

## 簡介 / INTRODUCTION

感謝您選購明達科技MD直升機產品，為了讓您更方便更順暢的操作此型直昇機，懇請您詳細的閱讀完這本說明書在進行組裝，並且請您妥善保存這本說明書、為往後進行調整以及維修之參考。

這台MD型直昇機是由明達科技企業社所自行研發的新機種，不論你是穩定的飛行或是追求性能3D飛行愛好者，MD將實現並帶領您進入飛行之夢想。

Thank you very much for choosing MD Helicopter. In order to assembly correctly and get the best performance, please read the manual carefully before assembly. Please keep the manual for reference when you do the fine tune or repair in the future.

The MD Helicopter is the brand new series of Ming Da Helicopter. It has been developed by Ming Da Technology team through precise process of design and thousands of intensive tests. No matter your requirement is stable or high performance 3D aerobatics, MD Helicopter is your best choice.

## 警告事項 / CAUTION

本項遙控直昇機產品並非一般玩具，嚴禁16歲以下青年與孩童使用，它是結合了許多高科技產品所設計製作出來的，而因組裝、調機、及操作上的不熟悉，都會導致自身或他人的傷害，發生這些傷害時製造公司是免於承擔責任的，所以飛行前請勿輕忽並注意自身及他人安全。模型商品屬於操作技術且為消耗性商品，如經拆裝使用後，而造成零件損耗商品不良或對產品不滿意，本公司無法於保固條件內更換新品或退貨，而若遇操作維修問題，本公司全省經銷商將提供免費技術指導、優惠零件 供應服務。

This MD RC Helicopter is not a toy, it is prohibited for ages under sixteen. As it is intergraded with many hi-tech electronic and mechanical parts, improper assembly, setup as well as operation will possibly injure the user or other people. Please ask professional hobby shop or experienced users to help you doing the final check of assembly and setup, and be cautioned to follow your local safety operation requirements. Manufacturer will take no liability of injuries if products are not properly assembled, setup or operated. RC Helicopter is an expendable product. Once consumers start to use, the parts will possibly start to attrit, and will not accept any replacement or return requirement. In case of repair requirements, please contact our authorized dealers. They will provide free technical support of repair as well as parts supply services at applicable good discount price.

## 飛行安全注意事項 / Safety Rules

遠離障礙物 / Keep away from Buildings, Trees, and Power Towers

遙控直昇機飛行時具有一定的速度，相對的也潛在著一點危險性，飛場的選擇是非常重要的。首先必須注意周遭有沒有人、高樓、建築物、高壓電線、樹木等等。避免操控不當而造成自己與他人財產上損壞。初次練習時，建議選擇在空曠場地並可適當搭配練習架練習飛行，這將會大幅降低飛行時所造成的損失。請勿在雨天、打雷等惡劣天候下操作，以確保本身及機體的安全。

As RC Helicopter flies at demanding speed, it is dangerous when crashed. Thus, fly field becomes very important. It is important to keep away from people, buildings, trees, and power towers. It is particularly essential to avoid improper operation to prevent from hurting people or any damages to private properties. It is recommended to select a wide fly field and use wide safety landing bracket for the first flight. This will reduce the risk of unexpected damage. For the safety consideration, please do not fly at the bad weather of raining and thunder.

#### 避免獨自操控 / Avoid to fly alone

至飛行場飛行前，需確認是否有相同頻率的同好進行飛行，相同頻率的發射機一同開機將導致無法控制的危險。

遙控飛機操控技巧在學習初期有著一定的難度，要儘量避免獨自操作飛行，需有經驗的人士在旁指導才可進行操作，作為一個稱職的遙控直昇機飛行員、必須要有安全的觀念與負責任的態度、(勤練電腦模擬器是入門的最佳選擇)。

It is essential to confirm whether there is any one takes the same frequency transmitter as yours before flight or switch on your transmitter. If the transmitters with the same frequency are switch on, it will interfere with each other and cause failure of control function. As the control of Helicopter is difficult, it is important to have good experienced pilot to assist and avoid operation alone. Being a good pilot of RC helicopter, the concept and responsibility of keeping safety rule is the most important issue. It is highly recommended to practice pilot skill by using PC flight simulation application software.

#### 遠離運轉中零件 / Keep away from Rotating Parts

當遙控直昇機主旋翼與尾旋翼運轉時，必須確認飛行地點不會有接觸到主/尾旋翼的情形發生，且勿觸摸並遠離任何物件，以免造成危險及損壞。

It is important to make sure there is nothing near the running area of Main Rotor and Tail Rotor. To avoid from any dangers, please keep away from the Helicopter when the Main Rotor and Tail Rotor are rotating.

#### 遠離潮濕環境 / Keep away from Humidity

直昇機內部是由許多精密的電子零組件所組成，必須絕對的防止潮濕或水氣，避免在浴室

或 雨天時使用，以免水氣進入機身內部而導致故障或引發不可預期的意外!

As the Helicopter contains of many precision electronic parts, it is absolutely essential to keep away from humidity or aqueous vapor. In order to prevent from any damaging to the electronic parts caused by humidity, it is strictly prohibited to operate the helicopter at bath room or in raining days.

#### 遠離熱源 / Keep Away from Heat Source

遙控直昇機多半是以POM或尼龍、電子商品為主要材質，因此要儘量遠離熱源，以避免因高溫而變形的可能。

As many parts of RC Helicopter are made of Polyoxymethylene (POM) or Nylon, some are made of precision electronic components, it is absolutely essential to keep away from heat source to prevent from deform or damage of the parts.

遵從以上之幾點安全事項，將可讓您沉醉在飛行的樂趣中！

Following the above safety guild lines, you will be able to enjoy the flight.

#### 一般保養方法 / Regular Maintenances

##### 請定期檢查 / Regular inspection

電動遙控直昇機為精密零組件構成之精細模型商品、所以飛行者須注意確保各控制組件及機構之性能良好，使能發揮優異穩定飛行特性，如果您的維護不當，飛行時將可能導致意外或任何損失，建議您注意養成直昇機定期檢查的習慣，以確保讓您的愛機隨時保持於最佳性能。

Electrical Helicopter consists of precision parts and components. In order to keep the helicopter with good and stable performance, pilot should always keep all the parts and components in good condition. If there is any worn or damaged parts caused by the lack of good maintenance, the helicopter might crash or not able to function properly. It is essential to do the regularly inspection of parts which is the key to keep you helicopter in good condition.

#### 主旋翼檢查重點 / Key check points of Main Rotor

##### 1. 主旋翼固定座 / Main Rotor Housing :

當主旋翼運轉發生異常時、飛行當中會發生明顯不明的震動情形，請檢查主旋翼、橫軸、主軸是否有變形或平衡不良，必要時請將主旋翼頭固定座更新。

If there is any unusual rotation of the Main Rotor, or unusual vibration on the fly, please check Main Blade, Feathering Shaft, and Main Rotor Shaft regards of the balance condition or deform situation. Please replace with a new Main Rotor Housing in case of needed.

##### 2. 主旋翼緩衝墊圈 / The main rotor rubber damper :

緩衝墊圈長期使用會發生彈性疲乏，會影響飛行穩定性此時建議更新。

The elasticity of rubber damper will be getting worse after certain period of use. Replace the rubber dampers if the stability of fly becomes worse caused by bad elastic rubber dampers.

### 3. 主旋翼夾座/ Main Rotor Holders :

主旋翼夾座一般飛行前雖然確認過螺距，但實際飛行時仍需增加螺距行程才足夠使用，如果飛行時升降動作遲緩情形；檢查重點包含了主旋翼本體是否有變形、軸承是否有損壞、以及球頭、軸承是否有明顯間隙、軸承鋼珠是否有脫落，如有上述情況均需要更換新品。

Although the pitch movement of the Main Rotor Holders has been checked on the ground, it might need to increase the movement of pitch after test of fly. If you encountered slower response of elevator or aileron on the fly, you should inspect if there is any deform of Main Rotor Holders, abrasion of bearings, gap of Linkage Balls and Ball Links, ball missing of bearings. Replace new parts if any of the above mentioned problems encountered.

注意/ Notice :

飛行前主旋翼必須詳細的做好動平衡的動作，並請修正雙槳不良情況，以提昇升力效能，注意因平衡不佳的震動將各導致零件損壞與鬆脫。

The Main Blades have to be well balanced before installation. In order to get the best thrust, adjust pitch control linkage rods to keep blades rotating on the same surface. Any vibrations caused by poor balanced of the Main Blades will attrit or damage parts, and cause loosen of connected parts.

### 5. 十字盤組/ Swashplate :

當十字盤組發生嚴重虛位時，會導致停懸時穩定性能不穩定、操控性能也會劣化，並可能發生不明原因的雙槳現象，嚴重時必須更新。

When clearance of the Swashplate becomes bigger, hovering will become unstable and the control will become inaccurate, the main blades will sometimes unable to rotate at the same surface. Replace a new Swashplate if you encountered the above mentioned problems.

## 機身組檢查重點/ Key check points of the fuselage

### 1. 主軸軸承/ *Bearing of the main shaft* :

主軸軸承經長期重負載運作、正常飛行約 100 趟後必須檢查反部軸承性能狀況，建議更換新品維持運作順暢度，但是若經常進行激烈的 3D 飛行或嚴重撞擊、建議您必須時常檢查主軸軸承，當發現主軸軸承有明顯的間隙、異音或是轉動有明顯的阻礙都必須更換新品。

The bearings of the main shaft are always worked under heavy load. It

is essential to check them after every each 100 flights. It is recommended to replace them with new ones after 100 flights. Please check these bearings more frequently if you fly more extreme 3D maneuvers or there is any crash. Please replace new bearings if there is any unusual rotation sound, bigger gaps or unsmooth rotation.

## 2. 單向軸承組 / One-way Bearing Set :

單向軸承組並不常發生損壞的情形，但是為了保持良好順暢的運作、建議您約 50 趟的週期當中 請拆下來清潔與上油。

One-way Bearing Set is not an easy worn component. In order to keep it in good operation condition, it is recommended to disassemble it and do the cleaning and lubricating jobs every each 50 flights.

※如果發生主齒輪明顯晃動，請立即更換單向軸承套。

Please replace new One-way Bearing set in case there is any unusual fluctuation of the main drive gear.

## 3. 尾傳動齒輪 / Torque Tube Drive Gear Set :

尾傳動齒輪雖然採用高強度塑膠、長時間使用時仍然會產生磨損的現象、請 隨時檢查齒輪磨損狀況，當齒輪間隙過大時請更換新齒輪,以維持良好的尾舵控制。

Although the Torque Tube Drive Gears are made of industrial high strength durable material, they will still be attrite for a long time and depend on intensity of the uses. In order to keep accuracy control of the tail, please check the abrasion situation regularly. Please replace the worn gears with new gears if the gaps between the gears becoming larger than its allowable tolerance.

## 控制桿拉桿組檢查重點/ Key check points of all Linkage Rods and Linkage Balls

控制連桿、控制臂連接座、升降舵連接座主裝時請特別注意各連接部位需保持滑順且盡量減少軸向左右搖晃間隙、此要點將嚴重影響飛行穩定性能各連接桿如因墜機損壞之外、因自然磨損或是因飛行場地惡劣因素也會發生磨損或鬆脫的情形，當您發現任何連接桿發生間隙、或是輕推既可脫出、建議您立即更新，確保飛行性能與安全。

During assembly of all the Linkage Rods and Linkage Balls of the helicopter, it is important to make sure all the Balls and the Ball Links are able to move smoothly with correct clearance without unusual gaps. Condition of all the Balls and the Ball Links affects fly stability and performance of the helicopter significantly. In order to keep good condition and good fly performance as well as safety fly, it is essential to

check the clearance of the Balls and the Ball Links particularly after crash or long-time abrasion by dusts or sands. Replace Balls and Ball Links if the clearance is bigger than allowable tolerance as which might cause loosen between Balls and the Ball Links.

#### 尾旋翼系統檢查重點/Key check points of the Tail Torque Assembly

##### 1. 尾齒輪組/ Torque Tube Drive Rear Gear Set :

尾齒輪組請注意尾旋翼軸承的檢查，當您發現軸承有明顯的間隙時請更新，避免軸承咬死，並請注意尾螃蟹爪不可將它鎖死、必須能保持順暢運動以免發生塑膠件熔化的情形。

Please pay special attention to the bearing checking. Once the gap of bearing becomes larger than allowable tolerance, replace new bearing. The abrasion situation of the gears also needs to check, replace new gear in case the gear is seriously worn and affects smooth rotation of any gear.

##### 2. 尾旋翼控制滑座/ Tail Pitch Assembly :

當您於草地飛行時，請注意檢查尾旋翼滑座，是否有發生落地時捲入雜草的狀況，若有必須立即將它清除再進行下一次飛行，否則可能會因為雜草纖維阻礙運作、造成尾旋翼控制失常的情形，平常保養盡量避免使用潤滑油於外部機構，避免沾染灰塵等雜物、嚴重時甚至會發生其他部位軸承磨損及尾旋翼滑座無法運作的情形。

When fly at the meadow, please check Tail Pitch Assembly to see is there any grass enmeshed after each landing. Clean the Tail Pitch Assembly before a new fly in case there is any grass enmeshed. Fail to clean the grass might cause unable to control to the tail as grass will create resistance and affect the smooth movement of the Tail Pitch Assembly. It is important that not to apply any lubricating oil to the Tail Pitch Assembly as it will stick dust and cause abrasion of the bearing, and affect the smooth movement of the Tail Pitch Assembly.

##### 3. 尾旋翼固定座 / Tail Torque Tube Unit :

尾旋翼固定座、飛行約 50 趟左右請拆卸進行清潔保養，確認軸承間隙是正常、如轉動不順或間隙過大請更換軸承、確保控制系統完善。

Please disassembly Tail Torque Tube Unit to do the cleaning and inspection jobs every each 50 flights. In order to keep tail control in good condition, replace new bearing if the gap of bearing is bigger than allowable tolerance, or the bearing is worn or damaged.

##### 4. 尾旋翼/ Tail Blade

飛行時發生觸地的情形請立即檢修，若發現尾旋翼有明顯的外觀損傷時請立即更

換、以避免發生尾部震動並因此損傷其它零件；確保飛行品質。

In any occasion that tail blades touched the ground during the fly, users should inspect the tail blade right after landing. In order to prevent from unusual vibrations which will cause abrasion or damages to other parts, please replace tail blade if there is any damage. This will maintain good condition of the Helicopter and good performance on the fly.

注意！螺絲鬆動將導致不可預期意外，請務必定期檢查鎖固。

Caution: Any loosen bolt/screw might cause malfunction, damage, or crash of a RC Helicopter. Please check all of the bolts/screws regularly, and fasten the loosen bolts/screws immediately.

## 自備遙控及電子設備



發射機六動以上  
直升機模式遙控器



接收機六動以上



馬達電子變速器120A以上



3軸陀螺儀



動作控制標準伺服X3  
尾舵控制標準伺服X1

## 建議動力系統



700型無刷馬達



鋰電池22.2V/X2

## 自備工具



剪刀



刀子



潤滑油



防鬆膠



快乾膠



斜口鉗



尖嘴鉗



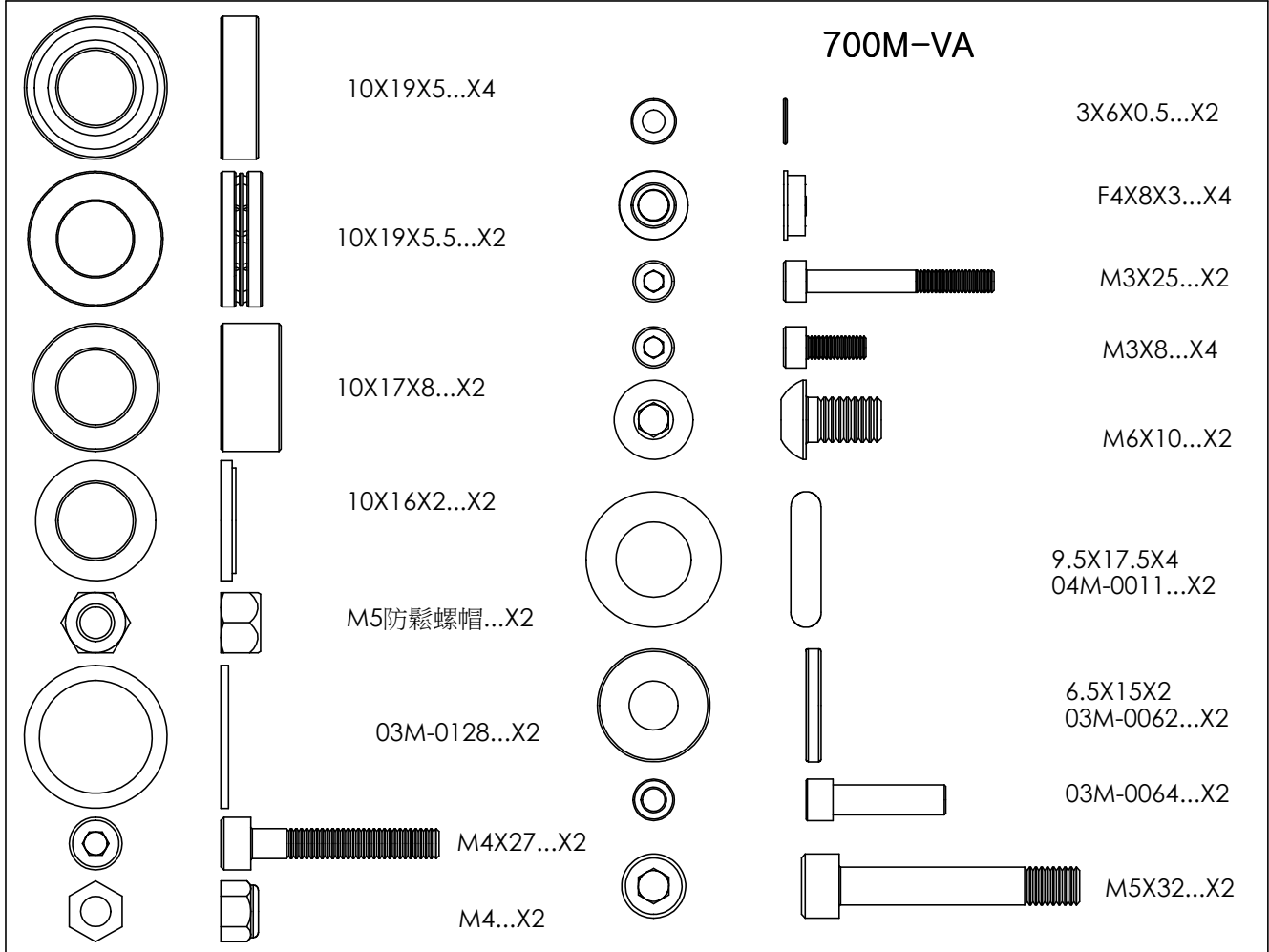
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十字起子



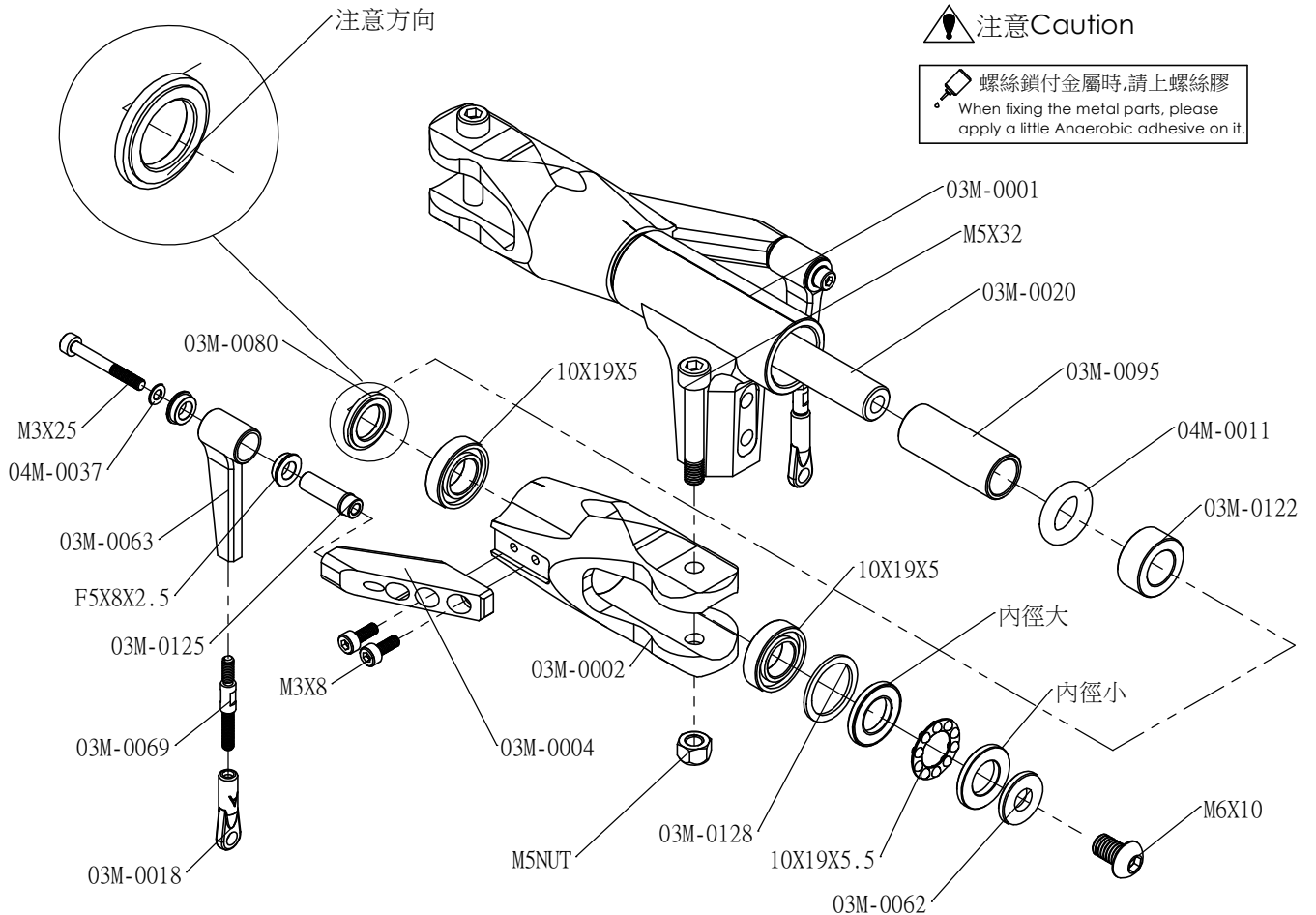
## 700M-VA



注意方向

注意Caution

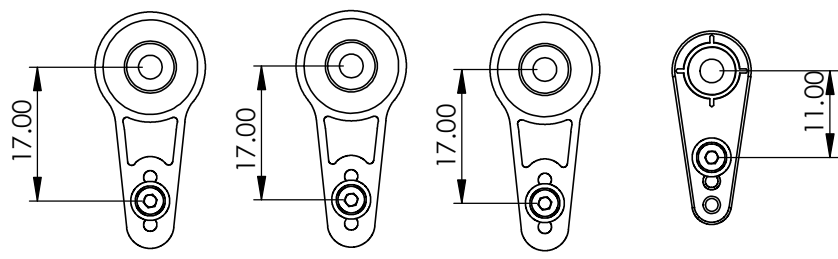
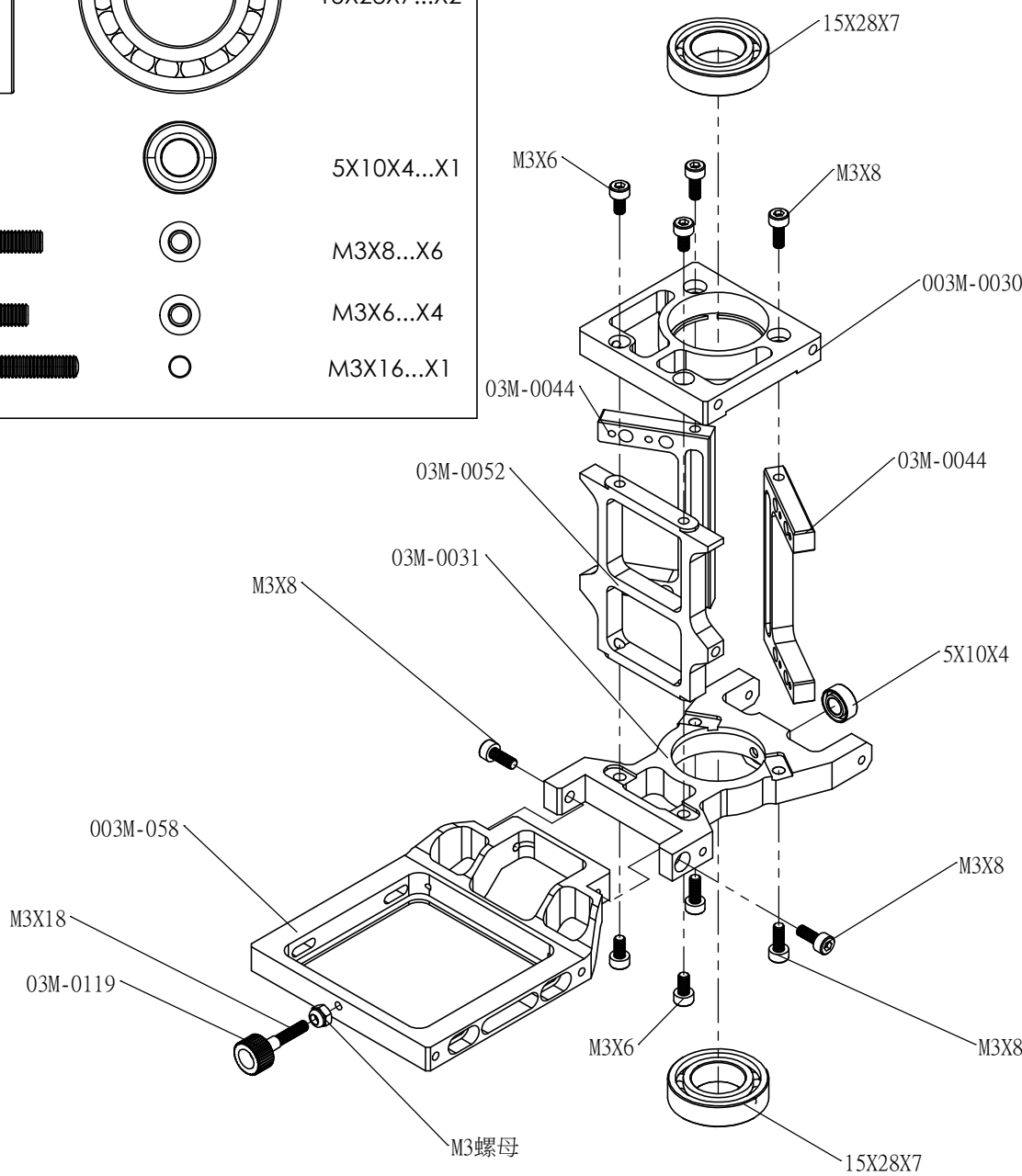
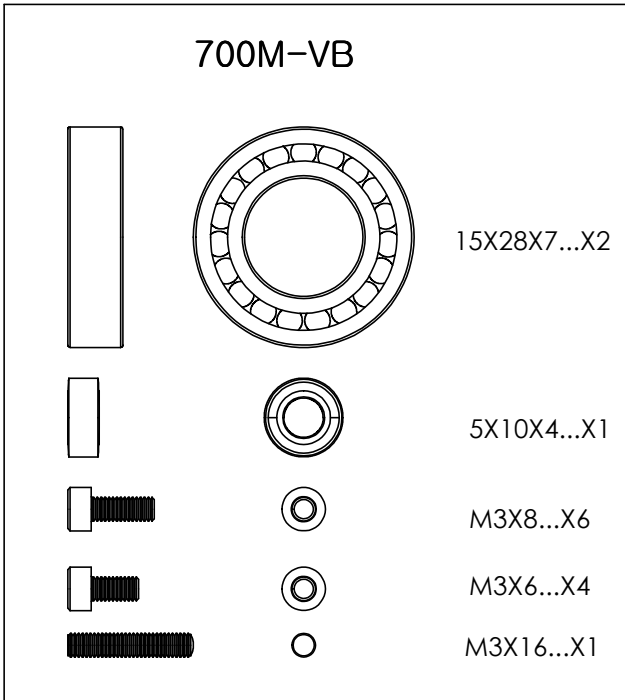
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When fixing the metal parts, please apply a little Anaerobic adhesive on it.




## 700M-VB

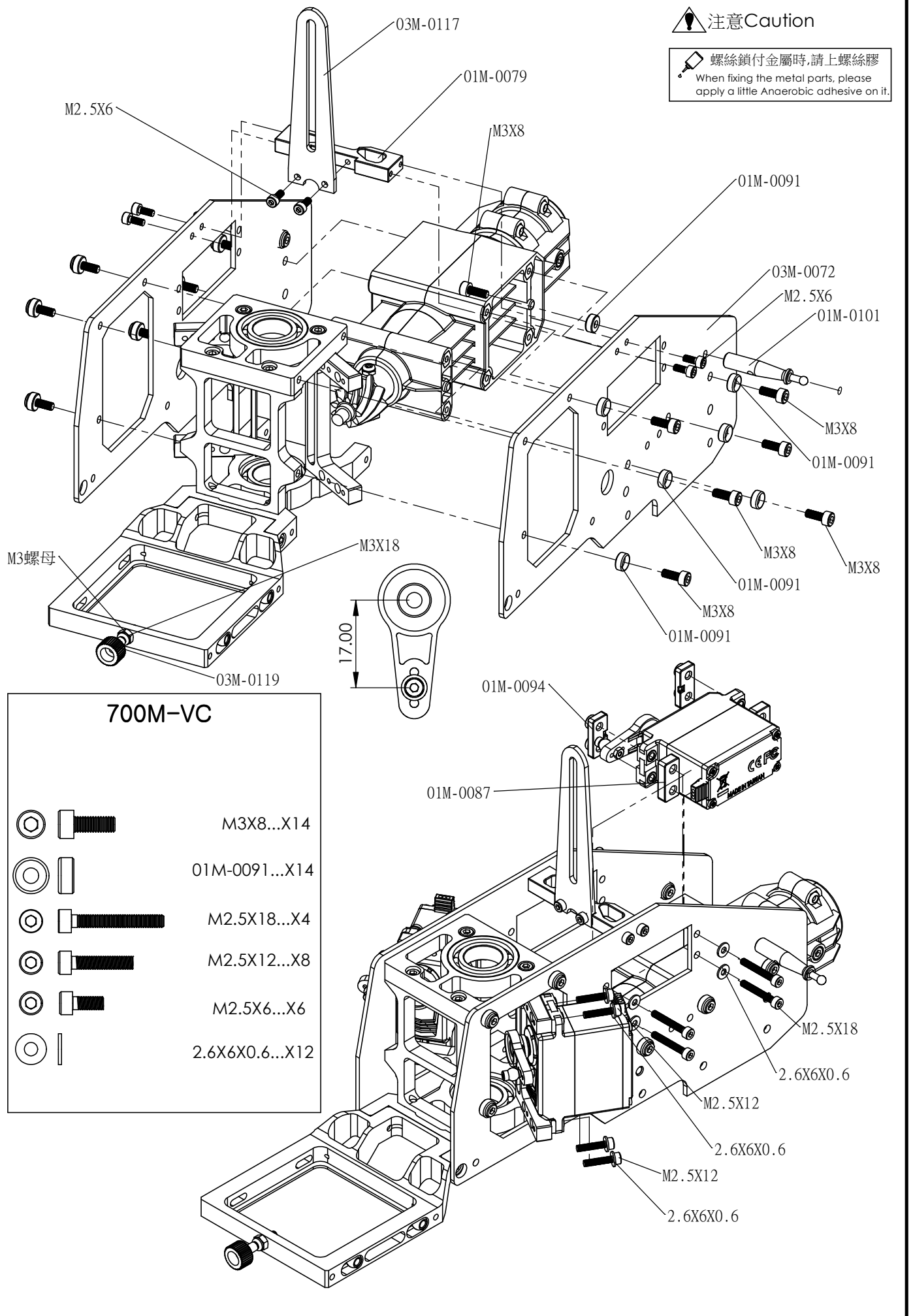
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












## 700M-VC

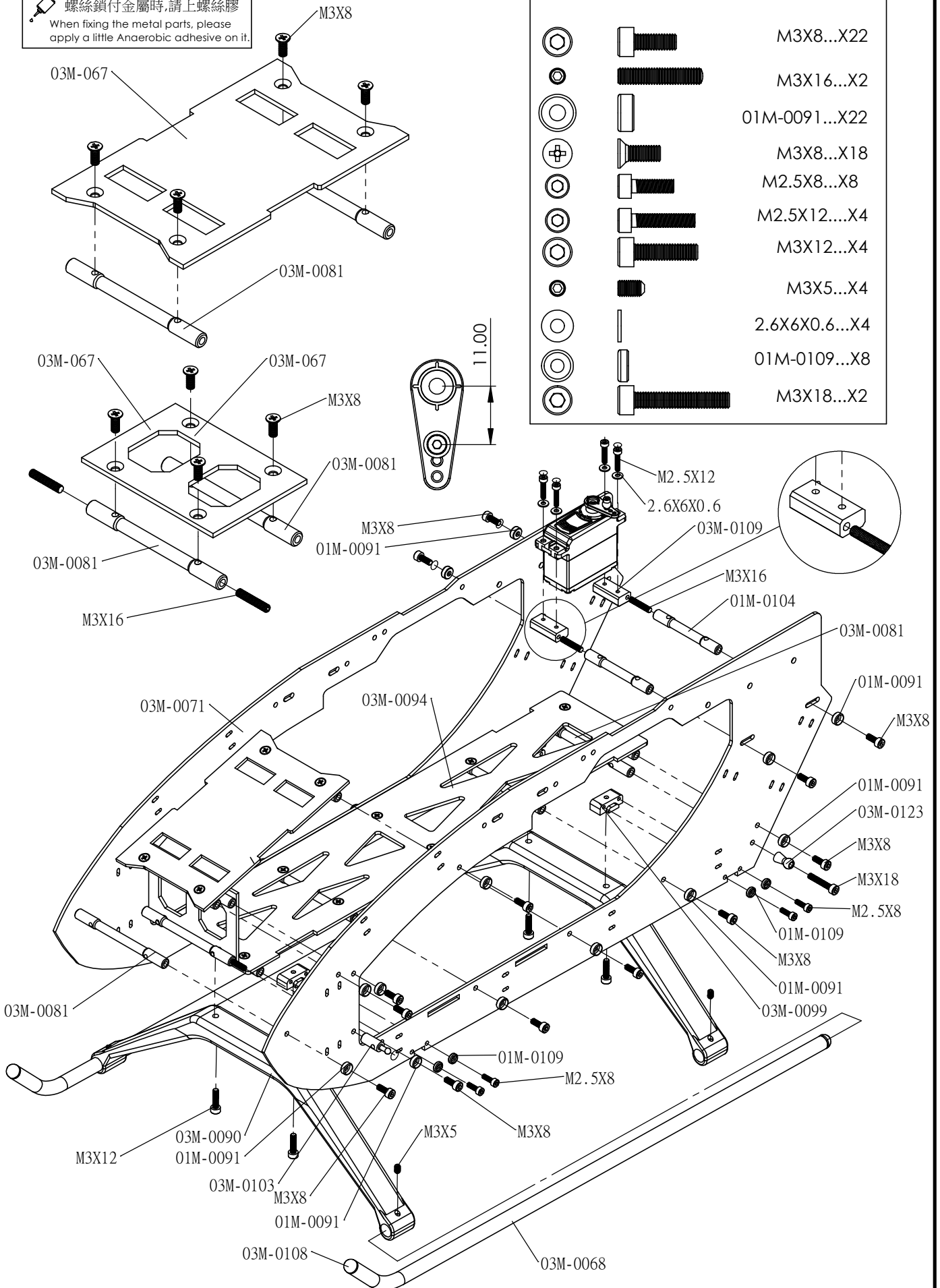
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|---|---|-----------------|
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|  |  | 01M-0091...X14  |
|  |  | M2.5X18...X4    |
|  |  | M2.5X12...X8    |
|  |  | M2.5X6...X6     |
|  |  | 2.6X6X0.6...X12 |

## 注意 Caution



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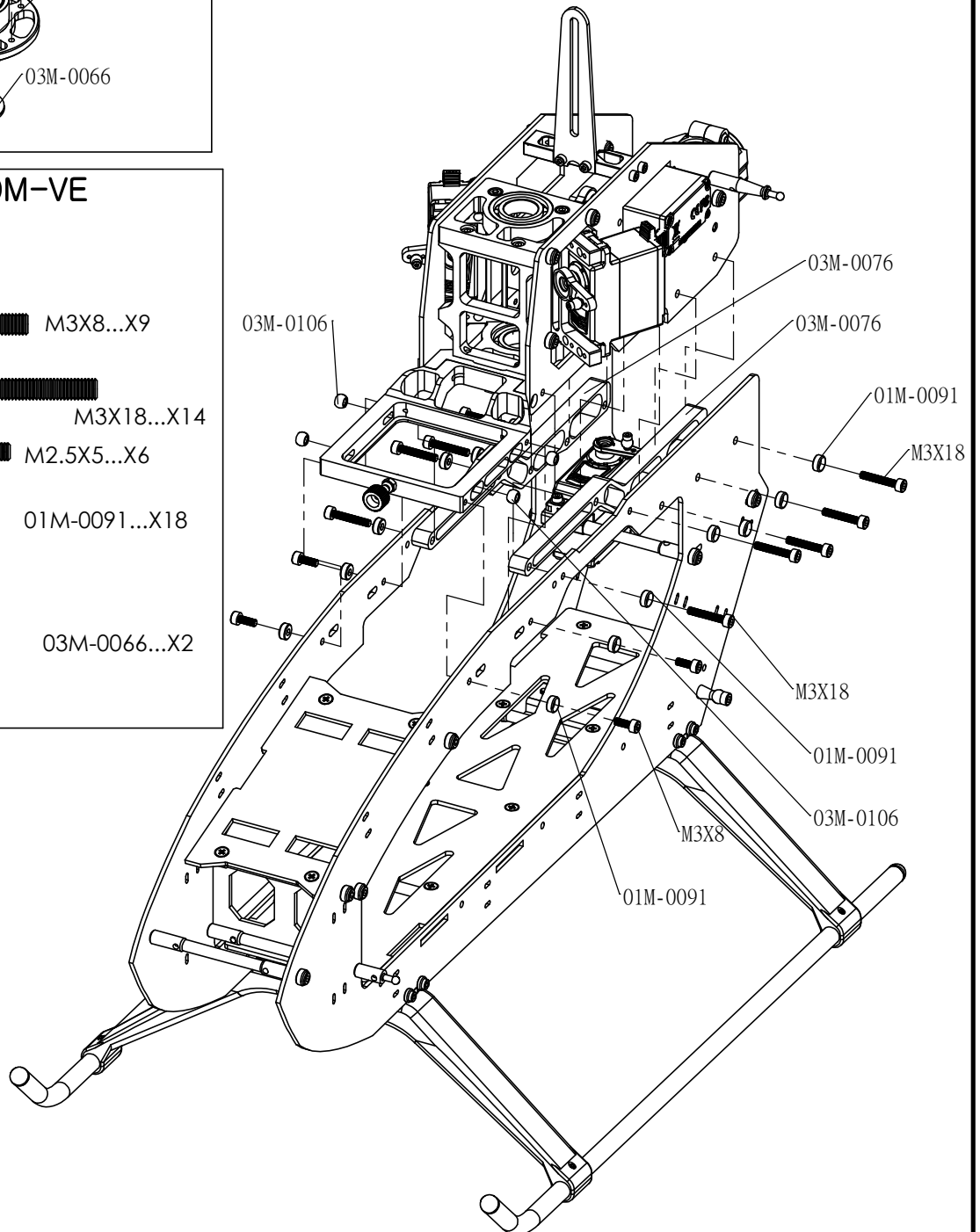
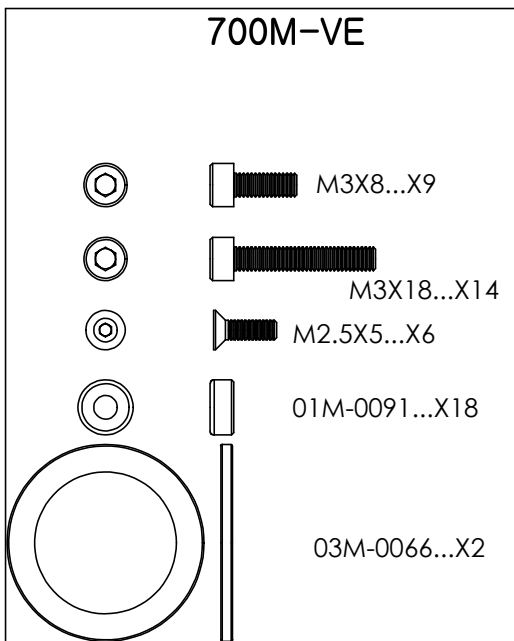
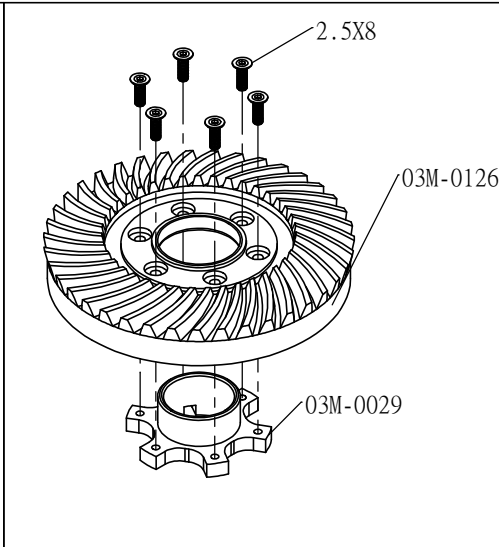
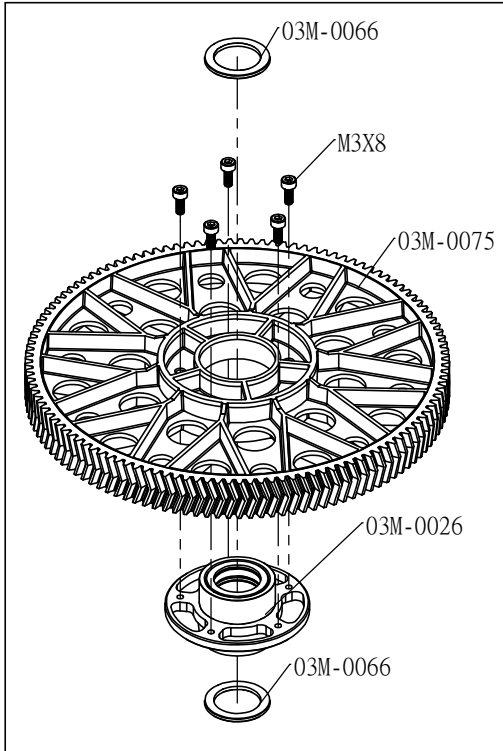
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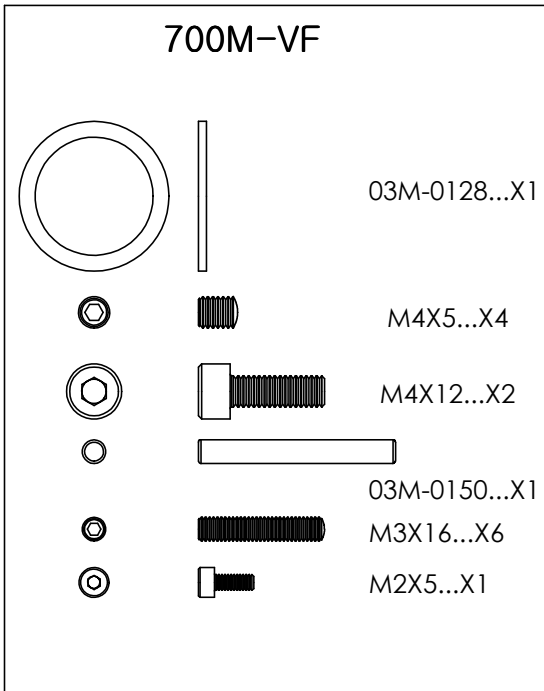
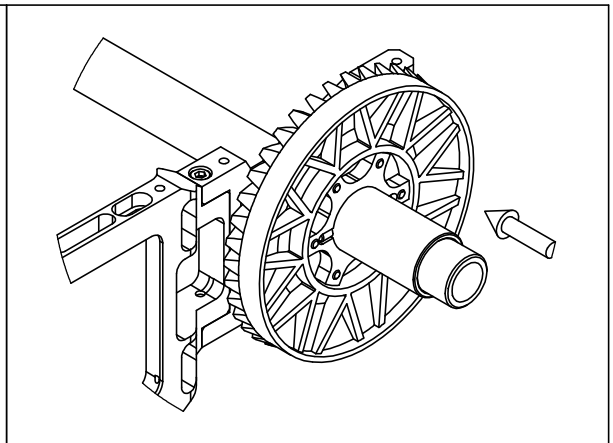
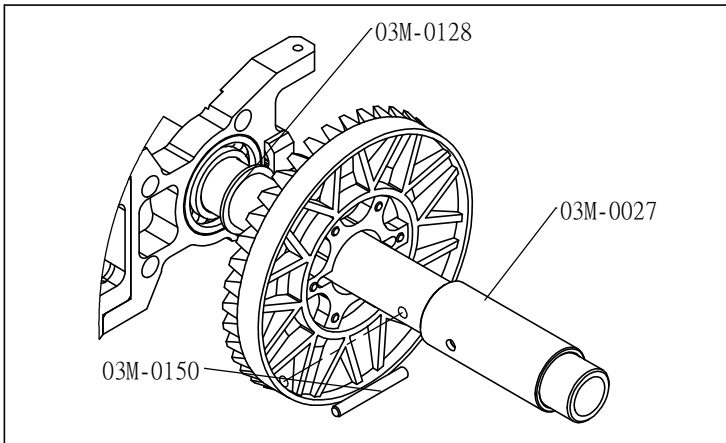
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		M3X16...X2
		01M-0091...X22
		M3X8...X18
		M2.5X8...X8
		M2.5X12...X4
		M3X12...X4
		M3X5...X4
		2.6X6X0.6...X4
		01M-0109...X8
		M3X18...X2



 注意 Caution

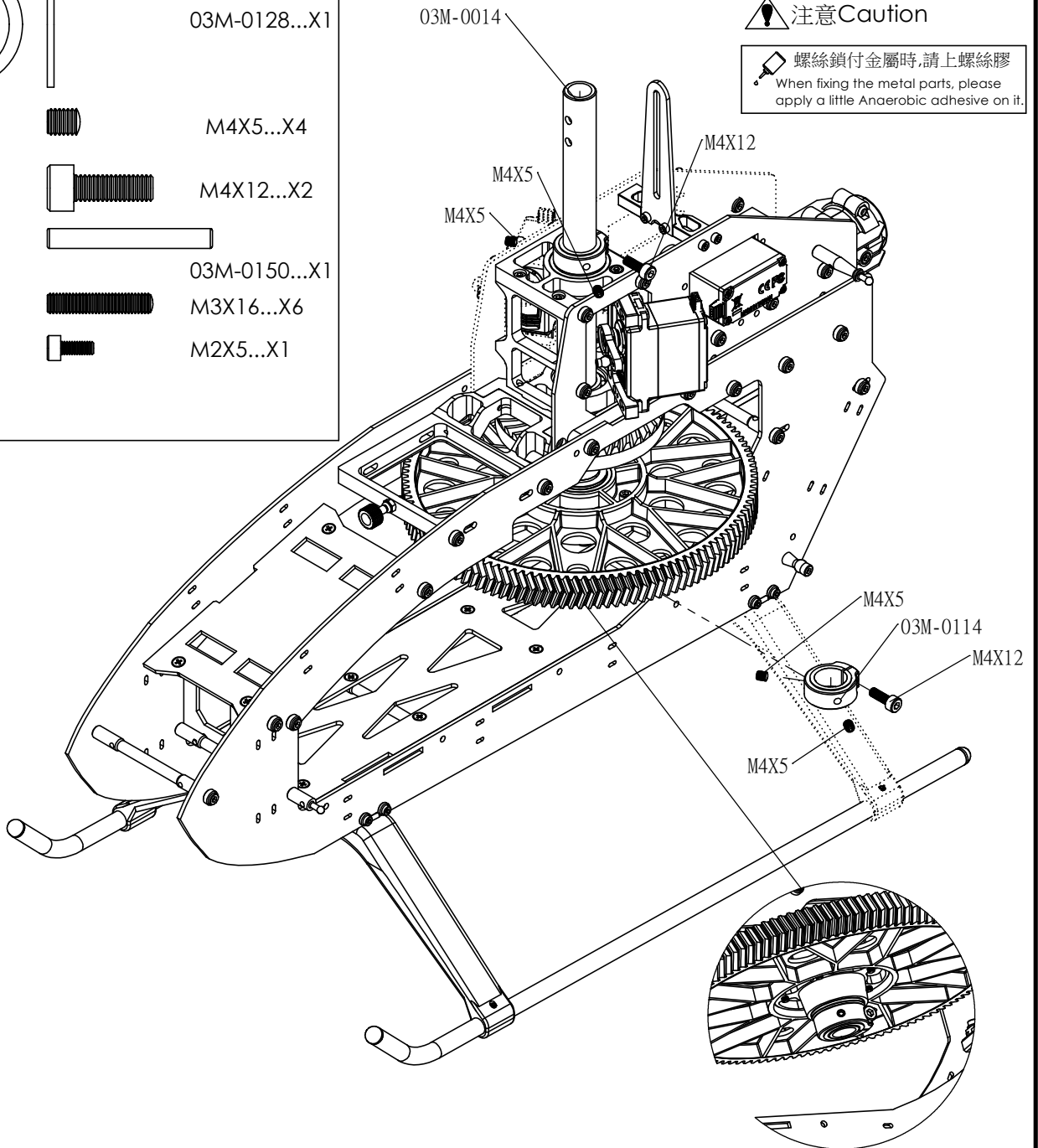
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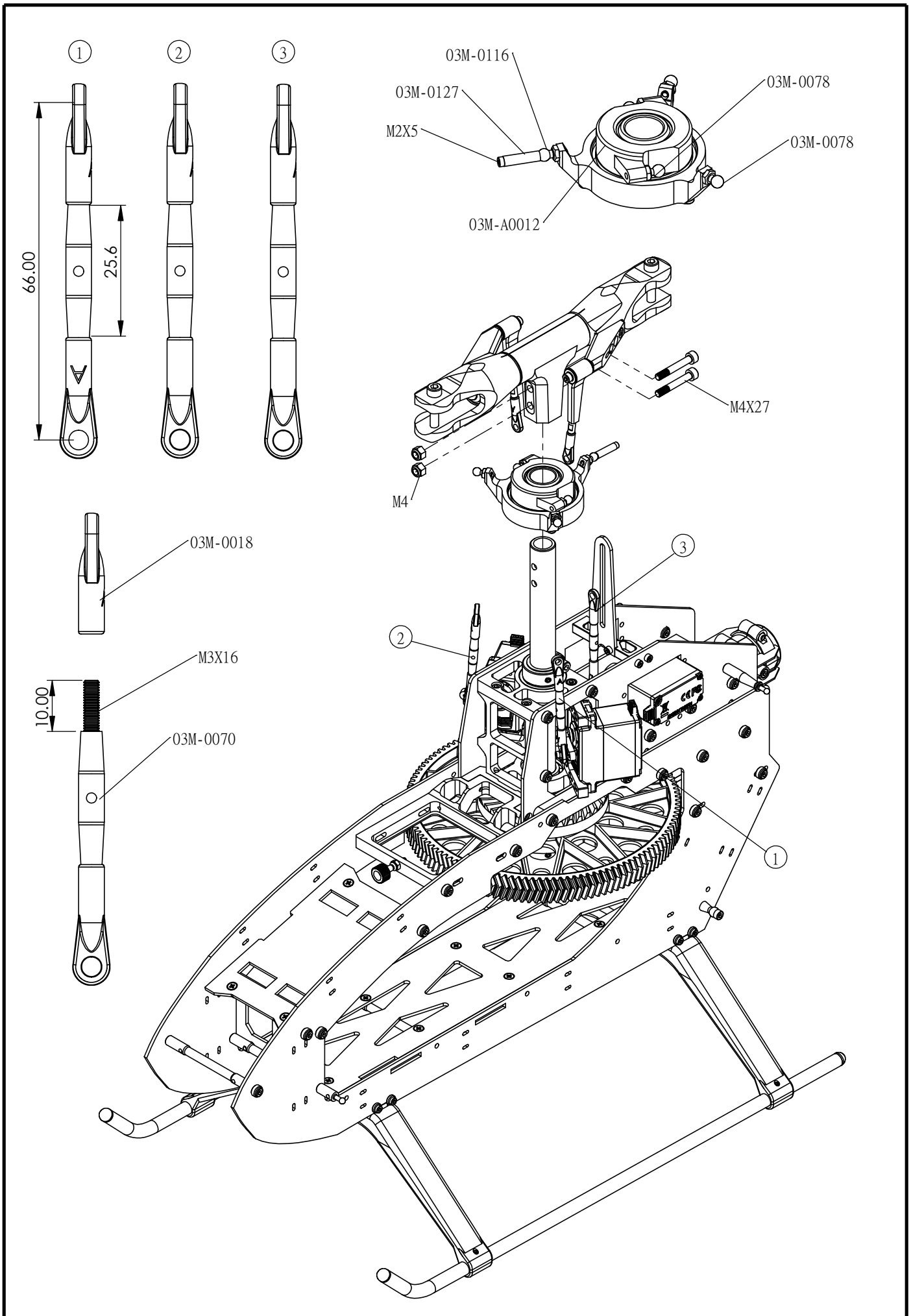





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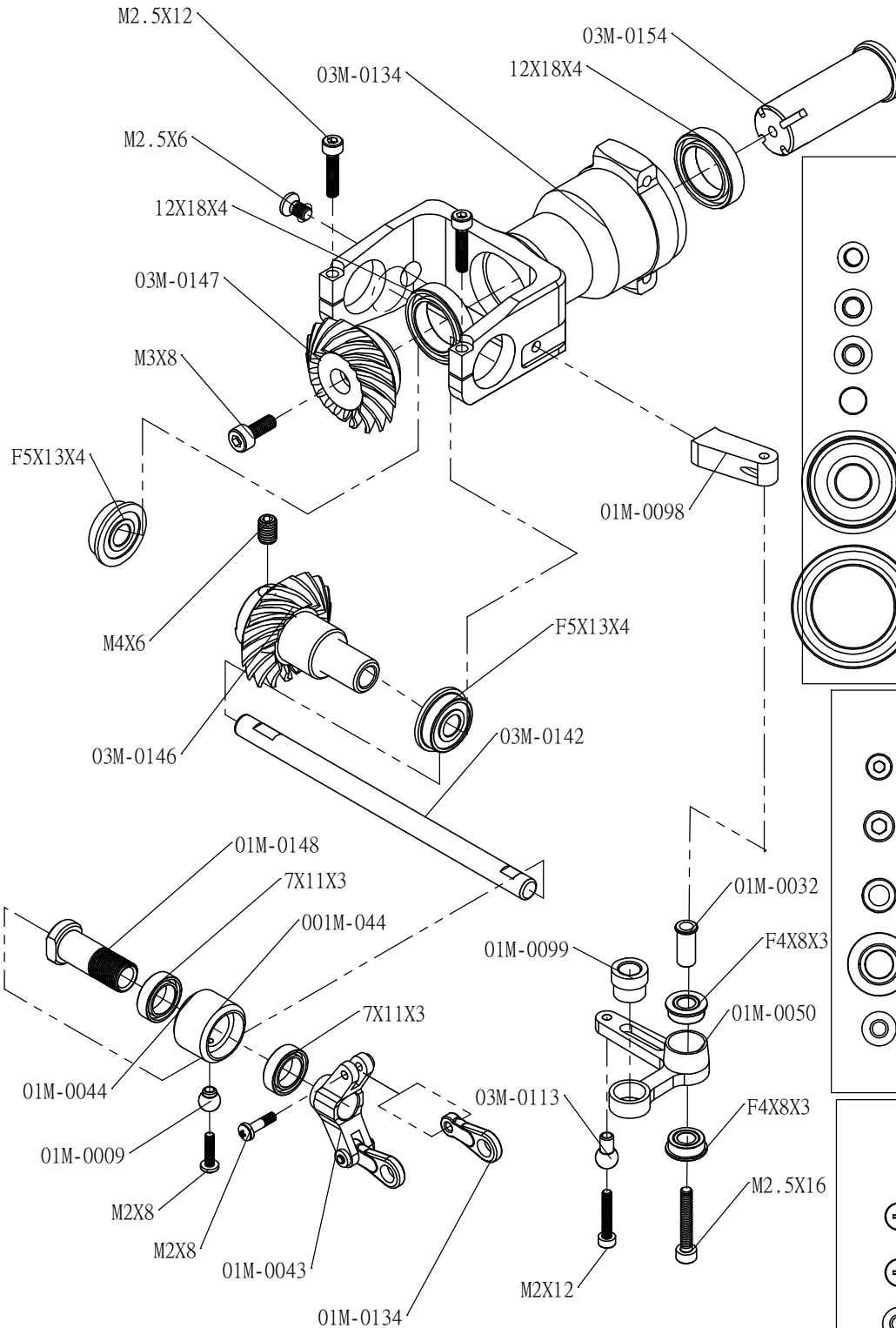


 注意 Caution

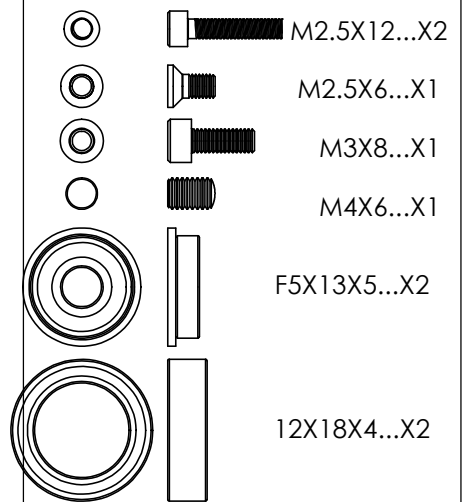
 螺絲鎖付金屬時,請上螺絲膠  
When fixing the metal parts, please apply a little Anaerobic adhesive on it.

原廠出廠之組裝品,請再次確認螺絲是否鎖緊上膠。  
Please make sure all screws been tightened even assembled already by factory.

軸承調整螺絲,不可鎖太緊,鎖緊程度必須讓軸承能滑順旋轉即可。



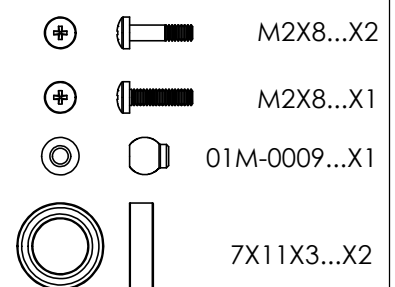
## 700M-VG



## 700M-VH









## 500M-I





**700M-J**

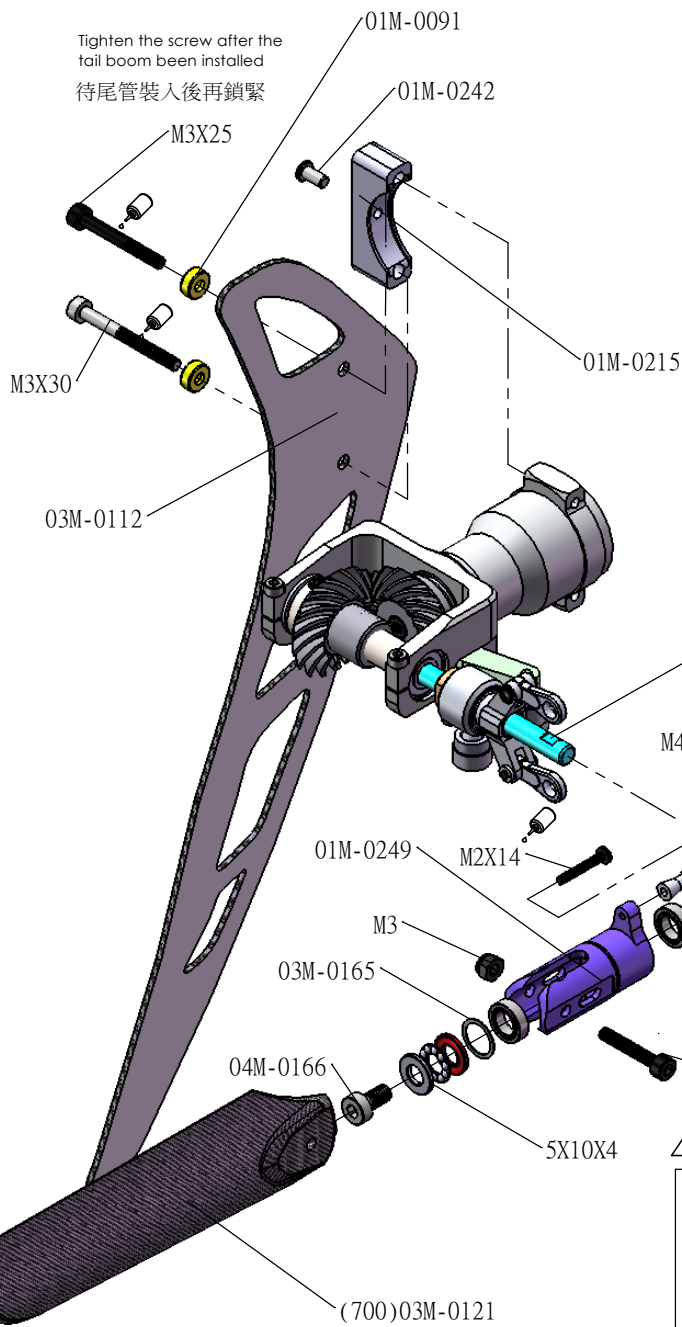
		5X10X4...X2
		6X10X3...X4
		04M-0166...X2

**注意Caution**

螺絲鎖付金屬時，請上螺絲膠  
When fixing the metal parts, please apply a little Anaerobic adhesive on it.

原廠出廠之組裝品，請再次確認螺絲是否鎖緊上膠。  
Please make sure all screws been tightened even assembled already by factory.

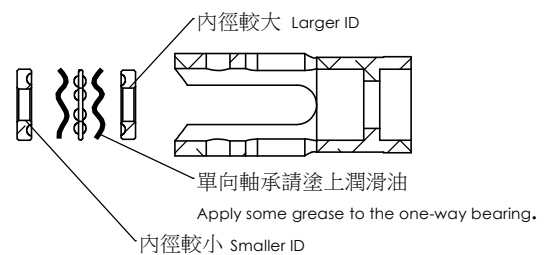
螺絲鎖付塑膠件時，適當的扭力鎖緊即可，過緊的扭力可能導致滑牙。  
Please noticed When tightening to a plastic part do not over tightened, otherwise may cause the stripped.




**700M-VJ**

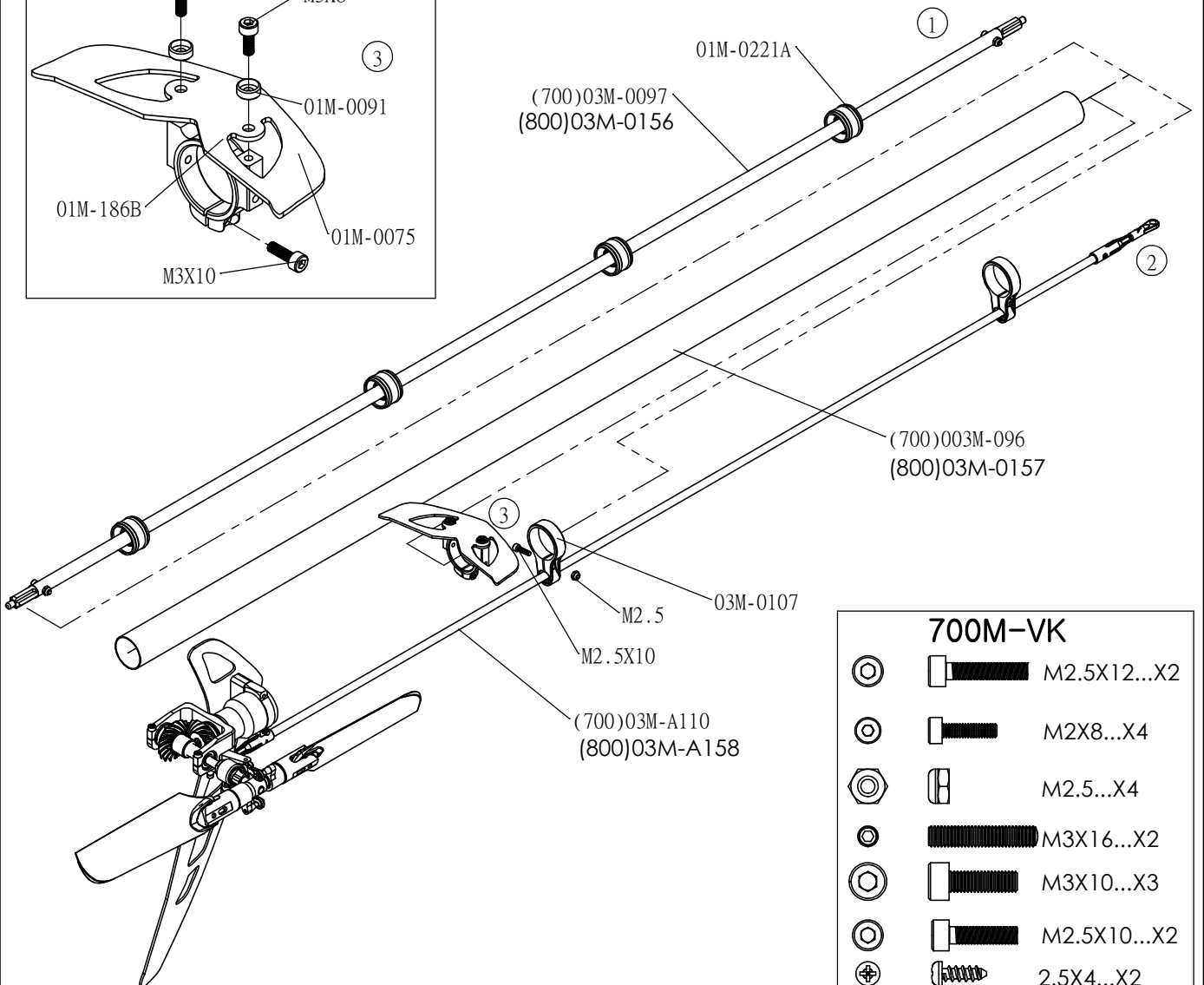
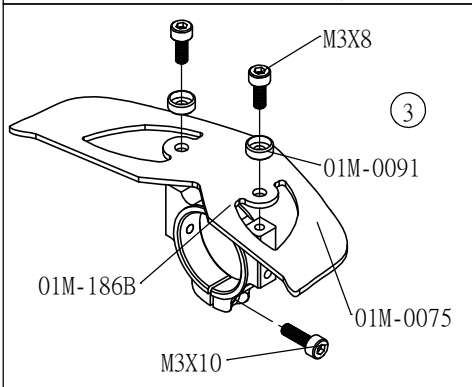
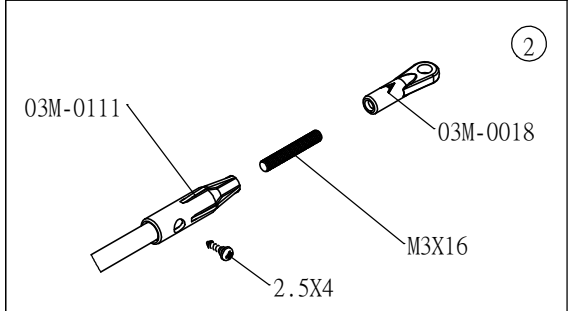
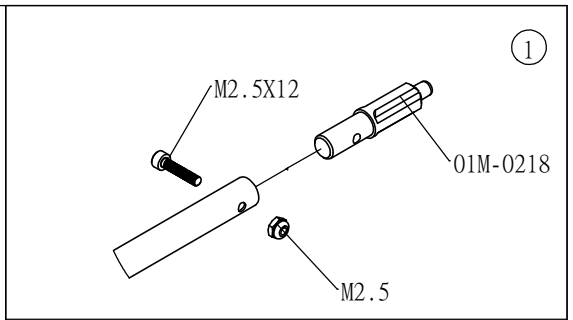
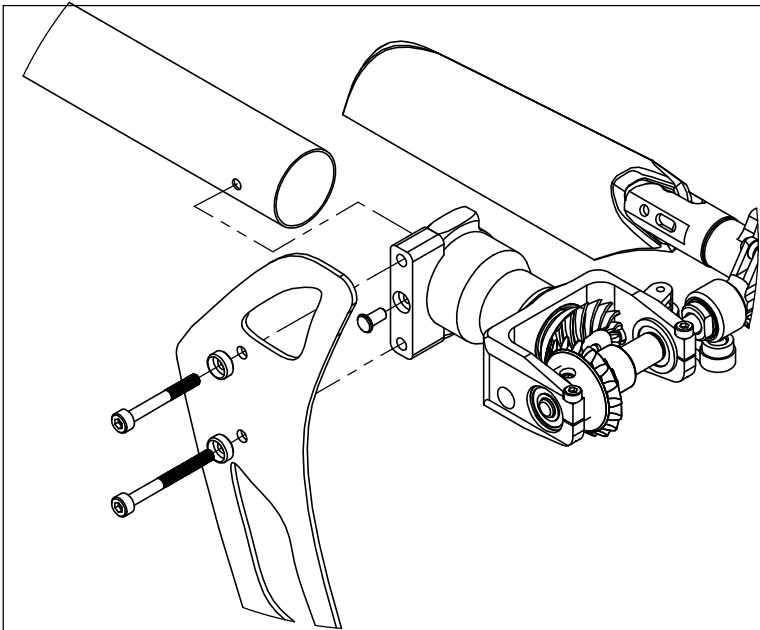
		M3X30...X1
		M3X25...X2
		M3X18...X2
		M2X14...X2
		M3 set nut...X4
		01M-0242...X1
		M4X4...X1
		01M-0162...X2
		01M-0091...X2
		03M-0165...X2















**注意Caution**




 注意 Caution

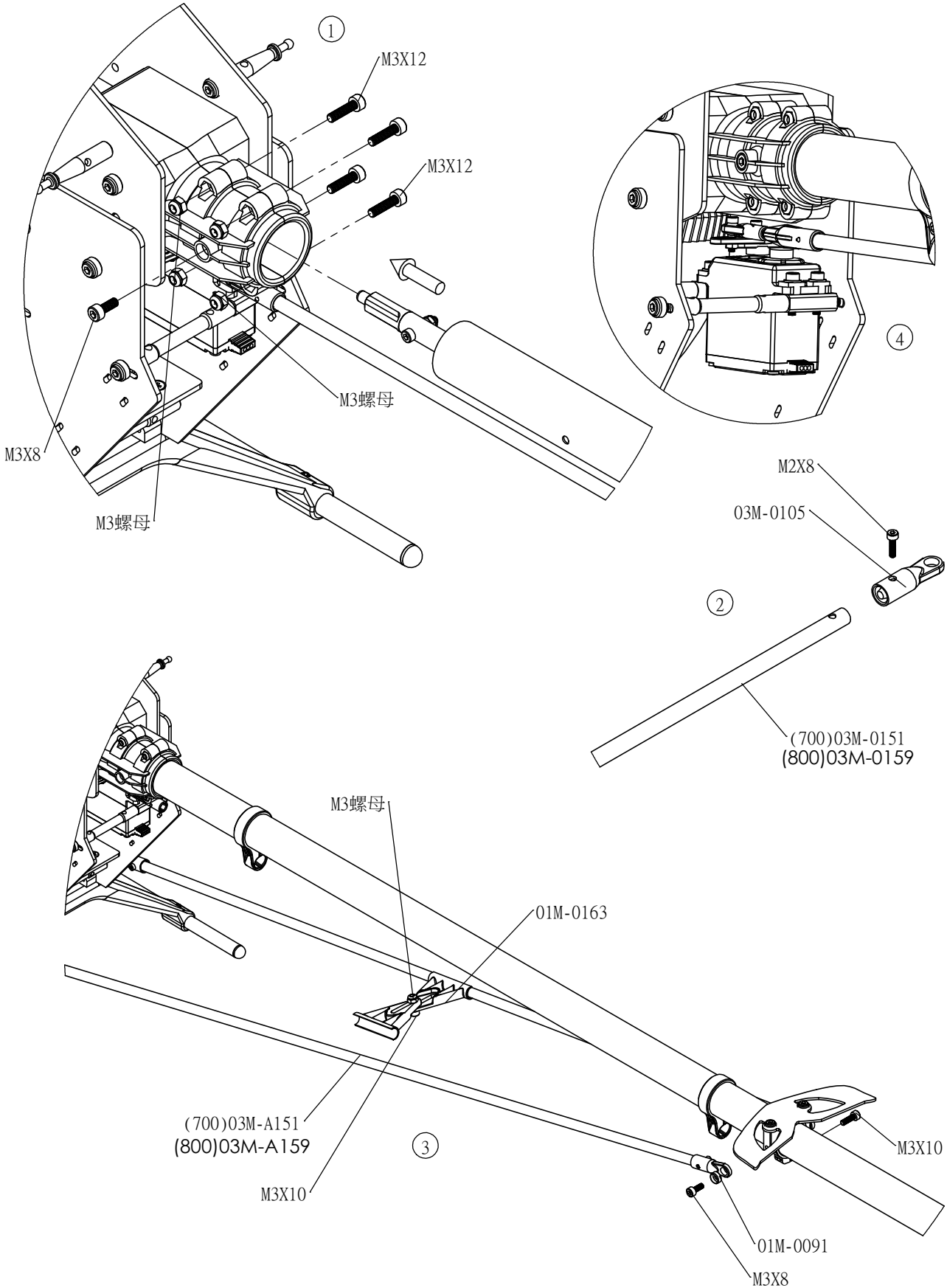
 螺絲鎖付金屬時，請上螺絲膠  
When fixing the metal parts, please apply a little Anaerobic adhesive on it.




700M-VK	
	 M2.5X12...X2
	 M2X8...X4
	 M2.5...X4
	 M3X16...X2
	 M3X10...X3
	 M2.5X10...X2
	 2.5X4...X2

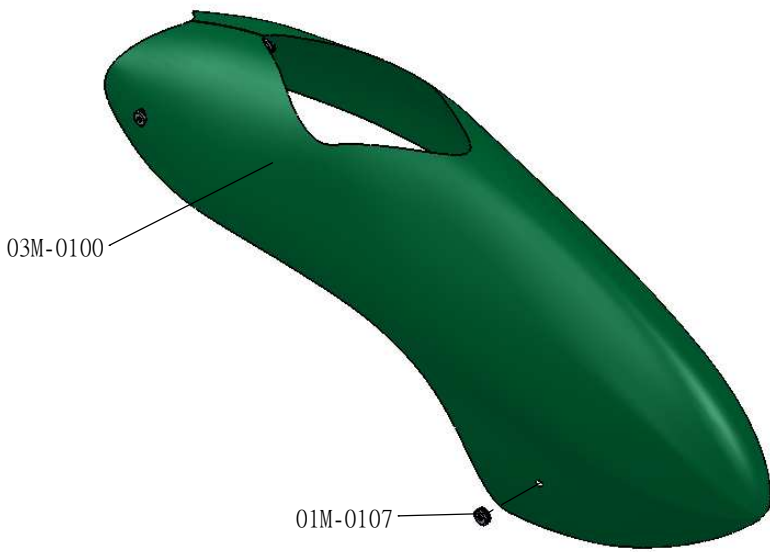
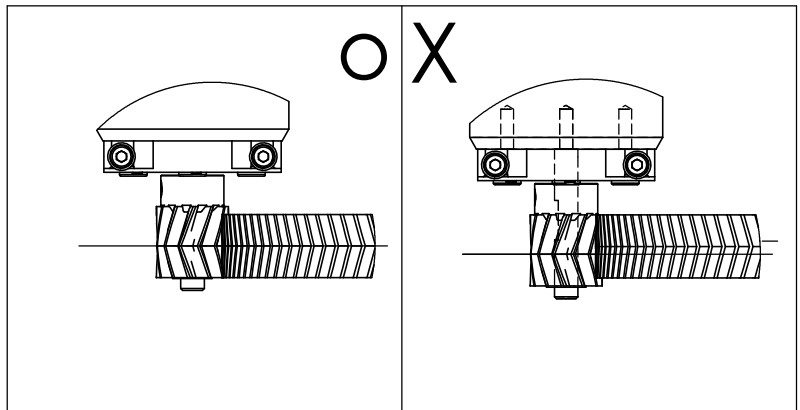
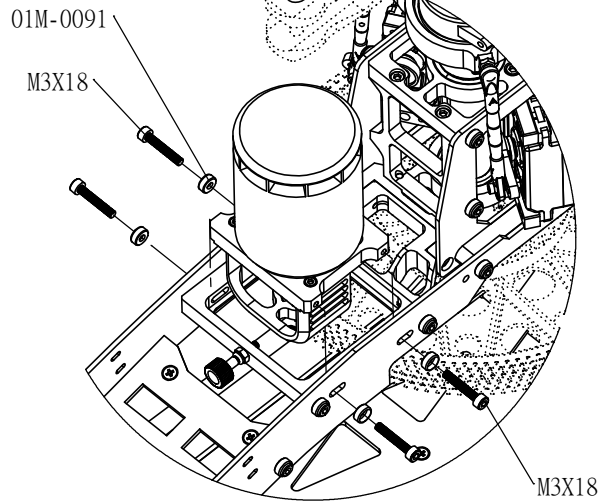
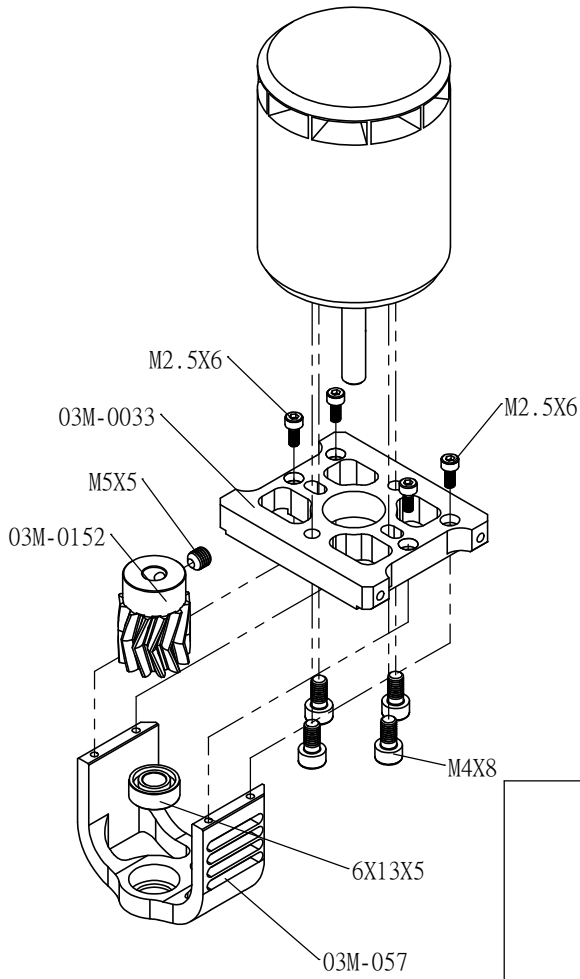
 注意 Caution

 螺絲鎖付金屬時,請上螺絲膠  
When fixing the metal parts, please apply a little Anaerobic adhesive on it.











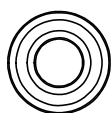
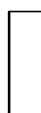


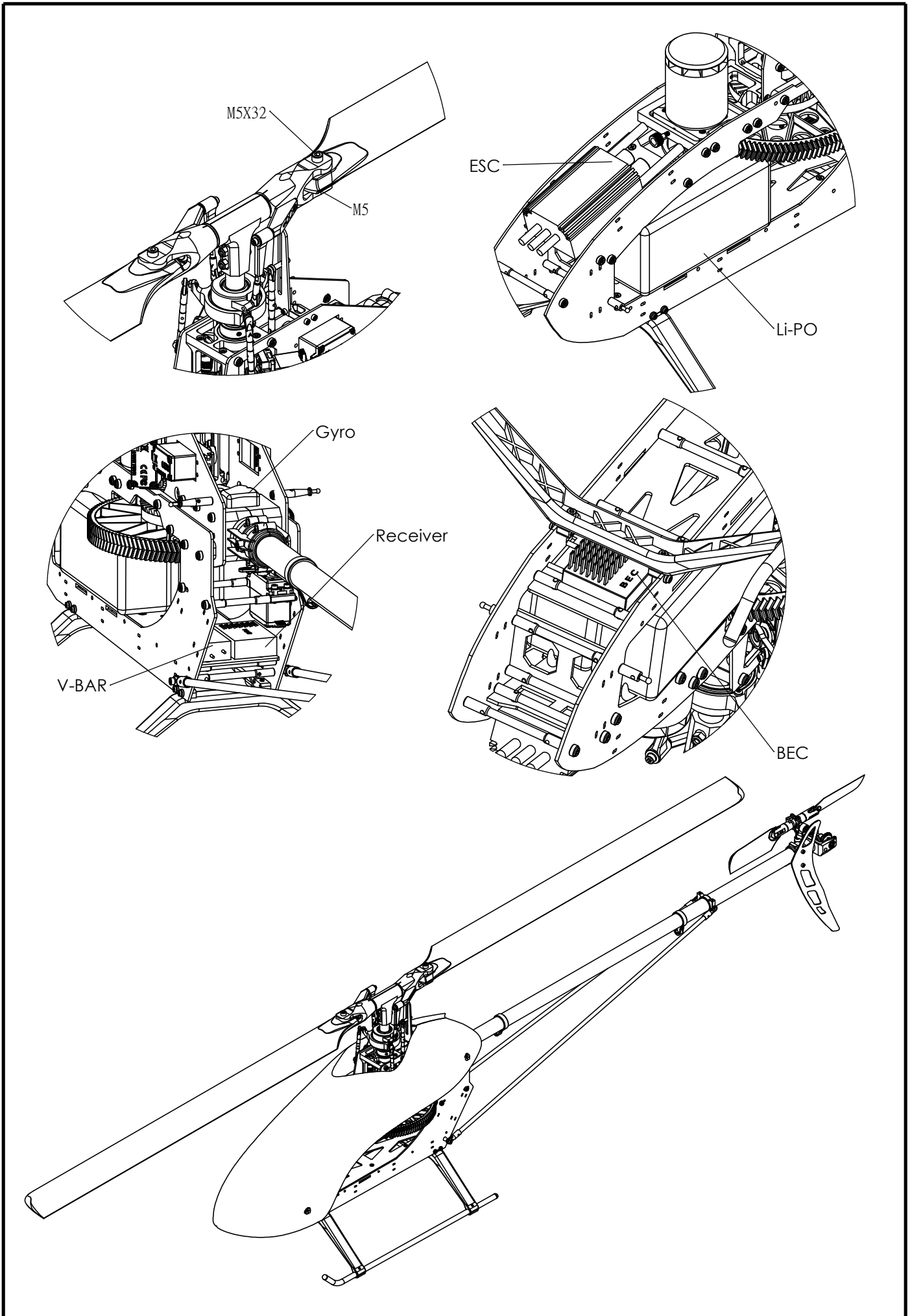
 注意 Caution

 螺絲鎖付金屬時,請上螺絲膠  
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### 700M-VL

		M2.5X6...X4
		M4X8...X4
		M3X18...X4
		M5X5...X1
		01M-0091...X4
		6X13X5...X1



# 組立說明 Assembly

M-3D

NO.	零件編號 Parts No.	品名 Description	規格 Spec.	數量 Quantity
700M-VA				
01	03M-0001	中心座 Metal main rotor hub		1
02	03M-0002	主旋翼夾座 Alum. Main Blade Holder		2
03	03M-0004	主旋翼夾擺臂 Main Blade Pitch Arm		2
04	03M-0020	橫軸 Feathering		1
05	03M-0095	橫軸套管 Feathering Shaft Sleeve		1
06	03M-0122	橫軸緩衝墊圈(O-Ring) Damper O-Ring	10X17X8	2
07	03M-0063	主旋翼拉桿頭 Mail blade push rod		2
08	03M-0069	連桿 Link rod		2
09	03M-0018	連桿頭 Ball Link		2
10	03M-0080	滑司 Spacer	10X16X2	2
11	03M-0125	軸承襯套 Thrust Bearing		2
12	03M-0128	滑司 Spacer	15X19X1	2
13	08M-0427	圓頭內六角螺絲 Hex Head Socket Screw	M4X27	2
14	08M-0532	圓頭內六角螺絲 Hex Head Socket Screw	M5X32	2
15	08M-0308	圓頭內六角螺絲 Hex Head Socket Screw	M3X8	4
16	08M-0325	圓頭內六角螺絲 Hex Head Socket Screw	M3X25	2
17	08M-0610	半圓頭內六角螺絲 Socket button head Screw	M6X10	2
18	03M-0062	滑司 Spacer	6X15X2	2
19	04M-0011	O-RIN	9. 5X17. 5X4	2
20	010M-0104	防鬆螺母 Lock Nut	M4	2
21	010M-0105	防鬆螺母 Lock Nut	M5	2
22	02M-B101955	止推軸承 Thrust bearing	10X19X5. 5	2
23	02M-101905	軸承 Bearing	10X19X5	4
24	04M-0037	滑司 Spacer	3X6X0. 5	2

# 組立說明 Assembly

M-3D

NO.	零件編號 Parts No.	品名 Description	規格 Spec.	數量 Quantity
25	02MMF85ZZ	軸承 Bearing	F5X8X2.5	4
700M-VB				
26	03M-0030	主軸座(上) Upper Bearing Housing		1
27	03M-0031	主軸座(下) Upper Bearing Housing		1
28	03M-0044	伺機固定座 Servo Instalation Mount		2
29	03M-0052	主軸座立板		1
30	03M-0058	馬達滑座		1
31	02M6702ZZ	軸承 Bearing	15X28X7	2
32	02MMR105ZZ	軸承 Bearing	5X10X4	1
33	08M-0308	圓頭內六角螺絲 Hex Head Socket Screw	M3X8	6
34	08M-0306	圓頭內六角螺絲 Hex Head Socket Screw	M3X6	4
700M-VC				
35	01M-0079	十字盤導板座 Phasing Control Track Mount		1
36	03M-0117	十字盤導板		1
37	01M-0094	伺服機塑膠螺帽 Servo Nut		2
38	01M-0087	伺服機固定墊塊 Plastic Servo Pedestal		2
39	03M-0120	機殼固定柱 Canopy Retaining Post		2
40	03M-0119	調整旋鈕		1
41	01M-0091	特殊滑司 Washer	3X7X2	14
42	03M-0072	機身上側板 Main Frame		2
43	08M-0308	圓頭內六角螺絲 Hex Head Socket Screw	M3X8	14
44	08M-2518	圓頭內六角螺絲 Hex Head Socket Screw	M2.5X18	4
45	08M-2512	圓頭內六角螺絲 Hex Head Socket Screw	M2.5X12	8
46	08M-2506	圓頭內六角螺絲 Hex Head Socket Screw	M2.5X6	6
47	04M-0036	滑司 Spacer	2.6x6x0.6	12

# 組立說明 Assembly

M-3D

NO.	零件編號 Parts No.	品名 Description	規格 Spec.	數量 Quantity
700M-VD				
48	03M-0067	ESC固定板		1
49	03M-0081	機身鋁柱 Main Frame Mount Bolt		11
50	03M-0109	伺機固定座 Servo Instalation Mount		2
51	01M-0104	機身鋁柱 Main Frame Mount Bolt		2
52	03M-0094	機身底板 Main Frame Bracket		1
53	03M-0103	機殼固定柱 Canopy Retaining Post		2
54	03M-0090	腳架 Skid Brace		2
55	01M-0091	特殊滑司 Washer	3X7X2	22
56	01M-0109	特殊滑司 Washer	2. 6X6X2	8
57	03M-0099	腳架座		4
58	03M-0108	腳架鋁管塞頭 Skid Pipe End Cap		4
59	03M-0068	腳架鋁管 Alum. Skid		2
60	03M-0123	尾支撐桿球頭	6X9	2
61	03M-0071	機身側板 Main Frame		2
62	08M-0308	圓頭內六角螺絲 Hex Head Socket Screw	M3X8	22
63	09M-0316	止付螺絲 Set Screw	M3X16	4
64	07M-0308	皿頭內六角螺絲 Flat Hex Head Screw	M3X08	18
65	08M-2508	圓頭內六角螺絲 Hex Head Socket Screw	M2. 5X8	8
66	08M-2512	圓頭內六角螺絲 Hex Head Socket Screw	M2. 5X12	4
67	08M-0312	圓頭內六角螺絲 Hex Head Socket Screw	M3X12	4
68	09M-0305	止付螺絲 Set Screw	M3X5	4
69	04M-0036	滑司 Spacer	2. 6x6x0. 6	4
70	08M-0318	圓頭內六角螺絲 Hex Head Socket Screw	M3X18	2
700M-VE				



# 組立說明 Assembly

M-3D

NO.	零件編號 Parts No.	品名 Description	規格 Spec.	數量 Quantity
71	03M-0066	銅墊圈 Metal Washer	18X25X1.5	2
72	03M-0075	大齒盤 Main Spur Gear		1
73	03M-0026	主齒座 Main Spur Mount		1
74	03M-0029	螺旋齒盤座		1
75	03M-0126	螺旋齒盤		1
76	03M-0076	機身間隔板		2
77	03M-0106	支撐桿球頭		4
78	01M-0091	特殊滑司 Washer	3X7X2	18
79	08M-0308	圓頭內六角螺絲 Hex Head Socket Screw	M3X8	9
80	08M-0318	圓頭內六角螺絲 Hex Head Socket Screw	M3X18	14
81	07M-2508	皿頭內六角螺絲 Flat Hex Head Screw	M2.5X08	6
82	03M-0027	單向軸套 One-way Clutch Shaft		1
83	03M-0128	墊圈 Washer	15X19X1	1
84	03M-0014	主軸 Main Shaft		1
85	03M-0114	主軸固定環 Main Shaft Lock ring		2
86	03M-0150	PIN	3X25	1
700M-VF				
87	03M-0078	球頭 Linkage Ball	5.0X5.5mm	4
88	03M-0116	球頭 Linkage Ball	5.0X5.5mm	1
89	03M-A0012	十字盤 Swashplate		1
90	03M-0127	襯套		1
91	03M-0018	連桿頭 Ball Link		6
92	03M-0070	連桿 Link rod		3
93	08M-0205	圓頭內六角螺絲 Hex Head Socket Screw	M2X5	1
94	09M-0405	止付螺絲 Set Screw	M4X5	4

## 組立說明 Assembly

M-3D

NO.	零件編號 Parts No.	品名 Description	規格 Spec.	數量 Quantity
95	09M-0316	止付螺絲 Set Screw	M3X16	6
96	08M-0412	圓頭內六角螺絲 Hex Head Socket Screw	M4X12	2
700M-VG				
97	03M-0142	尾軸 Tail Rotor Shaft		1
98	03M-0134	一體式尾殼 One-piece Tail Uint Housing		1
99	03M-0146	齒輪 Pinion Gear		1
100	03M-0147	齒輪 Pinion Gear		1
101	01M-0098	尾控制臂固定座 Tail Rotor Control Arm Mount		1
102	07M-2506	皿頭內六角螺絲 Flat Hex Head Screw	M2. 5X06	1
103	08M-2512	圓頭內六角螺絲 Hex Head Socket Screw	M2. 5X12	2
104	08M-0308	圓頭內六角螺絲 Hex Head Socket Screw	M3X8	1
105	02MF695ZZ	軸承 Bearing	F5X13X4	2
106	09M-0406	止付螺絲 Set Screw	M4X6	1
107	02M6701ZZ	軸承 Bearing	12X18X4	2
108	01M-0154	傳動軸套		1
700M-VG				
109	01M-0032	軸承襯套 Thrust Bearing	2. 5x4x9. 7	1
110	01M-0050	尾旋翼控制臂 Tail Rotor Control Arm		1
111	01M-0099	尾控制臂球頭襯套 Tail Rotor Control Thrust		1
112	03M-0113	球頭 Linkage Ball	5X6	1
113	08M-0212	圓頭內六角螺絲 Hex Head Socket Screw	M2X12	1
114	08M-2516	圓頭內六角螺絲 Hex Head Socket Screw	M2. 5X16	1
115	02MMF84ZZ	軸承 Bearing	F4X8X3	2
500M-I				
116	01M-0009	球頭 Linkage Ball	4. 8x3mm	1

# 組立說明 Assembly

M-3D

NO.	零件編號 Parts No.	品名 Description	規格 Spec.	數量 Quantity
117	01M-0043	尾控制組T座 Tail Pitch Control Lever		1
118	01M-0044	尾控制組軸承座 Tail control Bearing Block		1
119	01M-0148	尾軸滑套 Tail Control Slide Bushing		1
120	01M-0134	尾控制連桿 Tail Control Linkage		2
121	08M-0208	圓頭內六角螺絲 Hex Head Socket Screw	M2X8	1
122	005M-1208	十字圓頭軸套螺絲 Button Screw	M2X8	2
123	02MF677ZZ	軸承 Bearing	7X11X3	2
700M-VJ				
124	03M-0249	尾旋翼夾臂 Tail Pitch Housing		2
125	03M-0163	尾旋翼T座 Tail Rotor Hub		1
126	03M-0112	垂直尾翼 Vertical Staibilizer		1
127	03M-0121	尾旋翼 Tail Rotor Blade		2
128	01M-0215	垂直固定座		1
129	01M-0242	PIN		1
130	02M-051004	止推軸承 Thrust bearing	5X10X4	2
131	02MR106ZZ	軸承 Bearing	6X10X3	4
132	03M-0166	Ti合金圓頭內六角螺絲 TI Hex Head Socket Screw	M4X8	2
133	08M-0318	圓頭內六角螺絲 Hex Head Socket Screw	M3X18	2
134	08M-0330	圓頭內六角螺絲 Hex Head Socket Screw	M3X30	1
135	01M-0091	特殊滑司 Spacer	3X7X2	2
136	08M-0214	圓頭內六角螺絲 Hex Head Socket Screw	M2X14	2
137	010M-0103	防鬆螺母 Lock Nut	M3	2
138	01M-0162	球頭 Linkage Ball	4. 8x8. 5mm	2
139	09M-0404	止付螺絲 Set Screw	M4X4	1
140	03M-0165	滑司 Spacer	8X10X0. 3	2

# 組立說明 Assembly

M-3D

NO.	零件編號 Parts No.	品名 Description	規格 Spec.	數量 Quantity
141	08M-0325	圓頭內六角螺絲 Hex Head Socket Screw	M3X25	1
700M-VK				
142	03M-0018	連桿頭 Ball Link		2
143	03M-0096	尾管 Tail Boom		1
144	01M-186B	水平尾翼固定座 Bracket		1
145	03M-0105	尾管支撐桿頭 Tail Support		4
146	03M-0107	尾拉桿固定環 Tail Rod Guide		2
147	03M-A151	尾管支撐桿 Tail Support		2
148	03M-0110	尾拉桿 Tail Control Rod		1
149	03M-0111	尾拉桿頭		2
150	03M-0097	傳動軸		1
151	01M-0218	傳動十字軸		2
152	01M-0221A	軸承固定套		4
153	02MR148ZZ	軸承 Bearing	8X14X4	4
154	010M-125	螺母 Nut	M2.5	4
155	08M-2512	圓頭內六角螺絲 Hex Head Socket Screw	M2.5X12	2
156	08M-0308	圓頭內六角螺絲 Hex Head Socket Screw	M3X8	4
157	08M-2510	圓頭內六角螺絲 Hex Head Socket Screw	M2.5X10	2
158	011M-2504	十字圓頭自攻牙螺絲 Self Drilling Screw	2.5x4	2
159	01M-0091	特殊滑司 Spacer	3X7X2	4
160	08M-0310	圓頭內六角螺絲 Hex Head Socket Screw	M3X10	2
161	09M-0316	止付螺絲 Set Screw	M3X16	2
162	04M-0041	雙面束帶 AB Velcro		4
163	010M-0103	防鬆螺母 Lock Nut	M3	1
164	01M-0163	尾支撐桿架		2

# 組立說明 Assembly

M-3D

NO.	零件編號 Parts No.	品名 Description	規格 Spec.	數量 Quantity
700M-VL				
165	01M-0107	機殼固定套 Canopy Mount Rubber Grommets		4
166	03M-0100	玻璃纖維機殼 Fiberglass Canopy		1
167	03M-0152	齒輪 Pinion Gear	13T	1
168	04M-0041	雙面束帶 AB Velcro		2
169	08M-0308	圓頭內六角螺絲 Hex Head Socket Screw	M3X8	4
170	08M-0318	圓頭內六角螺絲 Hex Head Socket Screw	M3X18	4
171	08M-2506	圓頭內六角螺絲 Hex Head Socket Screw	M2.5X6	4
172	08M-0408	圓頭內六角螺絲 Hex Head Socket Screw	M4X8	4
173	02M686ZZ	軸承 Bearing	6X13X5	1
174	09M-0505	止付螺絲 Set Screw	M5X5	1
175	03M-0033	馬達座 Hex Head Socket Screw		1
176	03M-0057	馬達齒座 motor pinion gear mount		1
177	08M-0212	圓頭內六角螺絲 Hex Head Socket Screw	M2X12	4
178	010M-0102	螺母 Nut	M2	4
179	03M-0079	球頭 Linkage Ball	5X5	3
180	03M-0113	球頭 Linkage Ball	5X8	1
181	03M-0168	伺服機擺臂		3