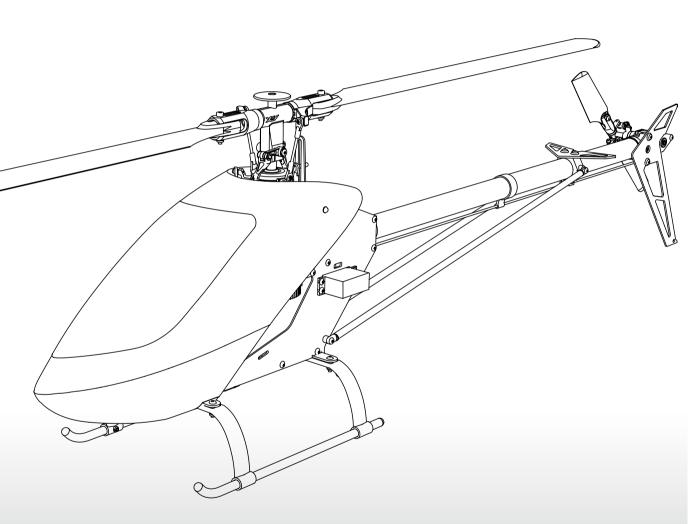
# **GAUI**





This product is for a radio controlled (RC) helicopter. Improper operation, maintenance or assembly can potentially cause a RC helicopter to pose danger to persons or objects including but not limited to the possibility of causing serious physical injury and even death.

#### 本產品是無線遙控的直升機。

不當的操作,保養或是組裝有可能導致遙控直升機對於人身或是物品造成危險。 Recommendation:

We highly suggest using the latest version of the Assembly Instruction Manual. To download the latest version, please visit the Official TSH GAUI web site: www.gaui.com.tw

取得最新的手册:

我們非常建議您取得最新版本的手册。

請到泰世網站下載最新的手冊,並且取代目前的手冊。

This product is suitable servo specifications (35mm x 15mm x 30mm).

Cited the following servo for reference purposes only. 本產品伺服器適用規格(35mm x 15mm x 30mm)。

列舉下列伺服機,僅供參考。

CCPM: FUTABA: BLS153. BLS651. S9650 JR: DS3401. DS3405. DS3201. DS361. NES-3125

SAVOX : SH1350 RUDD: FUTABA: BLS257.S9257. SAVOX : SH1357.

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Thank you for purchasing GAUI \*\* High Performance RC Helicopter from Tai Shih Hobby Corporation (TSH). We hope you will enjoy the joy of flight.

感謝您購買泰世科技出品的 GAUI ➤ 高性能遙控直升機,我們希望您可以盡情享受飛行的樂趣。

In order to understand full assembly sequences, this instruction manual show the assembly information of this model, even though some elements are supplied as pre-assembled. Please refer to it when carrying out maintenance or replacing parts.

為了要讓使用者詳細瞭解組裝順序,即使有些部件已經預先組裝完成, 本說明書將提供這台遙控模型的組裝資訊。同時,敬請參閱保養與主要零件更換資訊。

<u>CAUTION: This radio controlled helicopter is not a toy.</u> 警告:這台遙控直升機不是玩具。

#### SAFETY PRECAUTIONS

This kit includes some preassembled components. Please check for any loose screws and tighten them before you proceed with assembly.

You are responsible for assembly, safe operation, maintenance, inspection and adjustment of the model.

Before beginning assembly, please read these instructions thoroughly. Check all parts. If you find any defective or missing parts, contact your local dealer or GAULTSH distributor.

Before you proceed to RC helicopter activity, please check and follow thoroughly related regulation of aero modeling in your country/region.

## 安全資訊與注意事項

這台遙控模型包含預先組合完成的部件。

在進行組裝之前,請仔細檢查這些預先組裝部件上的所有螺絲均有仔細鎖緊。 您有完全的責任對於這台遙控模型的組裝,安全操作,保養,檢查與調整。 請先檢查所有的零件,如果發現任何不良品,遺失品,請向模型店或是當地的 泰世代理商連絡。

在您進行遙控直升機活動時,請先詳細瞭解與遵守當地遙控模型的相關法規。



#### LIABILITY DISCLAIMER

This product is for a radio controlled (RC) helicopter.

Improper operation, maintenance or assembly can potentially cause a RC helicopter to pose a danger to persons or objects including but not limited to the possibility of causing serious physical injury and even death.

Moving components can present a hazard to operators, and anyone or anything that could be in the flying area of the RC helicopter.

Under no circumstance should a minor be allowed to operate this RC helicopter without the approval, monitor and direction of his parent or legal guardian who takes full responsibility for all of the minor's actions.

This product is intended for being operated by experienced mature radio control helicopter pilots under controlled safety conditions and on locations properly authorized and setup for safe flying and away from other people.

Do not operate an RC helicopter within the vicinity of residences, trees, electrical power lines during inclement weather or near crowds of people.

The manufacturer and/or its distributors assume no responsibility or liability whatsoever for any damages including but not limited to ones generated by incidental or consequential damages.

The operator of the helicopter assumes all responsibility and liability that results from the correct or incorrect operation of the helicopter.

After leaving its facilities, the manufacturer has no way of maintaining control or monitor over the assembly, maintenance and/or operation of the helicopter.

# 免責聲明

本產品是無線遙控的直升機。

不當的操作,保養或是組裝有可能導致遙控直升機對於人身或是物品造成危險。 包括,但是不局限於對於人體產生嚴重傷害甚至死亡的可能性。

所有的移動部件可能對於操作的使用者,旁人或是這台遙控直升機飛行場的 任何人或物品產生傷害。

未成年的人如果要操作這台遙控直升機需要父母或是監護人的同意,

並在監督與指導下才能進行操作並遠離周遭障礙物及人群等,其父母或是監護人 需負起所有責任與法律責任。

以下場合與情況禁止操作遙控直升機:居家房屋附近、天候不佳時、非空曠區域、 樹木、電線竿等場合或是人群附近。

製造廠商與其經銷商都不對於所有的傷害,包含但是不局限於偶然或是連續發生的傷害負擔任何責任。

本產品的使用者要對於正確地或是不正確地操作的結果需負擔所有責任與法律責任。 本產品一但離開製造廠商的控制範圍外,製造廠商無法對於下列事項保持監督與控管: 組裝,保養,維修與操作這台遙控直升機。



For United States market, The Academy of Model Aeronautics (AMA) is a national organization representing modelers in the United States. Please refer the National Model Aircraft safety code from Academy of Model Aeronautics. And we've partially reprinted rules that are especially pertinent for radio controlled flight as below:

#### RADIO CONTROL

- 1. All pilots shall avoid flying models over unprotected people.
- 2. I will complete a successful radio equipment ground-range check in accordance with the manufacturer's recommendations before the first flight of a new or repaired aircraft.
- 3. At all flying sites a safety line or lines must be established, in front of which all flying takes place. Only personnel associated with flying the model aircraft are allowed at or in front of the safety line.
  - In the case of air shows or demonstrations a straight safety line must be established.
  - An area away from the safety line must be maintained for spectators. Intentional flying behind the safety line is prohibited. (See AMA Document #706 for Recommended Field Layout.)
- 4. I will operate my model aircraft using only radio-control frequencies currently allowed by the Federal Communications Commission (FCC). Only individuals properly licensed by the FCC are authorized to operate equipment on Amateur Band frequencies.
- 5. I will not knowingly operate my model aircraft within three (3) miles of any preexisting flying site without a frequency-management agreement. (See AMA Document #922 for Testing for RF Interference. See AMA Document #923 for Frequency Management Agreement.)
- 6. With the exception of events flown under official AMA Competition Regulations rules, excluding takeoff and landing, no powered model may be flown outdoors closer than 25 feet to any individual, except for the pilot and the pilot's helper(s) located at the flight line.
- 7. Under no circumstances may a pilot or other person touch a model aircraft in flight while it is still under power, except to divert it from striking an individual. This does not apply to model aircraft flown indoors.
- 8. Radio-controlled night flying requires a lighting system that provides the pilot with a clear view of the model's attitude and orientation at all times.
- 9. The operator of a radio-controlled model aircraft shall control it during the entire flight, maintaining visual contact without enhancement other than by corrective lenses that are prescribed for the pilot. First-Person View (FPV) flying may only be conducted in accordance with the procedures outlined in AMA Document #550.

These special codes and appropriate documents may be obtained either from the AMA Web site at www.modelaircraft.org or by contacting AMA headquarter.

Academy of Model Aeronautics 5151 East Memorial Drive Muncie, IN 47302 Phone (800) 435-9262 Fax (765) 741-0057





2.0mm Hexagon Screw Driver 2.0mm 六角螺絲起子



3.0mm Hexagon Screw Driver 3.0mm 六角螺絲起子



2.5mm Hexagon Screw Driver 2.5mm 六角螺絲起子



3.5mm Hexagon Screw Driver 3.5mm 六角螺絲起子



Needle-nosed pliers 尖嘴鉗



Diagonal cutting plier 斜口鉗



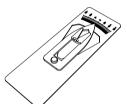
Ball Link Plier 拔豆鉗



Philips Screw Driver 十字螺絲起子



Scissors 剪刀



Dial Pitch Gauge 主旋翼螺距規



CA 瞬間膠



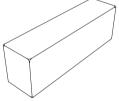
Thread Lock 螺絲止鬆劑



CCPM伺服機×3個



CCPM Servo x3pcs(35x15x30) Tail Specialized Servo x1pcs(35x15x30) 尾舵伺服機×1個



Battery 鋰聚電池



3-Axis Stabilizer 3軸陀螺儀



Transmitter (6-channel or more, helicoper system) 六動以上接收機&發射機



Lubricant

during assembly





Apply general thread lock. To tight screw and apply thread lock. 一般型止縣劑

鎖緊螺絲並確認上膠



Apply general thread lock. Be certain to tighten screw and apply thread lock. - 船型 上 懸劑

務必鎖緊螺絲並確認上膠



Apply CA glue 使用瞬間黏著劑



Apply special thread lock. Tighten screw and apply thread lock 特殊型止影劑

鎖緊螺絲並確認上膠



Apply special thread lock. Be certain to tighten screw and apply thread lock. 特殊型止鬆劑 務必鎖緊螺絲並確認上膠



Apply lubricant 依個人需求使用潤滑油。



Extreme attention:

More attention should be taken during assembly. Double check after assembly.

Attention: Pay attention, care should be taken

意: 組裝過程中請注意並小心安裝。

非 常 注 意 :組裝過程中請非常注意並 小心安裝及再確認組裝無誤。

Danger: High level of attention should be taken during

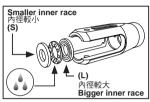
Right level of assembly assembly. Action during assembly might be hazardous. Extreme care should be taken to avoid injury.

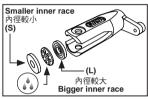


險: 組裝過程中請小心安裝並注意 此危險程度可能造成安全性漏洞 導致人為傷害。



Apply special thread lock 使用特殊型止鬆劑。





B-Bearing	B(Dia.in)x(Dia.out)x(Thickness)	
B-軸承	B(內徑)X(外徑)X(厚度)	
Ø-TapScrew	Ø(Dia.out)x(Length)	
Ø-粗牙螺絲	Ø(外徑)X(長度)	
M-Machine Screw	M(Dia.out)x(Length)	
M-公制螺絲	M(外徑)X(長度)	
P-tube	P(Dia.in)x(Dia.out)x(Length)	
P-柱狀體	P(內徑)X(外徑)X(長度)	
Pillar	P(Dia.out)x(Length)	
P-柱狀體	P(外徑)X(長度)X(實心柱)	
N-Nut	N(Dia.in)x(Width) L-Lock nut	
N-螺母	N(外徑)X(長度)	
W-Washer	W(Dia.in)xDia.out)x(Thickness)	
W-華司	W(內徑)X(外徑)X(厚度)	

Make sure to assemble the parts as shown in figure above. Incomplete or incorrect assembly may cause control failure during

以上圖示,於組裝時請確實注意,避免組裝後試飛造成失控零件 鬆脫等情況發生

## Specification

#### 規格資料

#### GAUL TAI SHIH HOBBY CORPORATION

Gear Ratio 齒輪傳動比:	10.87 : 1 : 4.06 (E.M.T)
Overall Length (with Canopy):880 Specifications	機身長度(含艙罩):880 mm
Main Rotor Diameter:970mm	主旋翼迴轉直徑:970 mm
Main rotor blades:425mm	主旋翼長度:425mm
Overall Height:284mm	機身高度:284 mm
Overall Width:165mm	機身寬度:165 mm
Tail Blade Length:70mm	尾旋翼葉片長度:70 mm
Tail Rotor Diameter:140mm	尾旋翼迴轉直徑:140 mm
Motor Drive Gear:18T	馬達齒:18T
Main Drive Gear: 61T	主齒輪:61T
Flying duration: 4~5 minutes	飛行時間:4~5分鐘
Power System(Recommanded):	動力系統(原廠建議):
Motor 1300~1400KV	馬達 1300~1400KV
ESC 66A~100A ESC	電子變速器 66A~100A ESC
6S1P(22.2v/2100~3000mah)	使用鋰聚電池:6S1P(22.2v / 2100~3000mah)
Total weight: 1400g ±5% (Equipped with Blades and	全配重量:1400g ±5%(全套含電子裝備不含電池)
all electronic gears except Battery).	

This product is for a radio controlled (RC) helicopter.

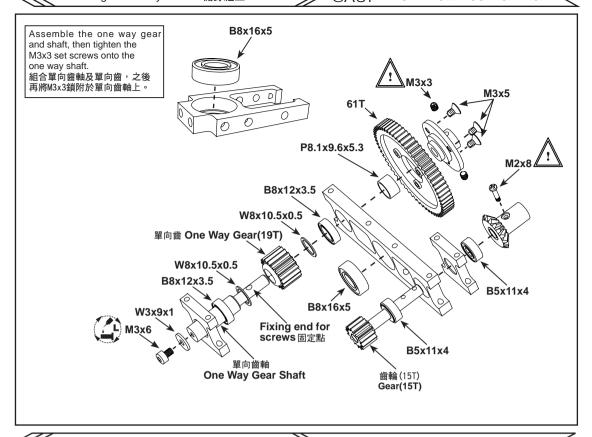
Improper operation, maintenance or assembly can potentially cause a RC helicopter to pose a danger to persons or objects including but not limited to

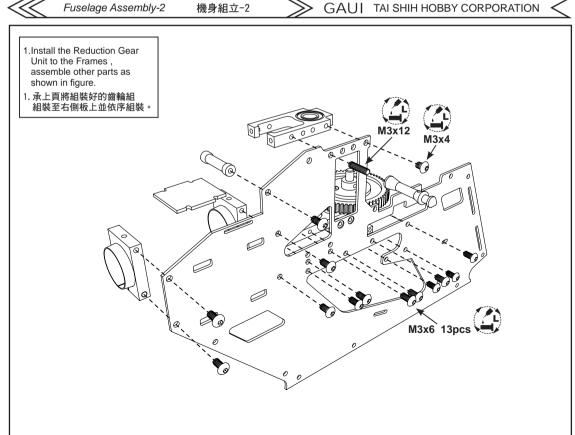
the possibility of causing serious physical injury and even death.

本產品是無線遙控的直升機。

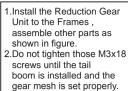
不當的操作,保養或是組裝有可能導致遙控直升機對於人身或是物品造成危險。

Important: The gear ratio, motor and battery should be set properly if the power system has been changed!!! 注 意:更改動力系統請注意電池電壓,馬達KV值及減速比 的關係來做搭配。



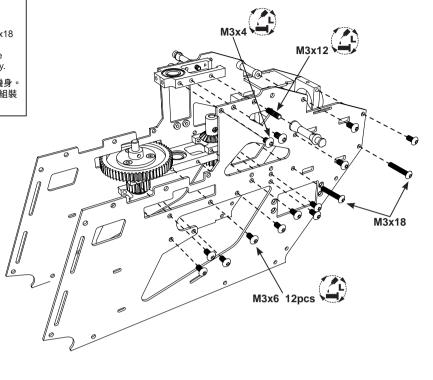






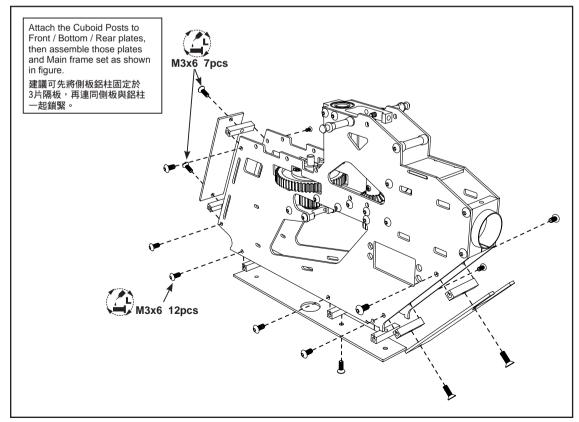
1. 承上頁將左側板組裝至機身。 2. M3x18螺絲含上待P. 15頁組裝

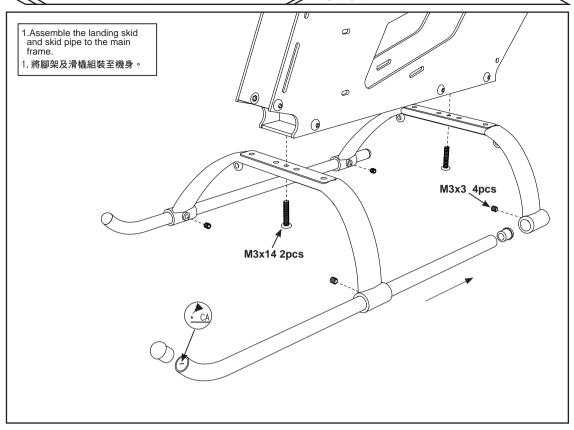
時在鎖緊。



Fuselage Assembly-4

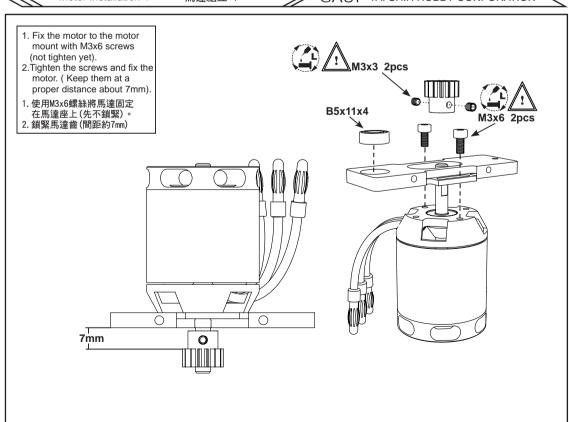
機身組立-4



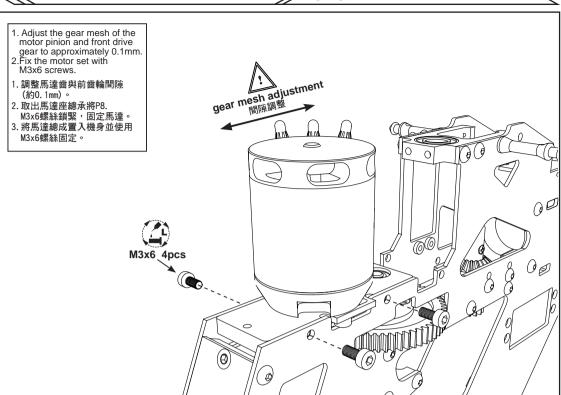




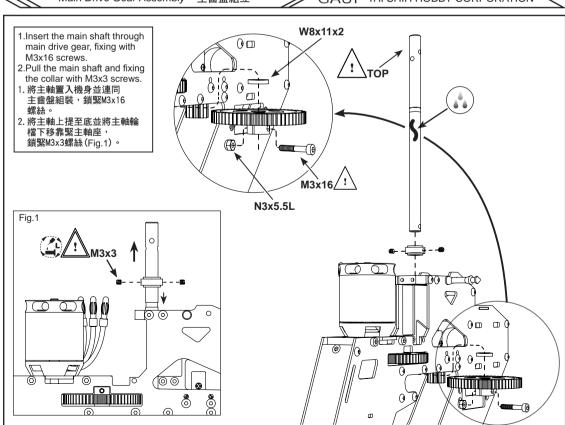
#### 馬達組立-1

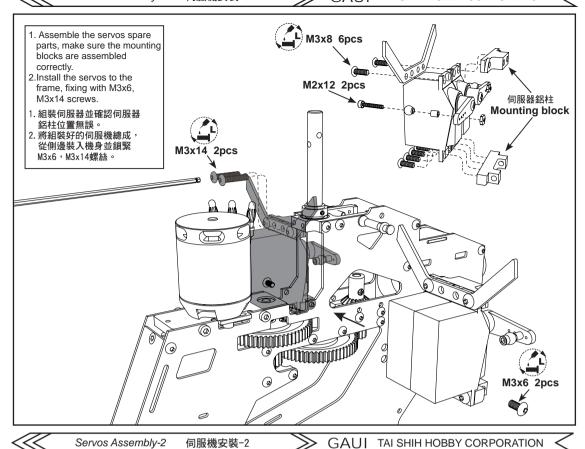




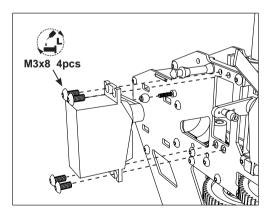


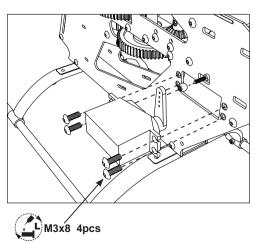
#### Main Drive Gear Assembly 主齒盤組立





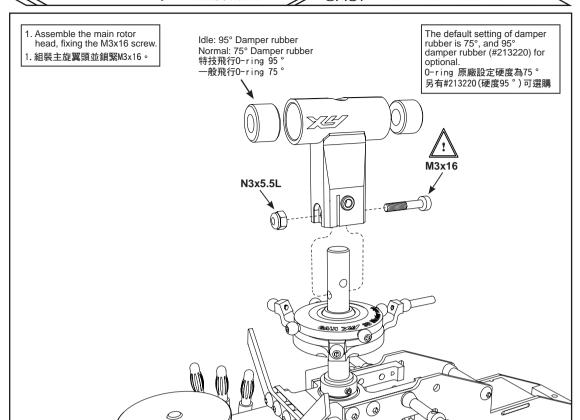
- 1. Install the servos to the frame.
- 1. 組裝伺服器

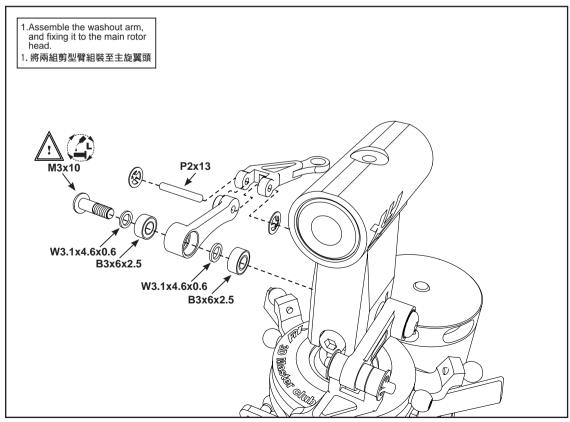




Washout Arm Assembly

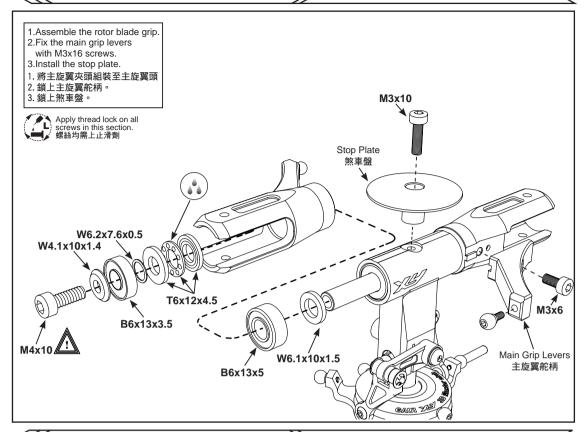
剪型臂組裝

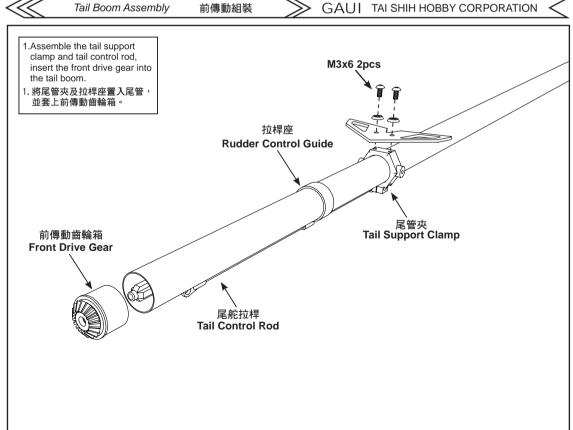


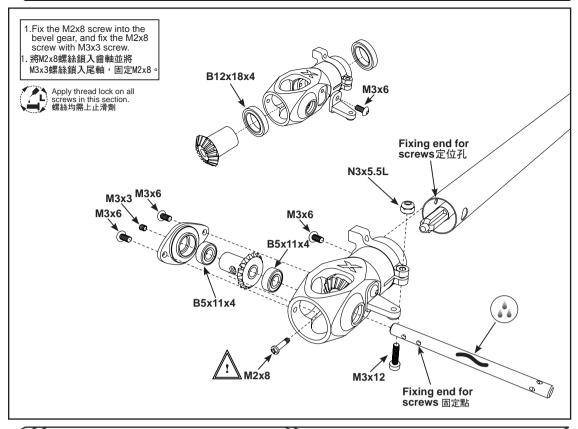


GAUI

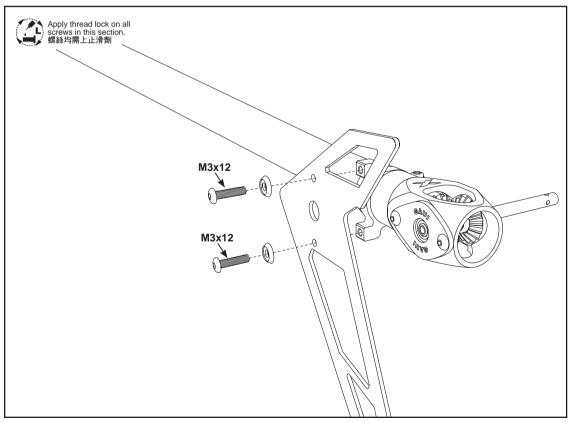


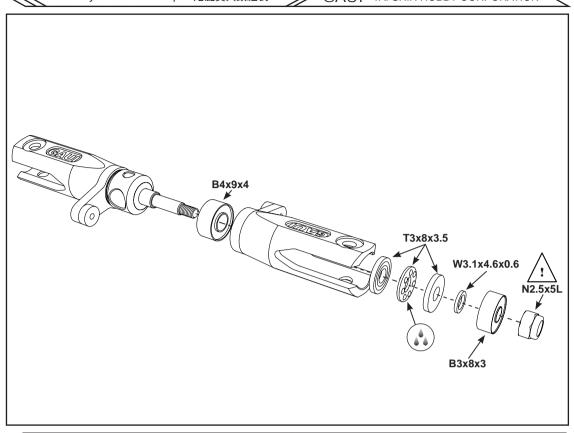




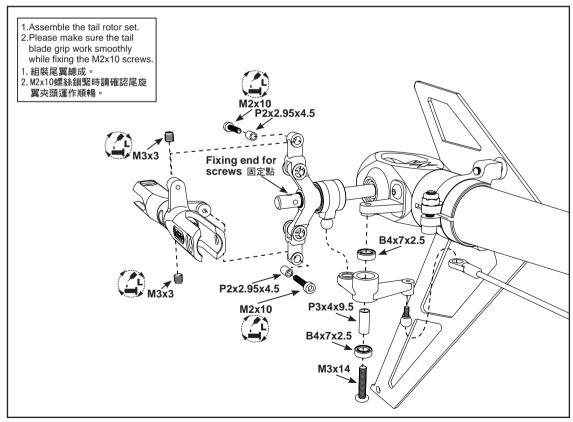


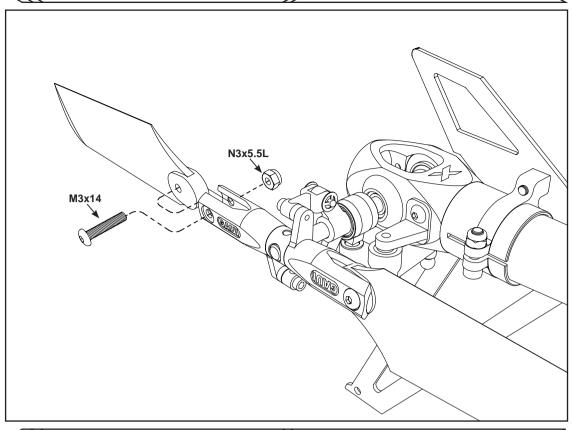
Assembly of Tail Vertical Stablizer 垂直尾翼組裝





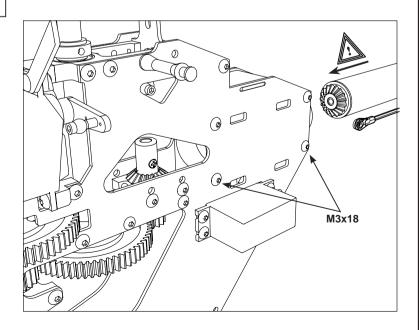
Assemblly of Tail Rotor Set 尾旋翼總成組裝

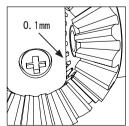


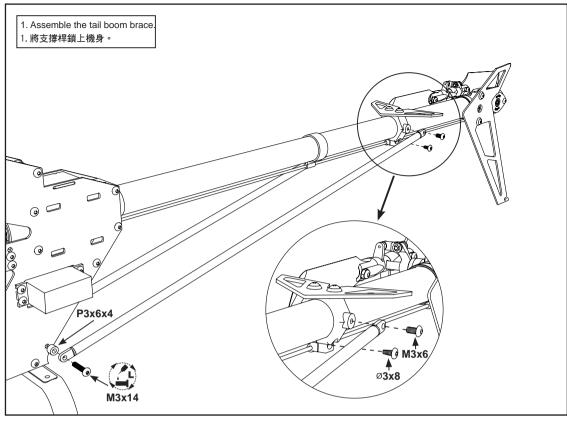


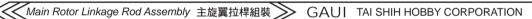
Assembly of Tail Boom Set 尾管總成組立

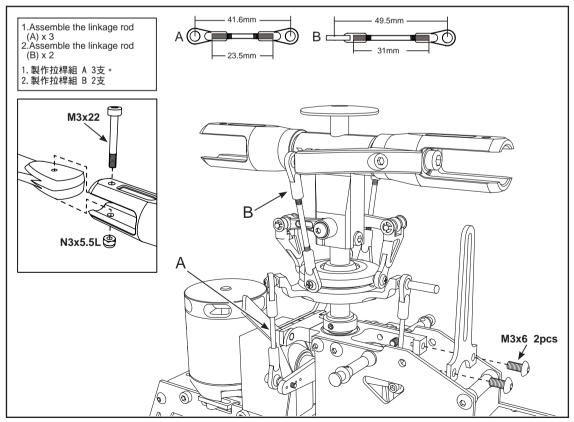
- 1.Insert the tail boom, make sure the gear mesh is approximately 0.1mm.
- 2. Fix M3x18 screws in P.7.
- 1. 將傳動尾管置入機身並確認 齒隙約0. 1mm。
- 2. 鎖緊P. 7頁的M3x18螺絲

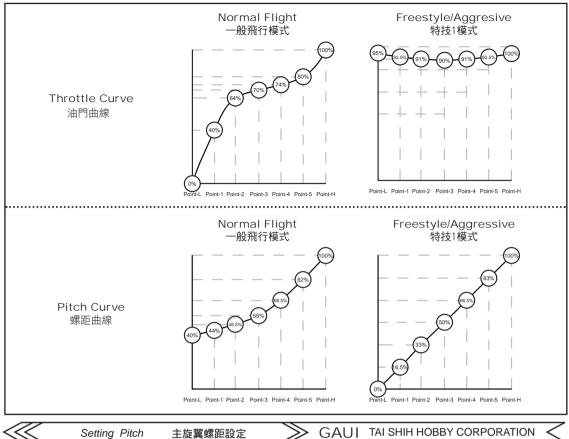


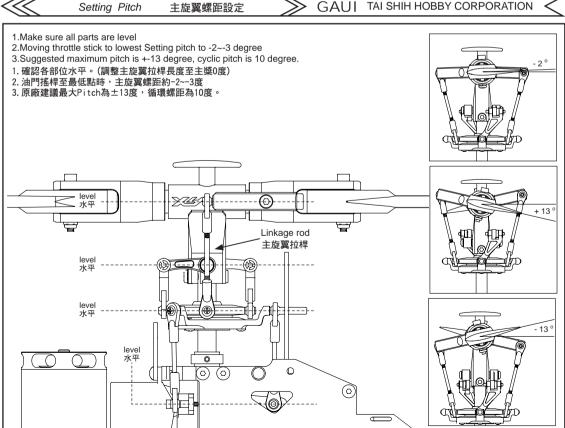














	X4 Tail Rotor Blade Set(70mm)	X4 尾旋翼(70mm)
213667	X4 CNC Tail Support Clamp(Silver anodized)	X4 CNC 水平翼固定座(電鍍亮銀)
213200	X4 FES CNC Main Rotor Yoke Set (Black anodized)	X4 FES CNC 主旋翼頭(電鍍黑)
213212	Ball with Stand(4.8mm)	4. 8球頭
213211	Mast Collar Set	主軸輪擋
213201	X4 CNC Main Grip Set (Black anodized)	X4 CNC主旋翼夾頭(電鍍黑)
213202	X4 FES Washout Arm Assembly (Black anodized)	X4 FES剪型臂組(電鍍黑)
213203	X4 FES CNC Main Grip Levers (Black anodized)	X4 FES主旋翼舵柄組(電鍍黑)
213204	X4 Spindle Shafts	X4 橫軸
213205	X4 FES Main Masts (8mm)	X4 FES主軸組(8mm)
213206	X4 FES 2 Blade Rotor Head Ass'y(for 8mm Mast)	X4 FES 兩槳旋翼頭總成(8mm主軸用)
213250	X4 Washer Pack	X4 墊片包
213220	Damper rubber (Hardness 95)	橫軸橡皮墊(硬度95)
	Main Blade Linkage Rod (2x31mm)x2 (2x23.5mm)x3	不鏽鋼連桿組 (2x31mm) x2(2x23.5mm) x3
213208	X4 CNC Stop Plate (Black anodized)	X4 CNC煞車盤(電鍍黑)
	X4 Canopy Posts(Silver anodized)	X4 艙罩支柱
	X4 CNC Swashplate (Black anodized)	X4 CNC十字盤(電鍍黑)
	X4 FRP Painted Canopy	X4 玻纖噴漆座艙組
	X4 Right CF Frame with Metal parts	X4 右碳纖側板含附件
	X4 Left CF Frame with Metal parts	X4 左碳纖側板含附件
		X4 碳纖陀螺儀座及電池座及強化板組
	X4 Servo Mounts and Mast Mount	X4 上主軸版、伺服機座組
	8mm Steel One Way Gear Ass'y(19T)	8mm單向齒輪(19T)
	Pulley Shaft with Steel Gear(14T)	皮帶齒軸附鋼齒(14T)
	8mm New One Way Gear Shaft Set(L43)	8mm 新單向軸(L43)
	Rear Main Gear(61T)	61T齒輪
	X4 Bearing Mount for CF Frames	X4 碳纖側板專用軸承座
	X4 CNC Boom Clamps (Silver anodized)	X4 CNC尾管固定座(亮銀)
	Front Gear Hub Set	前齒輪轂
	Rear Gear Hub Set	主齒輪轂
	Skid Set	X4 滑橇組(亮銀)
	Alu Square Post with 3mm thread hole	方鋁柱附3mm牙孔(5x5x23.5mm)及圓鋁柱
213513	(5x5x23.5mm) and Round Post (3x4.8x23.5mm)	(3x4. 8x23. 5mm)
213600	CF main blades (425L-CFA)	碳纖漿 425L(CFA)
	X4 Fin and Tail(CF)	X4 碳纖尾翼組
213651	X4 CF Tail Rotor Blade Set(77mm)	X4 碳纖尾旋翼(77mm)
213652	X4 CNC Integrated Tail Gear Case(Black anodized & Shaft version)	X4 一體成型尾殼座組(電鍍黑適用軸傳版)
213653	X4 CNC Tail Rotor Grips with Thrust Bearings (for 5mm tail output shaft)	X4 CNC尾旋翼夾頭附止推軸承(5mm尾軸用)
213654	CNC Tail Pitch Slider Set(for 5mm tail output shaft)	CNC螃蟹夾組(5mm尾軸用)
213655	X4 Tail Boom (Black anodized)	X4 尾管(電鍍黑)
213656	X4 Torque Tube Tail Boom Assembly (Black anodized)	X4 CNC軸傳動尾管總成(電鍍黑)

	X4 Tail Boom Support (Silver anodized)	X4 支撐桿(亮銀)
213658	500mm Straight Tail Pushrod	500mm 直尾拉桿(適用X4系列)
213659	X4 Tail Output Shaft	X4 尾軸
213660	X4 Torque Tube Drive Gear Set	X4 尾軸傳動齒輪包
213661	X4 Tail Hub Set (for #213652)	X4尾旋翼頭(適用#213652)
213662	Tail Pitch Control Lever Set	尾舵角片
213663	Tail Support Clamp	尾管夾
213664	Rudder Control Guide	拉桿座
213666	X4 CNC Torque Tube with bearing (for 425L blades)	X4 CNC尾傳動軸桿組(適用425mm槳)
803726	B. Pack(3x8x3)x4	軸承 (3x8x3) x4
803727	B. Pack(4x9x4)x2	軸承 (4x9x4) x2
803728	B. Pack(3x6x2.5)x4	軸承 (3x6x2.5) x4
803729	B. Pack(5x11x4)x4	軸承 (5x11x4) x4
803730	B. Pack(8x16x5)x2	軸承 (8x16x5) x2
803731	B. with washer (8x12x3.5)x2	軸承(8x12x3.5)x2(附墊片)
803732	B. Pack (6x13x3.5)x4	軸承 (6x13x3. 5) x4
803733	B. Pack (6x13x5)x4	軸承 (6x13x5) x4
803734	Thrust B. (T6x12x4.5)x2	止推軸承包(T6x12x4.5)x2
803735	Ball Links Pack(4.8mm)	拉桿頭(4.8mm)
810001	X4 Screws Combo Pack(M3)	X4 螺絲組合包(M3)
842015	Machine Screws-Silver-Semi-(2x8)x12pcs	十字機械牙螺絲包-銀色-半牙(2x8)x12個
842016	Socket Head Cap Screw - Black (M4x10)x10pcs	內六角螺絲包-黑色(M4x10)x10個
883817	Washer Pack(W3.1x4.6x0.6)	墊片包(W3.1x4.6x0.6)
884001	Nut (N2x4)x10pcs	螺帽(N2x4)x10個
884002	Nut Combo Pack(N3x5.5)	螺帽組合包(N3x5.5)
805104	B. (5x10x4)	軸承 (5x10x4)
835503	Socket Set Screw(M3x3mmx10pcs)	內六角止付螺絲(M3x3mmx10個)



**GAUI** 

http://www.gaui.com.tw E-mail: gaui@gaui.com.tw FAX: +886-2-2610-5567