

co-axial  
Easy control happy flight

# LAMA V3



#### Specification

Main rotor diameter:340mm  
Weight:215g  
Length:360mm  
Power system:180 motor\*2  
KIT/ARF/RTF:RTF  
Transmitter:Standard 4CH  
Mix controller:4in1 controller(W/gyro,mixer,ESC,receiver)  
Servo:8g,1.3kg.CM,0.12s/60°  
Battery:7.4V 800mAh Li-polymer battery

#### Product introduction

The design of lama V3 adopts coaxial and counter-rotating system which is fitting to the indoor flight. The design characters are easy flying, simple operation and it can fly after charging. 4in1 controller gathers four functions of mixed controlling, electric speed controller, gyro and receiver, which is convenient to the adjustment and maintenance of the helicopter. The design of swing hammer enhances the stability and balance of the flight, which can be easy for the beginners to master the basic flight skills in a short time. The improved tail rack will be more firm. With two superior 180 motors and one 7.4V Lithium battery, the flight power will be more abundant and the flight time will be much longer. It can finish easily the performance of quick rotation, hanging in the air, hovering and so on. The flight in the air is like aerial strolling, you can share the pleasure from the flight as much as you like

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**E\_sky**®



### 产品介绍

Lama v3 设计采用共轴反转双桨系统,适宜在室内飞行,设计特点是:容易飞行、简单操作,打开包装只要进行简单的充电就可以进行飞行。四合一控制器 集合了(混控、电子调速器、陀螺仪、接收机)的功能,方便了直升机的调整和维修,摆锤的设计提高了直升机飞行的稳定性和平衡性,可以使初学者在短时间内学会飞行掌握飞行的基本技巧。改良的尾架更加的牢固,可爱的尾旋翼可以在飞行中迎着气流自由旋转。使用两颗优质的 180 马达和 7.4 V 的锂电池使直升机的飞行时间更加长久,飞行动力也更加的充沛,可以轻松自如的在空中完成快速自转、悬停、盘旋等各种航线飞行,在空中的飞行犹如空中漫步,让您尽情的享受飞行带来的乐趣!

软质的塑料起落架,很好的保护起升机的起落。四合一装置.起平衡和稳定作用的摆锤;可拆装的电池盒,可以将电池牢牢的固定在直升上;软质韧性脚架,可以有效保护起降。

### 包装内发射机及充电配备

Transmitter and charging equipments in t



发射机 Transmitter



电源适配器 Power supply



充电器 Charger



主旋翼 Plastic blade



电池 Battery

### 直升机起飞步骤

The operation guide before fly



1. 电池充电 Charging battery



2. 安装电池 Loading battery



3. 打开发射机 Power on transmitter

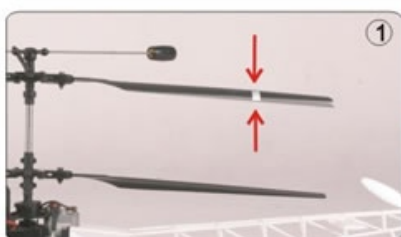


4. 接通电源 Connecting battery



5. 绿灯显示待飞 The green led indicates ready to fly

### 主旋翼攻角的调整 (Main blade angle of attack adjustment):



(1) 主旋翼旋转不在同一平面 Main blades don't rotate in one plane.



(2) 主旋翼攻角调整方法 Adjustment way to angle of attack of main blades.



(3) 主旋翼旋转在同一平面 Main blades rotate in one plane.

### 自备工具 Facilities self-contained



尖嘴钳 Long nosed pliers



EK1-T001 六角螺丝刀 Hexangular Screwdriver



EK1-T006 十字螺丝刀 Cross Screwdriver

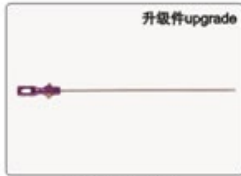


EK1-2127 "L"型六角螺丝刀 "L" Screwdriver



剪刀 Scissors

## LAMA 升级件



EK5-0206  
中心座组  
Central hub and shaft  
set(upper)



EK5-0207  
下中心座组  
Bottom Central holder Set



EK5-0209  
倾斜盘组  
Swashplate set

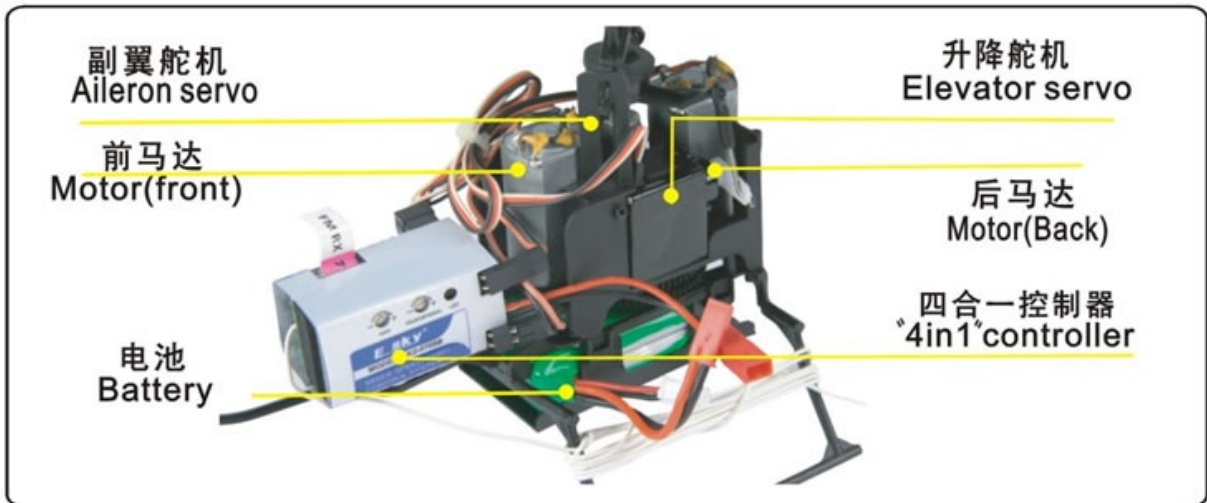


EK5-0210  
夹片组  
Mainblade grip set

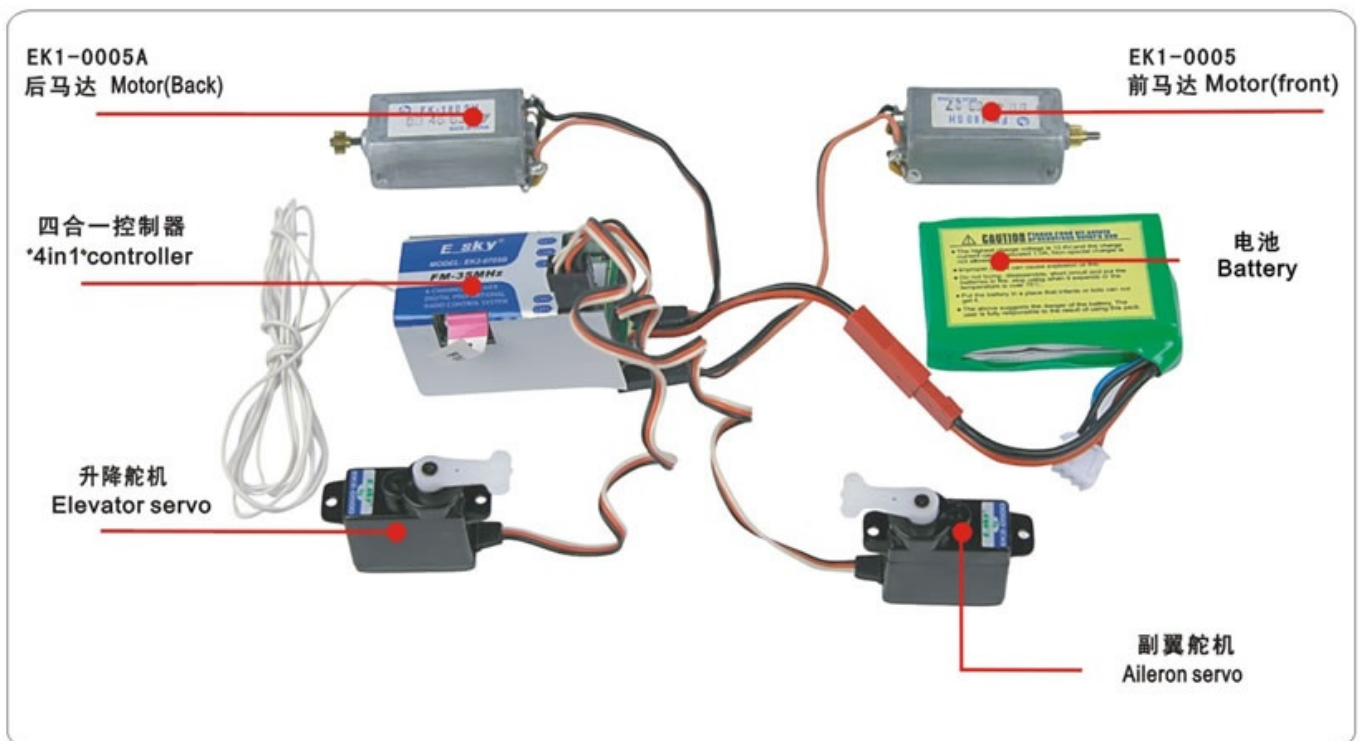


完成  
Completed.

## 机体局部设备示意图: Construction schematic diagram to inner equipments



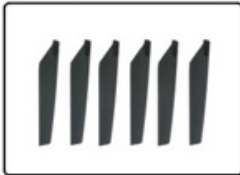
## 内部设备结构示意图 Connection schematic diagram to inner equipments



# 组件彩图 Spare parts picture

**E\_sky®**

EK1-0312



主旋翼A  
Plastic blade A

EK1-0313



主旋翼B  
Plastic blade B

EK1-0314



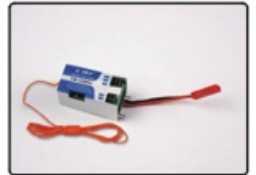
稳定锤  
Stabilizer set

EK1-0315



主旋头A  
Inner shatfA

EK2-0705B



四合一  
"4 in 1" controller

EK1-0316



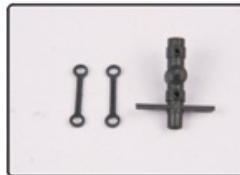
齿轮和轴设置B  
Gear & shaft B

EK1-0317



旋转夹头  
Main blade grip set

EK1-0318



主旋头B  
Inner shatfB

EK1-0319



倾斜外盘  
Swashplate set

EK2-0500



8克伺服器  
8g Servo

EK1-0320



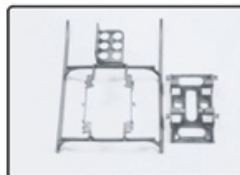
机架 Main frame

EK1-0321



齿轮和轴设置A  
Gear & shaft set A

EK1-0322B



滑撬和电池架  
Landing skid

EK1-0323



机头仓 Cabin

EK2-0903



适配器  
Switching adapter

EK1-0324



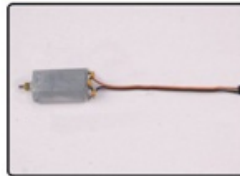
轴承固定套  
Bearing set collar

EK1-0325



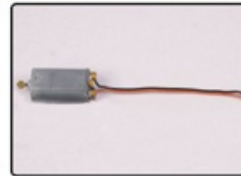
拉杆 Bell link

EK1-0005



180前马达180# Motor

EK1-0005A



180后马达180# Motor

EK2-0404



发射机 Transmitter

EK1-0328



4\*8\*3轴承 Bearing4\*8\*3

EK1-0218



2\*6\*3轴承  
Bearing2\*6\*3

EK1-0222



固定工具  
Mounting accys & wrech

EK1-0181



锂电 Li-polymer  
battery 7.4V800mAh

EK2-0851



充电器 Charger

EK1-0326



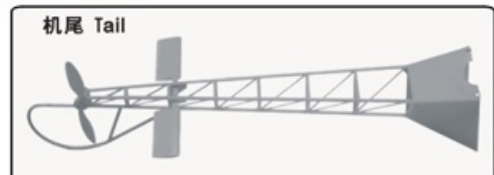
五金配件  
Hardware set

EK1-0327Y



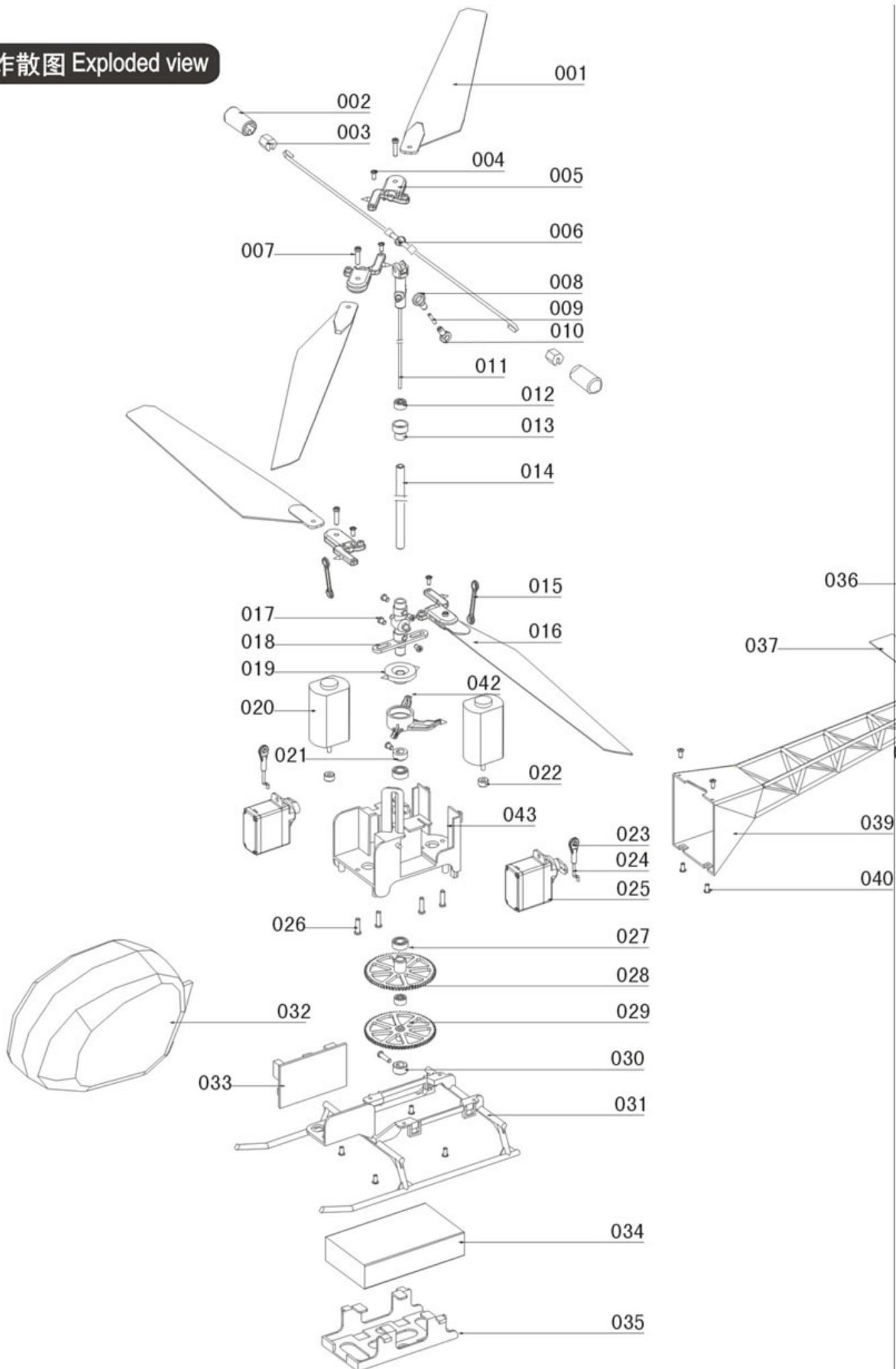
机尾 Tail

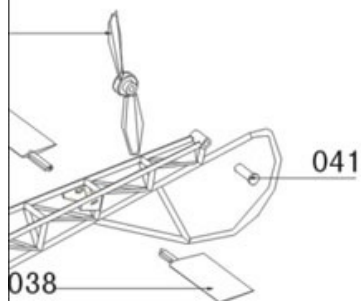
EK1-0327S



机尾 Tail

机体炸散图 Exploded view





Item Number	Description	Qty need
001	Plastic blade A 主旋翼A	2
002	Stabilizing weight 稳定锤	2
003	Balance weight 配重块	2
004	Screw(TWB1.7*4) 螺丝	4
005	Main blade grip set 主旋翼夹头组	4
006	FlyBar 平衡杆	1
007	Screw(M2*8) 螺丝	4
008	Control link A 拉杆A	1
009	Threaded bar (M1.4*8) 无头螺杆	1
010	Control link B 单孔拉杆B	1
011	Inner shaft A 主旋头A	1
012	Bearing2*6*3 轴承	2
013	Frame Bearing 机身轴承	1
014	Main Bearing B 轴承B	1
015	Plastic blade B 主旋翼A	2
016	Plastic blade B 主旋翼B	2
017	Screw(ISO2*2.5) 螺丝	5
018	Inner shaft B 主旋头A	1
019	Inner swashplate 内倾斜盘	1
020	Motor 180 180马达	2
021	Fix collar 固定座	1
022	Copper pinion 铜座	2
023	Push-rod head 拉杆头	2
024	Push-rod 拉杆	2
025	Servo 伺服器	2
026	Screw(ISO2*4) 螺丝	5
027	Bearing 4*8*3 轴承	2
028	Main gear B 齿轮组B	1
029	Main gear A 齿轮组A	1
030	Gear fix collar 齿轮固定座	1
031	Landing skid 滑撬	1
032	Cabin 机壳	1
033	^4in1^controller 四合一	1
034	Battery 电池	1
035	Battery frame 电池架	1
036	Tail blade 尾翼	1
037	Right balance blade 右平衡翼	1
038	Left balance blade 左平衡翼	1
039	Tail frame 尾机身	6
040	Screw(TPB 1.7*4) 螺丝	8
041	Tail blade shaft 尾翼轴	1
042	Outer swashplate 外倾斜盘	1
043	Main frame 机架	1

## 双桨系列的安装 Assembly for Co-axial helicopters



1. 没装升级件之前  
Before assembling the upgrade parts.



2. 将倾斜盘装入主轴  
Install the swashplate on the main axle.



3. 下中心座组装入主轴  
Install the bottom central holder set onto the main axle.



4. 夹头片锁紧  
Lock up the grip set.



5. 夹头片装在下中心座组上用螺丝锁紧  
Install the grip set onto the bottom central holder set and lock it up with the screws.



6. 固定环装上主轴  
Install the retainer ring on the main axle.



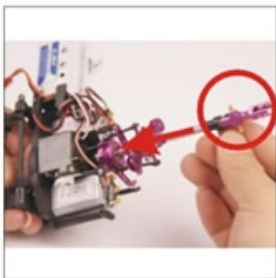
7. 双孔连杆连接倾斜盘与旋转夹头  
Connect the swashplate and main blade grip set with the ring-like push-rod.



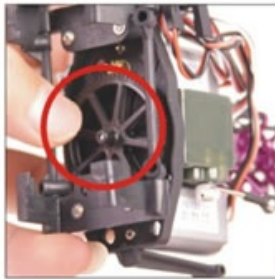
8. 伺服器摆臂上的拉杆头与倾斜盘连接  
Connect the push-rod on the servo horn with the swashplate.



9. 调整倾斜盘和下中心座组位置与伺服器摆臂平行即可  
Adjust the swashplate and bottom central holder set, make it parallel with the servo horn.



10. 中心座组装入主轴  
Install the central hub set onto the main axle.



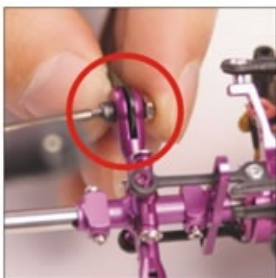
11. 主齿轮装入中心座组  
Assemble the main gear on the central hub set.



12. 齿轮固定环锁紧主齿轮  
Lock up the main gear with the gear retainer ring.



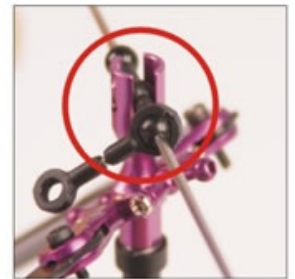
13. 夹头片装上中心座组并用螺丝锁紧  
Install the grip set on the central hub set and lock it up with screws.



14. 主旋翼B装上夹头片并用螺丝锁紧  
Install the grip set on blade B and lock up with screws.



15. 主旋翼A装上夹头片并用螺丝锁紧  
Install the grip set on blade A and lock up with screws.

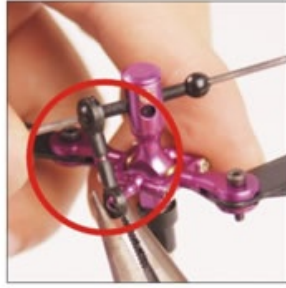


16. 稳定锤装上中心座组  
Install the stabilizer set on the central hub set.

## 双桨系列的安装 Assembly for Co-axial helicopters



17. 锁紧稳定锤  
Lock up the stabilizer set.



18. 单孔拉杆与主翼夹头连接  
Connect the control link with the main blade grip set.



19. 装好之后图  
Assembled.



升级件Upgrade

EK5-0209  
倾斜盘  
Swashplate



升级件Upgrade

EK5-0207  
下中心座组  
Bottom Central holder set



升级件Upgrade

EK5-0210  
夹头片  
Mainblade grip set



升级件Upgrade

EK5-0206  
中心座组  
Central hub and shaft set(upper)