

# JR PROPO<sup>®</sup>

## HELICOPTERS



### Specifications

[ Length ] 986mm  
[ Height ] 321mm  
[ Width ] 158mm  
[ Gros Weight ] 2.300g ~  
※including battery

[ Main rotor blades ] 510mm  
[ Main shaft dia. ]  $\varnothing$  10  
[ Main rotor dia. ] 1,142mm  
[ Tail rotor dia. ] 225mm  
[ Gear ratio ] 【T11】 13.6 : 1 : 4.26 【T12】 12.5 : 1 : 4.26

[ Control system ] 140° CCPM  
[ Li-po battery ] 6cell  $\times$  2  
[ Tail drive system ] Shaft drive



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# INTRODUCTION

Thank you for purchasing this JR product.

The NEX E6-550 is an electric helicopter perfect for beginners or advanced flyers, and will satisfy the needs of 3D flyers as well.

In addition to the assembly kit, this product also includes servos, 3 Axis Gyro, motor and ESC.

Please be sure to understand the instructions in this manual before commencing assembly.


## Be Sure to Observe for Safety Precautions


Do not assemble or fly this helicopter without seeking expert assistance. Be sure to receive guidance from our distributor or an advanced pilot. An instructor helping you is requested to fully observe not only the instructions and precautions in this manual but also the rules and guidelines for flight.


In order to prevent fire or injury, always observe the stated precautions for each flight.

The manual describes warnings, dangers and cautions required for safe assembly and flying. They are very important.

The following symbols are used to indicate the precautions for preventing accidents due to erroneous handling of this product. Please be sure to follow these instructions.

 **DANGER** Neglect of this precautionary notice is very likely to result in death or serious injury of the user.

 **WARNING** Neglect of this precautionary notice is likely to result in death or serious injury or damage to properties.

 **NOTE** Neglect of this precautionary notice is not likely to result in death or serious injury but may result in injury or damage to properties.

## TAKE GUIDANCE FROM OUR DISTRIBUTOR OR ADVANCED PILOT

This helicopter is not a toy.

If you are a beginner with R/C helicopters, or if you are unfamiliar with electric powered models, do not try to assemble or fly this model by yourself.

It may look simple and easy to operate. However, it actually requires extremely delicate assembly, adjustment and operation.

Take appropriate guidance from our distributor or an advanced pilot so that you can enjoy flying it and fully experience its performance.

When you can not complete the assembly by yourself, it is recommended you take guidance from our distributor or an advanced pilot. When you first fly the model, be sure to ask for assistance. Flying the helicopter alone may involve great danger as well as damaging the helicopter itself. Getting proper guidance helps prevent accidents and damage.

Also, please pay close attention to the use and care of peripheral equipment including the battery, charger, etc.

## Buy a Radio Control Insurance Policy

Please be sure to purchase a "radio control insurance policy".

For details, please inquire with our distributors or an insurance agent.

## Be careful when handling parts such as the battery or charger

Improper handling may result in electric shock, burn, explosion, or fire.

Do not use the charger or batteries near an open flame. If a power generator is used, do not use an open flame near it, the fuel, or any related devices.

Cigarettes may also cause fire - do not operate this product or related devices while smoking.

Please follow the guidance from related Instruction manuals while using this product.

When linking the connectors, please wear fire-resistant gloves to prevent electric shock and burns.

When not flying, please unplug the battery connectors.

While storing or moving the battery, please use special battery cases.

Do not store batteries in a high temperature environment such as a car trunk.

## PRECAUTIONS FOR HANDLING

- Immediately after flight, the motor, speed control and battery are very hot. Be careful to avoid a fire or burn.
- Accessories such as the battery and electrical parts should be handled with care. If the insulation is torn or the connector is shorted, you could be burnt or injured. Read the instructions for use of such accessories before handling.
- Do not charge or discharge the battery near an open flame or in a hot environment.
- Unnecessary disassembly or modification of any components are strictly prohibited.

Neglect of this could result in a fault and /or accident.

- Stop and unplug the motor before doing the following actions:

① When you make adjustments to the helicopter or the control system.

② When you replace any accessories or parts.

③ When the helicopter has something wrong or when you note unusual noise, smell or vibration.

④ When danger is expected.

- Use parts only within their service limits, if indicated.

- In order to realize a pleasant flight, try to keep appropriate gear backlash, movable parts moving smoothly, bolts tightened, and parts lubricated or replaced as required.

## Precautions for Safe Flight

The model could crash due to slight assembly failure, operational mistake, service failure (loose bolts, etc.), interference and so on. Always keep in mind that the radio control helicopter which is controlled by radio frequency, may go out of control for some reason, and the operator should pay attention to himself/herself and the surrounding environment at all times for safe flying.

- ◎ To fly the helicopter, it is necessary to fully master operational skills for flight as well as basic flight methods.

Receive guidance from our distributor or an experienced pilot and operate under their instructions.

- ◎ If you notice an abnormality before flight, be sure to eliminate the cause before flying.

- ◎ If two or more radio devices are used simultaneously on the same frequency, you can not operate the helicopter because of interference. If someone else is using the same frequency, operation may stop. If there is interference despite no one using the same frequency, a source of interference exists. Never fly until this interference has been cleared.

## Flying Site and Range

- ① The flying range of the helicopter can be defined as the distance where it can receive the radio frequency signal from the transmitter. However its true range is limited to where you can confirm the behaviors of the helicopter with your own eyes.
- ② Never operate the helicopter in a place where you may lose sight of it, or the radio signal from your transmitter fails to reach it - as a crash is very likely.
- ③ Try to understand the surroundings at all times and never fly in bad weather, such as strong wind or rain, at night or in low visibility.
- ④ Never fly in a place where there are people, cars, schools, hospitals, other buildings or obstacles, or by a river or on the seashore; fly at an exclusive airfield where radio signals are controlled.
- ⑤ Do not fly near roads, tracks, electric lines, high-tension lines or other objects determined dangerous.
- ⑥ Please do not let the noises of main rotor blades or other parts disturb the surroundings.

Observe these rules and manners to help enjoy this R/C helicopter.

## Precautions for the Operator

The following items are precautions for the operator flying this R/C helicopter.

Be sure to observe them.

- ① The following persons or those in the following states should never operate this helicopter:

- Infants, children, or other persons who have no knowledge or experience of R/C helicopters;
- Pregnant woman;
- When you are tired, ill, under influence of medicine or alcohol and cannot make proper judgments in safe operation;
- When you are a beginner or borrow someone's radio control helicopter and have not taken sufficient safety guidance on the operating methods; or
- Those who are believed to be incapable of flying a radio control helicopter.

- ② Wear easy-to-move clothes.

- Choose to wear clothes whose edges or hems can not come into contact with the rotating parts of the helicopter, the antenna or controls on the transmitter, endangering you.

- It is very dangerous if accessories such as rings, bracelets, etc. are caught by the helicopter or the transmitter.  
Remove them and bundle long hair so that they will not be caught.
  - In order to protect your feet, wear solid, easy-to-move shoes, avoiding sandals or high-heel shoes.
  - Wear a cap, gloves, sunglasses or goggles as required.
- ③ Do not fly the Helicopter in an unnatural posture.
- Avoid standing in an unstable or slippery position.
  - Do not fly while looking backward, sitting or lying.
  - Do not bring the helicopter too close to the operator or surrounding people (if there are bystanders, make sure that they are behind the operator).
- ④ Take sufficient flight breaks.
- An excessively long flight makes the operator lose his/her concentration due to fatigue, leading to accidents.  
Take adequate flight breaks. Avoid an unreasonably long flight, which could result in unexpected accidents or injuries.

## Precautions for Starting

- ① Make sure the bolts for the blades (main rotor, tail rotor) are properly tightened (there should be some movement possible).  
Check all other screws to confirm they are properly tightened. Retighten any loose screws.
- ② Make sure that no tool used for assembly or adjustment has been left in the helicopter body, and that all parts affecting flight performance are free from fault.
- ③ Keep the airfield as neat and tidy as possible and place the helicopter in a stable place (objects such as cables, wires, strings, debris of broken parts, screws, etc., may be scattered by the wind pressure from the rotor and damage the helicopter).
- ④ Make sure that the batteries in the transmitter and the receiver are fully charged.
- ⑤ Always turn on the transmitter first.
- ⑥ Conduct a distance (range) test of the transmitter. Follow the directions of your transmitter manufacturer, but generally with the antenna collapsed, move 15m or so from the helicopter. Move the controls and confirm movement of the helicopter servos. If they do not move properly, check the cause and have it repaired, if necessary.
- ⑦ -a Extend the transmitter's antenna to its full length. Put the receiver's antenna through an antenna tube and make sure that it can easily receive the radio signal, paying heed to ensure it cannot be caught by moving parts (do not bend or bundle the antenna).
- b When using a 2.4GHz transmitter set, please adjust the antenna as directed in the manual supplied with the transmitter.

### ◎ Starting

- ① When starting the motor, make sure that there is no person, animal or obstacle around the helicopter, which may be caught by the rotors.
- ② After starting the motor, please understand setting the throttle stick / trim to slowest position stops the motor. Rising the rotation speed suddenly is very dangerous. Start the rotation gradually by means of turning on the slow start function in ESC. After the main rotor is rotating, abrupt stick operation will cause the helicopter to rise quickly. Please set the stick to medium-slow position and wait. Make sure the rise of the rotor speed follows your stick operation.
- ③ When moving to a take-off site, note that if your clothes contact the transmitter's stick, the rotor may suddenly start running. Please proceed with caution.
- ④ When lifting the helicopter into the air, be sure to remain at least 10m or more away from it.
- ⑤ Land before adjusting the transmitter or Helicopter. Pay heed not to allow part of your body or clothes to contact the transmitter's sticks by mistake, and do not put the transmitter down in a standing position because wind, etc. may tip the transmitter over, bumping the throttle stick, and causing the helicopter to suddenly leap into the air, endangering yourself or others.
- ⑥ Do not put your hand or any objects into the movable parts while they are running.
- ⑦ When checking the tracking adjustment stay at least 5m or more from the helicopter.

### ◎ Stopping

Move the throttle stick down and allow the motor and main rotor blades to stop completely. Hold the rotor head by hand, remove the power-supplying batteries, and switch off the receiver. Turn off the transmitter last.

## Precautions during Flight

- ① If you note an abnormality such as unusual noise, vibration, etc. during flight, swiftly land the helicopter in a safe place and eliminate the cause prior to flying again.
- ② If the main rotor comes into contact with the ground during flight its appearance may look faultless, but fine cracks or distortions may have occurred in different parts. If you continue to fly it in that condition, the cracks may extend, allowing the inner lead weight to fly out or cause the main rotor to come off the main blade holder, thus leading to a serious accident. If the main rotor is damaged even slightly or if there is a possibility of damage, replace it with a new one immediately.
- ③ Never look away from the helicopter during flight. If you do so even for a short period of time, it may change its posture or you may lose sight of it, and loose control. Always assume the worst-case scenario and all care should be taken to prevent a crash.
- ④ Do not fly (or hover) the helicopter keeping the main rotor at eye level because it is dangerous. Always ensure that the main rotor is higher than eye level.
- ⑤ Never allow the power of the transmitter or the helicopter to run low (Set the transmitter timer, etc as a precautionary measure).
- ⑥ Do not touch the main rotor or tail rotor while they are running.

## Inspection after Flight

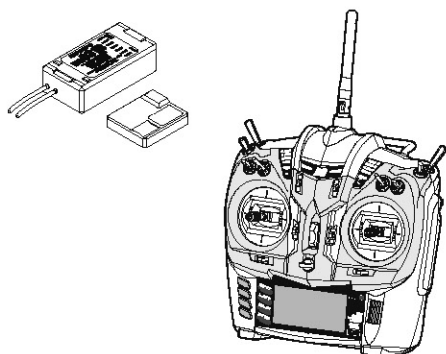
- ① After each flight inspect the following: Check screws for tightness and parts for wear, deterioration and damage. Wipe off dirt and water drops from the helicopter (if dirt on the movable parts is left uncleaned for a long time, they may move less smoothly, having a bad effect on flight performance).
- ② Make sure the motor, ESC, and battery are not abnormally hot.
- ③ When storing the helicopter for a long period of time, clean it before storage.
  - Store it in a dry, safe place beyond the reach of infants or children.
  - If there is damage or other problems, repair or replace components as necessary before storage.
- ④ To lubricate or replace the parts, follow the relevant parts assembly processes in the manual and the instructions in the parts lists.
- ⑤ Check whether or not the receiver and gyro are firmly secured, and free from problems.
- ⑥ Check the receiver antenna wire from time to time because its core may become broken. This may not be immediately apparent, so have it checked periodically by the manufacturer.
- ⑦ Once your flying session is over, be sure to remove the battery from the helicopter.

## Consumable Parts and Other Parts

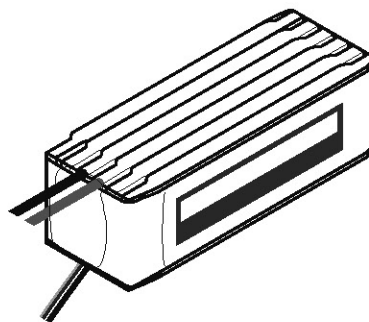
When replacing consumable parts, use our specified original parts or our authorized optional ones. Do not modify these parts. Our product warranty does not cover any troubles resulting from use of non-original parts. Do not use out-of-standard parts, because they may cause an accident or a problem exposing you to great danger.

## ADDITIONAL ITEMS REQUIRED

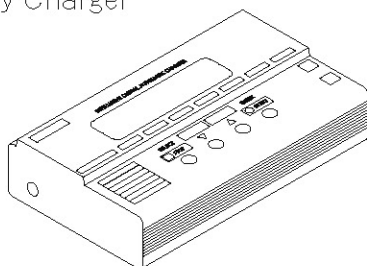
- 1 Transmitter (140 CCPM capable) and receiver



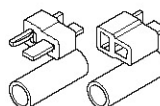
- 2 Lithium-Polymer Battery (Li-Po) 6 cell × 1



- 3 Battery Charger

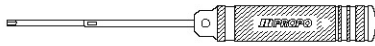


- 6 Battery Connector - One set

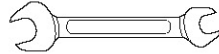


※ Please see p.28 for details.

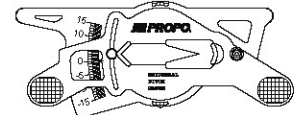
## TOOLS REQUIRED FOR ASSEMBLY



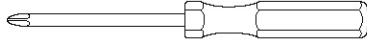
Hexagon Driver : 1,5mm (NO.61401)  
2mm (NO.61402)  
2.5mm (NO.61403)



Wrench : 4.5mm



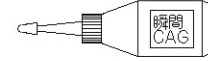
Universal Pitch Gauge  
NO.(60326)



Phillips Screwdrivers(#0, #1, #2)



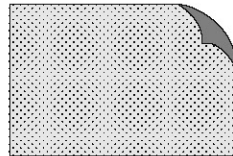
Rule: 15cm or longer



CA Glue



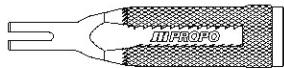
Epoxy Glue  
(Hardening Time; 30 Min. or More)



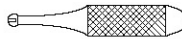
Sandpaper of #300 to 400

Other general tools required for making a model

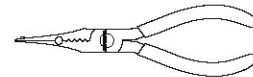
## Useful Tools



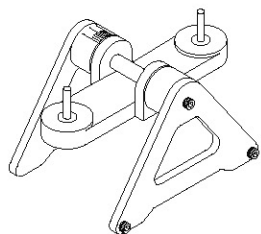
JR Universal Link Driver  
(NO.61360)



JR Universal Link Trimmer  
(NO.60219)



JR Universal Link Plier C  
(NO.60242)

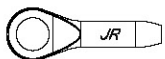


Blade Balancer

## UNIVERSAL LINKS

The Universal links have a front and back side and are mounted in the specified direction at the time of attaching the linkage. The following describes how to tell the front and back.

At the time of attaching the linkage, pay heed to the direction of each universal link during assembly.



The side marked "JR" is the front. At the time of fitting the linkage, attach the universal link to joint ball by pressing the back side onto the ball.

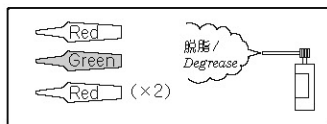
## INDICATION OF TEMPORARY FIXATION

The areas marked with the following symbol should be temporarily fixed until assembly and relevant processes are completed.



A number "( × 2)" next to the symbol denotes the number of parts required to be temporarily fixed.



## PREVENTION OF LOOSENED BOLTS



Bolts may be loosened if they are exposed to vibration for a long period of time. For this reason, it is necessary to take proper countermeasures to prevent them from being loosened. In each process, the bolts and matching tapped holes marked with the symbols shown above should be degreased with alcohol and adhered with a screw locking agent such as JR Thread lock

(green: hard, red: soft). The same applies for the parts marked with the same symbols. A parenthesized number added to the symbol indicates the number of bolts to be applied with the screw locking agent. If multiple pieces of the same part are used, the symbols including those for their bolts may be omitted. There are two kinds of screw locking agents. Green denotes a hard agent and red a soft one; use them properly, according to the instructions. When red (soft) agent is required, the mark  is used, and when the green (hard) one is required, the mark  is used.

Specially important areas are marked the de-greasing symbol shown above. If this symbol is indicated, degrease more elaborately. After assembly, if you want to remove the bolts, etc. secured with the screw locking agent, weaken the thread lock agent by adequately heating the bolt with a torch or a soldering iron (if you try to remove them by force, you may damage the bolt or wrench and fail to remove the part). When heating to loosen the screw locking agent, care should be taken not to deform the surrounding resin parts.

## EPOXY ADHESIVE AGENT

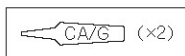
Bond the relevant parts marked with the following symbol using an epoxy adhesive agent with a hardening time of 30 minutes or more. As with the screw locking agent, a number "(x 2)" next to the symbol denotes the number of parts required to be adhered.



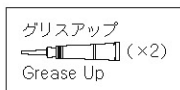
## INSTANT ADHESIVE AGENT

Bond the relevant parts marked with the following symbol, using an instant adhesive agent.

As with the screw locking agent, a number "(x 2)" next to the symbol denotes the number of parts required to be adhered.



## GREASE

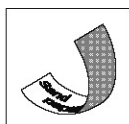


Apply thrust bearing grease to the relevant parts marked with this symbol.



This symbol indicates where silicone grease is required.

## SANDING



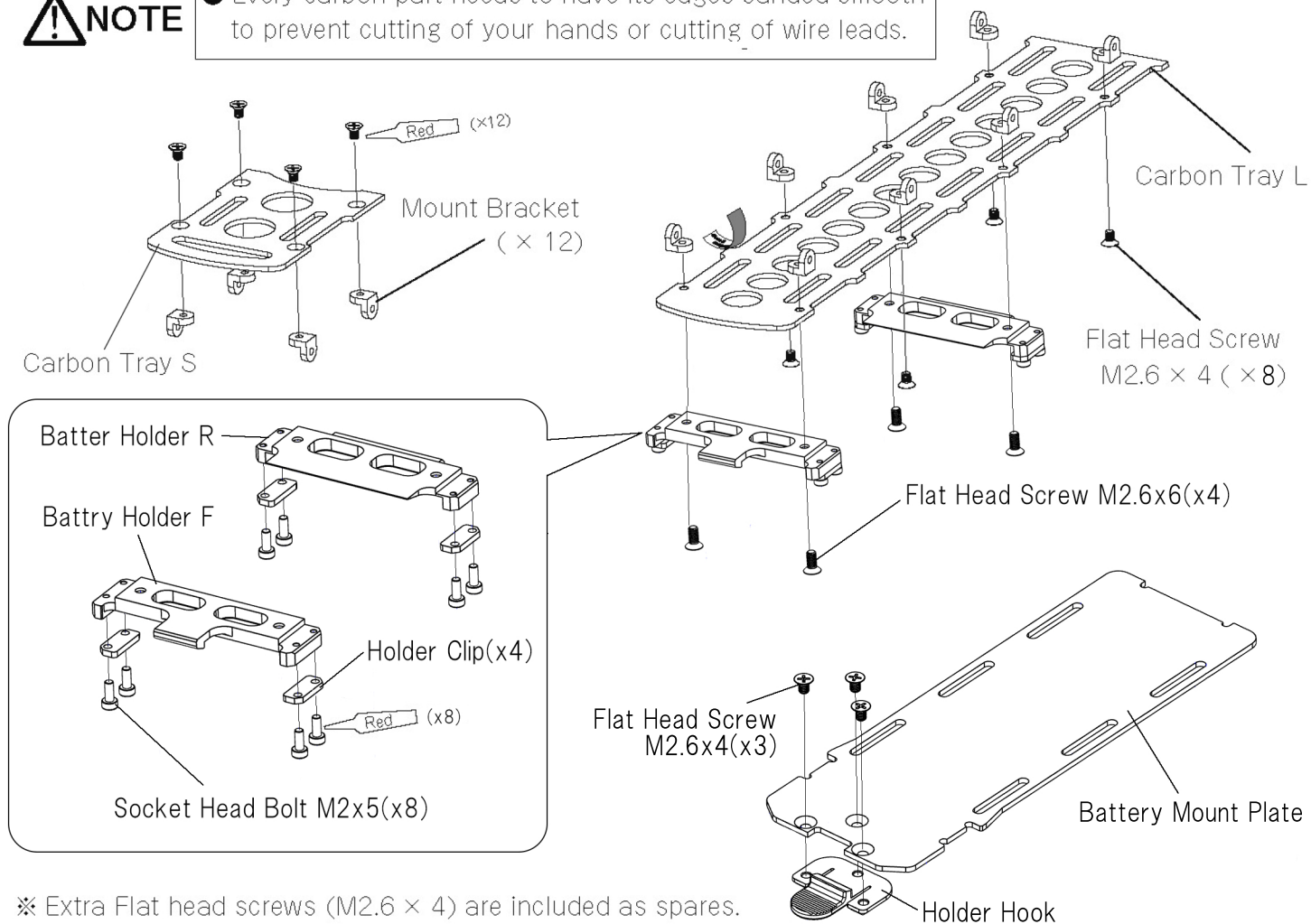
Sand the parts where indicated with this symbol.

## 1-1 CARBON TRAY ASSEMBLY

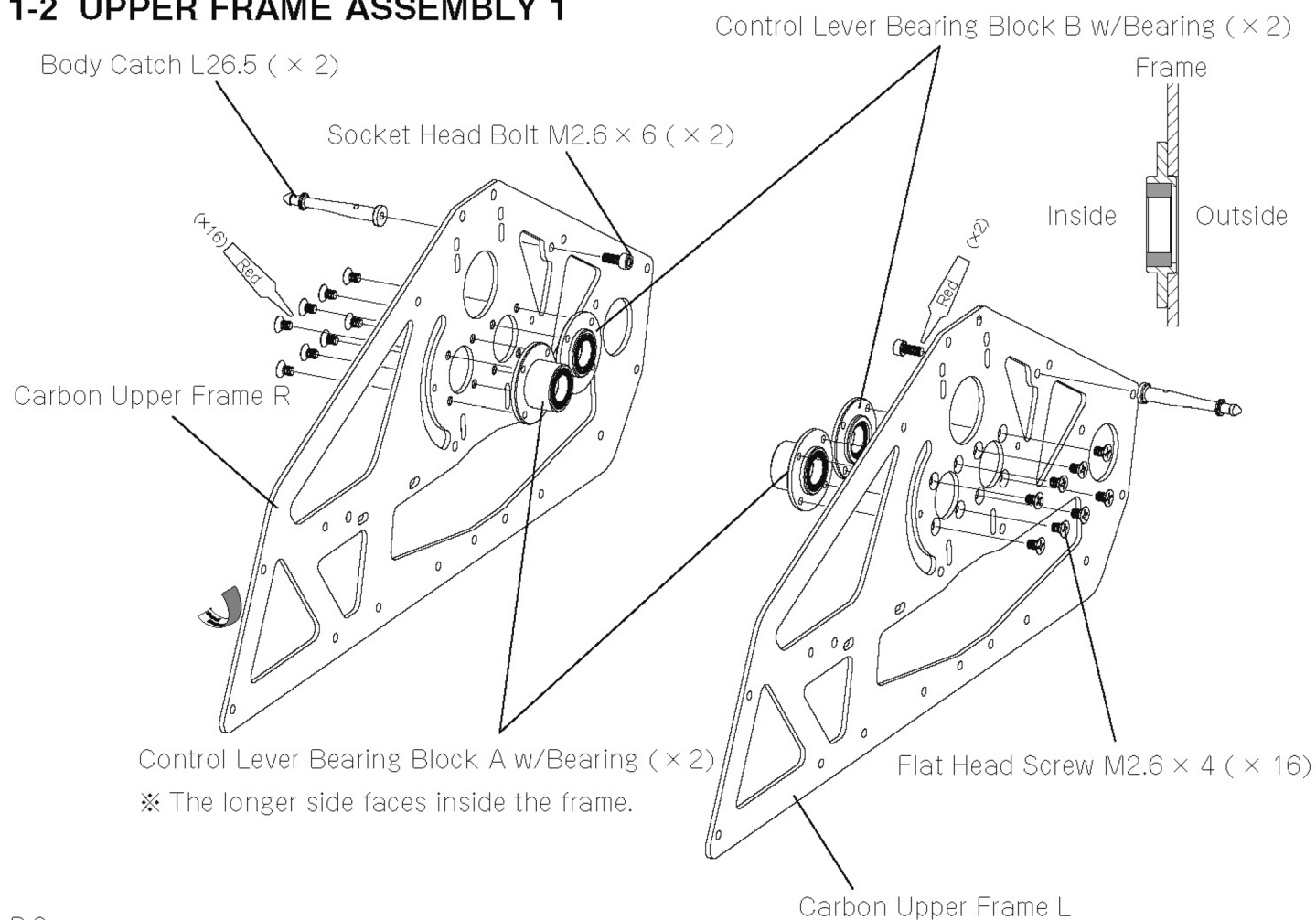


**NOTE**

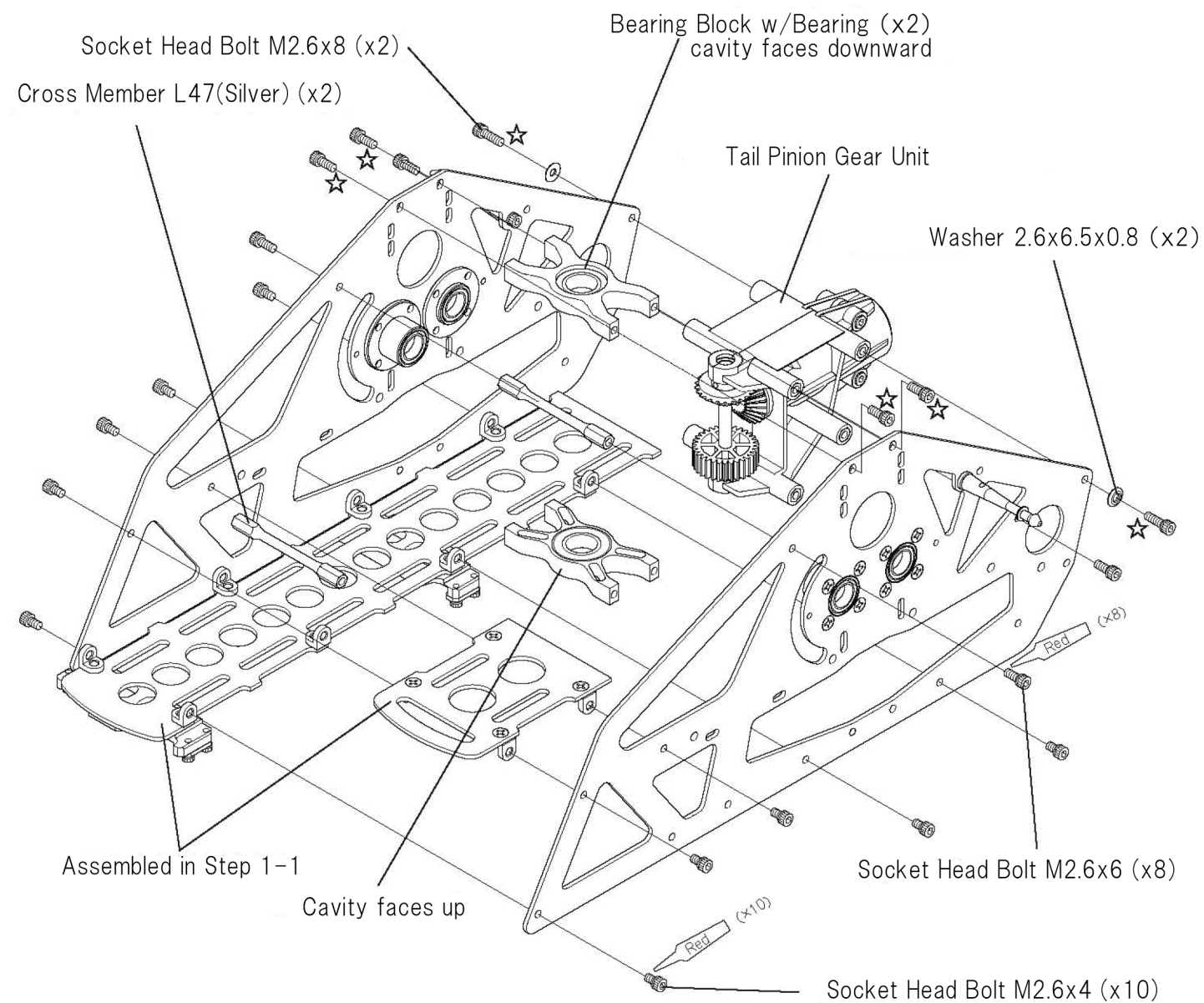
● Every carbon part needs to have its edges sanded smooth to prevent cutting of your hands or cutting of wire leads.



## 1-2 UPPER FRAME ASSEMBLY 1



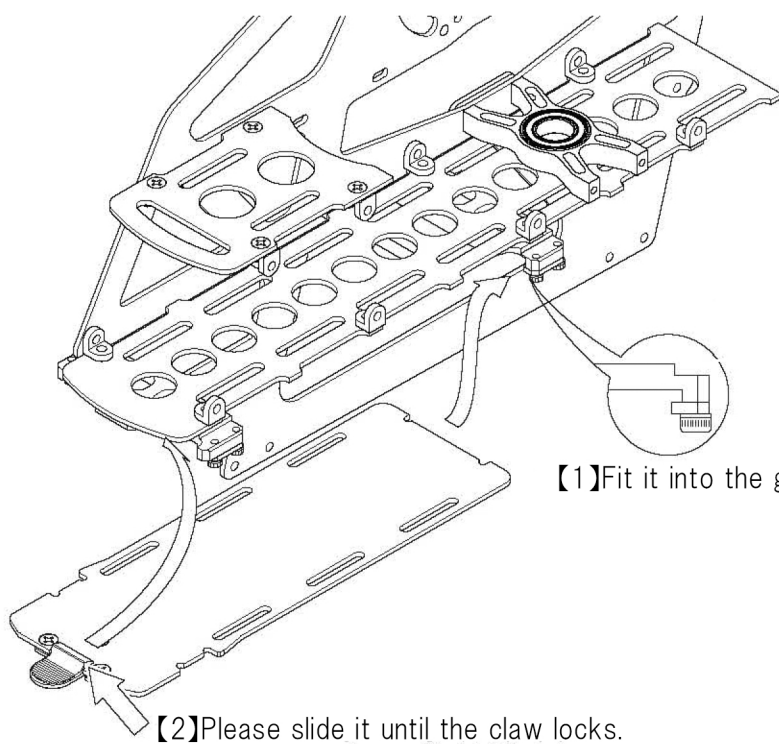
## 1-3 UPPER FRAME ASSEMBLY 2



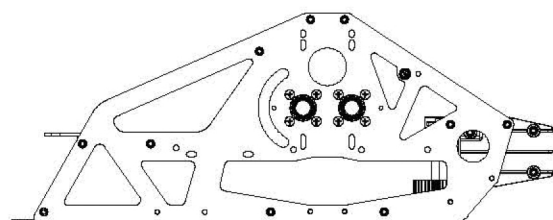
● Temporarily tighten the bolts indicated by a ☆.



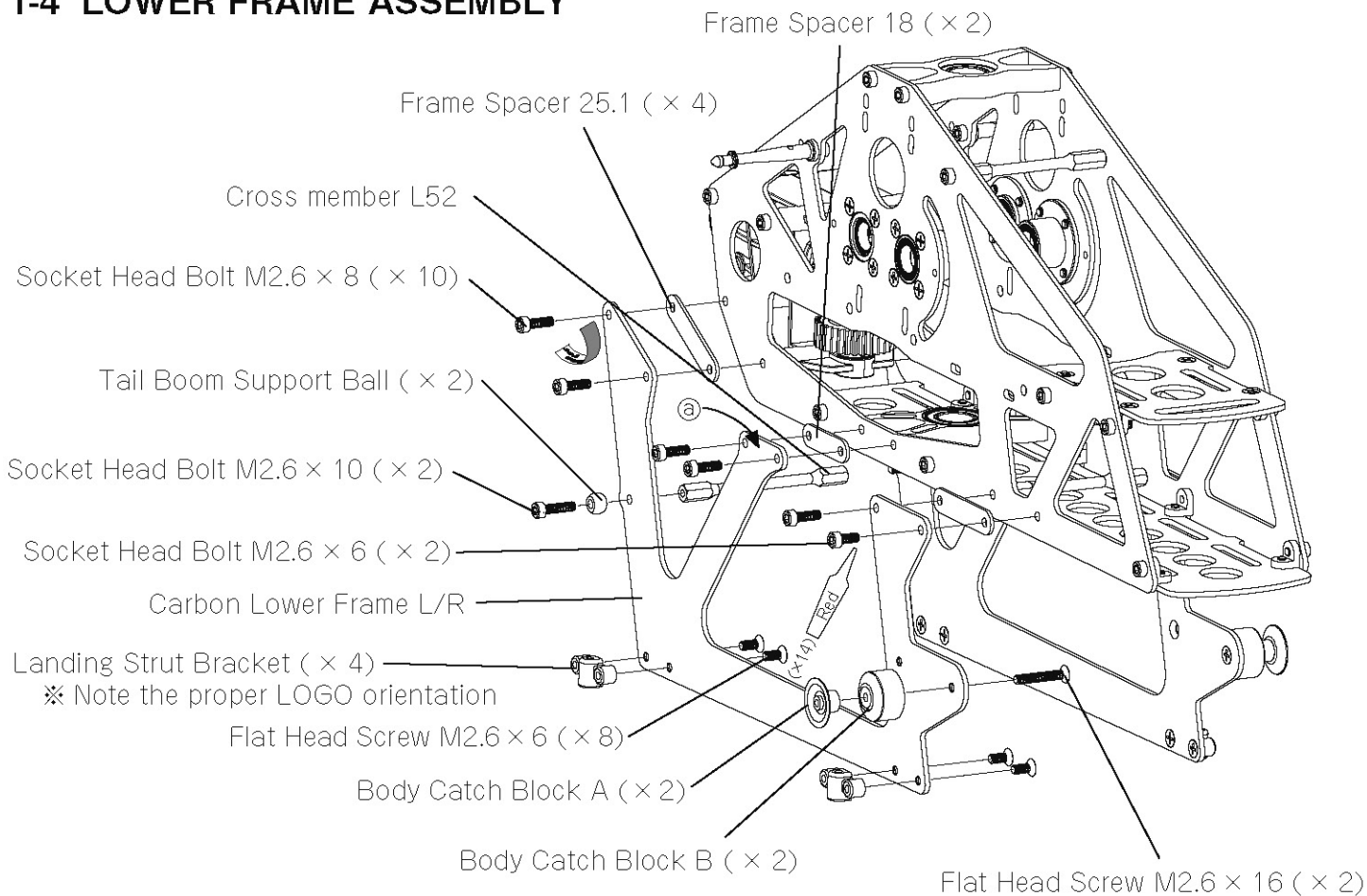
● A molybdenum grease is applied to the metal gear of the tail pinion gear unit. Please re-grease regularly.



Complete Assembly



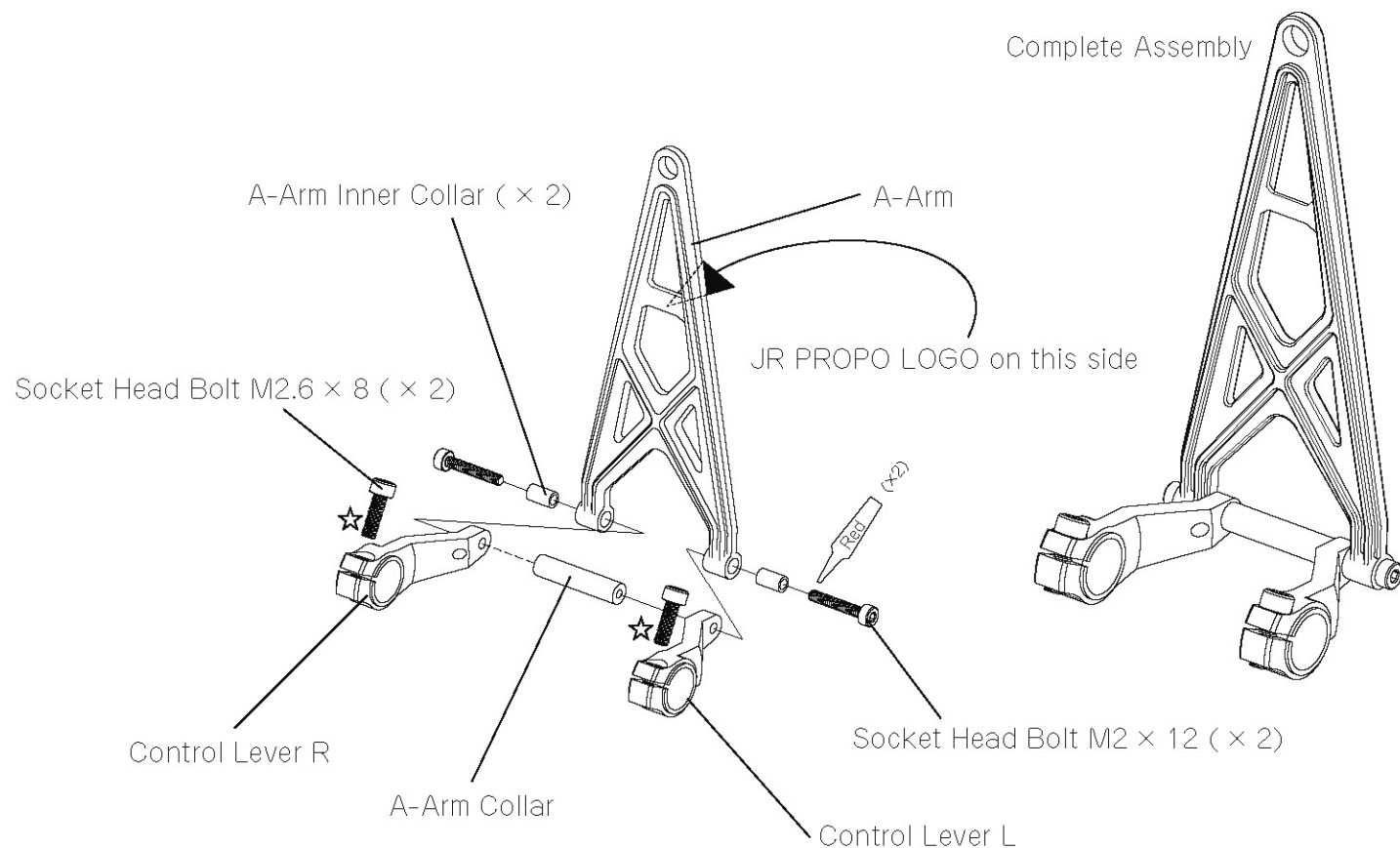
## 1-4 LOWER FRAME ASSEMBLY



### NOTE

- Note the orientation of the Carbon Lower Frame L and R.
- If you wish to install optional governor mount, install at "a" in the figure shows.

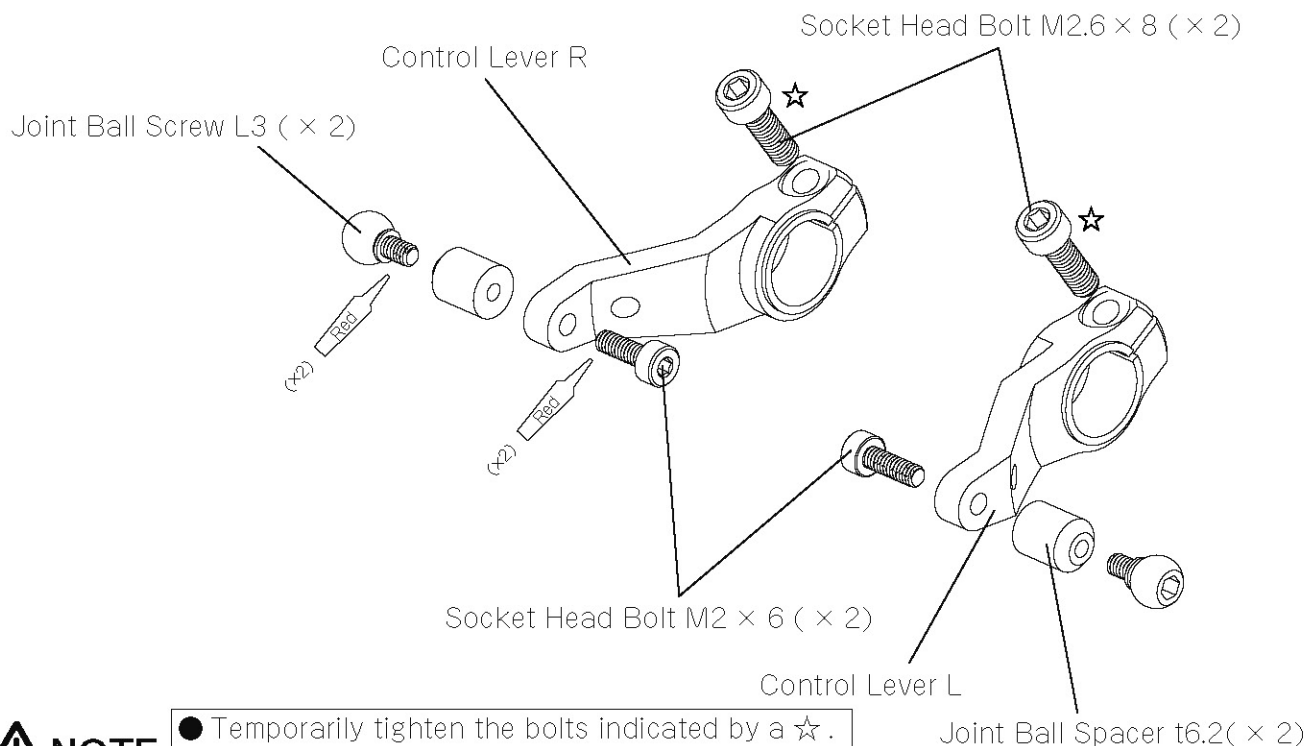
## 2-1 A-ARM ASSEMBLY



### NOTE

- Temporarily tighten the bolts indicated by a ☆.
- Note the orientation of the Control Lever L/R and the A-Arm.

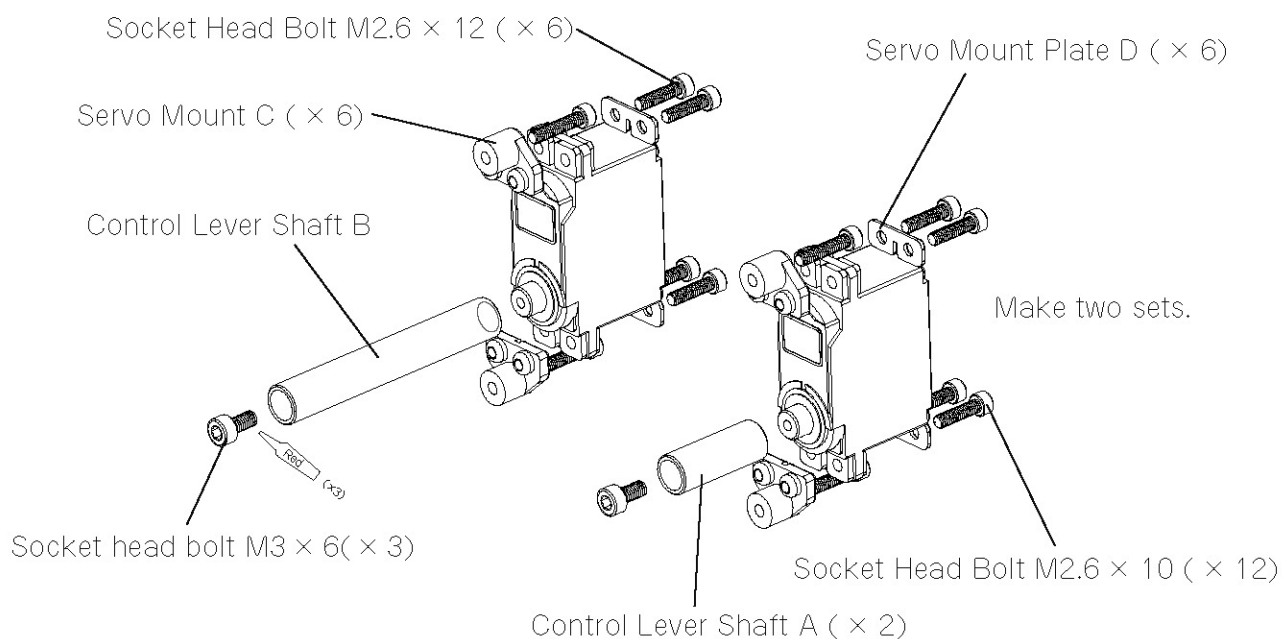
## 2-2 CONTROL LEVER ASSEMBLY



**NOTE**

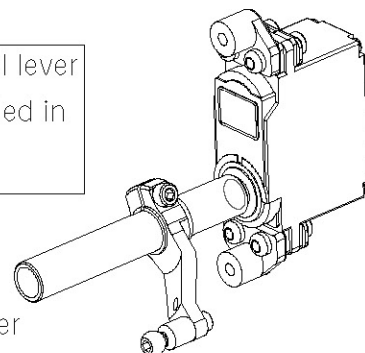
- Temporarily tighten the bolts indicated by a ☆.
- Note the orientation of the Control Lever L/R.

## 2-3 CONTROL LEVER SHAFT ASSEMBLY



**NOTE**

- Be careful not to load the servo when tightening the Control lever shaft. Temporarily install the Control lever which was assembled in a previous step when tightening the Socket head bolt.



※ If you are using FUTABA servos, please use the optional silver servo horn inner (not included).

※ When purchasing replacement servo gears, please purchase using the following parts numbers:

No.70708 Swash servo gear set (DS11) Plastic

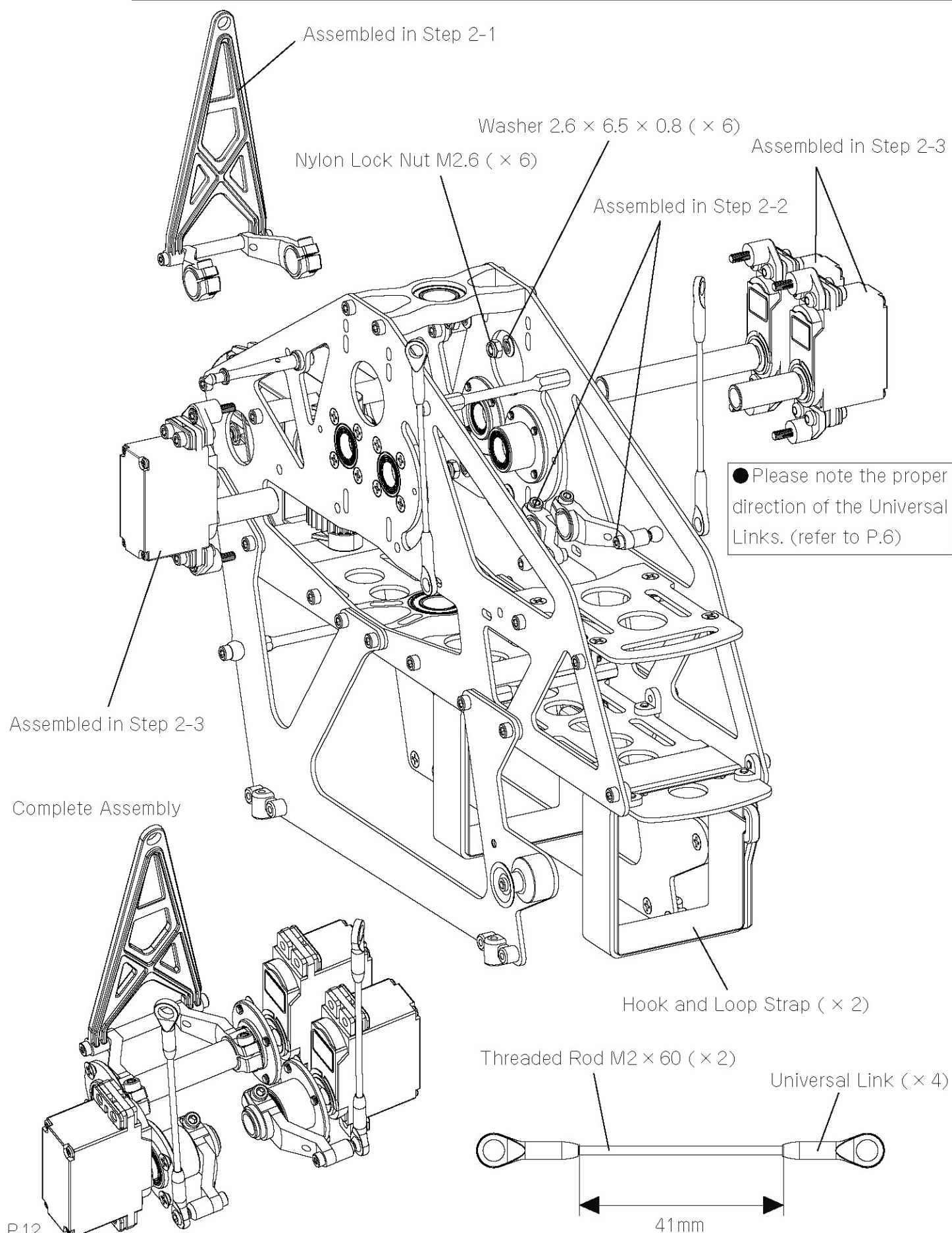
No.70710 Swash servo gear set (DS11) Metal (optional)

## 2-4 SWASH SERVO INSTALLATION

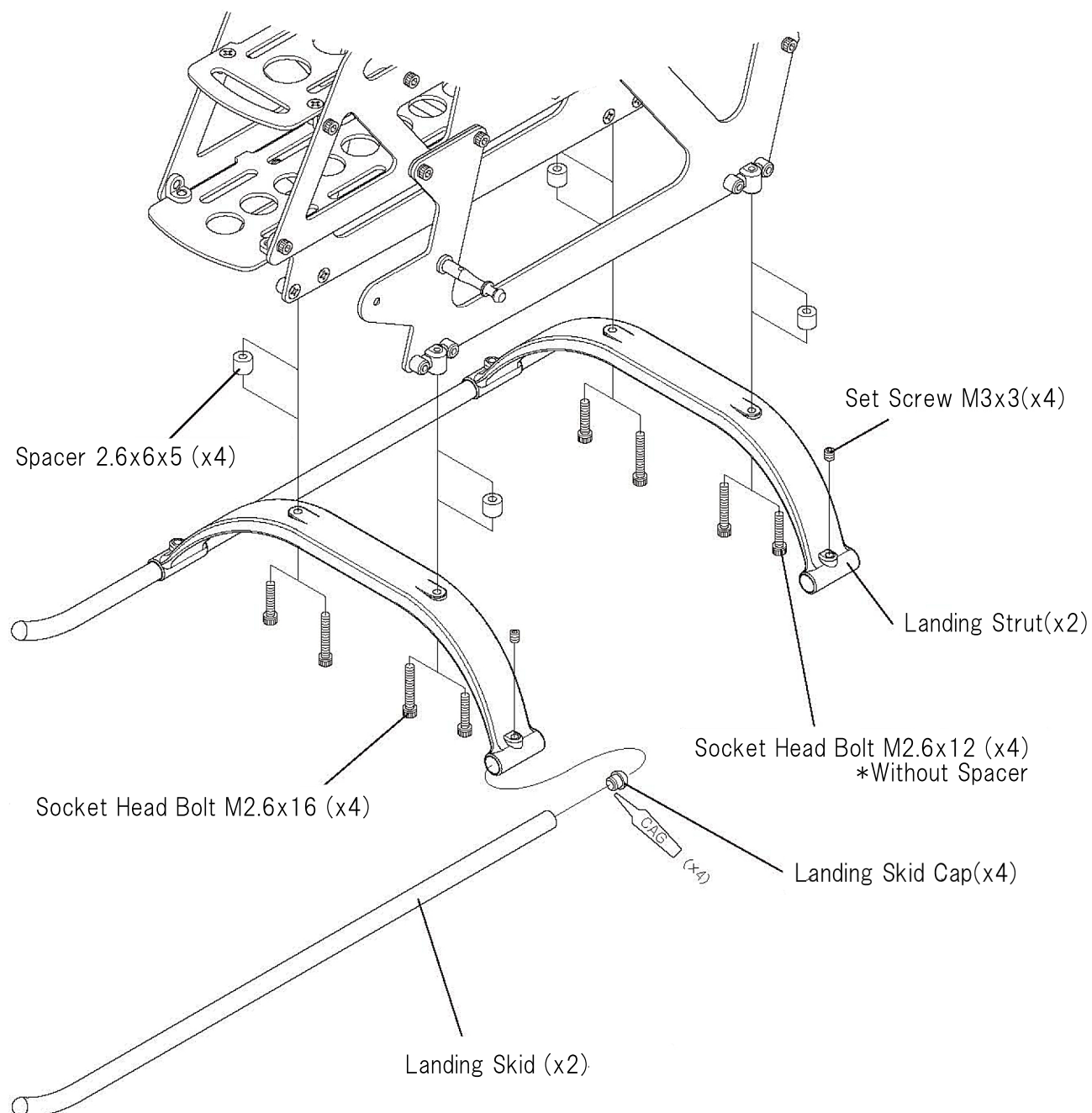


**NOTE**

- Put the Control Lever Shafts assembled in Step 2-3 through the Control Levers L/R assembled in Step 2-1 and 2-2. Leave the socket head Bolts M2.6 × 8 temporarily tightened. Once the assembly is complete, and the angle of the swash plate confirmed with the servos at neutral with the alignment pins inserted, tighten these bolts firmly.
- Please note the proper direction of the Universal Links (refer to P.6).



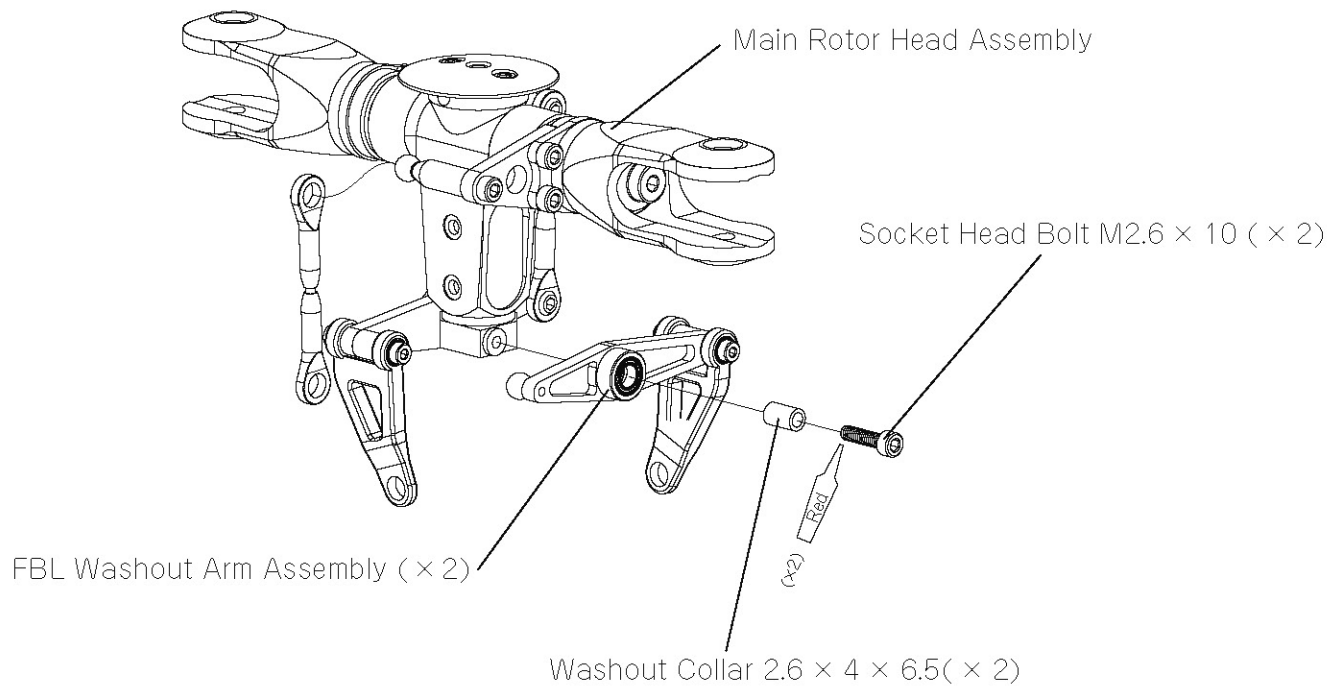
## 2-5 LANDING GEAR INSTALLATION



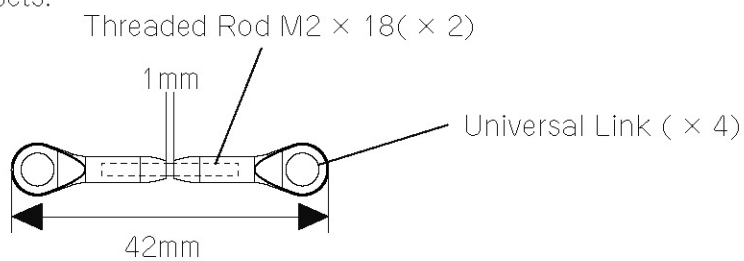
### 【Note】

If you do not have enough space for the battery installation, please incorporate a spacer 2.6X6x5.

### 3-1 MAIN ROTOR HEAD ASSEMBLY



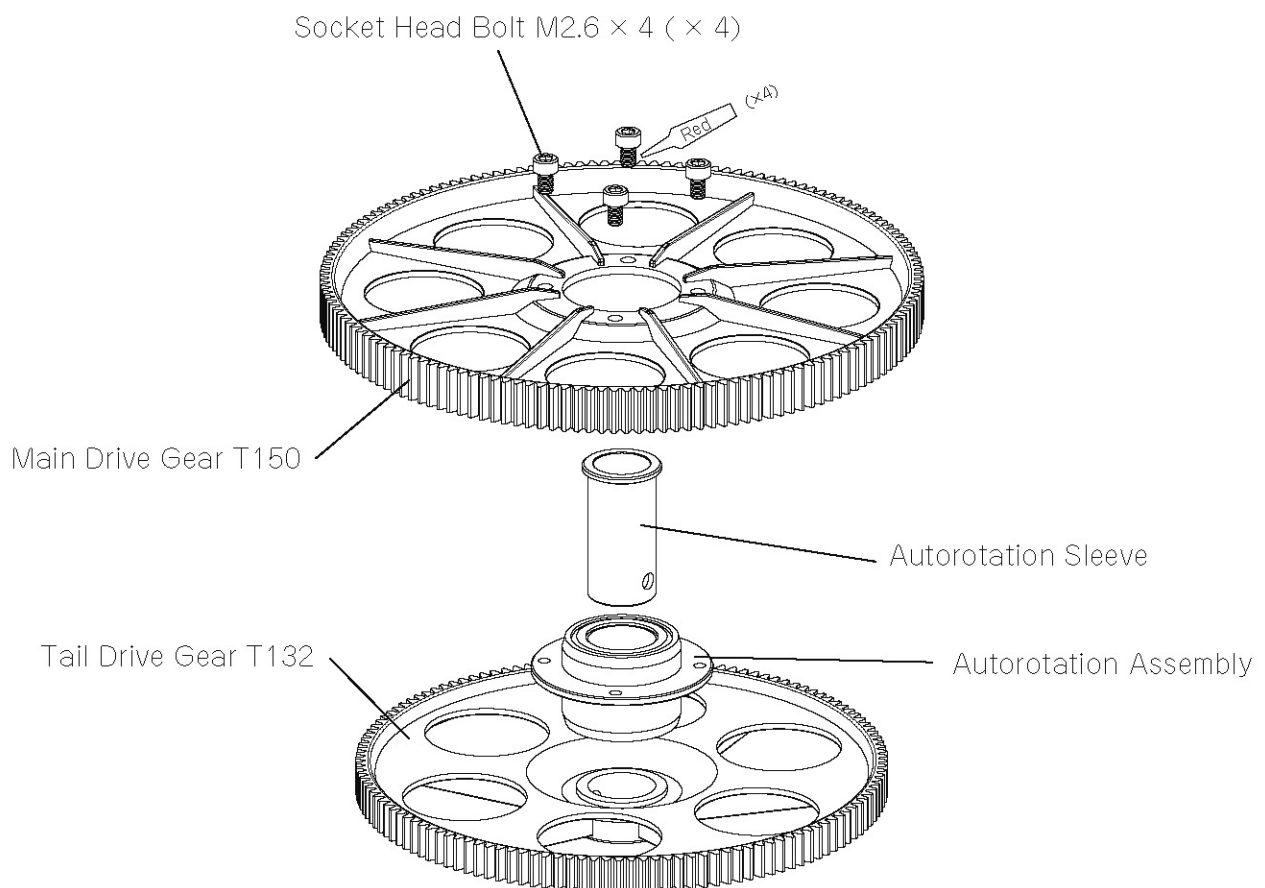
Make two sets.



#### NOTE

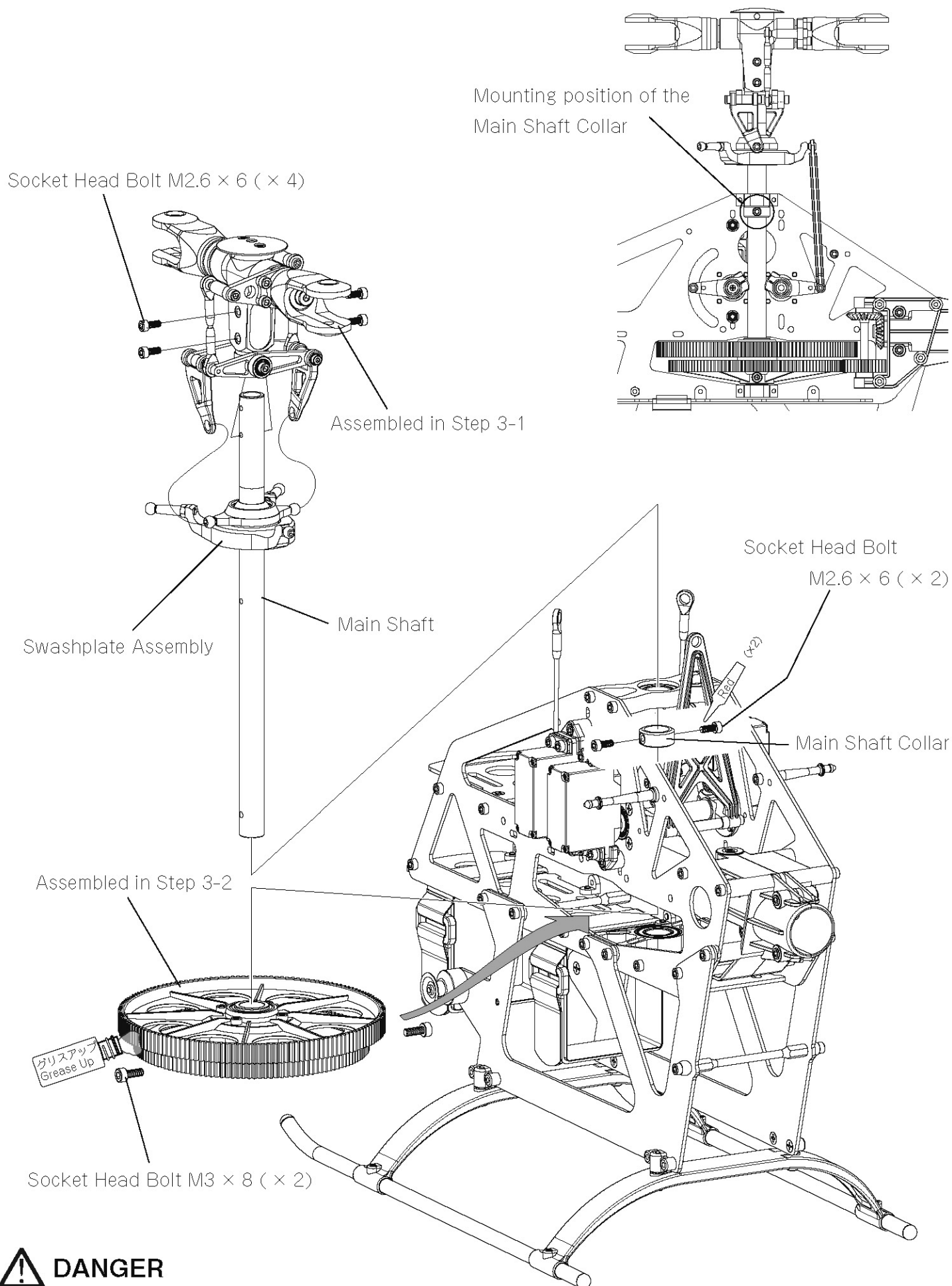
● Please note the proper direction of the Universal Links. (refer to P.6)

### 3-2 MAIN DRIVE GEAR ASSEMBLY



● Tail Drive Gear T132 has a mounting hole for governor magnet(not included). When installing the governor, use this hole for the magnet.

### 3-3 MAIN SHAFT INSTALLATION



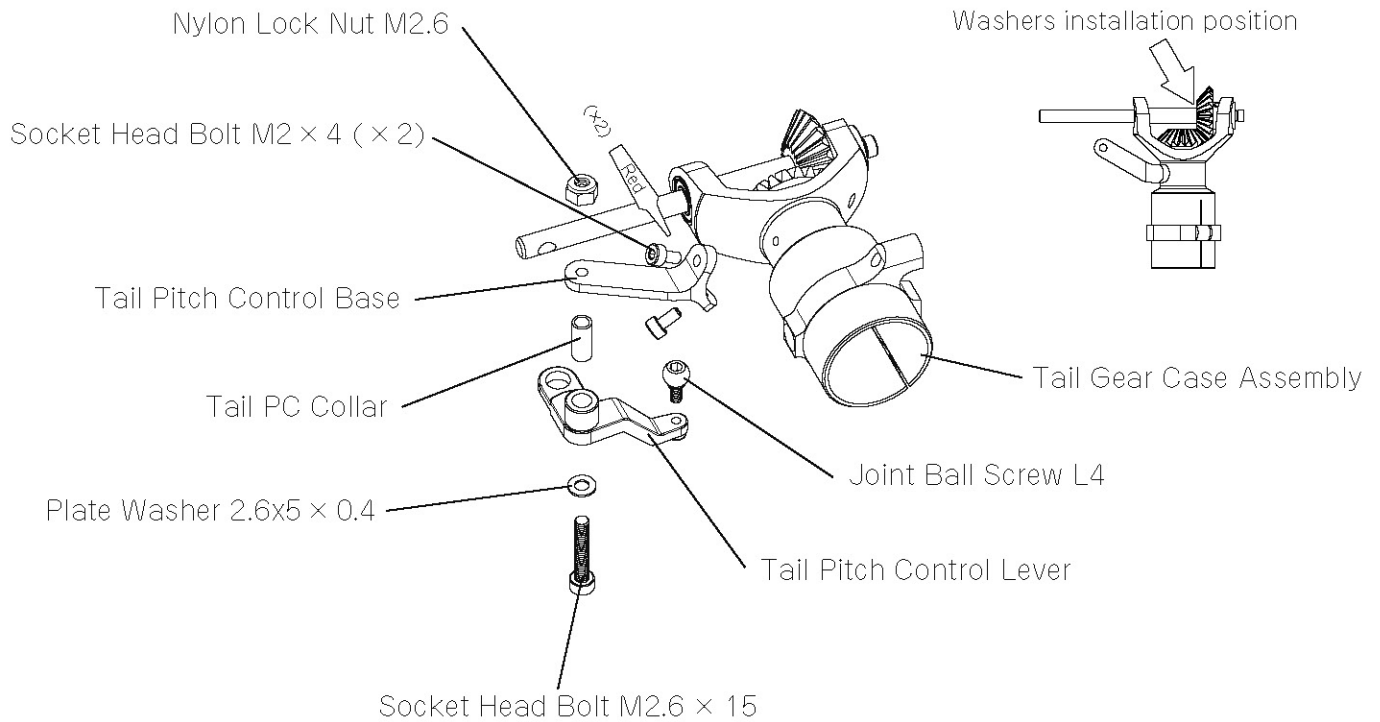
#### DANGER

- Make sure the Main Shaft has no up-down movement by adjusting the bearing case which was temporarily tightened in Step 1-3.
- Sparingly apply the supplied grease onto each gear.

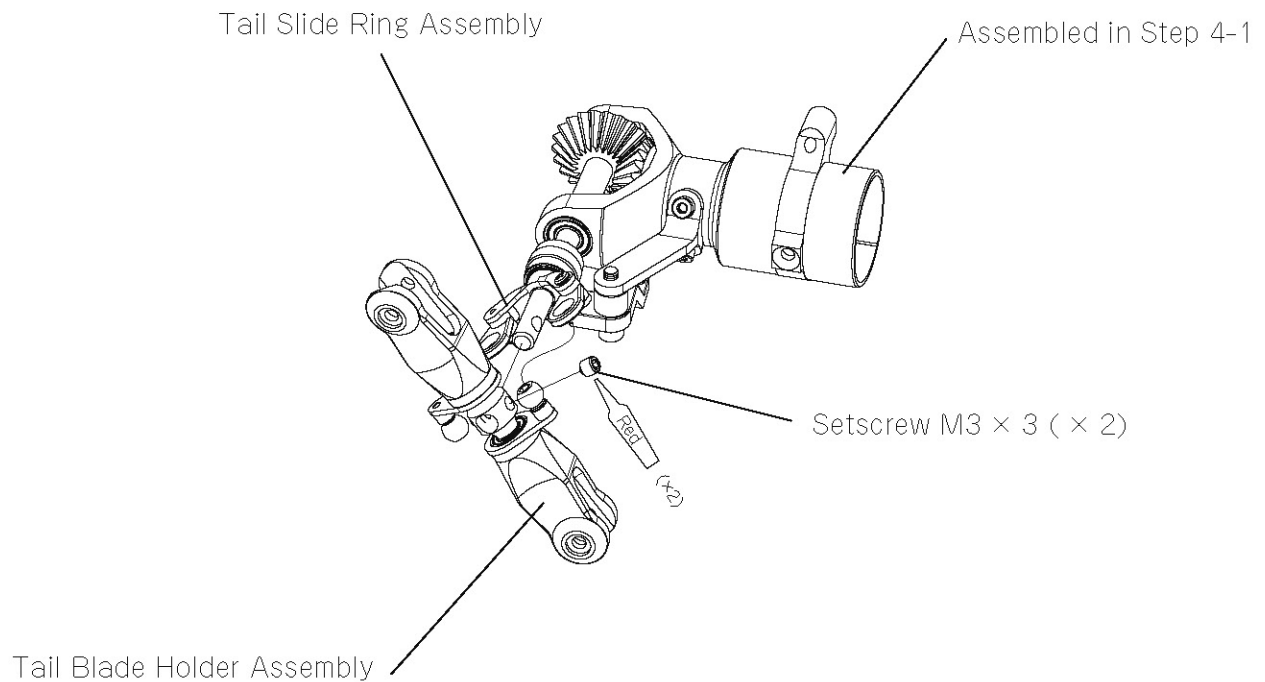
## 4-1 TAIL GEAR CASE ASSEMBLY 1



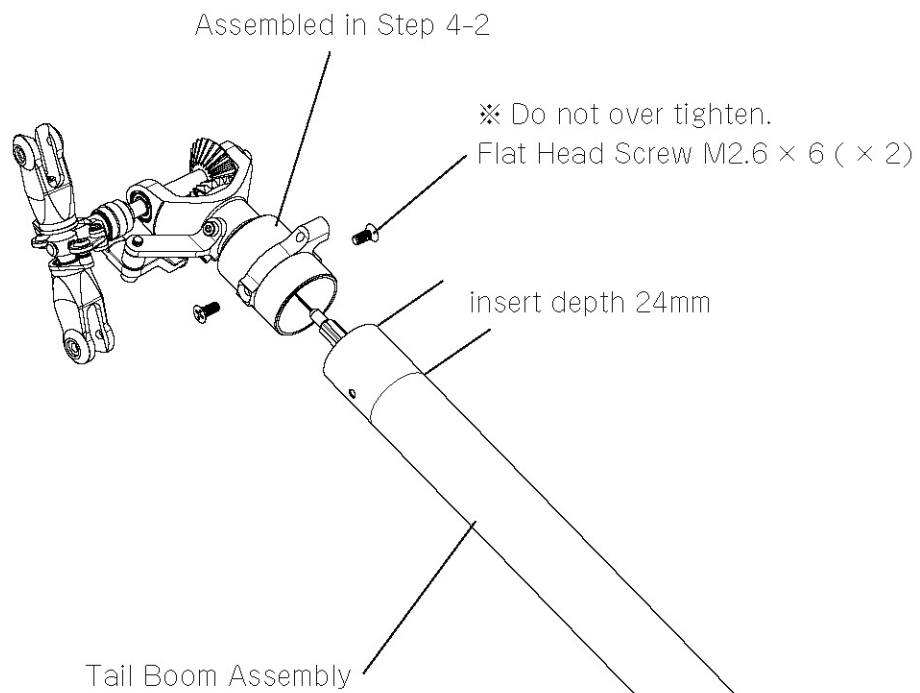
● During maintenance, if there is movement (in-out) of the Tail output shaft, please use the Washers to eliminate any movement.



## 4-2 TAIL BLADE HOLDER ASSEMBLY



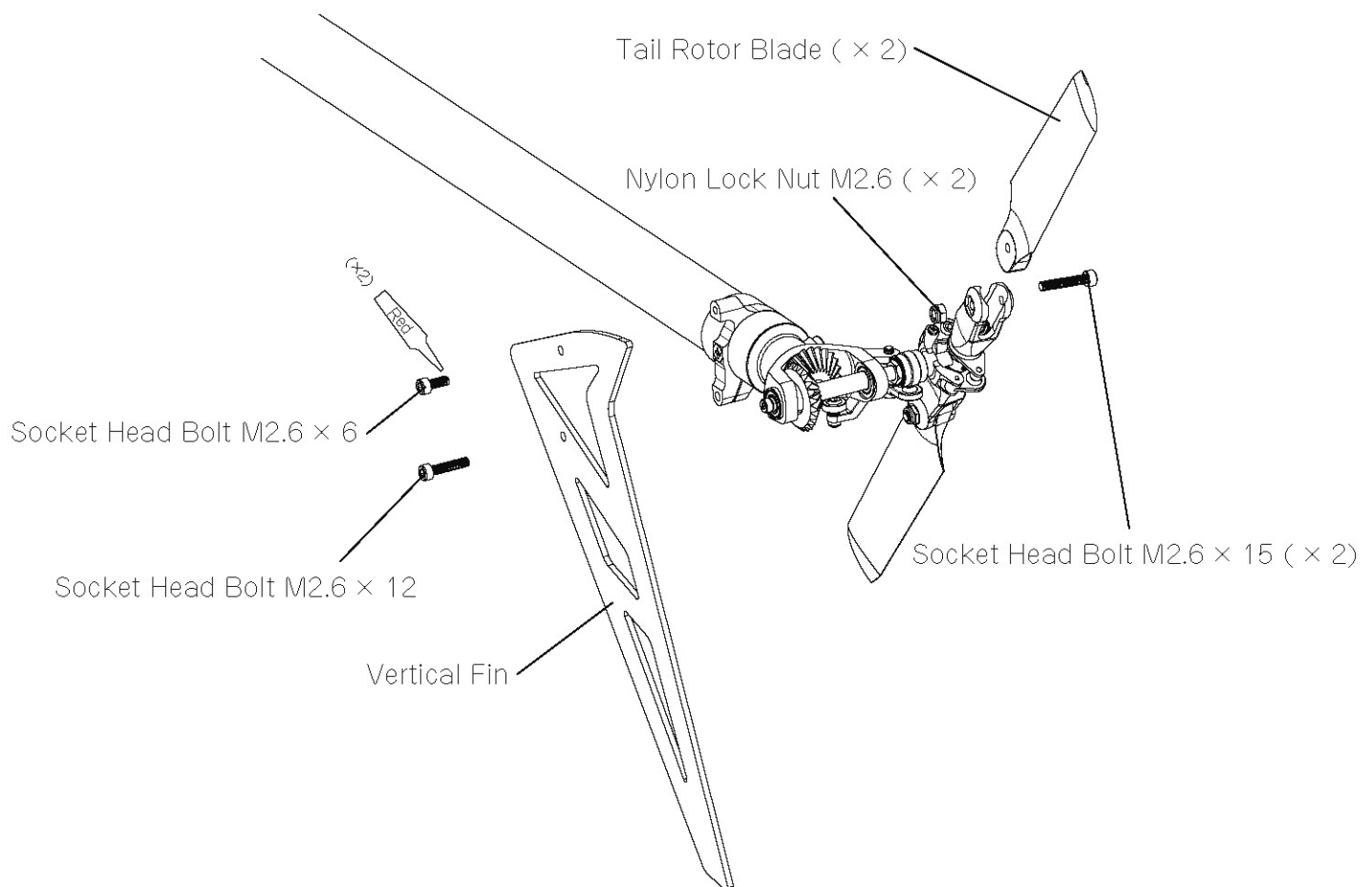
## 4-3 TAIL GEAR CASE INSTALLATION



### NOTE

● Do not over tighten the Flat Head Screws.

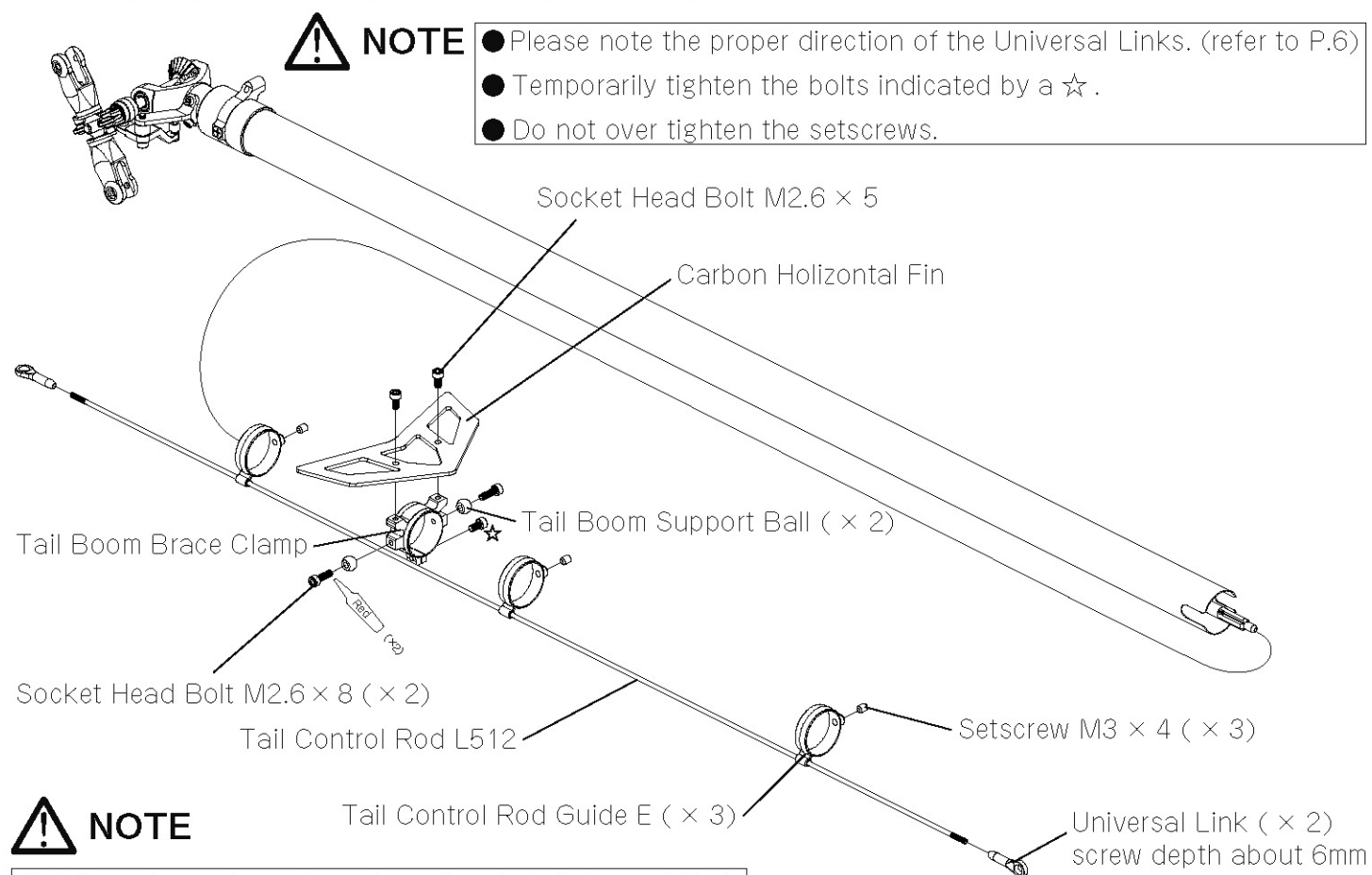
## 4-4 VERTICAL FIN AND TAIL ROTOR BLADE INSTALLATION



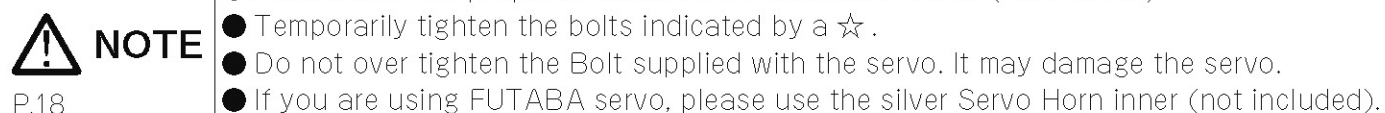
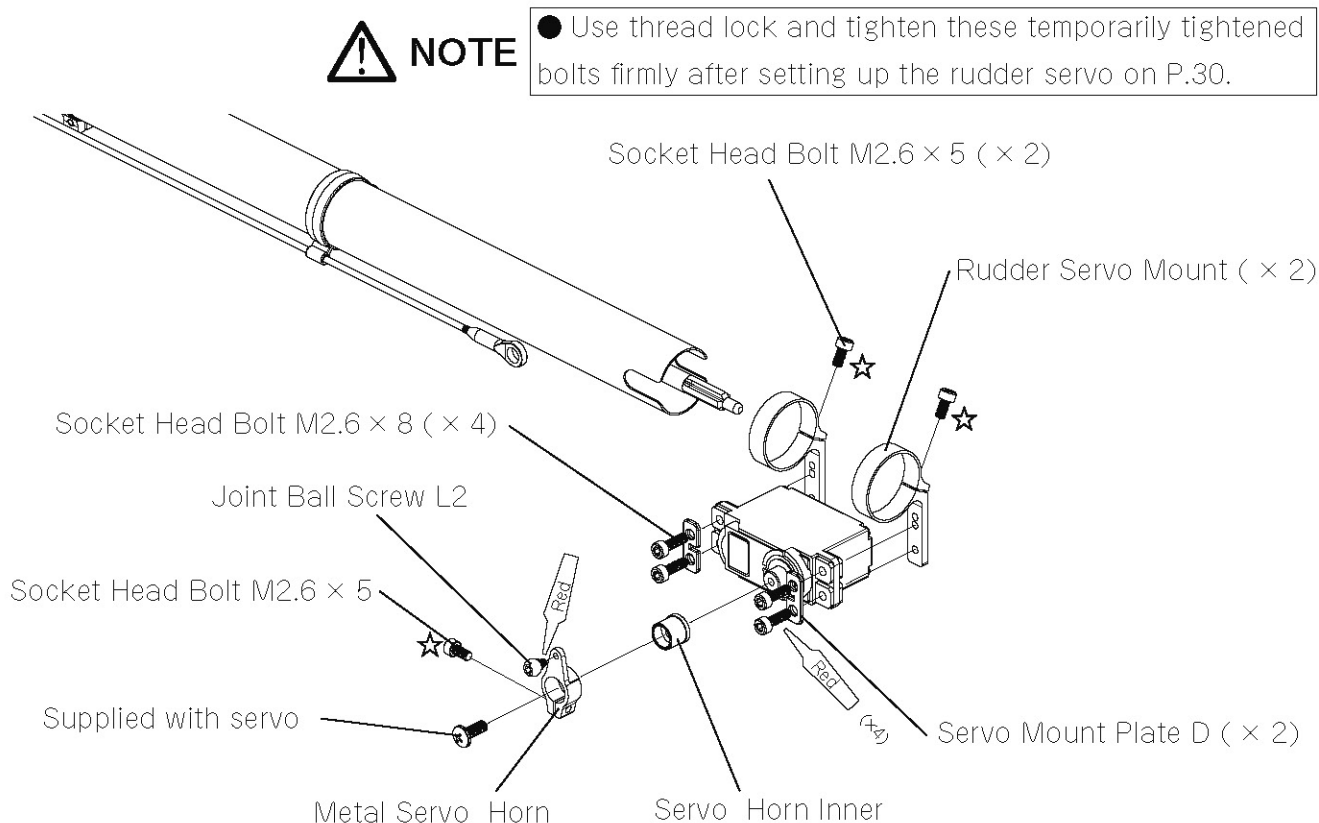
### NOTE

● Do not over tighten the Socket Head Bolt M2.6 × 12.

## 4-5 TAIL CONTROL ROD GUIDE INSTALLATION



## 4-6 RUDDER SERVO INSTALLATION



## 4-7 TAIL UNIT INSTALLATION

Tail Boom Brace End ( × 4)

Tail Boom Brace L400 ( × 2)

depth 39mm

● The setscrew securing the tail control guides should be tightened after adjusting the angle and position of the Tail control rod guides which were installed during step 4-5. Do not overtighten the setscrews - they should only be tightened enough to prevent the guides moving.

**NOTE**

● Sand both ends of the Tail Boom Brace and secure the brace ends using epoxy bonding agent. Insure correct orientation of the brace ends as the epoxy dries.

**⚠ DANGER**

● Insert and install the Tail Boom into the assembled Tail Gear Unit. After installation, tighten the bolts firmly which were temporarily tightened and be sure that the Tail Boom does not come away.

## 5-1 MOTOR MOUNT INSTALLATION

- Brushless Motor NHM-40-8P

- Motor Mount

Red (x4)

Flat Head Screw M3 × 6 (× 4)

Pinion Gear T11 or T12

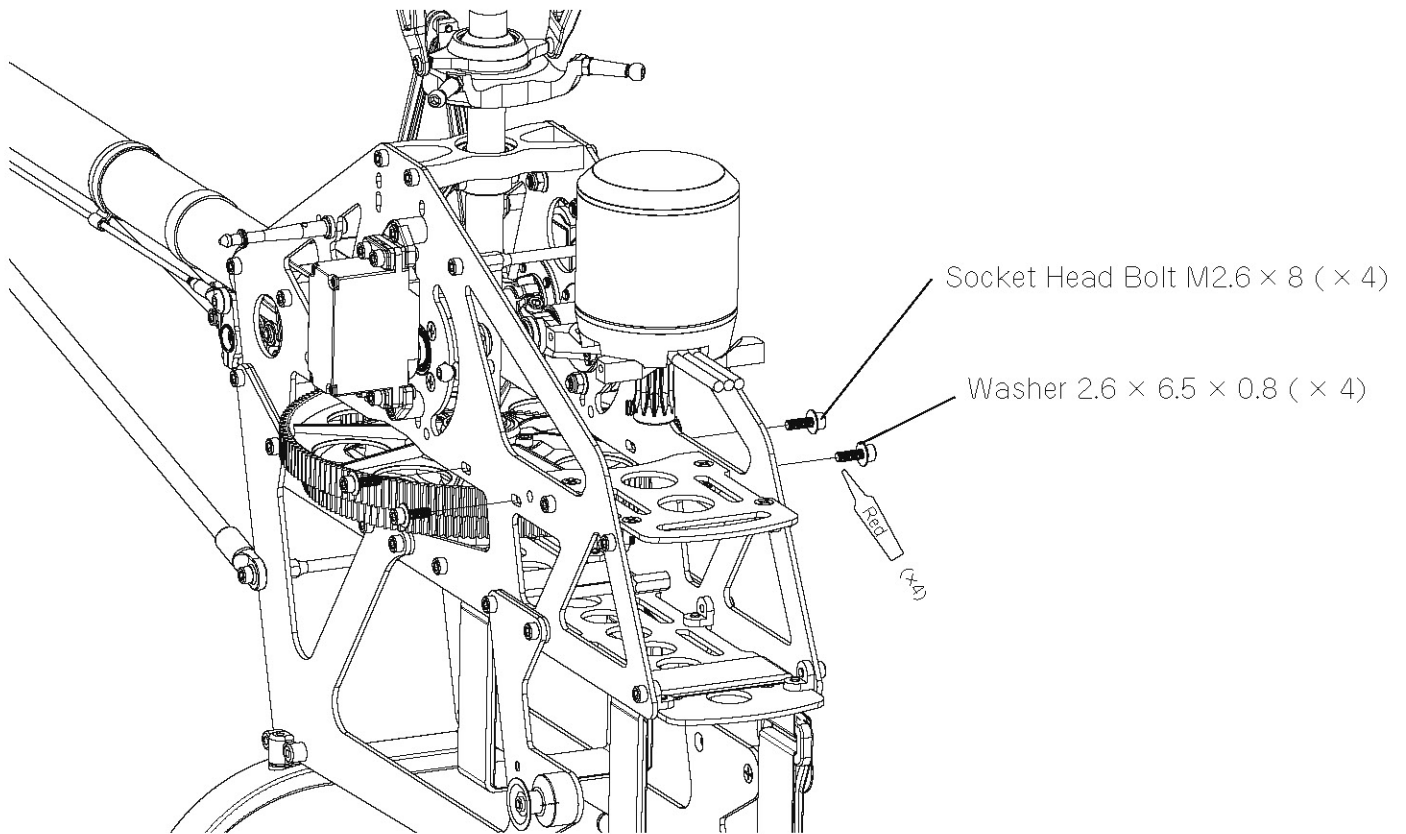
Setscrew M4 × 5

Pinion gear guide	
Sports flight	T11
Hard 3D	T12

**NOTE**

- Push the Pinion Gear on until it hits the Bearing of the Motor, and then install the Setscrew so its position matches the D-cut of the Motor shaft.
- Install the Motor and the Motor Mount as shown in the figure.

## 5-2 MOTOR INSTALLATION 2



### DANGER

- Adjust the Gear backlash so the gear turns smoothly. As a guide, use 2 layers of plastic from the parts bags and place between the pinion and gear. Press the pinion against the gear, and secure the motor mount bolts.
- Install the Motor so the lead wires do not touch the frame.

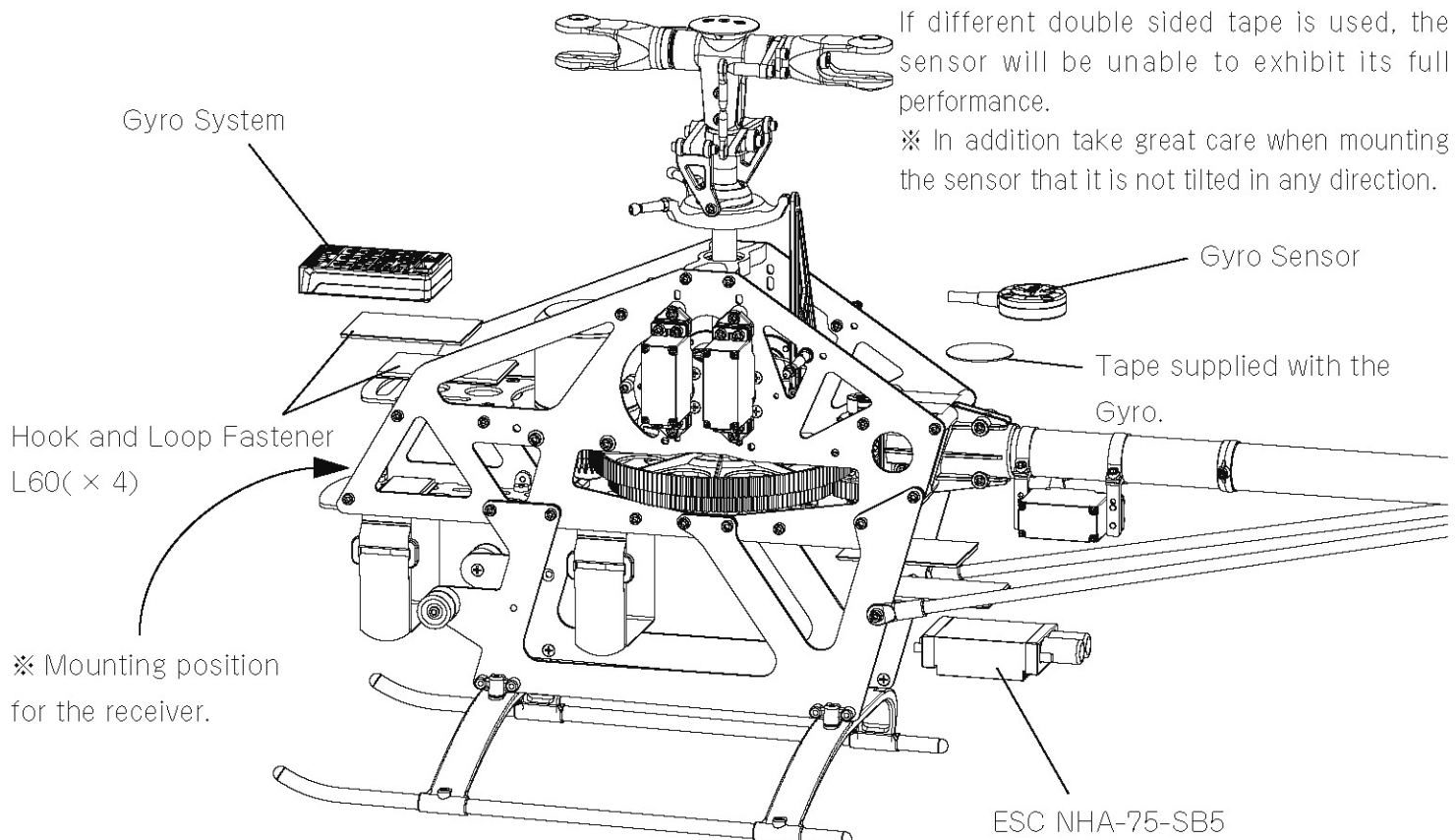
## 5-3 RECIEVER, GYRO SYSTEM, ESC INSTALLATION

※ Mount the sensor unit with the JR logo facing towards or away from the direction of travel.

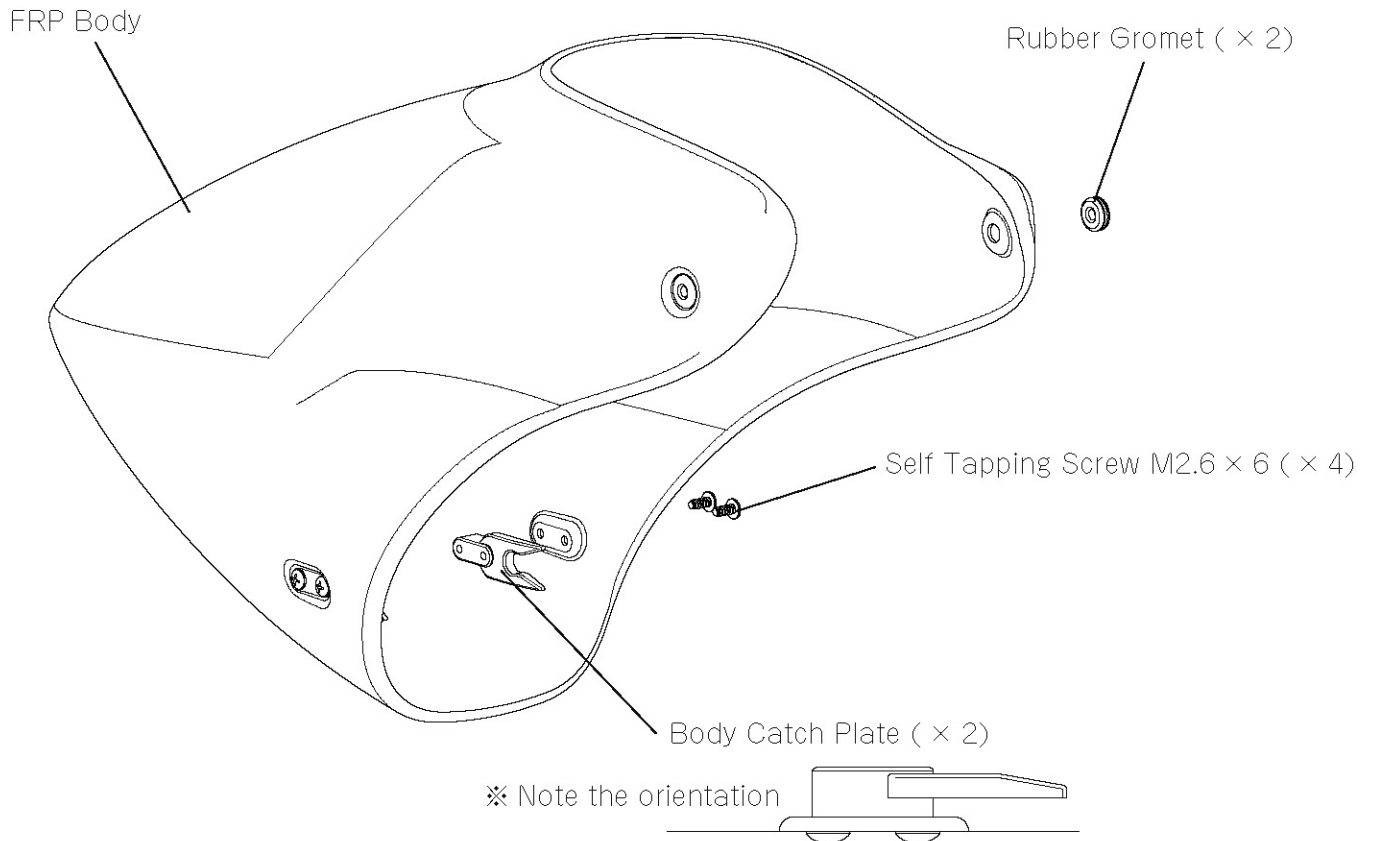
※ Be certain to use the included double sided tape to mount the sensor.

If different double sided tape is used, the sensor will be unable to exhibit its full performance.

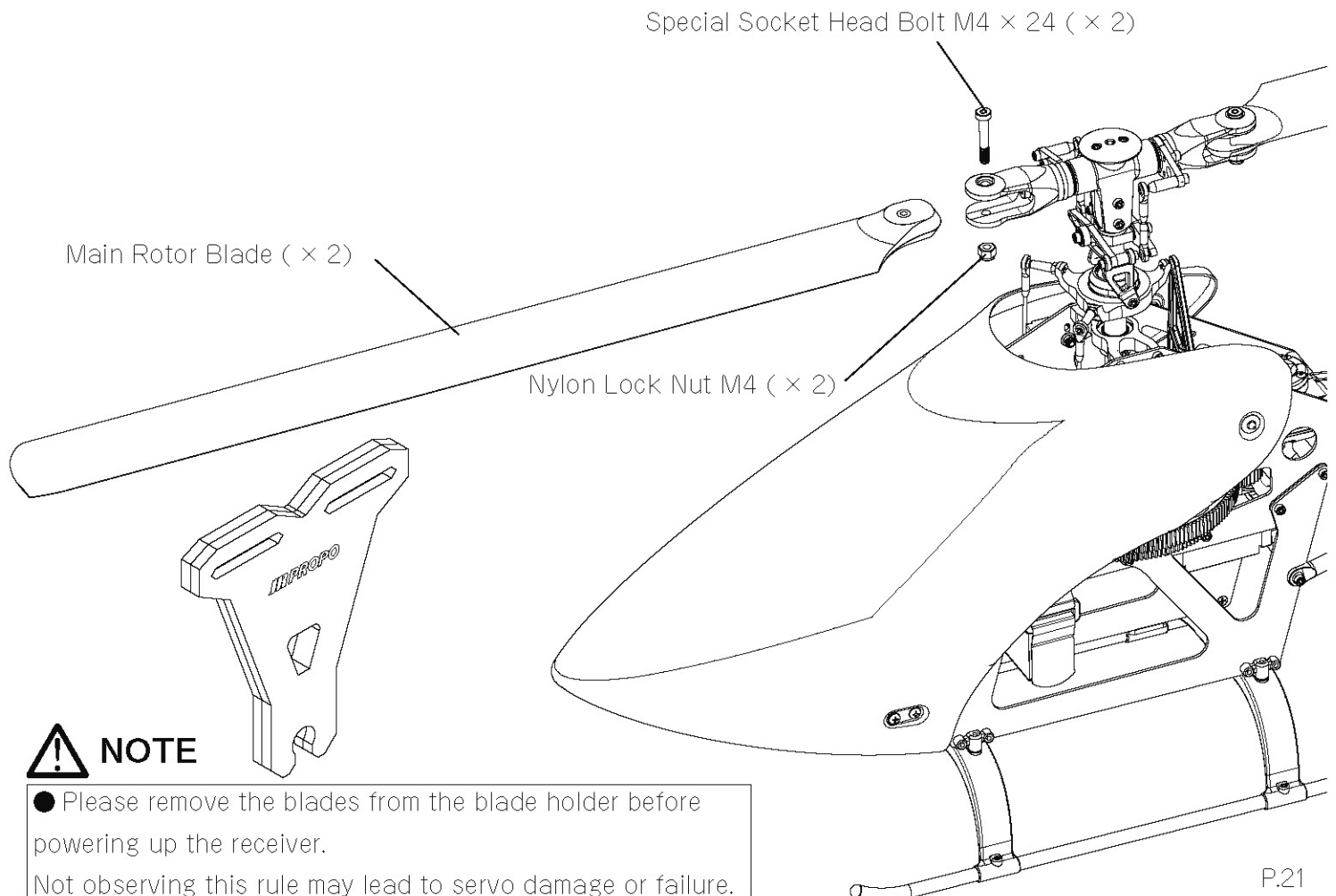
※ In addition take great care when mounting the sensor that it is not tilted in any direction.



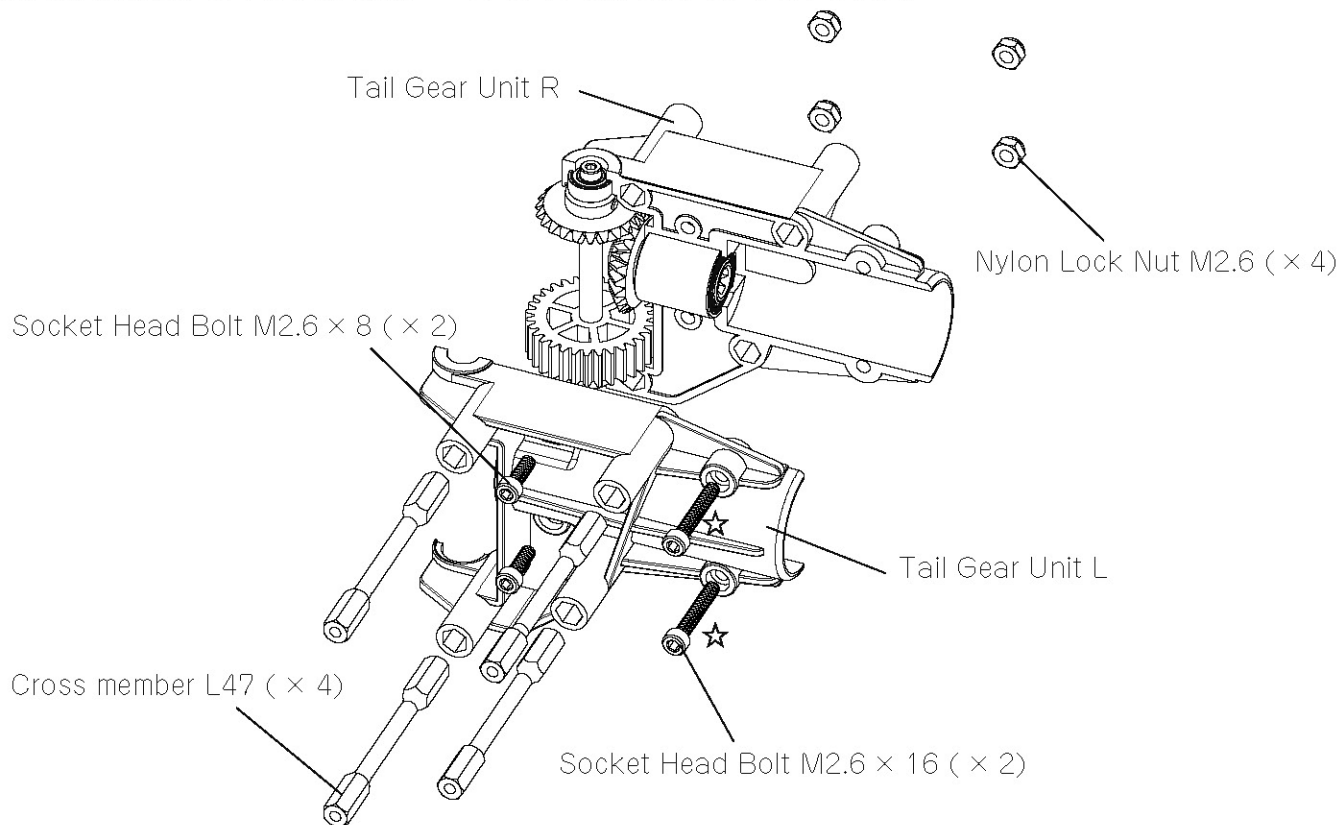
## 5-4 FRP BODY ASSEMBLY



## 5-5 FRP BODY AND MAIN ROTOR BLADE INSTALLATION



## When repair is necessary - TAIL PINION GEAR UNIT



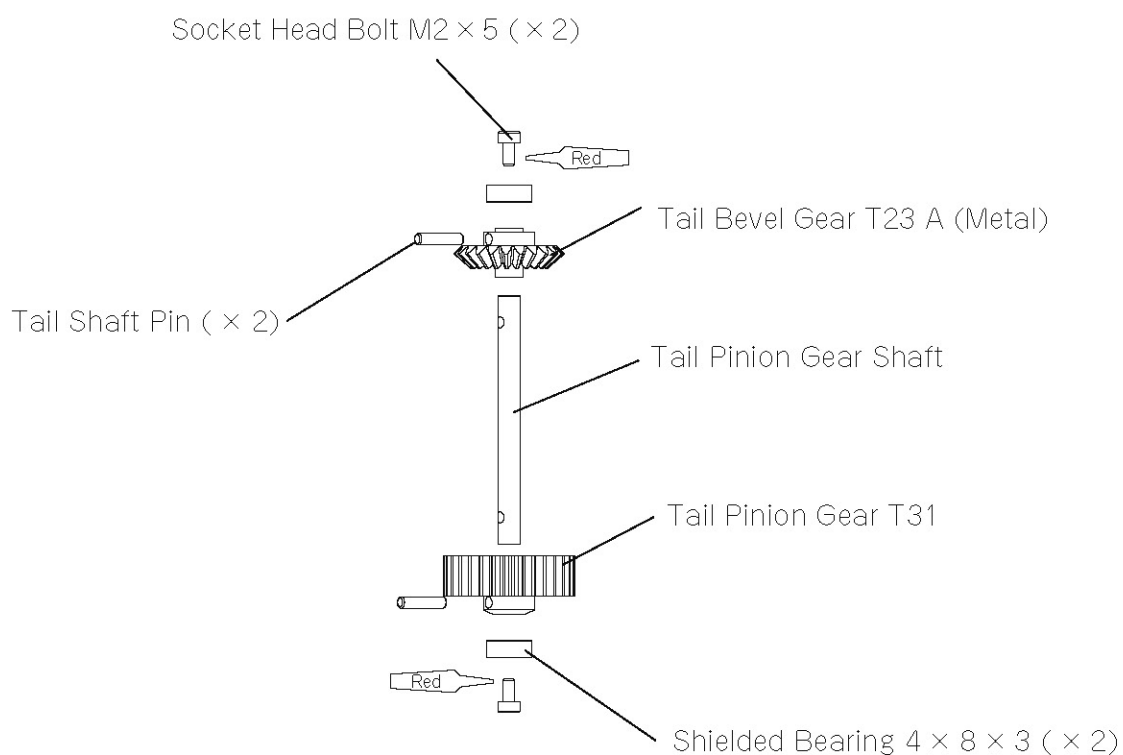
● Grease is applied to the Gears of the Tail pinion gear unit. Re-grease regularly.



### NOTE

● Temporarily tighten the bolts indicated by a ☆.

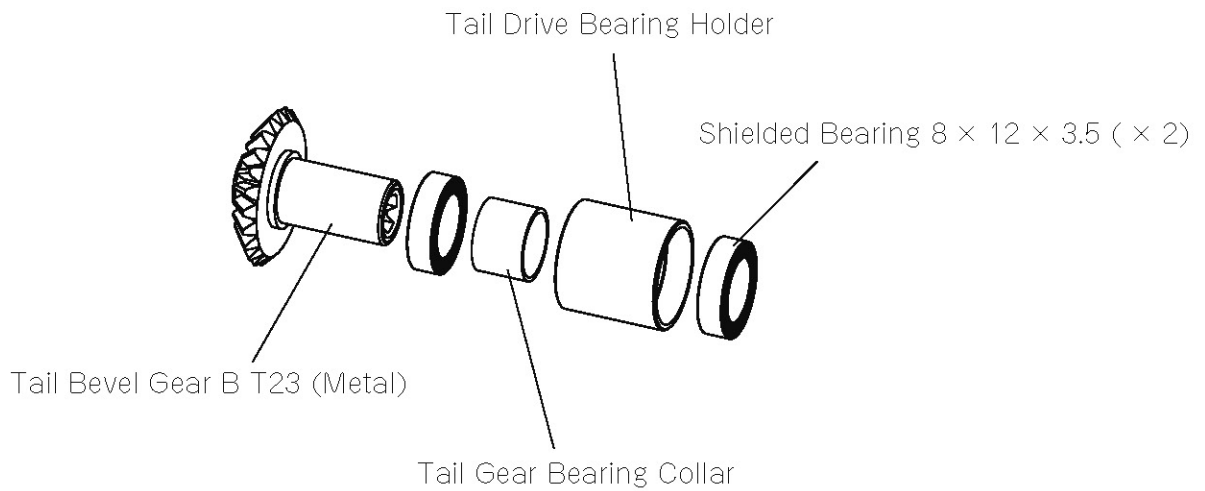
## When repair is necessary - TAIL PINION GEAR ASSEMBLY



### NOTE

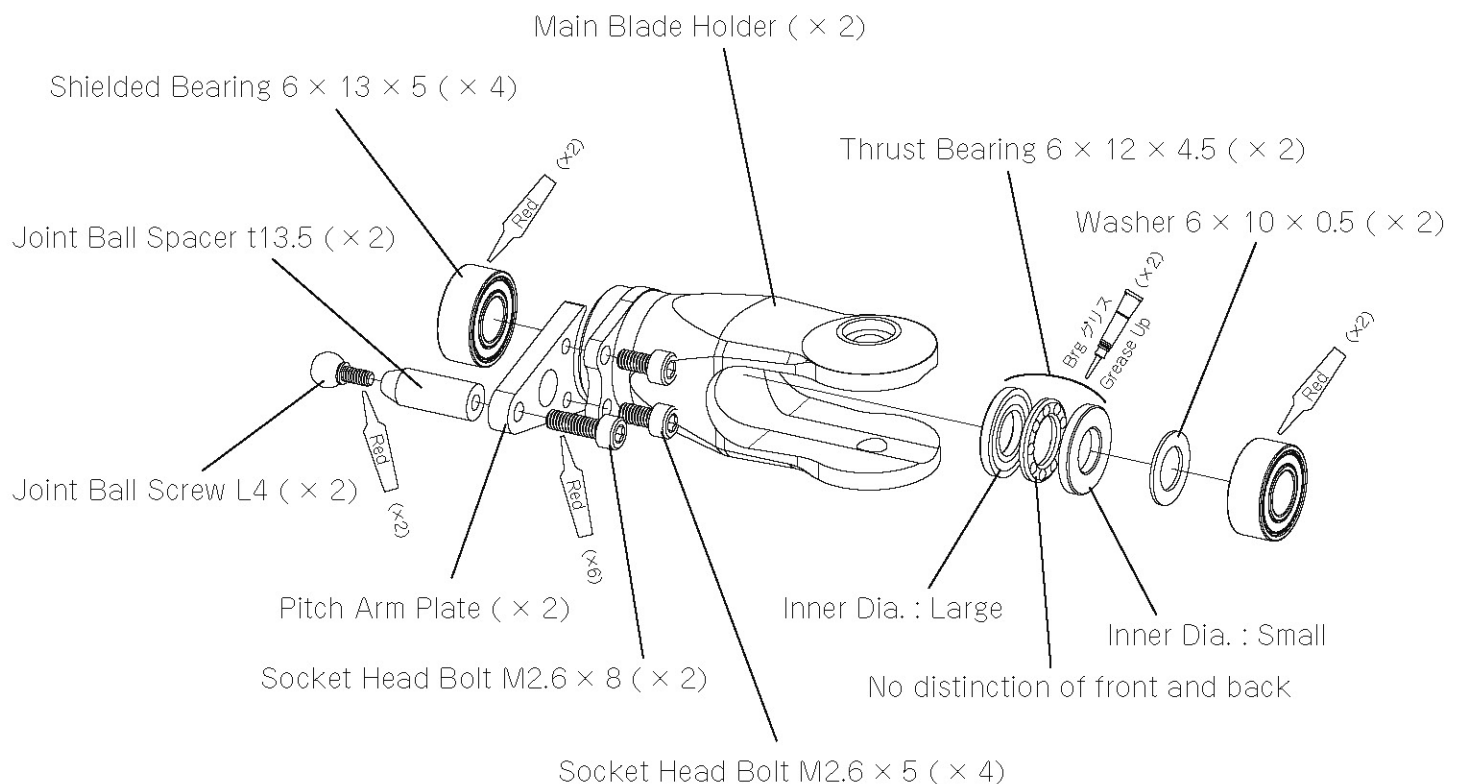
● Ensure the Tail shaft pins are secured firmly.

## When repair is necessary - BEVEL GEAR ASSEMBLY

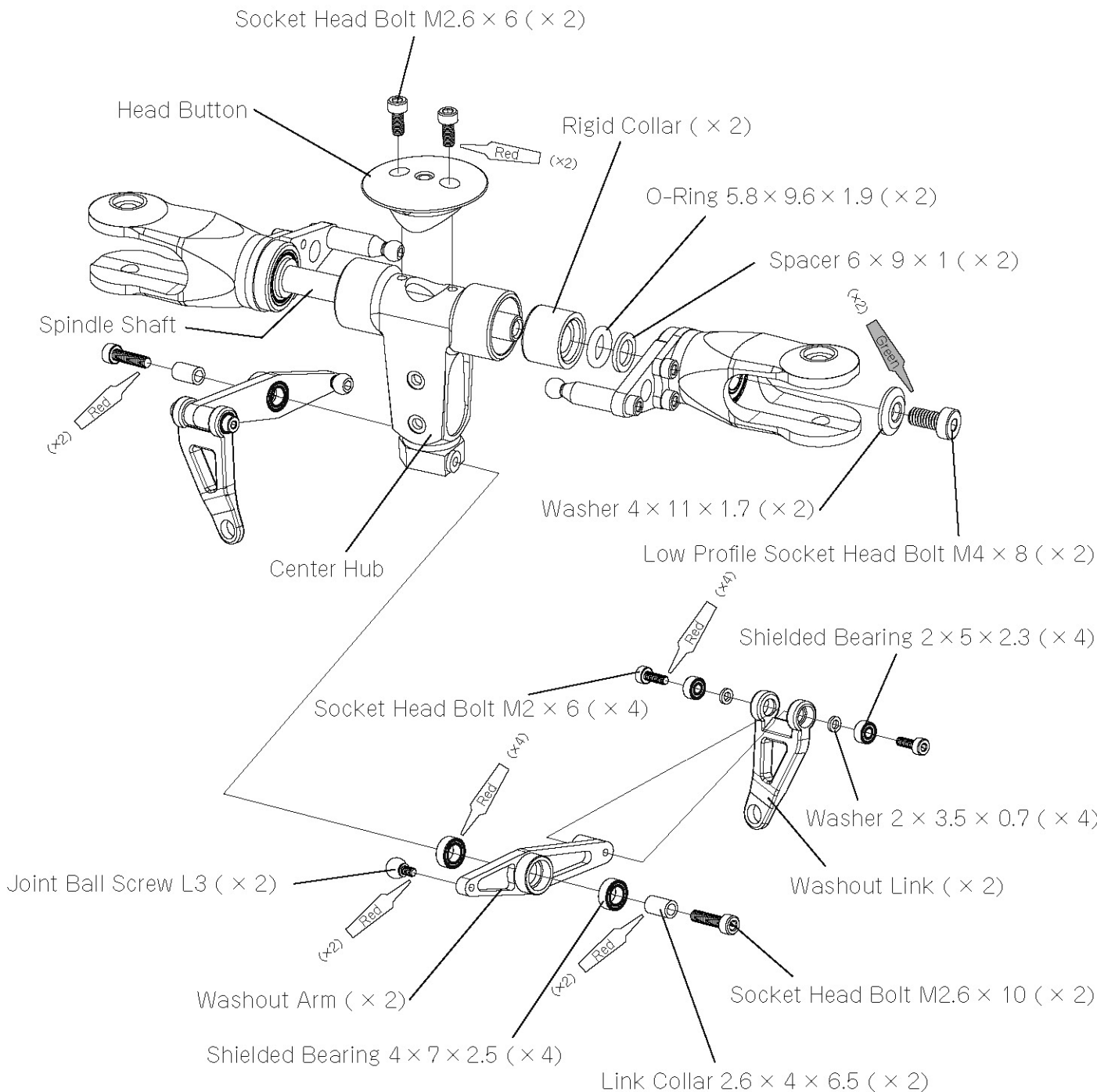


## When repair is necessary - MAIN ROTOR HEAD ASSEMBLY 1

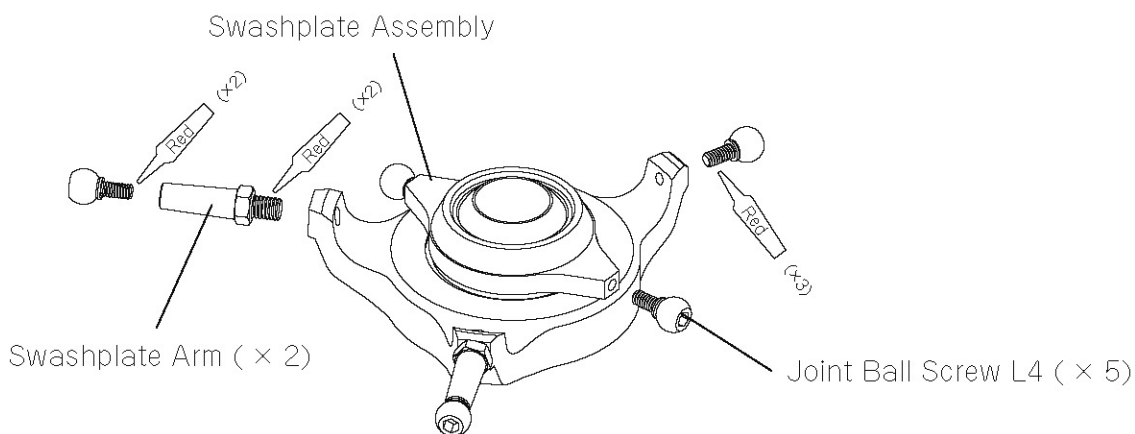
- NOTE**
- Apply a small amount of Thrust Bearing Grease to the Thrust Bearing.
  - Install the Thrust bearing with larger inner Dia. toward to the center of the rotor head.



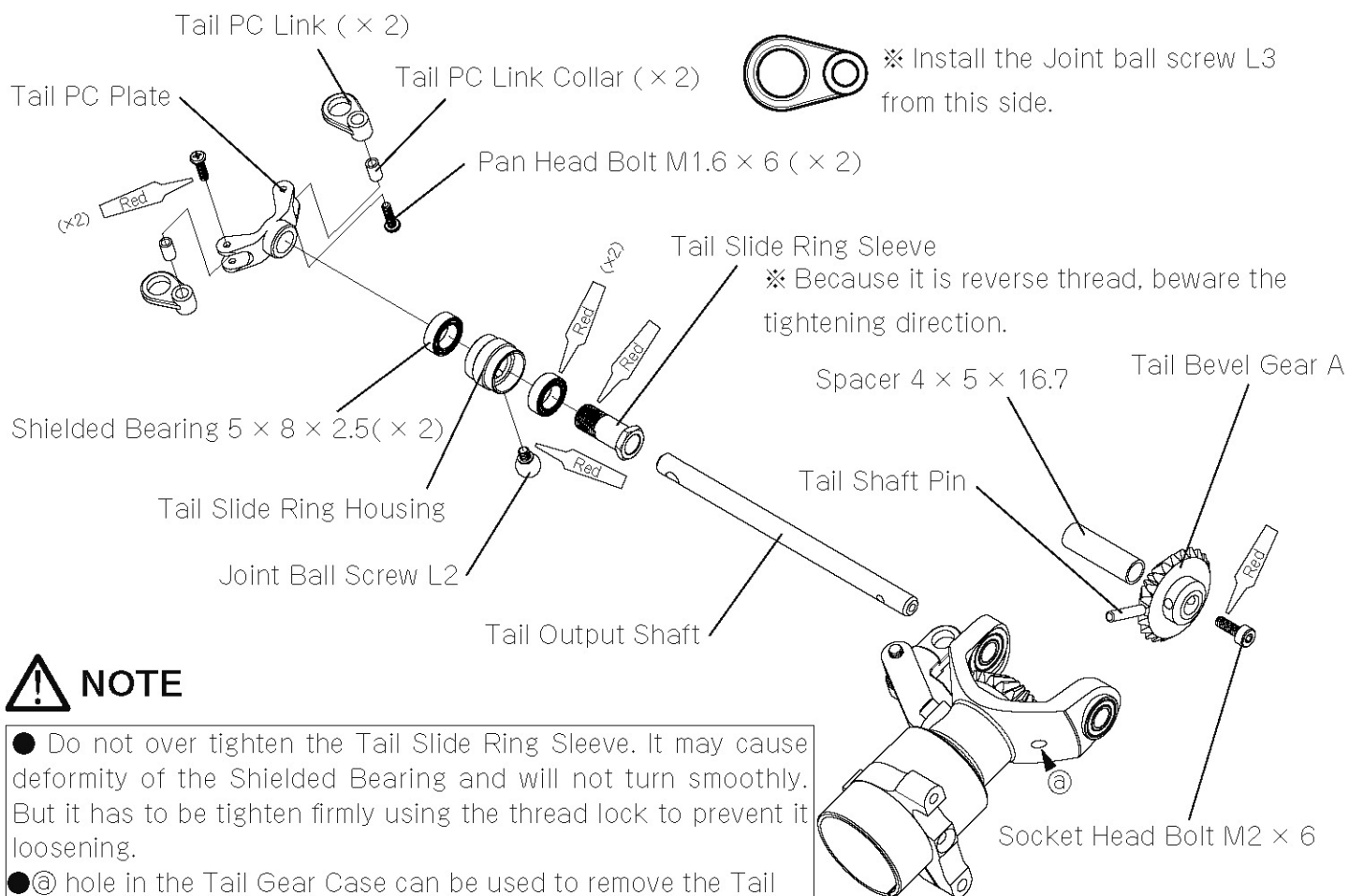
## When repair is necessary - MAIN ROTOR HEAD ASSEMBLY 2



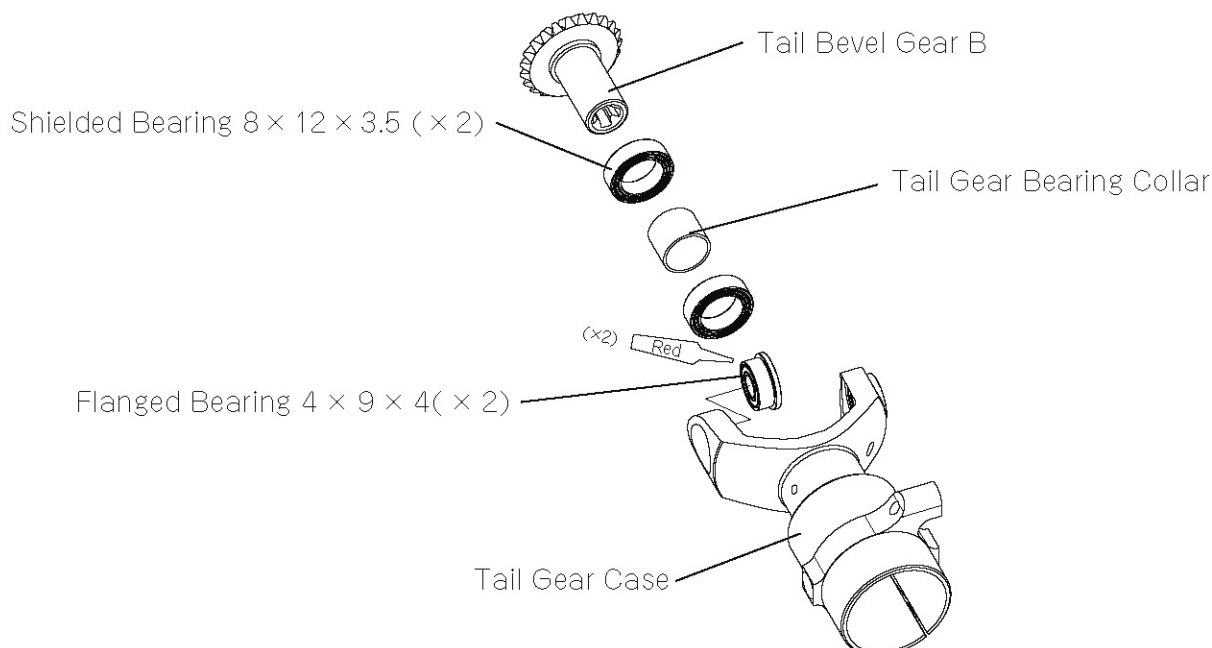
## When repair is necessary - SWASHPLATE ASSEMBLY



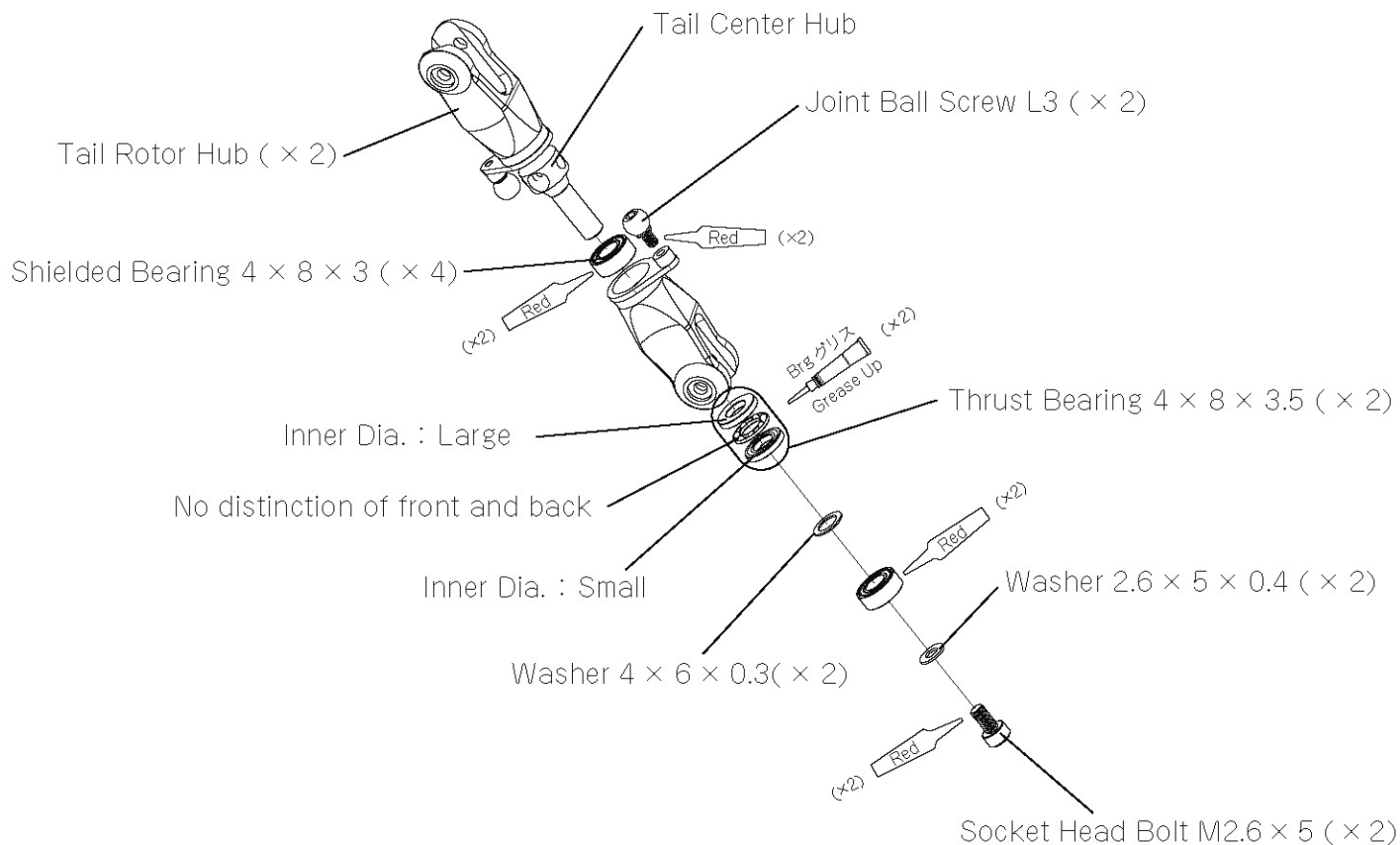
## When repair is necessary - TAIL GEAR CASE ASSEMBLY 1



## When repair is necessary-TAIL GEAR CASE ASSEMBLY 2



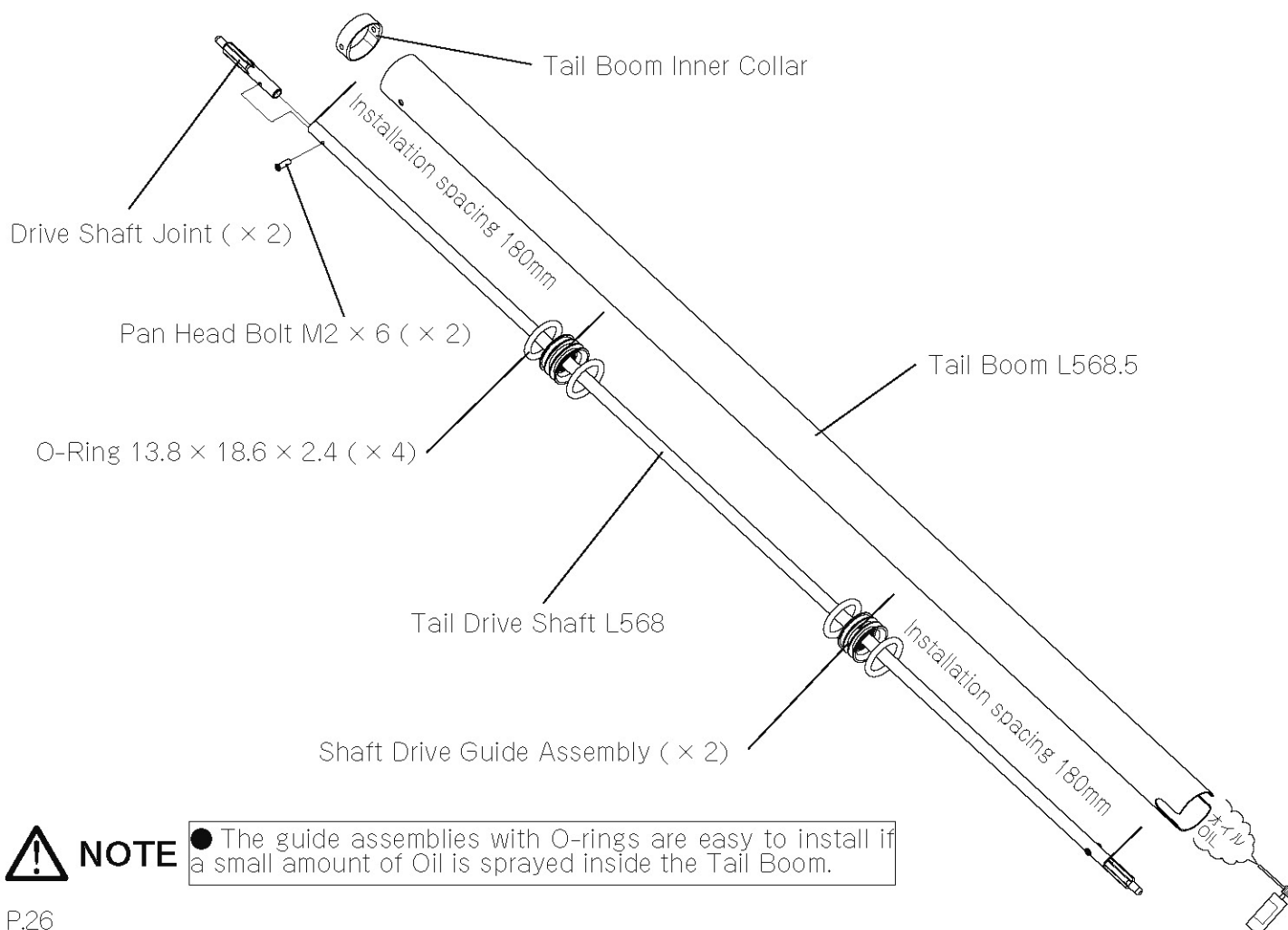
## When repair is necessary - TAIL BLADE HOLDER



### NOTE

- Apply a small amount of Thrust Bearing Grease to the Thrust Bearing.
- Install the Thrust bearing with larger inner Dia. toward to the tail center hub.

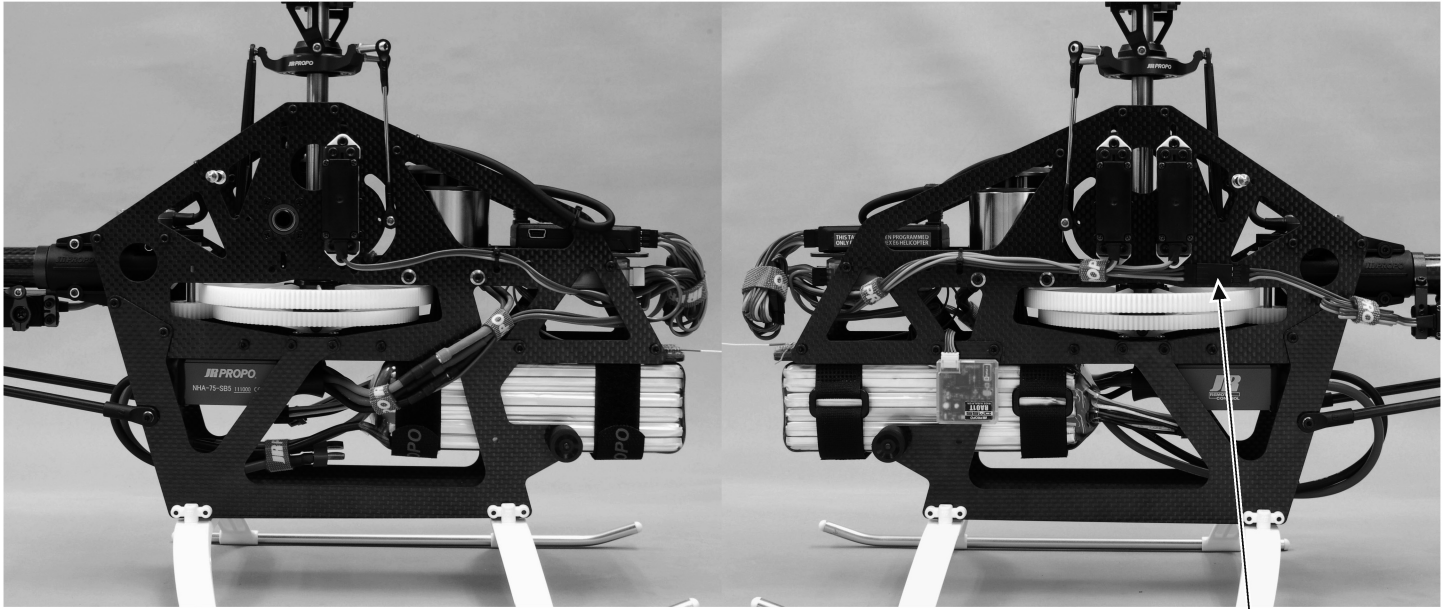
## When repair is necessary - TAIL DRIVE SHAFT ASSEMBLY AND TAIL BOOM



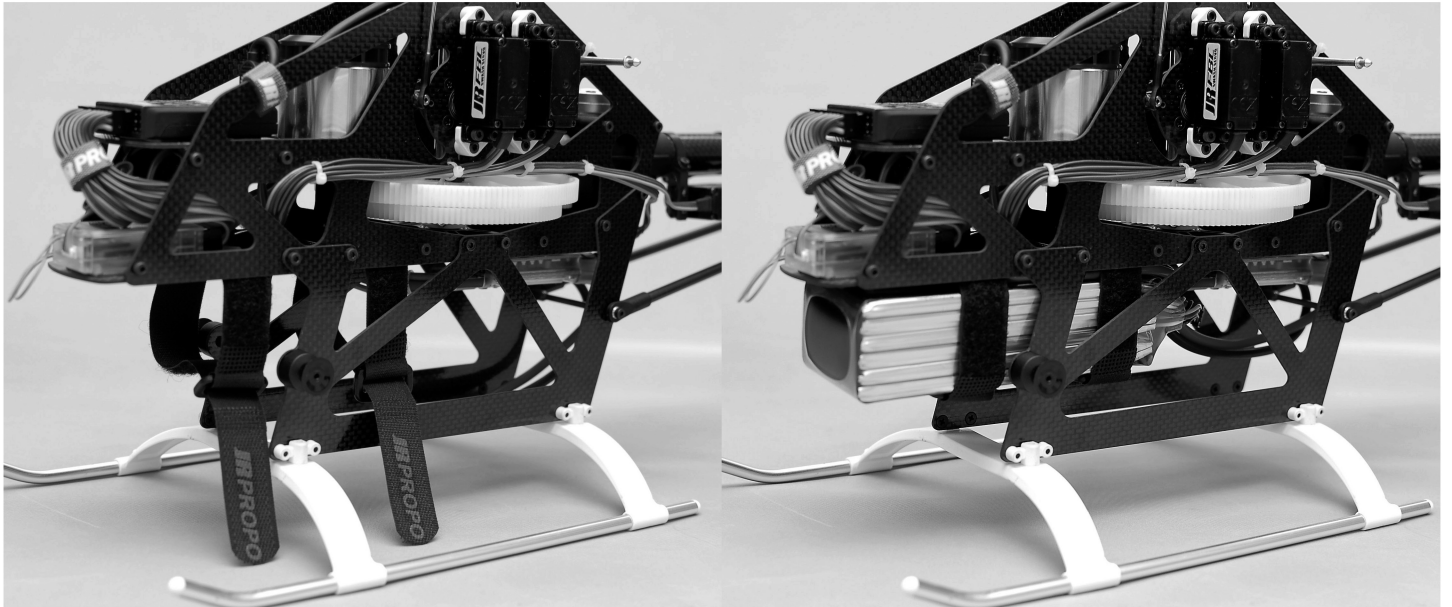
### NOTE

- The guide assemblies with O-rings are easy to install if a small amount of Oil is sprayed inside the Tail Boom.

## INSTALLATION EXAMPLES FOR BATTERY



※ Use the supplied extension lead for connecting the rudder servo.



# CHOOSING THE BATTERY

※ Please use the following as a guide.

Battery	Pinion	Gear Ratio	Motor KV value	Approximate flight time(when using 3,300mAh)			Rotor RPM		MAX current
		Pinion : Main		Hovering	Flying	Hard 3D	Hovering	Flying	
6 cell	T11	13.6 : 1	1,750	approx. 5 mins	approx. 4 mins	approx. 3 mins	1,800rpm	2,600rpm	75A
	T12	12.5 : 1					2,000rpm	2,800rpm	

## ● Battery Guide

Li-Po Battery		
Cell	Voltage / Capacity	Size
6 Cell	22.2V 6s 2,600mAh ~ 5,000mAh	46mm × 60mm × 160mm(maximum)

## ● Flight Time

㊤ Flight time is affected by the battery used. If using a 3,300mAh capacity battery, please set the flight time to:

Hovering only approx 5 mins

Flying only approx 4 mins

Hard 3D only approx 3 mins

In order to extend battery life, it is recommended to leave at least 15% battery capacity remaining after each flight.

㊤ Please do not fly consecutively.

After each flight, please do not start the next flight until the motor, ESC and other parts have cooled down.

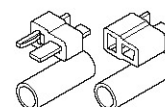
If you fly consecutively, the motor, ESC and other parts may get damaged from overheating.

## ● Connectors

Connectors rated for 75A or above are recommended.

Mistakes in confusing plus (+) and minus (-) are very dangerous and may lead to catastrophic accidents.

To prevent connection mistakes, please confirm the connecting method and the color of the wires are correct.



## OVERALL BASIC ADJUSTMENT AFTER ASSEMBLY

※ The following information is very important and has a great effect on flight performance. Read it thoroughly and fully understand the information.

The Helicopter does not function correctly without basic settings in the transmitter and the helicopter mechanics. Establish this basic setup, then test fly the helicopter, and adjust for optimum performance.

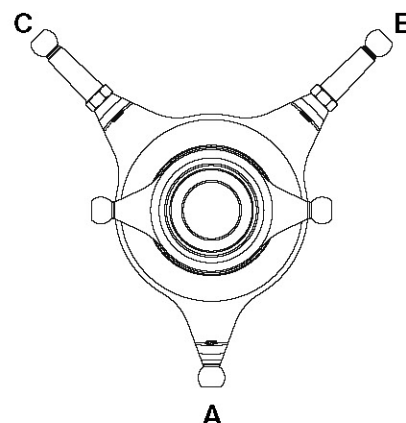
If you are using JR TAGS01, please also refer to Radio setup information.

### 1、【Initial Settings for the Radio System and Receiver Wiring】

See the wiring diagram in the "Radio System Settings Instruction Manual for JR CCPM" and the Instruction Manual for the gyro to connect each servo and gyro.

See the figure on the right. This is an overhead view of the Swash plate.

Servo positioned A is called Elevator Servo (ELEV), positioned B is called Aileron Servo (AILE) , positioned C is called Pitch Servo (PIT.) . Rudder Servo (RUDD) and ESC are used as well.



### 2、【Servo Neutral Adjustment】

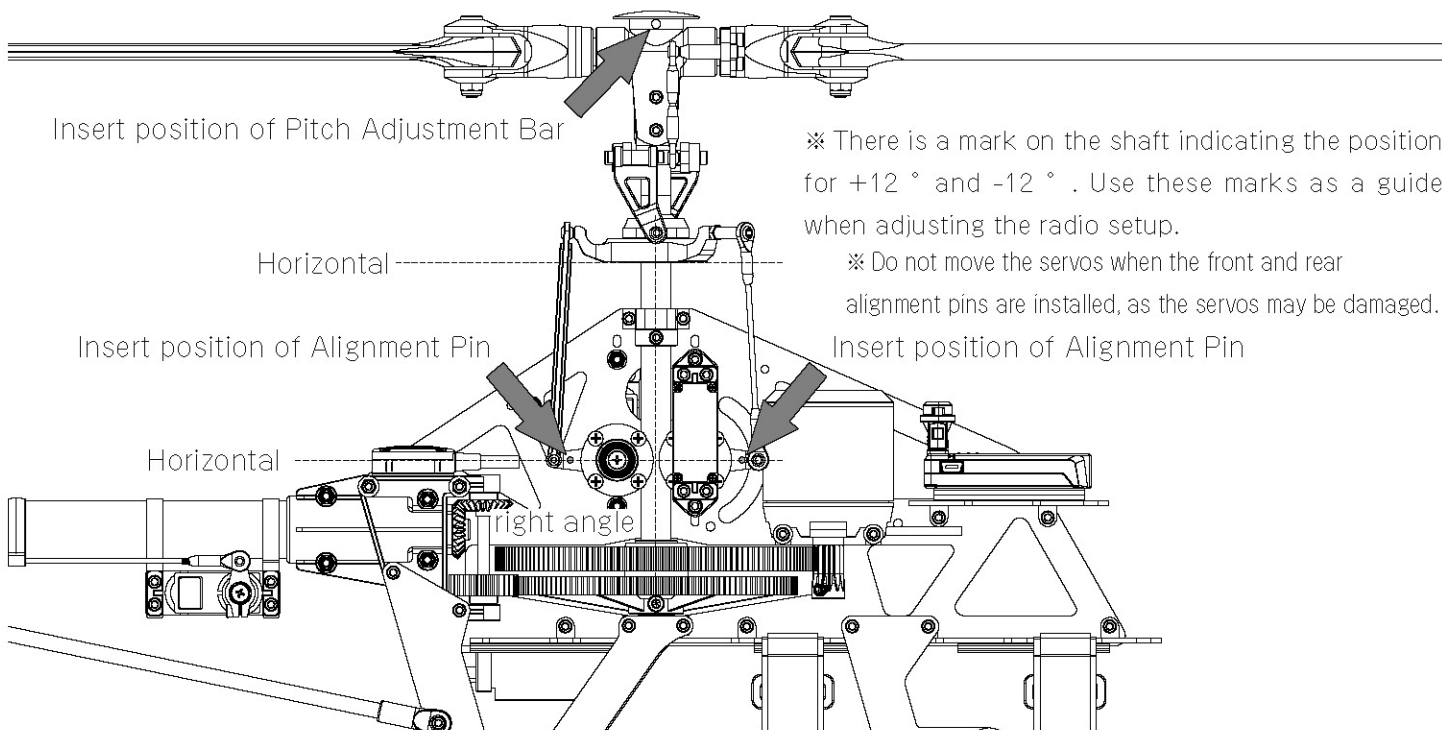
Turn on the transmitter first and ensure that all the servos function properly.

Always disconnect the motor wires before making any adjustments.

Next, we will adjust the neutral positions of each servos Confirm the transmitter's aileron and elevator trims and sub trims are in the neutral position. If your transmitter has hovering pitch and pitch trim levers set them to neutral (center) also.

Enter the pitch curve function of the transmitter and find the neutral position of the pitch (throttle) stick by seeing an input value in the middle of the travel (the spot indicating the output value "50" is the neutral position). The servo position at this time serves as a reference. Next insert the front and rear alignment pins.

Be careful you do not move the transmitter sticks with these pins in place. Now tighten the servo arm bolts which were previously only temporarily tightened, for the aileron, elevator and pitch servos. Now remove the front and rear alignment pins. Next, tighten the rudder servo arm bolt so it is in a vertical position as shown in the figure below.



The Swashplate should also be horizontal if the rod lengths are as specified.

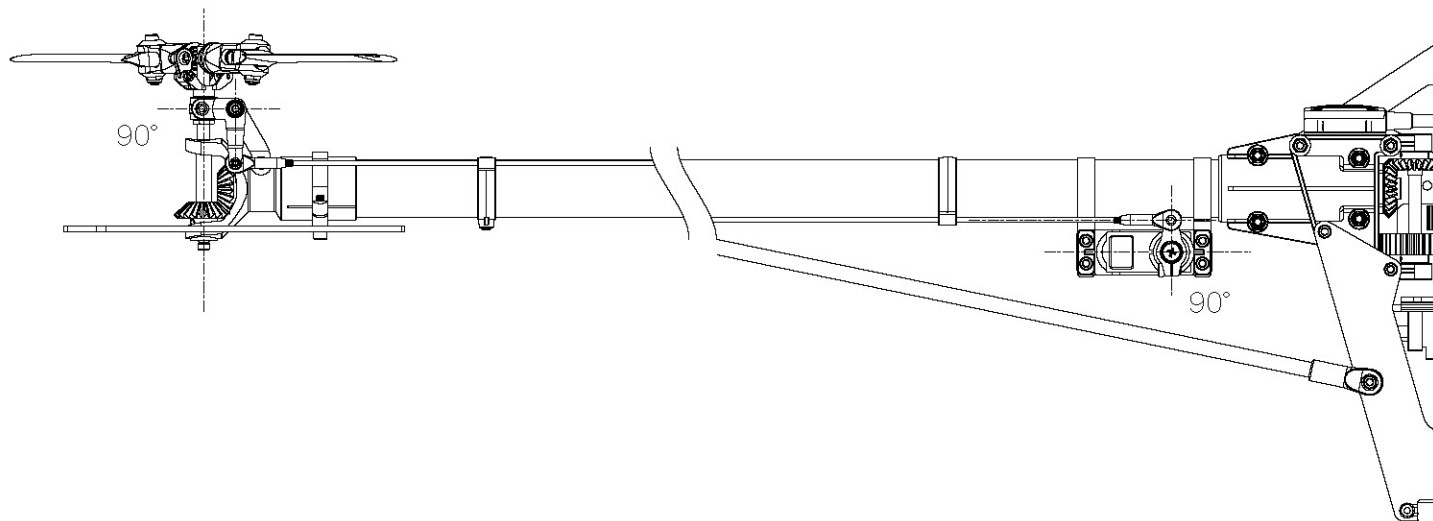
If the Swashplate is not horizontal, adjust the rod length of the two front swashplate control rods as required.

※ On this helicopter, when the swashplate moves up, the rotor blades give negative pitch. When the swashplate goes down, the rotor blades give positive pitch.

### 3. 【Rudder Servo Setting】

When setting up the rudder servo, use both the regular transmitter functions and the gyro. A brief description of the transmitter functions are described below.

- ① Reverse Switch (reverses the direction of the servo): If the servo moves in the wrong direction, when moving the transmitter stick, use the Reverse Switch in this function to correct the movement.
- ② Adjust the rudder servo mount and the tail control rod so as the angle of the rod and the Servo Horn Arm linkage become 90 degrees.



## SETTING AND ADJUSTMENT OF THE TRANSMITTER

The basic transmitter settings for the helicopter are almost complete. The following information describes the setting and adjustment of the transmitter in preparation for flying the helicopter. These functions control the movement of the Swashplate and relate directly to helicopter response in flight. Pitch settings is also done at this time. Please be extra careful not to turn on the Main Rotor when applying these settings. Always have the motor unplugged from the ESC when setting up the helicopter.

### 1. 【Dual Rate (Control Responsiveness Setting)】

Two different control sensitivities may be set for aileron, elevator, and rudder. These can be changed with a switch during flight.

Depending on the Gyro used, the settings may differ. For details, please refer to your Gyro manual.

### 2. 【Exponential (Control Sensitivity at Center Stick)】

This setting allows you to change the stick control feel near center to either a soft or quick (sensitive) feel.

Please refer to JR CCPM radio setting manual and the data sheet for setting this.

### 3. 【Throttle Hold (Transmitter Throttle Hold Function)】

During an autorotation landing, this function stops the engine and allows you to control pitch operation independently. This function is set by both the radio and ESC. Please refer to the ESC manual you use. This function can be canceled in mid-flow. The transmitter Throttle Hold function is turned on by activating this function.

4、【Gyro Sensitivity Settings (gyro sensitivity adjustment and switching function)】

You can adjust the gyro sensitivity and switching from the transmitter if your gyro has a remote gain system. See the transmitter and gyro manuals for further details.

Position "0" is typically used for hovering and sets the sensitivity rather high. Position "1" is for forward flight and sets the sensitivity rather low. Please refer to your gyro Instruction Manual. The final sensitivity adjustment should be made during a series of test flights. As you gradually increase the gyro sensitivity, the tail starts hunting (moving back and forth rapidly). Once you see this symptom, decrease the sensitivity slightly to a position just before hunting occurs.

5、【Gyro Output Direction Check】

Check whether or not the gyro output direction is correct. If you hold the tail and swing it to the right (the nose is directed toward left), the Tail Rotor must change in pitch to resist this movement. If it moves toward the wrong direction, change the output direction with the reverse switch on the gyro.

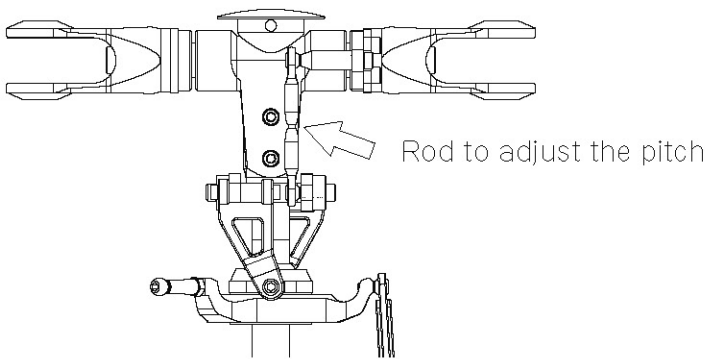
6、【Rotor Pitch Setting】

Measure the pitch of the Main Rotor Blades using the JR Universal Pitch Gauge (No. 60326, sold separately), in combination with the supplied Adjustment Parts Set (No.61648).

The intermediate (middle) value should be set to 0° - with the pitch stick in its middle position the pitch reading should be 0° . If it is not, adjust the length of the rods shown in the following figure to accurately set the pitch to 0° .

Once the intermediate pitch has been adjusted to 0° by rod adjustment, measure the high and low pitch values. It is presumed that they are almost as described in the table. If they are slightly higher or lower, use the "swash type (mix)" function to adjust the pitch stroke (swash pitch mix %). Increase or decrease the pitch percent value as required. In this case, the high and low pitches cannot be separately adjusted. If the above-mentioned intermediate pitch has been correctly adjusted, adjusting either the high or low pitch should automatically result in the figures seen in the table. If this is not the case, change the rod length and the pitch percent value in the swash mix, ignoring the intermediate value, so that the high and low pitches are properly adjusted.

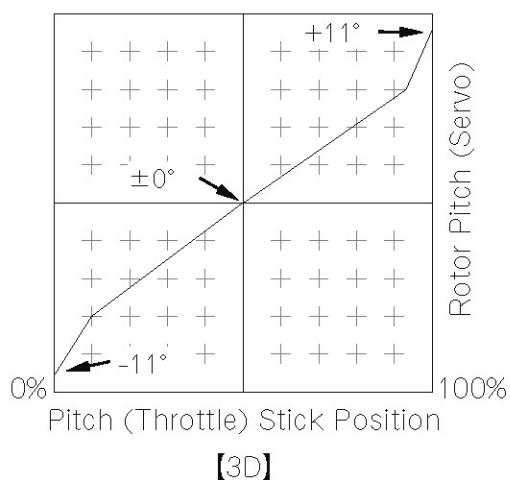
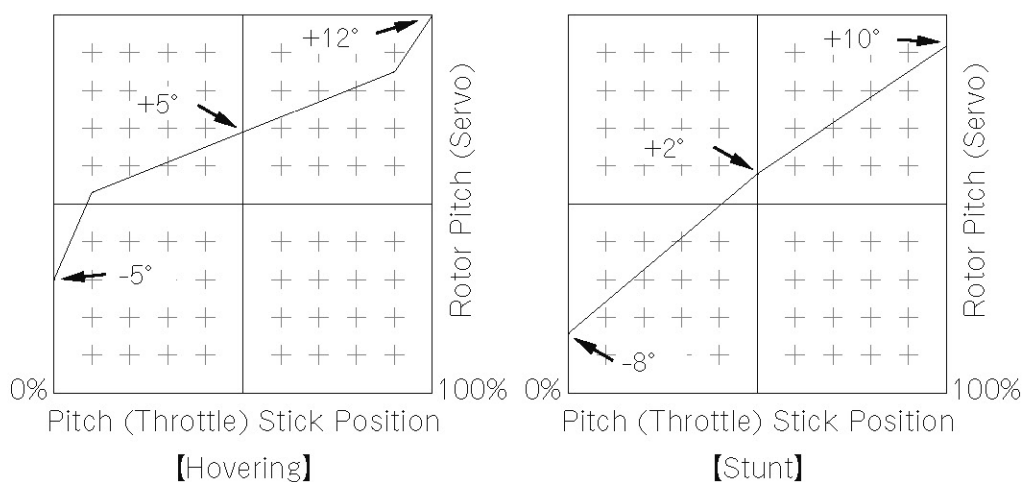
	Low Pitch	Intermediate Pitch	High Pitch	※ When confirming or adjusting the reference pitch range, the pitch curve should be at default values.
Reference Pitch	-12°	0°	+12°	
Hovering Pitch	-5°	+5°	+12°	※ The main shaft has reference marks for approximately +/-12 ° . Use these as a guide.
Stunt Pitch	-8°	+2°	+10°	
3D	-11°	0°	+11°	



## 7. 【Pitch Curve (Transmitter pitch curve adjustment)】

This function allows you to make adjustment freely between specific points as to how much Main Rotor Blade pitch should be set at a particular pitch (throttle) stick position. This is one of the basic important adjustments of the helicopter. This adjustment depends on the Main Rotor Blades used and interaction with the throttle curve. To begin with make adjustment as shown in the following figure, referring also to the table in the previous section. Make fine adjustments after test flying.

Pitch Curve



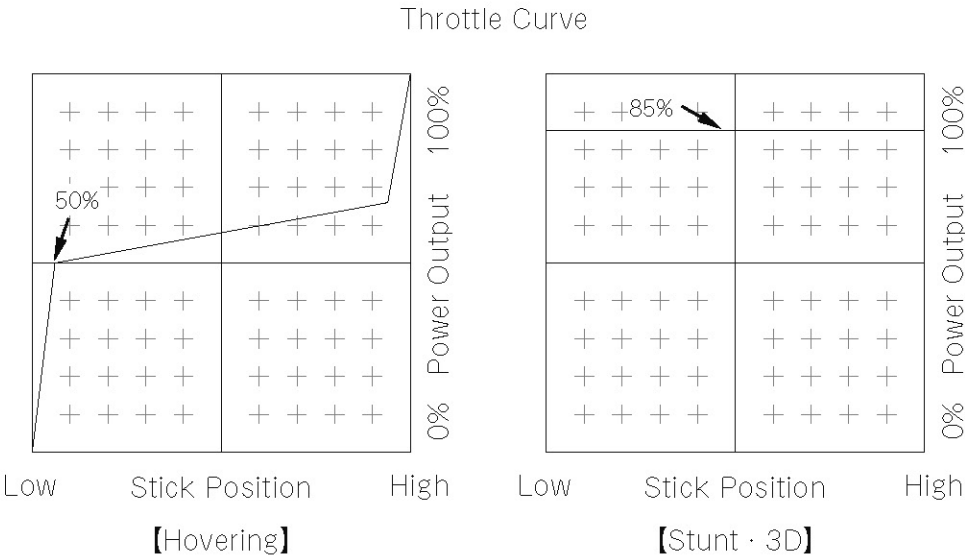
## 8. 【Control Movements】

Each control movement should now be correctly set (by the assembly and adjustments so far), but you may adjust them as required depending on your taste after a test flight.

9. 【Throttle curve (Transmitter Throttle Curve Function)】

Adjust the throttle curve so the rotor rpm is as per the table on page 28.

For details, please refer to your transmitter Instruction Manual and adjust the values as shown. Please be extra careful not to turn on the motor carelessly. The throttle values here are just examples. In order to prevent over-speed of the main rotor, please start adjustment on the slower side.



※ If your radio has a Throttle delay function, we recommend you to use this to prevent sudden changes in rotor speed when changing flight modes.

10. 【Rotor Rotation Speed and Pitch】

Ⓐ Before the helicopter takes off, please wait until the rotor RPM reaches sufficient speed.

Ⓑ For hovering, a rotation speed of 1,800rpm or above is recommended.

If the rotation speed is too low, it will cause the ESC to overheat.

In the worst case, this will damage the ESC.

Ⓒ Do not change the hovering rotation speed with abrupt pitch operation or ascending the helicopter suddenly.

At that time, the ESC load will rise sharply. In the worst case, this will damage the ESC.

Ⓓ Because there is no clutch system, power is supplied directly to the rotor head. If sudden changes in load exceed the tolerable range, it may damage the gear or stop the motor. Because this tolerable range varies greatly with flight style and the setup, please proceed with caution. With regard to the maximum pitch, please start with a low pitch setting and adjust based on performance.

11. 【Trim Lever】

These levers are used to correct trim (direction) in flight. This can be used regardless of CCPM settings. By operating the aileron or elevator, two servos are simultaneously activated for aileron trim, and three for elevator trim. Transmitters with a pitch trim lever (or pitch trim knob), these functions can be used as well.

For the detail, please refer to the radio and gyro manual you use.

12. 【Hovering Pitch Knob】

This function is used to change the Main Rotor Blade pitch in the hovering area, within a certain range. The pitch while hovering can be finely adjusted without accessing the pitch curve function. Adjustment with this knob is reflected on the

three Swash Servos.

### 13. 【Swash Type】

This is a basic function to control the JR CCPM. While performing the supplemental Initial Settings for the Radio manual, this function has already been set to 140° - a setting to activate the three Swash Servos. Furthermore, this function allows you to make adjustments corresponding to conventional settings for aileron, elevator and pitch servo movements and reversing. (Setting the JR CCPM can make the settings different for conventional ones.)

#### ㊤、Swash Mix Percentage (Similar to conventional travel adjust function)

This function is to increase/decrease control movement of the aileron, elevator and pitch functions. Different settings are possible for aileron, elevator and pitch functions - their control movements can be adjusted by changing the corresponding values of the swash mix percentage. Regardless of a plus (+) or a minus (-) sign, the control angle changes in proportion to the magnitude of the set value. It is generally found that the initial settings pose no problem for flight, but values can be changed as necessary. Raising the percentage above necessary may cause the servos to over-travel and jam, so please check carefully while changing settings.

#### ㊦、Swash Mix Reversing Function (similar to conventional reverse switch)

The control motion adjust function above is to increase/decrease the control throws. If the control throw value is continuously decreased, it will reach 0% and be prefixed with a minus sign (-) if further decreased. If originally a negative value, a plus (+) sign will appear as it is increased. If reversing control movement is desired, please change the plus/minus of the values. When this is done, the control movement will be reversed.

## FINAL CHECKS PRIOR TO FLIGHT

Although some items need to be readjusted after test flights, it is possible to do a final check prior to flight. Please recheck the following:

- ① Look through all the steps in the Instruction Manual again and make sure that all bolts are firmly tightened. Check in particular the bolts used for mounting the balls to the levers, and each bolt which was tightened after backlash adjustment of the gear mesh was completed.
- ② Confirm all the servos function smoothly and the direction of operation is correct.  
Also check if the servo horn screws are firmly tightened.
- ③ Make sure the gyro control direction is correct.
- ④ Make sure that the battery in the transmitter and that powering the receiver (in the helicopter) is fully charged.
- ⑤ Check that the receiver, gyro, ESC and battery are firmly secured.
- ⑥ Make sure that the Main Rotor Blades and the Tail Rotor Blades are attached in the correct orientation.

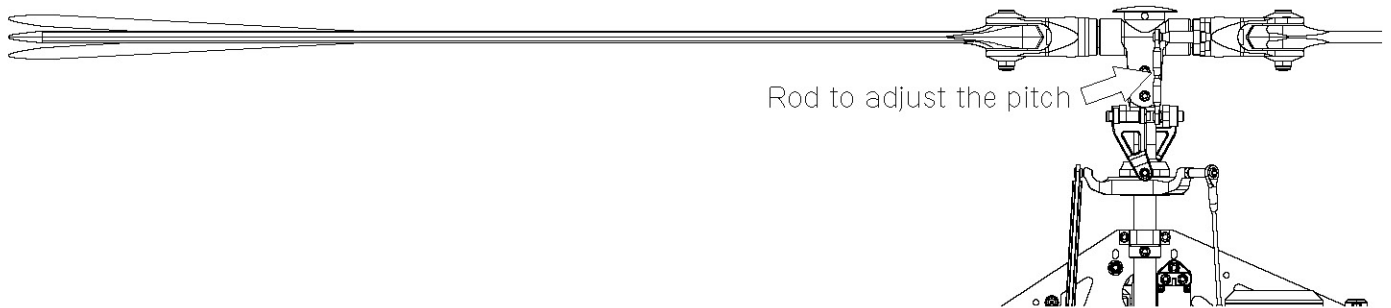
# CHANGES FOLLOWING THE TEST FLIGHT

【Items which need to be readjusted after the test flight】

## Tracking Adjustment

This is to adjust both Main Rotor Blades to the same pitch, so each produces the same amount of lift. If they are not uniform, their trajectory is not seen as an identical line as shown in the figure below. This leads to vibrations and a helicopter which does not fly well.

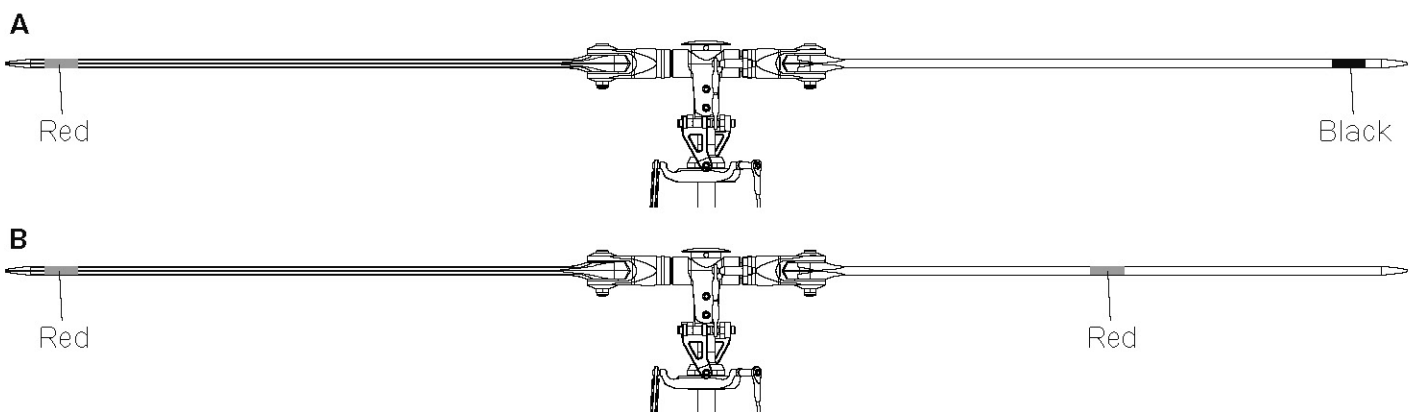
When the helicopter is about to leave the ground, look at the plane of rotation of the Main Rotor Blades from the side. No adjustment is required if the trajectory of the Main Rotor Blades is seen as an identical line. If vertically misaligned, pitch adjustment on one blade is required. On either the 'high' or 'low' blade adjust the Universal Link of the rod shown in the following figure in such a manner that the blade pitch is increased or decreased as required.



Tracking adjustment is dangerous. Stay at least 5m or more away from the helicopter at all times.

To adjust tracking, it is necessary to know which Main Rotor Blade is higher or lower. For this purpose, mark the Main Rotor Blades with color tapes.

There are two methods to apply the tape. Figure A shows wrapping different color tapes around the ends of each blade, and Figure B shows wrapping the same color tape around each blade at different positions. Use of bright colors is recommended.



# BE SURE TO READ PRIOR TO FLIGHT

This helicopter is not a toy. It is intended for those having had prior experience flying a radio control helicopter, knowledge and skills.

Even an advanced operator well-versed in radio control helicopters may forget the safety precautions. Refresh your memory by reading the following.

Fly the helicopter in a manner suitable for the operator's skills, avoiding an unnecessary risk during flight. For maneuvers demonstrated in a competition, emulate them after fully understanding and mastering the operating methods and skills. When flying the helicopter not only a beginner or intermediate operator, but an advanced operator should never fly alone. Listen to explanations from an assistant or an instructor having expertise and fly under their instruction.

## 1. 【Precautions after Assembly】

㊤ Check all bolts are fully tightened. Tighten any loose ones.

㊦ Be sure to use screw locking agent when tighten all bolts, if so instructed in the Instruction Manual. When doing this, degrease the bolts and nuts completely.

㊧ Check the rotating parts (Main Rotor Blades, Tail Rotor) and that their bolts are fully tightened. However it is necessary that the blades can be moved slightly back and forth.

㊨ Set the throttle stick to the slowest position, then turn on the transmitter (ensure it is fully charged). Next, turn on the helicopter by plugging in the main battery.

Always turn on in this order.

Operate the sticks (throttle/pitch, aileron, elevator and rudder) to confirm correct function.

Always have the motor unplugged so that the motor will not turn on.

㊩ Never cut or bundle the antenna wire. Put it in the antenna tube so that it will not be caught by the rotor or the main gear. If a 2.4Ghz transmitter set is used, please adjust the antenna to the correct orientation as recommended in the radio manual.

㊪ Securely hold the helicopter with both hands when moving it. The helicopter has sharp parts (such as machined metal) pay attention to avoid injury.

## ㊫ 【Backlash and Grease】

During the flight or immediately after flight, the motor is very hot.

The motor heat will be conducted to the pinion gear and then the Main Gear, causing the gear to increase in size and reduce the amount of backlash. Under this situation, with the addition of frictional heat, the temperature may become very high and damage the gear. Please set more backlash than you might with a nitro engine. Additionally, it is mandatory to grease the main gear and pinion.

## 2. 【Precautions Prior to Flight】

㊬ Make sure that the Main Rotor Blades and Tail Rotor are free from any cracks or damage. If they are damaged even just a little, do not use them.

㊭ With the stick at the slowest position, turn on the transmitter then receiver and check for correct control movements.

㊮ Care should be taken not to catch your cloths on the transmitter sticks when moving the helicopter. Move the helicopter to the takeoff position using two or more persons - one holding the helicopter with both hands and the other carrying items required for flight, such as the transmitter.

㊯ Be sure to check the remaining capacity of all batteries prior to flight.

㊰ Conduct a distance (range) test of the transmitter. With the transmitter antenna collapsed, move 15m or more from the helicopter. Move all the sticks and confirm the movement of the helicopter servos follow the sticks. If they do not move properly determine the cause and correct before flight. Ask for repair if it is needed.

㊱ If two or more Radios are used simultaneously on the same frequency you cannot fly the radio control helicopter because of interference. If someone else is using the same frequency, wait until he or she has finished operation. If there is interference despite no one using the same frequency, it is conceivably an external interference source exists. Never fly until that interference source has been cleared.

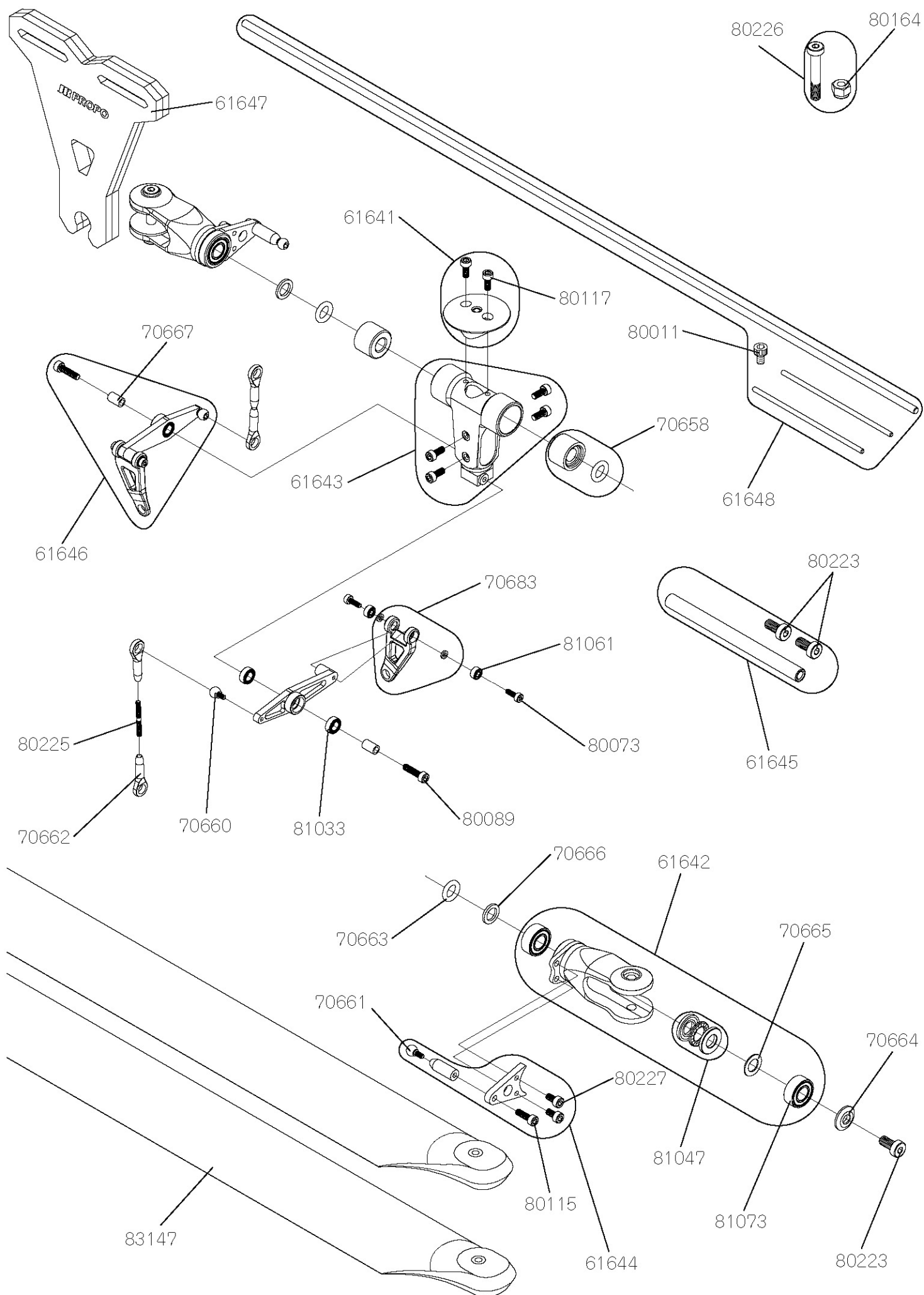
㊲ While connecting the batteries powering the helicopter, make sure the throttle stick is at the slowest position and the throttle hold switch is on.

### 3. 【Precautions during flight】

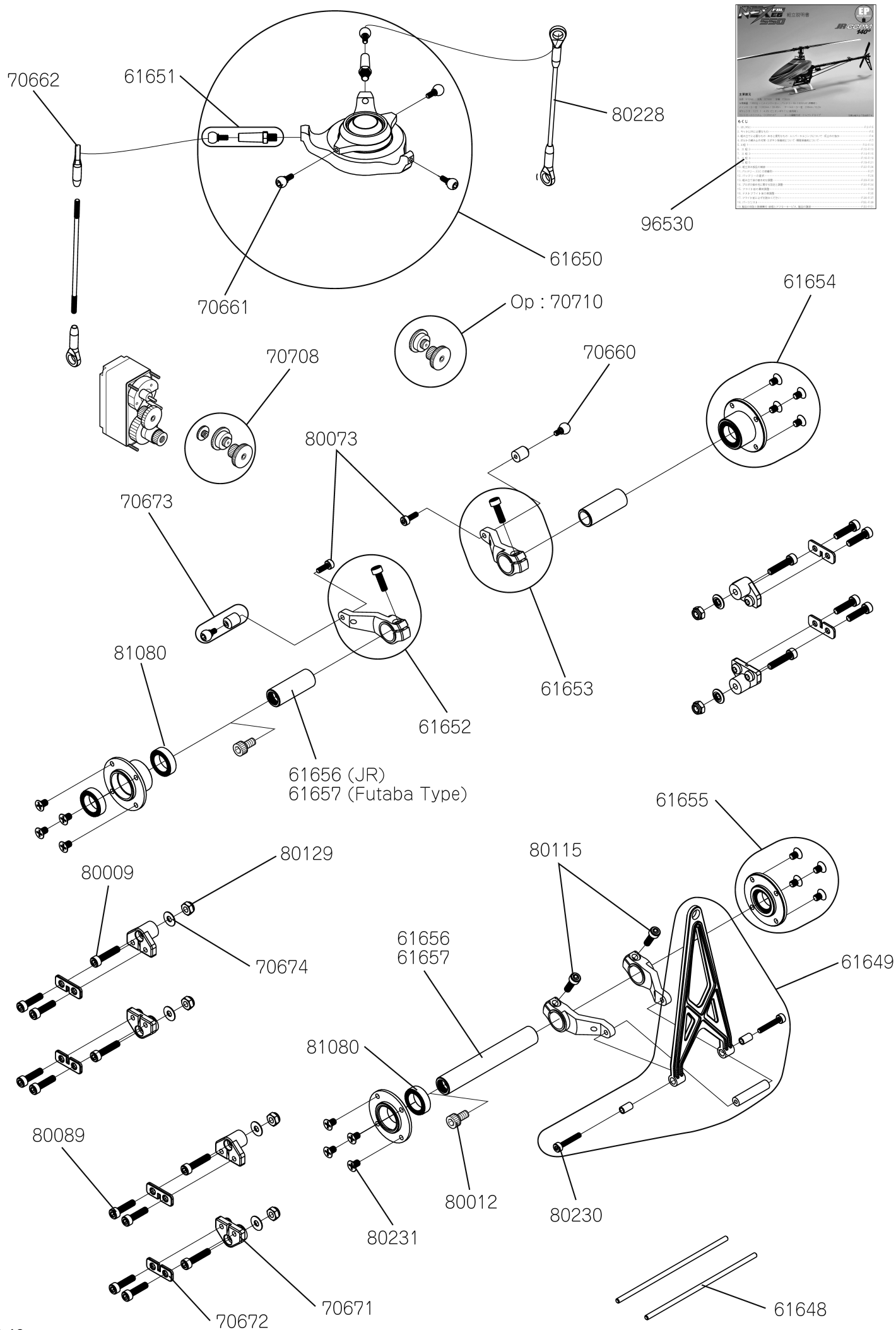
- Ⓐ Never fly the Helicopter near houses, high-tension lines or a heavy-traffic road.
- Ⓑ Never fly it above people, houses, behind you or too far away. If the helicopter crashes or comes into contact with the human body, it could cause serious injury or death.
- Ⓒ Keep your eyes on the helicopter during flight. If you look away even for a short period of time, it may change its position or you may lose sight of it and lose control.
- Ⓓ Do not fly (or hover) with the Main Rotor Blades at eye level because it is dangerous. Always ensure that the Main Rotor Blades are higher than eye level.
- Ⓔ Be careful not to exhaust the battery power. Use the timer function on the transmitter, keep the remaining battery power under check.
- Ⓕ When stopping the Main Rotor Blades never touch them. Wait for them to stop naturally.
- Ⓖ If you notice an abnormality during flight, land the helicopter immediately and check for any loose bolts, etc. Do not fly it again until the cause has been completely eliminated.
- Ⓗ In a crash parts like the Li-Po battery or the ESC in the helicopter could catch fire. Keep a fire extinguisher near during flight for safety and fire prevention.

### 4. 【Precautions after flight 】

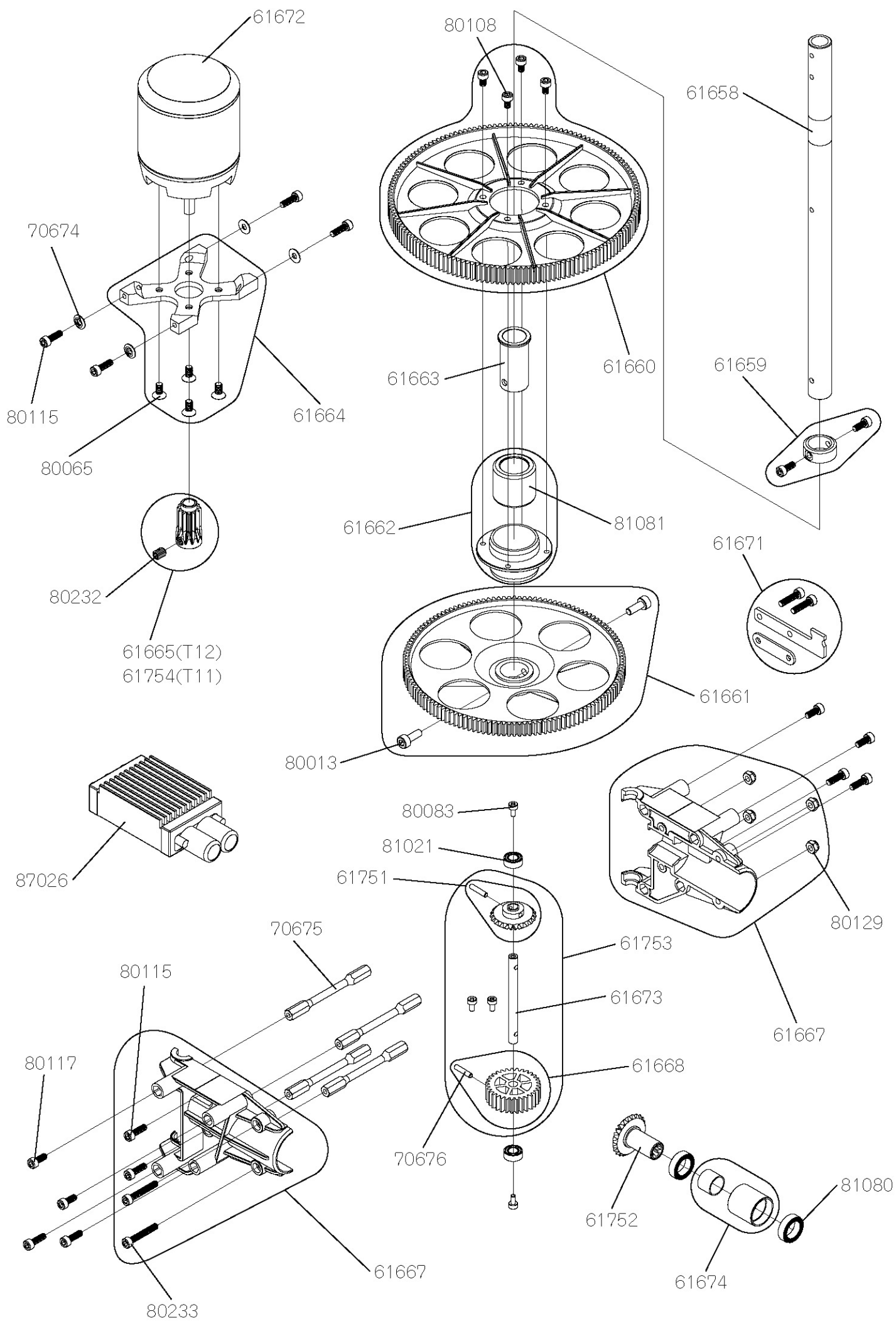
- Ⓐ Check for any loose bolts or shaky parts. If there is any abnormality, repair them before the next flight.
- Ⓑ If the Main Rotor Blades or any other part come into contact with the ground during flight, do not use those parts even if their appearance looks faultless. Replace them with new ones.
- Ⓒ Check whether or not the battery, receiver, gyro, etc. are firmly secured.
- Ⓓ Check the antenna wire from time to time because its core may have been broken. If broken within the coating, it may not be immediately apparent. Refer to the manufacturer periodically for servicing.



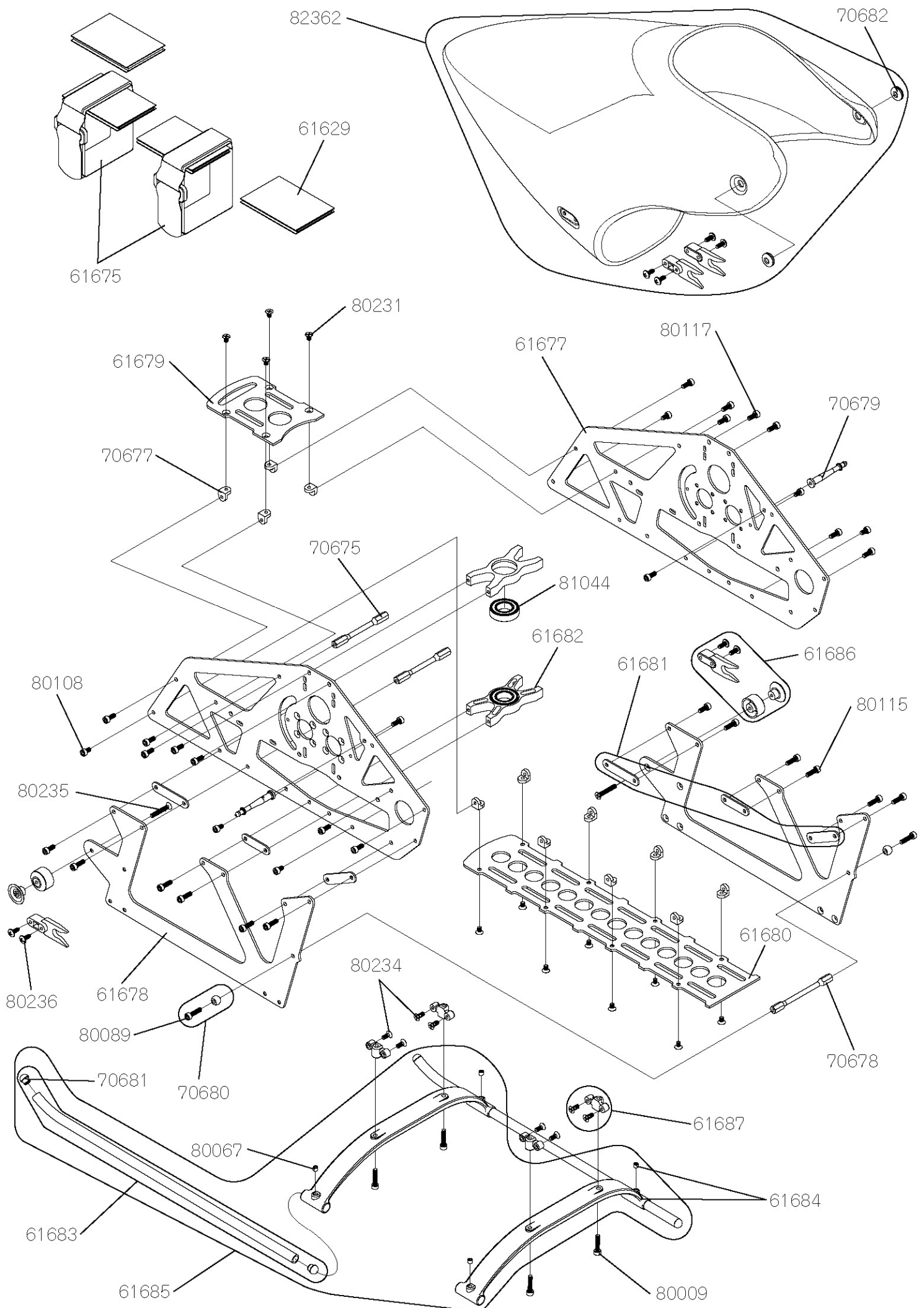
Item #	Description	Quantity	Note
61641	Head Button	1	w/Socket Head Bolt M2.6 × 6
61642	Main Blade Holder Assembly	1	w/Bearing · Thrust Bearing · Washer For 1 set
61643	Center Hub	1	w/Socket Head Bolt M2.6 × 6
61644	Pitch Arm Plate Set	1	w/Joint Ball Spacer t13.5 · Socket Head Bolt
61645	Spindle Shaft	1	w/Low Profile Socket Head Bolt M4 × 8
61646	Washout Arm Assembly	1	w/Bearing · Washout Link · Bolt For 1 set
61647	Blade Holder	1	
61648	Adjustment Parts Set	1	Pitch Adjustment Bar · Alignment Pin · Socket Head Bolt
70658	Rigid Collar Set	2	w/O-Ring 5.8 × 9.6 × 1.9 For 1 kit
70660	Joint Ball Screw L3	5	
70661	Joint Ball Screw L4	5	
70662	Universal Link M2	10	
70663	O-ring 5.8 × 9.6 × 1.9	4	
70664	Washer 4 × 11 × 1.7	2	
70665	Washer 6 × 10 × 0.5	2	
70666	Spacer 6 × 9 × 1	2	
70667	Collar 2.6 × 4 × L6.5	2	
70683	Washout Link	2	w/Washer 2 × 3.5 × 0.7 For 1 kit
80011	Socket Head Bolt M3 × 5	10	
80073	Socket Head Bolt M2 × 6	10	
80089	Socket Head Bolt M2.6 × 10	10	
80115	Socket Head Bolt M2.6 × 8	10	
80117	Socket Head Bolt M2.6 × 6	10	
80164	Nylon Lock Nut M4 (t3.8)	10	
80223	Low Profile Socket Head Bolt M4 × 8	10	
80225	Threaded Rod M2 × 18	2	
80226	Main Blade Bolts Set	1	M4 × 24 For 1 kit
80227	Socket Head Bolt M2.6 × 5	10	
81033	Shielded Bearing 4 × 7 × 2.5	2	L-740ZZ
81047	Thrust Bearing 6 × 12 × 4.5	2	DDT-1260DSG
81061	Shielded Bearing 2 × 5 × 2.3	2	L-520ZZ
81073	Shielded Bearing 6 × 13 × 5	2	L-1360ZZ
83147	Carbon Main Rotor Blades 510	2	



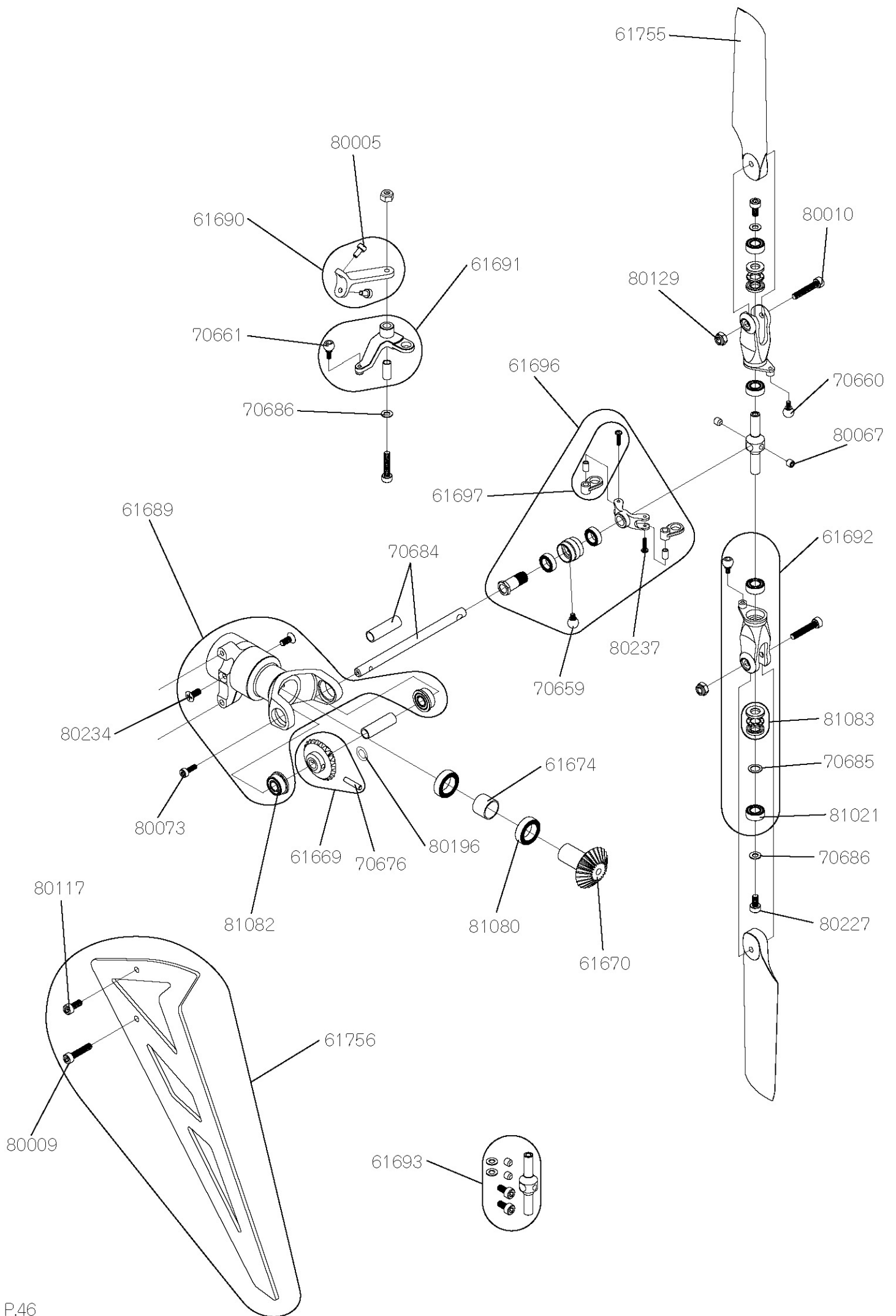
Item #	Description	Quantity	Note
61648	Adjustment Parts Set	1	Pitch Adjustment Bar · Alignment Pin
61649	A-Arm	1	w/A-Arm Collar · A-Arm Inner Collar · Bolts
61650	140° Swashplate Assembly	1	Color : Red w/Swashplate Arm · Joint Ball Screw L4
61651	Swashplate Arm	2	w/Joint Ball Screw L4
61652	Control Lever L	1	Color : Red w/Socket Head Bolt M2.6 × 8
61653	Control Lever R	1	Color : Red w/Socket Head Bolt M2.6 × 8
61654	Control Lever Bearing Block A	1	w/8 × 12 × 3.5 Bearing · Flat Head Screw M2.6 × 4
61655	Control Lever Bearing Block B	1	w/8 × 12 × 3.5 Bearing · Flat Head Screw M2.6 × 4
61656	Control Lever Shaft Set (JR)	1	A · B · Servo Horn Inner For 1 kit
61657	Control Lever Shaft Set (Futaba Type)	1	A · B · Servo Horn Inner For 1 kit Optional
70660	Joint Ball Screw L3	5	
70661	Joint Ball Screw L4	5	
70662	Universal Link M2	10	
70671	Servo Mount C	6	For 1 kit
70672	Servo Mount Plate D	10	Color : Red
70673	Joint Ball Spacer t6.2	2	w/Joint Ball Screw L3
70674	Washer M2.6 × 6.5 × t0.8	10	
70708	Swash Servo Plastic Gear Set (DS11)	3	For 1 kit
70710	Swash Servo Metal Gear Set (DS11)	3	For 1 kit Optional
80009	Socket Head Bolt M2.6 × 12	10	
80012	Socket Head Bolt M3 × 6	10	
80073	Socket Head Bolt M2 × 6	10	
80089	Socket Head Bolt M2.6 × 10	10	
80115	Socket Head Bolt M2.6 × 8	10	
80129	Nylon Lock Nut M2.6	10	
80228	Threaded Rod M2 × 60	2	
80230	Socket Head Bolt M2 × 12	10	
80231	Flat Head Screw M2.6 × 4	10	
81080	Shielded Bearing 8 × 12 × 3.5	2	
96530	Assembly Manual (NEX550)	1	w/Radio Setup Info



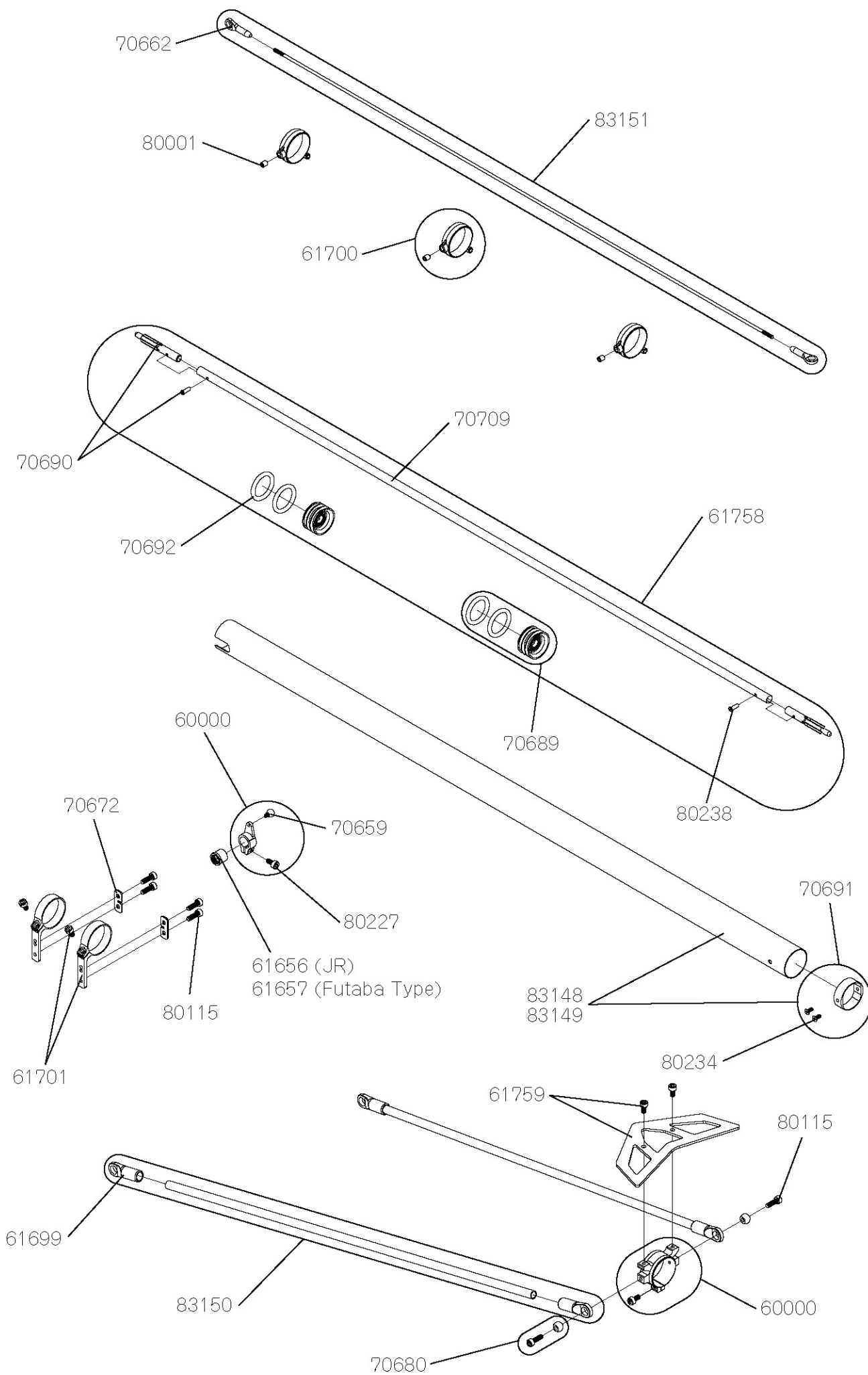
Item #	Description	Quantity	Note
61658	Main Shaft	1	w/Main Shaft Self Locking Nylon Set
61659	Main Shaft Collar	1	w/Socket Head Bolt M2.6 × 6
61660	Main Drive Gear T150	1	w/Socket Head Bolt M2.6 × 4
61661	Tail Drive Gear T132	1	w/Socket Head Bolt M3 × 8
61662	Autorotation Assembly	1	
61663	Autorotation Sleeve	1	
61664	Motor Mount	1	w/Flat Head Screw M3 × 6
61665	Pinion Gear T12	1	w/Setscrew M4 × 5
61667	Tail Gear Unit Set	1	w/Socket Head Bolt M2.6 × 8 · M2.6 × 16 · Nylon Nut
61668	Tail Drive Gear T31	2	w/Tail Shaft Pin
61671	Governor Mount	1	w/Flange Spacer 18 · Socket Head Bolt M2.6 × 12 Optional
61672	Brushless Motor NHM-40-8P	1	KV : 1750
61673	Tail Pinion Gear Shaft	1	w/Tail Shaft Pin
61674	Tail Drive Bearing Holder Set	1	w/Tail Gear Bearing Collar
61751	Tail Bevel Gear A T23 (Metal)	1	w/Tail Shaft Pin
61752	Tail Bevel Gear B T23 (Metal)	1	
61753	Tail Pinion Shaft Assembly	1	for 1 set
61754	Pinion Gear T11	1	w/Setscrew M4 × 5
70674	Washer 2.6 × 6.5 × 0.8	10	
70675	Cross member L47	2	Color : Silver
70676	Tail Shaft Pin	2	2 × 9.5
80013	Socket Head Bolt M3 × 8	10	
80065	Flat Head Screw M3 × 6	10	
80083	Socket Head Bolt M2 × 5	10	
80108	Socket Head Bolt M2.6 × 4	10	
80115	Socket Head Bolt M2.6 × 8	10	
80117	Socket Head Bolt M2.6 × 6	10	
80129	Nylon Lock Nut M2.6	10	
80232	Setscrew M4 × 5	10	
80233	Socket Head Bolt M2.6 × 16	10	
81021	Shielded Bearing 4 × 8 × 3	2	L-840ZZ
81080	Shielded Bearing 8 × 12 × 3.5	2	
81081	One Way Bearing 12 × 18 × 16	1	
87026	ESC NHA-75-SB5	1	75A/BEC 5A



Item #	Description	Quantity	Note
61629	Hook and Loop Fastener L60	2	
61675	Hook and Loop Strap Bk	2	L : 260
61677	Carbon Upper Frame Set	1	L/R
61678	Carbon Lower Frame Set	1	L/R
61679	Carbon Tray S	1	
61680	Carbon Tray L	1	
61681	Main Frame Spacer Set	1	25.1 · 18 For 1 kit
61682	Bearing Block w/Bearing	1	
61683	Landing Skid	2	w/Skid Cap
61684	Landing Strut	2	w/Setscrew M3 × 3
61685	Landing Gear Set	1	For 1 Unit
61686	Body Catch Block Set	1	A · B · Body Catch Plate · Self Tapping Screw For 1 Kit
61687	Landing Strut Bracket	4	w/Flat Head Screw M2.6 × 6
70675	Cross member L47	2	Color : Silver
70677	Mount Bracket	4	
70678	Cross member L52	2	Color : Red
70679	Body Catch L26.5	2	
70680	Tail Boom Support Ball	4	w/Socket Head Bolt M2.6 × 8 · M2.6 × 10
70681	Skid Cap	4	
70682	Rubber Grommet	4	
80009	Socket Head Bolt M2.6 × 12	10	
80067	Setscrew M3 × 3	10	
80089	Socket Head Bolt M2.6 × 10	10	
80108	Socket Head Bolt M2.6 × 4	10	
80115	Socket Head Bolt M2.6 × 8	10	
80117	Socket Head Bolt M2.6 × 6	10	
80231	Flat Head Screw M2.6 × 4	10	
80234	Flat Head Screw M2.6 × 6	10	
80235	Flat Head Screw M2.6 × 16	10	
80236	Self Tapping Screw M2.6 × 6	10	
81044	Shielded Bearing 10 × 19 × 5	2	L-1910ZZ
82362	FRP Body (NEX550)	1	For 1 set



Item #	Description	Quantity	Note
61669	Tail Bevel Gear A T23	2	w/Tail Shaft Pin
61670	Tail Bevel Gear B T23	2	
61674	Tail Drive Bearing Holder Set	1	w/Tail Gear Bearing Collar
61689	Tail Gear Case Assembly	1	w/Bearing · Flat Head Screw M2.6 × 6
61690	Tail Pitch Control Base	1	w/Socket Head Bolt M2 × 4
61691	Tail Pitch Control Lever	1	For 1 set
61692	Tail Blade Holder	2	w/L-840ZZ Bearing · Thrust Bearing For 1 kit
61693	Tail Center Hub	1	w/Socket Head Bolt · Setscrew · Washer
61696	Tail Slide Ring Assembly	1	w/Bearing · Tail PC Plate · Joint Ball Screw L2
61697	Tail PC Link	2	w/Tail PC Link Collar · Pan Head Bolt M1.6 × 6
61755	Carbon Tail Rotor Blade L82	2	
61756	Carbon Vertical Fin	1	w/Socket Head Bolt M2.6 × 12
70659	Joint Ball Screw L2	5	
70660	Joint Ball Screw L3	5	
70661	Joint Ball Screw L4	5	
70676	Tail Shaft Pin	2	2 × 9.5
70684	Tail Output Shaft	1	w/Spacer 4 × 5 × 16.7
70685	Washer 4 × 6 × 0.3	2	
70686	Washer 2.6 × 5 × 0.4	2	
80005	Socket Head Bolt M2 × 4	10	
80009	Socket Head Bolt M2.6 × 12	10	
80010	Socket Head Bolt M2.6 × 15	10	
80067	Setscrew M3 × 3	10	
80073	Socket Head Bolt M2 × 6	10	
80117	Socket Head Bolt M2.6 × 6	10	
80129	Nylon Lock Nut M2.6	10	
80196	Poly Slider 4.1 × 6.5 × 0.13	5	
80227	Socket Head Bolt M2.6 × 5	10	
80234	Flat Head Screw M2.6 × 6	10	
80237	Pan Head Bolt M1.6 × 6	10	
81021	Shielded Bearing 4 × 8 × 3	2	L-840ZZ
81080	Shielded Bearing 8 × 12 × 3.5	2	
81082	Flanged Bearing F 4 × 9 × 4	2	
81083	Thrust Bearing 4 × 8 × 3.5	2	



Item #	Description	Quantity	Note
61656	Control Lever Shaft Set (JR)	1	w/A · B · Servo Horn Inner For 1 kit
61657	Control Lever Shaft Set (Futaba Type)	1	w/A · B · Servo Horn Inner For 1 kit Optional
61699	Tail Boom Brace End	4	
61700	Tail Rod Guide E Set	1	w/Setscrew M3 × 4 For 1 kit
61701	Rudder Servo Mount	2	w/Socket Head Bolt M2.6 × 5
61703	Metal Servo Horn	1	w/Joint Ball Screw L2 · Socket Head Bolt M2.6 × 5
61757	Tail Boom Brace Clamp	1	w/Socket Head Bolt M2.6 × 5
61758	Tail Drive Shaft Set	1	w/Drive Shaft Joint · Shaft Drive Guide
61759	Carbon Horizontal Fin	1	w/Socket Head Bolts
70659	Joint Ball Screw L2	5	
70662	Universal Link M2	10	
70672	Servo Mount Plate D	10	Color : Red
70680	Tail Boom Support Ball	4	w/Socket Head Bolt M2.6 × 8 · M2.6 × 10
70689	Shaft Drive Guide	2	w/5 × 8 × 2.5 Bearing · O-Ring 13.8 × 18.6 × 2.4
70690	Drive Shaft Joint	2	w/Pan Head Bolt M2 × 6
70691	Tail Boom Inner Collar	1	w/Flat Head Screw M2.6 × 6
70692	O-Ring 13.8 × 18.6 × 2.4	4	
70709	Tail Drive Shaft	1	L568
80001	Setscrew M3 × 4	10	
80115	Socket Head Bolt M2.6 × 8	10	
80227	Socket Head Bolt 2.6 × 5	10	
80234	Flat Head Screw M2.6 × 6	10	
80238	Pan Head Bolt M2 × 6	10	
83148	Carbon Tail Boom L568.5	1	w/Tail Boom Inner Collar · Pan Head Bolt M2.6 × 6
83149	Aluminum Tail Boom L568.5	1	Optional
83150	Carbon Tail Boom Brace L400	2	w/Tail Boom Brace End
83151	Tail Control Rod L512	1	w/Universal Link M2

# PRODUCT WARRANTY AND LIABILITY INDEMNITY

## PRODUCT WARRANTY

1. The product has been delivered to you after strict inspection. After unpacking the kit, be sure to check its contents. If there are any faulty parts, contact our Distributor.
2. Note that our product warranty does not cover any failures of parts which have resulted from your handling during assembly.
3. For other product warranty, please inquiry with our distributors.

## LIABILITY INDEMNITY

1、The Product, by its nature, includes dangerous elements depending on how it is handled. When flying it, operate it at your own risk, paying full heed to the surrounding persons and objects as well as yourself.

Note that we will take no responsibility for any accidents of whatever cause during use of this product.

# REPAIR AND AFTER-SALE SERVICE, TRANSFER OF PRODUCT

## REPAIR

For repair assistance, please contact the shop where you purchased the product.

Please do not try to repair by yourself if you do not have enough knowledge or experience of R/C helicopters.

If you replace parts or repair by yourself, refer to the parts list and relate manuals.

If you ask for repair, please confirm first if it is repairable.

## AFTER-SALE SERVICE

Please contact our distributors for any inquiry about this product.

## TRANSFER OF PRODUCT

JR or JR distributors take no part in transferring or reselling our products.

The relevant parties are kindly requested to check the condition of the helicopter and the existence of the accessories and it is their responsibility to trade openly.

MEMO

Lined area for writing the memo content.

Fly. and catch the sky with JR!

**JR PROPO®**

man\_nexe6-550w\_230320

NEX E6-550 Assembly Manual

The product and the contents of these instructions are subject to change  
without notice due to improvement.