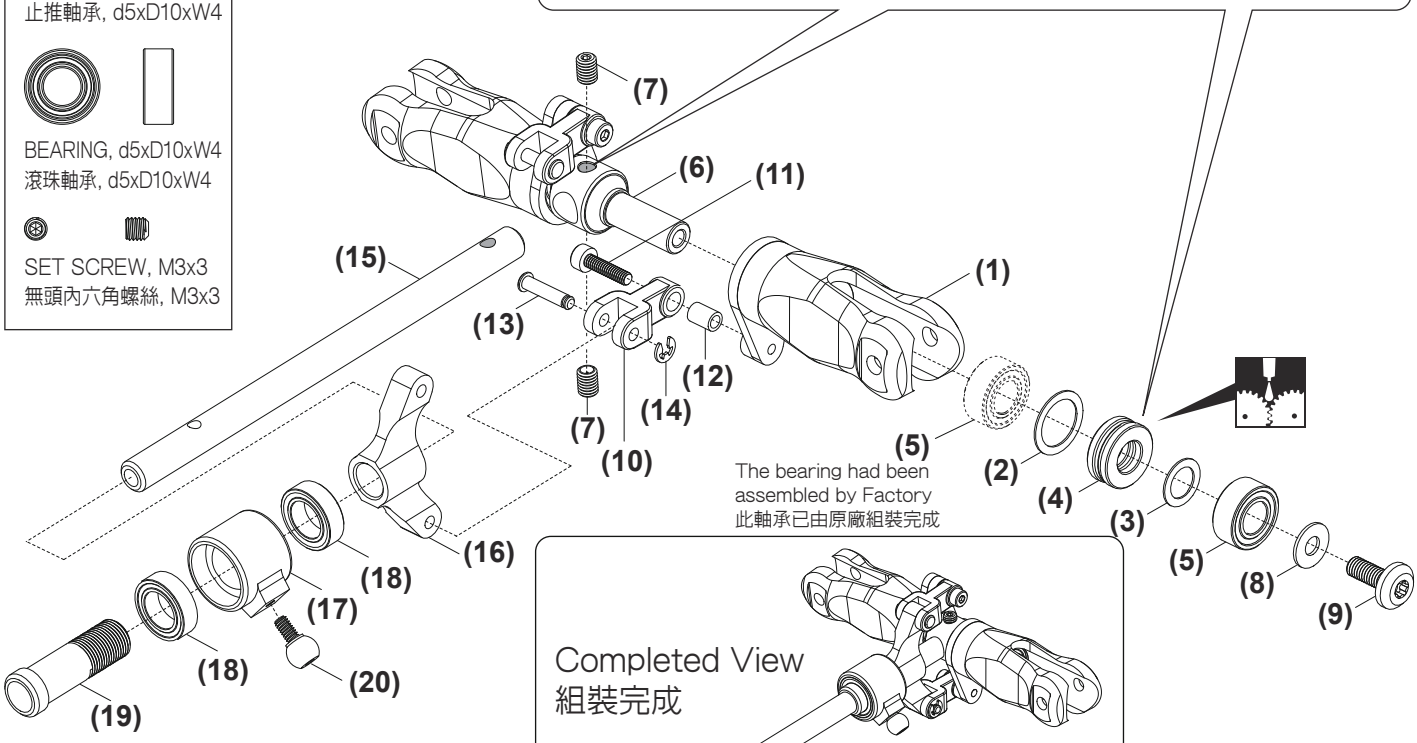
PIN, φ2x19
固定銷, φ2x19

E-CLIP
E型扣環

BEARING, d6xD10xW3
滾珠軸承, d6xD10xW3

LINKAGE BALL(A)
內六角連接頭螺絲(A)

1. Note the orientation of the Thrust Bearings; please refer page 6, Diagram for Thrust Bearing Assembly.
2. Line up the concave of Tail Rotor Shaft and the hole of Hub when securing the Tail Rotor Hub onto the Tail Rotor Shaft.
1. 請參考第 6 頁止推軸承安裝示意圖，注意安裝方向性。
2. 將尾旋翼固定座鎖上尾旋翼主軸時，請注意軸上凹槽需對正固定座上螺絲孔。



The bearing had been assembled by Factory
此軸承已由原廠組裝完成

Completed View
組裝完成

Apply threadlocker
使用螺絲防鬆膠

Assemble left and right side the same way
左右側組件相同

Ensure smooth, non-binding movement when assembling　確認組件靈活度

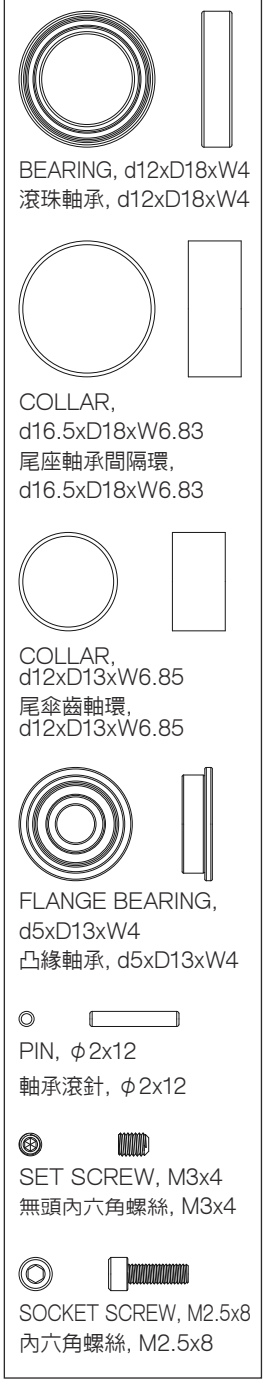
Apply grease
使用潤滑油膏(黃油)

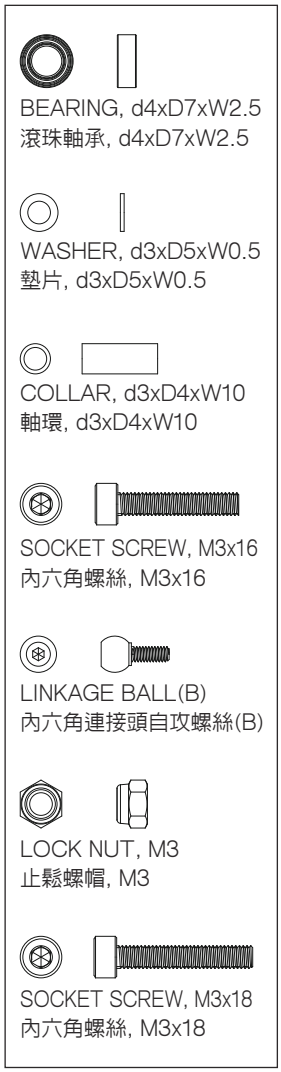
Bag H Tail Rotor System / 尾旋翼機構組裝

THUNDER TIGER

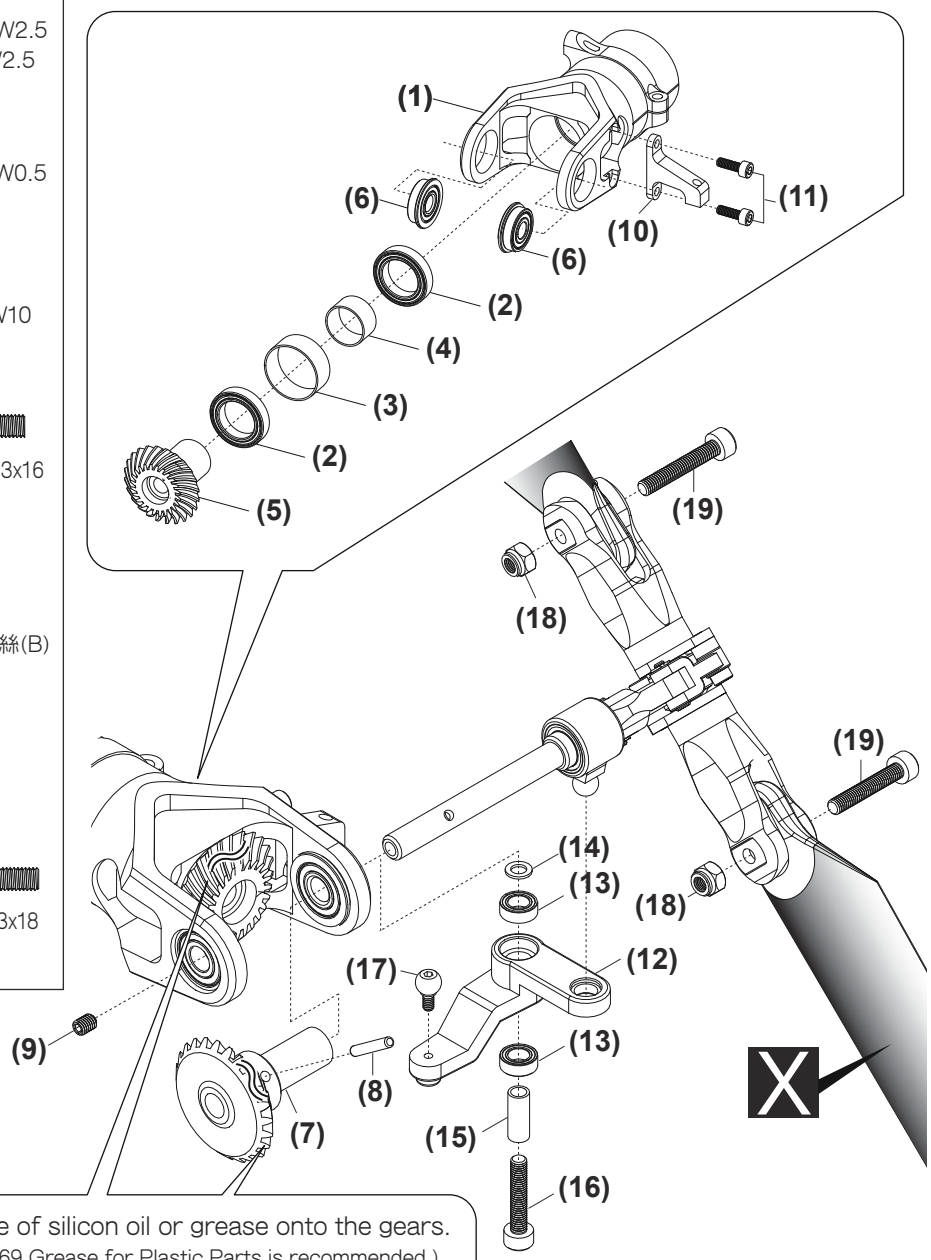
No.	Description	名稱	Qty
1	METAL TAIL UNIT HOUSING	金屬尾座	1
2	BEARING, d12xD18xW4	滾珠軸承, d12xD18xW4	2
3	COLLAR, d16.5xD18xW6.83	尾座軸承間隔環	1
4	COLLAR, d12xD13xW6.85	尾傘齒軸環	1
5	TAIL INPUT BEVEL	尾螺旋傘齒輪A(24T)	1
6	FLANGE BEARING, d5xD13xW4	凸緣軸承,d5xD13xW4	2
7	TAIL OUTPUT BEVEL	尾螺旋傘齒輪B(24T)	1
8	PIN, ϕ2x12	軸承滾針, ϕ2x12	1
9	SET SCREW, M3x4	無頭內六角螺絲, M3x4	1
10	TAIL LEVER BKT	金屬尾控制臂座	1

No.	Description	名稱	Qty
11	SOCKET SCREW, M2.5x8	內六角螺絲, M2.5x8	2
12	TAIL PITCH CONTROL LEVER	尾旋翼控制桿	1
13	BEARING, d4xD7xW2.5	滾珠軸承, d4xD7xW2.5	2
14	WASHER, d3xD5xW0.5	墊片, d3xD5xW0.5	1
15	COLLAR, d3xD4xW10	軸環, d3xD4xW10	1
16	SOCKET SCREW, M3x16	內六角螺絲, M3x16	1
17	LINKAGE BALL(B)	內六角連接頭自攻螺絲(B)	1
18	LOCK NUT, M3	止鬆螺帽, M3	2
19	SOCKET SCREW, M3x18	內六角螺絲, M3x18	2





Secure all screws shown on this page with a drop of threadlocker.
本頁顯示之螺絲請使用適量防鬆膠鎖固。



Apply some of silicon oil or grease onto the gears.
(Using PV0269 Grease for Plastic Parts is recommended.)
在傘齒輪上塗抹些許矽膠油或塑膠零件潤滑油。
(推薦使用PV0269塑膠零件潤滑油)

Apply threadlocker
使用螺絲防鬆膠

Ensure smooth, non-binding movement when assembling
確認組件靈活度

Must be purchased separately
改裝品需另購

Apply grease
使用潤滑油膏(黃油)

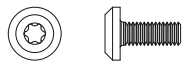
Bag I+J Tail Unit / 尾部總成組裝

No.	Description	名稱	Qty
1	TAIL DRIVE SHAFT	尾驅動軸	1
2	TAIL DRIVE SHAFT BRG	尾驅動軸軸套組	2
3	LOCK NUT, M2.5	止鬆螺帽, M2.5	2
4	TAIL DRIVE SHAFT LINKER	尾驅動連接棒	2
5	SOCKET SCREW, M2.5x12	內六角螺絲, M2.5x12	2
6	CARBOM TAIL BOOM	碳纖尾管	1
7	TORX SCREW, M3x8	星型螺絲, M3x8	2
8	TAIL STOPPER	尾管止擋塊	1
9	SOCKET SCREW, M3x10	內六角螺絲, M3x10	1
10	CARBON VERTICAL FIN	碳纖垂直安定面	1
11	METAL TAIL BOOM SUPPORT BRACKET	金屬尾管支撐固定座	1

No.	Description	名稱	Qty
12	SOCKET SCREW, M3x8	內六角螺絲, M3x8	1
13	SOCKET SCREW, M3x6	內六角螺絲, M3x6	2
14	METAL TAIL SERVO MOUNT	金屬伺服機固定座	2
15	SELF TAPPING SCREW, M2x8	自攻螺絲(粗), M2x8	3
16	ROD GUIDE	推拉桿固定環	3
17	TAIL BOOM SUPPORT END	尾管支撐架接頭	4
18	SOCKET SCREW, M3x12	內六角螺絲, M3x12	4
19	NUT, M2	六角螺帽, M2	4
20	SOCKET SCREW, M2x10	內六角螺絲, M2x10	4
21	CARBON TAIL BOOM SUPPORT	碳纖尾管支撐架	2
22	FRAME SPACER	側板支柱	1


LOCK NUT, M2.5
止鬆螺帽, M2.5


SOCKET SCREW, M2.5x12
內六角螺絲, M2.5x12

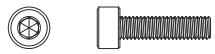

TORX SCREW, M3x8
星型螺絲


SOCKET SCREW, M3x10
內六角螺絲, M3x10


SOCKET SCREW, M3x8
內六角螺絲, M3x8


SOCKET SCREW, M3x6
內六角螺絲, M3x6

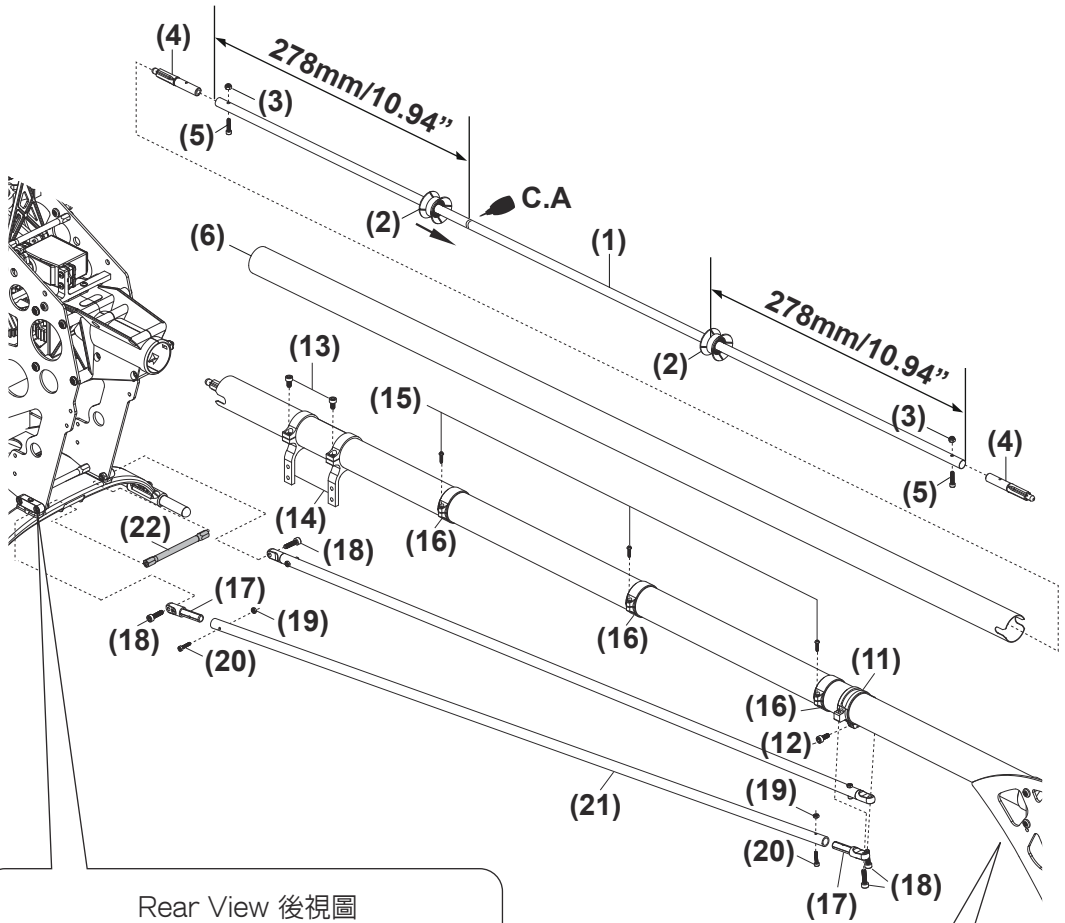

SELF TAPPING SCREW, M2x8
自攻螺絲(粗), M2x8


SOCKET SCREW, M3x12
內六角螺絲, M3x12

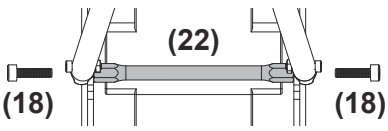

NUT, M2
六角螺帽, M2


SOCKET SCREW, M2x10
內六角螺絲, M2x10

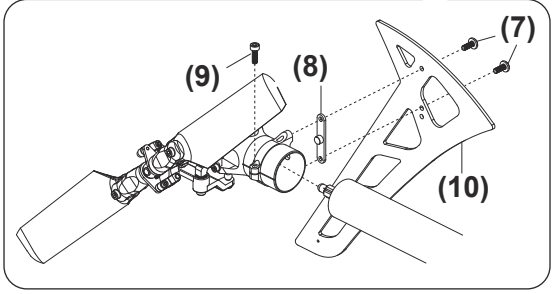
Add a drop of thin CA glue on the Tail Drive Shaft next to where the bearing should be, and then slide the bearings over the position quickly; the distance from the Shaft Drive End to the Rubber Shaft Bearing Support is approx. 278mm / 10.94”.
在尾傳動軸上軸承固定位置前方，塗抹少量快乾膠，迅速滑動軸承至定位固定；該定位大約距離軸傳動接頭278mm / 10.94”處。



Rear View 後視圖



Secure the screws into the Frame Spacer when attaching the Tail Boom Support End on the Main Frames.
安裝尾管支撐架於側板上時，請注意需將鎖固螺絲鎖固於六角固定支柱上。



Apply threadlocker
使用螺絲防鬆膠

Assemble left and right side the same way
左右側組件相同

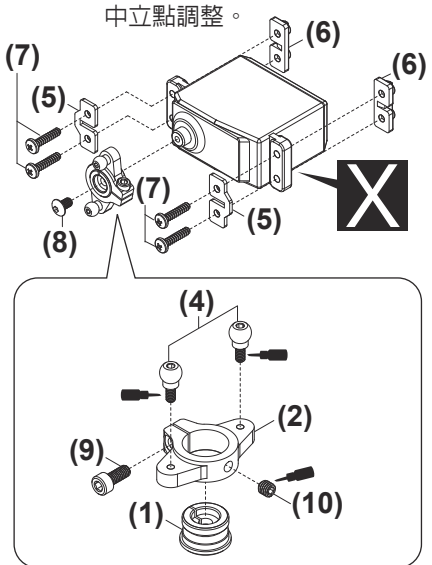
Apply C.A Glue
使用快乾膠黏合

Bag K Servo Installation / 伺服機裝配

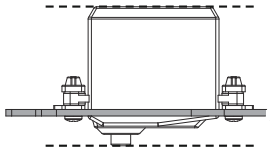
No.	Description	名稱	Qty
1	SERVO HORN COLLAR	伺服機擺臂軸套	4
2	SERVO HORN	伺服機擺臂	3
3	RUDDER SERVO HORN	尾舵伺服機擺臂	1
4	LINK BALL	連接球座	7
5	SERVO MOUNTING	伺服機墊片	8

No.	Description	名稱	Qty
6	SERVO NUT	伺服機螺帽	8
7	BUTTON PHILLIPS TAPPING SCREW, M2.6x14	扁圓自攻螺絲(粗), M2.6x14	16
8	BUTTON HEAD SOCKET SCREW, M3x5	半圓頭內六角螺絲, M3x5	4
9	SOCKET SCREW, M2.5x6	內六角螺絲, M2.5x6	4
10	SET SCREW, M3x3	無頭內六角螺絲, M3x3	4

Do not tighten the screw #9 & #10 at this step for preforming servo of calibations later.
螺絲#9&#10暫勿鎖緊以便後續中立點調整。

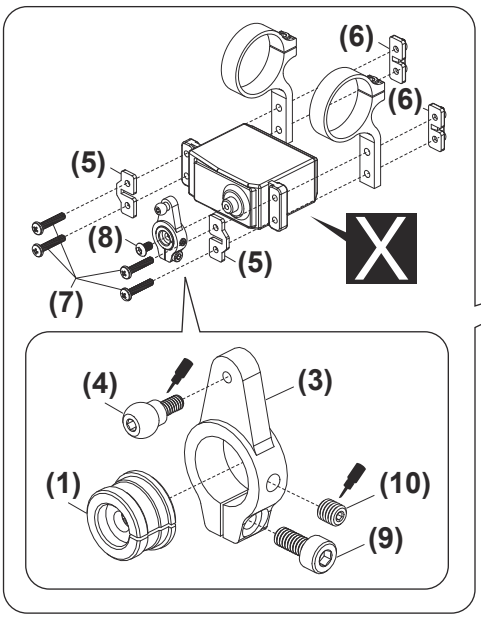


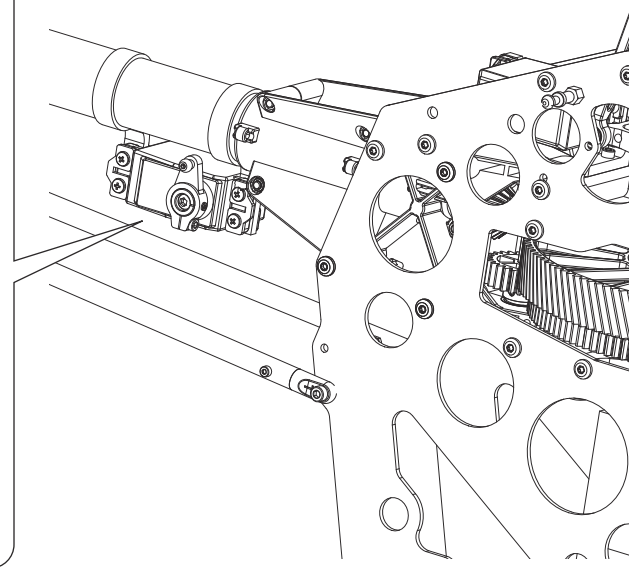
Screws should be separately fastened diagonally to ensure the servos mounted evenly.
鎖固時須依對角依序平均鎖上，以使伺服機平整安裝於側板上。



Attach the Servos onto the Servo Trays of Main Frame Set as drawing.
參考圖示將伺服機裝入主側板組上伺服機座。







X The adaptors come with the kit are applicable to ACR RC / Futaba servos as standard parts. The option adaptors for JR or Hitec are also available separately:
套件內附標準之伺服機擺臂軸套適用於ACE RC及Futaba品牌伺服機。
JR或Hitec伺服機使用之軸套可另外購買：
Item No. PV1623-J Servo Horn Adaptor for JR 伺服機擺臂軸套, JR
Item No. PV1623-H Servo Horn Adaptor for Hitec 伺服機擺臂軸套, Hitec

Apply threadlocker
使用螺絲防鬆膠

L/R Assemble left and right side the same way
左右側組件相同

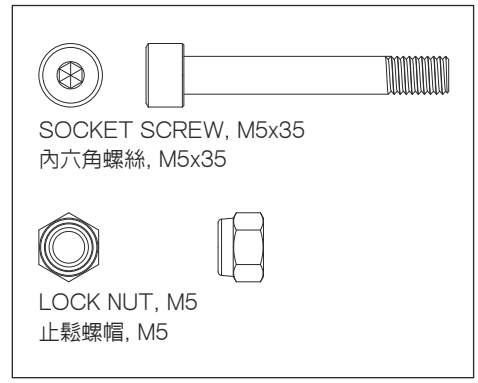
X Must be purchased separately
改裝品需另購

Bag J+KP1 Linkage Rod & Main Rotor Blade / 連桿及主旋翼組裝

THUNDER TIGER

No.	Description	名稱	Qty
1	LINKAGE ROD	尾推拉桿	1
2	BALL LINK	單頭連接桿	2
3	LINKAGE ROD	連接桿	6

No.	Description	名稱	Qty
4	ROTOR SPACER	主旋翼墊片	2
5	SOCKET SCREW, M5x35	內六角螺絲, M5x35	2
6	LOCK NUT, M5	止鬆螺帽, M5	2



The length of the Linkage Rod Set is fixed (74.53mm) without adjustment req'd.
此處連桿長度固定為74.53mm，長度無需進行調整。

Scale=1:1 (unit:mm)

1. You may need to adjust the linkage to ensure the blade tracking. Please refer page 27:Blade Tracking Adjustment.
2. Install the main blades with the Socket Screw. Do not over tighten and ensure the blades run effortlessly.
3. For safety the rpm of using carbon blades should not exceed 1,900rpm.

1. 您可能必需調整相關的連桿來確保旋翼旋轉軌跡正常。 請參閱第27頁〝主旋翼軌跡調整〞說明。
2. 以內六角螺絲安裝上主旋翼。請勿過度鎖緊。
3. 安全起見，碳纖維主旋翼轉速請勿超過1,900rpm。

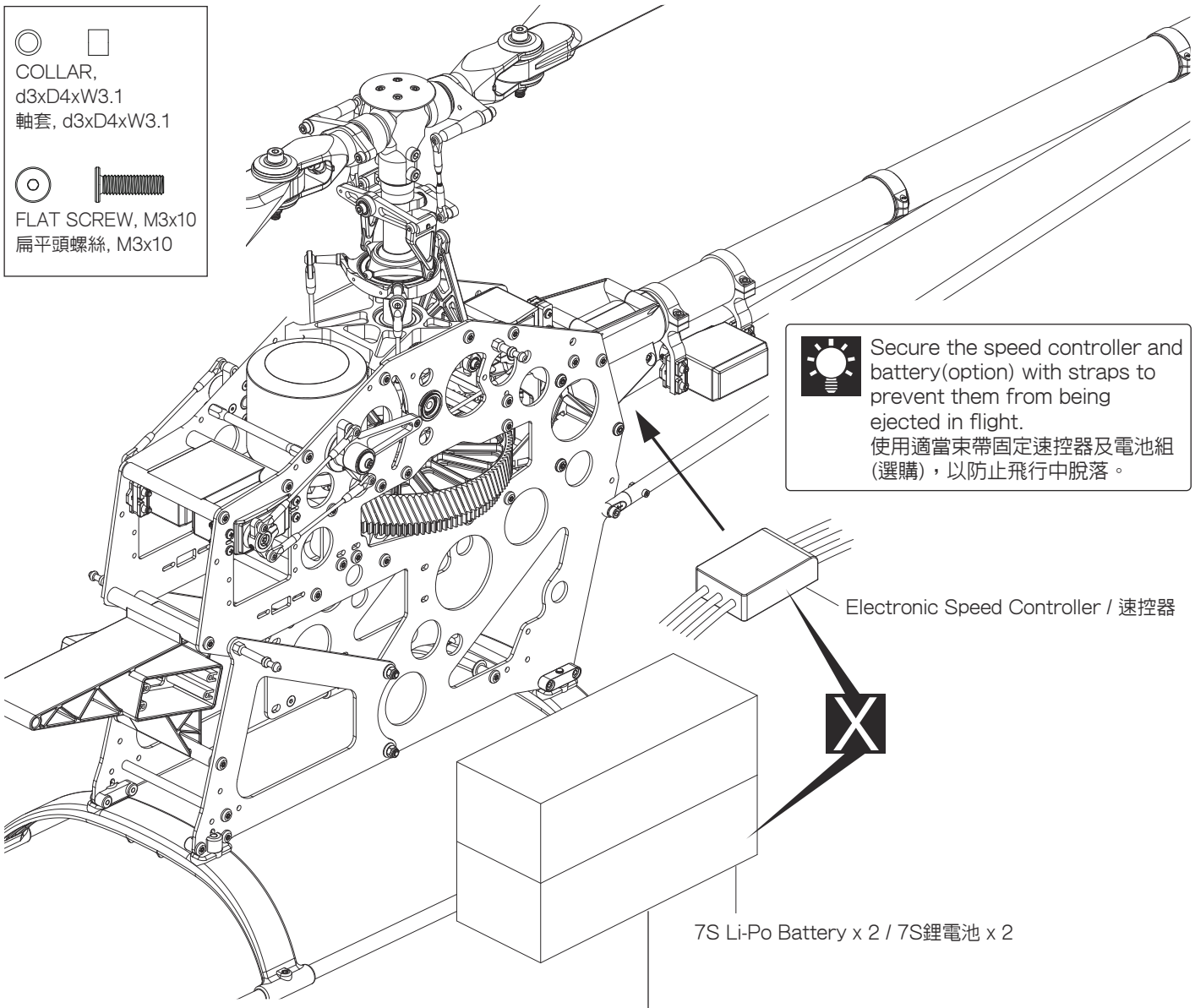
X Must be purchased separately
改裝品需另購

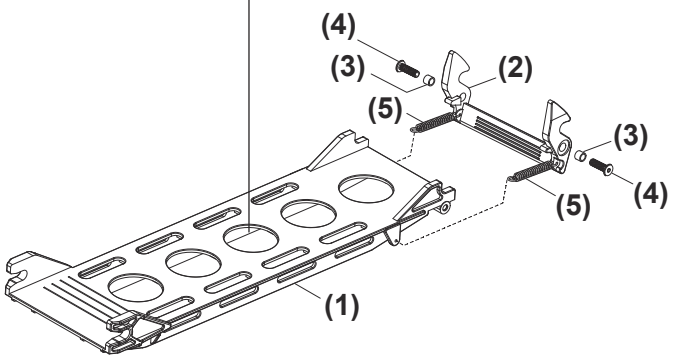
Bag L Electronic Device & Battery Tray / 電子設備及電池座組裝

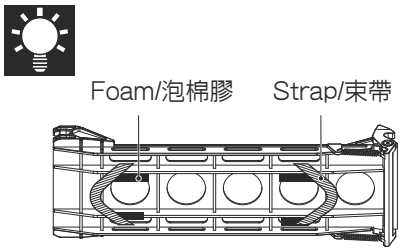
THUNDER TIGER

No.	Description	名稱	Qty
1	BATTERY TRAY	電池座	1
2	BATTERY TRAY CATCH	電池座夾扣	1
3	COLLAR, d3xD4xW3.1	軸套, d3xD4xW3.1	2

No.	Description	名稱	Qty
4	FLAT SCREW, M3x10	扁平頭螺絲, M3x10	2
5	SPRING	拉伸彈簧	2







Stick a foam tape onto the position where the strap ties through the battery tray to prevent the strap from being worn and broken in hard flight.
將泡棉膠貼在束帶穿過電池座的位置上，可防止束帶於激烈飛行中磨損及斷裂。

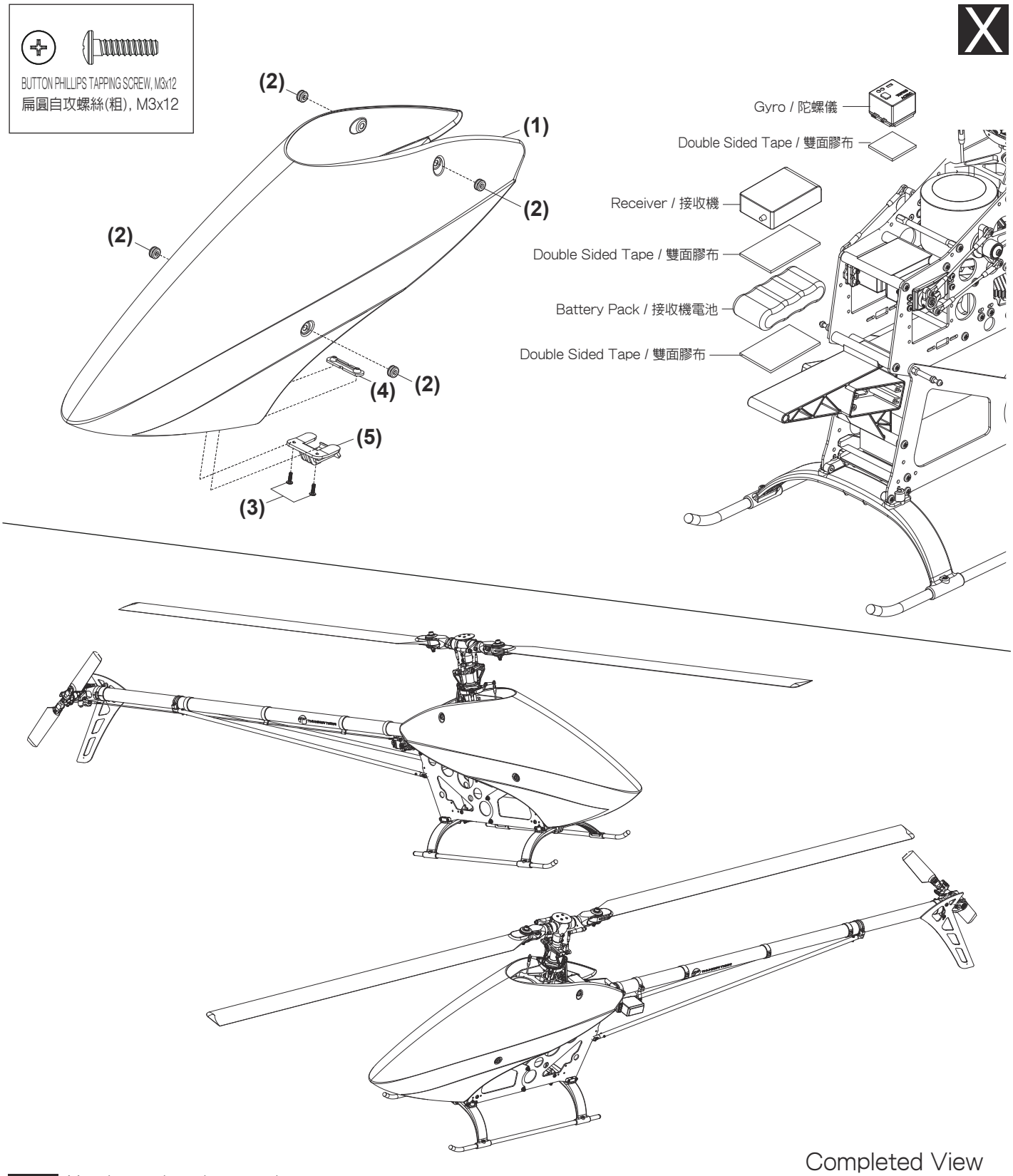
X Must be purchased separately
改裝品需另購

Bag M Electronic Device & Canopy / 電子設備及機殼罩

THUNDER TIGER

No.	Description	名稱	Qty
1	FIBERGLASS CANOPY, RED	玻纖機殼(紅)	1
2	RUBBER GROMMET	機身固定墊圈	4
3	BUTTON PHILLIPS TAPPING SCREW, M3x12	扁圓自攻螺絲(粗), M3x12	2

No.	Description	名稱	Qty
4	BODY CLIP B	機身夾扣B	1
5	CANOPY BRACKET	機身固定扣A	1



Must be purchased separately
改裝品需另購

Completed View
組裝完成

Radio System Setup / 遙控系統設定

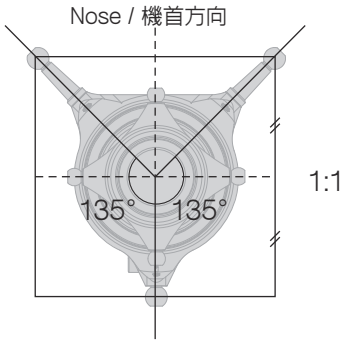
THUNDER TIGER

⚠ WARNING! / 警告!

For safety, please ensure the motor has been deactivated and will not drive the main rotor head before performing following setting processes. You may just unplug 2 of the wires from the motor and the ESC or move the motor with pinion away from the main gear to avoid a rotating rotor head.
安全起見，執行下列設定程序時，請確認馬達不會驅動主旋翼頭。您可拔除馬達與速控器間任兩條連接線，或將馬達驅動齒與主齒盤脫離。

Swashplate Type Setting / 十字盤模式設定

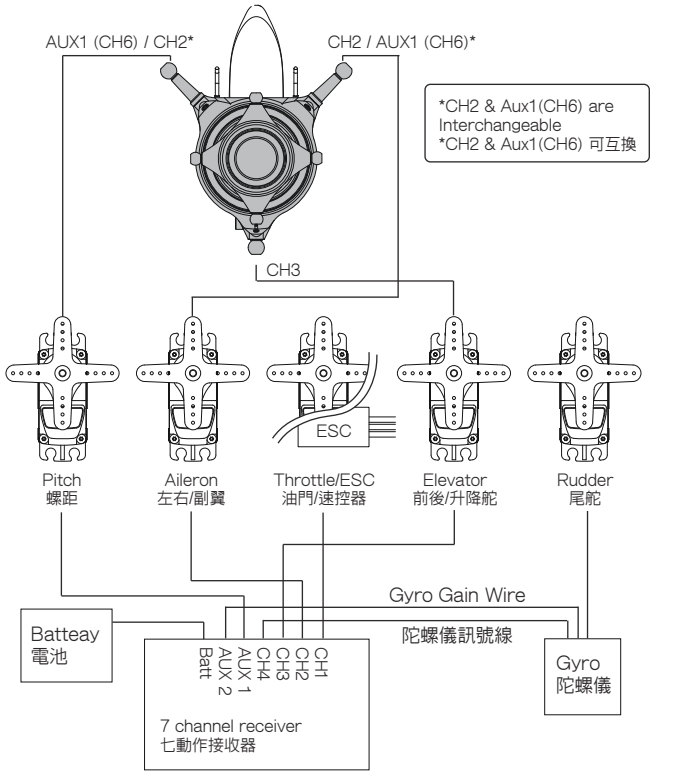
Choose and activate the swashplate mixing for a 135° CCPM program in your transmitter is the best recommended. Please refer your transmitter manual to find a proper swashplate setting.
A 140° CCPM program is also applicable to the helicopter if your transmitter does not feature a 135° CCPM program.
最佳設定為選用135度十字盤混控程式。請參考您的發射機說明書進行設定。
如您的發射機未具備135度十字盤混控程式，選用140度模式亦可正常操作本產品。



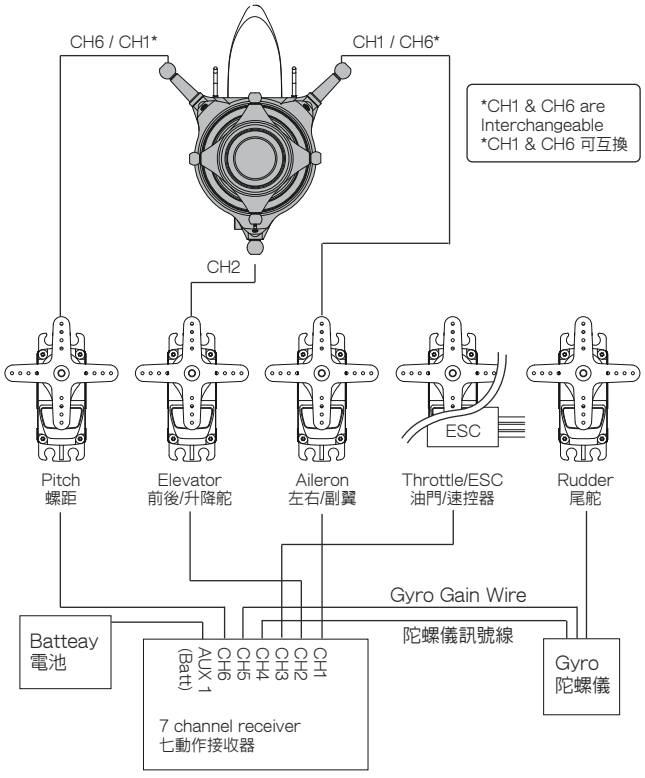
Electric Device Connection / 電子設備連接說明

E-CCPM system requires 3 channel for aileron, elevator and an AUX(for pitch). They are operated together to carry out the rolling, flipping and collective controlling. As a result, the following connecting manner is recommended.
The following chart is the E-CCPM connecting for your reference. Please also consult your radio instruction manual.
E-CCPM系統需要使用三個通路予副翼、升降舵、與螺距（使用AUX通道）。在混控模式下，必須藉由三顆伺服機同時完成動作，因此建議依照下列說明完成伺服機與接收機連結。下列圖示為安裝範例，實際接線方式，請參照您的遙控器使用說明書。

JR Radio Sysym



ACE RC / FUTABA / HITEC Radio Sysym

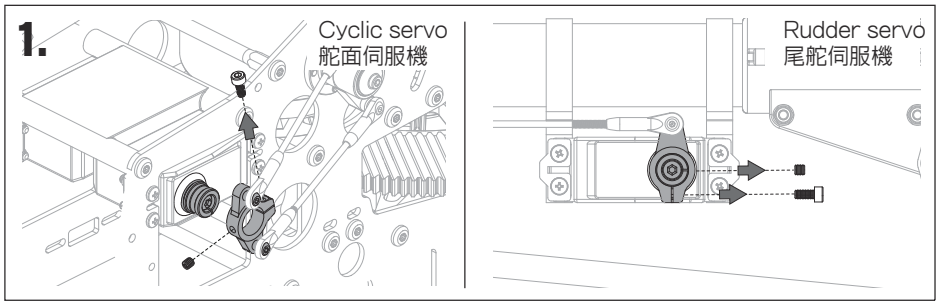


Mechanism Neutral Position Setting / 中立點設定

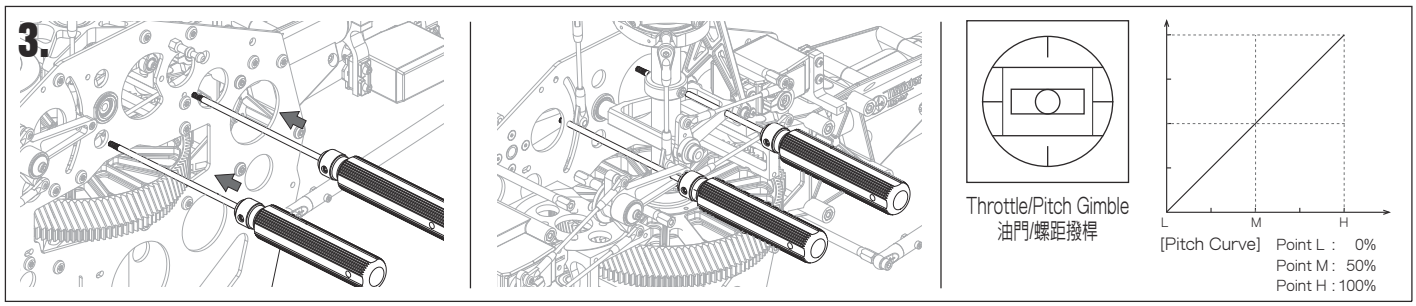
THUNDER TIGER

The innovative Quick-calibration System helps you to get a mechanism neutral position of the cyclic & rudder servo easier and fast. Please perform the procedure of the calibration as following illustrations step by step.
獨特創新的快速中立點校正系統，能幫助您快速完成舵面及尾舵伺服機的機構中立點校正；請依以下說明執行。

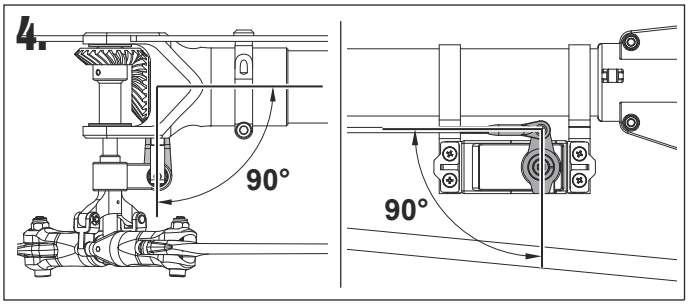
1. Loose the setting screws of the horns or just unhook the horn from the horn adaptor.
1. 鬆開擺臂上迫緊螺絲螺絲，或直接將擺臂自擺臂內襯上拆下。



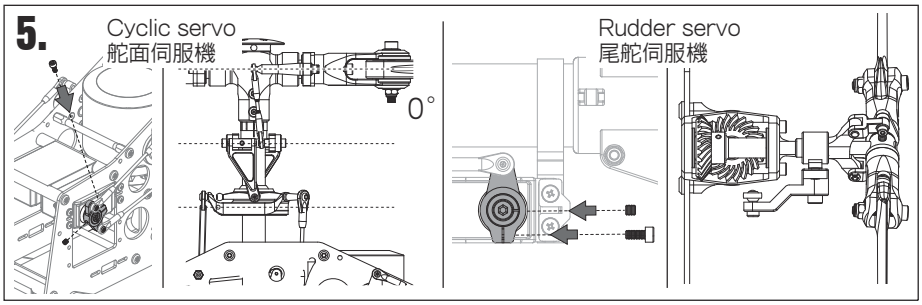
2. Refer your radio system manual to check and ensure that all of the trims & sub-trims are set at their neutral positions (the setting value should be 0), and switch to a non-heading lock mode for your gyro.
3. For calibration of the cyclic servos： please use a 3.0mm handle driver to pin the control arm.And then adjust the pitch curve as a negative 45° straight line (from 0 to highest 100% and pass through the mid-point 50%), therefore, all cyclic servos now are at the neutral position.
2. 請參考您的遙控系統說明書，將遙控器內微調設定全部設定為中立點位置，並將陀螺儀設定為非鎖定模式。
3. 執行舵面伺服機中立點校正：請使用3.0mm手工具固定控制臂；接著，將螺距曲線設定為負斜率之對角線（由0經過50至100%之直線），此時所有伺服機皆位於中立點位置。



4. For calibration of the rudder servo： check the servo horn is vertical to the servo; moreover, the tail pitch control lever is also vertical to the tail boom while the tail control stick and trim are centered. Tread the ball linkage to shorten/ lengthen the tail rotor linkage if non-vertical.
4. 執行尾舵伺服機中立點校正：確認當尾舵撥桿及微調均位於中立點時，尾舵擺臂垂直於伺服機，同時尾舵螺距控制臂也垂直於尾管。若尾舵推拉桿太短或過長，請調整球頭連桿鎖入拉桿距離。

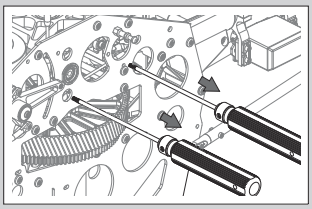


5. Mount all of the servo horns onto the adaptors and then tighten the setting screws, DONE! The collective pitch now is 0° at the neutral position of the cyclic servos, and the tail rotor is at 0° or a little off set to the right.
5. 將所有伺服機擺臂套入內襯並鎖固迫緊螺絲，完成! 此時舵面伺服機應位於中立點位置，主旋翼攻角為0度，同時，尾旋翼旋翼攻角為0度，或稍偏向右。



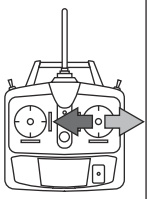
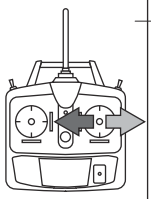
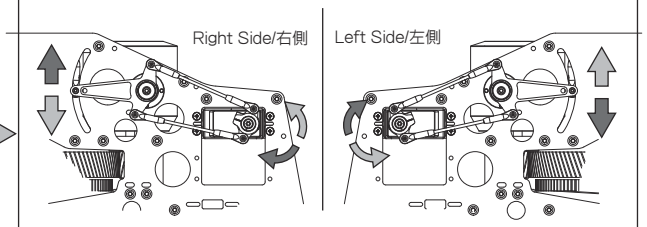
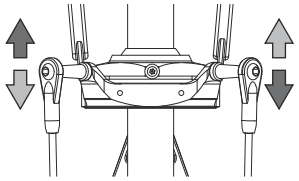
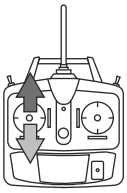
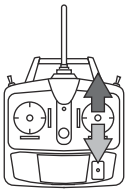
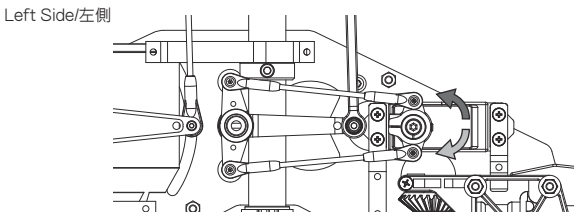
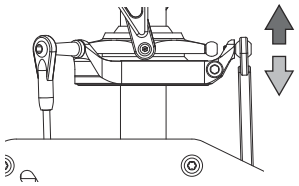
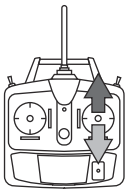
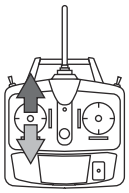
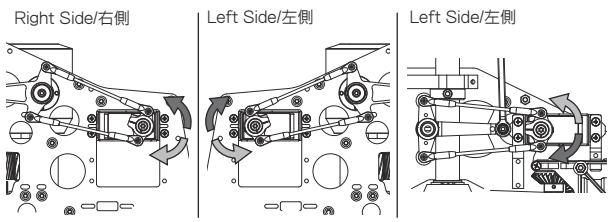
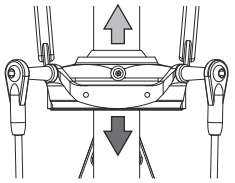
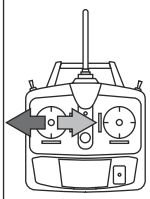
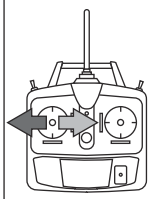
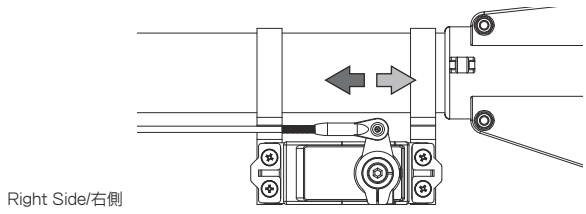
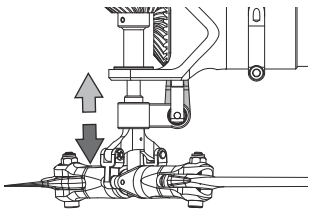
⚠ WARNING! / 警告!

Remember to turn the receiver power off and extract the handle drivers from the helicopter before performing the next procedure.
執行下一設定步驟前，請記得關閉接收機電源，並自機體上移除手工具。

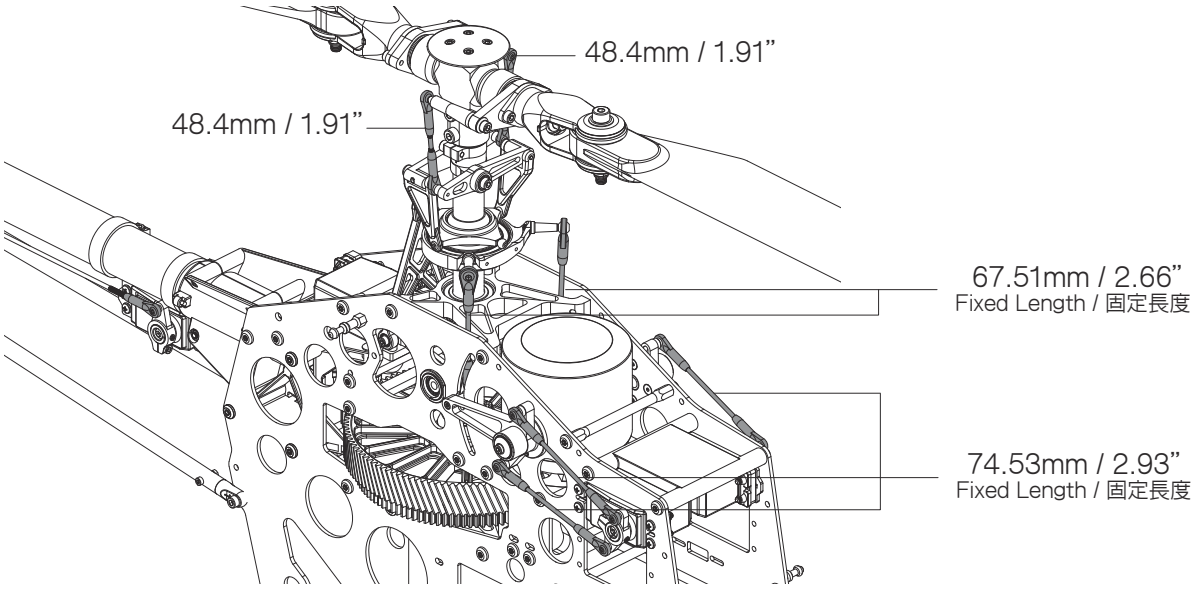


Swashplate & Servo Direction Setting / 十字盤及伺服機方向設定

Ensure there is none of the control bind at full travel before going through following setting procedures. Next, refer the illustrations below to check the direction of servo & swashplate with a given transmitter input. Adjust the servo reversing function in your transmitter if incorrect.
繼續設定前，請確認伺服機及連桿作動順暢且可達最大作動量。接著，請參考以下圖示，確認伺服機動作及十字盤混控設定可正確對應撥桿動作。若作動方向不正確，請調整您發射機上的伺服機逆轉功能。

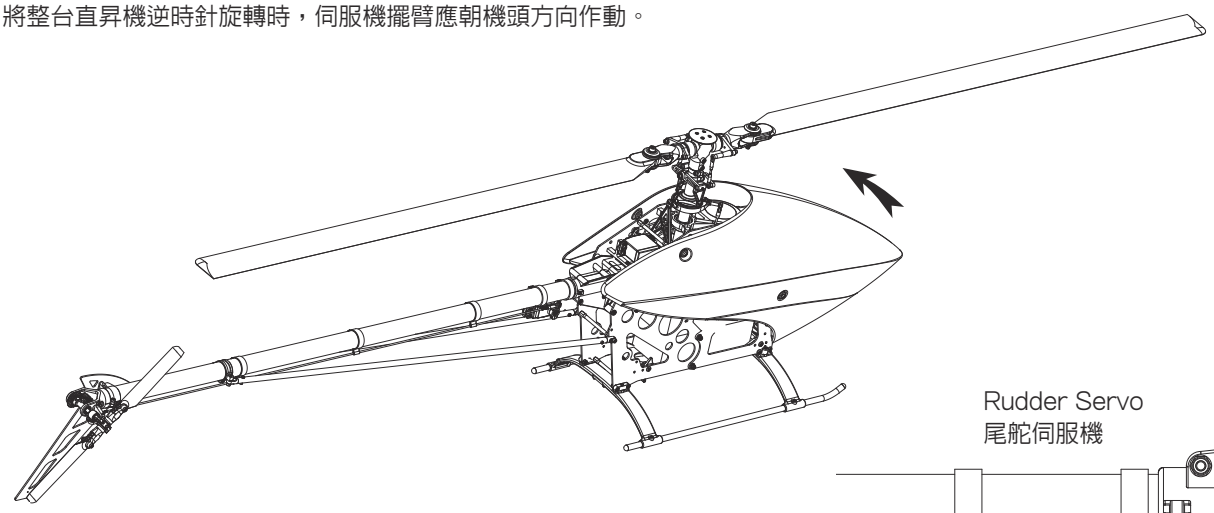
	Mold 1	Mold 2	Servo Horn movement 伺服機擺臂動作	Check Point 機構動作確認
Aileron 副翼				
Elevator 升降舵				
Pitch 螺距				
Rudder 尾舵				

Index of Linkage Length / 連桿長度索引

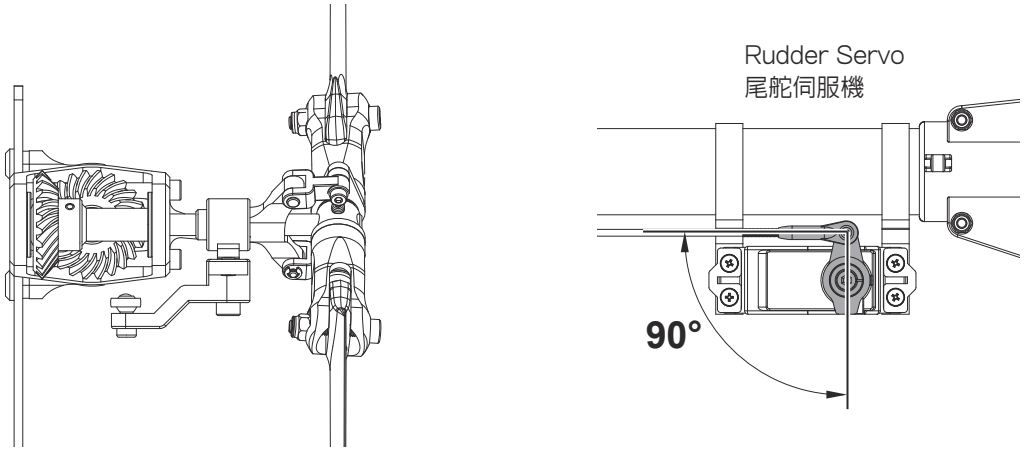


Tail Control & Gyro Setup / 尾舵控制及陀螺儀控制

It is recommended to use a Heading Lock Gyro. With a Heading Lock Gyro, you may not use the trim and the revolution mixing function of tail control. Mount the servo arm for the moment and check the movement of the tail servo:
1. While giving the right rudder control, the servo arm should move toward the nose of helicopter.
2. Rotate the helicopter with your hand counterclockwise, the servo arm should move toward the nose of helicopter.
建議搭配鎖定式陀螺儀，可使您無需額外設定微調及混控功能來控制尾舵 。暫將伺服機擺臂固定後進行尾舵伺服機作動確認：
1. 當執行右舵時，伺服機擺臂應朝機頭方向作動。
2. 將整台直昇機逆時針旋轉時，伺服機擺臂應朝機頭方向作動。



After ensuring the moving direction of tail servo, you have to mount the servo arm in the correct position. Please reset the receiver power and do not move the helicopter. While the tail control stick and trim are centered, mount the servo arm vertically. Next, two points may be your concern:
1. The traveling limit of the rudder servo may not go beyond the mechanical movement.
2. The rudder servo arm should be vertical while the tail rotor is at 0 pitch or with a little offset to the right.
(Referring to the photo below)
確認尾舵伺服機動作正確後，即可將伺服機擺臂確實安裝固定；請勿移動直昇機並重新啟動接收機電源。
當尾舵撥桿與微調置中時，將伺服機擺臂垂直伺服機安裝固定。接著，請特別注意下列兩者：
1. 尾舵伺服機最大行程量切勿大於機械行程量。
2. 當尾旋翼螺距為0或稍偏向右時，尾舵伺服機擺臂應在垂直位置。（請對照下圖）

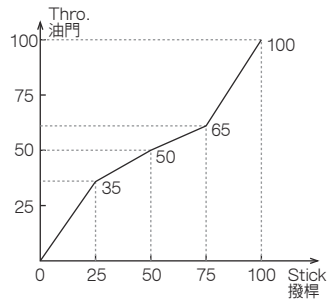
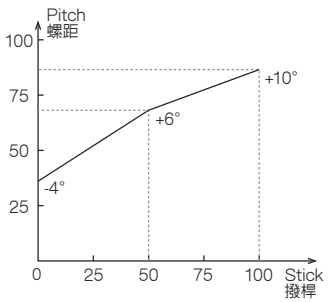


Note1: To find the traveling limit, you have to adjust the Gyro referring to its manual.
Note2: To adjust the pirouetting speed of the helicopter, please use the "Travel Adjustment" or the "D/R & EXP" function of your transmitter.
說明1：請參考陀螺儀說明書調整陀螺儀以確認伺服機最大行程量。
說明2：調整尾舵自旋速度，請設定發射機上“行程設定（Travel Adjustment ）”或“大小動（D/R）、指數值（EXP）”功能。

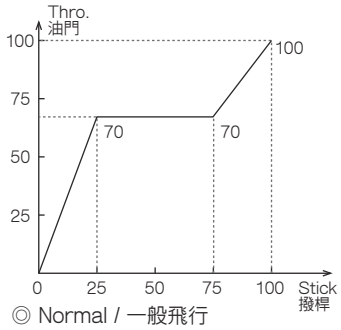
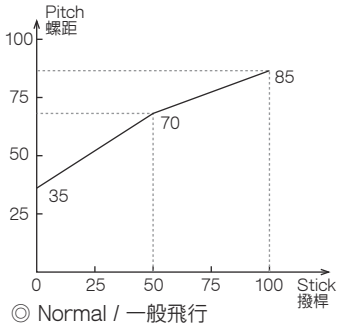
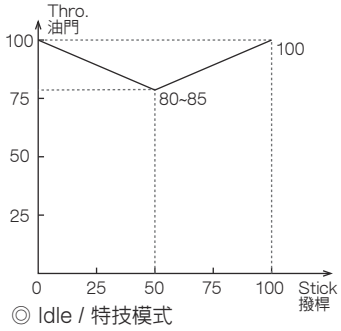
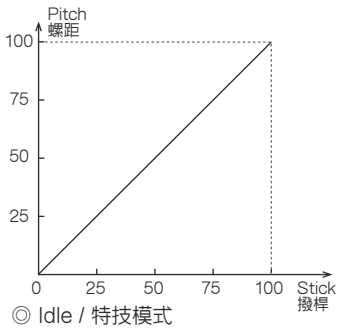
Throttle & Pitch Curve Setting / 油門及螺距曲線設定

The following is the setting up data of pitch curve and throttle curve for your reference only. Please ask an experienced pilot to help if you have never done this before.
下列參數設定僅供參考，請依實際狀況進行調整，或詢求有經驗的玩家協助。

■ Novice / 初學者設定

Throttle Curve 油門曲線	Pitch Curve 螺距曲線
	

■ 3D Flight / 進階玩家設定

Throttle Curve 油門曲線	Pitch Curve 螺距曲線
 ◎ Normal / 一般飛行	 ◎ Normal / 一般飛行
 ◎ Idle / 特技模式	 ◎ Idle / 特技模式

⚠ WARNING! / 警告!

1. Too much collective pitch will bring about too much loading to the power and drive system.
2. Too much headspeed will lead to blades (grips) explosion.
3. It's very dangerous for setting the headspeed over the blades (grips) limit.
4. Please do not set the collective pitch to exceed the maximum (±15°).

1.過大的聚合螺距設定會使引擎及傳動系統超載。
2.過快的主旋翼轉速會造成主旋翼轉座崩裂或射槳。
3.將旋翼轉速設定超過槳片負載極限極端危險!
4.請勿將聚合螺距設定超過最大值（±15度角）。

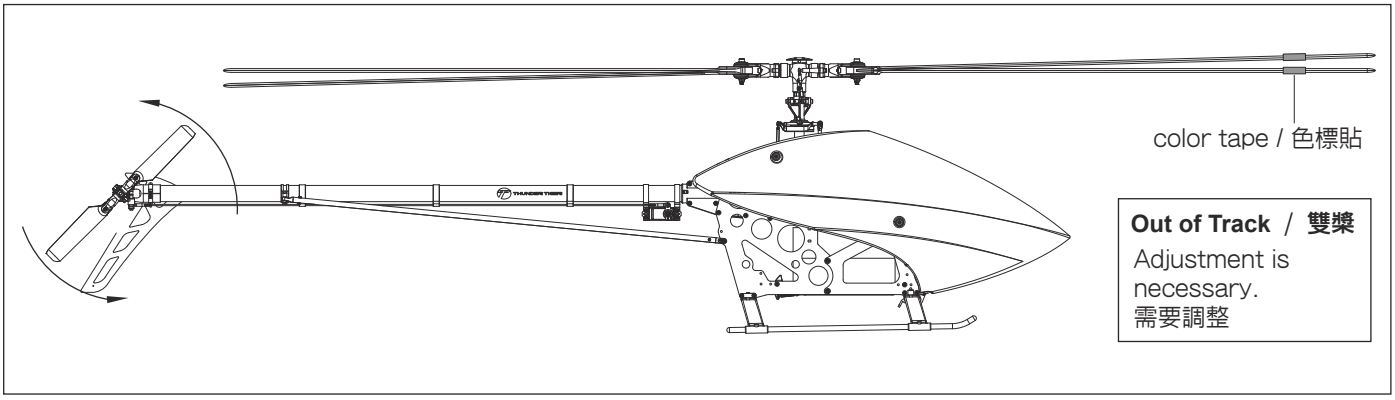
Blade Tracking Adjustment / 主旋翼軌跡調整

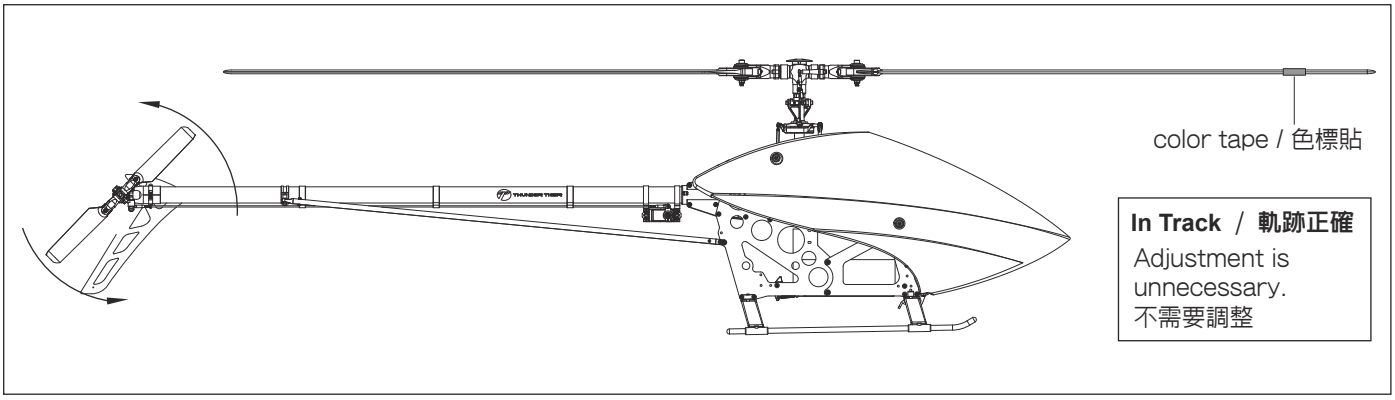
THUNDER TIGER

⚠ CAUTION! / 警告!

For safety, ensure to keep a safe distance from the helicopter at least 10 meter (30 feet) while making tracking adjustment.

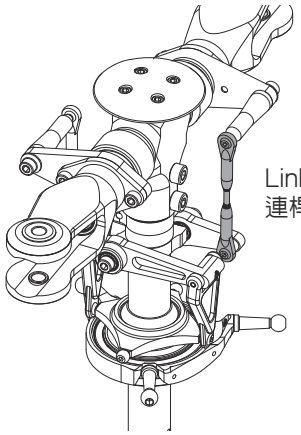
安全起見，進行主旋翼軌跡調整時，請至少與直昇機保持10米（30呎）的安全距離。





1. Use a color tape at the tip of main blades for tracking identification easily.
2. Increase the main blade speed to just before the helicopter lifts-off.
3. Observe which blade appears to be lower than the other, and increase the pitch of the lower blade one turn of the Linkage Rod (refer Page 7) at a time until each blade runs in track. If both main blades rotate in the same path, it doesn't need to be adjusted.

1. 在主旋翼前端貼上色標可方便辨識軌跡。
2. 提高主旋翼轉速使機體稍懸浮於地面。
3. 觀察兩支旋翼軌跡是否有落差 (雙槳) ，調整軌跡較低旋翼上之連桿 (參閱第7頁) 長度，一次調整一圈，直至兩支旋翼軌跡一致。若軌跡一致則無需調整。



⚠ CAUTION! / 警告!

Out of track causes vibration, instability and a loss of power due to additional drag. Please adjust the tracking repeatedly until the blades are in track properly.

旋翼軌跡落差（雙槳）會造成直昇機震動、不平衡及損失動力。請務必進行調整以使旋翼軌跡精準正確。

Cautions of Li-Po Battery Pack Using / 鋰聚電池使用注意事項

Lithium Polymer (Li-Po) battery is volatile. Failure to read and follow the safety instructions or the instruction manual offered by manufacturers may result in fire, personal injury and damage to property if charged or used improperly. Please READ your Li-Po battery manual thoroughly before using. Some precaution and information for your reference below:

1. ONLY use a charger specifically designed for Li-Po battery packs to charge/discharge your Li-Po battery packs. Failure to use an improper charger may cause a fire, which may result in personal injury and property damage.
2. A parallel charging process is strongly recommended, otherwise, the balancer is necessary if using a serial charging process.
3. Gernally DO NOT over charge the battery over the maximum voltage of 4.2V/per cell and over discharge drop below 3.0V/per cell.
4. Always keep the voltage of every cell at 3.8V if the pack will be stored for a long term.
5. Always avoid any puncture of the battery pack at all times.

Neither Thunder Tiger nor our distributoers/retailers assume liability for failures to comply with these cautions, safety recommended and instruction manual. Users assume all risks associated with Li-Po battery packs.

鋰聚電池具有相當之危險性。疏於詳閱以下注意事項及電池廠商所提供的說明書，或未依據正確操作方式使用，可能會引發火災、人身傷害及財產損失。

請務必在使用前詳閱並遵守使用說明。以下注意事項及訊息提供您參考：

1. 請務必使用鋰聚電池專用充電器充/放電鋰聚電池組。使用不正確的充電器可能會引發火災、人身傷害及財產損失。
2. 強烈建議使用平行充電式的充電器充電。若使用串充方式請務必加裝平衡器。
3. 請勿過度充電使電壓超過4.2伏特/單一電池蕊，或過度放電使電壓低於3.0伏特/單一電池蕊。
4. 如需長期儲存電池，請保持單一電池蕊電壓在3.8伏特。
5. 任何情況下，皆勿擠壓電池。

雷虎科技或授權經銷商/模型店對未依照正確方式使用或安並規定之意外具免責條款，使用人應自負使用鋰聚電池所可能衍生的風險。

After Flight Checklist / 飛行後的檢查項目

(1) Check every screw and bolt to make sure none has loosened due to vibration.
(2) Check every rotating and movable part to ensure they still move smoothly and normally.
(3) Clean off the exhaust residue from the muffler, engine, and helicopter.
(4) Check all movable parts, such as gears, ball links, belt, etc. for unusual wear.
(1) 每次飛行後必須詳細的檢查機體的各部位螺絲有無鬆動情形，若發生鬆動必須確實鎖緊再進行下飛行。
(2) 每次飛行後檢查每一個轉動部位（含單頭連接桿）均能順暢的運作。
(3) 排氣管、引擎、直昇機本體必須確實的清潔。
(4) 檢查每一個動作部位，齒輪、球頭、皮帶等是否有不正常磨損。

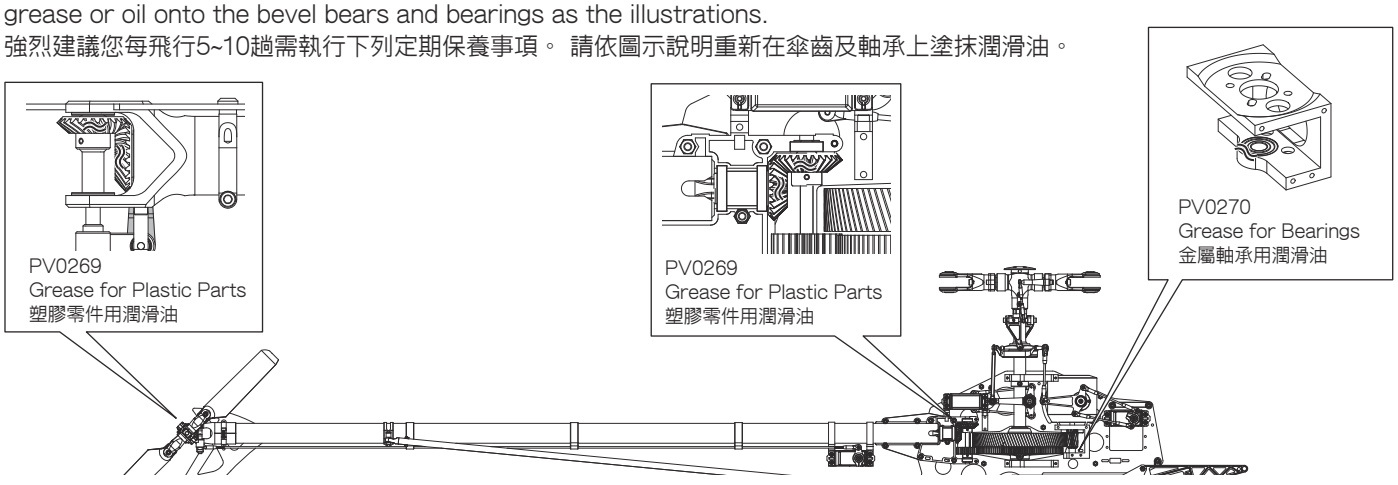
Regular Maintenance / 定期保養事項

⚠ WARNING! / 警告!

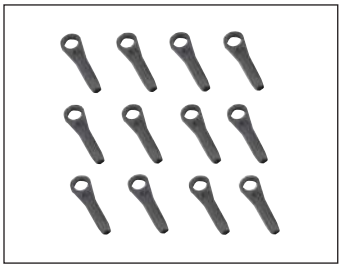
Lack for regular maintenance or apply a wrong type of grease/oil onto the parts may cause damage and model crash, which may cause series injury or death if the model hits people or property.

疏於定期保養，或塗抹不正確類型的潤滑油皆可能損壞零件造成摔機，因而導致人員受傷或財產損失。

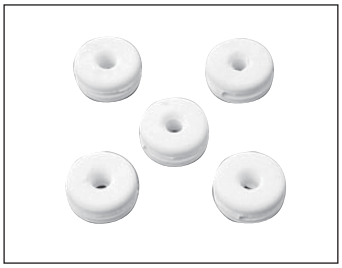
For safety, to check and maintain the parts every 5~10 flights is strongly recommended. Please re-apply the proper grease or oil onto the bevel bears and bearings as the illustrations.
強烈建議您每飛行5~10趟需執行下列定期保養事項。 請依圖示說明重新在傘齒及軸承上塗抹潤滑油。



SPARE PARTS / 零件包



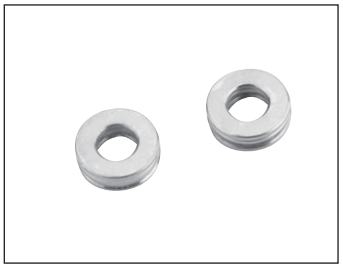
PV0041
BALL LINK
單頭連接桿



PV0062
RUBBER GROMMETS (WHITE)
機身固定墊圈組



PV0126-1
SPINDLE
固定軸



PV0172
THRUST BEARING, d8xD16xW5
止推軸承組, d8xD16xW5



PV0177-1
ROTOR BOLT
主旋翼螺絲組



PV0195
TAIL DRIVE SHAFT BEARING SET
尾驅動軸軸套組



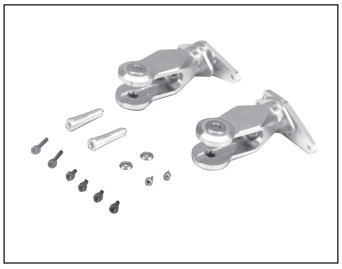
PV0268
LOCTITE #262
高強度防鬆劑（紅）



PV0270
THRUST BEARING GREASE
止推軸承潤滑脂



PV0425
TAIL PITCH CONTROL SLIDE BUSHING
尾旋翼控制軸套



PV0579
FBL ROTOR GRIP SET
金屬主旋翼轉座組(無平衡翼)



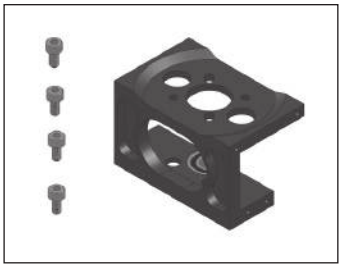
PV0580
FBL ROTOR GRIP LEVER
無平衡翼金屬旋翼轉座搖臂



PV0581
ROTOR GRIP POST
金屬主旋翼轉座支柱



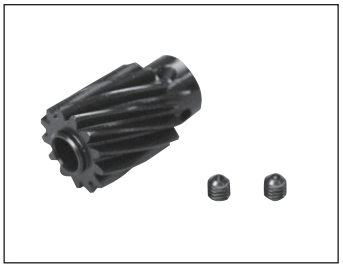
PV0582
MAIN SHAFT BRG BLOCK
金屬主軸軸承座組



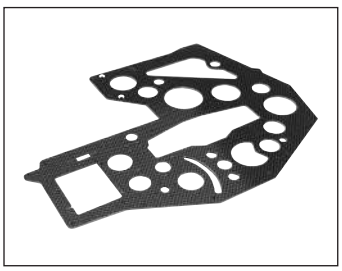
PV0583
U TYPE MOTOR MOUNT(8mm)
U型馬達座組(8mm)



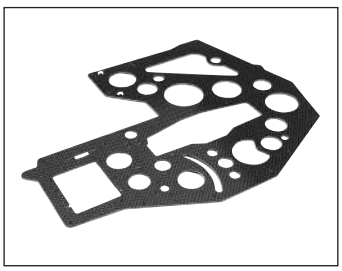
PV0584
MOTOR PINION(8mm),11T
馬達齒輪(8mm,11T)



PV0585
MOTOR PINION(8mm),12T
馬達齒輪(8mm,12T)



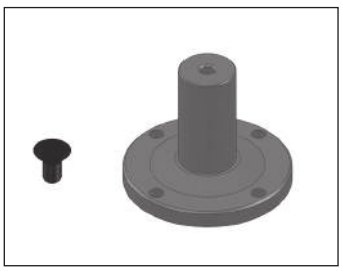
PV0586
SIDE FRAME-L
碳纖側板-左(單片)



PV0587
SIDE FRAME-R
碳纖側板-右(單片)



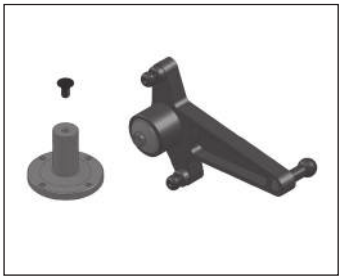
PV0588
CANOPY RETAINING POST SET
機身固定柱



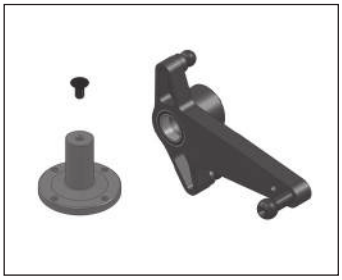
PV0589
CONTROL ARM BASE
控制臂固定座

SPARE PARTS / 零件包

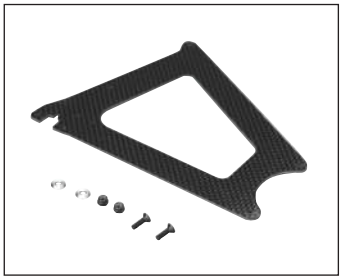
THUNDER TIGER



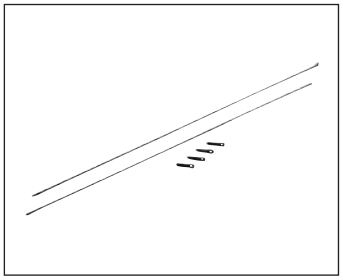
PV0590
CONTROL ARM SET-L
金屬側轉控制臂組-左



PV0591
CONTROL ARM SET-R
金屬側轉控制臂組-右



PV0592
LOWER SIDE FRAME
碳纖下側板(單片)



PV0593
LINKAGE ROD
尾推拉桿組



PV0595
METAL TAIL GRIP SET
金屬尾旋翼轉座組



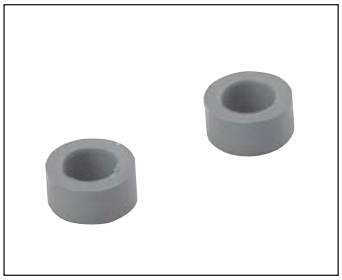
PV0596
METAL TAIL UNIT HOUSING SET
金屬尾座組



PV0597
FIBERGLASS CANOPY
玻纖機殼



PV0619
3D DAMPER SET
3D避震墊圈組



PV0620
3D INNER DAMPER
3D內避震墊圈



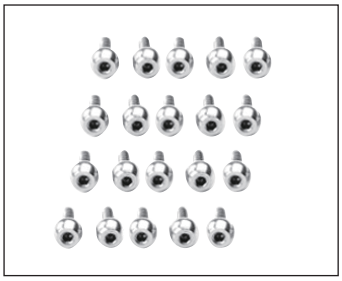
PV0621
3D OUTER DAMPER
3D外避震墊圈



PV0643
Link Ball Set
球頭組



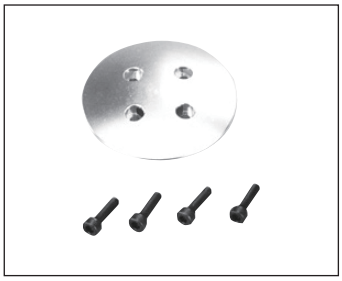
PV0760
LOCTITE #648
金屬防鬆劑(綠), #648



PV1379
LINKAGE BALL SCREW SET
球頭螺絲組



PV1432
THRUST BEARING, d5xD10xW4
止推軸承組,d5xD10xW4



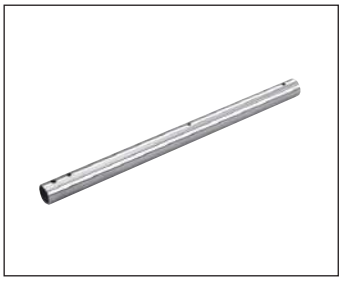
PV1503
METAL FLYBARLESS HEAD BUTTON
金屬無平衡翼煞車盤



PV1505
METAL FLYBARLESS MAIN ROTOR HUB SET
金屬無平衡翼主旋翼固定座



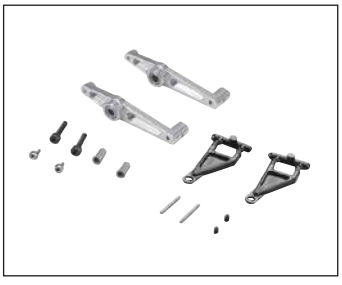
PV1516
METAL ROTOR GRIP (BODY)
金屬主旋翼轉座(本體)



PV1521
HARDENED MAIN SHAFT
強化主軸



PV1523
METAL FLYBARLESS WASHOUT BASE
無平衡翼金屬控制臂座



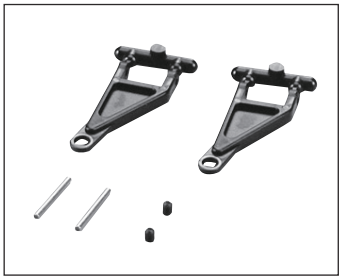
PV1525
METAL FLYBARLESS CONTROL LEVER SET
無平衡翼金屬控制搖臂組

SPARE PARTS / 零件包

THUNDER TIGER



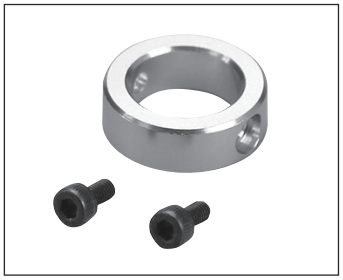
PV1527
METAL FLYBARLESS CONTROL LEVER
金屬無平衡翼控制搖臂



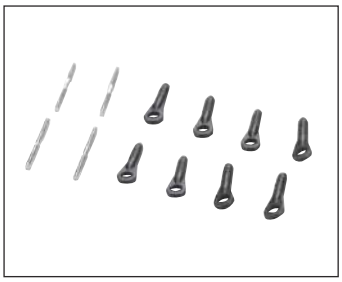
PV1529
FLYBARLESS WASHOUT LINKAGE
無平衡翼連接座



PV1530
METAL SWASHPLATE SET
金屬十字盤組



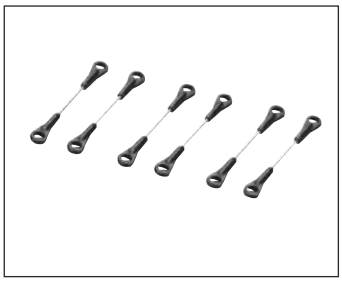
PV1532
MAIN SHAFT LOCK RING
主軸止檔



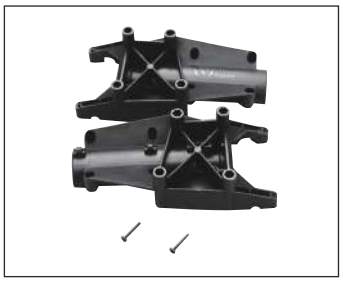
PV1533-1
FLYBARLESS LINKAGE ROD SET
無平衡翼連接桿組



PV1534
FIXED LINKAGE ROD, 67.5mm
一體式連接桿



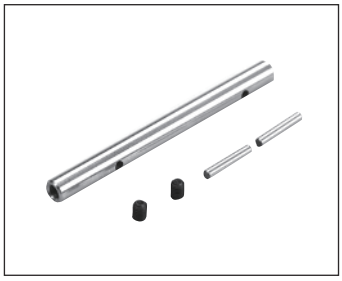
PV1535
FIXED LINKAGE ROD, 74.5mm
一體式連接桿組



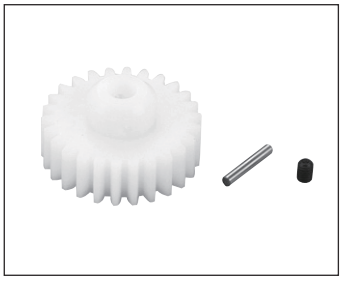
PV1536
TAIL BOOM BRACKET
機身尾管固定座



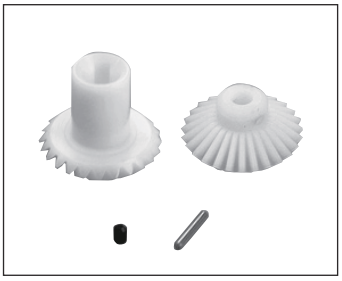
PV1537
TAIL DRIVE GEAR SET
尾驅動齒輪組



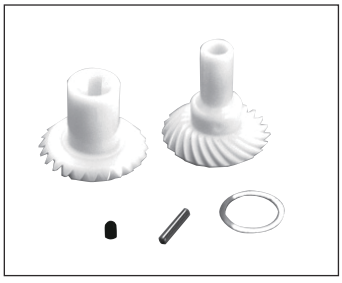
PV1538
TAIL DRIVE GEAR SHAFT
尾驅動齒輪軸



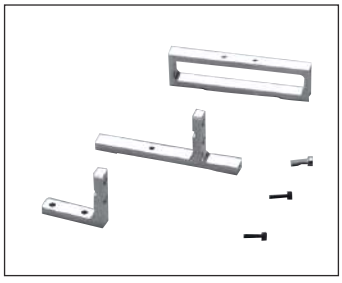
PV1539
TAIL DRIVE GEAR-26T
尾驅動齒輪26T



PV1540
FRONT TAIL BEVEL GEAR SET
前尾傘齒輪組



PV1541
REAR TAIL HELICAL BEVEL GEAR SET
後尾螺旋傘齒輪組



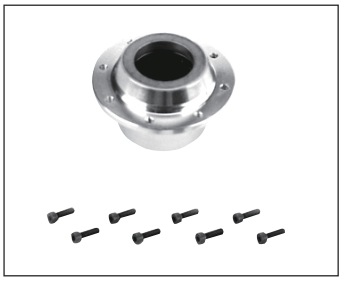
PV1542
METAL SERVO MOUNT
金屬伺服機固定座



PV1543
MAIN GEAR,111T
主齒輪(111T)



PV1544
AUTOROTATION TAIL DRIVE GEAR
尾驅動齒輪, 108T



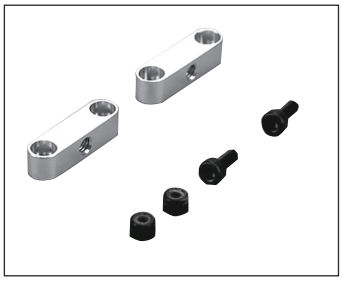
PV1545
ONE WAY CLUTCH HOUSING
單向離合器座



PV1546
ONE WAY BEARING SHAFT
單向離合器軸



PV1564
METAL ELEVATOR WASHER MOUNT SET
金屬控制臂軸承座



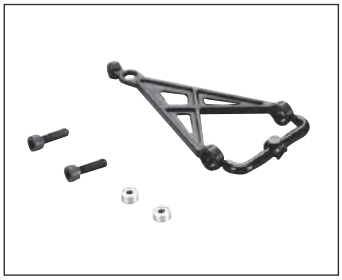
PV1567
METAL SKID BRACKET
金屬腳架固定座



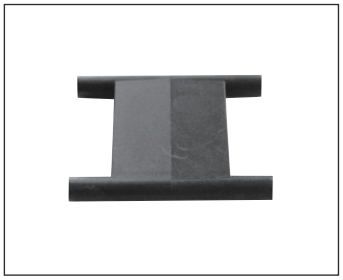
PV1569
SKID BRACKET, ELECTRIC
支撐架固定座, 電動版



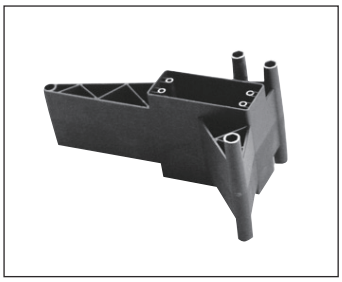
PV1570
METAL ELEVATOR CONTROL ARM SET
金屬升降舵控制臂組



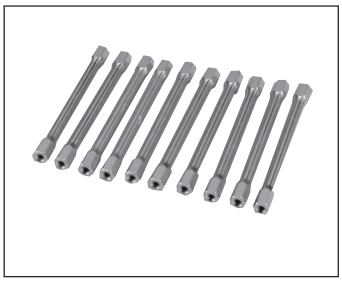
PV1572
ELEVATOR CONTROL ARM LINK
升降舵連接座



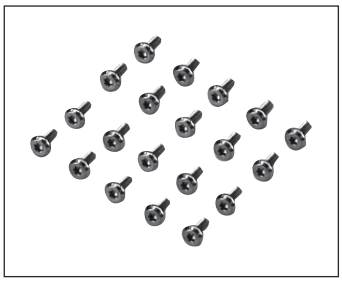
PV1573
GYRO TRAY
陀螺儀座



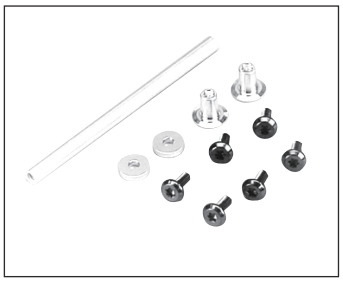
PV1575
RADIO TRAY
油門伺服機固定架



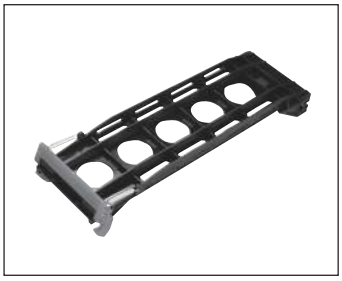
PV1576
METAL FRAME SPACER
金屬側板支柱



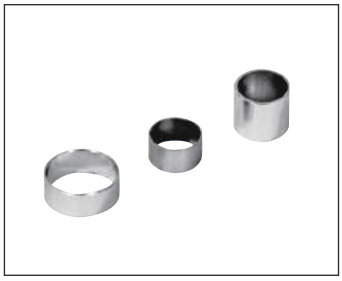
PV1577
TORX SCREW, M3x8
星型低頭螺絲



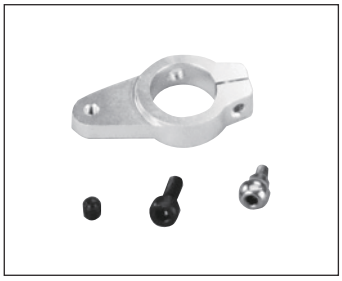
PV1578
BATTERY TRAY RETAINING SET
電池座固定組



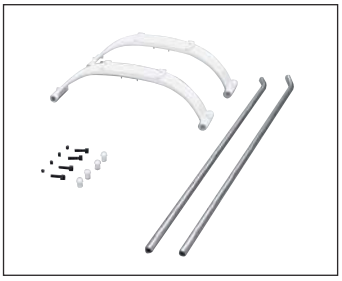
PV1579
BATTERY TRAY SET
電池座組



PV1581
COLLAR SET
軸環組



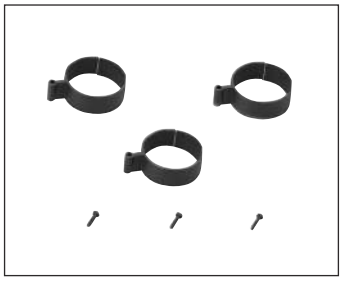
PV1582
METAL RUDDER SERVO HORN
金屬尾舵伺服機擺臂



PV1583
LANDING SKID SET
腳架組



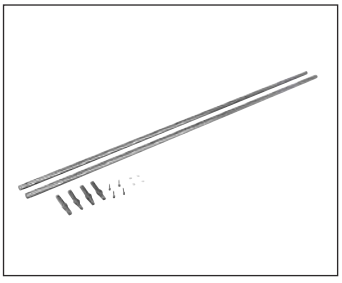
PV1584
LANDING SKID BRACE
腳架



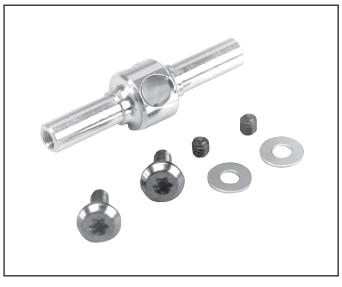
PV1587
ROD GUIDE SET
推拉桿固定環組



PV1589
METAL TAIL BOOM SUPPORT BRACKET
金屬尾管支撐固定座



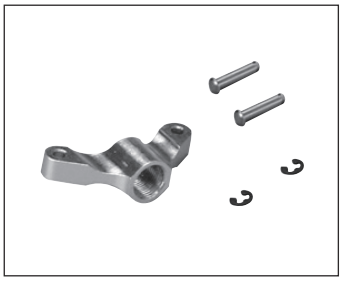
PV0594
CARBON TAIL BOOM SUPPORT SET
碳纖尾管支撐架組



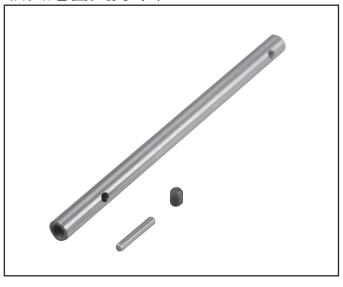
PV1593
METAL TAIL ROTOR HUB
金屬尾旋翼座



PV1594
METAL TAIL PITCH SLIDER
金屬尾旋翼滑座



PV1595
METAL TAIL PITCH CONTROL FORK
金屬尾旋翼控制座



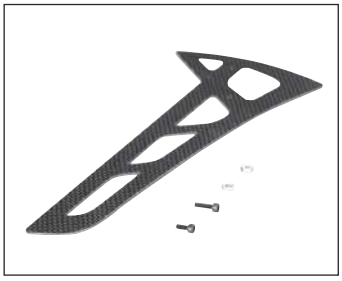
PV1596
TAIL OUTPUT SHAFT
尾旋翼軸

SPARE PARTS / 零件包

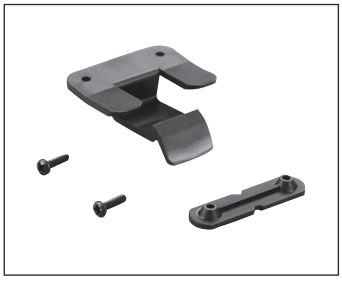
THUNDER TIGER



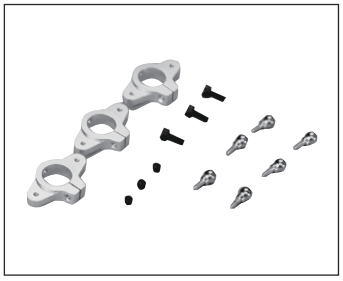
PV1598
TAIL PITCH CONTROL LEVER
尾旋翼控制桿



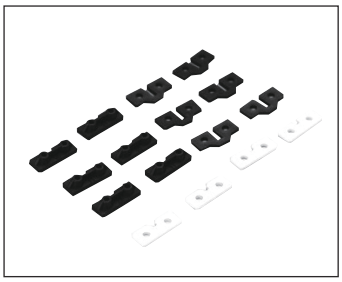
PV1600-1
CARBON VERTICAL FIN
碳纖垂直安定面



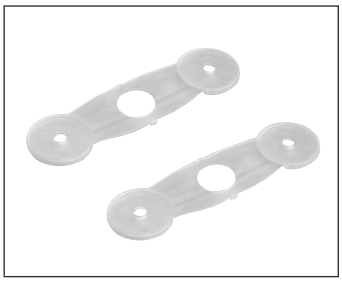
PV1601
CANOPY BRACKET
機身固定扣



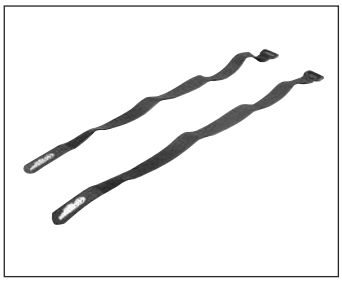
PV1603
METAL CYCLIC SERVO HORN SET
金屬舵面伺服機擺臂組



PV1604
SERVO MOUNTING SET
伺服機墊片組



PV1605
ROTOR SPACER
主旋翼墊片



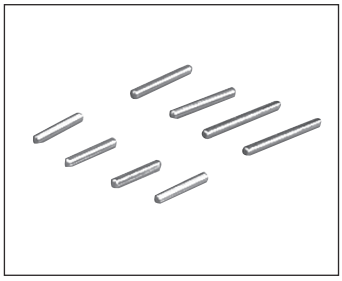
PV1606
VELCRO STRAP
固定束帶



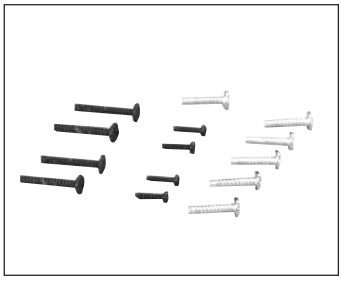
PV1607
TORX DRIVER SET
星型工具組



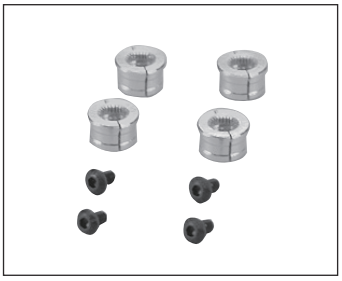
PV1611
FLANGE BEARING,d5xD13xW4
凸緣軸承組,d5xD13xW4



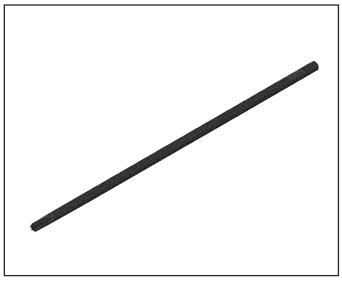
PV1612
PIN SET
固定銷組



PV1613
SELF TAPPING SCREW SET
扁圓自攻螺絲組



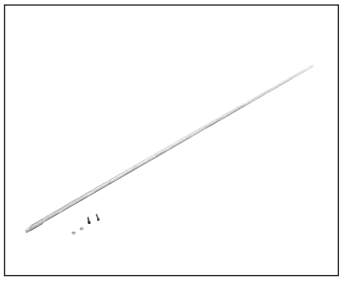
PV1623-F
SERVO HORN COLLAR(FUTABA)
伺服機擺臂軸套(FUTABA)



PV1629
TORX DRIVER TIP
星型圓棒



PV1717
CARBON TAIL BOOM
碳纖尾管



PV1718
TAIL DRIVE SHAFT
尾驅動軸組



PV1719
METAL TAIL SERVO MOUNT
金屬後置伺服機固定座組

	No.	DESCRIPTION	中文名稱
	PV0209	WASHER, d4xD11xt1.7	墊圈, d4xD11xt1.7
	PV0210	WASHER, d3xD8xt1.4	墊圈, d3xD8xt1.4
	PV0271	WASHER, d3xD5xt0.5	墊圈, d3xD5xt0.5
	PV1627	THRUST COLLAR SET	止推軸環組

	No.	DESCRIPTION	中文名稱
	PV0225	SET SCREW, M3x4 (20)	無頭內六角螺絲, M3x4
	PV0226	SET SCREW, M4x3 (20)	無頭內六角螺絲, M4x3
	PV0780	SET SCREW, M3x3 (20)	無頭內六角螺絲, M3x3

	No.	DESCRIPTION	中文名稱
	PV0235	LOCK NUT, M2.5 (20)	止鬆螺帽, M2.5
	PV1615	NUT (BLACK), M2	六角螺帽(電黑鎳),M2

SPARE PARTS / 零件包

	No.	DESCRIPTION	中文名稱
	PV0046	BALL BEARING, d8xD12xW3.5	軸承組, d8xD12xW3.5
	PV0048	BALL BEARING, d4xD8xW3	軸承組, d4xD8xW3
	PV0050	BALL BEARING, d5xD13xW4	軸承組, d5xD13xW4
	PV0174	BALL BEARING, d4xD11xW4	軸承組, d4xD11xW4
	PV0175	BALL BEARING, d8xD16xW5	軸承組, d8xD16xW5
	PV0176	BALL BEARING, d4xD7xW2.5	軸承組, d4xD7xW2.5
	PV0197	BALL BEARING, d12xD18xW4	軸承組, d12xD18xW4
	PV0200	BALL BEARING, d5xD10xW4	軸承組, d5xD10xW4
	PV0203	BALL BEARING, d6xD15xW5	軸承組, d6xD15xW5
	PV1608	BALL BEARING, d12xD21xW5	軸承組, d12xD21xW5
	PV1609	BALL BEARING, d15xD28xW7	軸承組, d15xD28xW7
	PV1610	BALL BEARING, d2.5xD7xW3.5	軸承組, d2.5xD7xW3.5

	No.	DESCRIPTION	中文名稱
	PV0212	SOCKET SCREW, M3x10 (20)	內六角螺絲, M3x10
	PV0213	SOCKET SCREW, M3x12 (20)	內六角螺絲, M3x12
	PV0214	SOCKET SCREW, M3x14 (20)	內六角螺絲, M3x14
	PV0215	SOCKET SCREW, M3x18 (20)	內六角螺絲, M3x18
	PV0216	SOCKET SCREW, M3x25 (20)	內六角螺絲, M3x25
	PV0218	SOCKET SCREW, M3x8 (20)	內六角螺絲, M3x8
	PV0220	SOCKET SCREW, M4x12 (20)	內六角螺絲, M4x12
	PV0223	SOCKET SCREW, M4x8 (20)	內六角螺絲, M4x8
	PV0256	SOCKET SCREW, M3x6 (20)	內六角螺絲, M3x6
	PV0637	SOCKET SCREW, M2.5x12 (20)	內六角螺絲, M2.5x12
	PV0777	SOCKET SCREW, M2x8 (20)	內六角螺絲, M2x8
	PV1614	SOCKET SCREW SET	內六角螺絲組

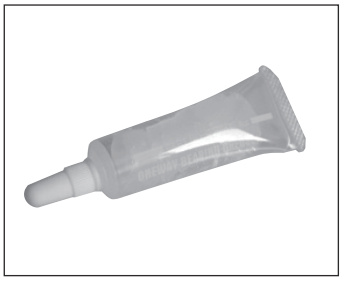
OPTIONAL PARTS / 改裝零件表



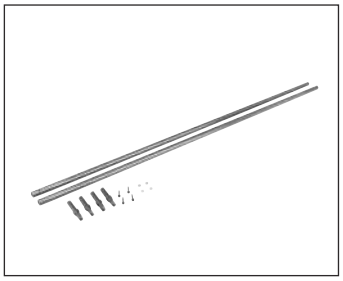
PV0269
PLASTIC GEAR GREASE
塑膠軸承潤滑脂(白色)



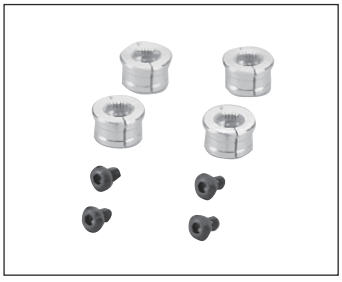
PV0404
70° FLAP DAMPER
70度避震墊圈



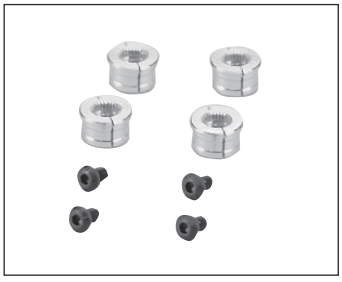
PV0517
ONEWAY BEARING GREASE
單向軸承油脂



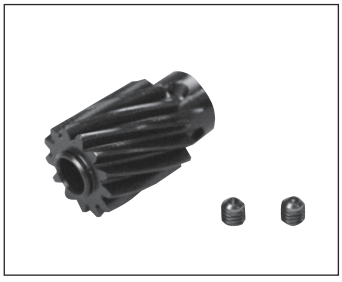
PV1590
CARBON TAIL SUPPORT SET
碳纖尾管支撐架組



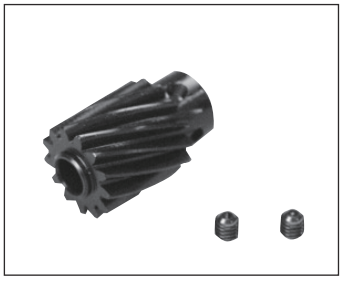
PV1623-J
METAL SERVO HORN COLLAR, JR
伺服機擺臂軸套, JR



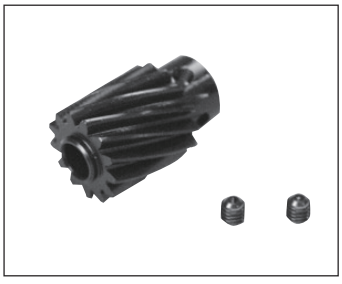
PV1623-H
METAL SERVO HORN COLLAR, HITEC
伺服機擺臂軸套, HITEC



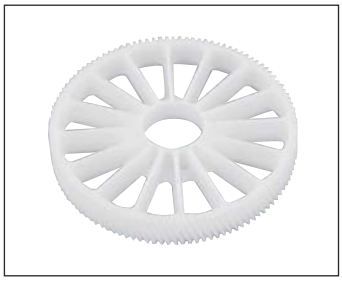
PV1548
MOTOR PINION(6mm), 12T
馬達齒輪(6mm), 12T



PV1617
MOTOR PINION(6mm), 11T
馬達齒輪(6mm), 11T



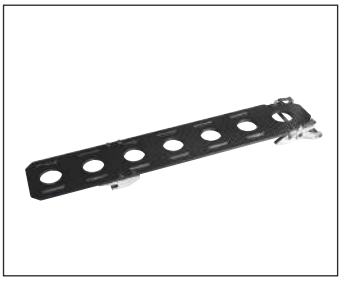
PV1618
MOTOR PINION(6mm), 13T
馬達齒輪(6mm), 13T



PV0599
CNC MAIN GEAR(115T)
強化主齒輪(115T)

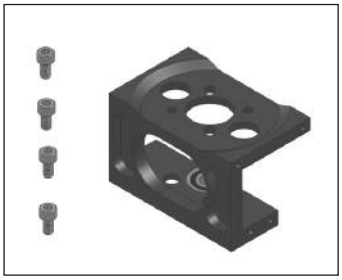


PV0600
3D FBL ROTOR GRIP LEVER
3D金屬旋翼轉座搖臂

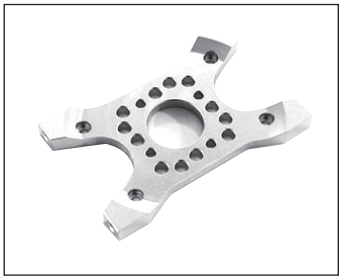


PV1720
CARBON BATTERY TRAY
碳纖電池座組

OPTIONAL PARTS / 改裝零件表



PV0598
U TYPE MOTOR MOUNT(6mm)
U型馬達座組(6mm)



PV1547
METAL MOTOR MOUNT
金屬馬達固定座



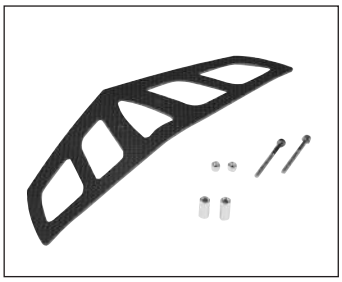
PV1630
REINFORCED METAL MOTOR PINION BLOCK, 6mm
強化金屬馬達齒輪固定座,6mm



PV1616
REINFORCED METAL MOTOR PINION BLOCK, 8mm
強化金屬馬達齒輪固定座,8mm



PV1621
LANDING SKID BRACE, BLACK
腳架組, 黑



PV1622
CARBON HORIZONTAL FIN
碳纖水平安定面

ELECTRONIC DEVICE & ACCESSORY / 電子設備及配件



8086
POWER MONITOR
即時電量計



8088
GT5.1, 3-AXIS GYRO
GT5.1, 3軸陀螺儀



8126
DS1213, DIGITAL SERVO
DS1213, 數位伺服機



8128
DS1313, DIGITAL SERVO
DS1313, 數位伺服機



8127
DS1015, DIGITAL SERVO
DS1015, 數位伺服機



8158
DSHV0507nT, HV DIGITAL RUDDER SERVO (NARROW BAND)
DSHV0507nT, 高壓尾舵數位伺服機(窄頻)



8163
DS0606n, DIGITAL RUDDER SERVO (NARROW BAND)
DS0606n, 尾舵數位伺服機(窄頻)

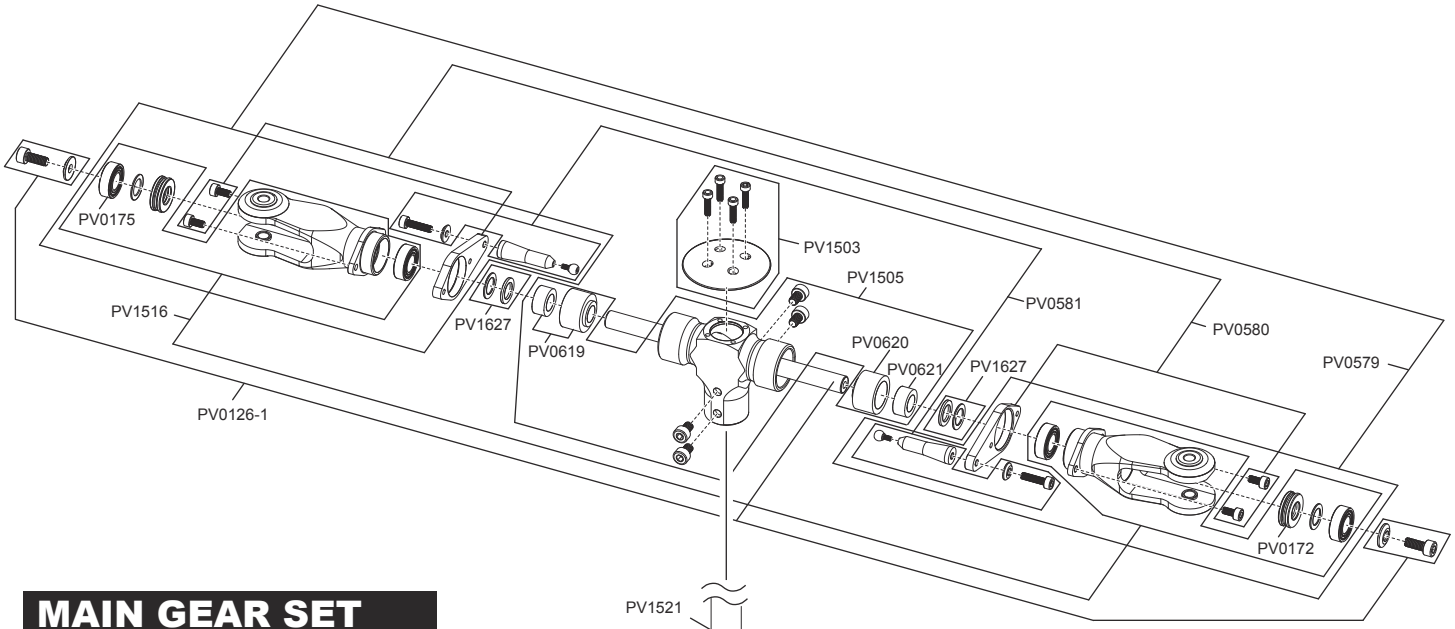


8166
DS0606, DIGITAL RUDDER SERVO
DS0606, 尾舵數位伺服機

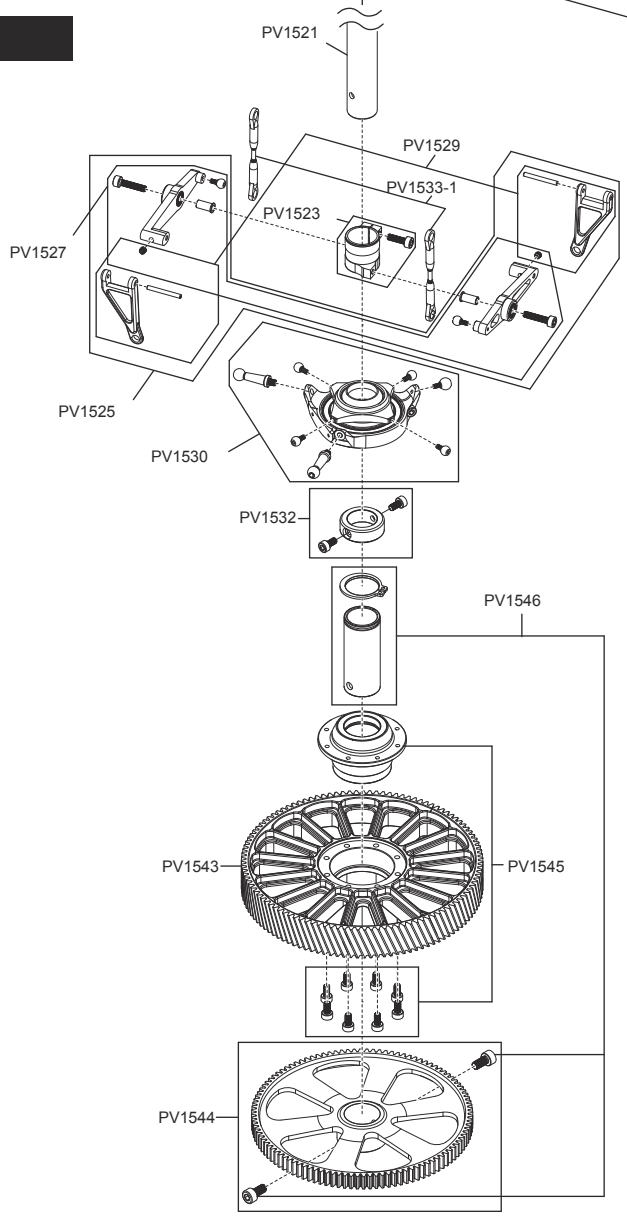


8169
DSHV0818T, HV DIGITAL SERVO
DSHV0818T, 高壓數位伺服機

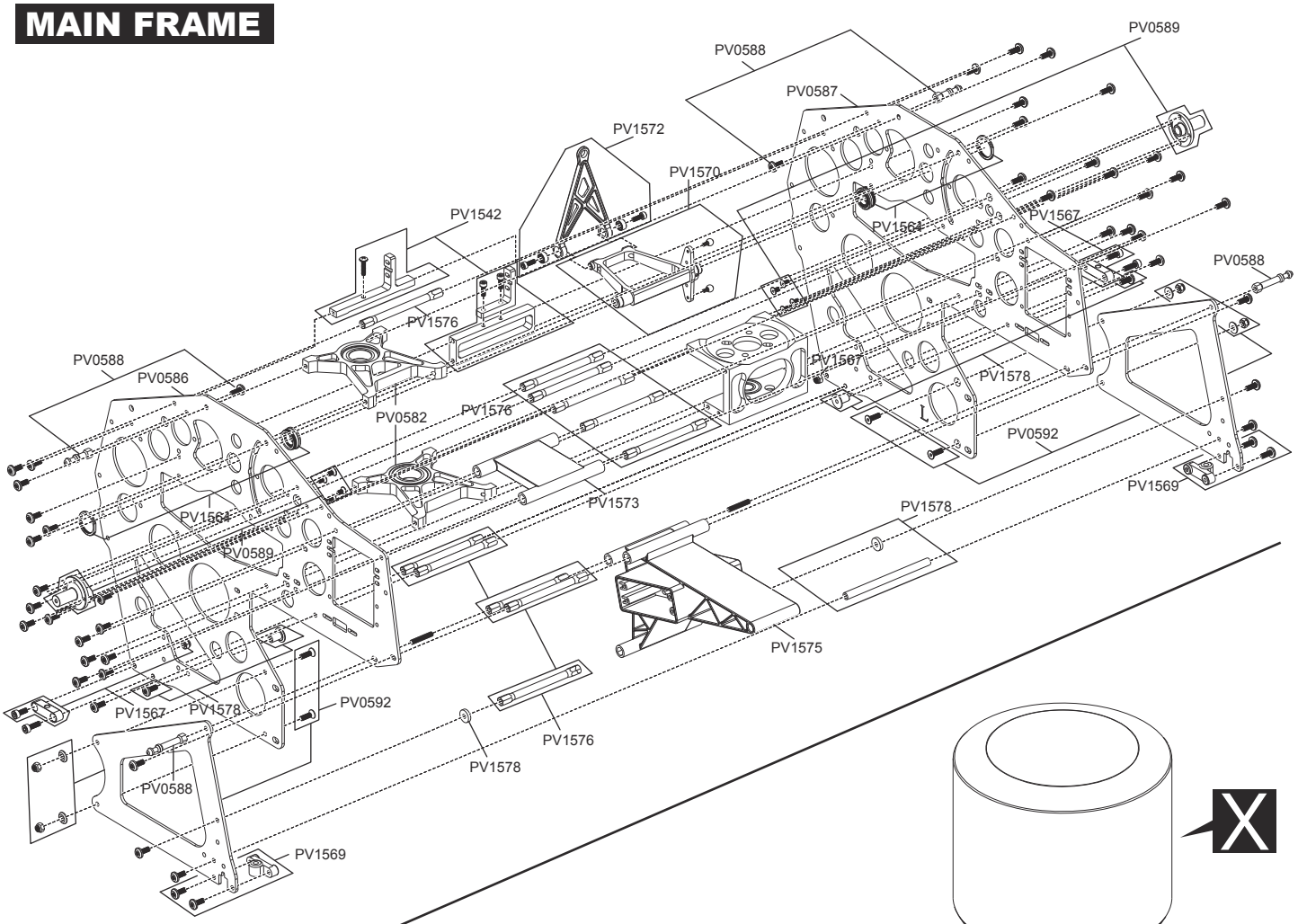
MAIN ROTOR HEAD

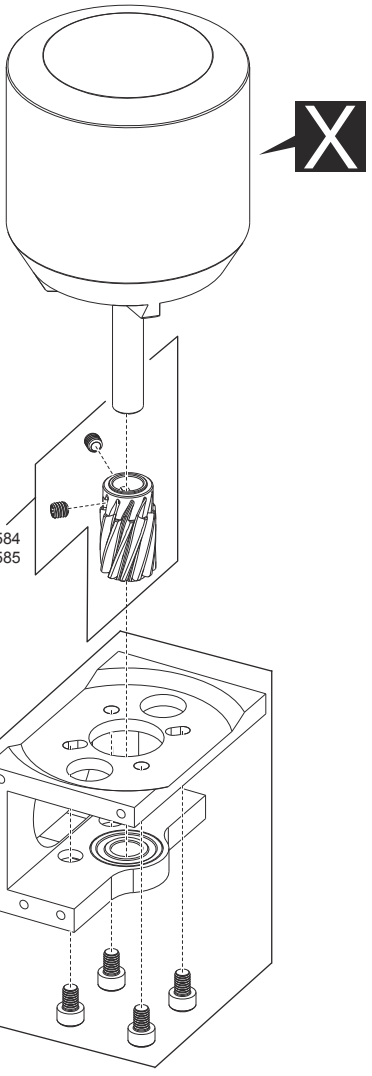


MAIN GEAR SET

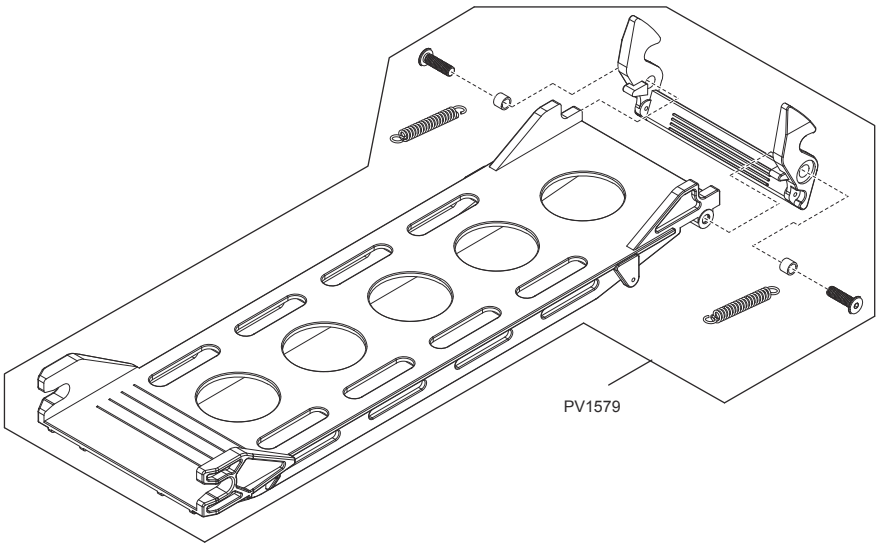


MAIN FRAME





POWER SYSTEM

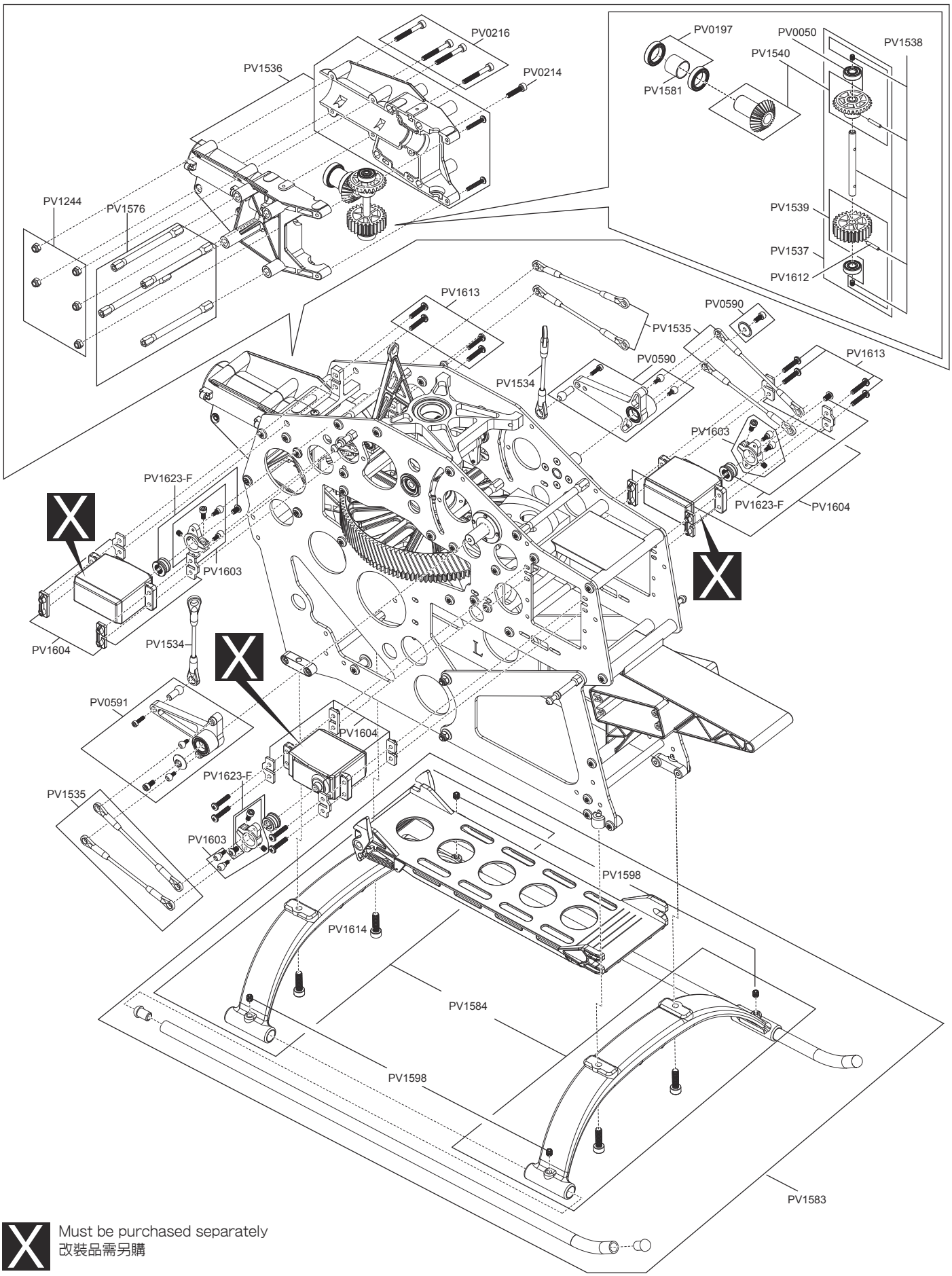


X Must be purchased separately
改裝品需另購

Exploded View / 爆炸圖檢索

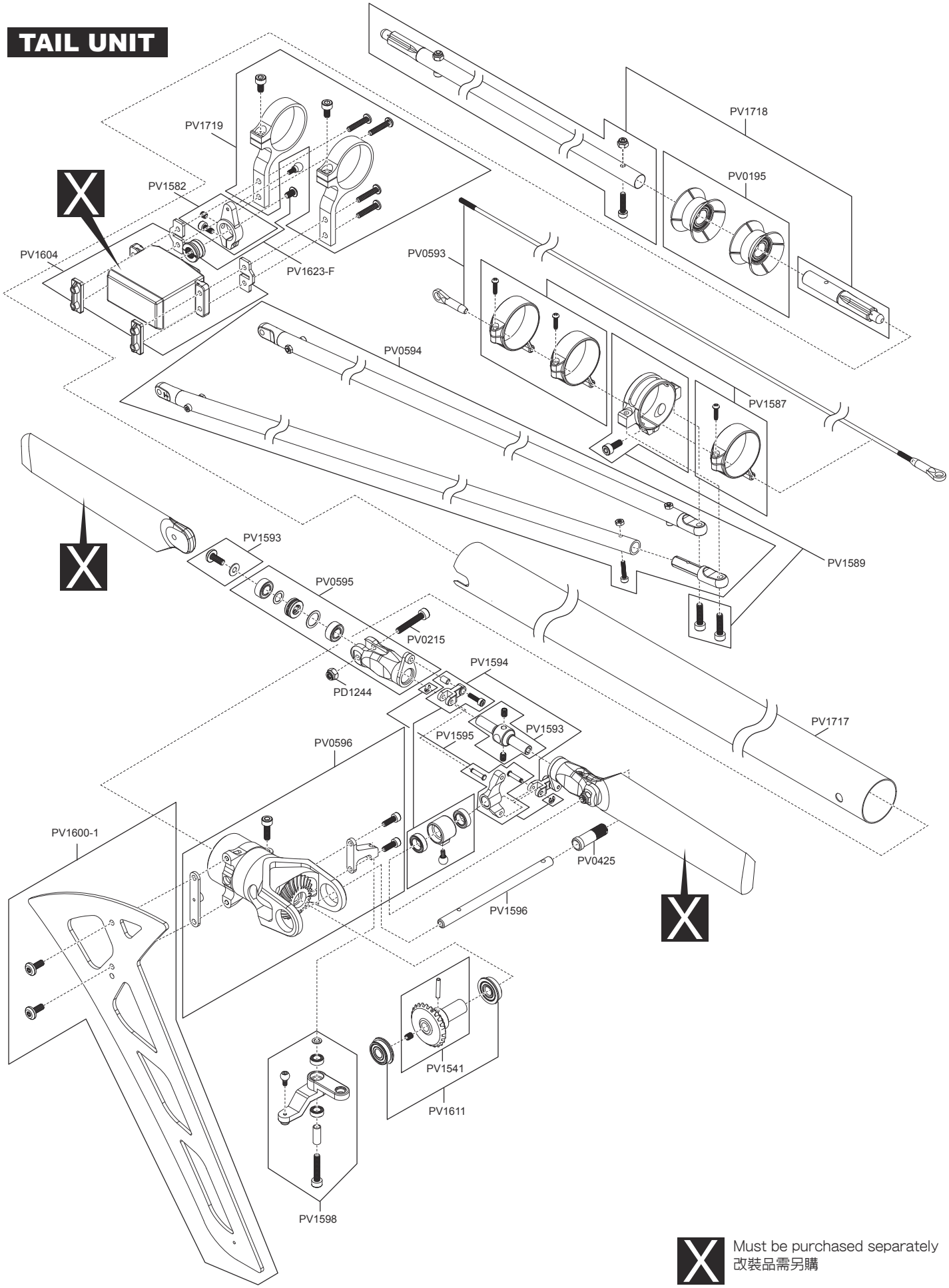
THUNDER TIGER

ARMS & SKID



X Must be purchased separately
改裝品需另購

TAIL UNIT



X Must be purchased separately
改裝品需另購

MEMO