

## User Handbook



### Specifications:

Main Rotor Diameter: 900 mm

Tail Rotor Diameter: 175 mm

Overall Length: 820 mm

Rudder Servo: weight 9.1g / speed 0.12sec/60° (4.8V) / torque 1.1kg/cm (4.8V) / dimension 22.5X11.8X27mm

20g Servo: weight 22.6g / speed 0.18sec/60° (4.8V) / torque 2.0kg/cm (4.8V) / dimension 28.5X13.5X29.6mm

Engine Model: 15A

Battery: 4.8V 1300mAh Ni -MH

All-up Weight: 1100g (Without fuel)

Receiver: RX- 702

Transmitter: WK-0703

Gyro: WK-G011

### Features:

- 1) CCPM mixing control system and collective pitch structure make perfect 3D aerobatics like rolls, swoop, and inverted flights.
- 2) Metal rotor head, metal swashplate and metal tail fiber frame structure, built with legerity and novelty. The autorotation landing system, made of high quality one-way bearing, minimizes damage to your helicopter during unplanned landing.
- 3) Tail blades driven by belt provide easy adjustment, stable flight, and low noise.
- 4) 15A fuel engine of high performance is powerful.
- 5) WK-0703 LCD transmitter with adjustable pitch (PIT) parameter, rudder mixing, throttle curve & servo exponential make flight more stable and precise.

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## Introduction

Thank you for your purchase of our product. In order to enjoy all the benefits of your helicopter, we recommend you carefully read the entire manual before you begin working with this model. After you have read the manual please store it in a safe place for future reference.

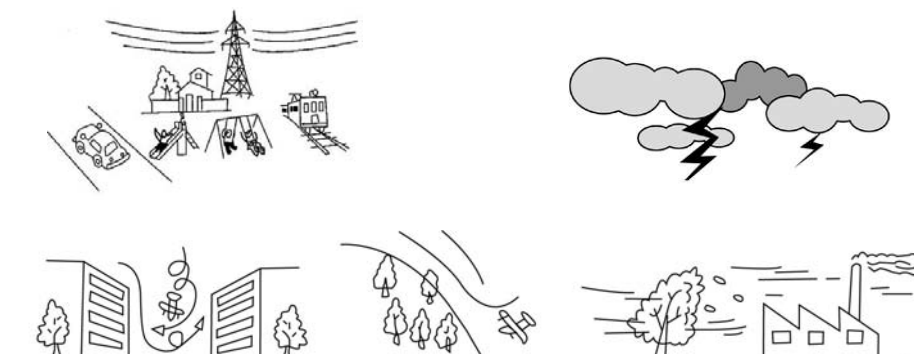
## Warning

1. Walkera helicopters are not toys. They are a complex combination of electronics and mechanics which produce an aerodynamic rotorcraft. All models require proper setup and exacting adjustments to avoid accidents. We accept no liability for damage and/or consequent damage arising from the use or misuse of the products due to improper construction methods, use or operation, It is your responsibility to operate this highly advanced model in a safe manner.
2. When charging the battery, do not overcharge. Overcharging may result in fire or explosion. When the battery is hot during charging, please stop charging at once. Use specified charger only. Never short circuit! Proper disposal of the battery is your responsibility.
3. Children under 14 years old are strictly forbidden from flying the helicopter. Please do not allow children or adults in the designated flying area.
4. Any situations that occur during flight, that cause the rotor blades to stop spinning or that result in a serious ground strike and cause damage to the helicopter could initiate a fire or explosion. If this type of situation occurs, **IMMEDIATELY** move the throttle stick to it's lowest position.

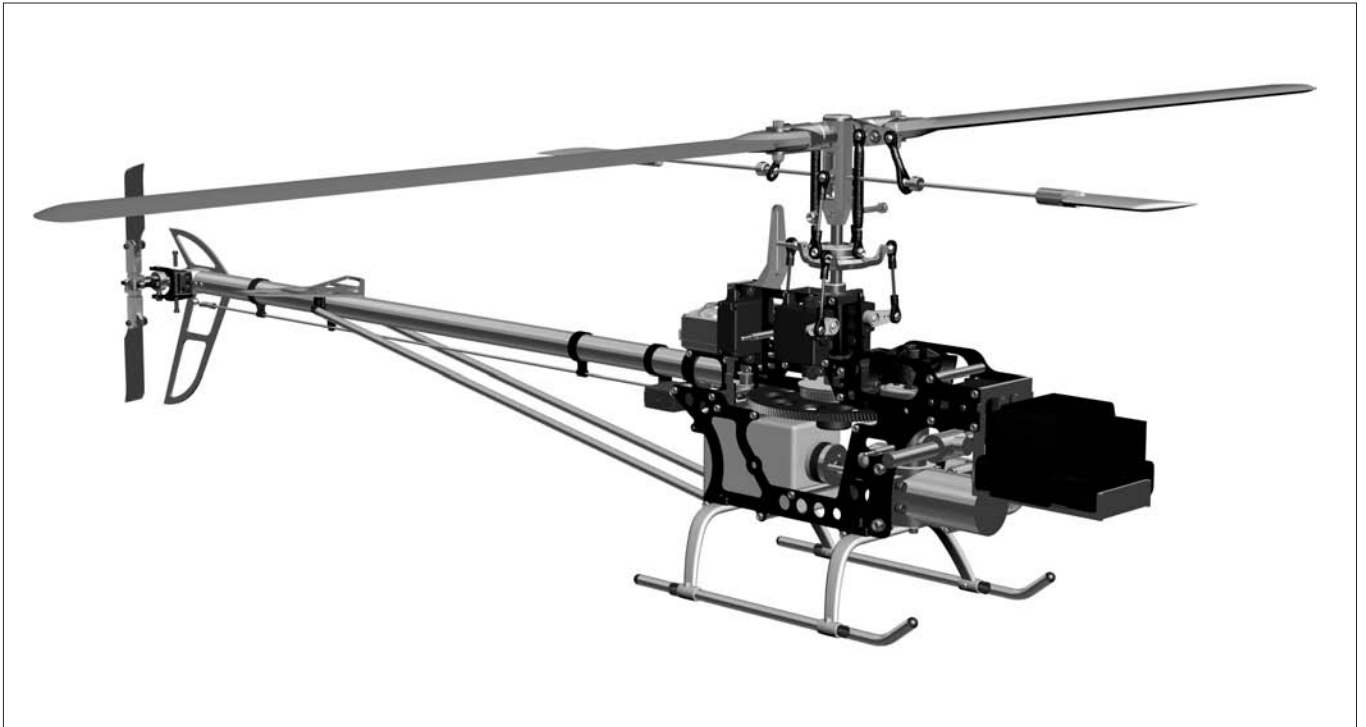
## Cautions

1. Because the helicopter is operated by radio control, it is important to make sure you are always using fresh and/or fully charged batteries. Never allow the batteries to run low or you could lose control of the helicopter.
2. Do not allow any of the electrical components to get wet. Otherwise electrical damage may occur.
3. You should complete a successful range check of your radio equipment prior to each new day of flying, or prior to the first flight of a new or repaired model.
4. If the helicopter gets dirty, don't use any solvents to clean it. Solvents will damage the plastic and composite parts.
5. Always turn on the transmitter before plugging in the flight battery and always unplug the flight battery before turning off the transmitter.
6. Never cut the receiver antenna shorter or you could lose control of the helicopter during flight.
7. When flying the helicopter, please make sure that the transmitter antenna is completely extended and is pointed up toward the sky, not down toward the ground.

### Don't fly your helicopter in these locations or conditions



## Assembling Process

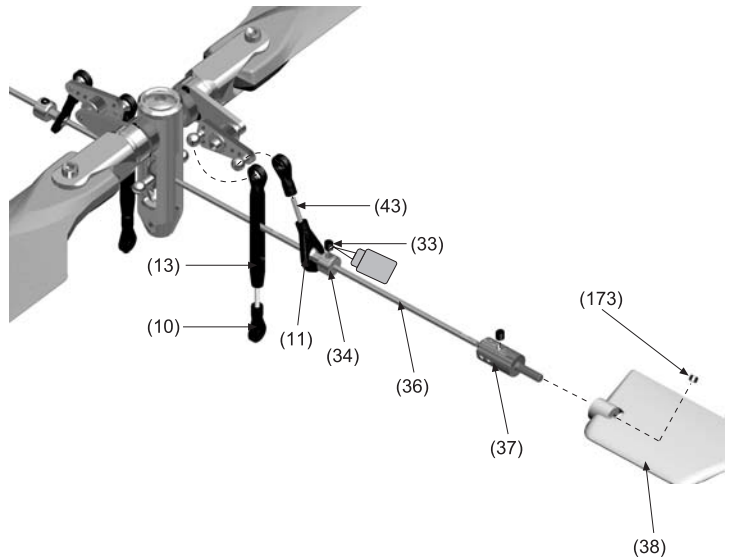


Every kit is sorted according to its assembling process. Please open the kits in order.



### (3) Rotor Head Assembly Step 3

(10) Ball Linkage End	4
(11) Ball Linkage End 3	2
(13) Long Link Rod	2
(33) Hexagon Socket Pan Head Locking Screw (M3*3)	5
(34) Flybar Steering Ball	2
(36) Balance Bar	1
(37) Flybar Paddle Connector	2
(38) Flybar Paddle	2
(43) Link Rod 2	4
(173) Type-1 Hexagonal Nut (M3)	2

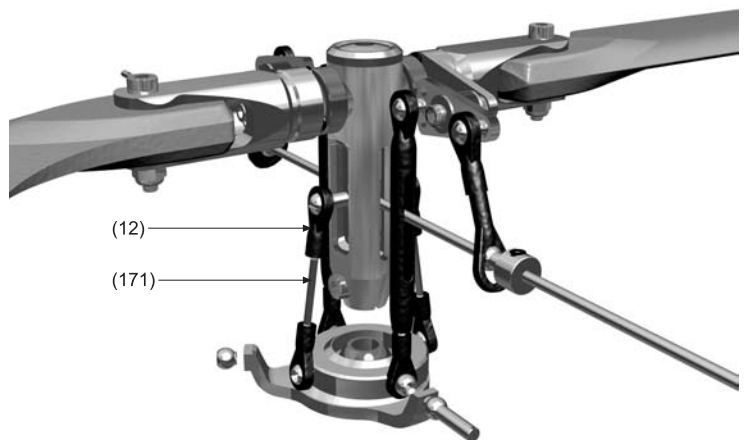
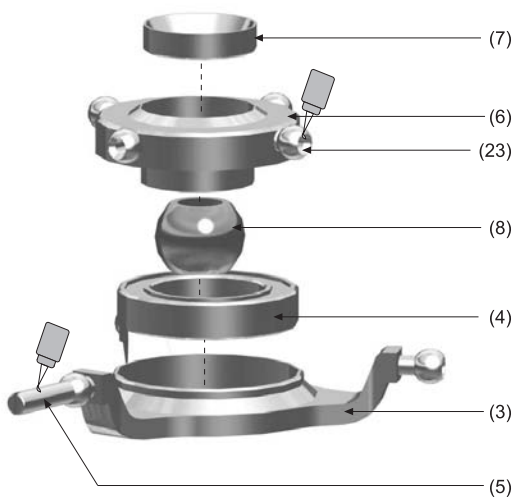


- Notice:**
1. The lengths of left and right in the Balance Bar (36) should be exactly same.
  2. The left and right Flybar Paddles (38) should be at the same horizontal level (lateral view).
  3. Drop some glue on its screw thread when mounting the Hexagon Socket Pan Head Locking Screw (33).

### (4) Swashplate Assembly

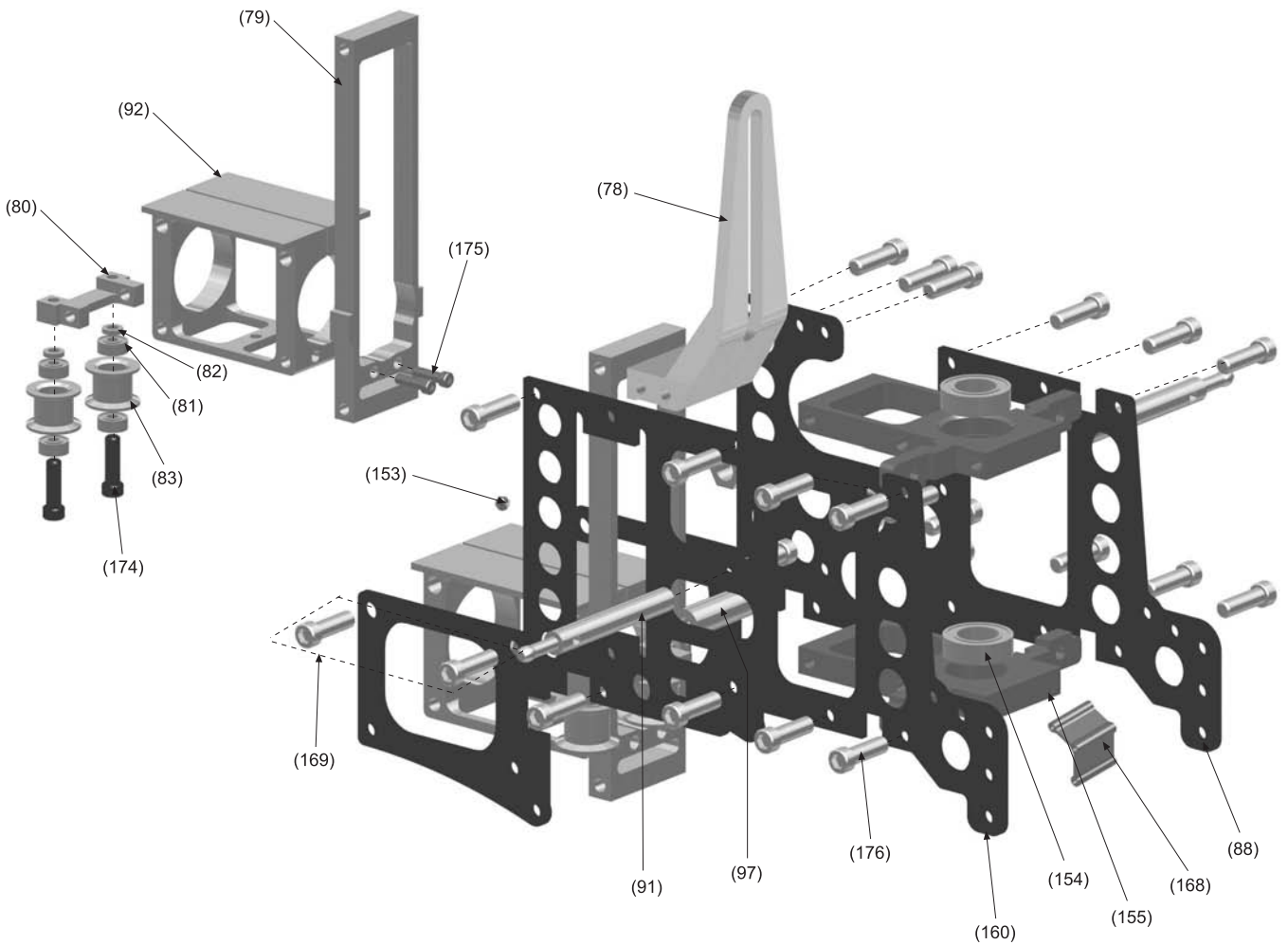
(3) Swashplate (Base)	1	(8) Steel Ball	1
(4) Bearing ( φ 15* φ 24*5)	1	(12) Ball Linkage 2	4
(5) Steering Rod	1	(23) Steel Ball A	6
(6) Swashplate (Lower Cover)	1	(171) Link Rod 1	2
(7) Swashplate (Upper)	1		

- Notice:**
1. After the Steel Ball (8) is inserted, the rotation of swashplate should be quite smooth.
  2. When mounting the Steering Rod (5) and Steel Ball A (23), please drop some glue on both of their screw threads.



## (5) Main Frame Assembly Step 1

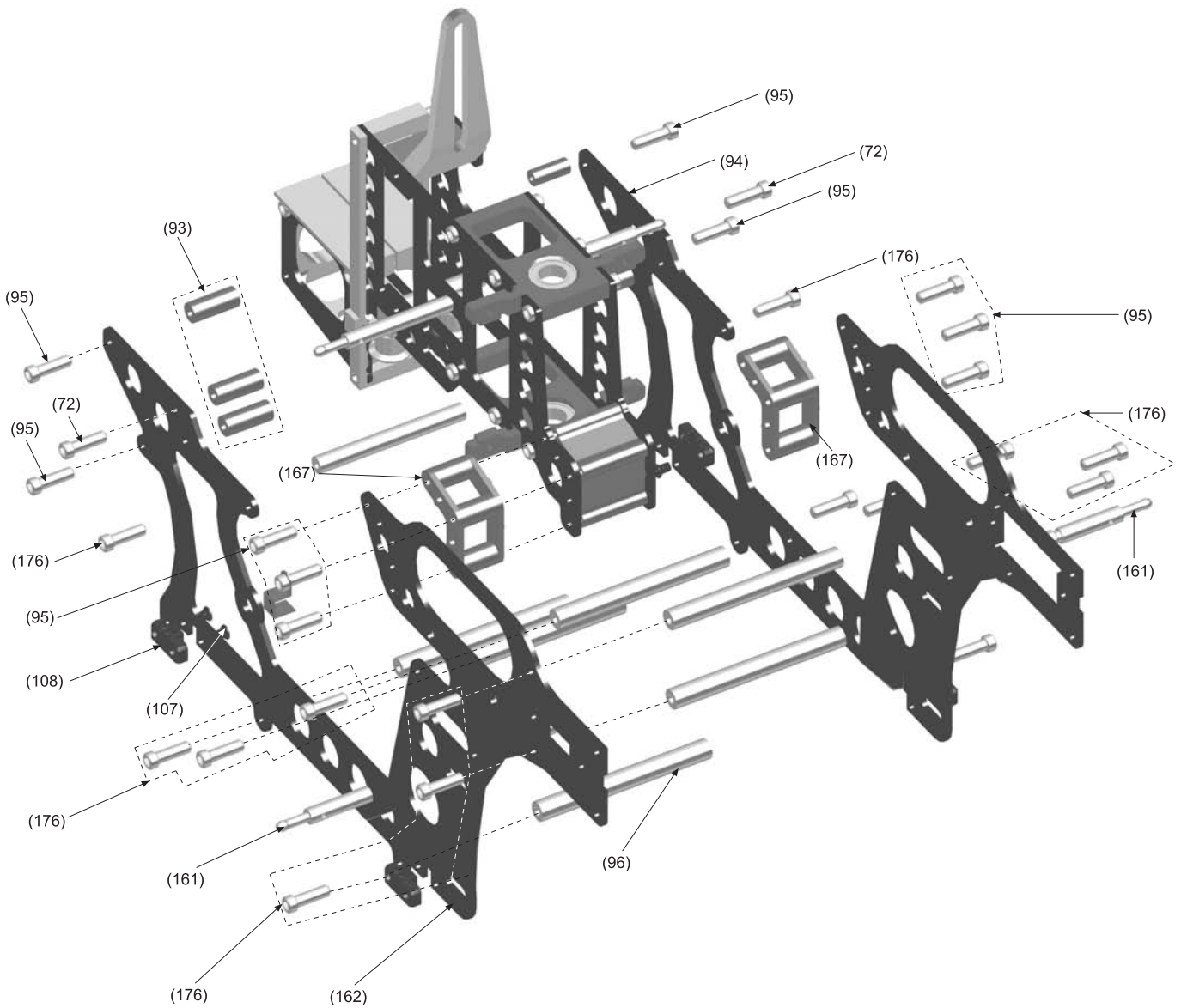
(78) Swashplate Anti-Steering Block	1	(153) Locking Hexagonal Nut (M2.5)	2
(79) Main Frame Connector	1	(154) Bearing ( $\phi 6 \times \phi 10 \times 3$ )	2
(80) Guide Pulley Holder	1	(155) Servo Holder	2
(81) Bearing ( $\phi 2 \times \phi 5 \times 2$ )	4	(160) Main Frame 1	1
(82) Idler Pulley Washer	2	(168) Main Frame Connector 1	1
(83) Synchronmesh Belt Idler Pulley	2	(169) Hexagon Socket Head Cap Screw (M2.5*23)	2
(88) Main Frame 2	1	(174) Hexagon Socket Head Cap Screw (M2*10)	2
(91) Canopy Kniighthed 1	2	(175) Hexagon Socket Head Cap Screw (M2*6)	2
(92) Tail Boom Holder	1	(176) Hexagon Socket Head Cap Screw (M2*4)	20
(97) Beam 1	1		





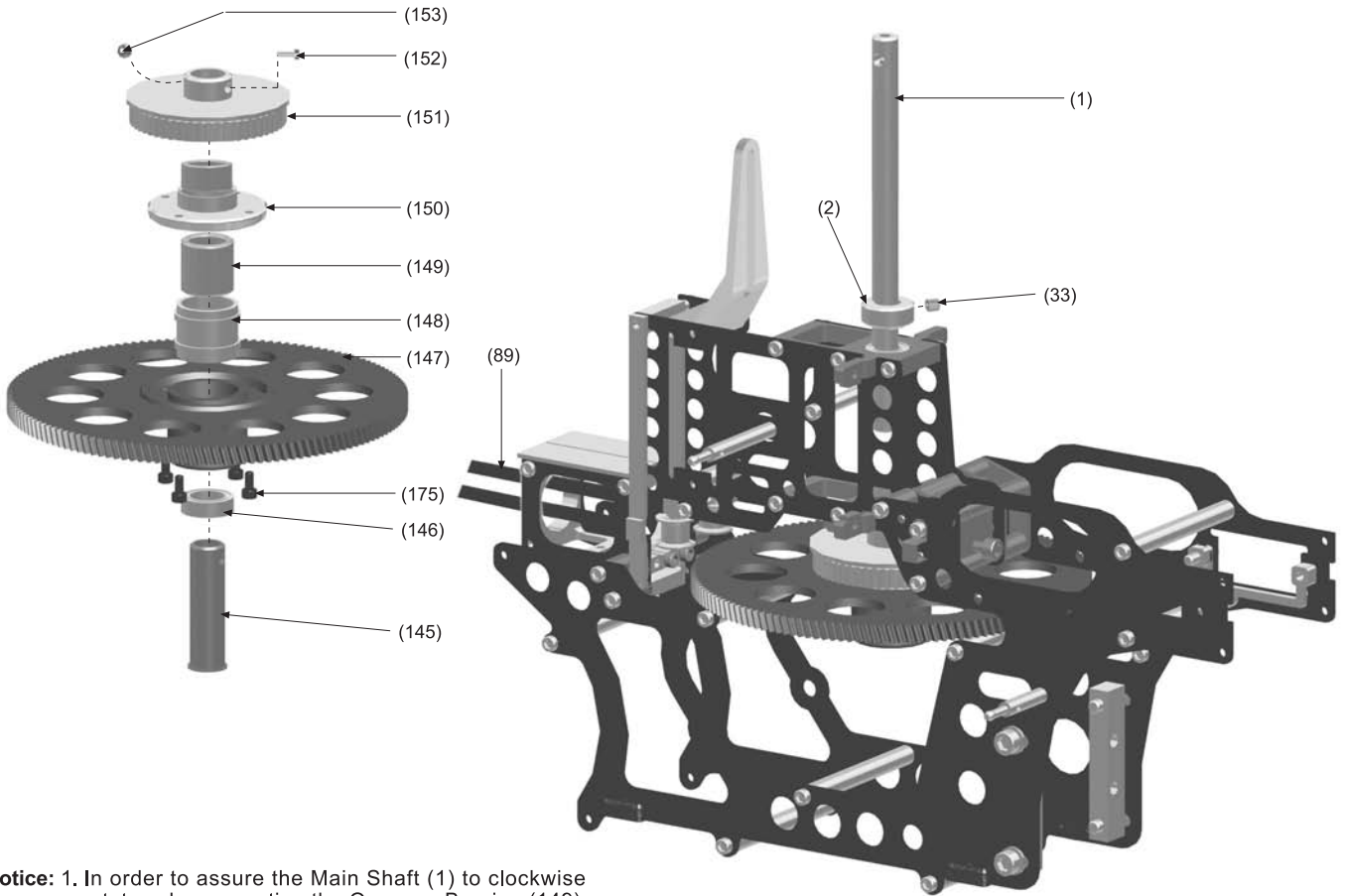
## (6) Main Frame Assembly

(72) Hexagon Socket Head Cap Screw (M2*18) .....	2	(108) Skid Landing Aluminum Block .....	4
(93) Beam 2 .....	6	(161) Canopy Knighthead 2 .....	2
(94) Main Frame 4 .....	1	(162) Main Frame 3 .....	1
(95) Hexagon Socket Head Cap Screw (M2*20) .....	10	(167) Main Frame Connector 2 .....	2
(96) Beam 3 .....	7	(176) Hexagon Socket Head Cap Screw (M2*4) .....	16
(107) Cross Recessed Countersunk Flat Head Screw (KM2*5) .....	8		



## (7) Main Gear Assembly

(1) Main Shaft ..... 1	(148) Main Gear Aluminum Sleeve ..... 1
(2) Main Shaft Lock Ring ..... 1	(149) Oneway Bearing ( $\phi 8 \times \phi 12 \times 12$ ) ..... 1
(33) Hexagon Socket Pan Head Locking Screw (M3*3) ..... 1	(150) Main Gear Connector ..... 1
(89) Belt ..... 1	(151) Main Belt Wheel ..... 1
(145) Main Shaft Sleeve (Lower End) ..... 1	(152) Hexagon Socket Head Cap Screw (M2.5*15) ..... 1
(146) Bearing ( $\phi 8 \times \phi 12 \times 3.5$ ) ..... 2	(153) Locking Socket Nut (M2.5) ..... 1
(147) Main Gear ..... 1	(175) Hexagon Socket Head Cap Screw (M2*6) ..... 4



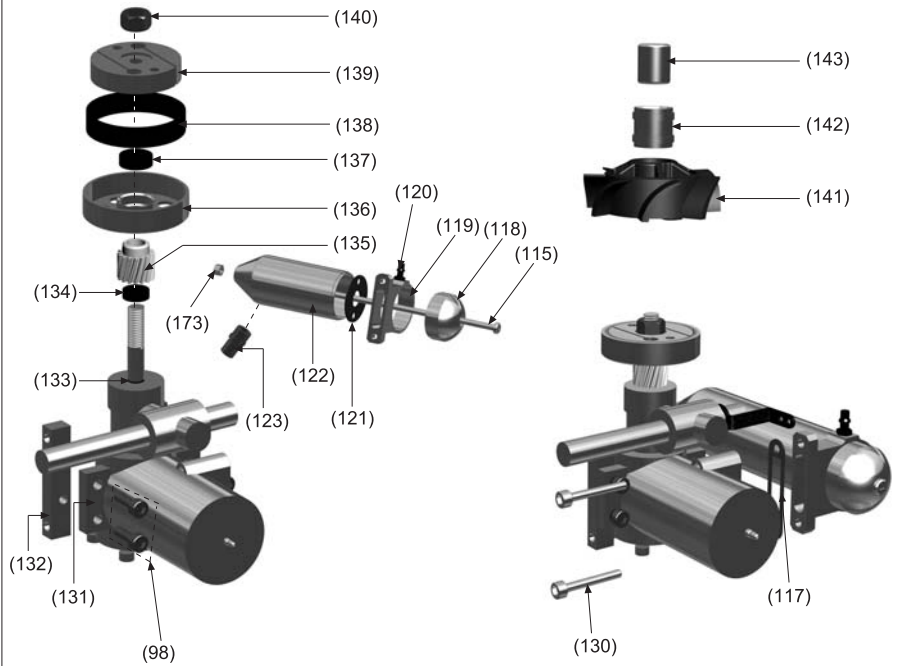
**Notice:** 1. In order to assure the Main Shaft (1) to clockwise rotate, when mounting the One-way Bearing (149), please keep the face with arrow symbol (→) down.

2. After the belt(89) is rung on the main belt wheel (151), please tighten the hexagon nut using hexagon socket head cap screw (152) in order to fix main gear to main shaft.

3. When install the Main Shaft lock ring (2), note the convexity downward.

## (8) Engine Assembly

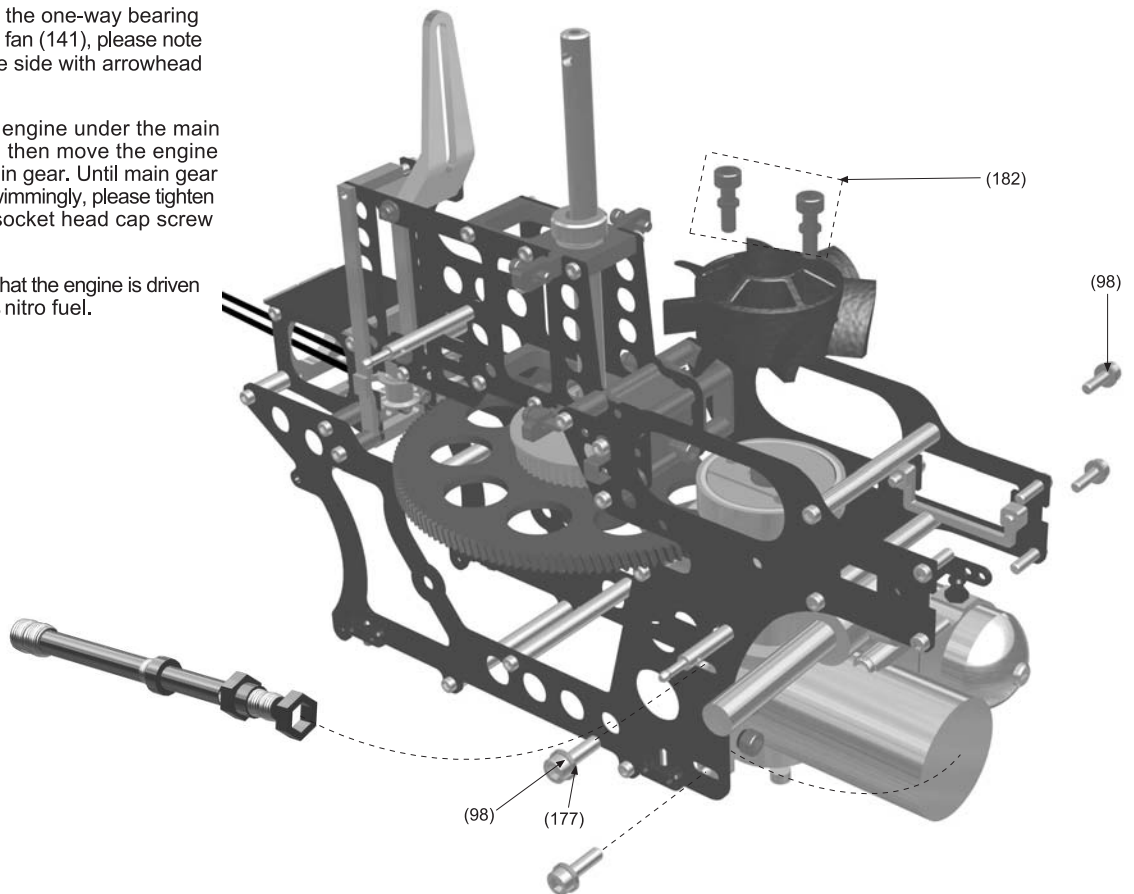
(98) Hexagon Socket Head Cap Screw (M3*8) .....	8
(115) Silencer Lock Screw .....	1
(117) Engine Gasket .....	1
(118) Silencer Pre-Storehouse .....	1
(119) Silencer Base .....	1
(120) Silencer Pipe Connector .....	1
(121) Silencer Sound Insulation .....	1
(122) Silencer Back-Storehouse .....	1
(123) Silencer Gas Outlet .....	1
(130) Slotted Pan Head Screw Notch .....	2
(131) 15 Engine .....	1
(132) Engine Holder .....	2
(133) Gear Washer .....	1
(134) Bearing ( φ 5* φ 8*2.5) .....	1
(135) Engine Gear .....	1
(136) Clutch Bottom-Cover .....	1
(137) Bearing ( φ 6* φ 10*3) .....	1
(138) Drive Output Friction Plate .....	1
(139) Clutch Tumpplate .....	1
(140) Type-1 Hexagonal Nut (M5) .....	1
(141) Fan .....	1
(142) Fan Aluminum Cover .....	1
(143) Oneway Bearing ( φ 6* φ 10*12) .....	1
(173) Type-1 Hexagonal Nut (M3) .....	1
(177) Plain Washer (Class C) ( φ 3* φ 6*0.5) .....	4
(182) Hexagon Socket Head Cap Screw (M3*8) .....	2



**Notice:** 1. When install the one-way bearing (143) into the fan (141), please note that place the side with arrowhead downwards.

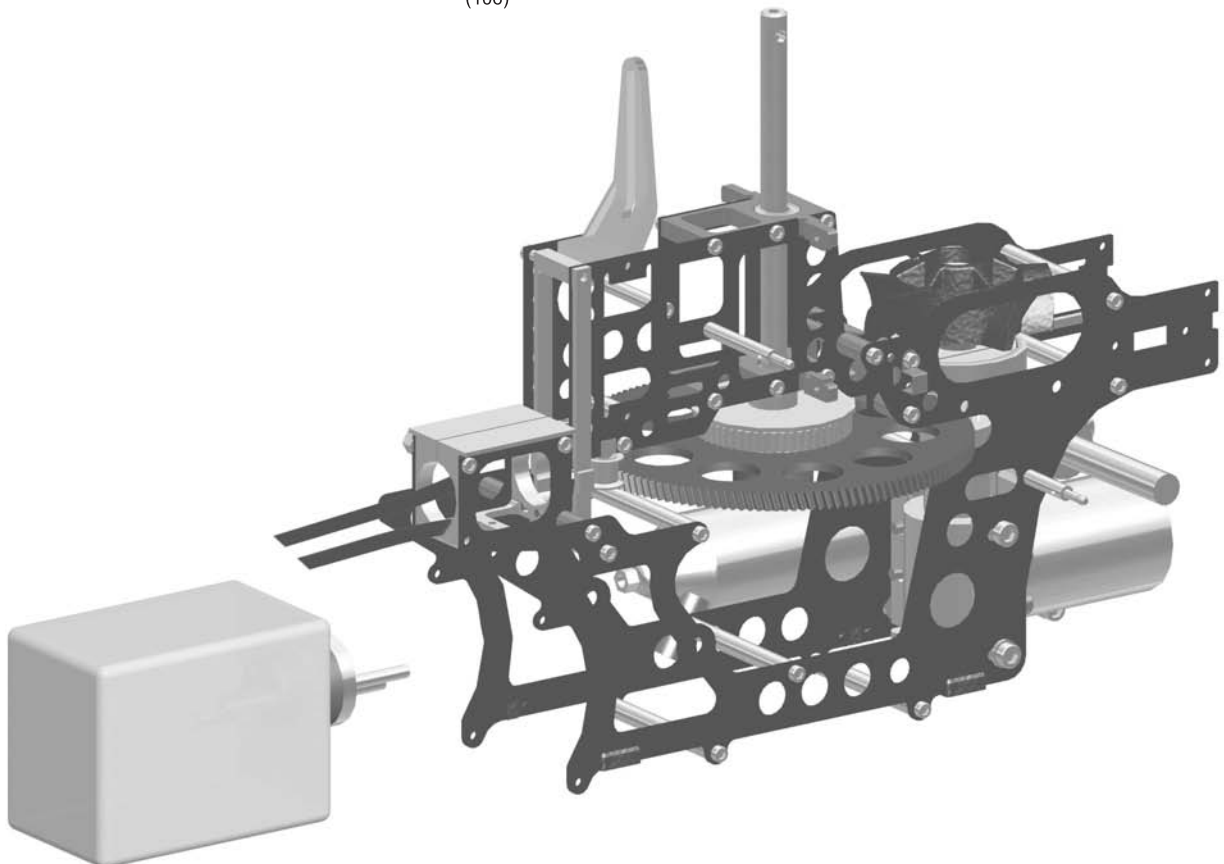
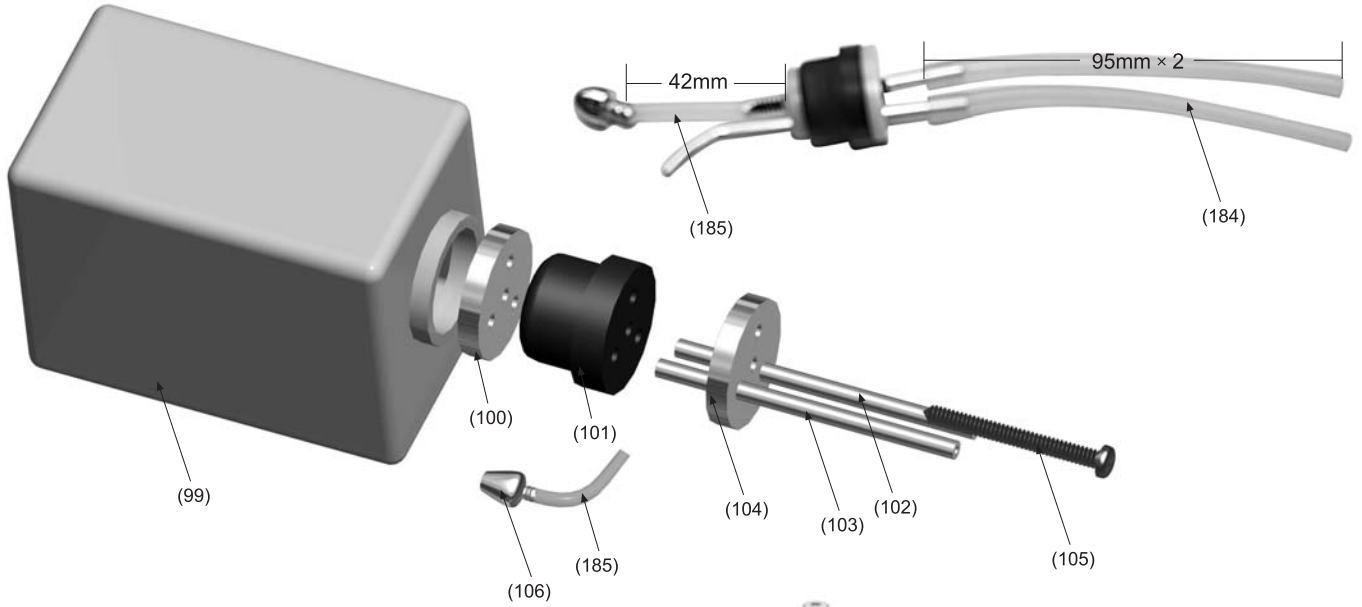
2. Place the engine under the main frame and then move the engine toward main gear. Until main gear can turn swimmingly, please tighten hexagon socket head cap screw (98).

3. We suggest that the engine is driven by over 30% nitro fuel.



## (9) Oil Box Assembly

(99) Oil Box .....	1	(104) Compact 2 .....	1
(100) Compact 1 .....	1	(105) Cross Recessed Pan Head Tapping Screw .....	1
(101) Soft Rubber Plug .....	1	(106) Oil Box Inner Choke .....	1
(102) Aluminum Pipe 1 .....	1	(184) Vitta 1 ( $\phi 2^* \phi 5^*95$ ) .....	2
(103) Aluminum Pipe 2 .....	1	(185) Vitta 2 ( $\phi 2^* \phi 4^*42$ ) .....	1

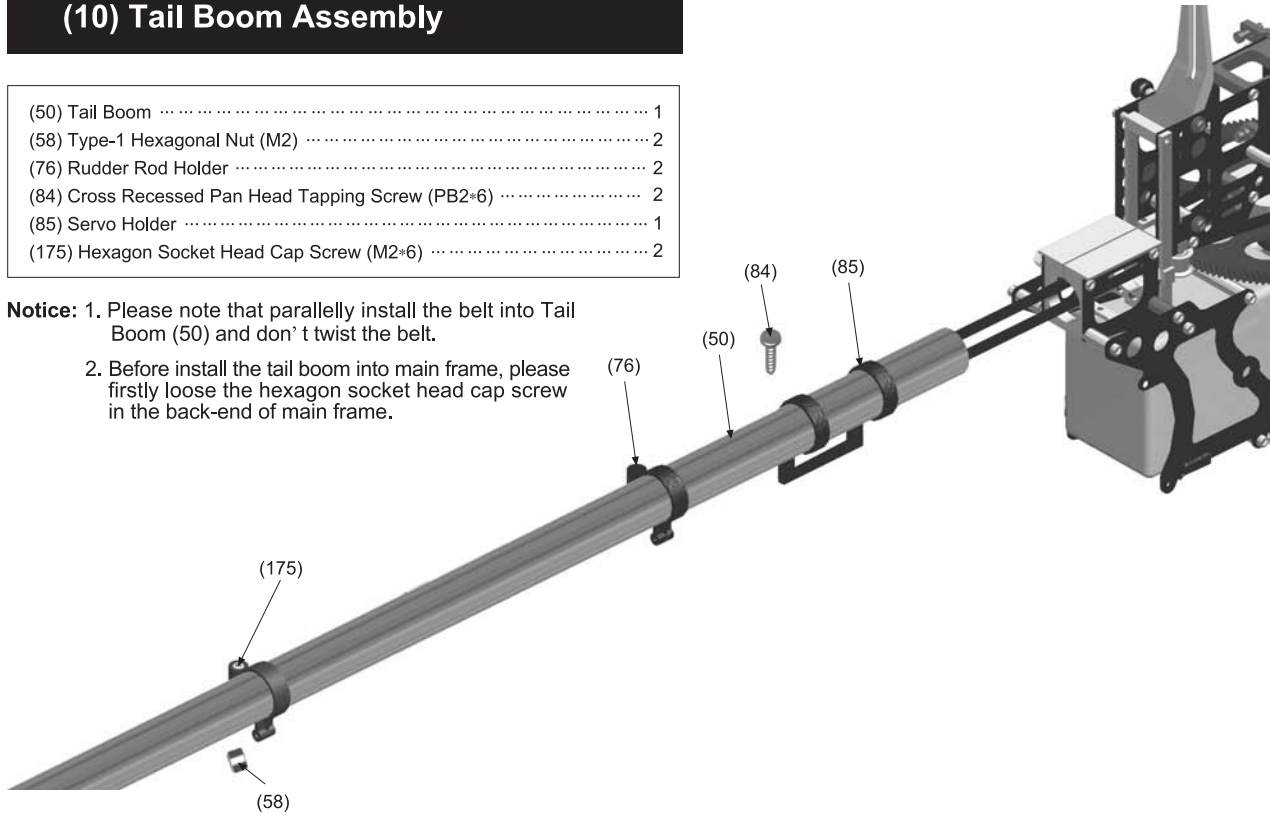


## (10) Tail Boom Assembly

(50) Tail Boom	1
(58) Type-1 Hexagonal Nut (M2)	2
(76) Rudder Rod Holder	2
(84) Cross Recessed Pan Head Tapping Screw (PB2*6)	2
(85) Servo Holder	1
(175) Hexagon Socket Head Cap Screw (M2*6)	2

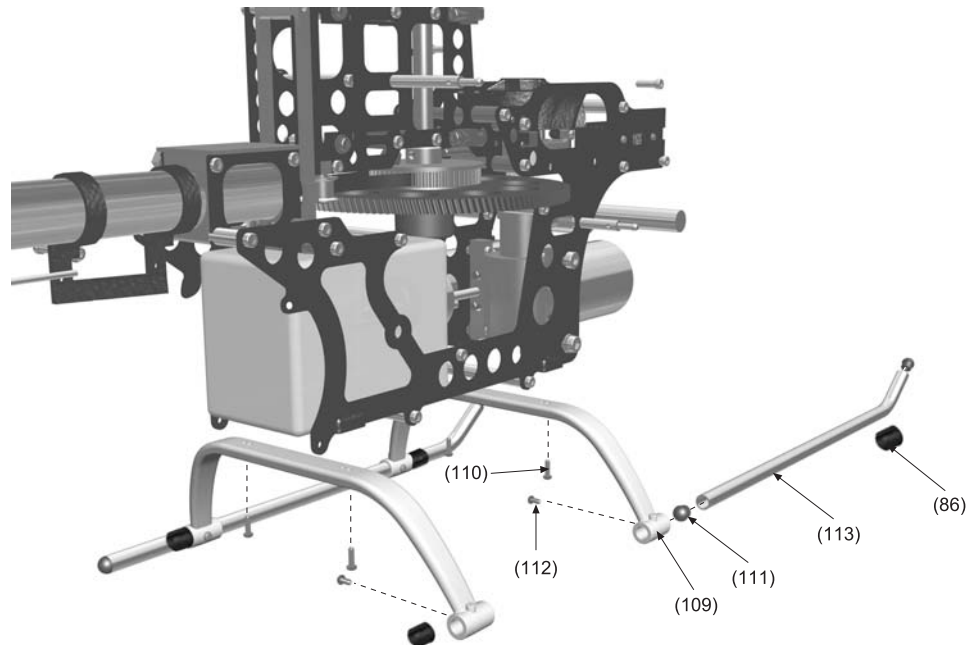
**Notice:** 1. Please note that parallelly install the belt into Tail Boom (50) and don't twist the belt.

2. Before install the tail boom into main frame, please firstly loose the hexagon socket head cap screw in the back-end of main frame.



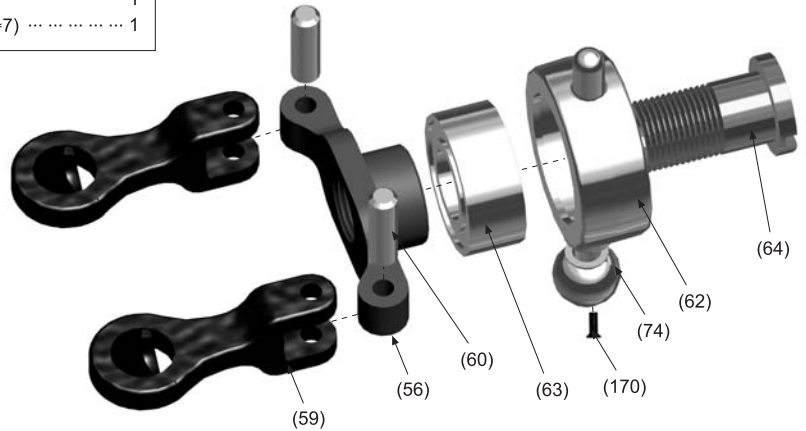
## (11) Skid Landing Gear Assembly

(86) Skid Landing Gear Rubber Sleeve	4
(109) Skid Landing	2
(110) Hexagon Socket Head Cap Screw (PM2*8)	4
(111) Casing Cap	4
(112) Cross Recessed Pan Head Tapping Screw (PA1.4*3)	4
(113) Skid Landing Gear	2



## (12) Tail Rotor Steering Sleeve Assembly

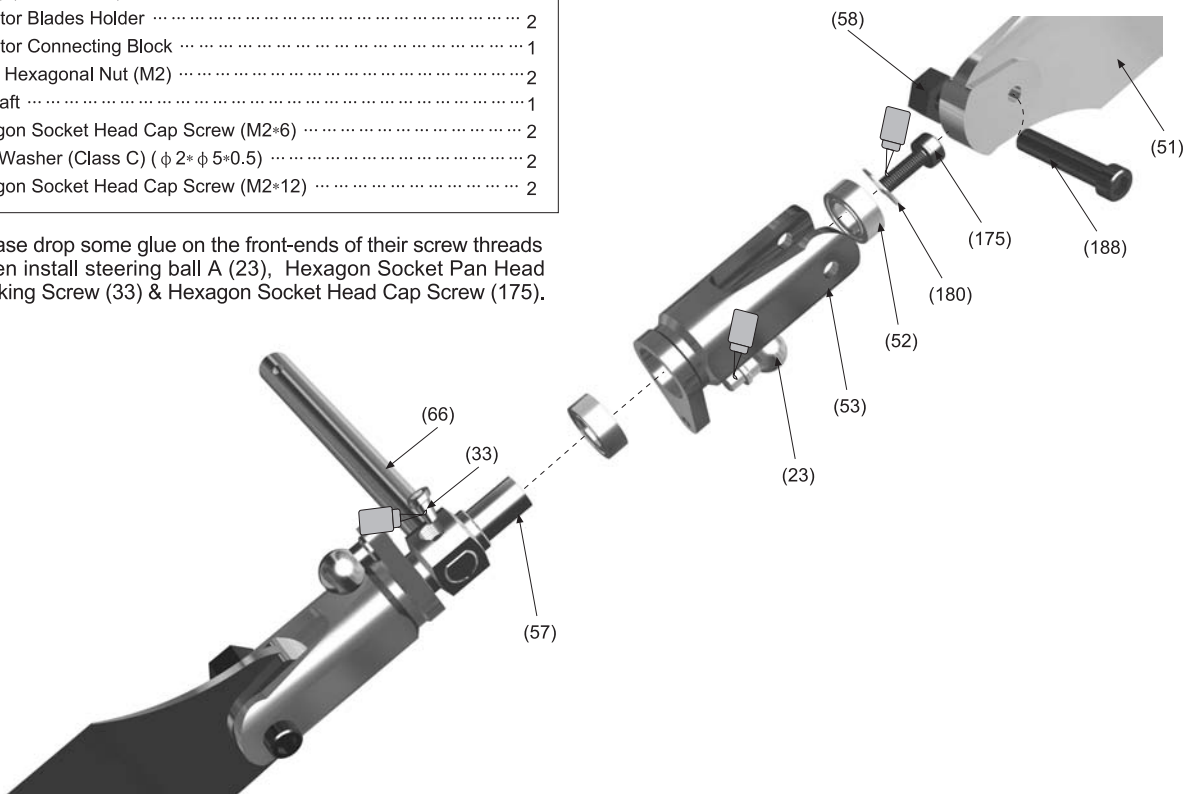
(56) Tail Rotor Connecting Shaft	1
(59) Tail Rotor Ball Linkage	2
(60) Cylindrical Pin ( $\phi 1.5 \times 5.8$ )	2
(62) Tail Rotor Steering Sleeve	1
(63) Bearing ( $\phi 5 \times \phi 10 \times 4$ )	1
(64) Tail Rotor Steering Copper Cover	1
(74) Copper Ball	1
(170) Cross Recessed Countersunk Flat Head Screw (KM2*7)	1



## (13) Tail Rotor Blades Holder Assembly

(23) Steel Ball A	2
(33) Hexagon Socket Pan Head Locking Screw (M3*3)	1
(51) Tail Rotor Blade	1
(52) Bearing ( $\phi 4 \times \phi 7 \times 2.5$ )	4
(53) Tail Rotor Blades Holder	2
(57) Tail Rotor Connecting Block	1
(58) Type-1 Hexagonal Nut (M2)	2
(66) Tail Shaft	1
(175) Hexagon Socket Head Cap Screw (M2*6)	2
(180) Plain Washer (Class C) ( $\phi 2 \times \phi 5 \times 0.5$ )	2
(183) Hexagon Socket Head Cap Screw (M2*12)	2

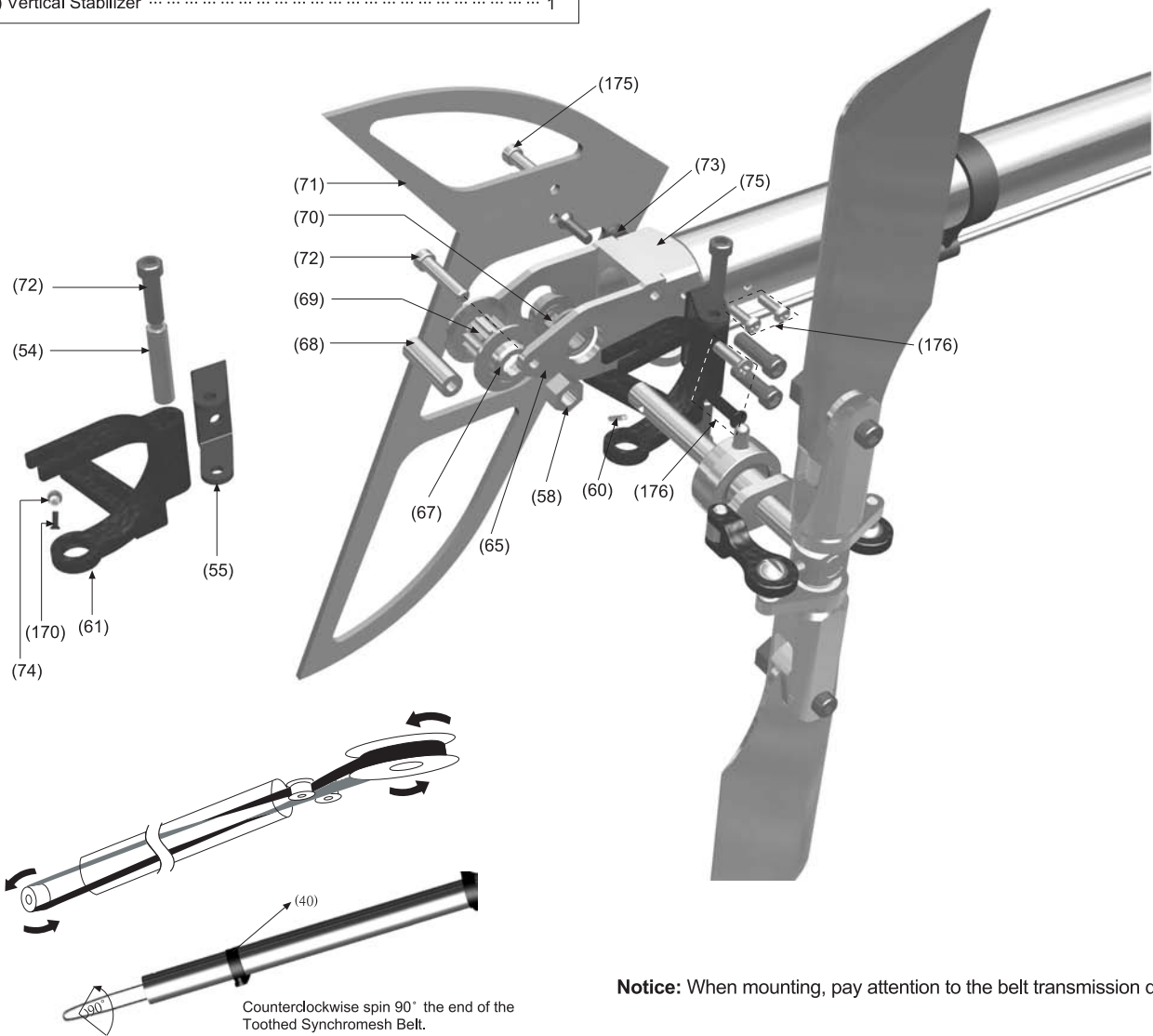
**Notice:** Please drop some glue on the front-ends of their screw threads when install steering ball A (23), Hexagon Socket Pan Head Locking Screw (33) & Hexagon Socket Head Cap Screw (175).



## (14) Tail Rotor Holder Assembly

(54) Tail Rotor Bellcrank Cover	1
(55) Tail Rotor Bellcrank Fixer	1
(58) Type-1 Hexagonal Nut (M2)	2
(60) Cylindrical Pin ( $\phi$ 1.5*5.8)	1
(61) Tail Rotor Bellcrank	1
(65) Tail Gear Frame Fixer	2
(67) Tail Pulley Cover	1
(68) Tail Boom Holder	1
(69) Tail Pulley	1
(70) Step Bearing ( $\phi$ 4* $\phi$ 7*2.5)	2
(71) Vertical Stabilizer	1

(72) Hexagon Socket Head Cap Screw (M2*18)	2
(73) Vertical Stabilizer Washer	2
(74) Copper Ball	1
(75) Tail Rotor Holder	1
(170) Cross Recessed Countersunk Flat Head Screw (KM2*7)	1
(175) Hexagon Socket Head Cap Screw (M2*6)	2
(176) Hexagon Socket Head Cap Screw (M2*4)	10

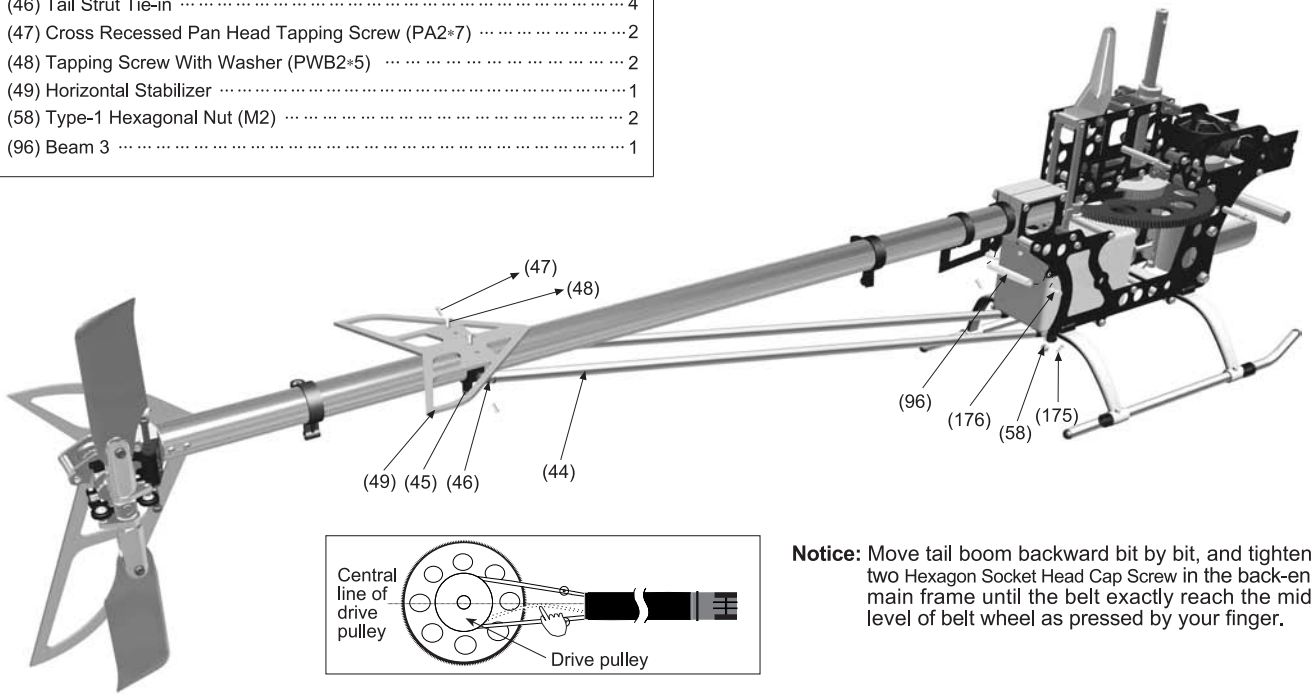


**Notice:** When mounting, pay attention to the belt transmission direction.

## (15) Tail Strut Assembly

(44) Tail Strut	2
(45) Horizontal Stabilizer Holder	1
(46) Tail Strut Tie-in	4
(47) Cross Recessed Pan Head Tapping Screw (PA2*7)	2
(48) Tapping Screw With Washer (PWB2*5)	2
(49) Horizontal Stabilizer	1
(58) Type-1 Hexagonal Nut (M2)	2
(96) Beam 3	1

(175) Hexagon Socket Head Cap Screw (M2*6)	3
(176) Hexagon Socket Head Cap Screw (M2*4)	2

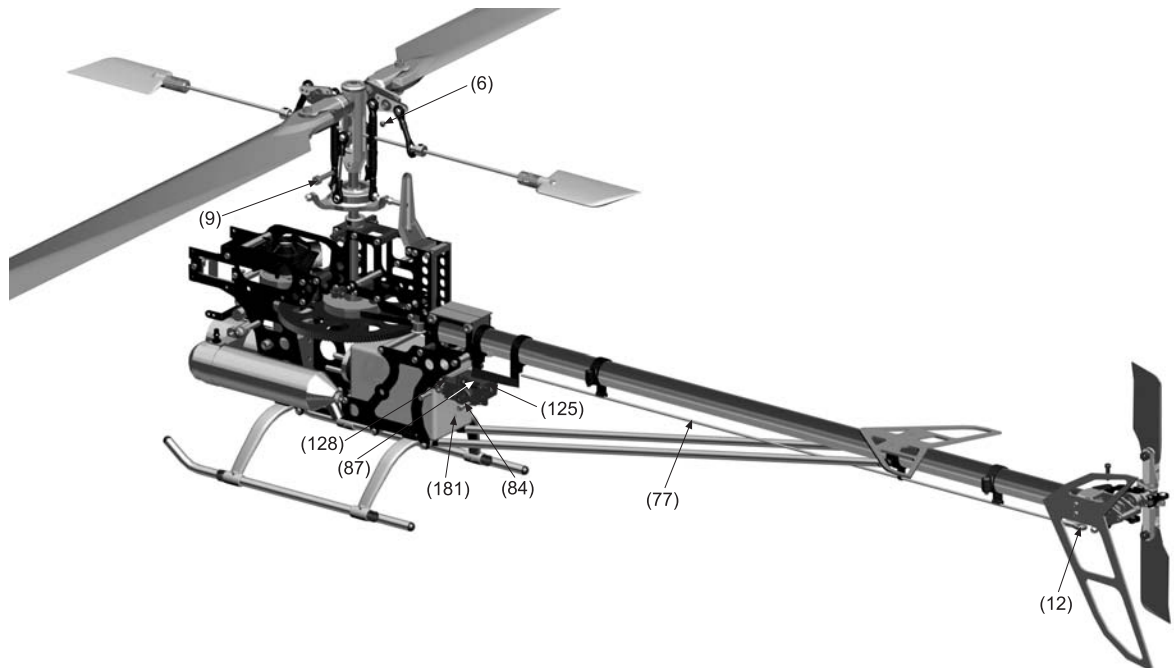


**Notice:** Move tail boom backward bit by bit, and tighten the two Hexagon Socket Head Cap Screw in the back-end of main frame until the belt exactly reach the midline level of belt wheel as pressed by your finger.

## (16) Tail Servo Assembly

(6) Swashplate (Lower Cover)	1
(9) Hexagon Socket Head Cap Screw (M3*14)	1
(12) Ball Linkage End 2	2
(84) Cross Recessed Pan Head Tapping Screw (PB2*6)	2

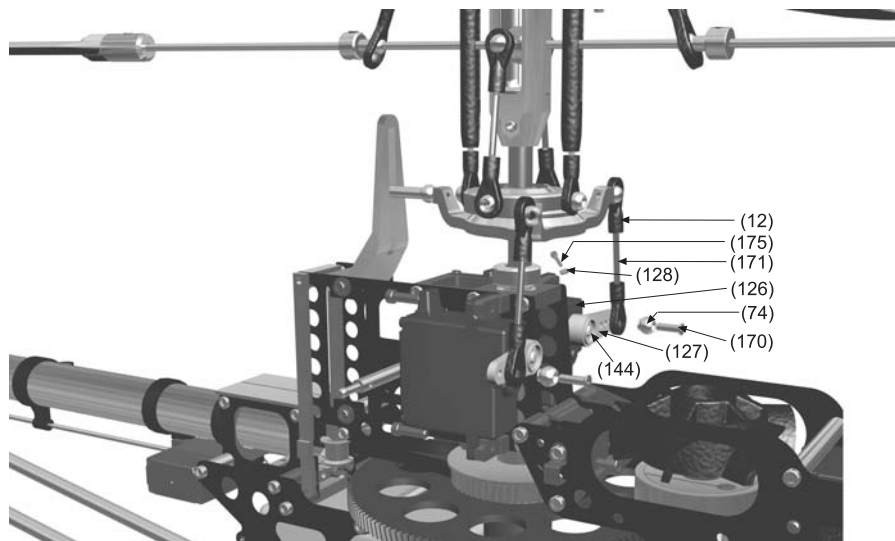
(87) Servo Bellcrank	1
(125) 9g Servo	1
(128) Servo Compact	2
(181) Tapping Screw With Washer (PWA1.7*4)	1





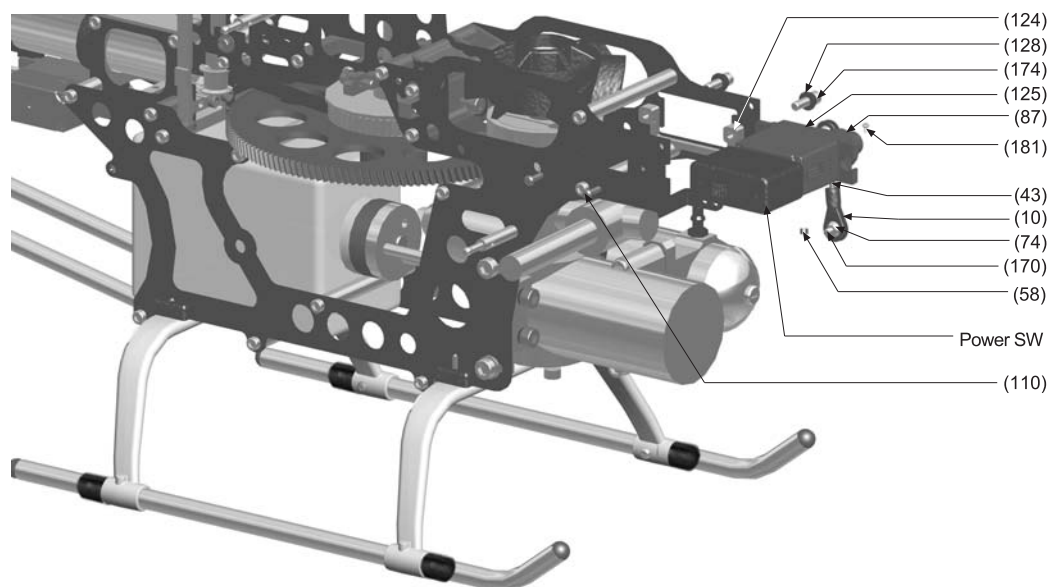
## (17) Main Frame Servo Assembly

(12) Ball Linkage End 2	6	(144) Cross Recessed Pan Head Tapping Screw (PA2.5*7)	3
(74) Copper Ball	3	(170) Cross Recessed Countersunk Flat Head Screw (KM2*7)	3
(126) 20g Servo	3	(171) Link Rod 1	3
(127) Servo Bellcrank	3	(175) Hexagon Socket Head Cap Screw (M2*6)	6
(128) Servo Compact	6		



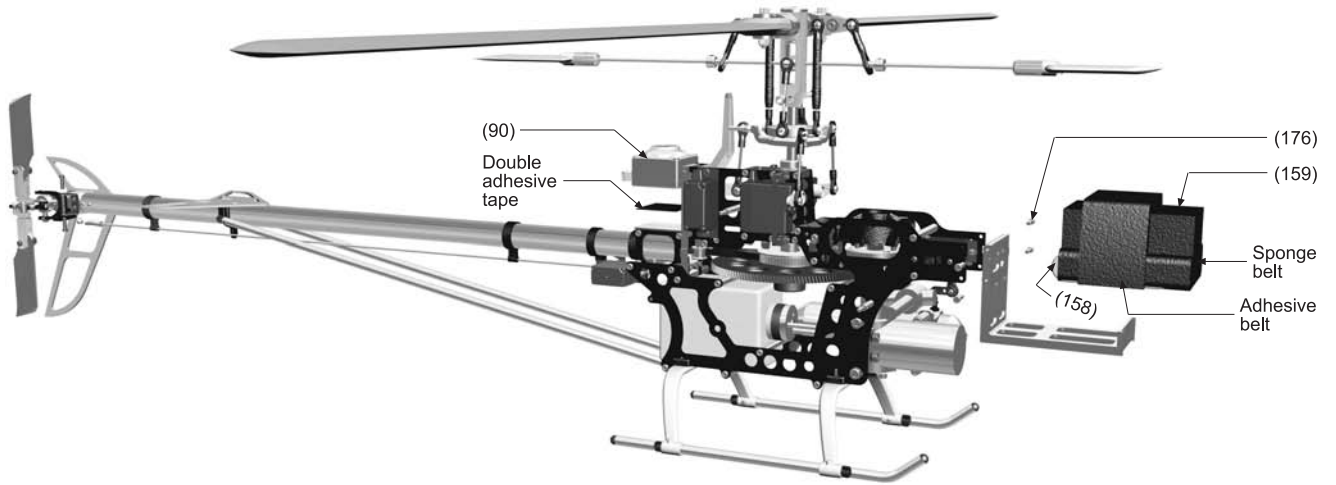
## (18) Throttle Servo Assembly

(10) Ball Linkage End	2	(124) Servo Washer	1
(43) Link Rod 3	1	(125) 9g Servo	1
(58) Type-1 Hexagonal Nut (M2)	3	(128) Servo Compact	2
(74) Copper Ball	2	(170) Cross Recessed Countersunk Flat Head Screw (KM2*7)	1
(87) Servo Bellcrank	1	(174) Hexagon Socket Head Cap Screw (M2*10)	2
(110) Cross Recessed pan Head Screw (PM2*8)	2	(181) Plus Screw with Washer (PWA1.7*4)	1



**(19) Receiver and Gyro Assembly**

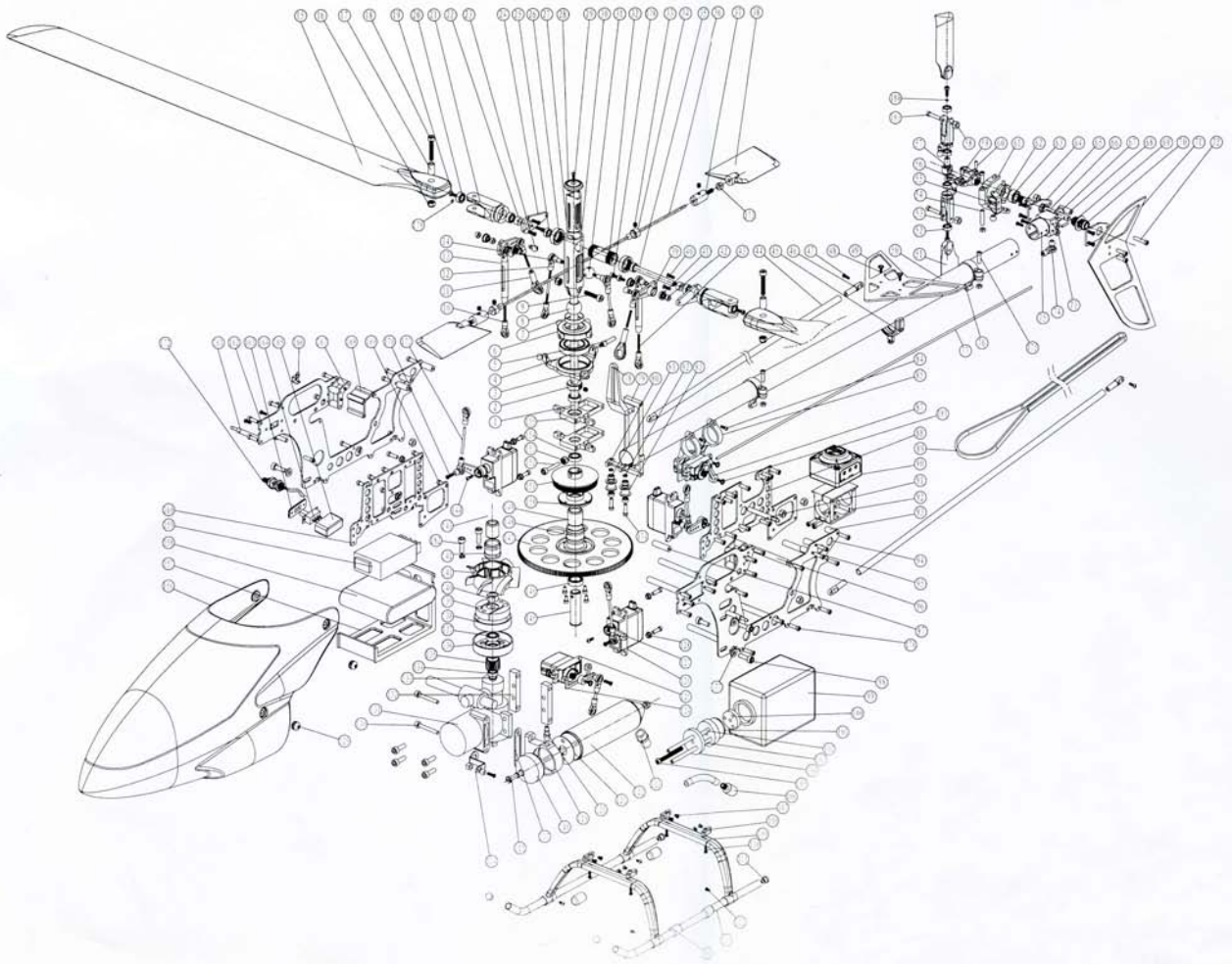
(90) Gyro .....	1	(159) Receiver .....	1
(157) Battery holder .....	1	(176) Hexagon Socket Head Cap Screw (M2*4) .....	4
(158) Battery .....	1		



**(20) The Assembled profile**



## Exploded Diagram



Part Code	Description	Specification	Qty
001	Main Shaft		1
002	Main Shaft lock Ring		1
003	Swashplate (Base)		1
004	Bearing	Φ15×Φ24×5	1
005	Steering Rod		1
006	Swashplate (Lower cover)		1
007	Swashplate (Upper)		1
008	Steel Ball		1
009	Hexagon Socket Head Cap Screw	M3×14	1
010	Ball Linkage End		6
011	Ball Linkage End 3		2
012	Ball Linkage End 2		12
013	Long Link Rod		2
014	Steel ball B		2
015	Main Rotor Blade		2
016	Locking Socket Nut	M3	3
017	Main blade copper cover		2
018	Hexagon Socket Head Cap Screw	M3×18	2
019	Hexagon Socket Head Cap Screw	M2.5×6	2
020	Bearing	Φ4×Φ8×3	4
021	Main Blade Holder		2
022	Main Blade Ring		2
023	Steel Ball A		12
024	Blade Holder		2
025	Rubber Ring		2
026	Decoration Ring		2
027	Rotor Head Inner Cover		1
028	Rotor Head Cover		1
029	Cross Recessed Pan Head Screw	PM2×6	1
030	Rotor Head Outer Cover		1
031	Guide Ball		1
032	Rotor Head Transver Shaft		1
033	Hexagon Socket Pan Head Locking Screw	M3×3	7
034	Flybar Steering Ball		2
035	Main Blade Shaft		1
036	Balance Bar		1
037	Flybar Paddle Connector		2
038	Flybar Paddle		2

Part Code	Description	Specification	Qty
039	Blade Mixer Lever		2
040	Cross Recessed Countersunk Flat Head Screw	KM1.6×4	6
041	Step Bearing	Φ2×Φ6×2.5	4
042	Fixing Sleeve		4
043	Link Rod 2		5
044	Tail Strut		2
045	Horizontal Stabilizer Holder		1
046	Tail Strut Tie-In		4
047	Cross Recessed Pan Head Tapping Screw	PA2×7	2
048	Tapping Screw With Washer	PWB2×5	2
049	Horizontal Stabilizer		1
050	Tail Boom		1
051	Tail Rotor Blade		2
052	Bearing	Φ4×Φ7×2.5	4
053	Tail Rotor Blades Holder		2
054	Tail Rotor Bellcrank Cover		1
055	Tail Rotor Bellcrank Fixer		1
056	Tail Rotor Connecting Shaft		1
057	Tail Rotor Connecting Block		1
058	Type-1 Hexagonal Nut	M2	11
059	Tail Rotor Ball Linkage		2
060	Cylindrical Pin	Φ1.5×Φ5.8	3
061	Tail Rotor Bellcrank		1
062	Tail Rotor Steering Sleeve		1
063	Bearing	Φ5×Φ10×4	1
064	Tail Rotor Steering Copper Cover		1
065	Tail Gear Frame Fixer		2
066	Tail Shaft		1
067	Tail Pulley Cover		1
068	Tail Boom Holder		1
069	Tail Pulley		1
070	Step Bearing	Φ4×Φ7×2.5	2
071	Vertical Stabilizer		1
072	Hexagon Socket Head Cap Screw	M2×18	4
073	Vertical Stabilizer Washer		2
074	Copper Ball		8
075	Tail Rotor Holder		1
076	Rudder Rod Holder		2

Part Code	Description	Specification	Qty
077	Rudder Rod		1
078	Swashplate Anti-steering Block		1
079	Main Frame Connector		1
080	Guide Pulley Holder		1
081	Bearing	Φ2×Φ5×2	4
082	Ldler Pulley Washer		2
083	Synchromesh Belt Idler Pulley		2
084	Cross Recessed Pan Head Tapping Screw	PB2×6	4
085	Servo Holder		1
086	Skid Landing Gear Rubber Sleeve		4
087	Servo Bellcrank		2
088	Main Frame 2		1
089	Belt		1
090	Cyro		1
091	Canopy Knighthead 1		2
092	Tail Boom Holder		1
093	Beam 2		6
094	Main Frame 4		1
095	Hexagon Socket Head Cap Screw	M2×20	10
096	Beam 3		8
097	Beam 1		1
098	Hexagon Socket Head Cap Screw	M3×8	8
099	Oil Box		1
100	Compact 1		1
101	Soft Rubber Plug		1
102	Aluminum Pipe 1		1
103	Aluminum Pipe 2		1
104	Compact 2		1
105	Cross Recessed Pan Head Tapping Screw	PA3×30	1
106	Oil Box Inner Choke		1
107	Cross Recessed Pan Head Screw	KM2×5	8
108	Skid Landing Aluminum Block		4
109	Skid Landing		2
110	Cross Recessed Pan Head Screw	PM2×8	4
111	Casing Cap		4
112	Cross Recessed Pan Head Tapping Screw	PA1.4×3	4
113	Skid Landing Gear		2
114	Engine Throttle Bellcrank		1

Part Code	Description	Specification	Qty
115	Silencer Lock Screw		1
116	Engine Gasket		1
117	Engine Gasket		1
118	Silencer Pre-storehouse		1
119	Silencer Base		1
120	Silencer Pipe Connector		1
121	Silencer Sound Insulation		1
122	Silencer Back-storehouse		1
123	Silencer Gas Outlet		1
124	Servo Washer		1
125	9g Servo		2
126	20g Servo		3
127	Servo Bellcrank		3
128	Servo Compact		10
129	Rubber Retainer Ring		4
130	Slotted Pan Head Screw Nutch	M2.5×19	2
131	15 Engine		1
132	Engine Holder		2
133	Gear Washer		1
134	Bearing	Φ5×Φ8×2.5	1
135	Engine Gear		1
136	Clutch Bottom-cover		1
137	Bearing	Φ6×Φ10×3	1
138	Drive Output Friction Plate		1
139	Clutch Tumpalte		1
140	Type-1 Hexagonal Nut	M5	1
141	Fan		1
142	Fan Aluminum Cover		1
143	Oneway Bearing	Φ6×Φ10×12	1
144	Cross Recessed Pan Head Tapping Screw	PA2.5×7	3
145	Main Shaft Sleeve (Lower End)		1
146	Bearing	Φ8×Φ12×3.5	2
147	Main Gear		1
148	Main Gear Aluminum Sleeve		1
149	Oneway Bearing	Φ8×Φ12×12	1
150	Main Gear Connector		1
151	Main Belt Wheel		1
152	Hexagon Socket Head Cap Screw	M2.5×15	1

Part Code	Description	Specification	Qty
153	Locking Hexagonal Nut	M2.5	3
154	Bearing	Φ6×Φ10×3	2
155	Servo Holder		2
156	Canopy		1
157	Battery Holder		1
158	Battery		1
159	Receiver		1
160	Main Frame 1		1
161	Canopy Knighthead 2		2
162	Main Frame 3		1
163	Switch Upper Cover		1
164	Switch Button		1
165	Switch Lower Cover		1
166	Press Line Holder		1
167	Main Frame Connector 2		2
168	Main Frame connector 1		1
169	Hexagon Socket Head Cap Screw	M2.5×23	2
170	Cross Recessed Countersunk Flat Head Screw	KM2×7	8
171	Link Rod 1		5
172	Spark Plug		1
173	Type-1 Hexagonal Nut	M3	3
174	Hexagon Socket Head Cap Screw	M2×10	4
175	Hexagon Socket Head Cap Screw	M2×6	21
176	Hexagon Socket Head Cap Screw	M2×4	52
177	Plain Washer (Class C)	Φ3×Φ6×0.5	4
178	Hexagon Socket Head Cap Screw	M2×4	2
179	Plain Washer (Class C)	Φ2.5×Φ5×0.5	2
180	Plain Washer (Class C)	Φ2×Φ5×0.5	2
181	Tapping Screw with Washer	PM1.1×4	2
182	Hexagon Socket Head Cap Screw	M3×10	2
183	Hexagon Socket Head Cap Screw	M2×12	2
184	Vitta 1	Φ2×Φ5×9	2
185	Vitta 2	Φ2×Φ4×2	1
186			
187			
188			
189			
190			

## Belt Inspection

- 1. Belt direction inspection.** CW spin the rotor head of your helicopter and check the direction of tail rotor blade. If the tail rotor blades are spinning backwards, the direction is correct. Otherwise, the belt is wrongly distorted and need to be re-mounted (Fig. 1).
- 2. Belt tension inspection.** Use your finger to lightly press the belt and check its tension. If the pressed belt just reaches the central line of the drive pulley, the belt is in a proper tension (Fig. 2); if the pressed belt is beyond the central line, the belt is too loose (Fig. 3); if the pressed belt doesn't reach the central line, the belt is too tense (Fig. 4). Either looseness or tension of the belt needs to be re-adjusted.

Fig. 2

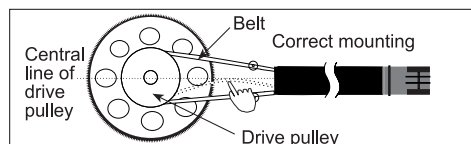


Fig. 3

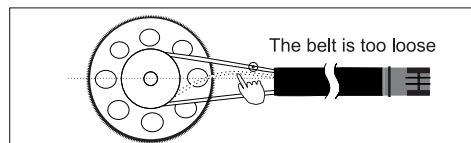


Fig. 4

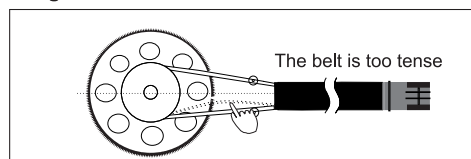
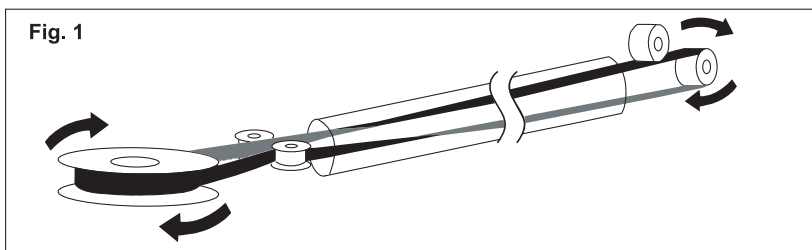


Fig. 1



## Swashplate Adjustment

- 1. Swashplate check.** Pull down the throttle stick and throttle trim to the lowest position, and put the elevator trim and eileron trim in the neutral position. Turn on the receiver. Check whether the swashplate is in a horizontal level.
- 2. Swashplate adjustment.** If the swashplate is not in a horizontal level, adjust via the following two steps: servo and servo bellcrank adjustment. Re-turn on the receiver cable to the motor again and await the servo reposition. After the reposition is ready, adjust the angle between the servo bellcrank and servo linkage rod at 90 degrees (Fig. 5). Servo linkage rod adjustment. Adjust the servo linkage rod to parallel to swashplate bottom level .

Fig. 5

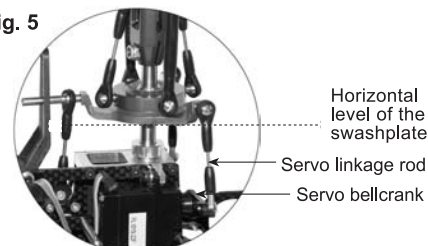
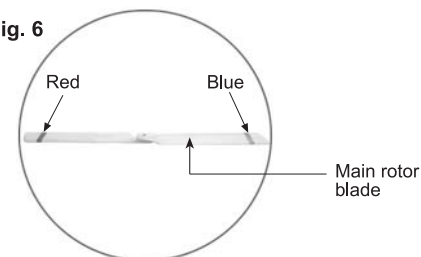


Fig. 6

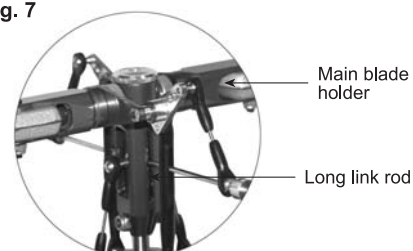


## Main Rotor Blade Adjustment

The purpose of adjusting the main rotor blade is to correctly set up the collective pitch and to assure the main rotor blades are spinning at the same horizontal level.

- 1. Color decal.** Two different colored blade tracking decals should be sticked on each blade tip (Fig. 6, red and blue).
- 2. Main rotor blade inspection.** The purpose of inspecting the two blades is to keep them symmetrical in weight and shape. Screw the two blades and keep them in line.
- 3. Blade tracking adjustment.** Before checking the blade tracking, please properly install the battery pack, initiate the gyro, and place a red stick on one blade tip. Place your helicopter on the reasonable level so that you can view the blades at your eye level. Please make you are in a safe difference to the high spinning blades. If the red blade is higher than the other one, please lengthen the length of the ball linkage of the other blade in one or more turn increments; otherwise, please shorten its length. The blade tracking and vibration will arise from looseness and/ or distortion of the blade holder. If the blade holder is loose or distorted, please adjust or substitute new holder for the old one.

Fig. 7



## Rudder Servo Adjustment

**1. Rudder servo adjustment.** Push the rudder stick of transmitter leftward and rightward and check the movement range of tail rotor steering sleeve (Fig 8) and the angle between the tail servo bellcrank and the rudder rod. If the tail rotor steering sleeve moves symmetrically left and right and the angle between the tail servo bellcrank and the rudder rod is 90 degrees (Fig 9), the tail servo is in proper arrangement. Otherwise, the tail servo and the rudder rod should be re-adjusted. Firstly loose the screw of servo bellcrank and take servo bellcrank off (Fig 9), re-turn on the receiver and await the reposition of tail servo. After that adjust the angle between the tail servo bellcrank and the rudder rod to be 90 degrees and then tighten the screw of servo bellcrank.

Fig. 8

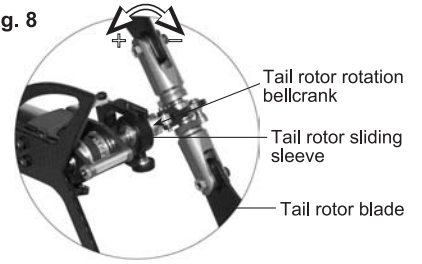
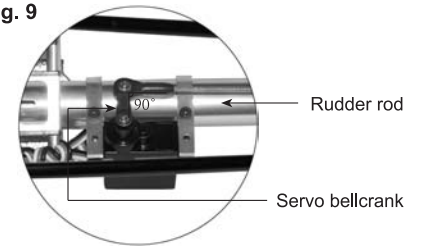
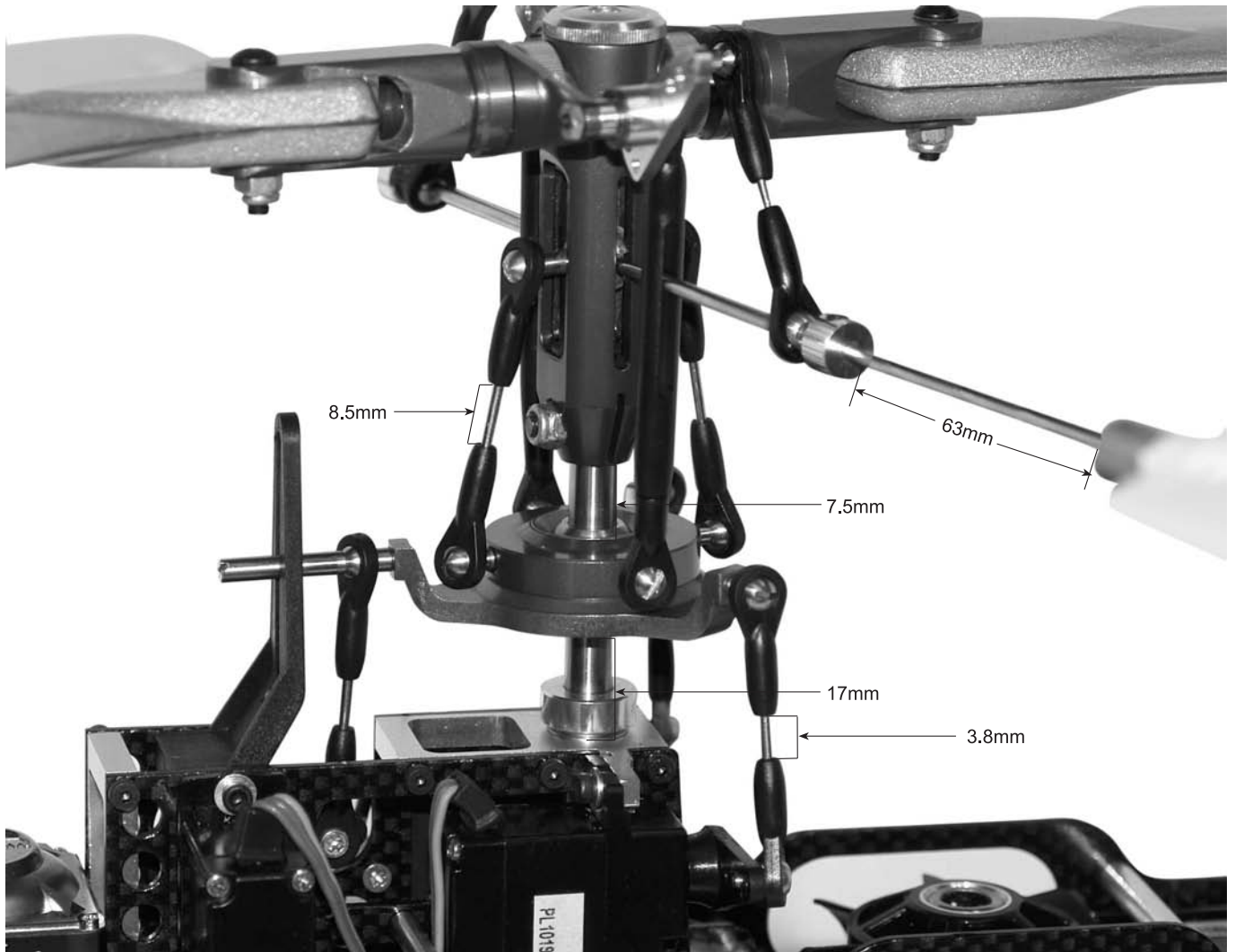


Fig. 9



## Technical Data for Adjustment





***RC* WALKERA PRODUCT**

The specifications of the R/C aircraft may be altered without notice.