



***Aeolus 50 3D*** Helicopter

# INSTRUCTION MANUAL

## 使用说明书



**High-flier Tech海弗莱科技**

地址:成都经济技术开发区龙腾工业城5A  
ADD :5A LongTeng Industry City of Economy & Technology  
Development District Chengdu China  
Email: Service@hiflier-tech.com  
Email: hiflier@163.com  
Http :// www. ahf-rc.com

# Contents 目录

---

## CONTENTS

■	1. Outstanding features of Aeolus 50 3D helicopter.....	2
	2. Technical specification of Aeolus 50 3D helicopter.....	2
	3. Important notes.....	2
	4. Safety notes.....	3-5
	5. Equipment.....	5-7
	6. Standard package.....	8-10
	7. Assembly section.....	11-36
	8. Safety check before flying.....	37-40
	9. Inspection.....	41
	10. Repair parts list .....	42-52
	11. Torque tube driven pail assembly .....	53-56
	12. VI-SV Assembly Instruction.....	57-72
■	1、设计特点.....	2
	2、技术参数.....	2
	3、重要申明.....	3
	4、注意事项.....	3-5
	5、周边配件.....	5-7
	6、标准包装图表.....	8-10
	7、装配图解.....	11-36
	8、飞行前调试.....	37-40
	9、地面检查.....	41
	10、零部件选购图表 .....	42-51
	11、轴传动部分装配图 .....	53-56
	12、VI-SV系列装配图解.....	57-72

---

The electro-servo system is isolated from the fuel system by being located in the forward section of the helicopter. All components are secured firmly but are easily and quickly to remove from the helicopter.

★ 整体电子伺服系统安装(含定速传感器),整机全部电子部分可以与机体完全分离,安装牢固、拆装非常方便,更可防止燃油污染、有力的保护电子伺服设备。

The advanced engine mounting design allows easy engine removal and more efficient power transmission.

★ 采用无底板高精度整体发动机加强安装设计,提高动力传递效率,提高飞机整体强度。

The highest power to weight ratio available with a minimal takeoff weight as 3.00KG and its huge pitch stroke, which is 13°both plus and minus, gives you the most outstanding 3D explosive strength.

★ 超高的动力重量比(最小起飞重量3.00Kg),正负13°超大螺距行程,可以将3D飞行爆发力发挥到极致。

Clutches with a single-direction bearing are fixed by double bearings. This improves the precision and efficiency of power transmission, and reduces the vibration.

★ 带单向轴承的离合器组采用双轴承固定的特殊安装方式,提高传动精度,减小震动,高效率动力传递。

The rudder rod is constructed of light fiber thereby reducing distortion in the transmission and allows for very accurate tail rotor control.

★ 超轻高强度纤维管尾舵拉桿,将传动变形减小到最小,控制更精准

A 420 CC gasoline tank completes the perfect combination of furious flying and steady performance.

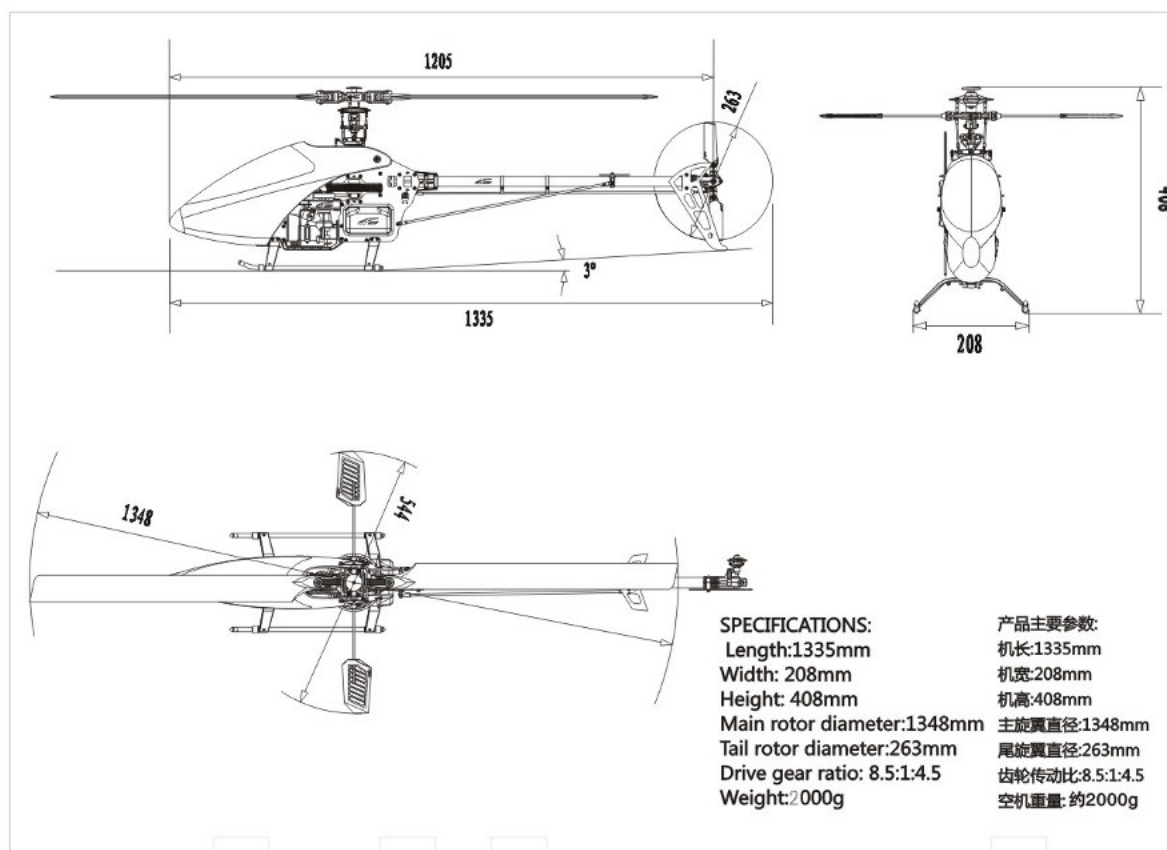
★ 420ml剧烈3D飞行时间和3D飞行性能达到完美结合。

52 high-precision bearings guarantee excellent performance.

★ 全机采用52颗高精度轴承,确保优秀的飞行表现。

For a more reliable power transmission, the single-direction bearing in rotary table of the principle axis is well protected by vertical double bearings.

★ 主轴齿轮盘采用纵列双颗轴承保护中心单向轴承,使动力输出更可靠。



Thank you for buying AHF products. The Aeolus 50 3D Helicopter is designed as an easy to use, full featured Helicopter R/C model capable of all forms of rotary flight. Please read the manual carefully before assembling the model, and follow all precautions and recommendations located within the manual. Be sure to retain the manual for future reference, routine maintenance, and tuning. The Aeolus 50 3D is a new product developed by HIFLIER. It features the best design available on the Micro-Heli market to date, providing flying stability for beginners, full aerobatic capability for advanced fliers, and unsurpassed reliability for customer support.

承蒙阁下选购AHF的系列产品,谨表谢意!为了让您方便使用Aeolus 50 3D helicopter,请先详细的阅读完说明书后,再进行相关的组装和操作这架直升机。同时请您妥善地保存好本说明书,作为日后的进行调整及维护的参考。该产品是由海弗莱科技自主研发并拥有多项自主知识产权的新产品。不论您是追求稳定性的初学者或者追求极致性能的3D飞行的玩家,Aeolus 50 3D直升机是您最佳的选择,实现操控者3D飞行的梦想。

1. R/C helicopters, including the AHF-50 are not toys. R/C helicopter utilize various high-tech products and technologies to provide superior performance. Improper use of this product can result in serious injury or even death. Please read this manual carefully before using and make sure to be conscious of your own personal safety and the safety of others and your environment when operating all AHF products.

Manufacturer and seller assume no liability for the operation or the use of this product. Aeolus 50 is intended for use only by adults with experience flying remote control hileopters at a legal flying field. After the sale of this product we cannot maintain any control over its operation or usage.

Aeolus 50 3D直升机不是玩具,属于R/C模型之范畴。它是结合了众多的高科技设计出来的休闲竞技运动之产品。所以说对之使用不当或不熟悉都可能会照成严重的伤害甚至死亡。使用之前务必要详细阅读本说明书,并注意自身的安全。注意!任何遥控直升机的使用,厂商是无法对使用者的零件使用的磨损异常或组装不当所导致的意外事故的发生承担任何责任。本产品是提供给有操作过模型直升机经验的成熟人士或有相当技术的人员在旁指导在当地的合法的遥控飞行场地飞行,以确保安全无误的前提下操作使用。产品售出后本公司不负任何责任和操作和使用控制上的任何性能与安全责任。

2. We recommend that you obtain the assistance of an experined pilot before attempting to fly our products for the first time. A local expert is the best way to properly assemble, setup, and fly your model for the first time. The AHF-50 requires a certain degree of skill to operate, and is a consumer item. Any damage or dissatisfaction as a result of accidents or modifications are not covered by any warrantee and cannot be returned for repair or replacement. Please contact our distributors for free technical consultation when you experience problems during operation or maintenance.

模型产品属于高超技术操控,且又是消耗性之商品,如经使用拆装后,会造成零部件不同程度的磨损,任何使用情况下造成商品的不良或不满意,将无法于保修的条件下更换新品或退货。如遇有使用操作维修问题,本公司的分支机构或经销商及代理商将提供技术指导。

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

遥控模型直升机属高危险性之商品,飞行时务必远离人群。组装不当或机件损坏、电子设备控制不良,以及控制上的不熟悉,都有可能到导致飞机失控损伤等不可预见的意外发生。请飞行者务必注意飞行安全,并应清楚意识到疏忽所造成任何意外伤害的责任,特别注意以下事项(但不仅仅包含如下事项):

1) LOCATE AN APPROPRIATE LOCATION  
R/C helicopters to fly at high speed, thus posing a certain degree of potential danger. Choose a legal flying field consisting of flat, smooth ground without obstacles. Do not fly near buildings, high voltage cables, or trees to ensure the safety of yourself, others and your model. For the first pra ctice, please choose a legal

flying field and can use a training skid to fly to reduce the damage. Do not fly our model in inclement weather, such as rain, wind, snow or darkness.

①远离障碍物和人群

模型直升机飞行具有一定的速度, 相对存在着危险性, 场地的选择也是相当的重要, 请遵守当地的法规到合法的飞行场地去飞行, 请勿在下雨、打雷等恶劣天气条件下飞行, 确保自身和机体的安全。务必注意周边有没有人员、高楼、建筑物、高压电线、树木等等。避免由于操控不当造成自己和他人的经济损失或意外的伤害, 初次练习时, 必须在有丰富经验者指导下进行。

2) OBTAIN THE ASSISTANCE OF AN EXPERIENCED PILOT

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

②避免独自操控

进场飞行前, 需要确认是否与你相同的频率的同好正在飞行, 因为开启相同频率的发射机将导致自己与他人的干扰的意外危险。遥控飞机操控之技巧在初学期是有相当大的难度, 要尽量避免独自操控飞行, 需要有经验的人士在旁指导, 才可以操控飞行。(建议: 勤练电脑模拟器和请有经验的飞手指导乃是入门的必要选择)

3) ALWAYS BE AWARE OF THE ROTATING BLADES

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

③远离旋转中的零件

当直升机主旋翼和尾翼高速旋转时, 且勿触摸或远离任何物体, 以免造成意外的损害;

4) PREVENT MOISTURE

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

④远离潮湿环境

模型直升机的内部也是有许许多多精密电子元件组成, 所以必须防止潮湿或水气, 避免在浴室或雨天时使用, 防止水气进入机身内部而导致机件或电子零件故障而引发的不可预见的意外。

5) KEEP AWAY FORM HEAT

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

⑤远离热源

飞机的部件多半是尼龙纤维或聚甲醛、电子商品为主要材质, 因此, 尽量远离热源、暴晒, 避免由于高温而引起的变形甚至熔化损坏的可能。

6) PROPER OPERATION

Please use the replacement of parts contained in the manual to ensure the safe operation of the helicopter. These products are for R/C helicopter model, so please do not use for other purpose.

⑥勿不当使用本品

请勿自行改造及加工, 任何的升级改造的或维修, 请使用AHF产品目录中的升级件的规格部品, 以确保结构的安全。请确认在产品的极限内操控使用, 请不要过载使用, 并不能用于安全、法令外其他非法用途。

7) SAFE OPERATION

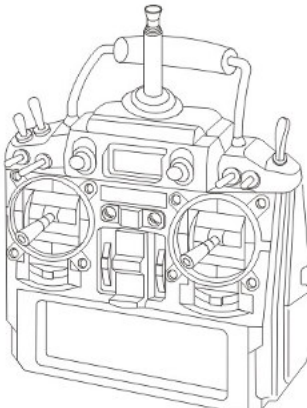
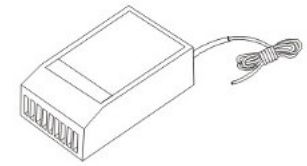
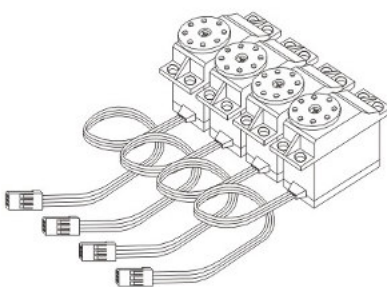
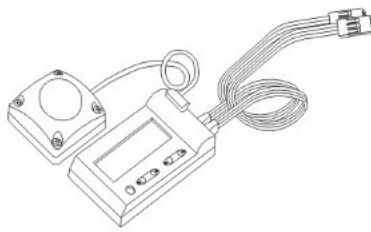
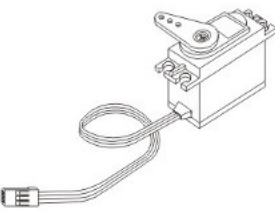
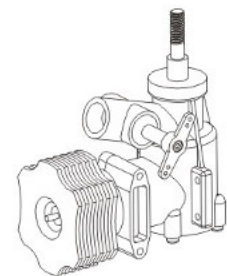
Operate this unit within your ability. Do not fly when tired or otherwise incapacitated as improper operation may cause in danger.

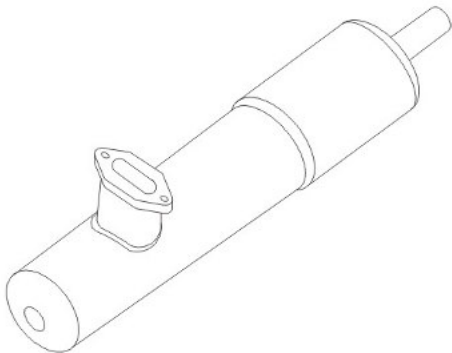
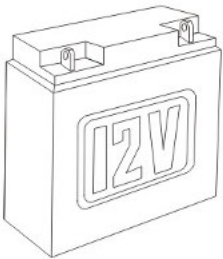

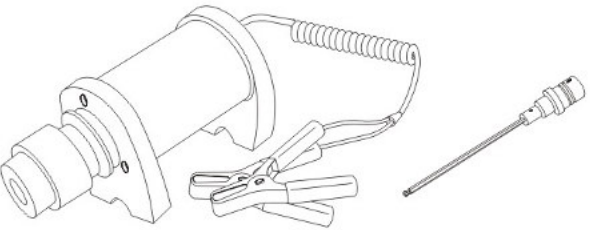
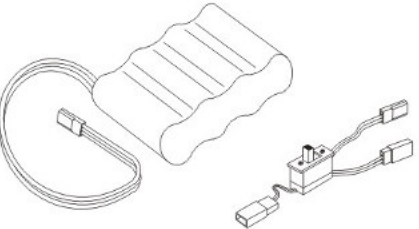

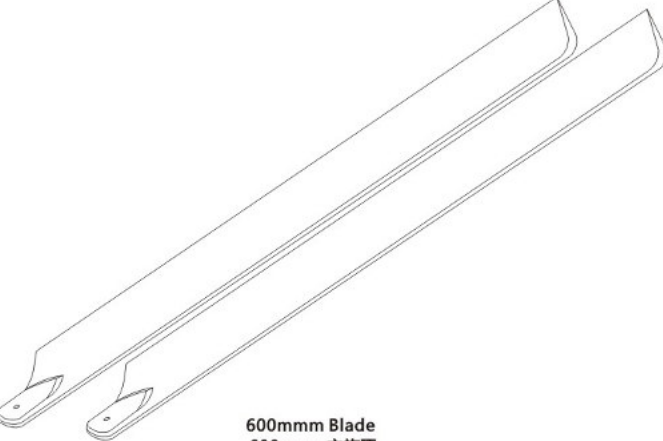

⑦安全操作

请在自己的能力的范围内及需要一定的技术范围内操控这架直升机, 身体过于疲劳、精神不佳、饮酒后或不当的操作, 导致意外的发生危险的可能性将会提高。


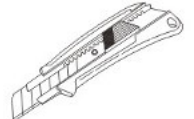

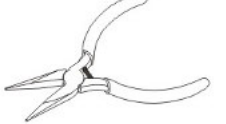




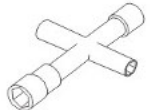

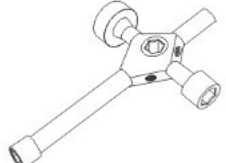
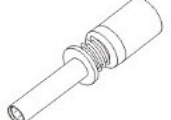
V、EQUIPMENT 周边配件

RADIO TRANSMITTER AND ELECTRONIC EQUIPMENT REQUIRED FOR ASSEMBLY 需要自备器材

 <p>Transmitter(6-channel or more, helicopter system) 无线电遥控发射机(六通道以上的直升机模式版本)</p>	 <p>Receiver(6-channel or more) 无线电遥控接收机(六通道以上)</p>
 <p>Standard Servo X 4 标准的伺服机 4颗</p>	 <p>Head Lock Gyro 锁定式陀螺仪</p>
 <p>Tail Specialized Servo 尾舵专用控制伺服机</p>	 <p>2-stroke ENGINE 50两冲程发动机</p>

 <p>50 Resonance Maffler 50谐振消音器</p>	 <p>Fuel pump 启动机电瓶</p>
 <p>Gasoline pump 加油泵</p>	 <p>Starter/Starter stick 启动机/启动棒</p>
 <p>Batteries 接收电池组</p> <p>Switch 开关组</p>	 <p>Oil 发动机专用燃油</p>
 <p>600mm Blade 600mm主旋翼</p>	 <p>Pitch Gauge 螺距规</p>

### ADDITIONAL TOOLS REQUIRED FOR ASSEMBLY 自备工具

 <p>Scissors 剪刀</p>	 <p>Cutter Knife 美工刀</p>	 <p>Diagonal Cutting Pliers 斜口钳</p>	 <p>Needle Nose Pliers 尖嘴钳</p>
 <p>Oil 润滑油</p>	 <p>Quick Drying Glue 瞬间胶</p>	 <p>Hexagon Screw Dri (3/2.5/1.5mm) 内六角螺丝起子 (3/2.5/1.5mm)</p>	 <p>Phillips Screw Driver 十字螺丝起子</p>
 <p>Socket wrench(5.5/7/8mm) 套筒扳手 (5.5/7/8mm)</p>	 <p>Ball Link Pliers 球头专用钳</p>	 <p>Glow Plug Wrench 热头专用扳手</p>	 <p>Glow plug igniter 点火夹</p>



Smear oil between axes and axis sleeves or on the connection parts of frictional surfaces, to better the lubrication.  
请在轴与轴套或摩擦面结合处适当加注, 有利于提升润滑度和机能;



Smear glue on the screw in linkage ball, then screw down the assembling holes of plastic components to better the fastness.  
上请在球头扣的螺孔适当涂之, 再将其与塑胶件的安装孔拧紧增加牢固度;



Use only after fixing up the bearings Or the screws and thread are assembled firmly.  
请在轴承固定或螺钉与螺紋组合相对牢固不拆卸时, 适度使用之;



Use only when the screws and thread are assembled firmly and easy to disassembly.  
请在螺钉与螺紋组合相对紧面, 且方便拆卸时, 适度使用之;

#### ●Note:

- ★Proper dosage of lube can prevent the pollution to components.
- ★Special care must be paid when using the super glue to prevent over-stickiness of two neighboring components or stain on the plane surface.
- ★Proper dosage of super screw glue (red) should be smeared at the screw thread, 1-1.5mm from the tip; otherwise the components can not be disassembled any more. Heating the metal components for 15 to 20 seconds to disassemble them (plastic components can not be heated).
- ★Smear the glue (blue) at the screw thread, 1-1.5mm from the tip; please control the dosage carefully otherwise the components can not be disassembled any more.
- ★The sigh AHF should be upwards when assembling the linkage ball and its inverse should be integrated with metal linkage ball.

#### ●注意: ★润滑油使用量要适当, 防止污染部件及飞机;

- ★瞬间胶使用时要格外小心控制流量, 防止流胶粘牢相邻部件, 或固化个后造成表面污浊;
  - ★红色螺丝胶使用时适度涂于螺杆螺紋的端部1-1.5mm, 过量使用会导致无法拆卸, 若要拆卸金属件时, 需要加热15-20秒后即可 (塑胶件不推荐此方法);
  - ★蓝色螺丝胶使用时适量涂于螺杆螺紋的端部2-1.5mm, 严禁过量, 防止拆卸困难。
- 提示: 球头扣在安装时“AHF”向上, 反面与球头压配结合。

# VI、STANDARD PACKAGE 标准配置部件

Code No. 代码 (A)	Part 零件			
A-1 Clutch 离合器总成	<p>Sensor Magnet 磁钢 <math>\phi 4 \times 2</math></p>			
A-2 Elevator lever 十字盘前控制臂组				
A-3 Bearing block 主轴轴承座	<p>X12 X12</p>			
A-4 Engine 引擎组	A-4	<p>X8 X12</p>		
	A-4-1			
A-4-2				
A-5 Aileron lever 十字盘控制臂组				
A-6 Tail control arm 尾伺服传动摇臂组				
Code No 代码 (B)	Part 零件			
B Fuel tank 油箱组	B			
B-1				
Code No 代码 (C)	Part 零件			
C Main frame 机身侧板	C-1	C-2	C-3	C-4

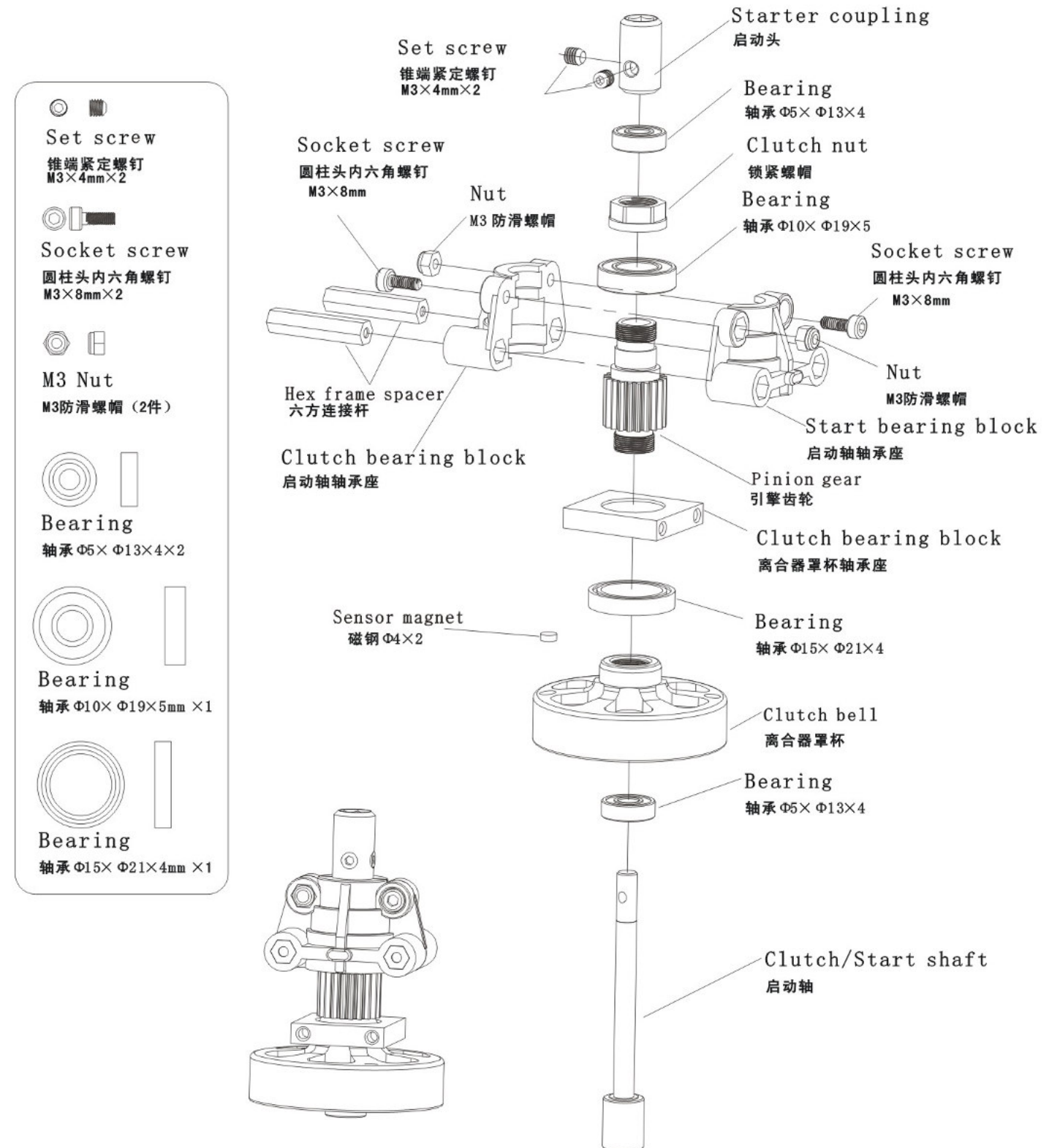
Code No 代码 (D)	Part 零件		
D Landing skid 脚架组	D	D-1	
Code No 代码 (E)	Part 零件		
E-1 Tail rotor 尾旋翼组	E-1	E-1-1	
E-2 T Type arm 尾旋翼控制臂			
E-3 Tail rotor control arm L型控制臂			
E-4 Tail boom mount 尾波箱组	E-4 Torque tube driven part one (轴传动版)	E-4-1 Torque tube driven part one (轴传动版)	
	E-4 Belt driven one (皮带传动版)	E-4-1 Belt driven one (皮带传动版)	
	E-4-2	E-4-2	
E-5 Vertical stabilizer 垂直翼	E-5	E-5-1	
E-6 Tail boom mount 尾管固定座组	E-6 Torque tube driven part one (轴传动版)	<p>X12 X12</p>	
	E-6 Belt driven one (皮带传动版)	<p>X12 X12</p>	
E-7 Horizontal stabilizer 水平翼	E-7	E-7-1	E-7-2
	E-7-3		
Code No 代码 (F)	Part 零件		
F-1 Main rotor housing 主旋翼固定座组	<p>red 红色 6° Yellow 黄色 75° White 白色 6°</p>		
	F-1-1	F-1-2	

F-2 Flybar seesaw holder 平衡翼杆固定座组	F-2	F-2-1	F-2-2
F-3 Washout base 向位器组	F-3		
F-4 Swashplate 十字盘组	F-4		
F-5 Main shaft 主轴组	F-5	F-5-1	
F-6 Main rotor holder 主旋翼夹组	F-6	F-6-1	
F-7 Drive gear set 齿轮组	F-7		
Code No 代码 (G)	Part 零件		
G Servo installation frame 整体伺服器安装架组	G	G-1	G-2
	G-3	G-4	
Code No 代码 (H)	Part 零件		
H Canopy 机头罩组	H	H-1	
Code No 代码 (I)	Part 零件		
I Main rotor holder 主旋翼托架	I	I-1	I-2 Attached (赠品)

## VII. ASSEMBLY SECTION 组合装配STEP A

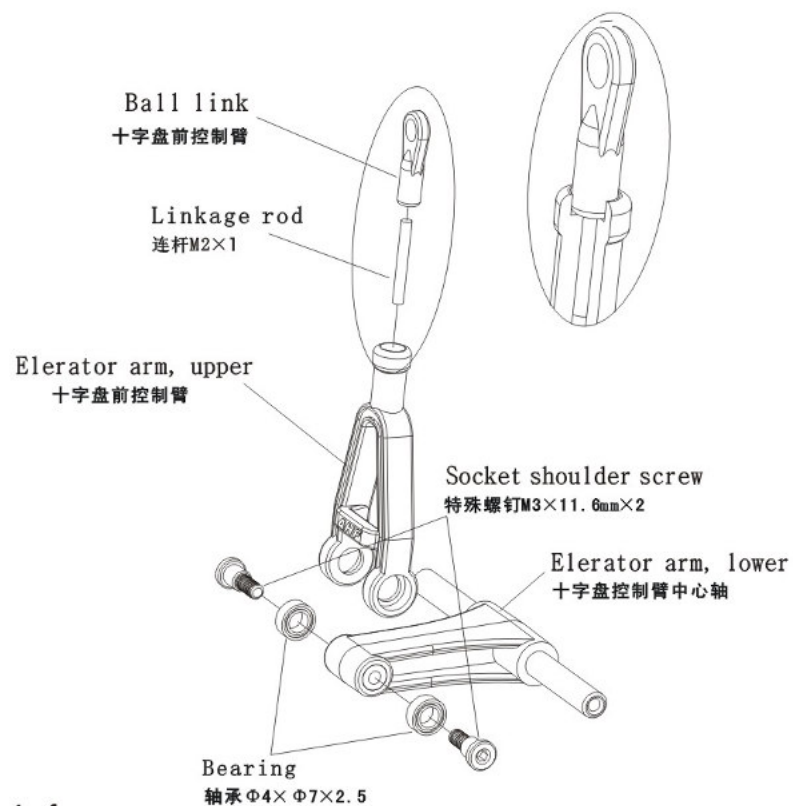
### 1. CLUTCH AND STARTER SYSTEM 离合器罩、启动系统组合

(A-1)



Double check your work after assembly. 已组装完成的部件，请务必再次确认。

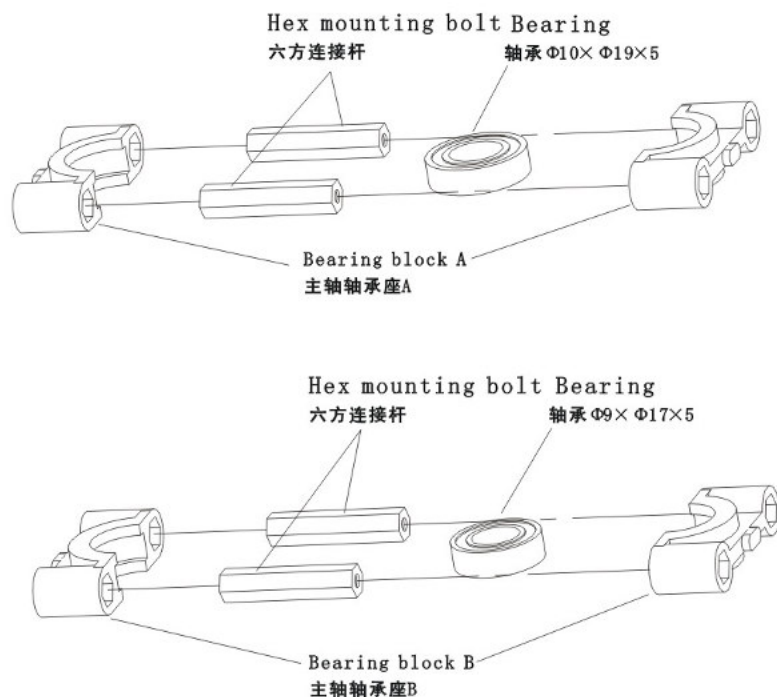
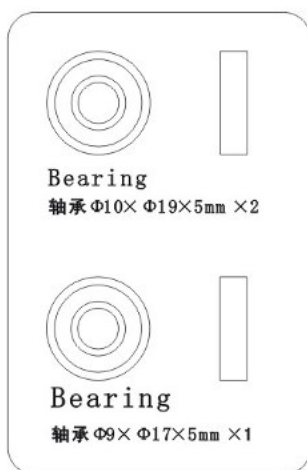
2、十字盘前控制臂及主轴A、B轴承座装配 (A-2)



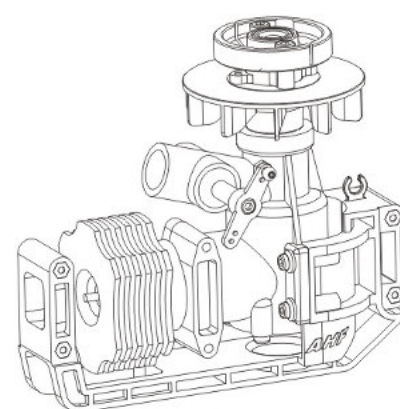
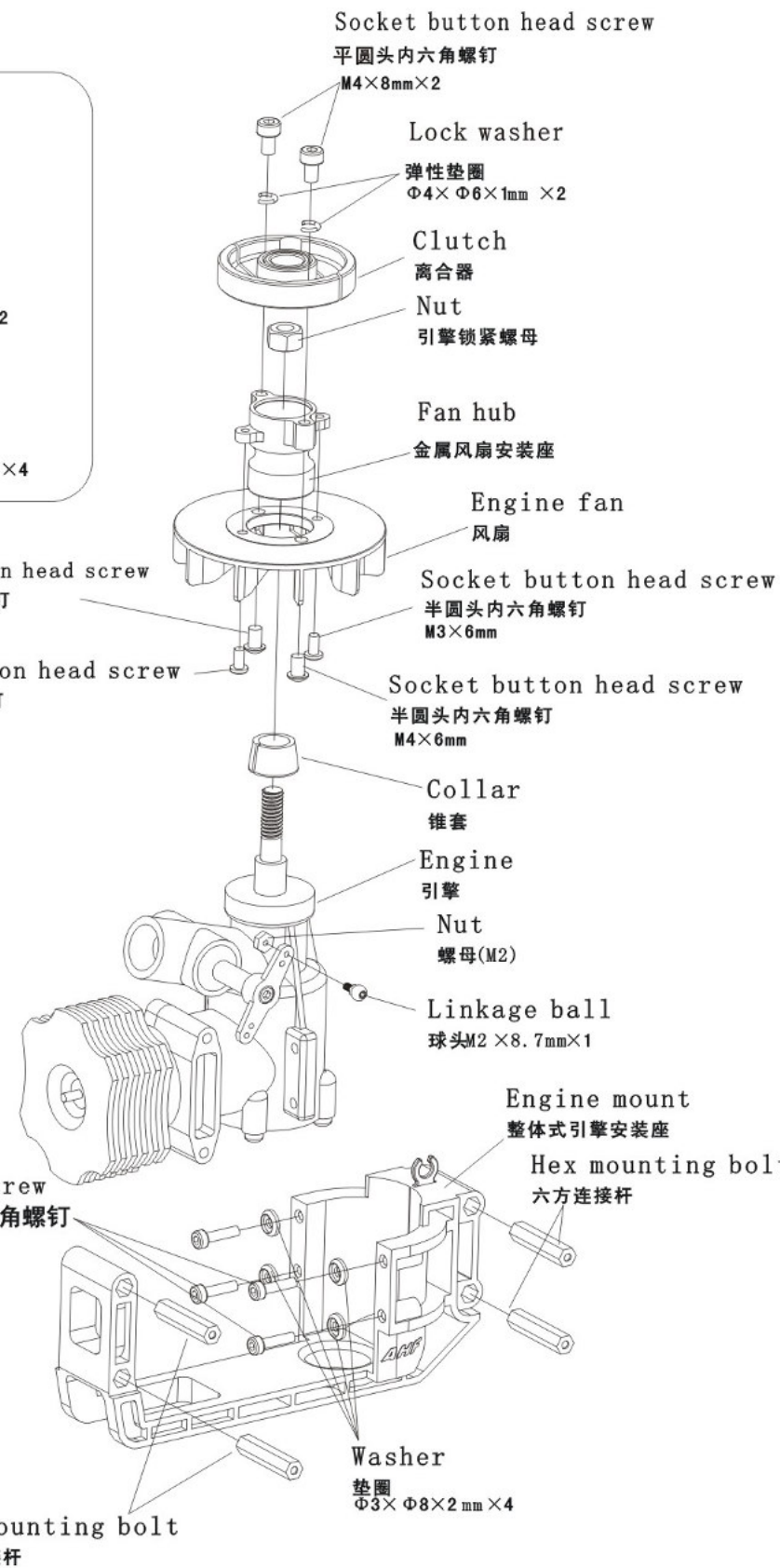
Do please install this part on the left main frame

★提示:安装是请将此方向与左侧板(C-1)装配

(A-3)



3、发动机、离合器、风冷系统组合装配 (A-4/A-4-1)



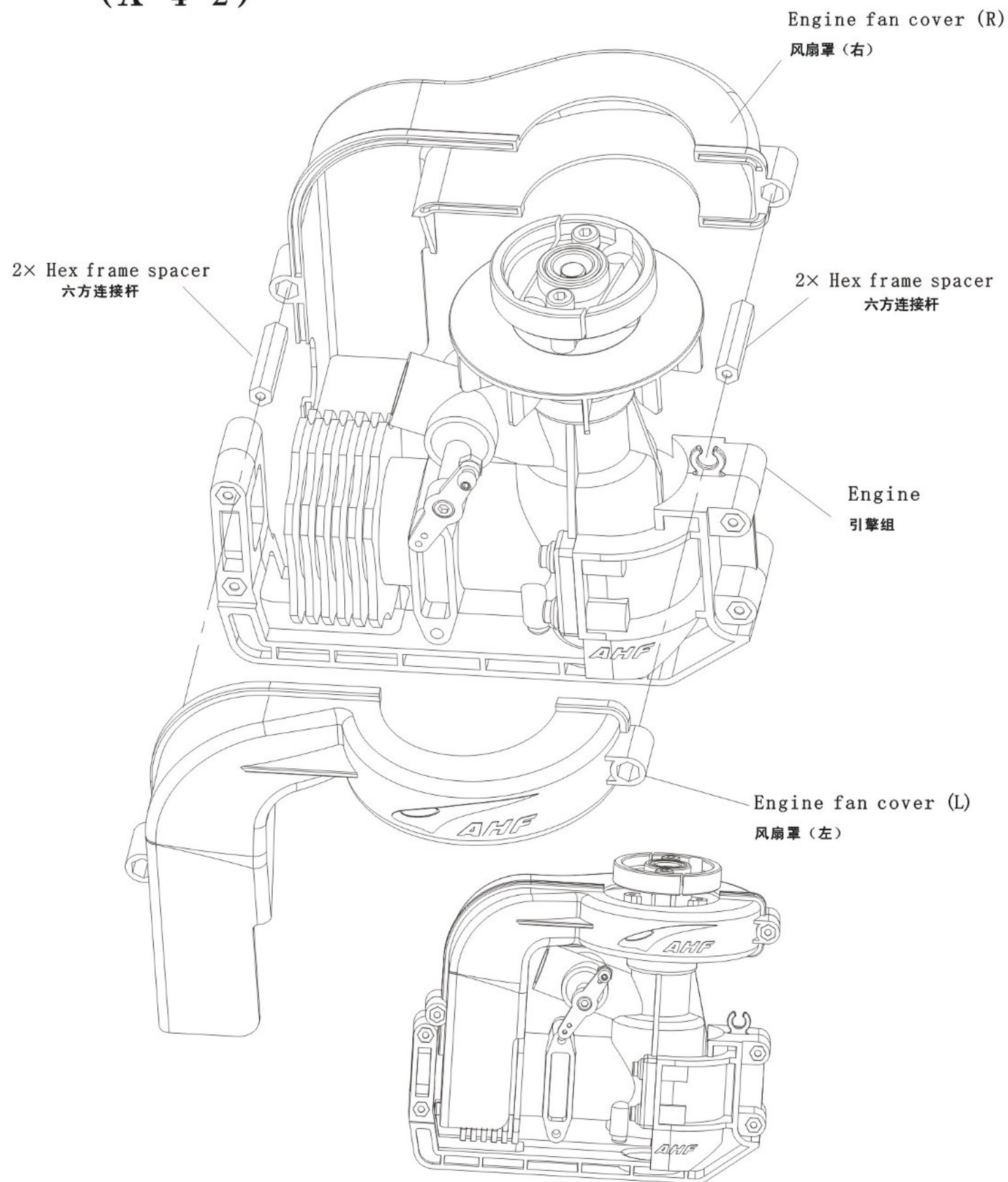
Hex mounting bolt  
六方连接杆



Some differences (large / small) for bearings and bearings block A&B, please assemble after checking to avoid any mistake.  
轴承、轴承座A与B又有大/小之分, 请确认后组合操作, 严防装错。



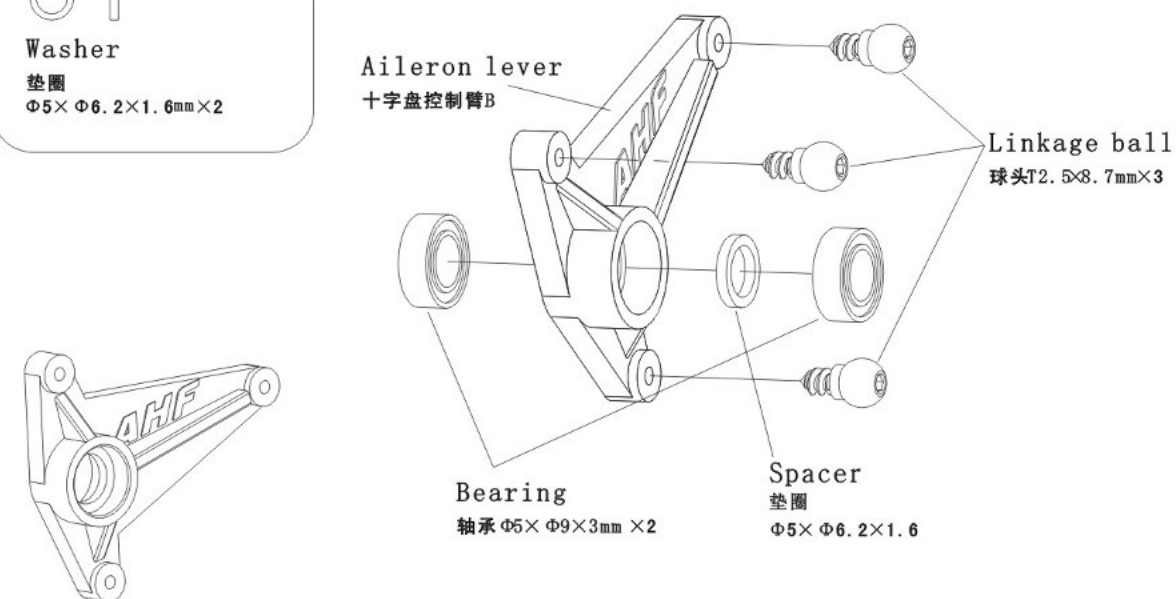
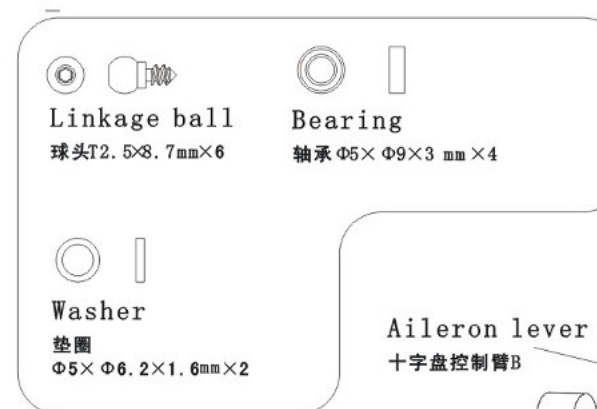
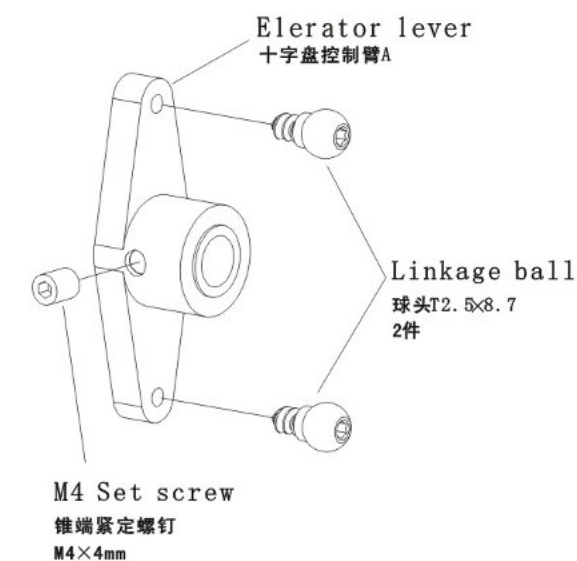
(A-4-2)



4、AILERON CONTROL BEARING AND LINKAGE BALL ASSEMBLY

4、十字盘翼控制臂轴承/球头装配

(A-5)

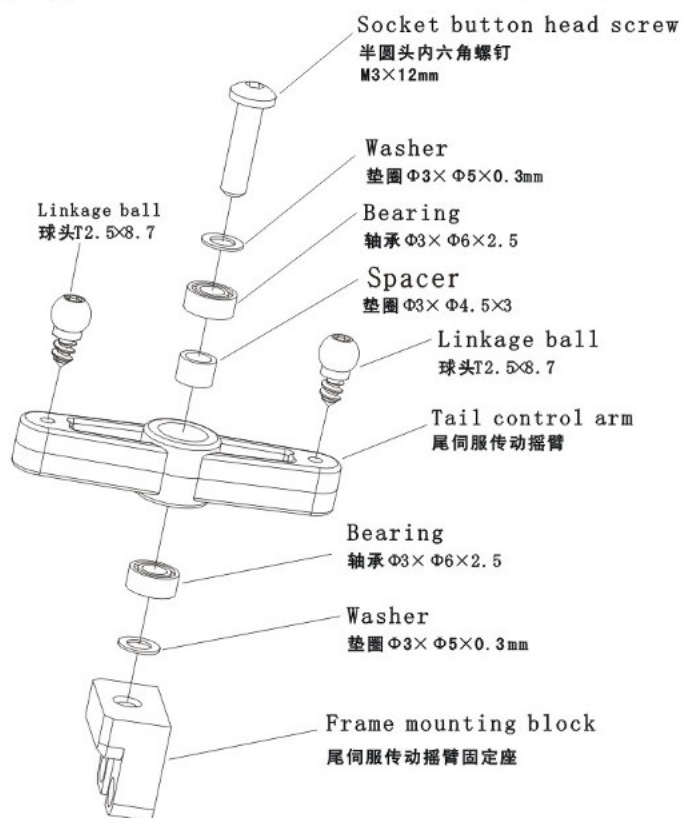


⚠ Double check your work after assembly. 已组装完成的部件，请务必再次确认。

⚠ For original manufactory package, please check if screws are firmly secured and applied with some glue before every operation. 原组装完成品每次飞行前，要确认螺丝是否已上胶，严防螺丝松动，导致事故的发生。

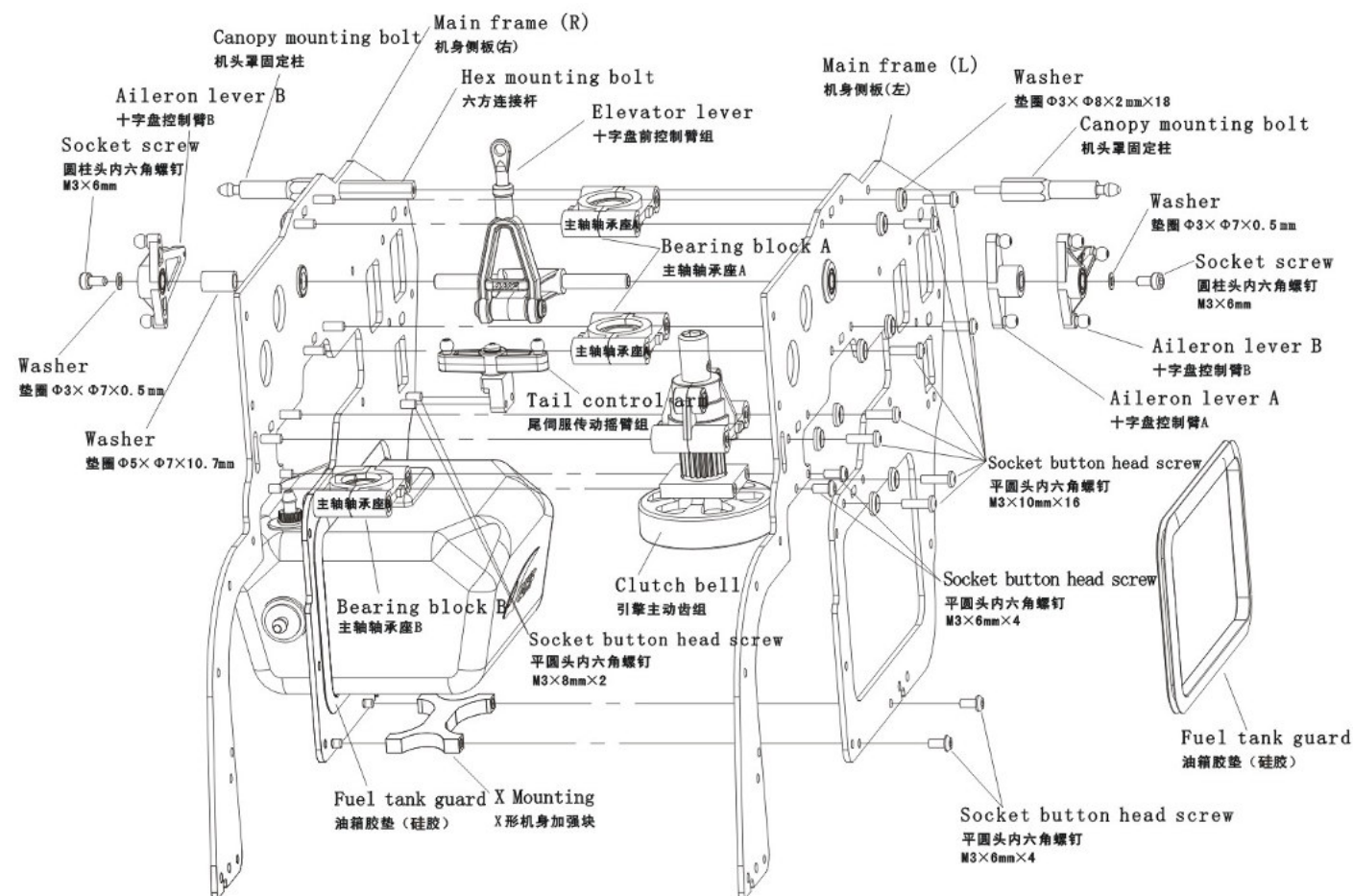
5、尾伺服传动摇臂组装

(A-6)



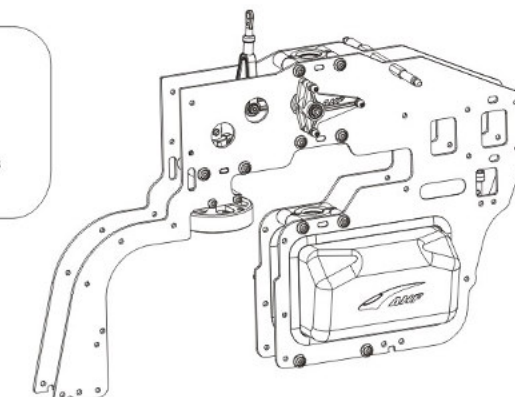
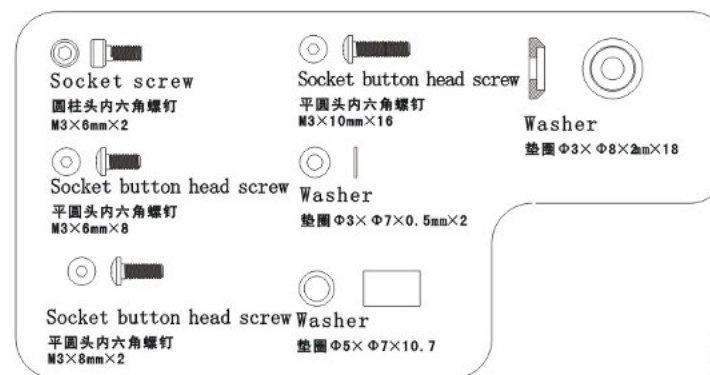
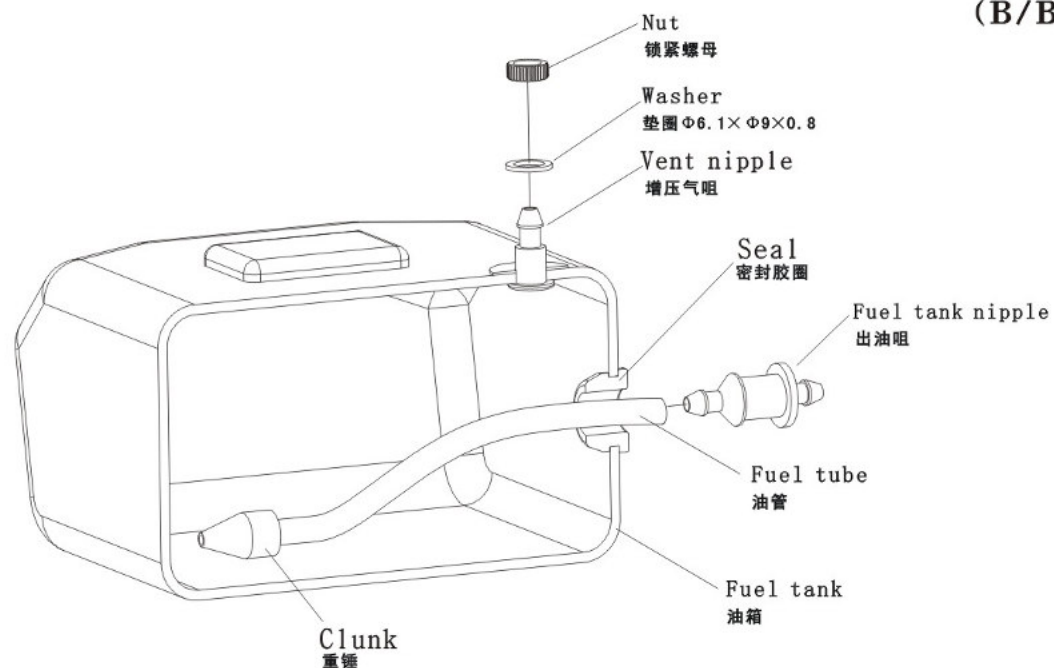
For original manufactory package, please check if screws are firmly secured and applied with some glue before every operation. 原组装完成品每次飞行前, 要确认螺丝是否已上胶, 严防螺丝松动, 导致事故的发生。

(C-1、C-2、C-3、C-4)



STEP B 6、SUEL TANK ASSEMBLY 油箱组合装配

(B/B-1)

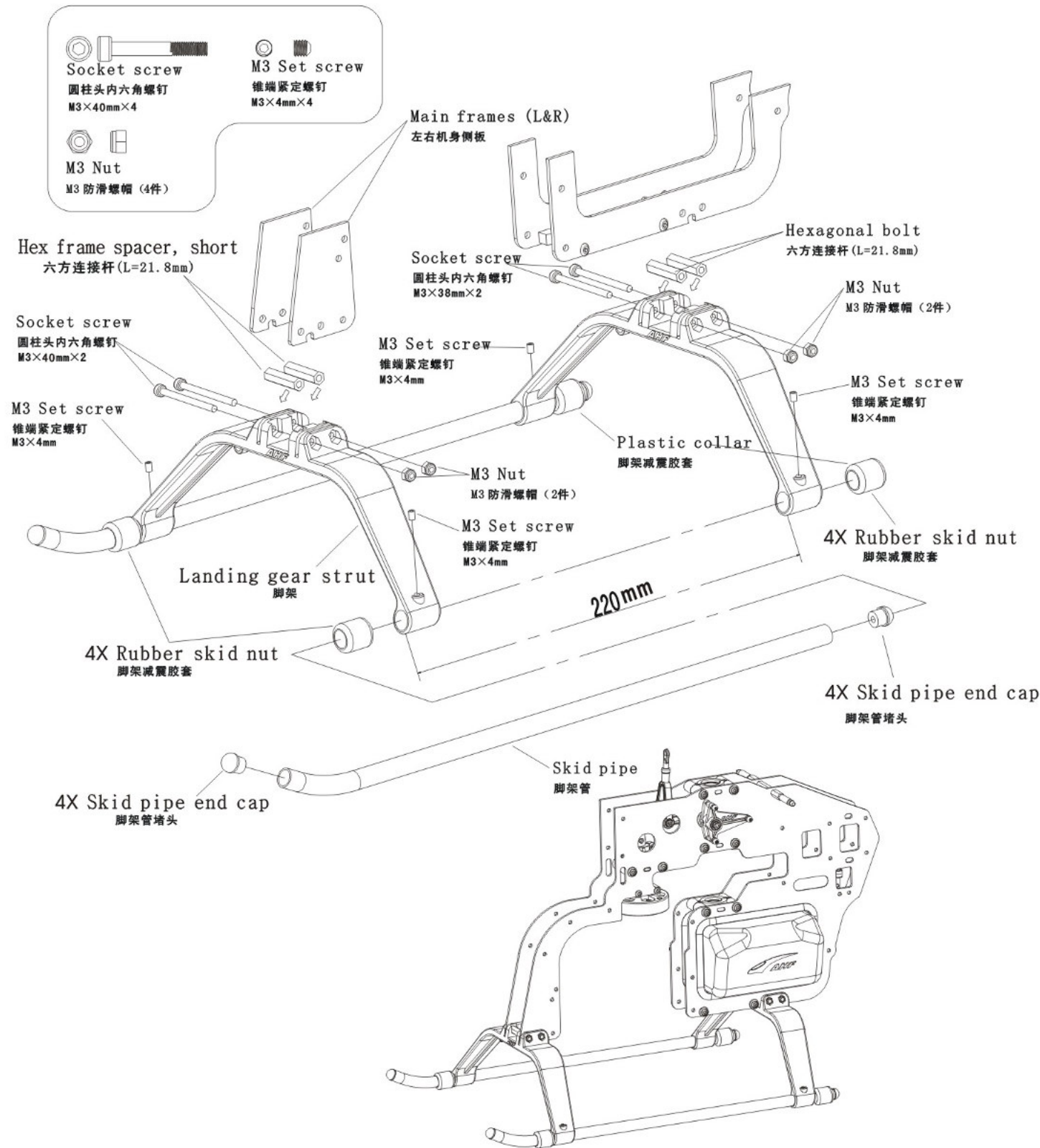


1. Please double check your work after assembly 2. When the oil box already assembled, please verify its tightness. 1、已组装完成的部件, 请务必再次确认。2、油箱装配完成后, 要验证其气密性。

First do not fully tighten the screws of main frames. Put the main shaft through the three bearings and check if the movements are smooth. The bottom bracket must be firmly touched the level table top, please keep the smooth movements on main shaft and level bottom bracket, then slowly tighten the screws. A correct assembly can help for the power and flight performance. 组合机身侧板的螺钉时, 先不要全部的螺钉拧紧, 插入主轴并贯穿三颗轴承确保主轴上下滑动顺畅; 两边的侧板一定要保持端面平齐, 精准的装配品质对动力与飞行品质有着显著的作用。

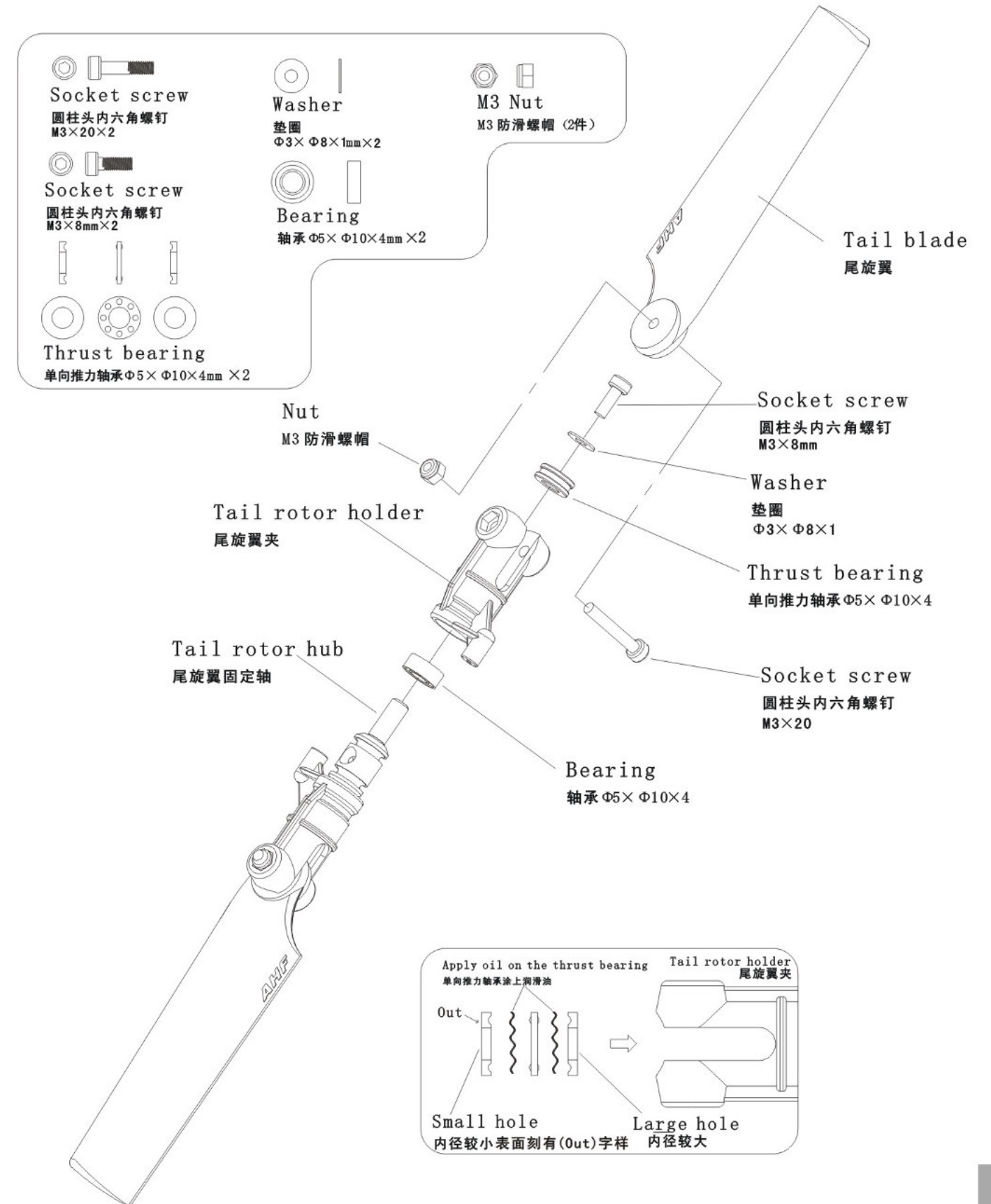
# STEP D 8. LANDING SKID ASSEMBLY 脚架组合装配

(D/D-1)



# STEP E 9. TAIL BLADE ASSEMBLY 尾旋翼组合装配

(E-1/E-1-1)



**Double check your work after assembly.** 已组装完成的部件，请务必再次确认。

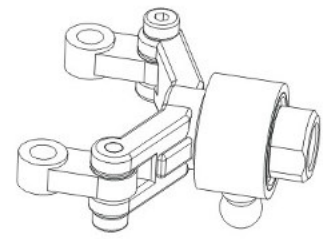


**For original manufactory package, please check if screws are firmly secured and applied with some glue before every operation.** 原组装完成品每次飞行前，要确认螺丝是否已上胶，严防螺丝松动，导致事故的发生。装完成的部件，请务必再次确认。

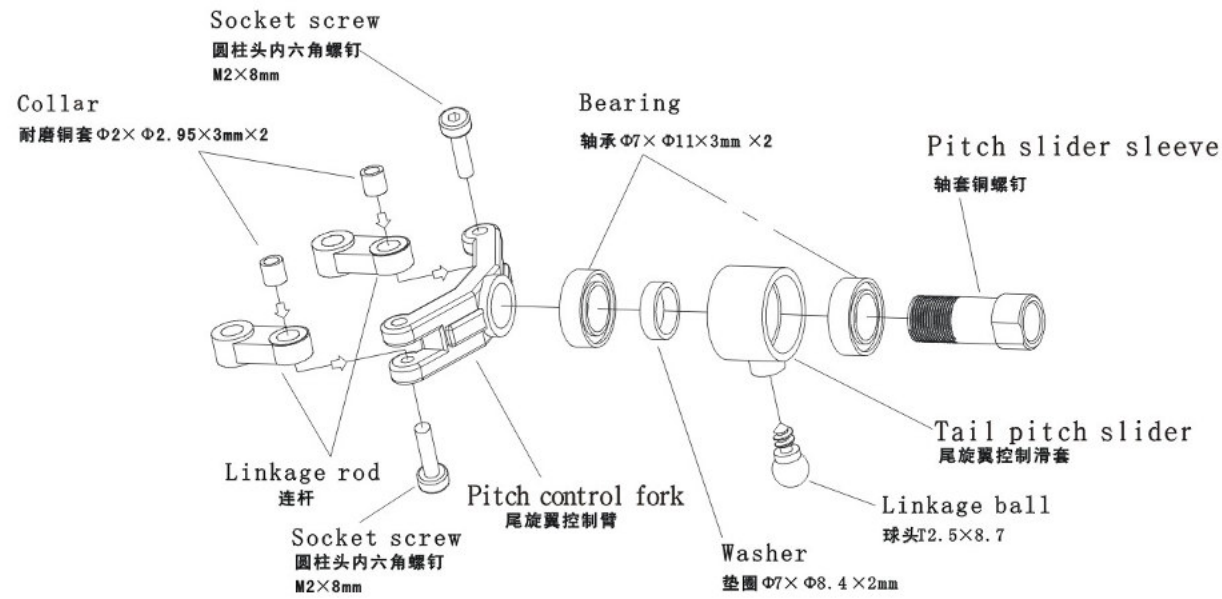
# 10. TAIL BOOM MOUNT ASSEMBLY 尾波箱组合

(E-4/E-4-1/E-4-2)

(E-2)

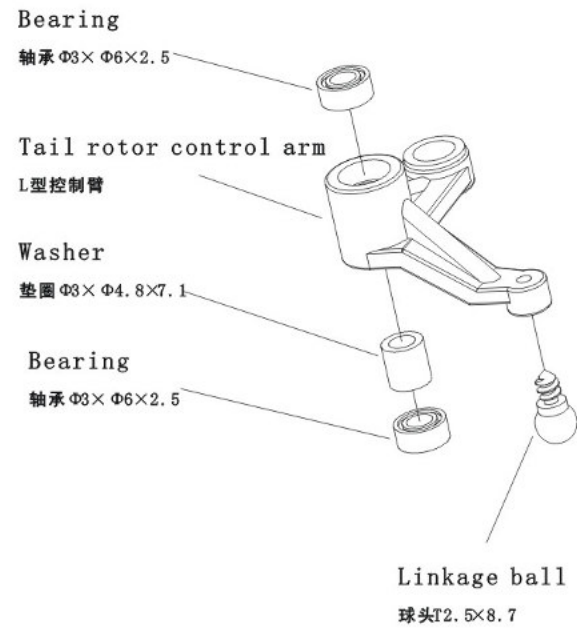
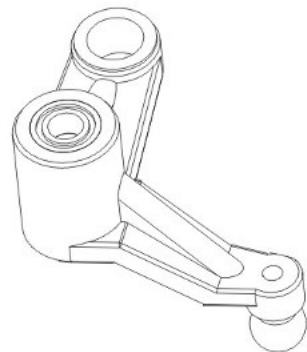


-  Bearing  
轴承  $\Phi 7 \times \Phi 11 \times 3 \text{mm} \times 2$
-  Washer  
垫圈  $\Phi 7 \times \Phi 8.4 \times 2 \text{mm} \times 1$
-  Socket screw  
圆柱头内六角螺钉  
 $M2 \times 8 \text{mm} \times 2$
-  Collar  
耐磨铜套  $\Phi 2 \times \Phi 2.95 \times 3 \text{mm} \times 2$
-  Linkage ball  
球头  $T2.5 \times 8.7 \text{mm} \times 1$

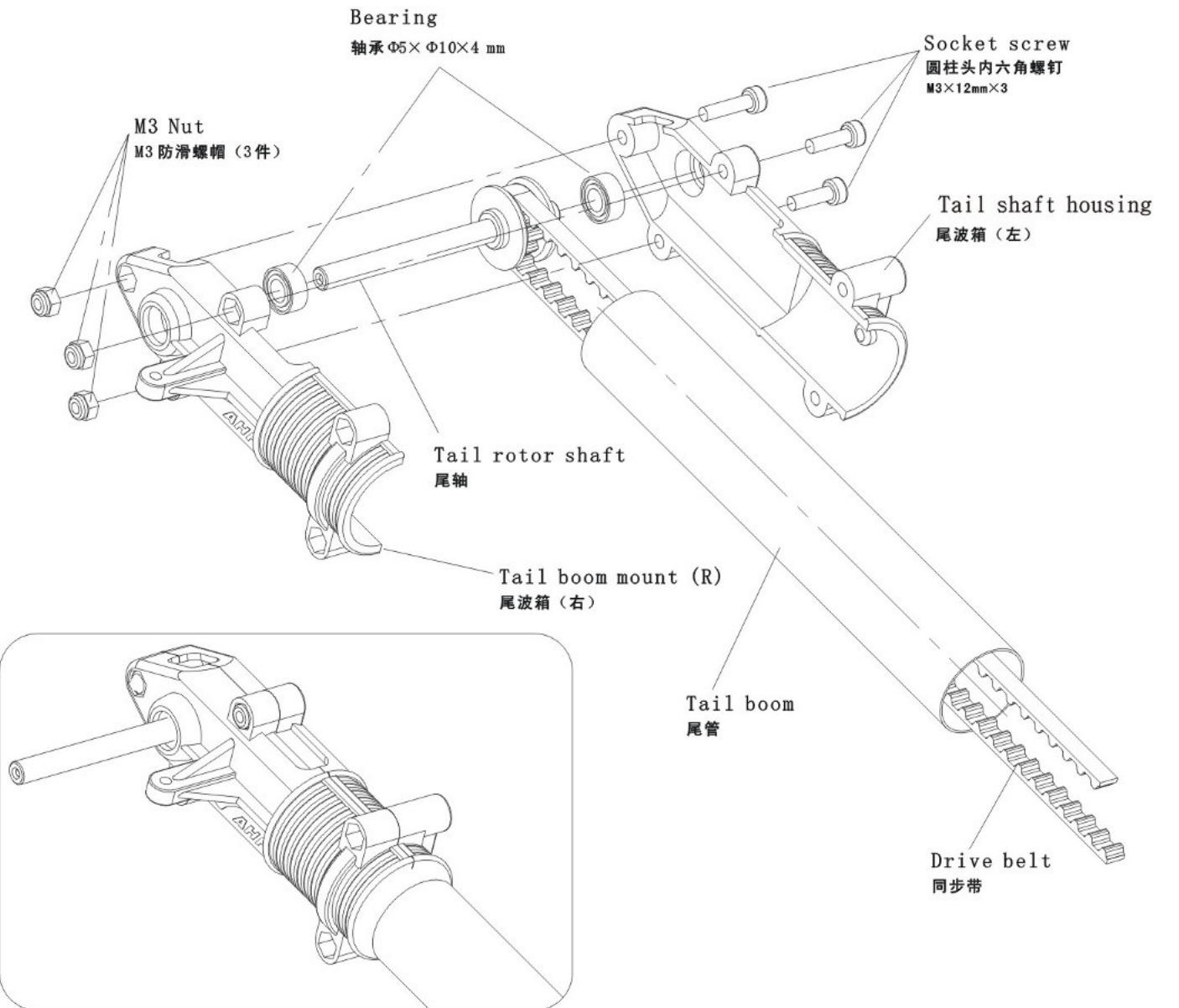


(E-3)

-  Bearing  
轴承  $\Phi 3 \times \Phi 6 \times 2.5 \text{mm} \times 2$
-  Linkage ball  
球头  $T2.5 \times 8.7 \text{mm} \times 1$
-  Washer  
垫圈  $\Phi 3 \times \Phi 4.8 \times 7.1 \text{mm} \times 1$

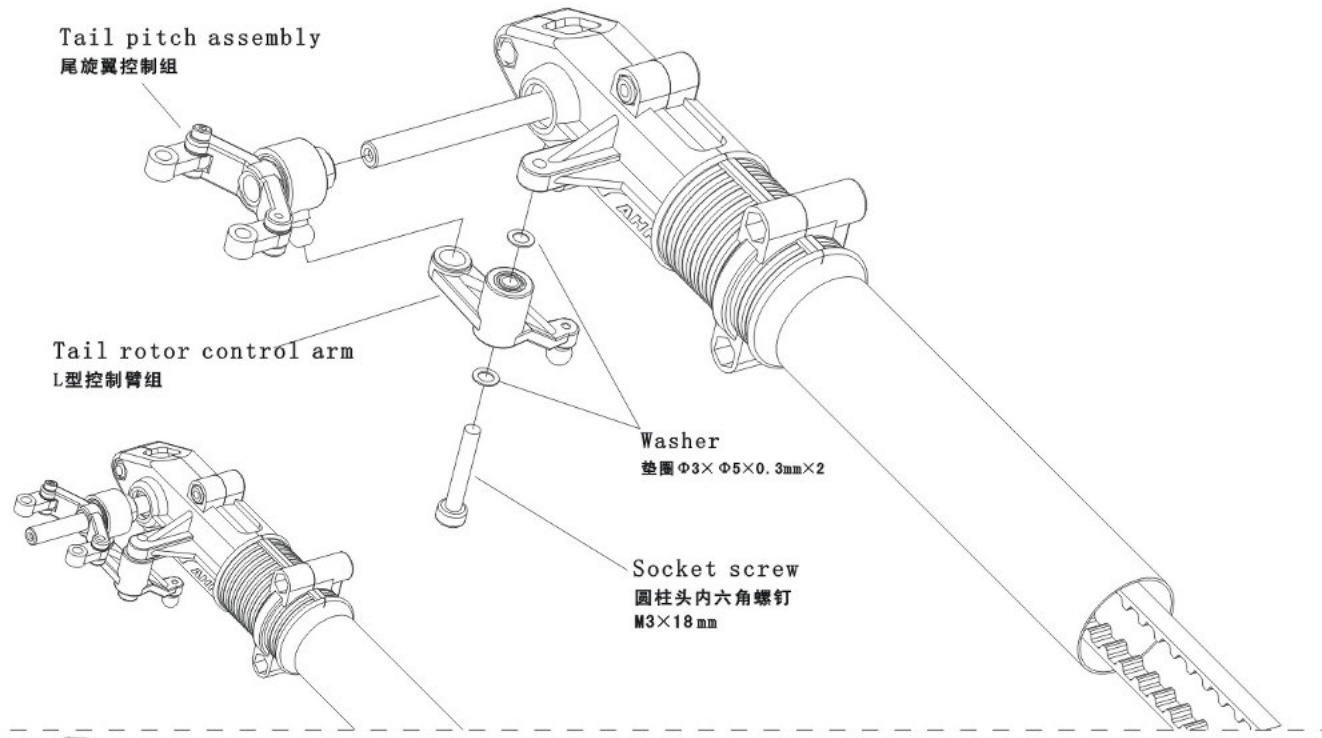


-  Bearing  
轴承  $\Phi 5 \times \Phi 10 \times 4 \text{mm} \times 2$
-  Socket screw  
圆柱头内六角螺钉  
 $M3 \times 12 \text{mm} \times 3$
-  M3 Nut  
M3 防滑螺帽 (3件)



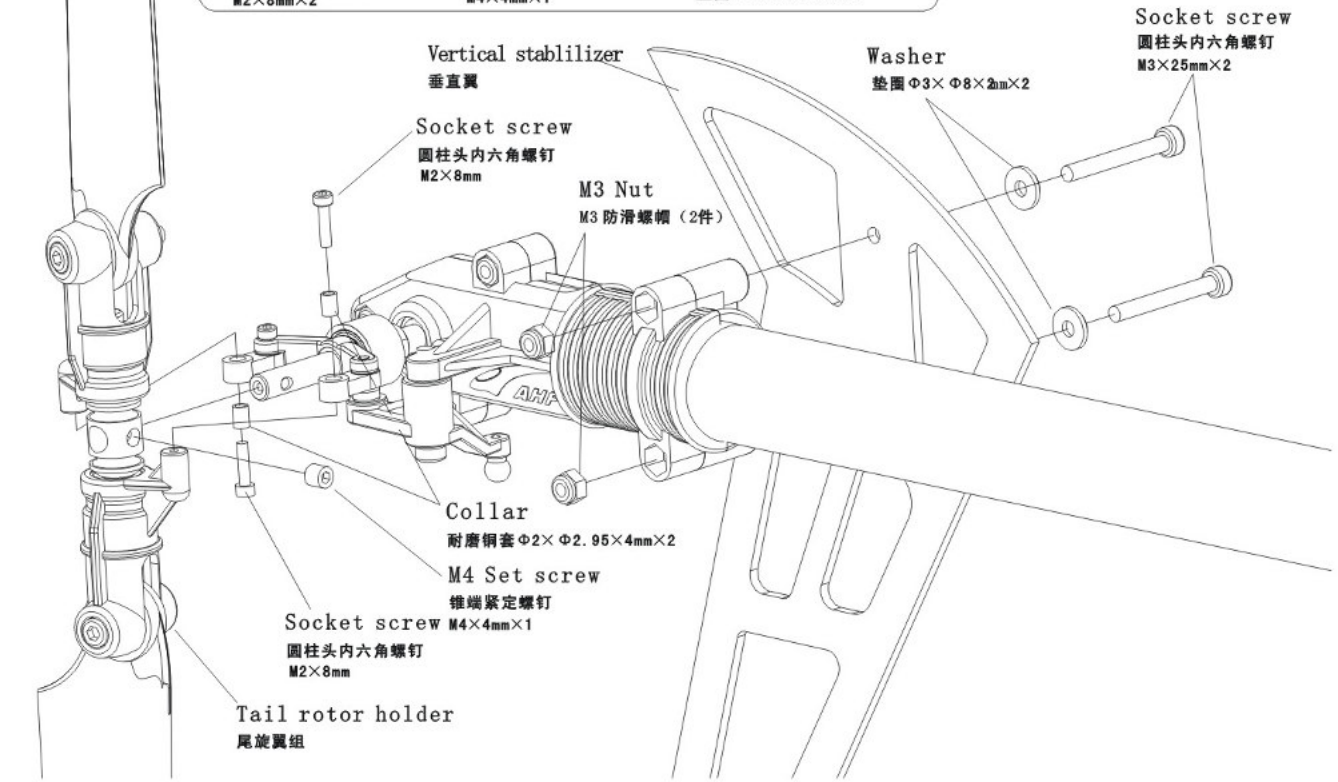
When tightening a linkage to a plastic part, please note to use a little CA glue and tighten it firmly, but not over tightened, or they will strip or broken.  
球头与塑件安装组合时请特别注意，要使用少量的瞬间胶水适当用力拧紧即可；禁止过度用力拧紧球头以免造成滑牙或导致塑件的损坏。

	
Washer 垫圈 $\Phi 3 \times \Phi 5 \times 0.3 \text{mm} \times 2$	Socket screw 圆柱头内六角螺钉 $M3 \times 18 \text{mm} \times 1$



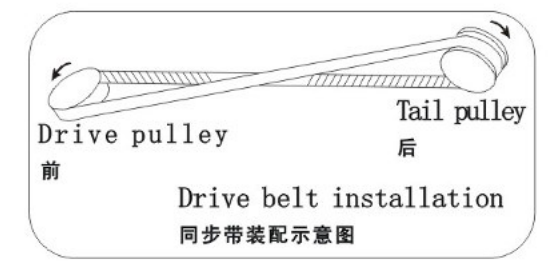
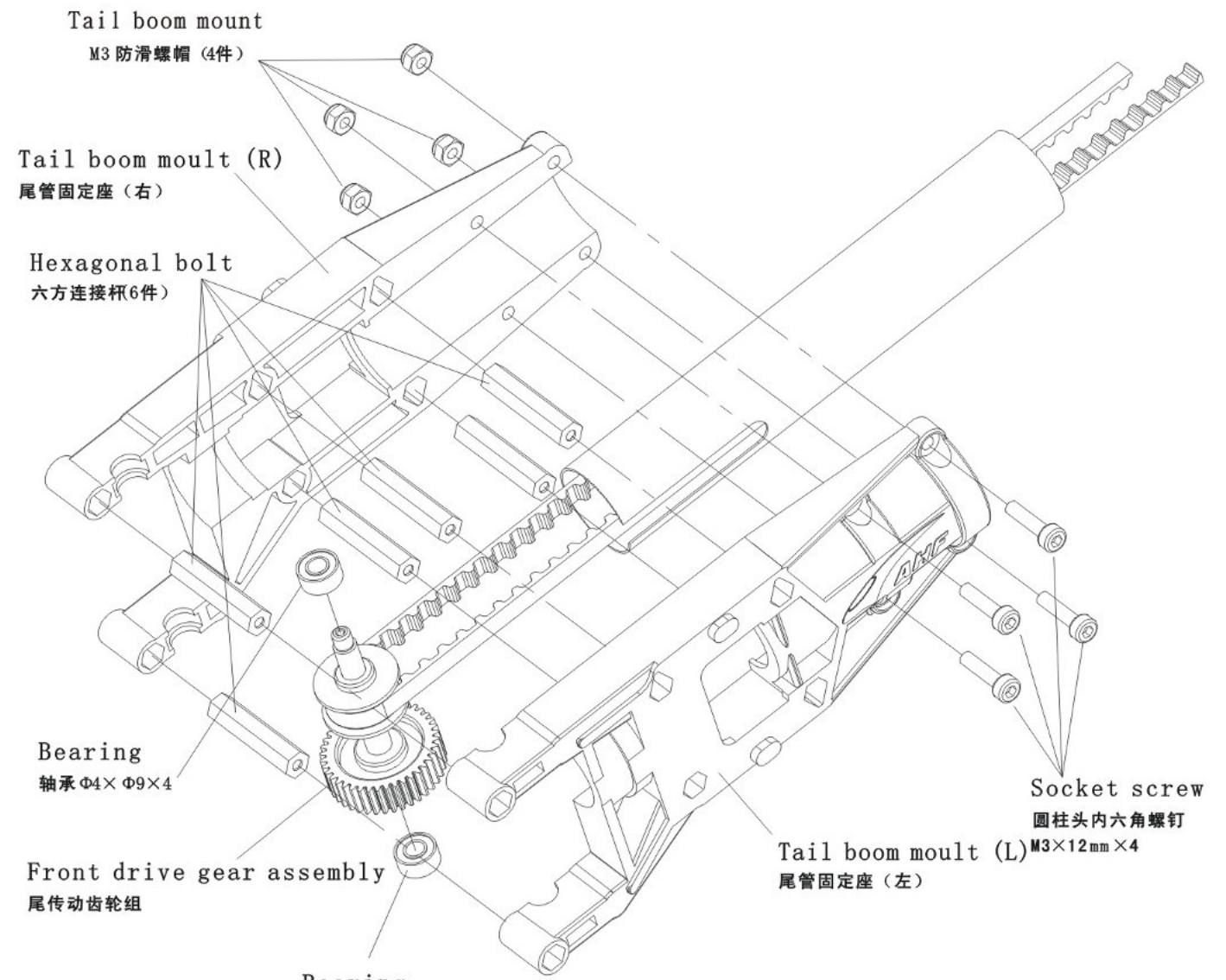
(E-5/E-5-1)

		
Socket screw 圆柱头内六角螺钉 $M3 \times 25 \text{mm} \times 2$	M3 Nut M3 防滑螺帽 (2件)	Collar 耐磨铜套 $\Phi 2 \times \Phi 2.95 \times 4 \text{mm} \times 2$
		
Socket screw 圆柱头内六角螺钉 $M2 \times 8 \text{mm} \times 2$	M4 Set screw 锥端紧定螺钉 $M4 \times 4 \text{mm} \times 1$	Washer 垫圈 $\Phi 3 \times \Phi 8 \times 2 \text{mm} \times 2$

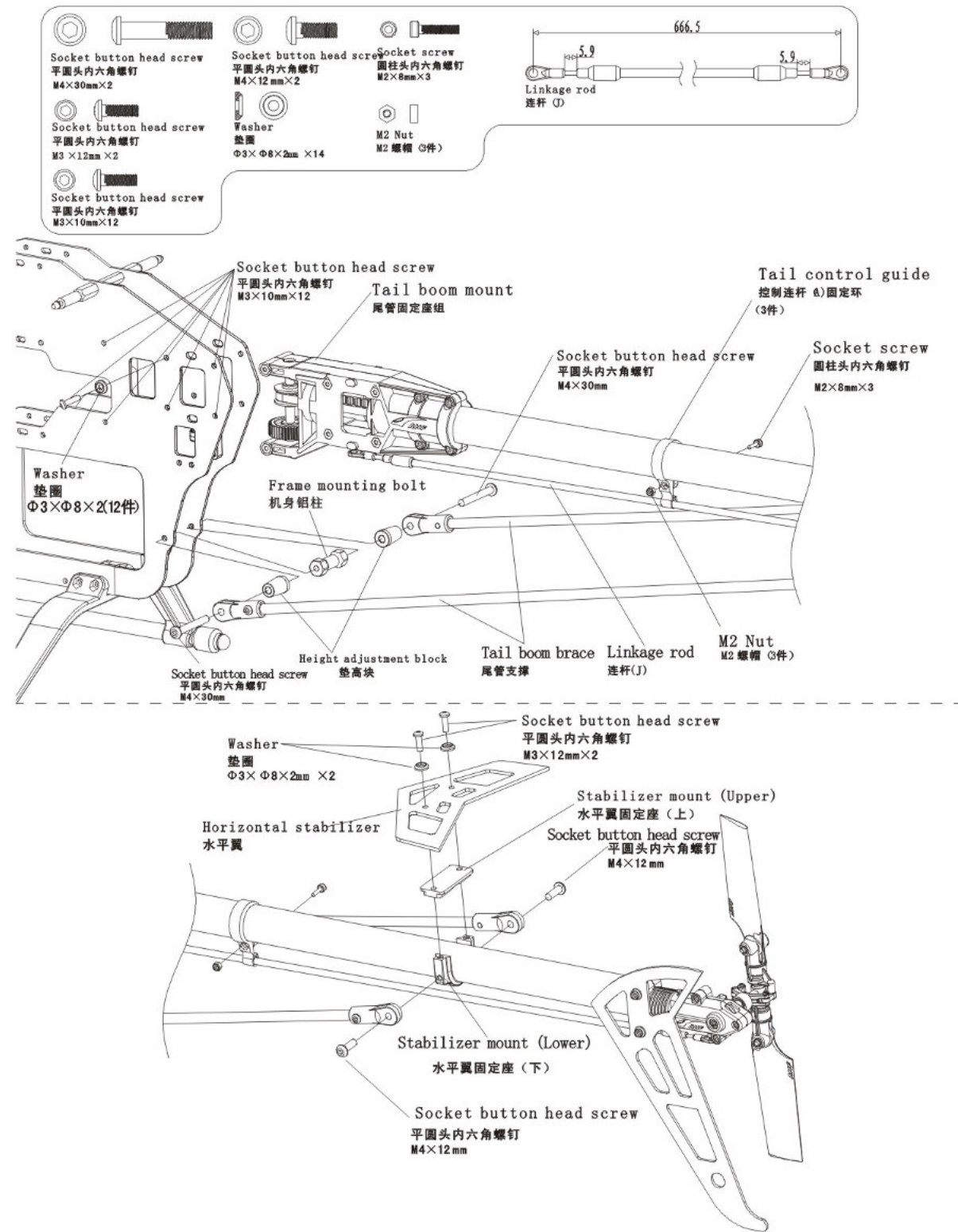


11、尾管夹、同步齿带传动和尾管组件组合装配 (E-6)

		
Bearing 轴承 $\Phi 4 \times \Phi 9 \times 4 \text{mm} \times 2$	Socket screw 圆柱头内六角螺钉 $M3 \times 12 \text{mm} \times 4$	Nut M3 防滑螺帽 (4件)



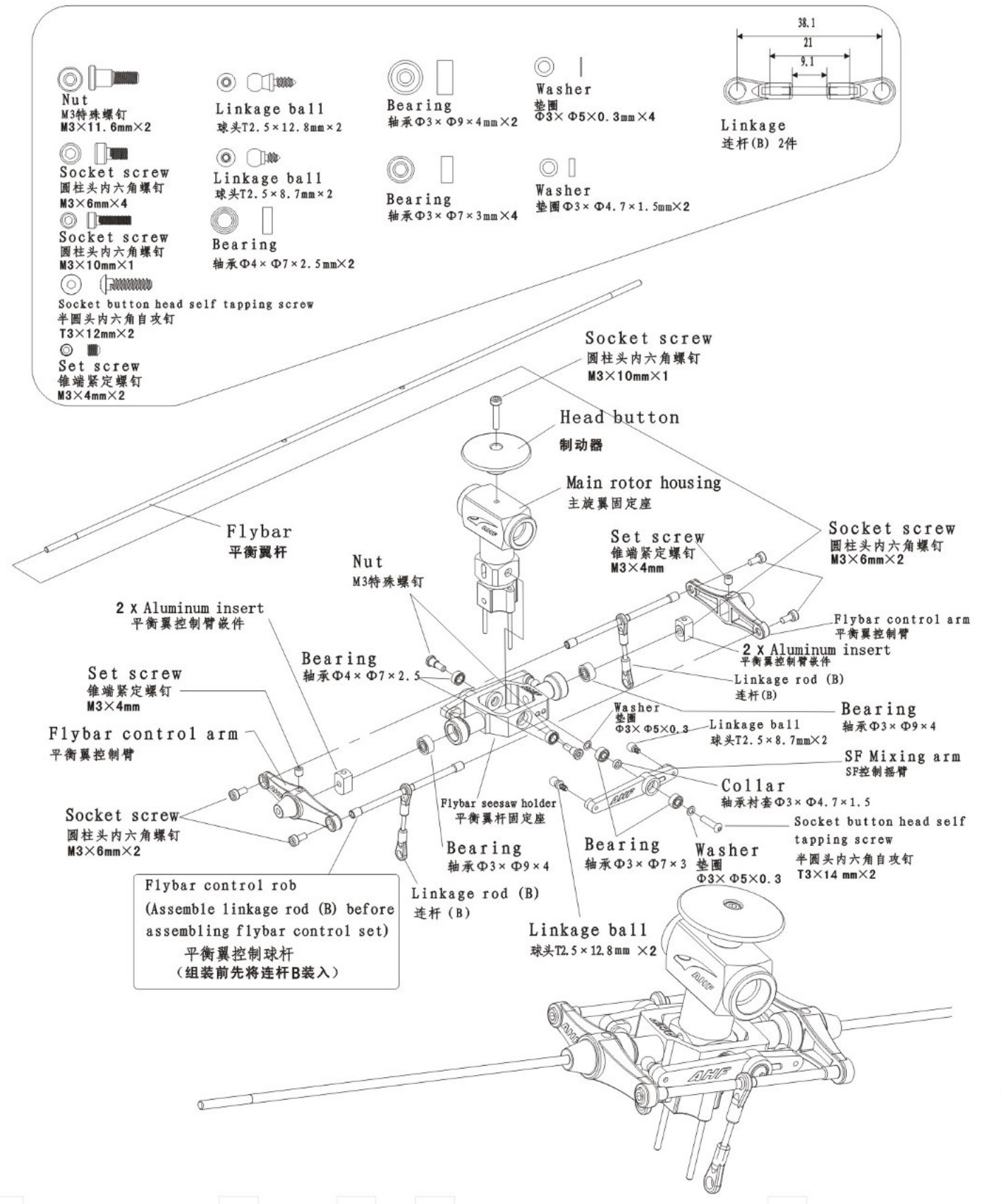
12、尾管/尾撑杆/水平尾翼/垂直尾翼装配 (E-7/E-7-1/E-7-2/E-7-3)



For original manufactory package, please check if screws are firmly secured and applied with some glue before every operation.  
原组装完成品每次飞行前, 要确认螺丝是否已上胶, 严防螺丝松动, 导致事故的发生。装完成的部件, 请务必再次确认。

**Double check your work after assembly.** 已组装完成的部件, 请务必再次确认。

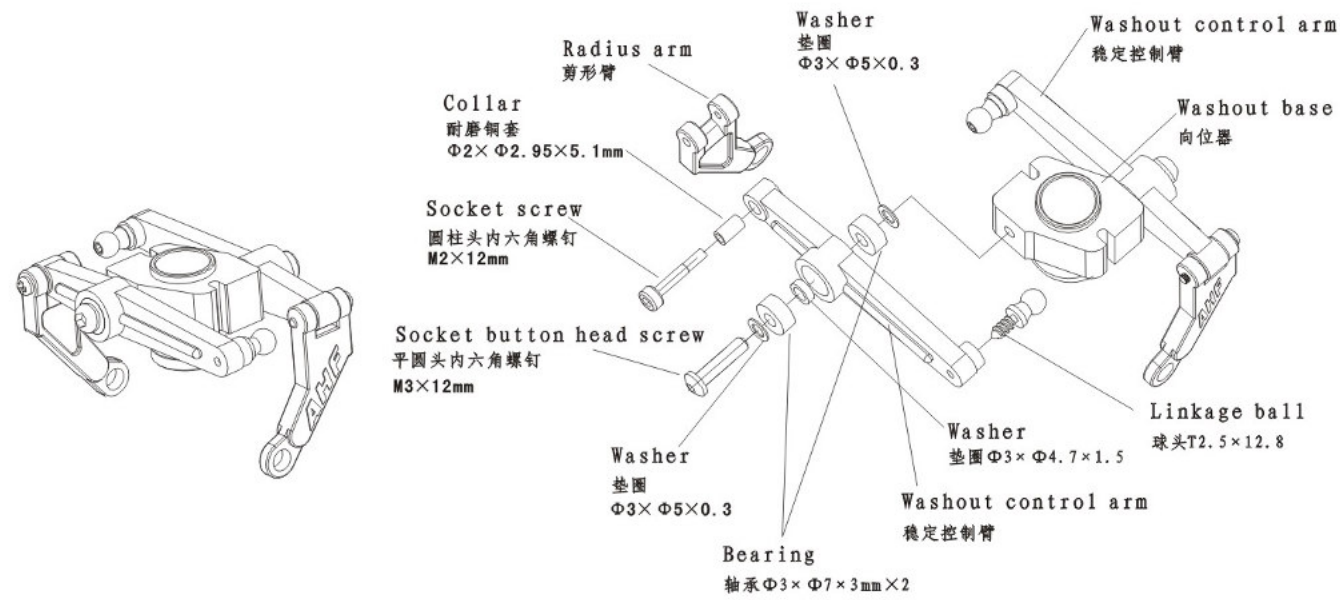
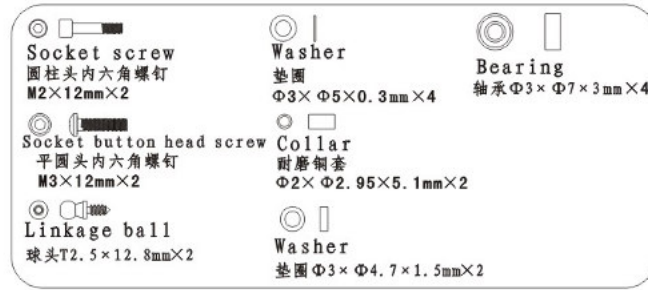
STEP F  
13、旋翼头、平衡杆固定座组的组合装配 (F-1/F-1-1/F-2/F-2-1/F-2-2)



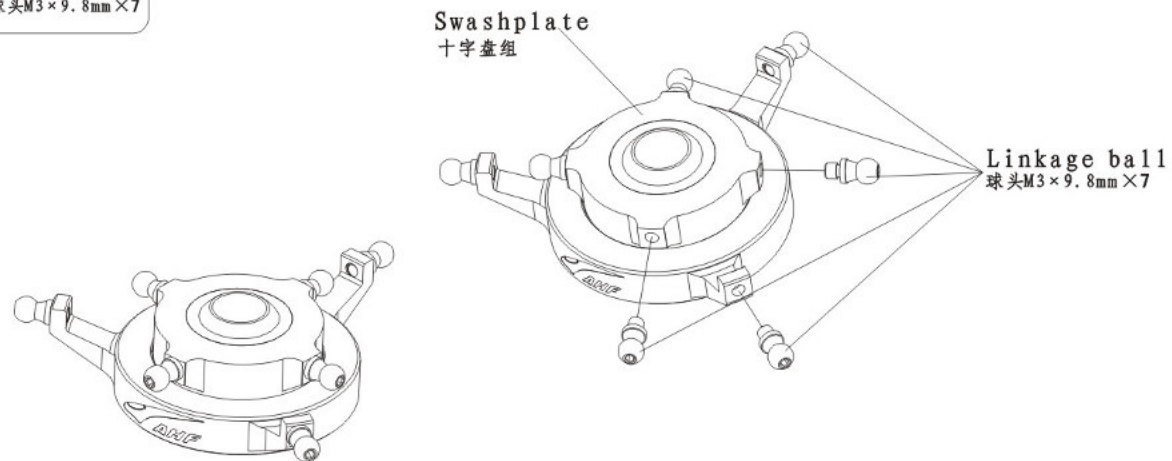
## 14. MIXING ARM AND SWASHPLATE

### 14、向位器稳定控制摇臂、十字盘组件装

(F-3)



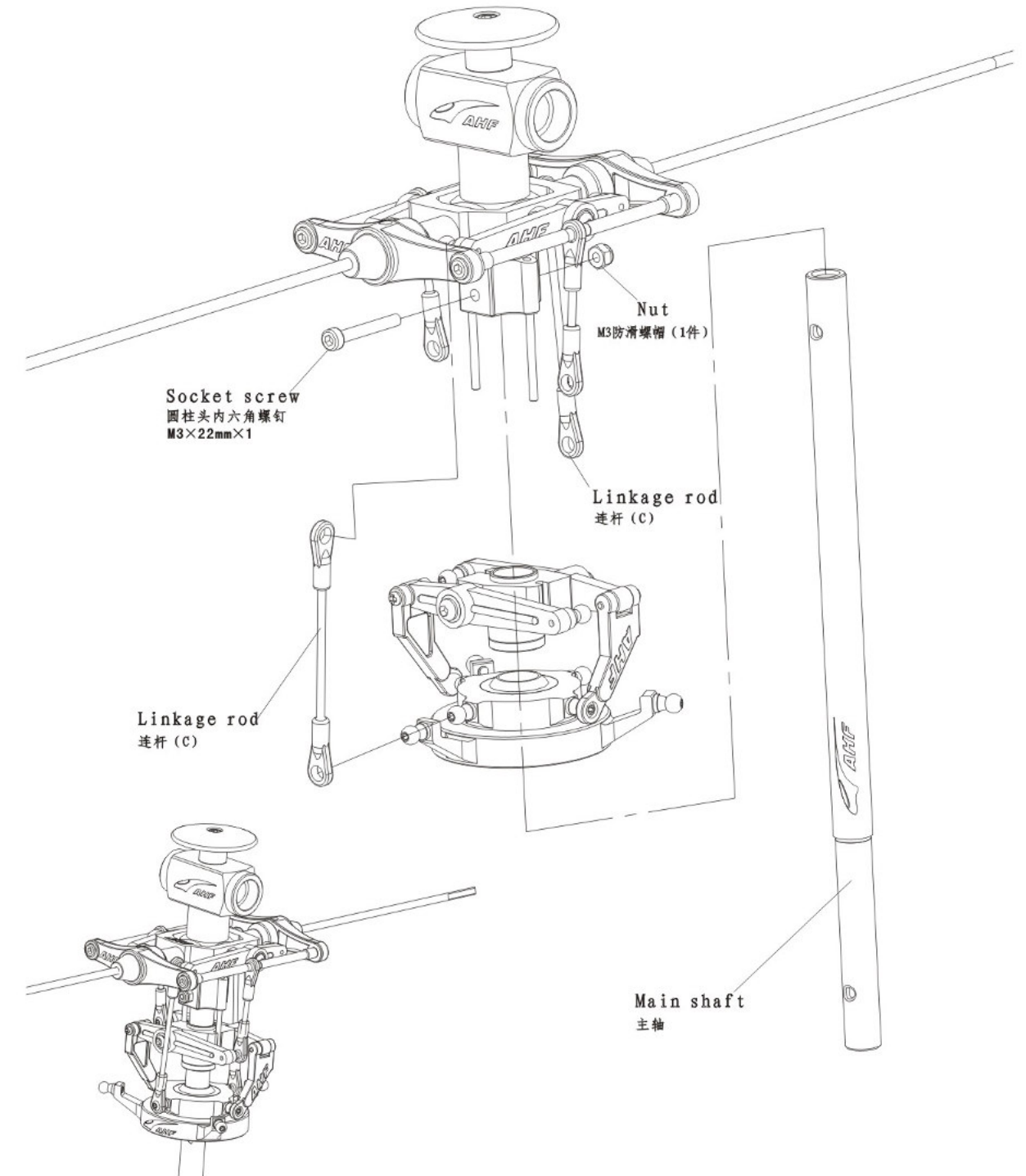
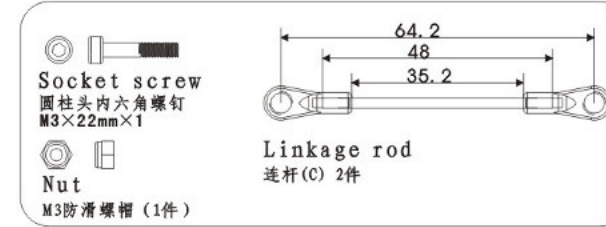
(F-4)



## 15. MIXING ARM, SWASHPLATE AND MAIN ROTOR HOLDER ASSEMBLY

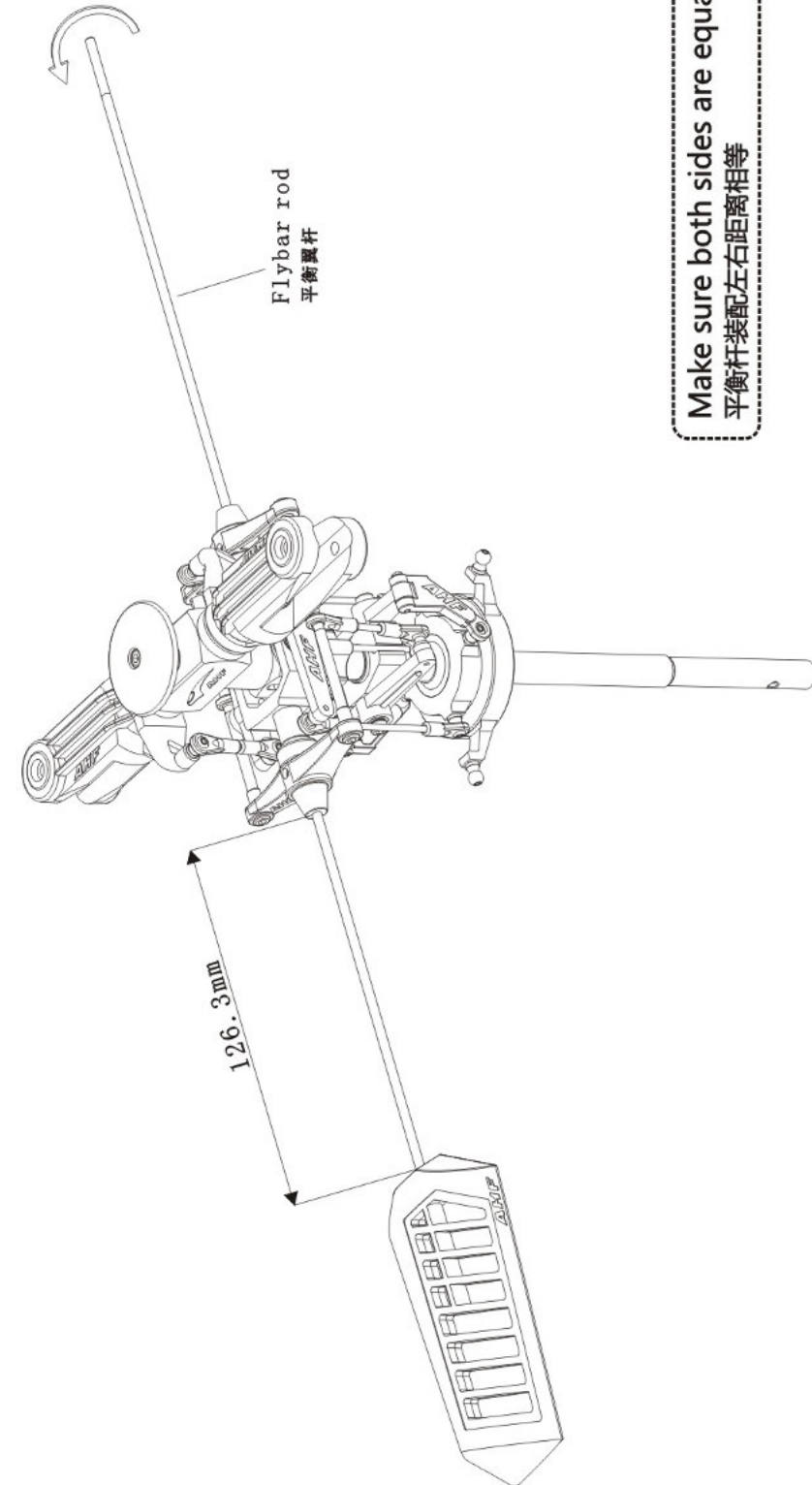
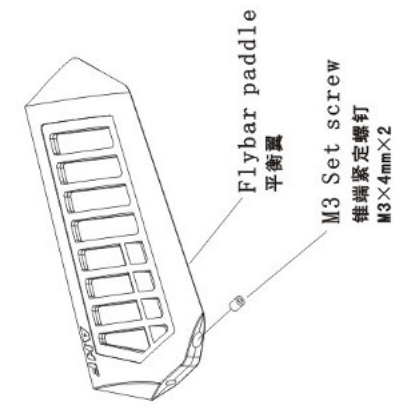
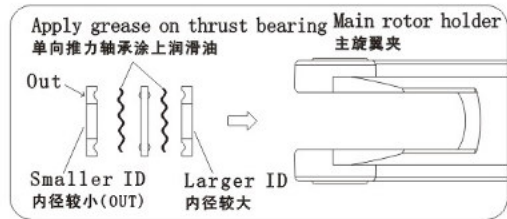
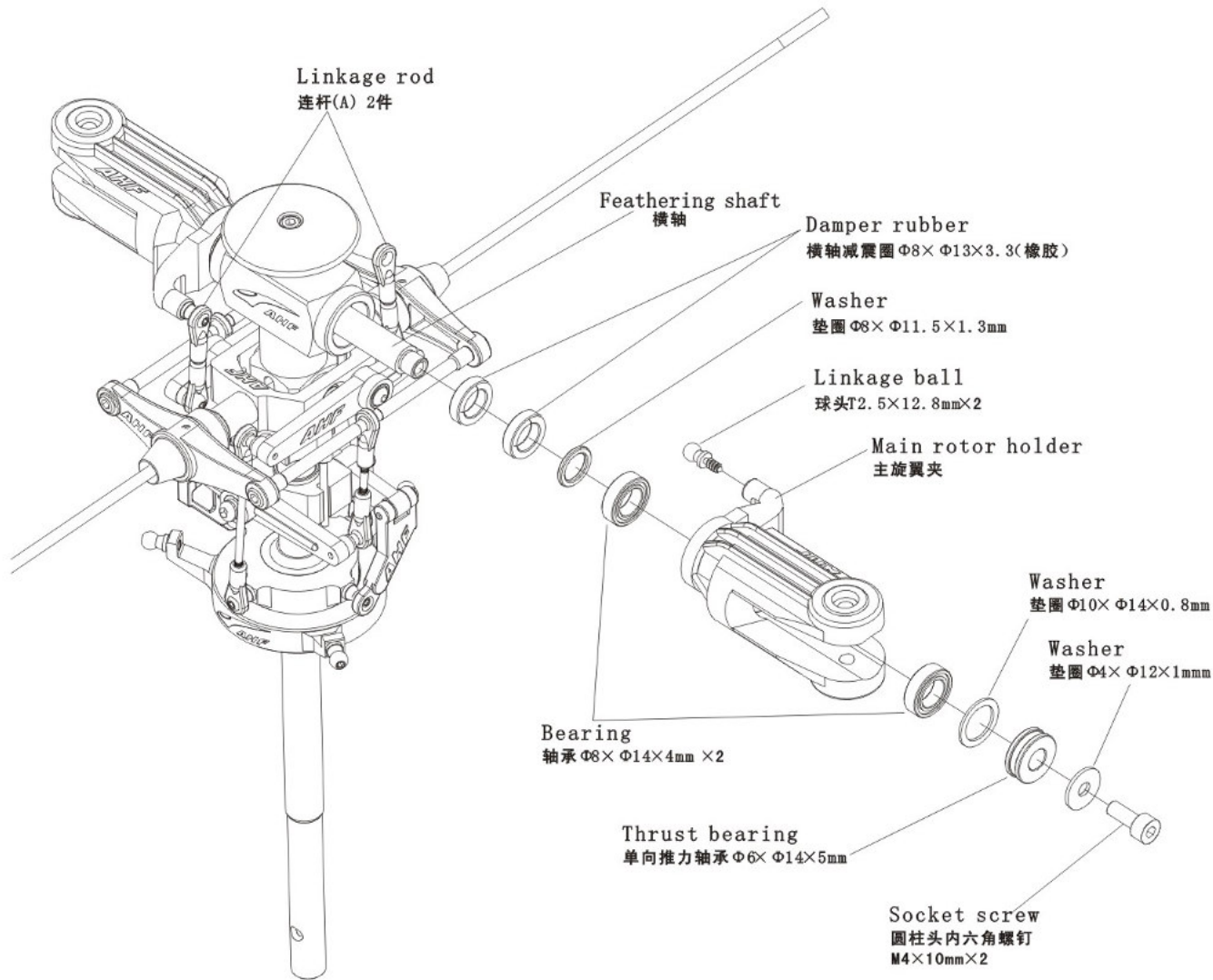
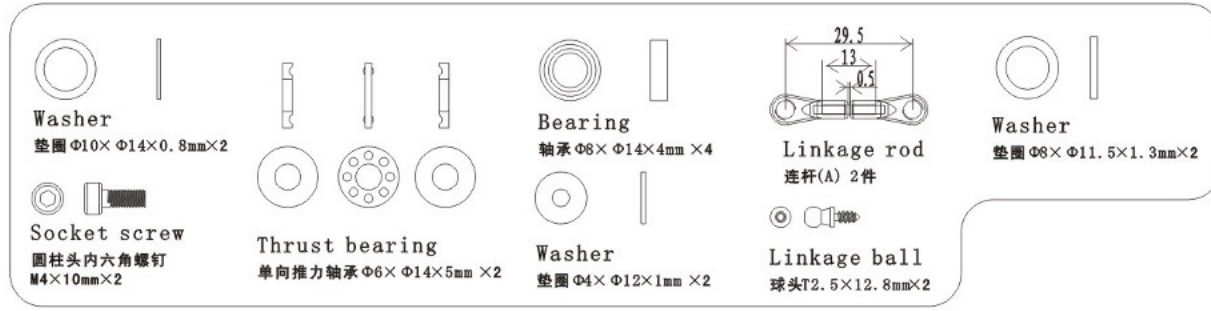
### 15、向位器、稳定控制摇臂、十字盘与旋翼头

(F-5/F-5-1)

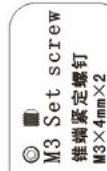


For original manufactory package, please check if screws are firmly secured and applied with some glue before every operation.  
原组装完成品每次飞行前, 要确认螺丝是否已上胶, 严防螺丝松动, 导致事故的发生。

16、主旋翼夹、平衡翼装配 (F-1/F-6-1)



Make sure both sides are equal in length.  
平衡杆装配左右距离相等



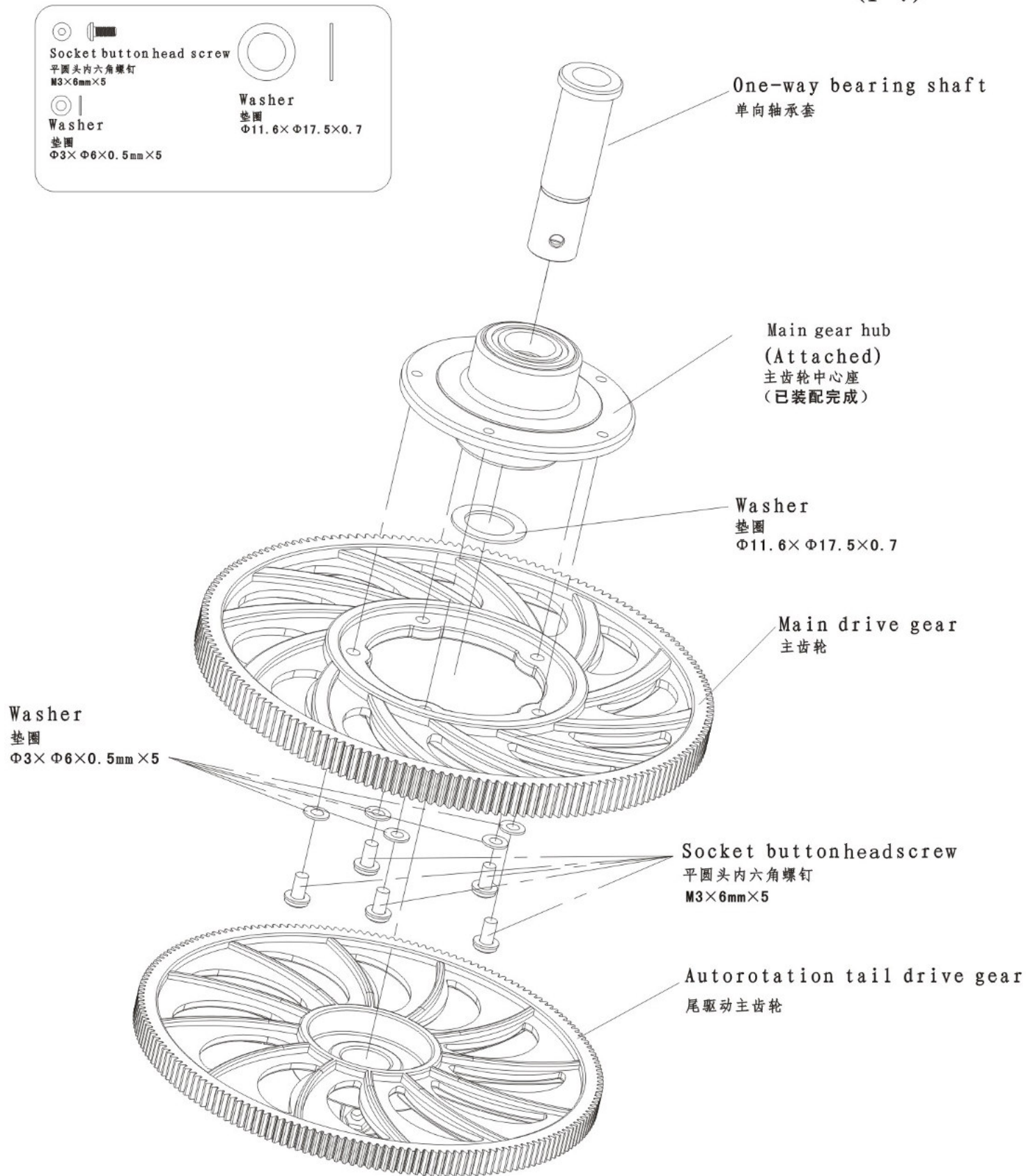
Double check your work after assembly. 已组装完成的部件，请务必再次确认。





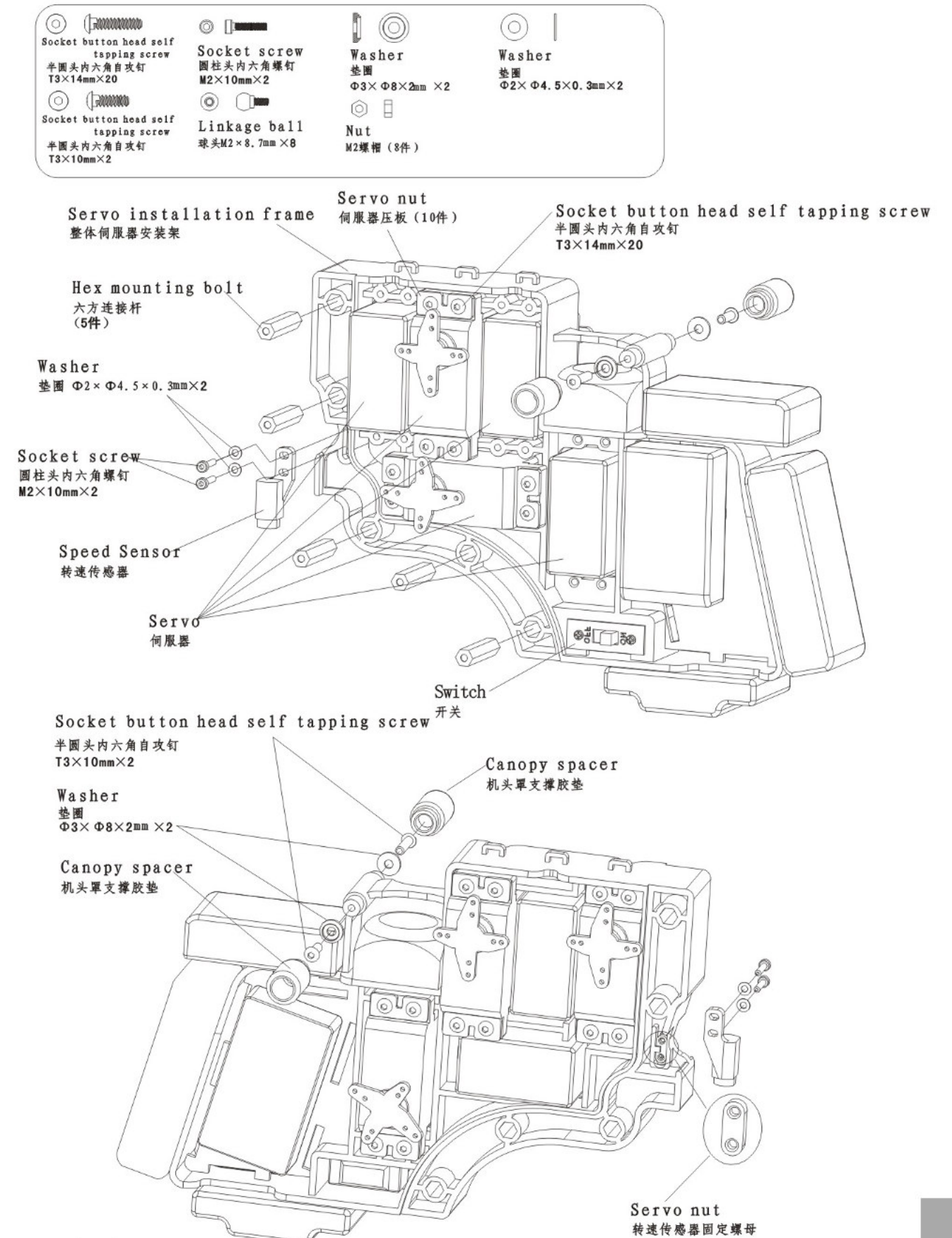
# 17. MAIN DRIVE GEAR ASSEMBLY 驱动主齿盘组件装配组合

(F-7)



# STEP G 18. SERVO, RECEIVER, HEAD LOCK GYRO, BATTERY AND OTHER PARTS

## 18. 伺服器安装架的伺服器、接收机、陀螺仪、定速器、电池等的装配 (G/G-1/G-2)

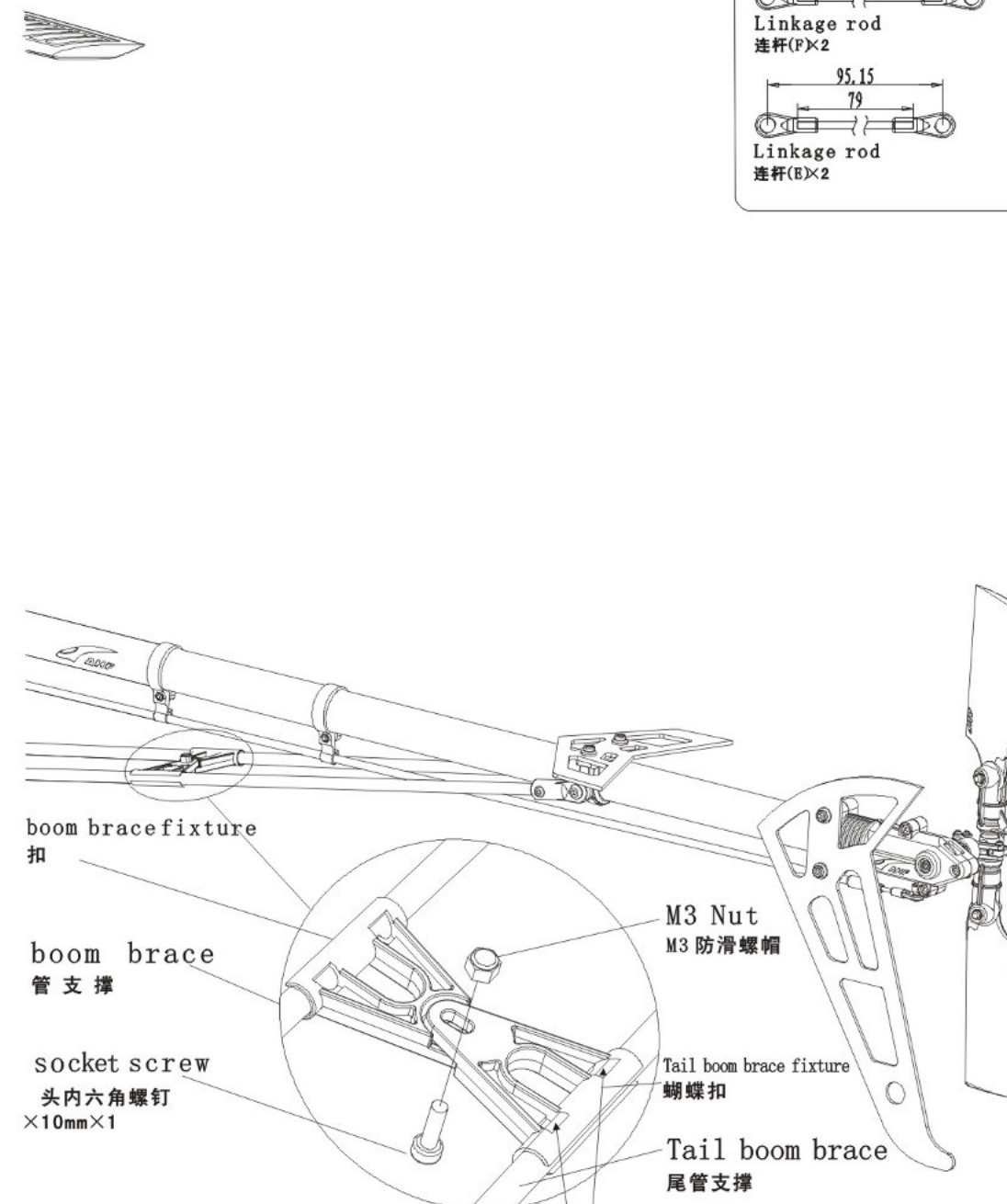
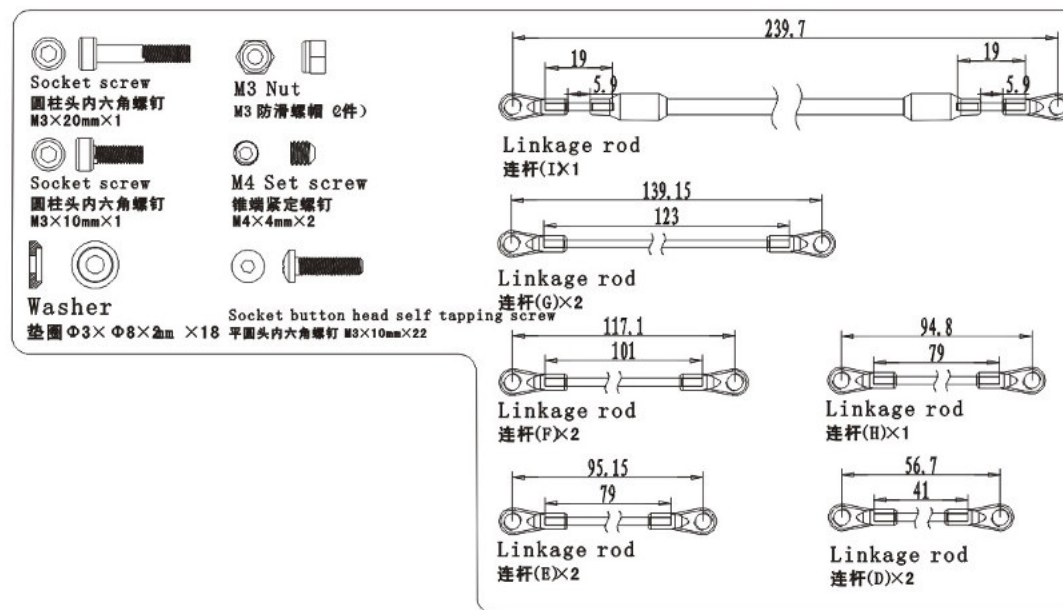
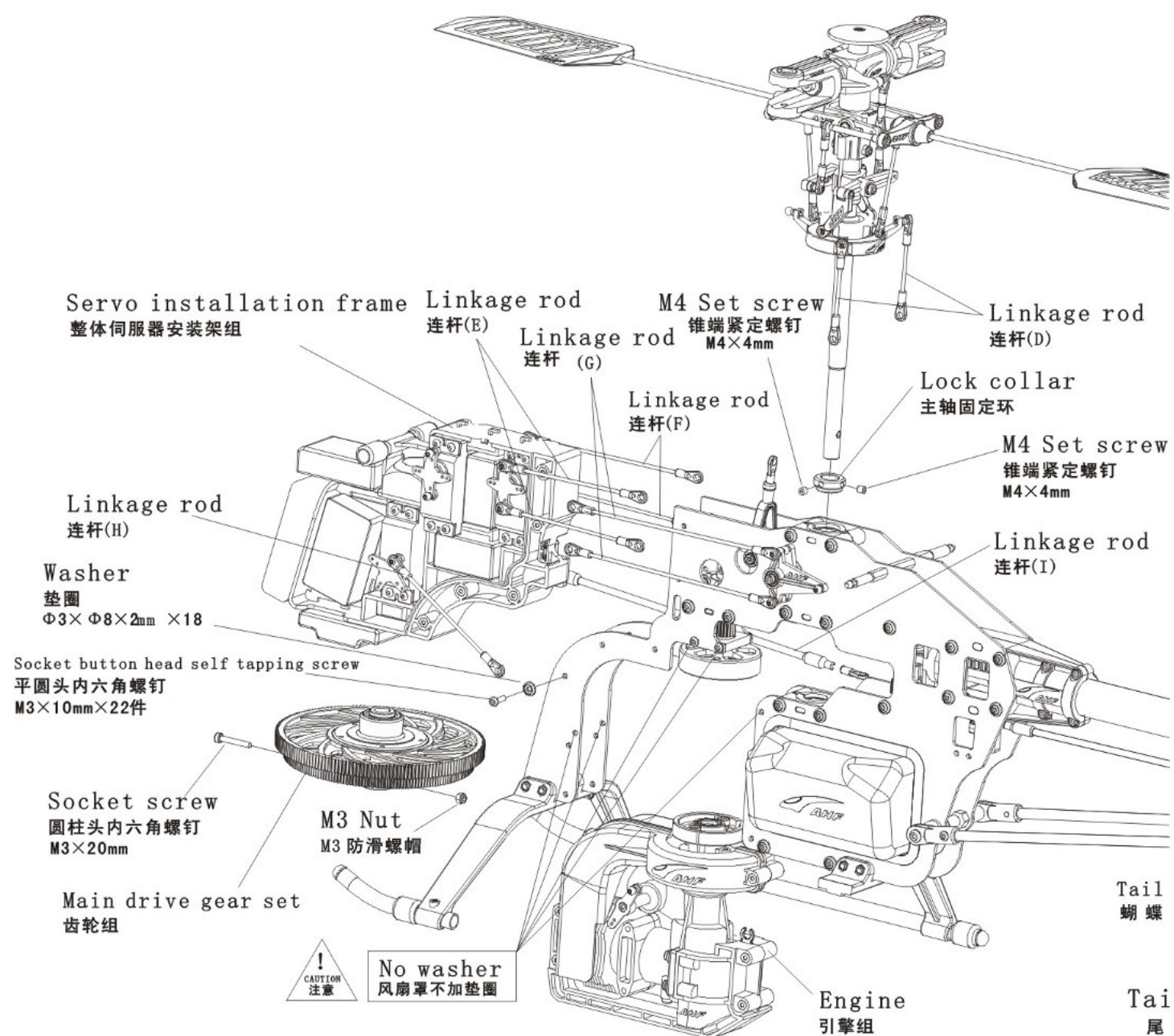


⚠ Double check your work after assembly. 已组装完成的部件，请务必再次确认。

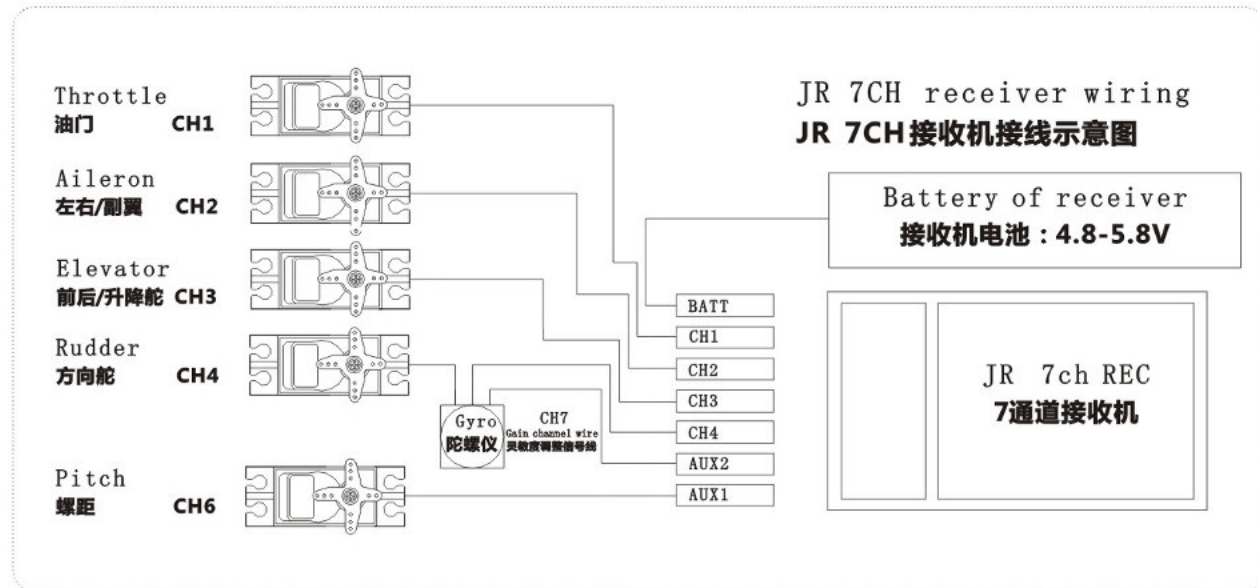
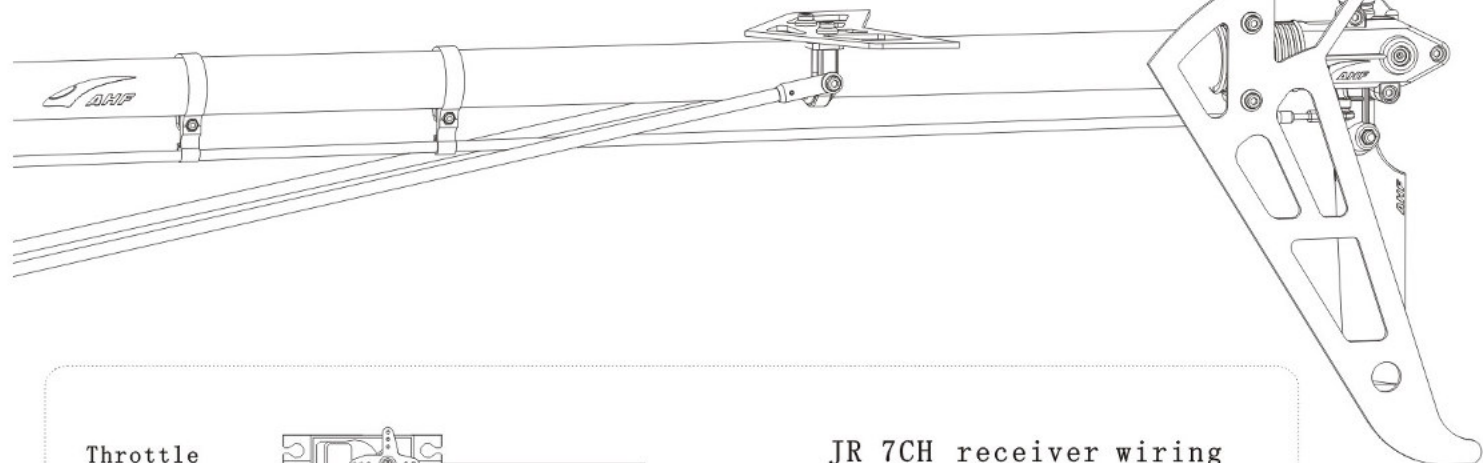
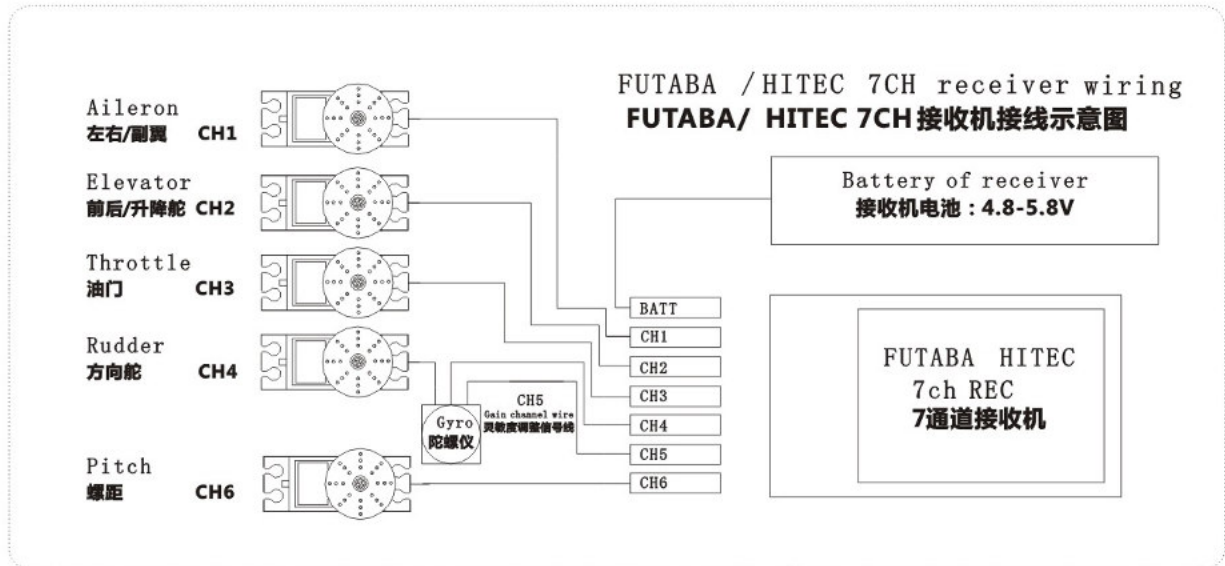
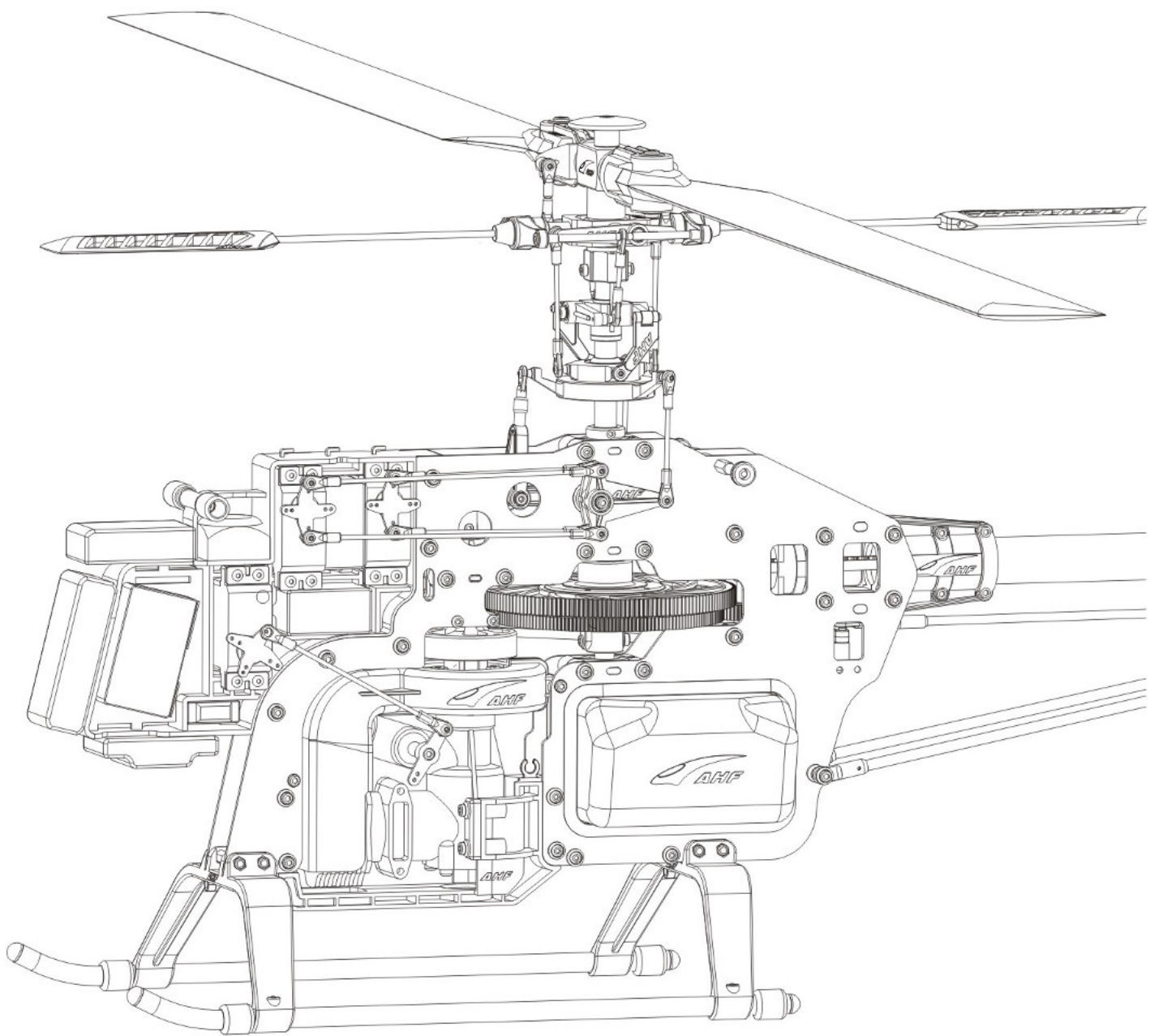
⚠ Double check your work after assembly. 已组装完成的部件，请务必再次确认。

# 19、GENERAL EQUIPMENTS ASSEMBLY 总装组合装配

(G-3/G-4)



Please holed tight with nylon ties!  
请用扎带扎牢!



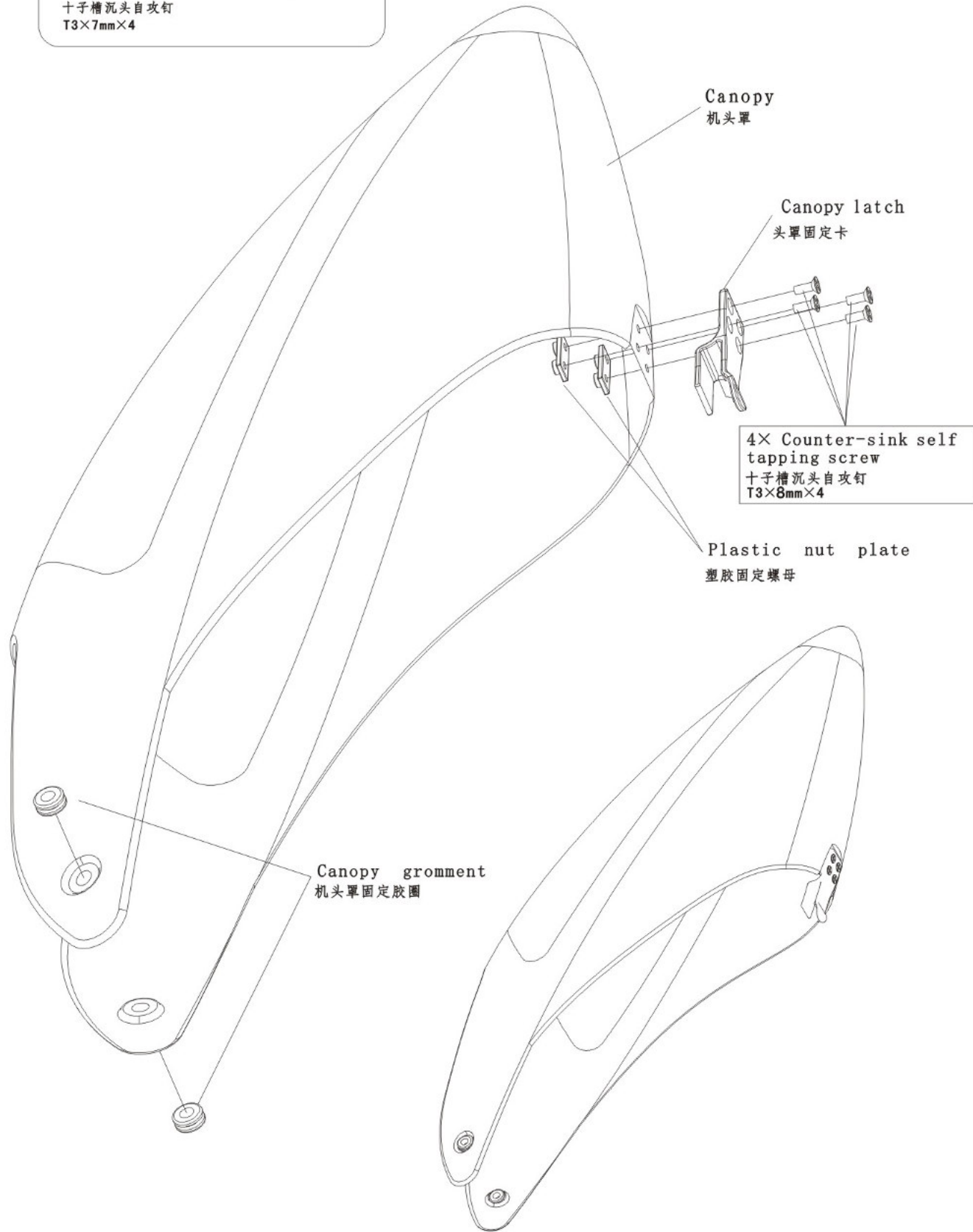
For original manufactory package, please check if screws are firmly secured and applied with some glue before every operation.  
 原组装完成品每次飞行前，要确认螺丝是否已上胶，严防螺丝松动，导致事故的发生。

Double check your work after assembly. 已组装完成的部件，请务必再次确认。

(H/H-1)

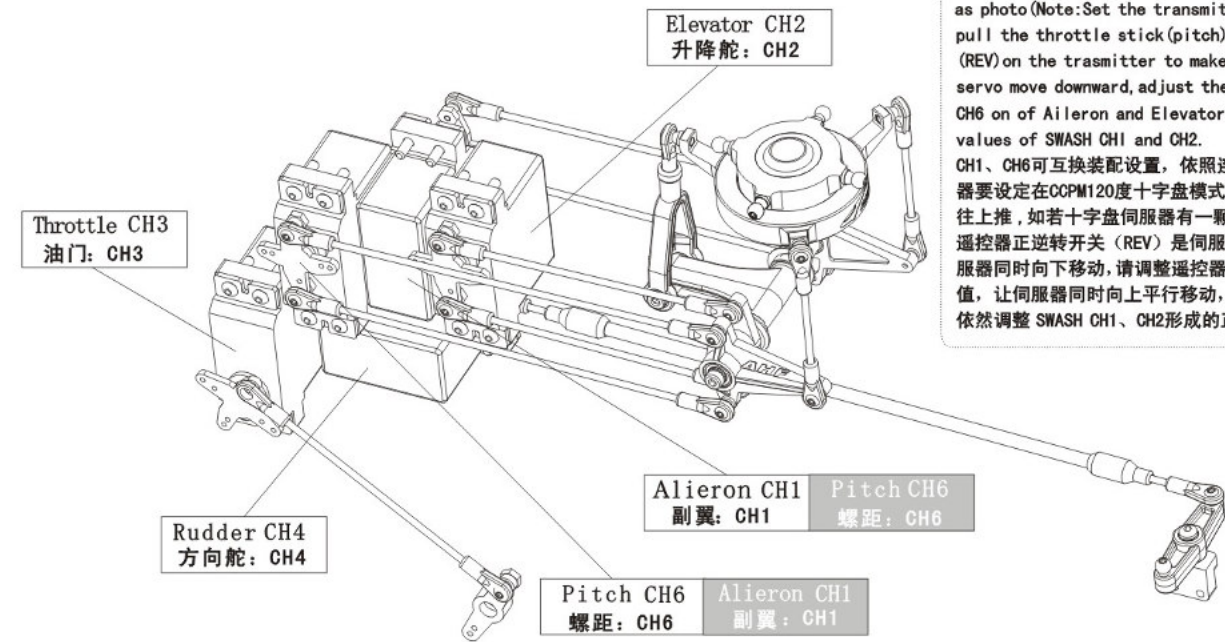


Socket button head self tapping screw  
十字槽沉头自攻钉  
T3×7mm×4



1.SERVO ADJUSTMENT 伺服器的设置与调整

FUTABA/HITEC Transmitter/Servo  
FUTABA/ HITEC遥控器与伺服器对应示意图



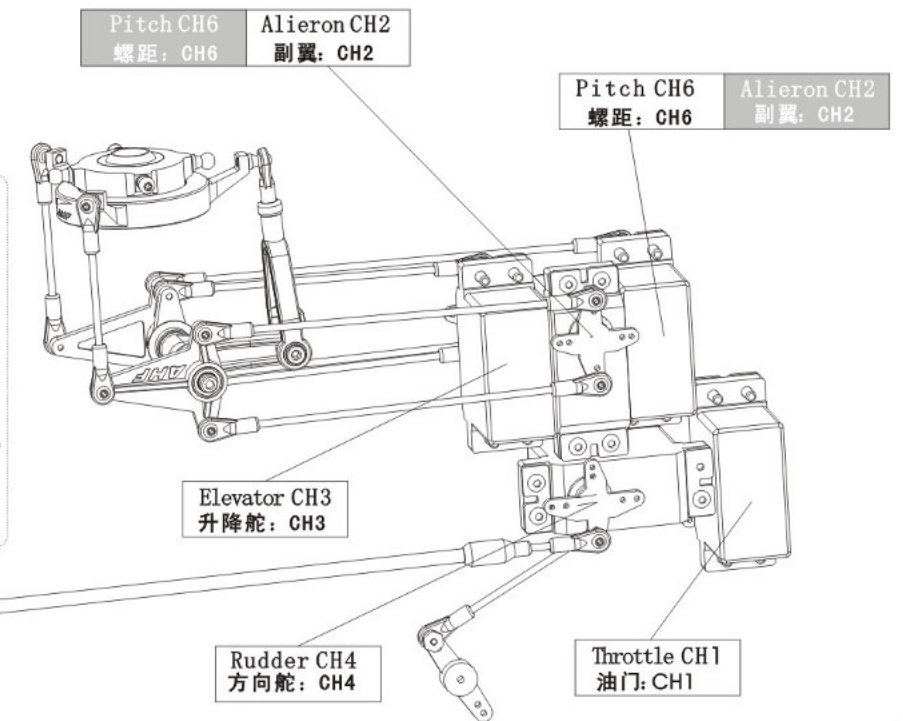
Positions of CH1、CH6 are exchangeable. After assembling as photo (Note: Set the transmitter CCPM 120 degrees mode), pull the throttle stick (pitch) upward. If one swashplate (REV) on the transmitter to make it moves upward, if three servo move downward, adjust the travel value (+ -) of SWASH CH6 on of Aileron and Elevator are opposite, adjust travel values of SWASH CH1 and CH2.

CH1、CH6可互换装配设置, 依照连接图连接后 (注意: 遥控器要设定在CCPM120度十字盘模式), 将油门操纵 (pitch) 往上推, 如若十字盘伺服器有一颗或两颗往下动作时, 则将遥控器正逆转开关 (REV) 是伺服器向上运动, 如果三颗伺服器同时向下移动, 请调整遥控器 SWASH CH6 行程量的正负值, 让伺服器同时向上平行移动, 副翼与前后运动相反时, 依然调整 SWASH CH1、CH2形成的正负值。

JR Transmitter/Servo  
JR 遥控器与伺服器对应示意图

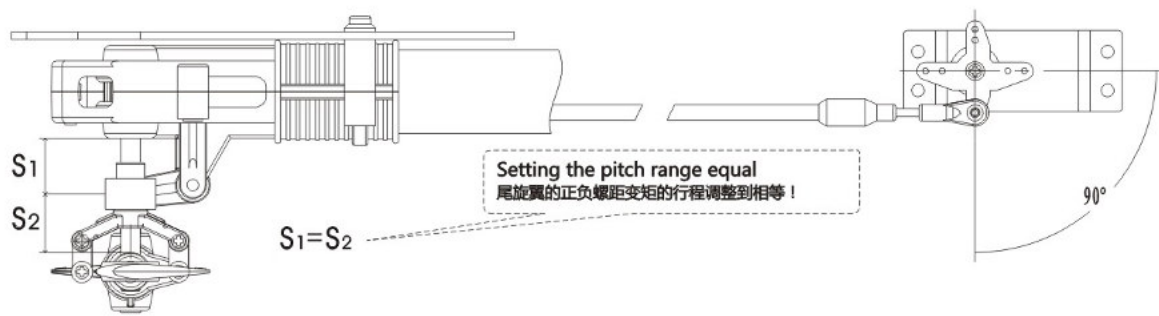
Positions of CH2、CH6 are exchangeable, After assembling as photo (Note: Set the transmitter CCPM 120 degrees mode), pull the throttle stick (pitch) upward. If one swashplate (REV) on the transmitter to make it moves upward, if three servo move downward, adjust the travel value (+ -) of SWASH CH6 on of Aileron and Elevator are opposite, adjust travel values of SWASH CH2 and CH3.

CH2、CH6可互换装配设置, 依照连接图连接后 (注意: 遥控器要设定在CCPM120度十字盘模式), 将油门操纵 (pitch) 往上推, 如若十字盘伺服器有一颗或两颗往下动作时, 则将遥控器正逆转开关 (REV) 是伺服器向上运动, 如果三颗伺服器同时向下移动, 请调整遥控器 SWASH CH6 行程量的正负值, 让伺服器同时向上平行移动, 副翼与前后运动相反时, 依然调整 SWASH CH2、CH3形成的正负值。



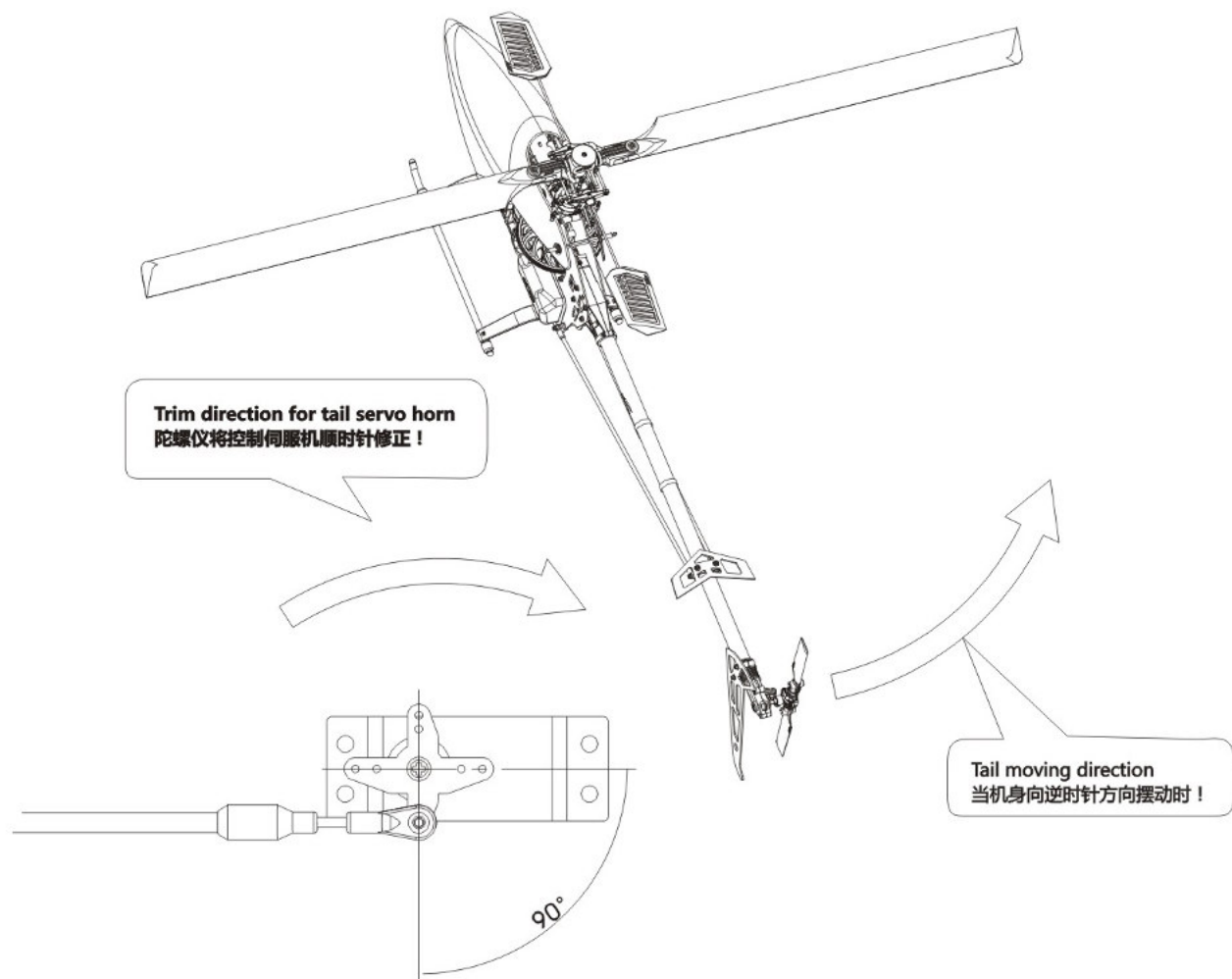
When tightening a linkage to a plastic part, please note to use a little CA glue and tighten it firmly, but not over tightened, or they will strip or broken.

球头与塑胶件安装组合时请特别注意, 要使用少量的瞬间胶水适当用力拧紧即可; 禁止过度用力拧紧球头以免造成滑牙或导致塑胶件的损坏。



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

陀螺仪选择, 推荐选用锁定式陀螺仪, 其遥控器内陀螺仪设定请关闭跟轴混控模式, 并将遥控器上的感应开关关于陀螺仪切至锁定模式, 感应度设置70%左右, 遥控器设定完成后接上接收机的电源, 即可进行尾中立点的设置. 请注意: 当开启接收机电源时请不要拨动尾舵控制杆或触碰机体, 待3秒后陀螺仪锁定后尾舵机臂需与舵机约成90°尾旋翼控制组须正确置于尾横轴的中间, 即为标准尾中立点设定.



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

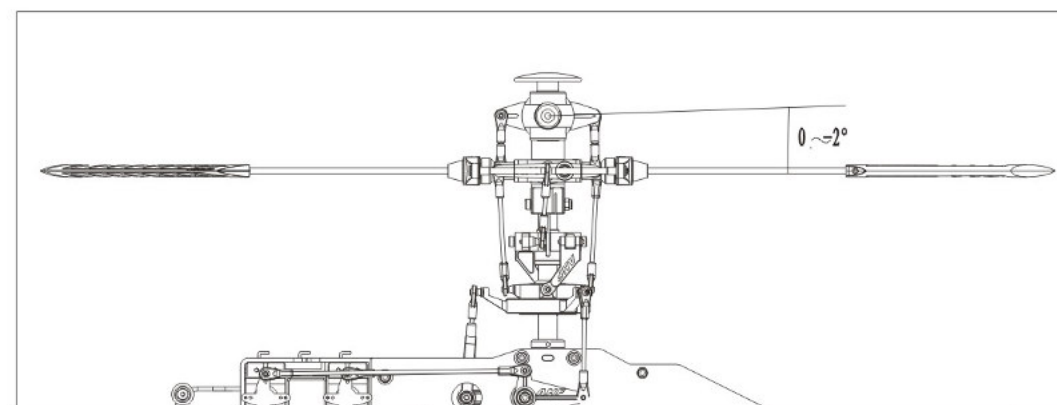
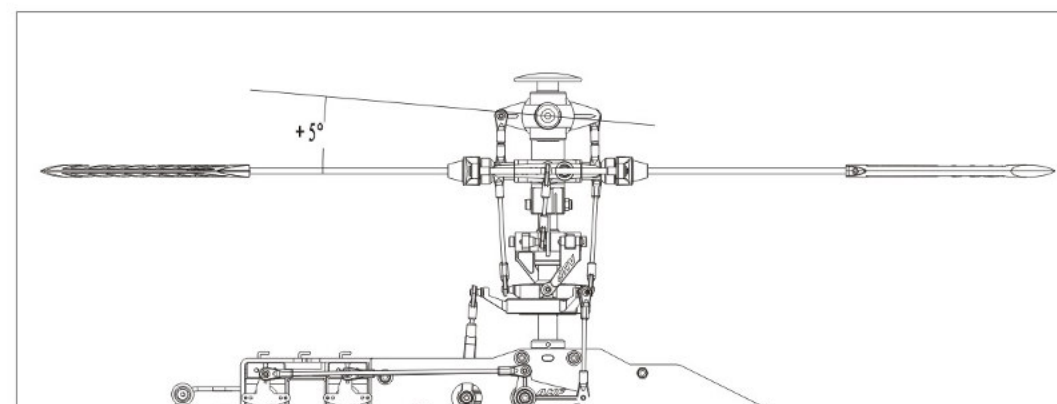
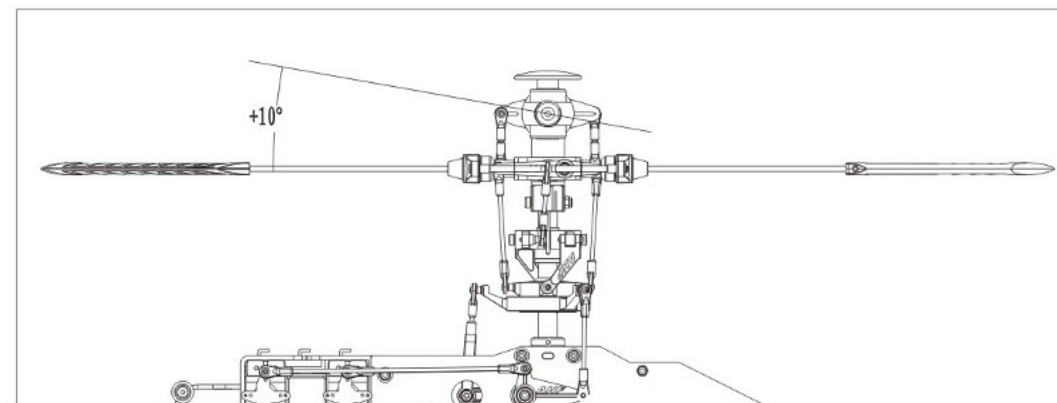
- ★ 陀螺仪锁定后尾舵机与尾旋翼控制组正确摆动位置. 若尾旋翼控制组未置中时请调整尾舵控制连杆的长度来校正
- To check the head lock direction of the gyro, to move the tail counter-clockwise and the tail servo horn will be trimmed clockwise. If it trims in the reverse direction, please switch the gyro to "REVERSE".
- ★ 陀螺仪锁定方向确认, 当用手摇尾部反时针摆动, 尾舵机摇臂应顺时针修正. 若反向时请切换陀螺仪上的 "锁定反向" 开关修正.



GENERAL FLIGHT 模式的主旋翼桨距设置参考表

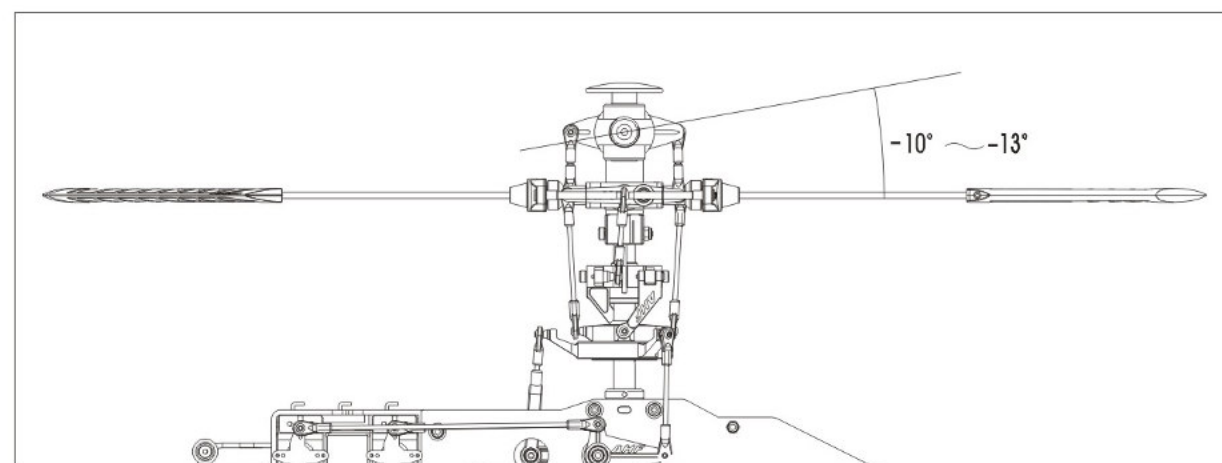
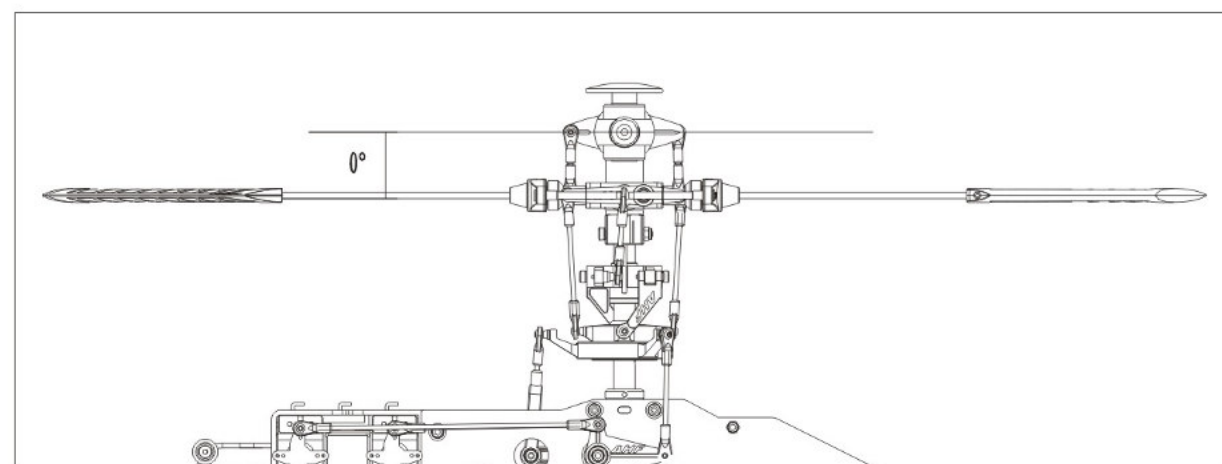
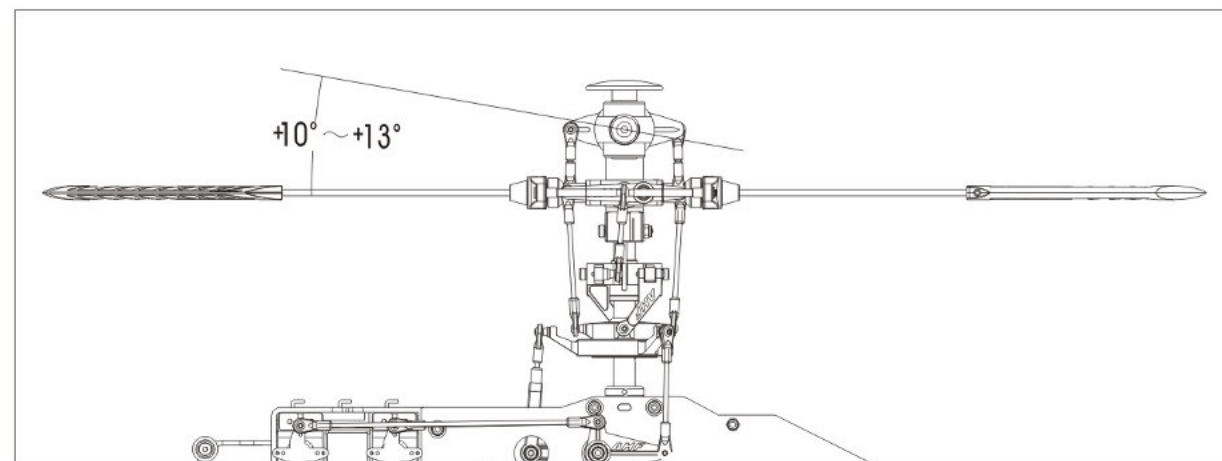
① GENERAL FLIGHT ① 一般飞行模式:

No. 次别	ITEM 项别	Throttle油门设定值	Pitch螺距设定值
5		100% ( At high speed高速 )	+ 10°
4		80%	
3		60% ( At hovering悬停 )	+ 5°
2		40%	
1		0% ( at low speed低速 )	0 ~ -2°



②、3D FLIGHT ②、3D 运动飞行模式：

No. 次别	ITEM 项别	Throttle油门设定值	Pitch螺距设定值
3		100% ( At high speed高速 )	+10° ~ +13°
2		60-65%(At middle中速度)	0°
1		100% ( At low speed低速 )	-10° ~ -13°



1. Pitch range: Approx 26 degrees. 2. If the pitch is set too high, it may causing motor overload  
 ★ 螺距总行程大约在26°左右； ★ 过大的螺距的设置，将会导致引擎过载。

## IX. EQUIPMENT 地面检查

Before flight, please check that the batteries of transmitter and receiver are charged enough for the flight.

★ 每次飞行前请确认您的无线电遥控器的发射机和接收机电池的电量是否在充满状态，确保足够飞行之用。

Before operation, check that every control movement is smooth and the control directions are correct.

★ 飞行前要确认您的直升机各伺服机的动作方向以及动作行程是否正常。

When turn off the unit, please follow the power on/off procedure. Power ON-Please turn on the transmitter first, and then turn on the receiver. Power OFF-Please turn off the receiver first and then turn off the transmitter. Failure to follow this procedure may cause you to lose control of the helicopter.

★ 开机时必须遵守先开发射机后开接收机的顺序原则，关机时必须先关接收机再关发射机的顺序操作，并养成习惯，时时遵守。不正确的开、关机，可能发生失控现象，造成自身或他人身体的伤害。

During pre-flight preparation, confirm whether there is an open frequency for your flight. Multiple transmitters operating on the same frequency can cause a loss of helicopter control and is very dangerous. Before operation, please check if the transmitter is on and the receiver is operating properly.

★ 准备飞行前需确认是否有相同频率的同好在飞行，相同的发射机一同开机将导致无法控制的危险。

Use oil which the engine manufacture recommended or oil with the same additive.

★ 尽可能使用发动机制造商推荐使用的燃油和相应添加剂含量的规格油品。

Check all ball links to avoid excess play and replace as needed. Failure to do so will result in poor flight stability

★ 需要检查球头与球头座是否有松脱现象，松脱的连杆头将导致直升机无法操控的危险。

Before operation, please check if the transmitter opening and the receiver is normal or not.

★ 启动前需确认发射机开启，接收机动作正常，以免发生发动机无法控制的危险。

Before starting engine, please check if the transmitter's throttle stick is at lowest position, confirm that the flameout landing switch and IDLE switch are off. This is very important.

★ 启动发动机前必须仔细确认遥控器的油门是否在低速的位置上？熄火降落开关是否关闭？定速器开关 (Idle)是否关闭？启动时将油门至于高速将对自身产生危险。

Please confirm there will be no access to the main rotor and the tail rotor as they operate at very high speeds and can cause injury to humans, plants, animals and property. Please keep a safe distance from the helicopter during operation.

★ 主旋翼和尾桨在运转时转速相当高，必须确认在飞行时、不会有接触到主旋翼和尾桨的情形发生。

Please keep a safe distance during operation.

★ 飞行时随时注意与直升机保持安全距离。

Do not fly the helicopter model in inclement weather, such as fog, rain, wind or snow.

★ 避免阴雨、强风的天气飞行，以免发生无法控制的情形。

Check that the battery and power plug are fastened properly. The vibration and violent flight maneuvers may cause the power connects and plug to loosen which can result in a loss of control.

★ 确认电池的固定及连接牢固，飞行中的震动或激烈飞行，可能造成电池脱落或插头松动而导致失控情形的发生。

Flight must be away from spatial domain of manned vehicles, and avoid approaching any vehicles, buildings or onlookers.

★ 飞行高度必须远离载人飞行器的高度或空域，同时必须避免接近车辆和围观的人员。

Check for missing or loose screws and nuts. See if there are any cracked or incomplete assemblies of parts. Carefully check the main rotor blades and rotor holders. Broken blades and missing or loose or broken parts must be replaced or repaired prior to flight. Failure to use Hi-Flier Tech parts in your helicopter may cause damage to the helicopter and may cause a loss of control of the helicopter.

★ 仔细去检查螺母或螺钉是否有松动现象，确认没有组装不完整和零件损坏的情形，着重查实主旋翼、主旋翼桨夹及尾桨夹的部位。有损坏或不完整的部件不仅会影响飞行，而且，更会造成不可预见的危险。注意对损耗、有裂痕的部件更新及定期检查的重要性。

As a competent remote control helicopter pilot, it is necessary to maintain a responsible and professional attitude with a constant awareness and practice of the highest level of safety and security.

★ 做为一个称职的遥控直升机飞行员，必须具有安全观念和负责任的态度。

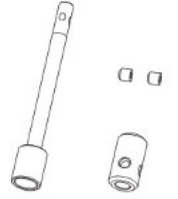

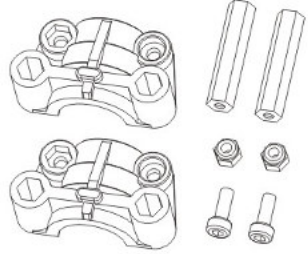
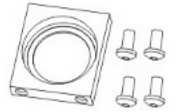

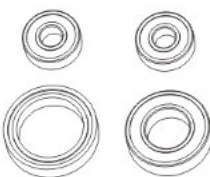
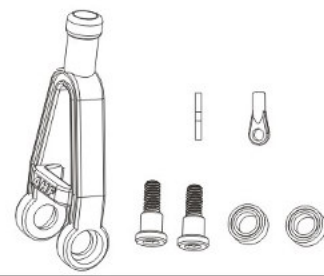
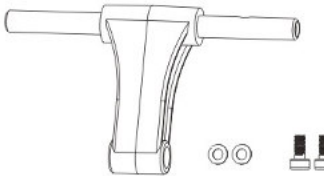
**GOOD LUCK!**

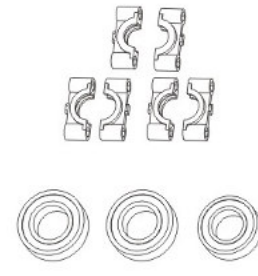


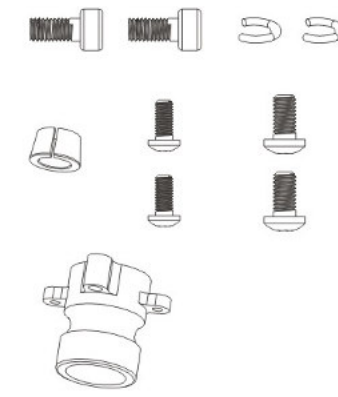
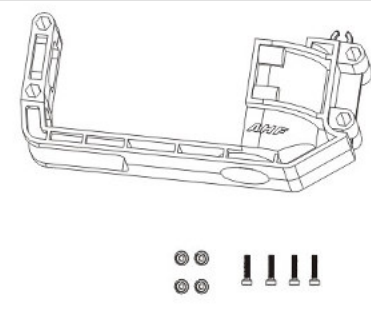
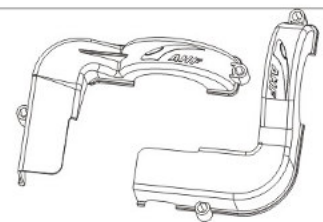


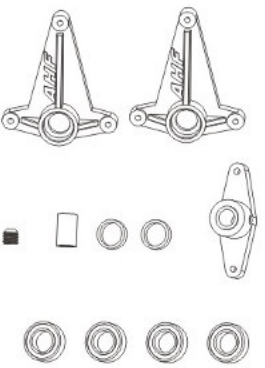
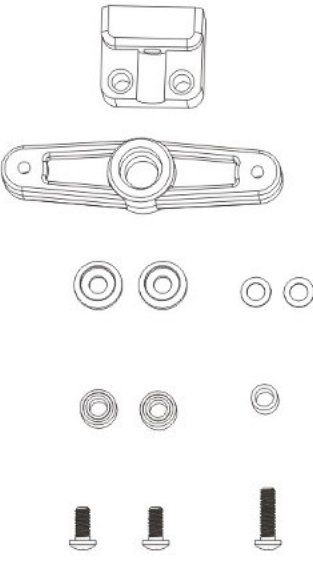
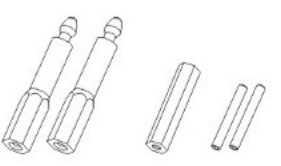


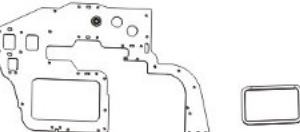
Double check your work after assembly. 已组装完成的部件，请务必再次确认。


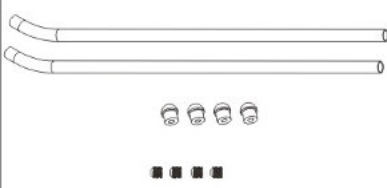

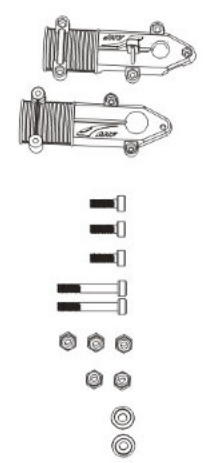
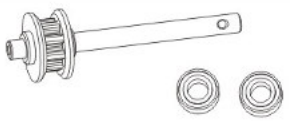





# IX、REPAIR PARTS LIST 零部件选购图表

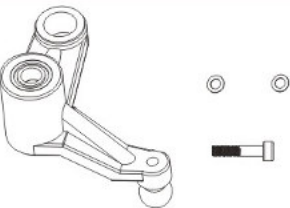
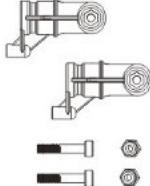
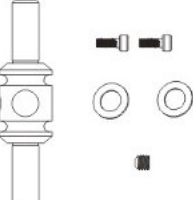
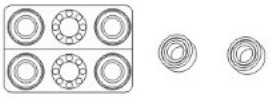



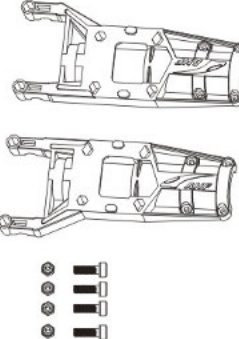


Part 零件	Code No. 代码	Name 名称	Qty 数量	Remarks 备注
	A50A001	Starter shaft 启动轴组	1	Starter shaft 启动轴×1
				Starter coupling 启动头×1
				Set screw 锥端紧定螺钉M4×4mm×2
	A50A002	Clutch gear 引擎齿轮组	1	Pinion gear 引擎齿轮×1
				Clutch nut 锁紧螺帽×1
	A50A003	Start bearing block 启动轴承座	1	Clutch bearing 启动轴承座×2
				Hex frame spacer 六方连接杆×2
				Socket screw 圆柱头内六角螺钉M3×8mm×2
				Nut M3防滑螺帽×2
	A50A004	Clutch bearing block 离合器罩杯轴承座	1	Clutch bearing block 离合器罩杯轴承座×1
				Socket button head screw 平圆头内六角螺钉M3×6mm×4
	A50A005	Clutch bell 离合器罩杯	1	Clutch bell 离合器罩杯×1
				Sensor magnet 磁钢×1
	A50A006	Start bearing block 启动轴承组	1	Bearing 轴承Φ5×Φ13×4mm×2
				Bearing 轴承Φ10×Φ19×5mm×1
				Bearing 轴承Φ15×Φ21×4mm×1
	A50A007	Elevator arm 十字盘前控制臂组	1	Elevator arm, upper 十字盘前控制臂×1
				Socket shoulder screw M3 特殊螺钉×2
				Linkage rod 连杆M2×16mm×1
				Linkage ball 球头扣×1
				Bearing 轴承Φ4×Φ7×2.5mm×2
	A50A008	Aileron arm 十字盘控制臂中心轴	1	Elevator arm, lower 十字盘控制臂中心轴×1
				Screw 圆柱头内六角螺钉 M3×6mm×2
				Washer 垫圈Φ3×Φ7×0.5mm×2

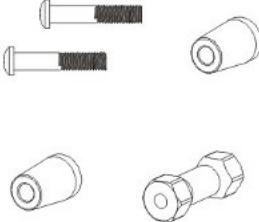
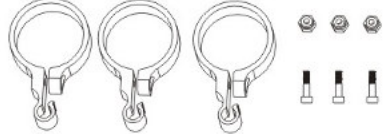

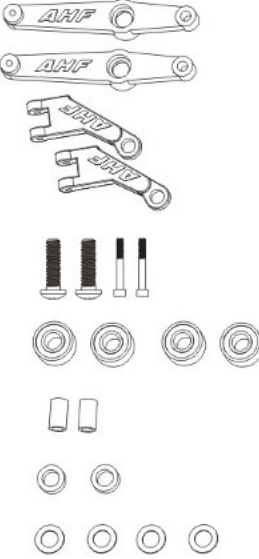


Part 零件	Code No. 代码	Name 名称	Qty 数量	Remarks 备注
	A50A009	Bearing block 主轴轴承座	1	Bearing block A 主轴轴承座 A×4
				Bearing block B 主轴轴承座 B×2
				Bearing block 轴承Φ10×Φ19×5mm×2
				Bearing block 轴承Φ9×Φ17×5mm×1
	A50A010	Clutch 离合器	1	Clutch 离合器×1
	A50A011	Engine fan 风扇	1	Engine fan 风扇×1
	A50A012	Engine fan mount 金属风扇安装座组	1	Socket screw 圆柱头螺钉 M4×8mm×2
				Lock washer 弹性垫圈Φ4×Φ6×1mm×2
				Collar 锥套×1
				Socket button head screw 平圆头螺钉M3×6mm×2
				Socket button head screw 平圆头螺钉M4×6mm×2
				Fan hub 金属风扇安装座×1
	A50A013	Engine mount 整体式引擎安装座组	1	Engine mount 整体式引擎安装座×1
				Washer 垫圈Φ3×Φ8×2mm×4
				Socket screw 不锈钢圆柱头螺钉M3×16mm×4
	A50A014	Engine fan cover 风扇罩组	1	Engine fan cover (L) 风扇罩左×1
				Engine fan cover (R) 风扇罩右×1

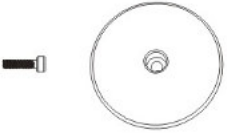
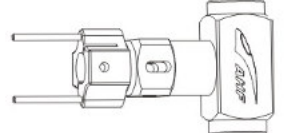
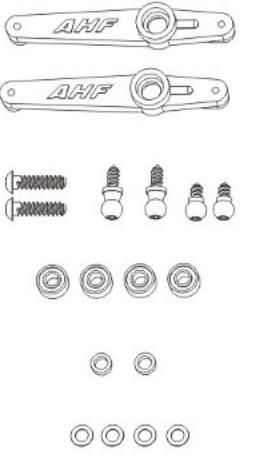
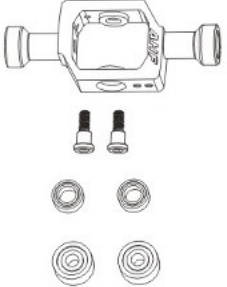
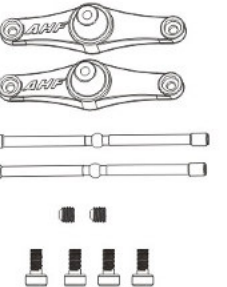

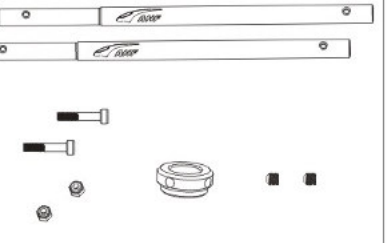
Part 零件	Code No. 代码	Name 名称	Qty 数量	Remarks 备注
	A50A015	<b>Aileron lever</b> 十字盘控制臂组	1	Elevator lever 十字盘前控制臂 A×1
				Aileron lever 十字盘控制臂 B×2
				Washer 垫圈 $\phi 5 \times \phi 7 \times 10.7\text{mm} \times 1$
				Spacer 垫圈 $\phi 5 \times \phi 6.2 \times 1.6\text{mm} \times 2$
				Bearing 轴承 $\phi 5 \times \phi 9 \times 3\text{mm} \times 4$
				Set screw 锥端紧定螺钉 $M4 \times 4\text{mm} \times 1$
	A50A016	<b>Tail control arm</b> 尾伺服传动摇臂组	1	Frame mounting block 尾伺服传动摇臂固定座×1
				Tail control arm 尾伺服传动摇臂×1
				Washer 垫圈 $\phi 3 \times \phi 8 \times 2\text{mm} \times 2$
				Washer 垫圈 $\phi 3 \times \phi 5 \times 0.3\text{mm} \times 2$
				Bearing 轴承 $\phi 3 \times \phi 6 \times 2.5\text{mm} \times 2$
				Washer 垫圈 $\phi 3 \times \phi 4.5 \times 3\text{mm} \times 1$
				Socket button head screw 平圆头螺钉 $M3 \times 8\text{mm} \times 2$
Socket button head screw 平圆头螺钉 $M3 \times 12\text{mm} \times 1$				
	A50A017	<b>Canopy mounting bolt</b> 机头罩固定柱组	1	Canopy mounting bolt 机头罩固定柱×2
				Hex mounting bolt 六方连接杆×1
				Screw 平端紧定螺钉 $M2 \times 16\text{mm} \times 2$
	A50A018	<b>X Mounting</b> X形机身加强块组	1	X Mounting X形机身加强块×1
				Socket button head screw 平圆头螺钉 $M3 \times 6\text{mm} \times 4$
	A50B001	<b>Main frame (L)</b> 机身侧板(左)	1	Main frame (L) 机身侧板(左)×1
				Fuel tank guard 油箱胶垫×1
	A50B002	<b>Main frame (R)</b> 机身侧板(右)	1	Main frame (R) 机身侧板(右)×1
				Fuel tank guard 油箱胶垫×1

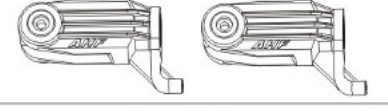
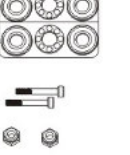
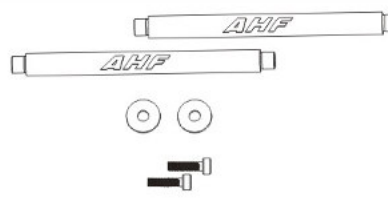

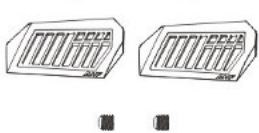
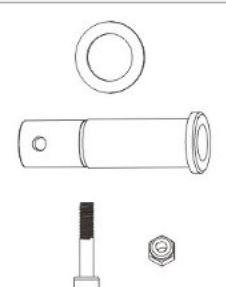


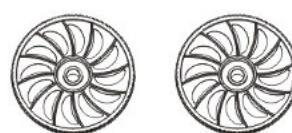
Part 零件	Code No. 代码	Name 名称	Qty 数量	Remarks 备注
	A50C001	<b>Landing gear strut</b> 脚架	2	Landing gear strut 脚架×2
	A50C002	<b>Skid pipe</b> 脚架管	1	Skid pipe 脚架管×2
				Skid pipe end cap 脚架管堵头×4
	A50C003	<b>Skid pipe accessory</b> 脚架管附件	1	Hex frame spacer 六方连接杆 (L=21.8mm)×4
				Nut M3防滑螺帽×4
				Socket screw 圆柱头螺钉 $M3 \times 40\text{mm} \times 4$
	A50D001	<b>Tail boom mount</b> 尾波箱组	1	Tail shaft housing(L) 尾波箱(左)×1
				Tail shaft housing(R) 尾波箱(右)×1
				Socket screw 圆柱头螺钉 $M3 \times 12\text{mm} \times 3$
				Socket screw 圆柱头螺钉 $M3 \times 25\text{mm} \times 2$
				Nut M3防滑螺帽×5
				Washer 垫圈 $\phi 3 \times \phi 8 \times 2\text{mm} \times 2$
	A50D002	<b>Tail rotor shaft</b> 尾轴	1	Tail rotor shaft 尾轴×1
	A50D003	<b>Drive belt</b> 同步带	1	Drive belt 同步带×1
	A50D004	<b>Tail boom</b> 尾管	2	Tail boom 尾管×2
	A50D005	<b>Tail rotor control arm</b> 尾旋翼控制臂组	1	Tail rotor control arm 尾旋翼控制臂组×1
				Linkage 尾旋翼控制臂连杆×2
				Linkage ball 球头 $T2.5 \times 8.7\text{mm} \times 1$
				Collar 耐磨铜套 $\phi 2 \times \phi 3 \times 3\text{mm} \times 2$
				Collar 耐磨铜套 $\phi 2 \times \phi 3 \times 4\text{mm} \times 2$
Socket screw 圆柱头螺钉 $M2 \times 8\text{mm} \times 4$				


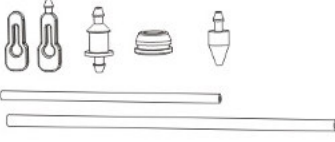
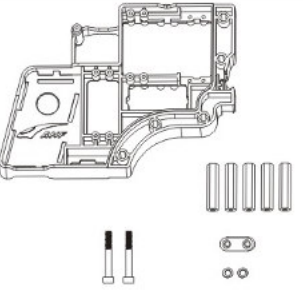

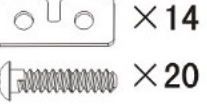
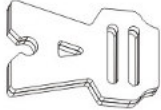
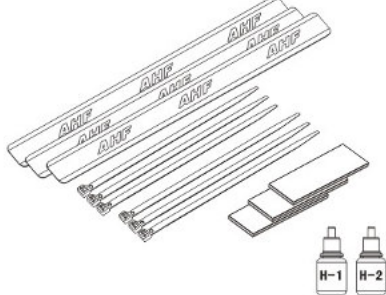


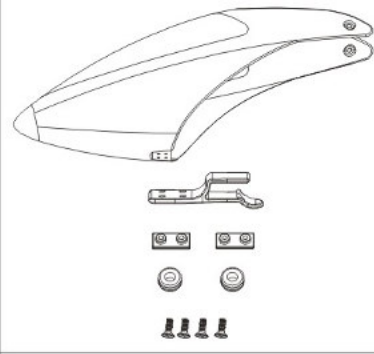





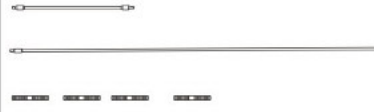






Part 零件	Code No. 代码	Name 名称	Qty 数量	Remarks 备注
	A50D006	Tail rotor control arm L型控制臂组	1	Tail rotor control arm L型控制臂组件×1
				Washer 垫圈 $\phi 3 \times \phi 5 \times 0.3\text{mm} \times 2$
				Socket screw 圆柱头螺钉 $M3 \times 18\text{mm} \times 1$
	A50D007	Tail rotor holder 尾旋翼夹	1	Tail rotor holder 尾旋翼夹×2
				Socket screw 圆柱头螺钉 $M3 \times 20\text{mm} \times 2$
				Nut M3防滑螺帽×2
	A50D008	Tail rotor hub 尾旋翼固定轴	1	Tail rotor hub 尾旋翼固定轴×1
				Socket screw 圆柱头螺钉 $M3 \times 8\text{mm} \times 2$
				Washer 垫圈 $\phi 3 \times \phi 8 \times 1\text{mm} \times 2$
				Set screw M4紧定螺钉×1
	A50D009	Thrust bearing 单向推力轴承	1	Thrust bearing 单向推力轴承 $\phi 5 \times \phi 10 \times 4\text{mm} \times 2$
				Bearing 轴承 $\phi 5 \times \phi 10 \times 4\text{mm} \times 2$
	A50D010	Tail blade 尾旋翼	2	Tail blade 尾旋翼×2
	A50D011	Vertical stabilizer 垂直翼	2	Vertical stabilizer 垂直翼×2
	A50D011-1	Horizontal stabilizer 水平翼	2	Horizontal stabilizer 水平翼×2
	A50D012	Tail boom mount 尾管固定座组	1	Tail boom mount (L) 尾管固定座(左)×1
				Tail boom mount (R) 尾管固定座(右)×1
				Nut M3防滑螺帽×4
				Socket screw 圆柱头螺钉 $M3 \times 12\text{mm} \times 4$
	A50D013	Front drive gear assembly 尾传动齿轮组	1	Front drive gear assembly 尾传动齿轮组×1
				Bearing 轴承 $\phi 4 \times \phi 9 \times 4\text{mm} \times 2$
	A50D014	Tail boom brace 尾管支撑	2	Tail boom brace 尾管支撑×2



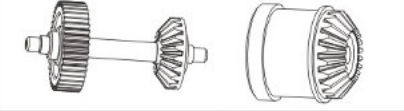


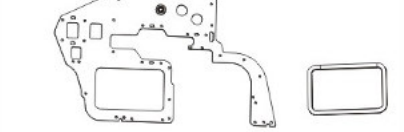
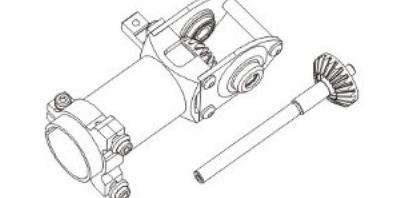
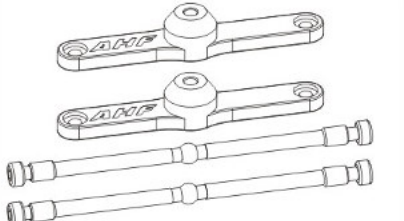
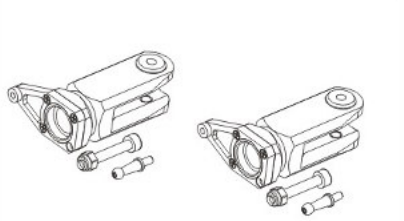
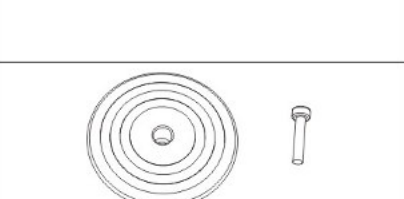


Part 零件	Code No. 代码	Name 名称	Qty 数量	Remarks 备注
	A50D015	Tail boom linkage set 尾管支撑固定件	1	Socket screw 平圆头螺钉 $M4 \times 30\text{mm} \times 2$
				Washer 垫圈 $\phi 4 \times \phi 10 \times 15\text{mm} \times 2$
				Hexagonal bolt 六方连接杆 $\times 1 (9 \times 26\text{mm})$
	A50D016	Tail control guide 控制连杆(A)固定环	3	Tail control guide 控制连杆(A)固定环×3
				Nut M2螺帽×3
				Socket screw 圆柱头螺钉 $M2 \times 8\text{mm} \times 3$
	A50D017	Stabilizer mount 水平翼固定座	1	Stabilizer mount (Upper) 水平翼固定座(上)×1
				Stabilizer mount (Lower) 水平翼固定座(下)×1
				Washer 垫圈 $\phi 3 \times \phi 8 \times 2\text{mm} \times 2$
				Socket screw 平圆头螺钉 $M4 \times 12\text{mm} \times 2$
				Socket button head screw 平圆头螺钉 $M3 \times 12\text{mm} \times 2$
	A50E001	Washout control arm 稳定控制臂组	1	Washout control arm 稳定控制臂×2
				Radius arm 剪形臂×2
				Socket button head screw 平圆头螺钉 $M3 \times 12\text{mm} \times 2$
				Socket screw 圆柱头螺钉 $M2 \times 12\text{mm} \times 2$
				Bearing 轴承 $\phi 3 \times \phi 7 \times 3\text{mm} \times 4$
				Collar 耐磨铜套 $\phi 2 \times \phi 3 \times 5.1\text{mm} \times 2$
				Washer 垫圈 $\phi 3 \times \phi 4.7 \times 1.5\text{mm} \times 2$
Washer 垫圈 $\phi 3 \times \phi 5 \times 0.3\text{mm} \times 4$				
	A50E002	Washout base 向位器	1	Washout base 向位器×1
	A50E003	Swashplate 十字盘组	1	Swashplate 十字盘×1

Part 零件	Code No. 代码	Name 名称	Qty 数量	Remarks 备注
	A50E004	Head button 制动器	1	Socket screw 圆柱头螺钉M3×10mm×1 Head button 制动器×1
	A50E005	Main rotor housing 主旋翼固定座	1	Main rotor housing 主旋翼固定座×1
	A50E006	SF Mixing arm SF控制摇臂组	1	SF Mixing arm SF控制摇臂×2 Socket button head self tapping screw 半圆头内六角自攻钉T3×14mm×2 Linkage ball 球头T2.5×12.8mm×2 Linkage ball 球头T2.5×8.7mm×2 Bearing 轴承Φ3×Φ7×3mm×4 Washer 垫圈Φ3×Φ4.7×1.5mm×2 Washer 垫圈Φ3×Φ5×0.3mm×4
	A50E007	Flybar seesaw holder 平衡翼杆固定座	1	Flybar seesaw holder 平衡翼杆固定座×1 Specialty screw M3特殊螺钉×2 Bearing 轴承Φ4×Φ7×2.5mm×2 Bearing 轴承Φ3×Φ9×4mm×2
	A50E008	Flybar control arm 平衡翼控制臂	1	Flybar control arm 平衡翼控制臂×2 Flybar control rod 平衡翼控制球杆×2 Set screw M3锥端紧定螺钉×2 Socket screw 圆柱头螺钉M3×6mm×4
	A50E009	Flybar 平衡翼杆	2	Flybar 平衡翼杆×2
	A50E010	Main shaft 主轴	1	Main shaft 主轴×2 Socket screw 圆柱头螺钉M3×22mm×2 Nut M3防滑螺帽×2 Lock collar 主轴固定环×1 Set screw 锥端紧定螺钉M4×4mm×2

Part 零件	Code No. 代码	Name 名称	Qty 数量	Remarks 备注
	A50E011	Main rotor holder 主旋翼夹	1	Main rotor holder 主旋翼夹×2
	A50E011-1	Main rotor holder bearing 主旋翼夹轴承		Thrust bearing 单向推力轴承Φ6×Φ14×5mm×2 Socket screw 圆柱头螺钉M4×28mm×2 Nut M4防滑螺帽×2
	A50E012	Feathering shaft 横轴	2	Feathering shaft 横轴×2 Washer 垫圈Φ4×Φ12×1mm×2 Socket screw 圆柱头螺钉M4×10mm×2
	A50E013	Damper rubber 横轴减震圈	1	Damper rubber (with different rigidity) 横轴减震圈×12(不同硬度) Washer 垫圈Φ8×Φ11.5×1.3mm×2
	A50E014	Flybar paddle 平衡翼	2	Flybar paddle 平衡翼×2 Set screw M3锥端紧定螺钉×2
	A50E015	One-way bearing shaft 单向轴承套	1	Washer 垫圈Φ11.6×Φ17.5×0.7mm×1 One-way bearing shaft 单向轴承套×1 Socket screw 圆柱头螺钉M3×20mm×1 Nut M3防滑螺帽×1
	A50E016	One-way bearing mount 单向轴承座	1	Main gear case 主齿轮中心座组×1 Washer 垫圈Φ3×Φ6×0.5mm×5 Socket button head screw 平圆头内六角螺钉M3×6mm×5
	A50E017	Main drive gear 主齿轮	2	Main drive gear 主齿轮×2
	A50E018	Autorotation tail drive gear 尾驱动主齿轮	2	Autorotation tail drive gear 尾驱动主齿轮×2

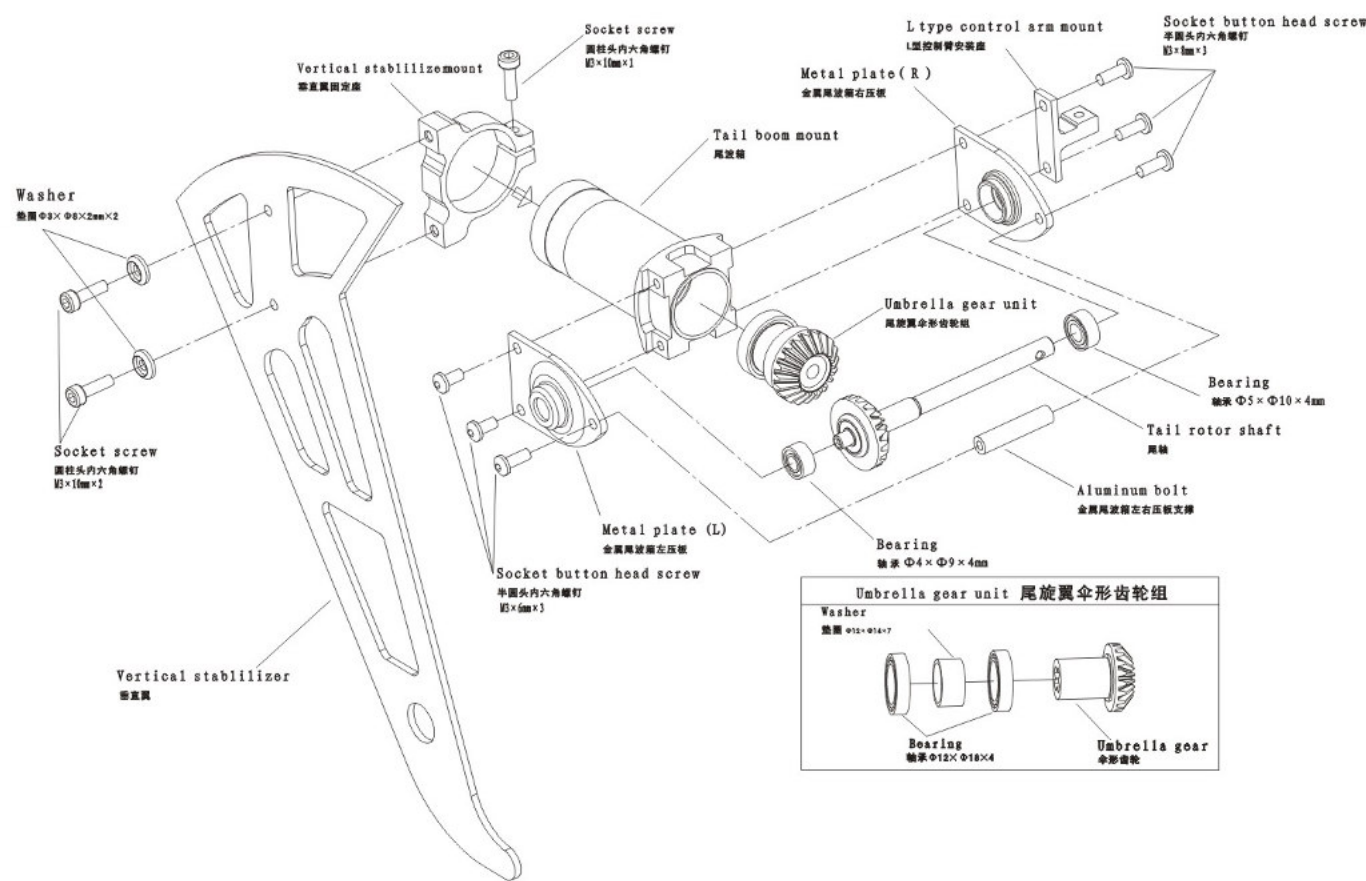
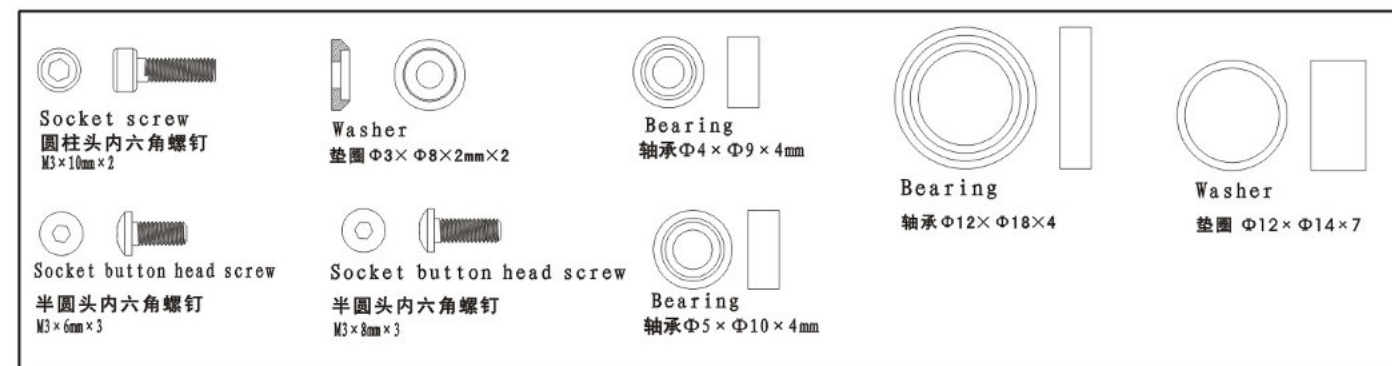
Part 零件	Code No. 代码	Name 名称	Qty 数量	Remarks 备注
	A50F001	Fuel tank 油箱组	1	Fuel tank 油箱组×1
	A50F002	Fuel tank accessory 油箱附件	1	Fuel tank clamp 油管夹 A×1 B×1
				Fuel tank nipple 出油咀×1
				Seal 密封胶圈×1
				Clunk 重锤×1
				Fuel tube 油管×2
	A50G001	Servo installation frame 整体伺服器安装架	1	Servo installation frame 整体伺服器安装架×1
				Hex mounting bolt 六方连接杆×5
				Washer 垫圈 $\phi 2 \times \phi 4.5 \times 0.3 \text{mm} \times 16$
				Socket screw 圆柱头螺钉 M2×10mm×2
				Speed senser screw 转速传感器固定螺母×1
	A50G002	Collar nut 机头罩支撑胶垫	1	Collar nut 机头罩支撑胶垫×2
				Socket button head self tapping screw 半圆头内六角自攻钉 T3×10mm×2
				Washer 垫圈 $\phi 3 \times \phi 8 \times 2 \text{mm} \times 2$
	A50G003	Servo nut 伺服器压板组	1	Servo nut 伺服器压板×14
				Socket button head self tapping screw 半圆头内六角自攻钉 T3×14mm×20
	A50H001	Main rotor holder 主旋翼托架	1	Main rotor holder 主旋翼托架×1
	A50H002	Accessory 附件组	1	Velcro 魔术贴×3
				Nylon ties 扎带×6
				Gum magic tips 背胶魔术贴×3
				Thread Locker 螺丝胶×2

Part 零件	Code No. 代码	Name 名称	Qty 数量	Remarks 备注
	A50H003	Canopy 机头罩组	1	Canopy 机头罩×1
				Canopy latch 头罩固定卡×1
				Plastic nut plate 塑胶固定螺母×2
				Canopy grommet 机头罩固定胶圈×2
	A50L001	Hex frame spacer 六方连接杆	12	Hex frame spacer 六方连接杆 L=26mm×12
	A50L002	Hex frame spacer 六方连接杆	6	Hex frame spacer 六方连接杆 L=21.8mm×6
	A50L003	Linkage ball A 球头组 A	9	Linkage ball A 球头 M2×8.7mm×9
				NUT M2 螺帽×9
	A50L004	Linkage ball B 球头组 B	1	Linkage ball 球头 T2.5×8.7mm×13
				Linkage ball 球头 T2.5×12.8mm×8
	A50L005	Main rotor linkage rods 主旋翼连杆组	1	L=13mm×2
				L=21mm×2
				L=48mm×2
	A50L006	Servo linkage rods 整体伺服器安装架连杆组	1	L=101mm×2
				L=123mm×2
				L=79mm×3
				L=41mm×2
				L=16mm×1
	A50L007	Tail rotor linkage rods 尾旋翼连杆组	1	L=199mm×1
				L=625.8mm×1
				L=19mm×4
	A50L008	Linkage ball 球头扣	16	Linkage ball 球头扣×16
	A50L009	T3×10	12	Socket button head self tapping screw 半圆头内六角自攻钉 T3×10mm×12
	A50L010	M3×10	12	Socket screw 圆柱头螺钉 M3×10mm×4
	A50L011	Specialty washer 特殊垫圈	16	Washer 垫圈 $\phi 3 \times \phi 8 \times 2 \text{mm} \times 16$
	A50M001	Special spanner 专用扳手	2	Special spanner 专用扳手×2
	A50M002	Tail boom brace fixture 尾支撑蝴蝶扣	1	Tail boom brace fixture 尾支撑蝴蝶扣
				Nut M3 塑胶固定螺母×2
				Socket screw 圆柱头内六角螺钉 M3×10mm×2
				Nylon ties 扎带×4

Part 零件	Code No. 代码	Name 名称	Qty 数量	Remarks 备注
	A50P001	Torque tube 尾传动轴杆	1	Torque tube 尾传动轴杆
	A50P002	Tail rotor shaft assembly 尾轴	1	Tail rotor shaft assembly 尾轴 Umbrella gear 伞形齿轮
	A50P003	Front drive gear assembly 尾传动齿轮组-2	1	Front drive gear assembly 尾传动齿轮组 Umbrella gear 伞形齿轮组
	A50P004	Rubber collar 胶套	2	Rubber collar 胶套
	A50P005	Carbon main frame (L) 机身侧板(左)	1	Metal main frame (L) 机身侧板(左)×1 Fuel tank guard 油箱胶垫×1
	A50P006	Carbon main frame (R) 机身侧板(右)	1	Carbon main frame (R) 机身侧板(右)×1 Fuel tank guard 油箱胶垫×1
	A50P007	Metal tail boom mount 金属尾波箱组	1	Metal tail boom mount 尾波箱组 Tail rotor shaft assembly 尾轴
	A50P008	Flybar control arm 平衡翼控制臂	2	Flybar control arm 平衡翼控制臂×2 Flybar control rod 平衡翼控制球杆×2
	A50P009	Metal main rotor holder 金属主旋翼夹	2	Metal main rotor holder 主旋翼夹 Socket screw 圆柱头螺钉M4×27mm×2 Nut M4防滑螺母×2 Linkage ball 球头M3×20.5mm×2
	A50P010	Metal head button 制动器	1	Socket screw 圆柱头螺钉M3×10mm×1 Metal head button 制动器×1
	A50P011	Carbon vertical stabilizer 碳纤维垂直翼	2	Carbon vertical stabilizer 垂直翼×2
	A50P012	Carbon horizontal stabilizer 水平翼	2	Carbon horizontal stabilizer 水平翼×2

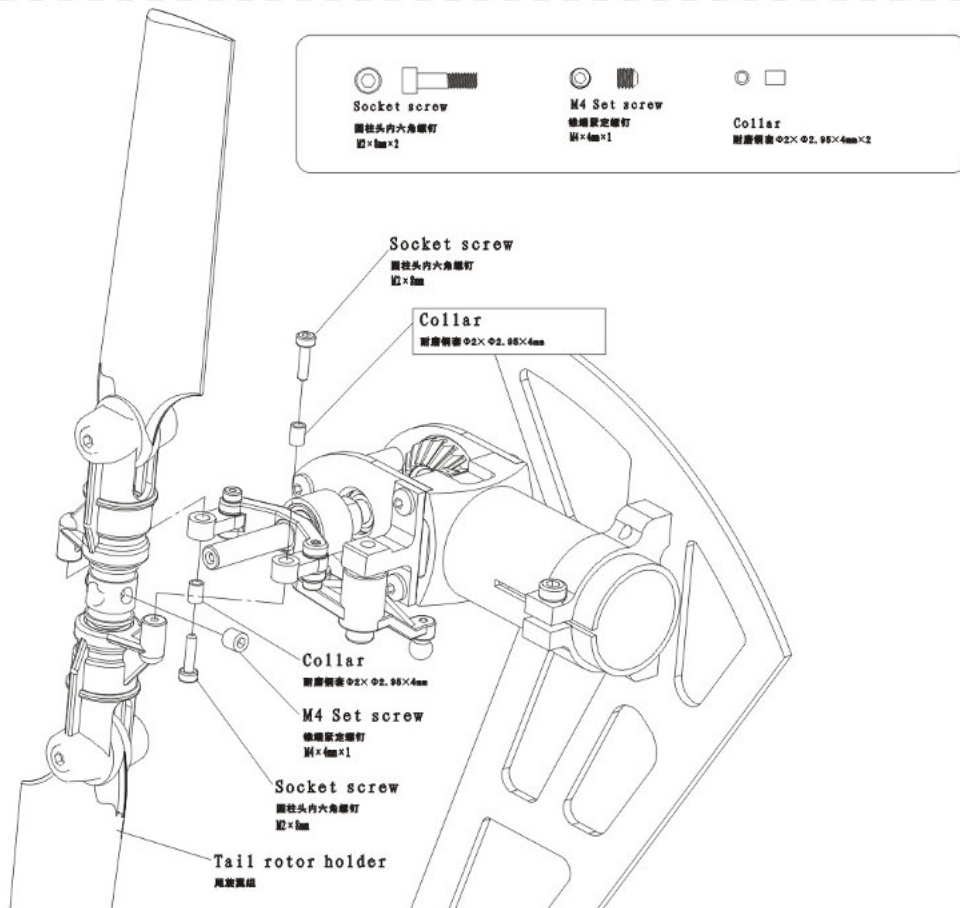
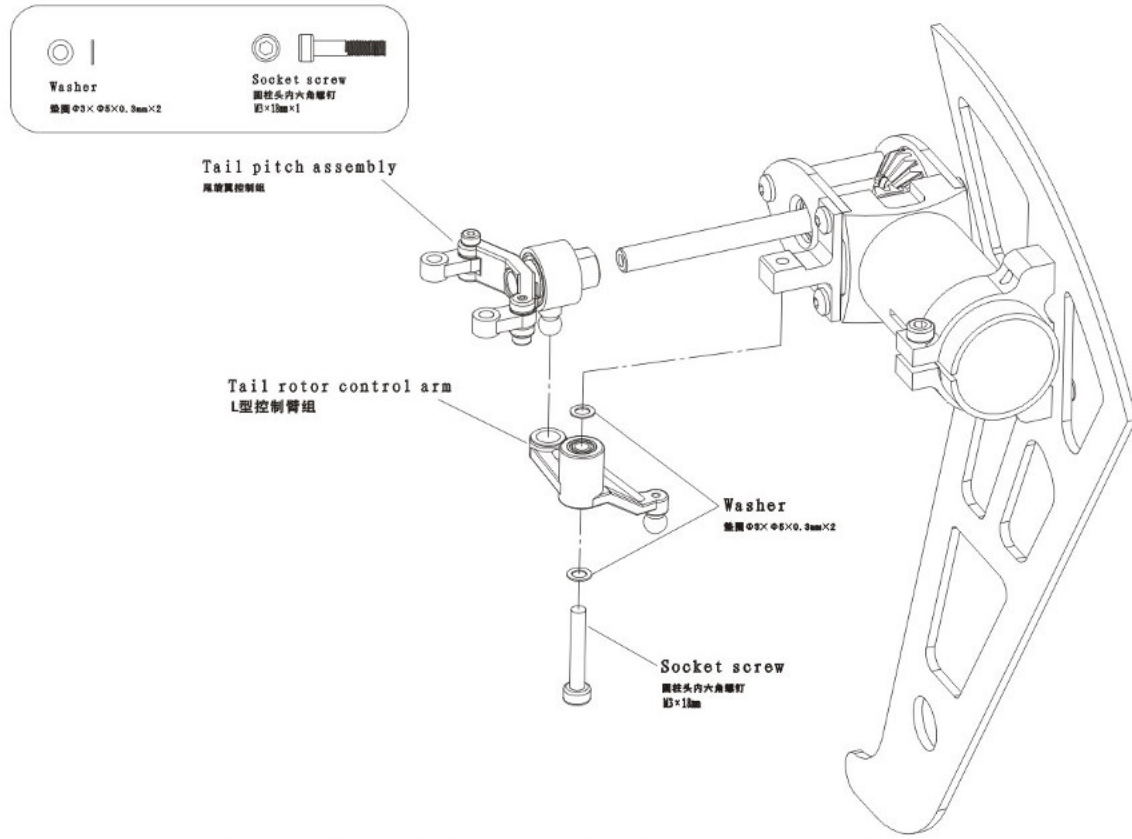
# Torque Tube Driven Pail Assembly 轴传动

(E-4/E-5)



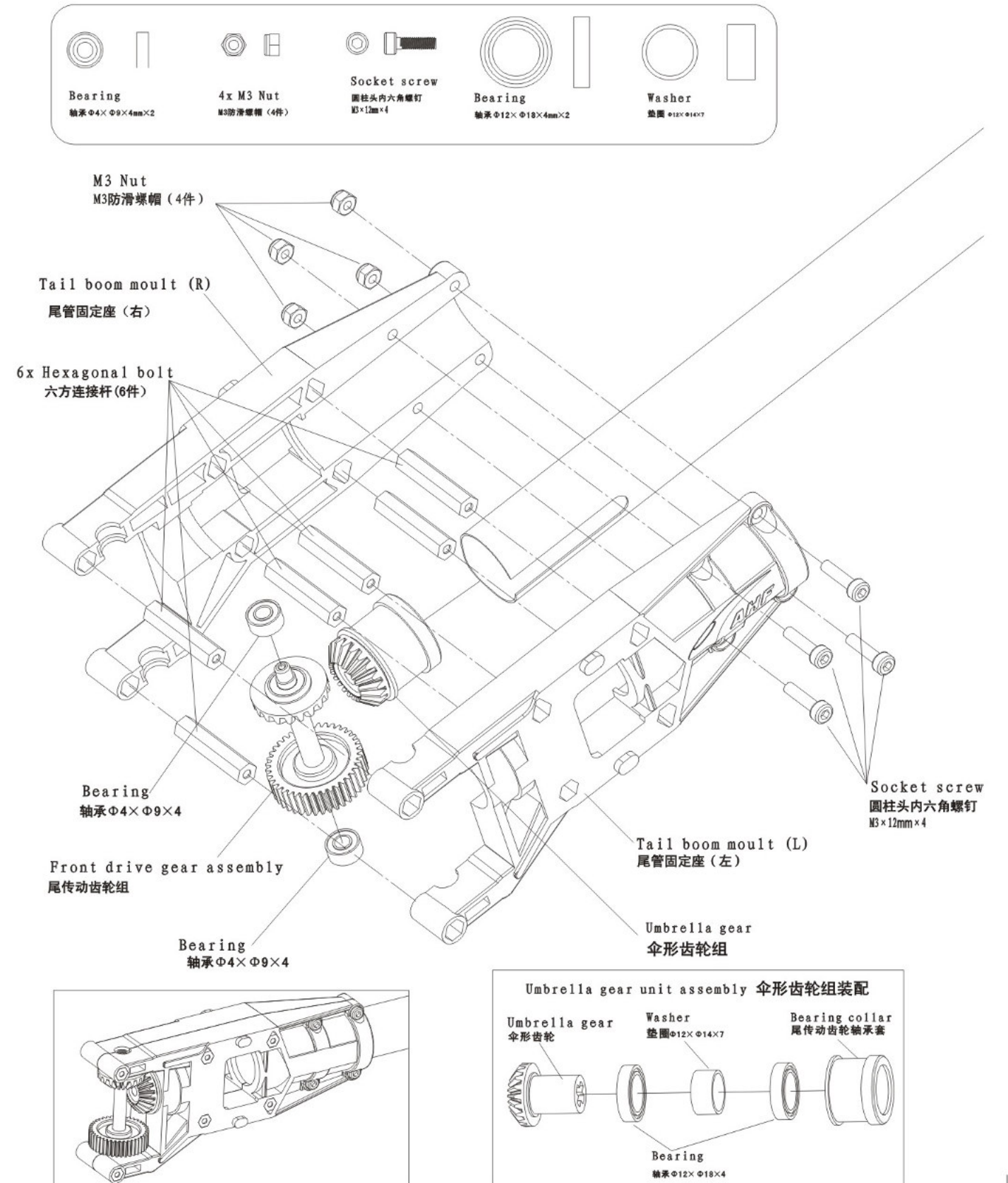
# Torque Tube Driven Pail Assembly 轴传动

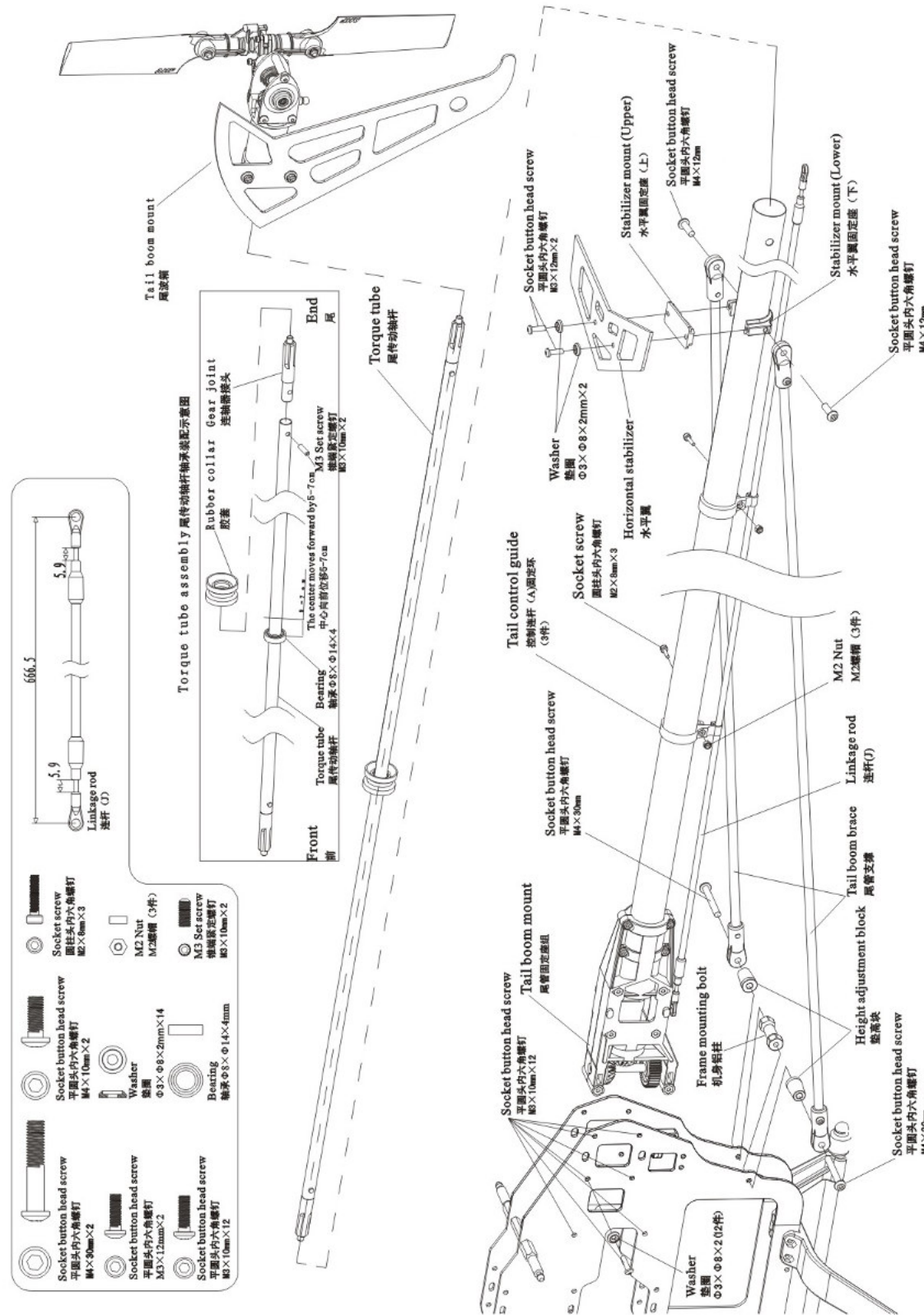
(E-1/E-2/E-3)



# Torque Tube Driven Pail Assembly 轴传动

(E-6)





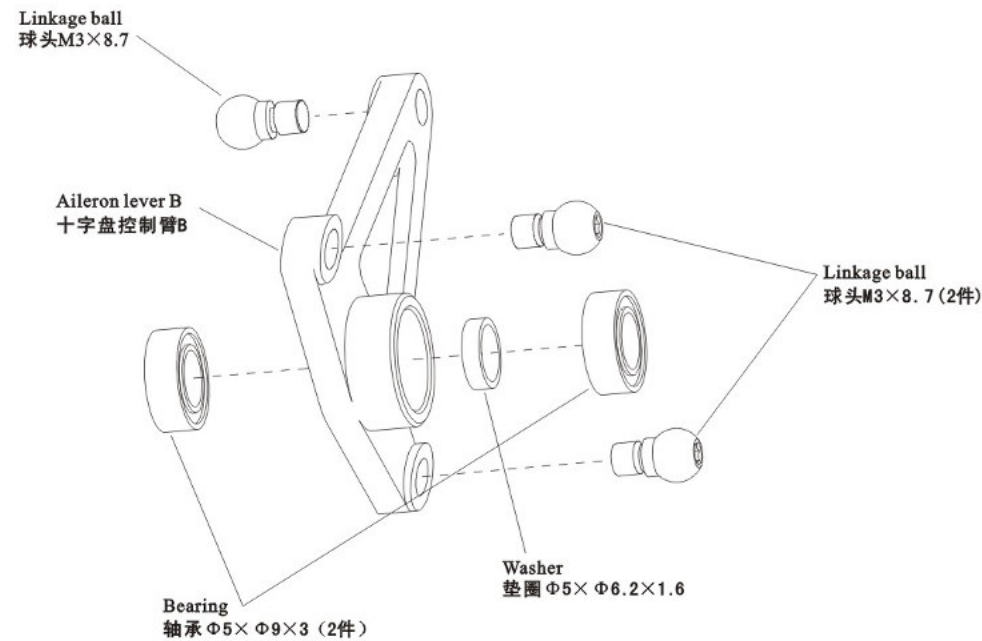
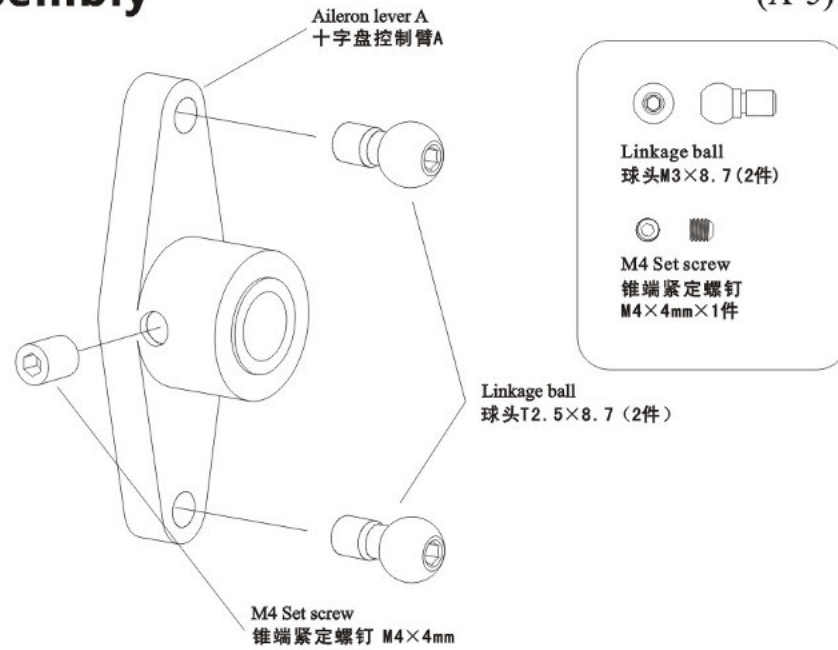
Code No 代码 (A)	Part 零件
A-1 Clutch 离合器总成	A-1  Magnet 磁钢 Ø4×2
A-2 Elevator lever 十字盘前控制臂组	A-2
A-3 Bearing block 主轴轴承座	A-3  ×12 ×12
A-4 Engine 引擎组	A-4  ×4 ×8
	A-4-1  A-4-2
A-5 Aileron lever 十字盘控制臂组	A-5
A-6 Tail control arm 尾伺服传动摇臂组	A-6
Code No 代码 (B)	Part 零件
B Fule tank 油箱组	B  B-1  ×8 ×4
Code No 代码 (C)	Part 零件
C Main frame 机身侧板	C-1  C-2
	C-3  C-4  ×4 ×8 C-5

<b>Code No</b> 代码 (D)	<b>Part 零件</b>		
D Landing skid 脚架组	D-1 	D-2 	D-3 
<b>Code No</b> 代码 (E)	<b>Part 零件</b>		
E1 Tail rotor 尾旋翼组	E-1 	E-1-1 	
E-2 T Type arm 尾旋翼控制臂	E-2 		
E-3 Tail rotor control arm L型控制臂	E-3 		
E-4 Tail boom mount 尾波箱组	E-4 		
	E-4-1 		
E-5 Vertical stabilizer 垂直翼	E-5 	E-5-1 	
E-6 Tail boom mount 尾管固定座组	E-6 		
E-7 Horizontal stabilizer 水平翼	E-7 	E-7-1 	E-7-2 
	E-7-3 		
<b>Code No</b> 代码 (F)	<b>Part 零件</b>		
F-1 Main rotor housing 主旋翼固定座组	F-1 		
	F-1-1 	F-1-2 	

F-2 Flybar seesaw holder 平衡翼杆固定座组	F-2 	F-2-1 	F-2-2 
F-3 Washout base 向位器组	F-3 		
F-4 Swashplate 十字盘组	F-4 		
F-5 Main shaft 主轴组	F-5 	F-5-1 	
F-6 Main rotor holder 主旋翼夹组	F-6 	F-6-1 	
F-7 Drive gear set 齿轮组	F-7 		
<b>Code No</b> 代码 (G)	<b>Part 零件</b>		
G Servo installation frame 整体伺服器安装架组	G 	G-2 	G-3 
	G-4 		G-4-1 
<b>Code No</b> 代码 (H)	<b>Part 零件</b>		
H Canopy 机头罩组	H 	H-1 	
<b>Code No</b> 代码 (I)	<b>Part 零件</b>		
I Main rotor holder 主旋翼托架	I 	I-1 	I-2 (赠品) 

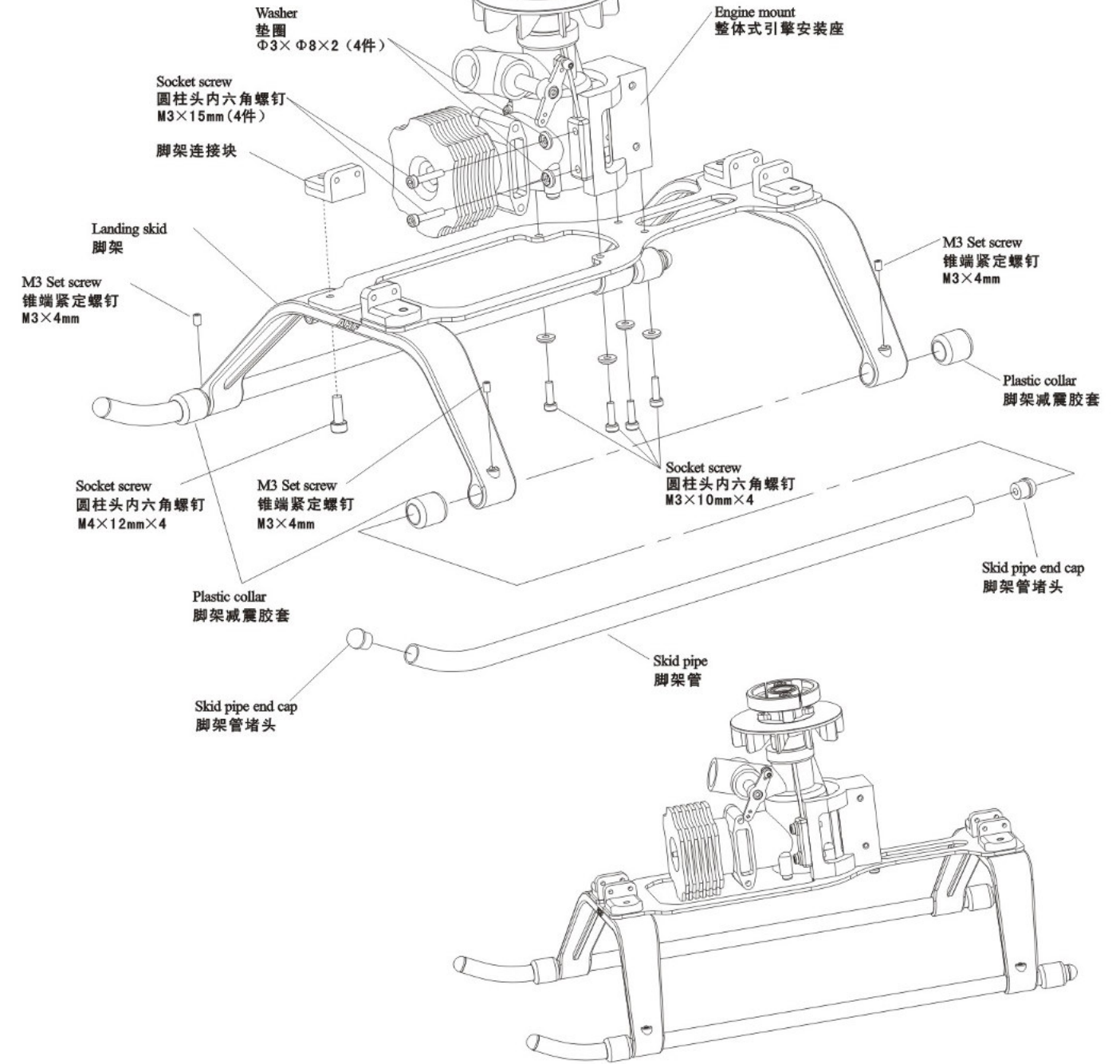
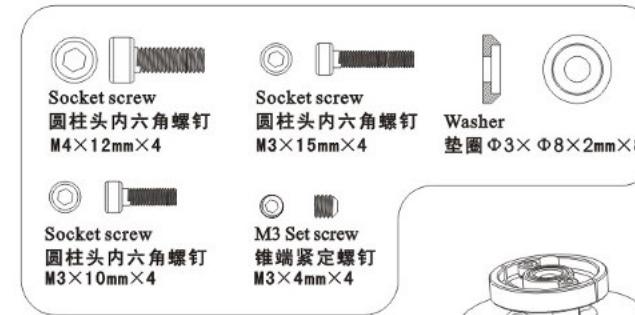
### 1. Elevator arm Assembly 十字盘控制臂组合

(A-5)



### 2. Engine & Landing gear strut Assembly 引擎.脚架组合

(A-4/C-4/C-5/D-1/D-2/D-3)



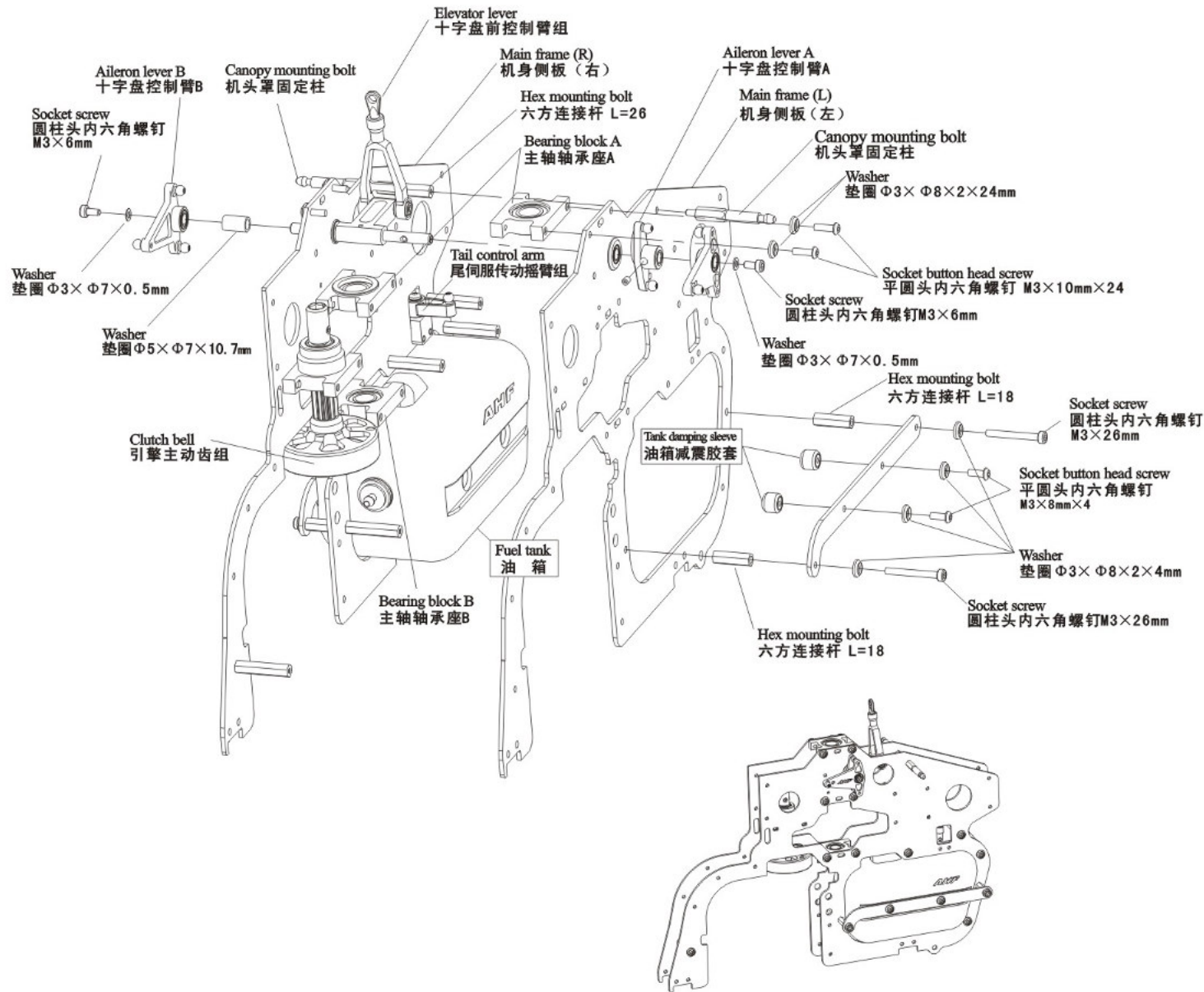
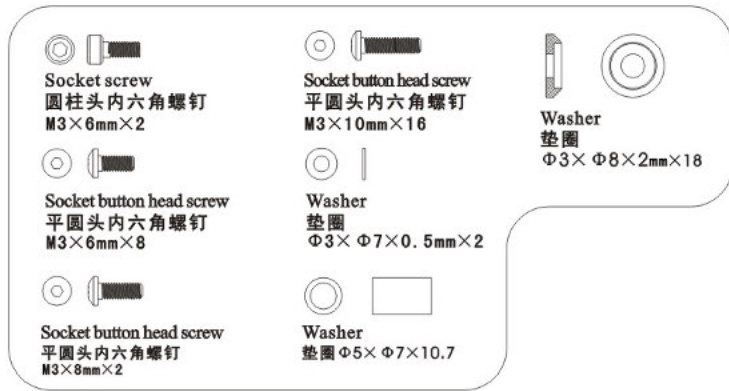
For original manufactory package, please check if screws are firmly secured and applied with some glue before every operation.

原组装完成品每次飞行前,要确认螺丝是否已上胶,严防螺丝松动,导致事故的发生。

Double check your work after assembly. 已组装完成的部件,请务必再次确认。



3. Main frame Assembly 机身侧板组合 (A-1/A-2/A-3/A-6/B-1/C-1/C-2/C-3)



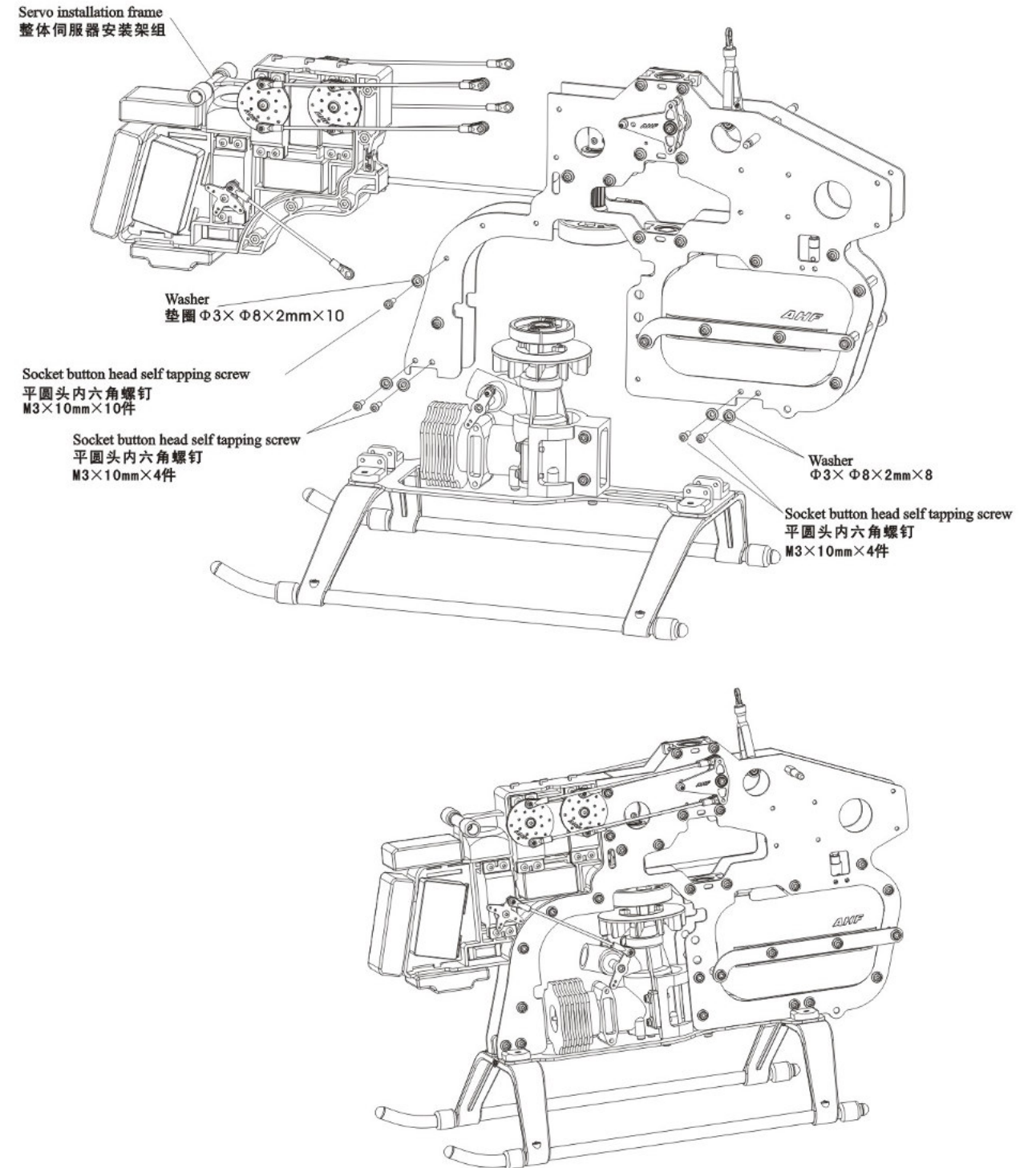
First do not fully tighten the screws of main frames. Put the main shaft through the three bearings and check if the movements are smooth. The bottom bracket must be firmly touched the level table top, please keep the smooth movements on main shaft and level bottom bracket, then slowly tighten the screws.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

组合机身侧板的螺钉时,先不要全部的螺钉拧紧,插入主轴并贯穿三颗轴承确保主轴上下滑动顺畅;两边的侧板一定要保持端面平齐,精准的装配品质对动力与飞行品质有着显著的作用。



4. Frame & Servo System Assembly 机身组.伺服系统组合

(G-1/G-2/G-3/G-4)



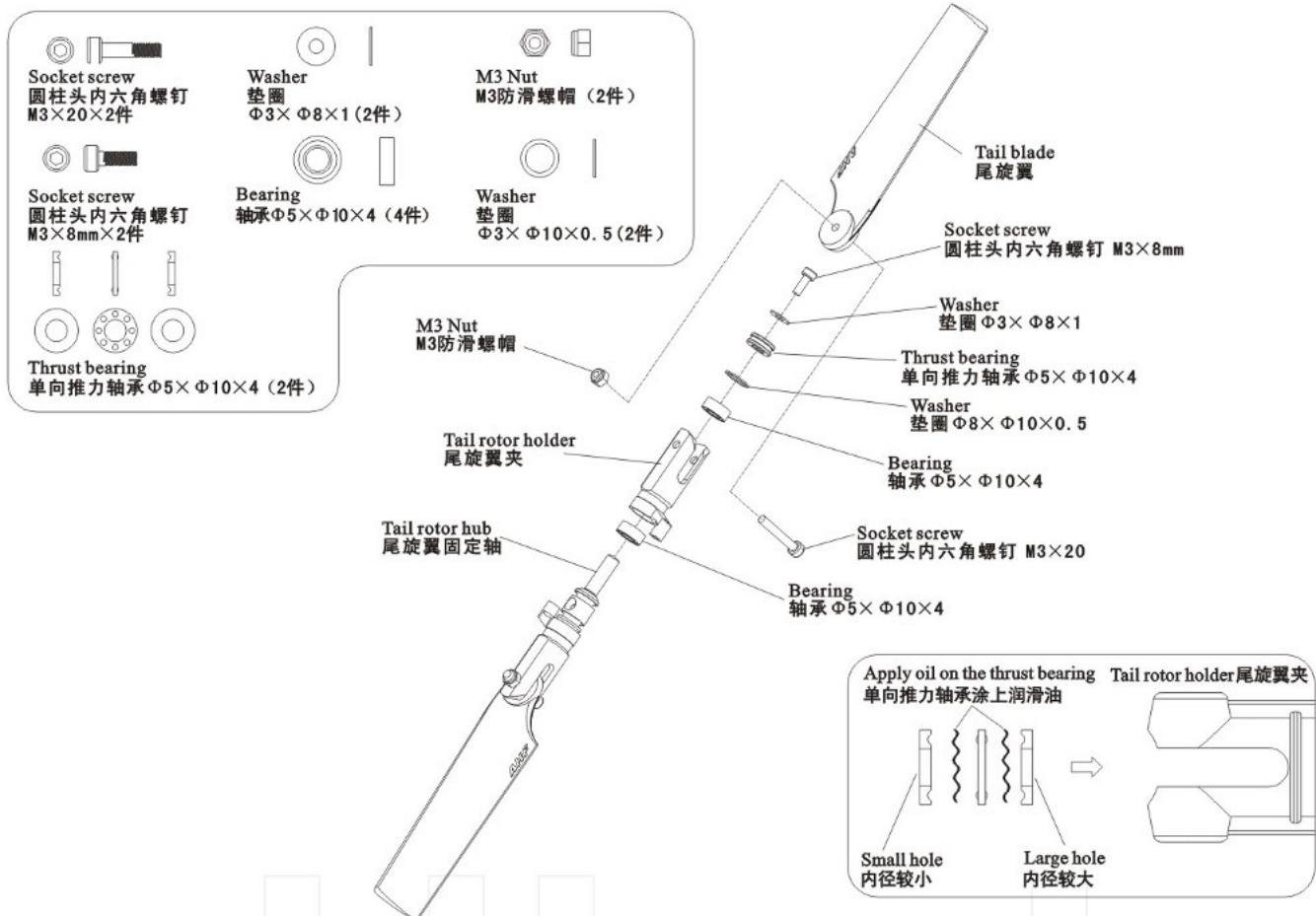
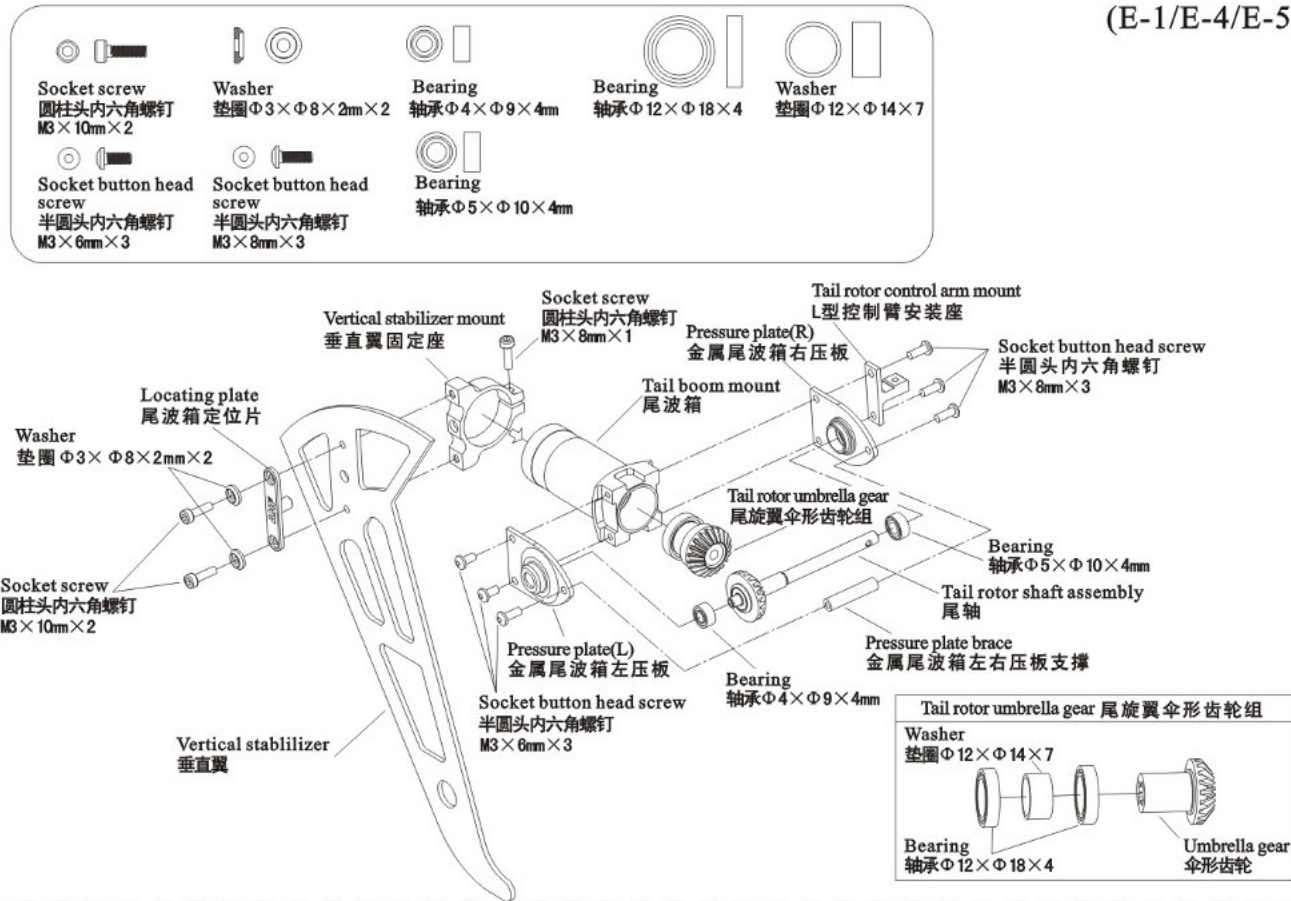
For original manufactory package, please check if screws are firmly secured and applied with some glue before every operation.

原组装配成品每次飞行前,要确认螺丝是否已上胶,严防螺丝松动,导致事故的发生。装完成的部件,请务必再次确认。

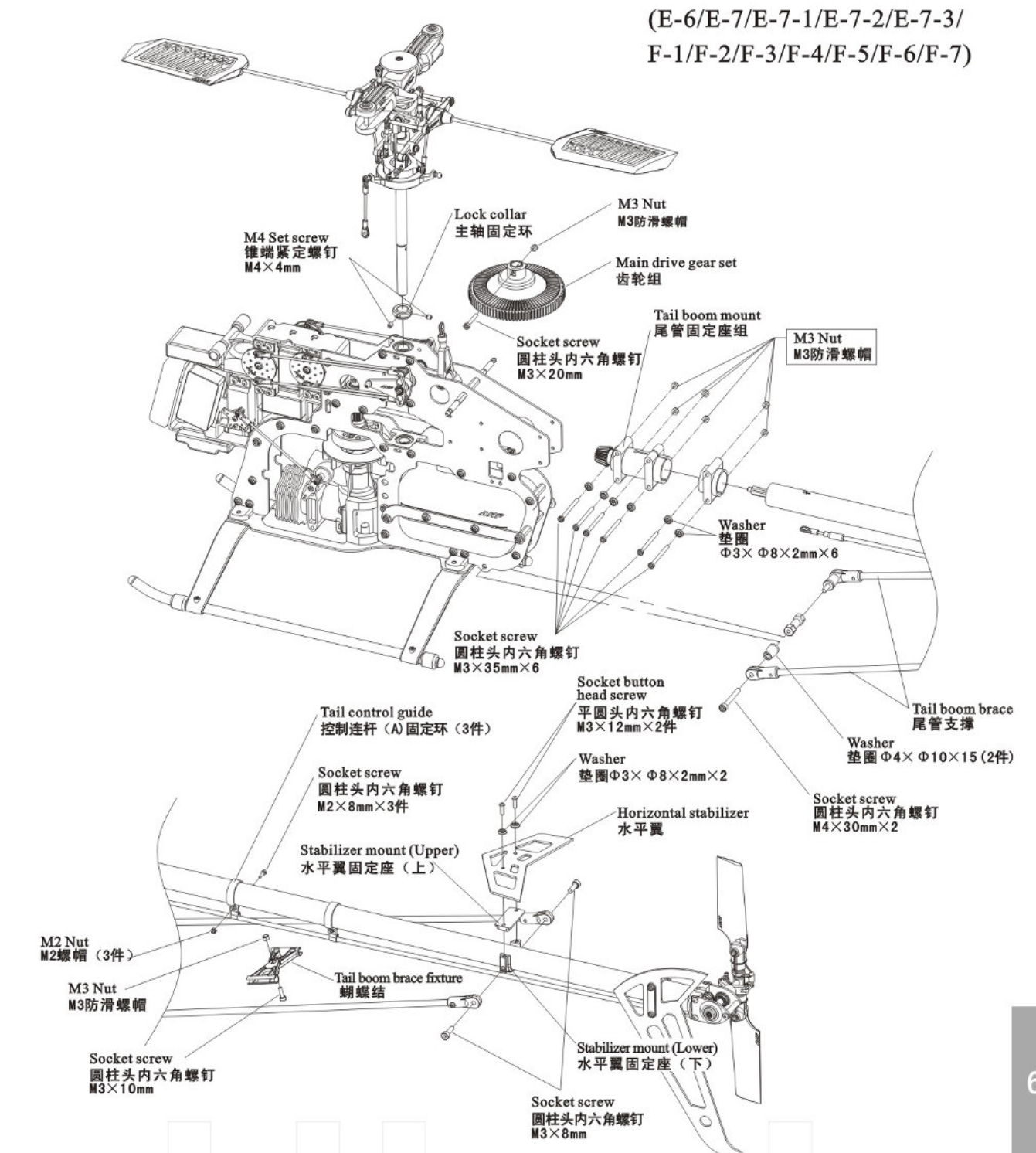
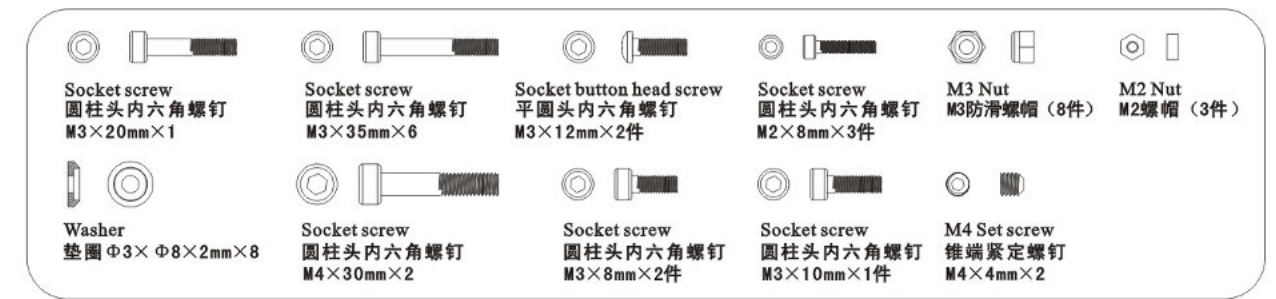


### 5. Tail Boom Mount & Tail Rotor Assembly 微波箱.尾旋翼组合

(E-1/E-4/E-5)

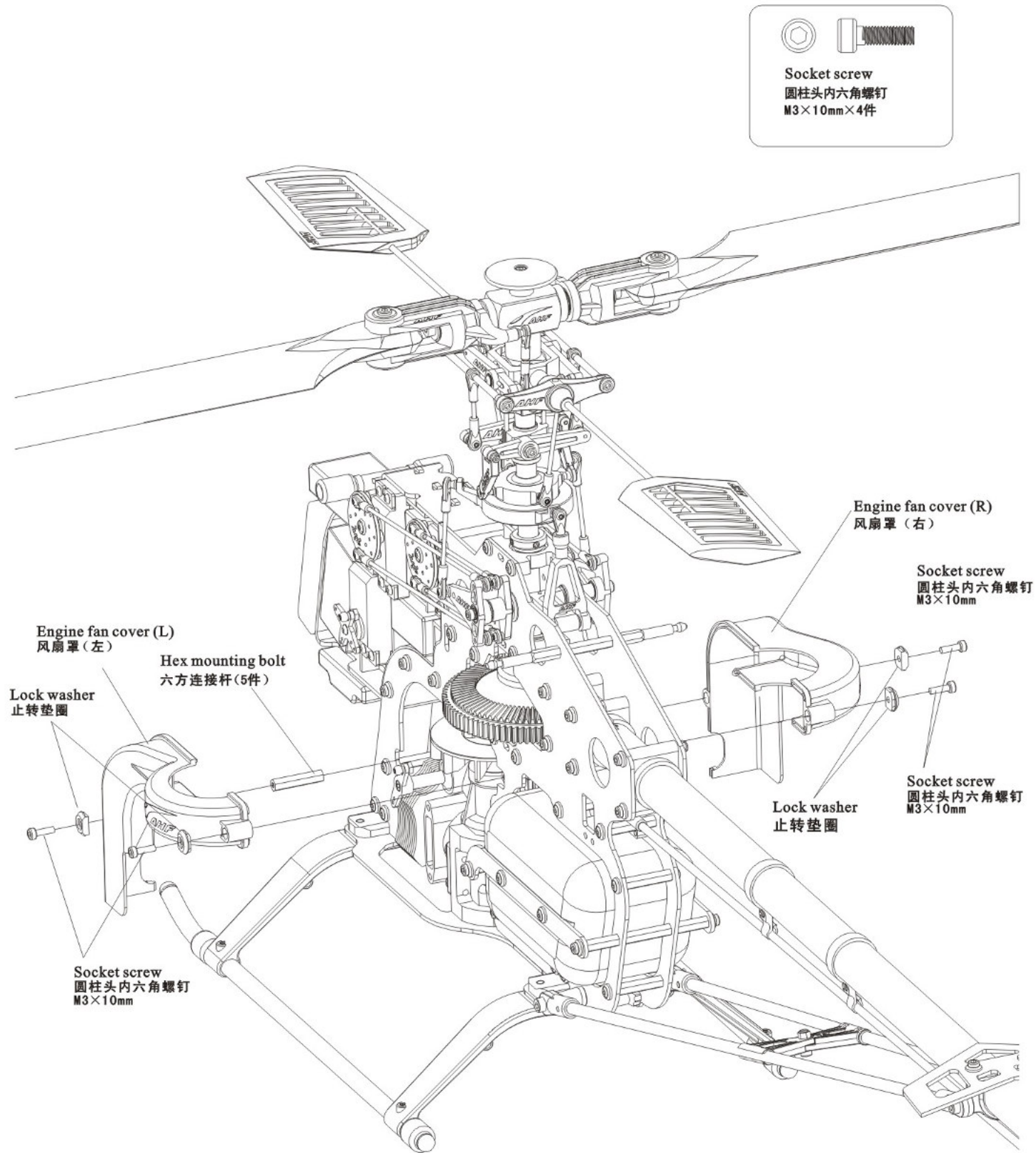


### 6. Main Rotor Holder, Tail Driven System & Main Frame Assembly 主旋翼.尾传动系统与机身组合



### 7. Engine & Clutch Bell Assembly 引擎风扇罩组合

(A-4-2)



Socket screw  
圆柱头内六角螺钉  
M3×10mm×4件

Engine fan cover (R)  
风扇罩 (右)

Socket screw  
圆柱头内六角螺钉  
M3×10mm

Engine fan cover (L)  
风扇罩 (左)

Hex mounting bolt  
六方连接杆(5件)

Lock washer  
止转垫圈

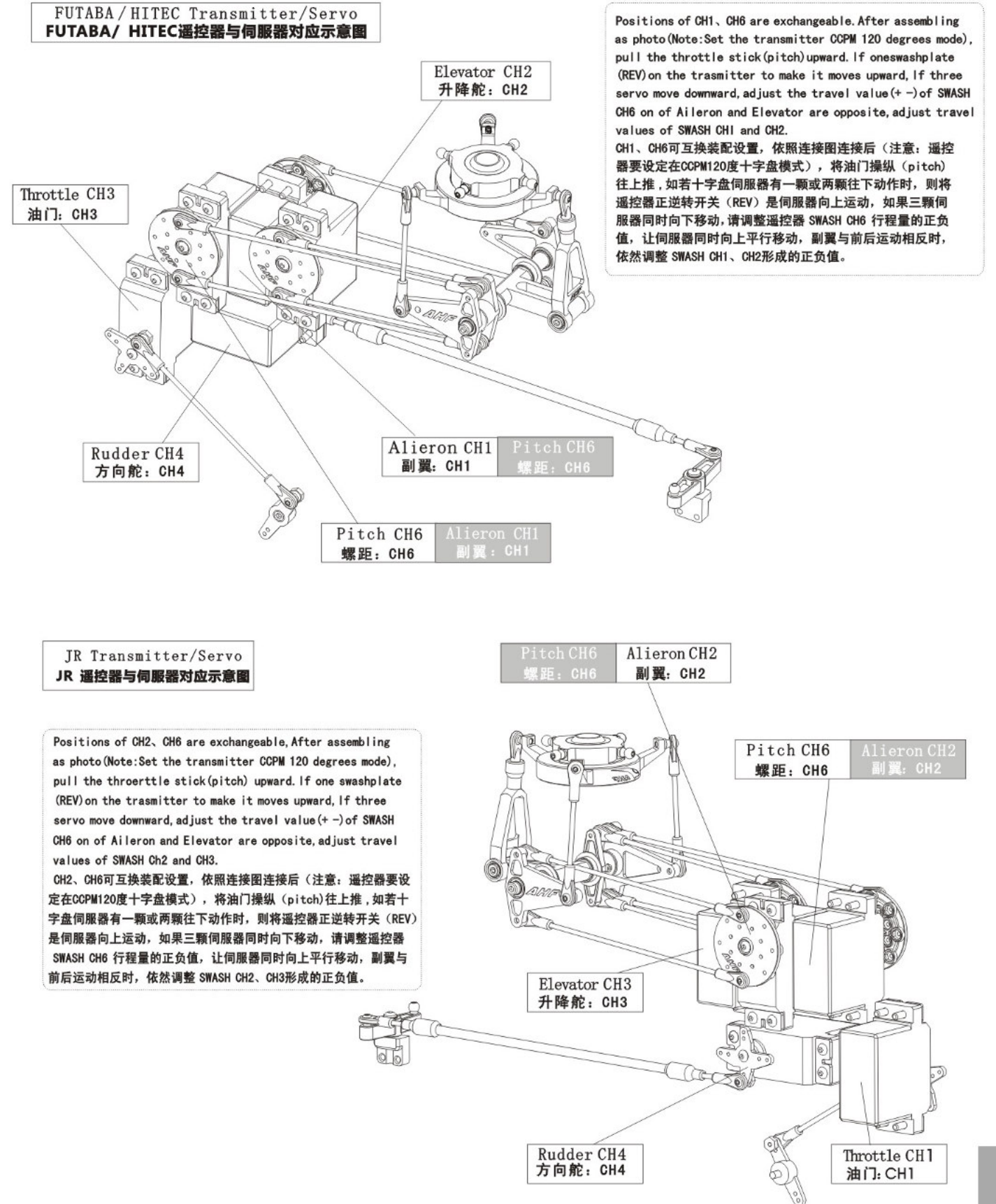
Lock washer  
止转垫圈

Socket screw  
圆柱头内六角螺钉  
M3×10mm

For original manufactory package, please check if screws are firmly secured and applied with some glue before every operation.  
原组装完成品每次飞行前,要确认螺丝是否已上胶,严防螺丝松动,导致事故的发生



### 8. Servo System Assembly 伺服系统装配组合



FUTABA/HITEC Transmitter/Servo  
FUTABA/HITEC遥控器与伺服器对应示意图

Positions of CH1, CH6 are exchangeable. After assembling as photo (Note: Set the transmitter CCPM 120 degrees mode), pull the throttle stick (pitch) upward. If one swashplate (REV) on the transmitter to make it moves upward, if three servo move downward, adjust the travel value (+/-) of SWASH CH6 on of Aileron and Elevator are opposite, adjust travel values of SWASH CH1 and CH2.

CH1、CH6可互换装配设置,依照连接图连接后(注意:遥控器要设定在CCPM120度十字盘模式),将油门操纵(pitch)往上推,如若十字盘伺服器有一颗或两颗往下动作时,则将遥控器正反转开关(REV)是伺服器向上运动,如果三颗伺服器同时向下移动,请调整遥控器SWASH CH6行程量的正负值,让伺服器同时向上平行移动,副翼与前后运动相反时,依然调整SWASH CH1、CH2形成的正负值。

Throttle CH3  
油门: CH3

Elevator CH2  
升降舵: CH2

Rudder CH4  
方向舵: CH4

Aileron CH1  
副翼: CH1

Pitch CH6  
螺距: CH6

Pitch CH6  
螺距: CH6

Aileron CH1  
副翼: CH1

JR Transmitter/Servo  
JR 遥控器与伺服器对应示意图

Positions of CH2, CH6 are exchangeable. After assembling as photo (Note: Set the transmitter CCPM 120 degrees mode), pull the throerttle stick (pitch) upward. If one swashplate (REV) on the trasmitter to make it moves upward, if three servo move downward, adjust the travel value (+/-) of SWASH CH6 on of Aileron and Elevator are opposite, adjust travel values of SWASH Ch2 and CH3.

CH2、CH6可互换装配设置,依照连接图连接后(注意:遥控器要设定在CCPM120度十字盘模式),将油门操纵(pitch)往上推,如若十字盘伺服器有一颗或两颗往下动作时,则将遥控器正反转开关(REV)是伺服器向上运动,如果三颗伺服器同时向下移动,请调整遥控器SWASH CH6行程量的正负值,让伺服器同时向上平行移动,副翼与前后运动相反时,依然调整SWASH CH2、CH3形成的正负值。

Pitch CH6  
螺距: CH6

Aileron CH2  
副翼: CH2

Pitch CH6  
螺距: CH6

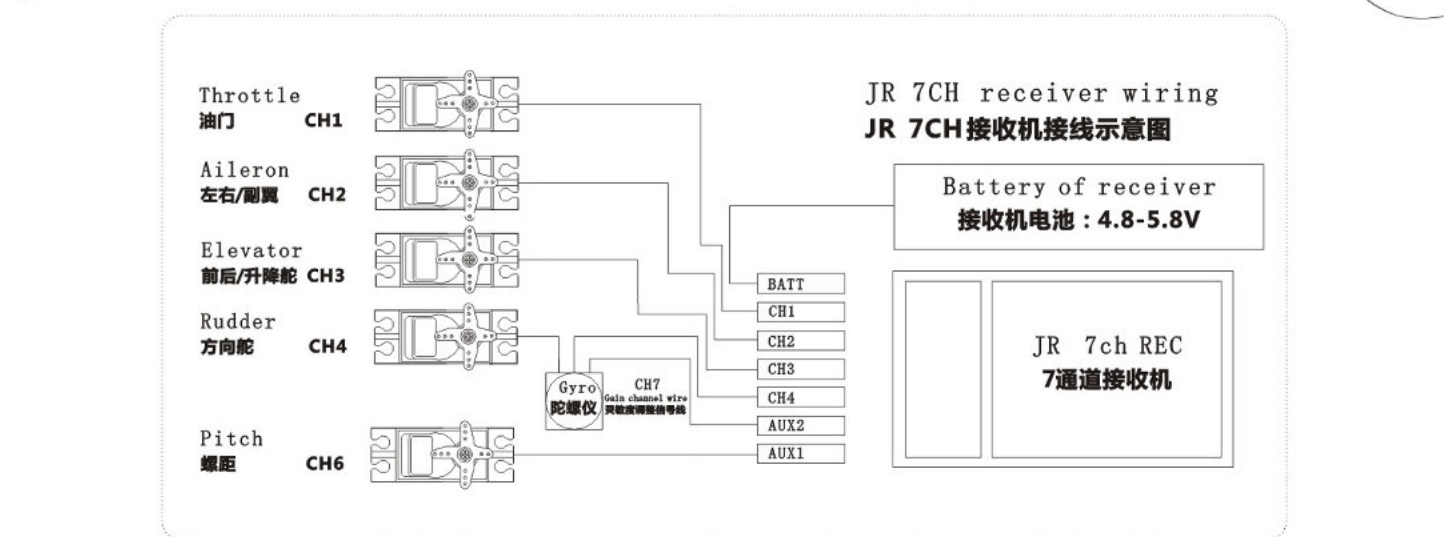
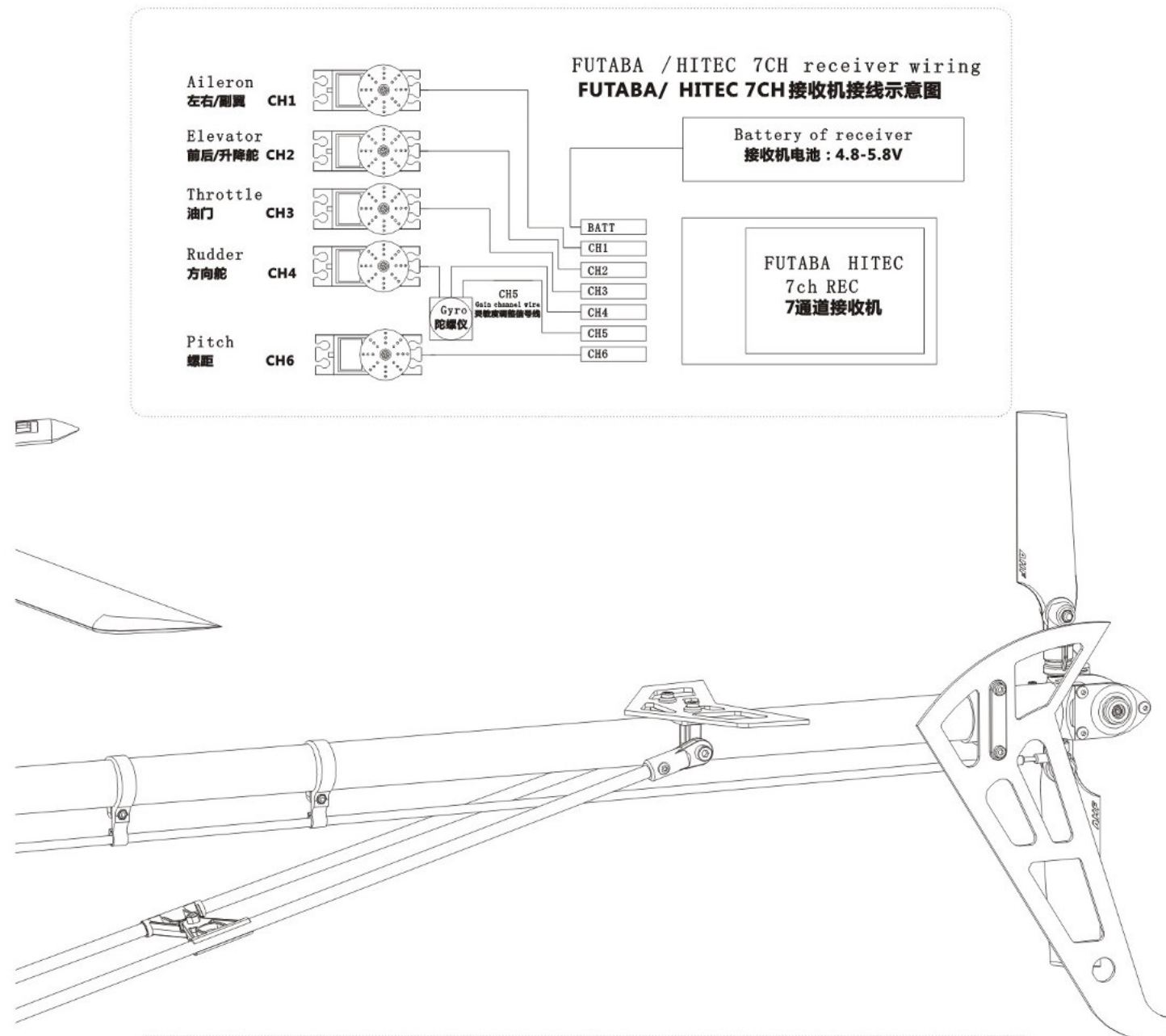
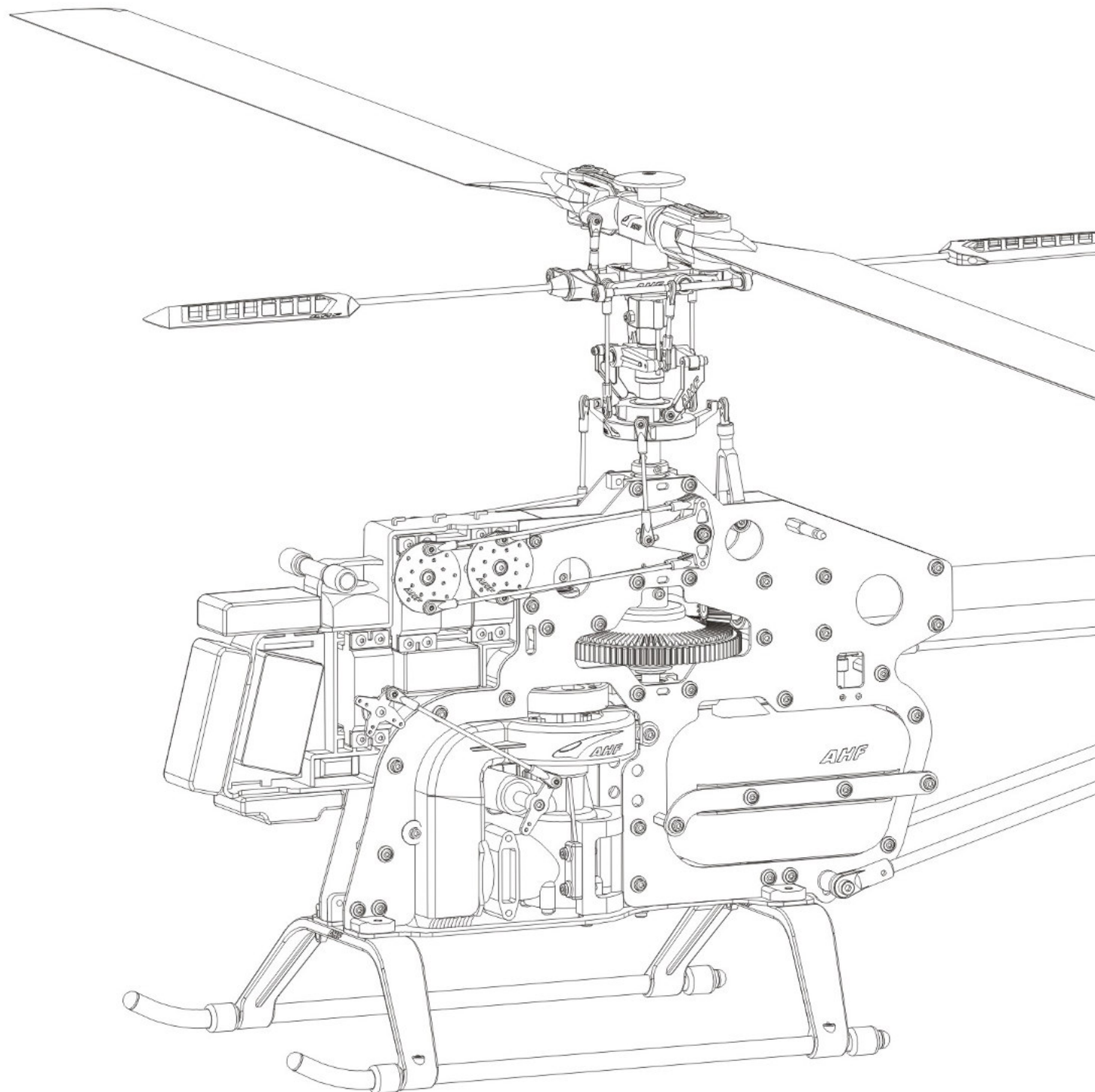
Aileron CH2  
副翼: CH2

Elevator CH3  
升降舵: CH3

Rudder CH4  
方向舵: CH4

Throttle CH1  
油门: CH1

### 9. Remote Control System Assembly R/C控制系统组合




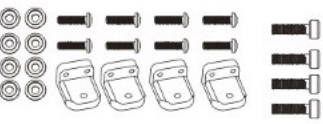
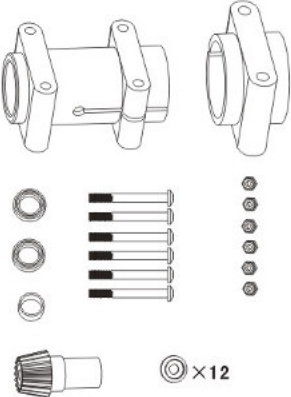
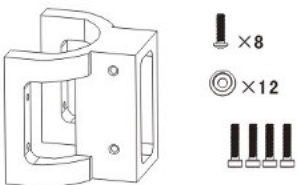


For original manufactory package, please check if screws are firmly secured and applied with some glue before every operation.  
原组装完成品每次飞行前,要确认螺丝是否已上胶,严防螺丝松动,导致事故的发生


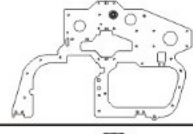
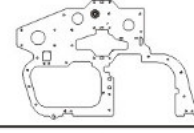


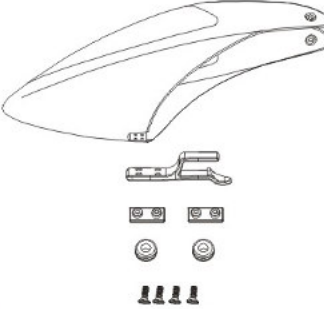



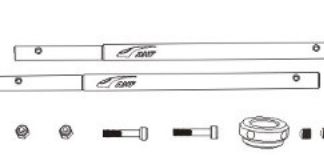


Double check your work after assembly. 已组装完成的部件,请务必再次确认。

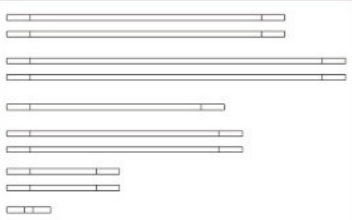
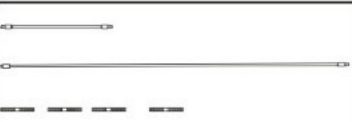
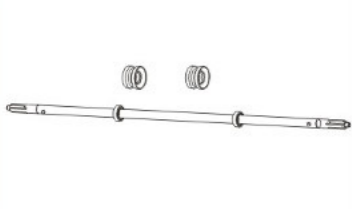

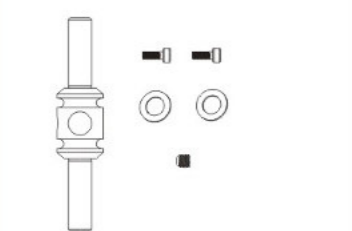
### III. REPAIR PARTS LIST VII-SV 零部件选购图表

Part 零件	Code No. 代码	Name 名称	Qty 数量	Remarks 备注
	A50V001	Carbon bottom plate 碳纤维底板	1	Carbon bottom plate 碳纤维底板
	A50V002	Fuel tank 油箱	1	Fuel tank 油箱
				Socket button head screw 平圆头内六角螺钉 M3×6mm×4
				Screw 螺钉 M3×25mm×4
				holder 支撑条×2
				Fuel tank guard 减震塞×4
				Hex mounting bolt 六方连接杆 L=26×2
				Hex mounting bolt 六方连接杆 L=18×4
Washer 垫圈 Φ3×Φ8×2mm×8				
	A50V003	Landing skid 脚架	2	Landing skid 脚架×2
	A50V004	Bottom plate connection group 脚架连接件	1	Washer 垫圈 Φ3×Φ8×2mm×8
				Socket button head screw 平圆头内六角螺钉 M3×10mm×8
				Bottom plate connection group 脚架连接件×4
				Screw 螺钉 M4×12mm×4
	A50V005	VII Metal tail boom mount 尾管夹座组	1	Metal tail boom mount A 尾管夹座 A
				Metal tail boom mount B 尾管夹座 B
				Screw 螺钉 M3×35mm×6
				Bearing 轴承 Φ12×Φ18×4mm×2
				Washer 垫圈 Φ12×Φ14×7mm×1
				Washer 垫圈 Φ3×Φ8×2mm×12
				Nut M3防滑螺帽×6
				Tail drive gear 尾传动齿轮
				Washer 垫圈 Φ3×Φ8×2mm×12
Nut M3防滑螺帽×6				
	A50V006	VII Metal engine mount 金属发动机座	1	Metal engine mount 金属发动机座
				Socket button head screw 平圆头内六角螺钉 M3×10mm×8
				Washer 垫圈 Φ3×Φ8×2mm×12
				Socket screw 圆柱头螺钉 M3×15mm×4
				Washer 垫圈 Φ3×Φ8×2mm×12

### III. REPAIR PARTS LIST VII-SV 零部件选购图表

Part 零件	Code No. 代码	Name 名称	Qty 数量	Remarks 备注
	A50V007	VII Carbon vertical stabilizer 碳纤维垂直翼	2	Carbon vertical stabilizer 碳纤维垂直翼×2
				Washer 尾波箱定位片×1
	A50V008	VII Carbon main frame (R) 碳纤维机身侧板(右)	1	Carbon main frame (R) 碳纤维机身侧板(右)
	A50V009	VII Carbon main frame (L) 碳纤维机身侧板(左)	1	VII Carbon main frame (L) 碳纤维机身侧板(左)
	A50V010	VII Main drive gear 主齿轮	2	Main drive gear 主齿轮×2
	A50V011	VII Autorotation tail drive gear 尾驱动主齿轮	1	Autorotation tail drive gear 尾驱动主齿轮×1
	A50V012	Canopy(carbon windscreen) 机头罩组	1	Canopy 机头罩×1
				Canopy nut 头罩固定卡×1
				Nut 塑胶固定螺母×2
				Canopy nut 机头罩固定胶圈×2
				Screw T3×7mm×4
	A50V013	VII Starter shaft 启动轴组	1	Starter shaft 启动轴×1
				Starter coupling 启动头×1
				Set screw 锥端紧定螺钉 M3×4mm×2
	A50V014	VII Clutch gear 引擎齿轮组	1	Clutch gear 引擎齿轮×1
				Clutch nut 锁紧螺帽×1
	A50V015	VII Tail boom 尾管	2	Tail boom 尾管×2
	A50V016	VII Main shaft 主轴	1	Main shaft 主轴×2
				Socket screw 圆柱头螺钉 M3×22mm×2
				Nut 防滑螺帽 M3×2
				Lock collar 主轴固定环×1
				Set screw 锥端紧定螺钉 M4×2

### III. REPAIR PARTS LIST VII-SV 零部件选购图表

Part 零件	Code No. 代码	Name 名称	Qty 数量	Remarks 备注
	A50V017	VII Servo linkage rods 整体伺服安装架连杆组	1	L=107mm×2
				L=129mm×2
				L=79mm×1
				L=85mm×2
				L=41mm×2
				L=19mm×4
	A50V018	VII Tail rotor linkage rods 尾旋翼连杆组	1	L=153mm×1
				L=625.8mm×1
				L=19mm×4
	A50V019	VII Troque tube 尾传动轴杆	1	Troque Tube 尾传动轴杆
				胶套×2
				Bearing 轴承 $\Phi 8 \times \Phi 14 \times 4\text{mm} \times 2$
				Set screw 锥端紧定螺钉 $M3 \times 10 \times 2$
				Linkage head 联轴器接头×2
	A50V020	VII Aileron lever 十字盘控制臂组	1	Aileron lever A 十字盘前控制臂A×1
				Aileron lever B 十字盘控制臂B×2
				Washer 垫圈 $\Phi 5 \times \Phi 7 \times 10.7\text{mm} \times 1$
				Washer 垫圈 $\Phi 5 \times \Phi 6.2 \times 1.6\text{mm} \times 2$
				Bearing 轴承 $\Phi 5 \times \Phi 9 \times 3\text{mm} \times 4$
				Set screw 锥端紧定螺钉 $M4 \times 4\text{mm} \times 1$
				Linkage ball 球头 $M3 \times 8.7 \times 8$
	A50V021	Tail rotor hub 尾旋翼固定轴	1	Tail rotor hub 尾旋翼固定轴×1
				Socket screw 圆柱头螺钉 $M3 \times 8\text{mm} \times 2$
				Washer 垫圈 $\Phi 3 \times \Phi 8 \times 1\text{mm} \times 2$
				Set screw M4紧定螺钉×1