KALT HELICOPTER

50 BARON

INSTRUCTION MANUAL

●Become thoroughly familiar with this manual, all parts and components prior to beginning construction or opening packages.

Several different rotor heads can be utilized with the 50 BARON.

This instruction manual covers only the helicopter assembly.
Please refer to the separate rotor head instruction manual contained in your kit.
Contents of this kit were inspected several times prior to shipment. If you should find any parts missing, please contact your dealer.
Specifications of the 50 BARON are subject to change without notice.

Contents of instruction manual

Prior to Construction

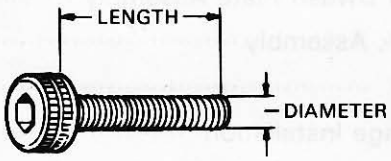
The construction of this kit is divided into 8 groups. The number following B50 shows which group the parts apply to. Screw sets are all numbered by group. Open only the bag required for the group you are assembling.

Additional equipment required for construction and flying your BARON :

- 5 or more channel R/C equipment. The BARON can be flown with 4 channel equipment ; however, for best results we recommend that you install a 5th servo for collective pitch.
  Servo frames included in this kit will accept servos the following size : 20mm wide ; 39~48mm long, not including mounting flanges. Servos larger than this will require mounting frame modifications.
- Engine : O.S. 50 FSR-H or ENYA 49X TV
- Muffler : KALT New Muffler (For BARON) (Optional, not included in kit)
- Fuel tubing and Filter (Optional, not included in kit)
- Engine starting equipment (Electric starter, batteries etc.)
- Additional tools etc.
  Small screwdriver ; Pliers ; 5.5 & 7mm nut driver ; 2,3 & 6mm drills ; knife ; file ; tapered reamer ; vinyl tape ; cyanoacrylate adhesive, and epoxy glue.

Nuts and bolts used during construction are identified as follows :

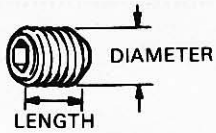
- **Cap bolt**



It has a hexagon hole in the head. Tighten with the hex wrench supplied.

(Example) M3 × 15 Cap B.
Diameter 3mm — M3
Length 15mm — 15
Cap B. — Abbreviation for Cap Bolt

- **Set bolt** (Grub Screw)



It has a hexagon hole in the end, but no head.

(Example) M4 × 4 Set B.
Diameter 4mm — M4
Length 4mm — 4
Set B. — Abbreviation for Set Bolt

■ **Self locking nut**

It has a nylon insert in the top of the nut.
(Example) M3 N.N.
3mm——┘ └——Abbreviation for Nylon Nut
Use a 5.5mm box wrench to tighten the nuts.

■ **Self Tapping Screw**

These are hardend steel self tapping screws. Use for attaching the canopy to the cabin. Drill 2mm holes prior to screw them in.

■ **Plus screw**
These are the normal familiar round head screws. Use the screwdriver for tightening.

■ **Serrated lock washer**

These are lock washers with gripping teeth around the edges.

■ All of the nuts, bolts and washers are called out by number as explained on pages 2 and 3.

■ **Use of the hexagon wrenches**
This kit contains 4 size of hex wrenches. Use for tightening cap and set bolts as follows.

Dia.	Cap bolts	Set bolts
M3	2.5mm	1.5mm
M4	3mm	2mm

The necessary nuts, bolts and washers needed for each step in construction, are listed at the end of each step. Be careful to use the correct parts as called out, as only the required number of nuts, bolts and washers are provided in the kit.
(Example)
(M3 × 8 Cap B.·····4) Use 4 M3 × 8 Cap Bolts.

Scales are drawn at the top of each page for handy reference of bolt length.

PARTS LIST

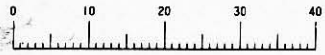
No.	Name	Quan.	Remarks
B50-1-01	Subframe (L, R)	1ea.	
-02	Servo Plate Retainer	2	For B50
-03	Cross Member (A)	1	
-04	Body Mounting Bolt (F)	1	For B50
-05	Front Bed	1	Plywood
-06	Main Frame (L, R)	1ea.	For B50
-07	Body Mounting Bolt (R)	2	For B50
-08	Radius Support Arm	1	
-09	Cross Member (B)	1	
-S	No. 1 Screw Set	1	
B50-2-01	Slide Ring Assembly	1	
-02	Pinion Gear	1	
-03	Clutch Bell	1	
-04	626 ZZ Ball Bearing	1	w/housing(A)
-05	1910 ZZ Ball Bearing	1	w/housing(A)
-06	1970 ZZ Ball Bearing	1	w/housing(A)
-S	No.2 Screw Set	1	
B50-3-01	Throttle Adapter	1	For O.S.
-02	Throttle Lever & Spacer	1ea.	For ENYA
-03	Cooling Fan	1	
-04	Pulley	1	w/pilot bearing
-05	Clutch Bolt, "E" ring & Washer	2ea.	
-06	Clutch Shoe	2	
-07	Clutch Spring	2	
-08	Cooling Shroud	1	
-09	Starting Belt	1	
-10	Engine Mounting Block	1	For 40-50engine
-S	No. 3 Screw Set	1	
B50-4-01	605 Ball Bearing & Housing (B)	2ea.	} Assembled
-02	Bevel Pinion Gear	1	
-03	Main Shaft	1	For B50
-04	Upper Plate Lock	1	w/universal link, bolt & nut
-05	Swash Plate & Swash Plate Collar	1ea.	
-06	Pitch Control Rod	1	For B50
-07	Main Gear	1	
-08	Main Gear Spacer	1	
-S	No. 4 Screw Set	1	
B50-5-01	Cross Member (D)	2	
-02	Under Carriage Brace	2	
-03	Under Carriage Skid	2	
-04	Under Carriage Clamp	4	
-05	Skid Cap	4	
-06	Under Carriage Spacer	4	For B50

No.	Name	Quan.	Remarks
B50-5-07	Fuel Tank	1set	For B50
-S	No. 5 Screw Set	1	
B50-6-01	Tail Gear Housing (A, B)	1ea.	
-02	Tail Output Gear	1	w/shaft
-03	Tail Input Gear	1	w/shaft
-04	1350 Ball Bearing	2	
-05	1350 ZZ Ball Bearing	2	
-06	Tail Rotor Hub Ass'y	1	w/ball bearings
-07	Tail Rotor Grip	1set	w/arm & w/o arm
-08	Tail Pitch Control Plate	1	
-09	Tail Pitch Control Lever	1	
-10	Tail Pitch Control System	1set	Bracket, Crank & Plastic Ball
-11	Tail P.C. Plate Retainer	2	
-12	Tail Bracket	1	
-13	Tail Drive Music Wire	1	
-14	Tail Joint	2	
-15	Tail Joint Spacer	2	
-16	Tail Boom	1	
-17	Tail Drive Wire Guide	1	
-18	Tail Boom Retainer	2	
-19	Tail Boom Support	1set	
-20	Tail Clamp	3	
-21	Vertical Fin	1	
-22	Horizontal Stabilizer	1	
-23	Tail Rotor Blade	1pair	
-S	No. 6 Screw Set	1	
B50-7-01	Servo Frame Set	1set	
-02	Bell crank, Spacer & Washer	2ea.	
-03	M2.3 × 110 Threaded Rod	1	
-04	M2.3 × 200 Threaded Rod	5	
-05	Flexible P.P. Rod	1set	Black & White Rods
-06	Flexible P.P. Rod Bracket	4	
-S	No. 7 Screw Set	1	
B50-8-01	Cabin (L, R) & Instrument Panel	1ea.	For B50
-02	Canopy	1	For B50
	Instruction Manual	1	
	Construction Drawing	1	
	Side View Plan	1	

Screw Set Contents List

Bag No.	Size & Name	Quan.	Remarks
No. 1	M3 × 8 Cap Bolt	12	
	M3 × 10 Cap Bolt	3	
	M3 × 12 Bolt	4	
	M3 × 10 Bolt	2	
	M3 Nylon Nut	10	
	M3 Nut	4	
	M2 Nut	2	
	M3 Plate Washer	6	
	M3 Serrated Lock Washer	2	
	1.5 Hex. Wrench	1	
	2 Hex. Wrench	1	
	2.5 Hex. Wrench	1	
	3 Hex. Wrench	1	
No. 2	M3 × 8 Cap Bolt	1	
	M3 × 30 Cap Bolt	6	
	M2 × 10 Bolt	4	
	M4 × 4 Set Bolt	2	
	M3 Nylon Nut	6	
	M2 Nut	7	
	M3 × 10 × 1 Plate Washer	1	
	Ball Joint	4	
No. 3	M3 × 12 Cap Bolt	4	
	M3 × 15 Cap Bolt.	4	
	M4 × 12 Cap Bolt	6	
	M3 × 4 Set Bolt	2	
	M3 Nylon Nut	4	
	M3 Spring Washer	5	
	M3 Plate Washer	8	
	M4 Serrated Washer	6	
	M4 Plate Washer	6	
	M3 × 25 (JIS) Cap Bolt	1	For ENYA Engine
	2.4 Hex. Wrench	1	For ENYA Engine
No. 4	M3 × 15 Cap Bolt	1	
	M3 × 30 Cap Bolt	2	
	M3 Nylon Nut	3	
No. 5	M3 × 10 Cap Bolt	8	
	M3 × 25 Cap Bolt	4	
	M3 Nylon Nut	12	
No. 6	M3 × 8 Cap Bolt	4	
	M3 × 10 Cap Bolt	2	
	M3 × 15 Cap Bolt	2	
	M3 × 30 Cap Bolt	4	

Bag No.	Size & Name	Quan.	Remarks
No. 6	M3 × 12⊕ Bolt	6	
	M2 × 10 ⊕ Bolt	11	
	M2.3 × 8 ⊕ Bolt	6	
	M3 × 4 Set Bolt	4	
	M4 × 4 Set Bolt	8	
	M3 Nylon Nut	14	
	M2 Nut	8	
	M2.3 Nut	4	
	M3 Plate Washer	6	
	M2 Plate Washer	1	
	Ball Joint	2	
	Universal Link	2	
No. 7	M3 × 8 Cap Bolt	4	
	M3 × 10 Cap Bolt	3	
	M3 × 12 Cap Bolt	4	
	M3 × 25 Cap Bolt	2	
	M3 Nylon Nut	13	
	M3 Nut	4	
	M3 Plate Washer	6	
	M2.6 Flange Nut	20	
	M2.6 × 10 ⊕ Bolt	20	
	M2.3 × 17 Threaded Rod	4	
	Universal Link	10	
	Quick Link	3	
No. 8	M3 × 12 Cap Bolt	3	
	M3 Plate Washer	6	
	M2.3 × 5 Self Tapping Screw	3	
	Rubber Grommet	3	



1 Main Frame Assembly

1 Assemble subframes and servo plate retainer, paying close attention to the proper angles.

[M3 × 8 Cap B. ·····4
M3 N. N. ·····4]

2 Attach body mounting bolt (F) to cross member (A).

[M3 × 12 Cap B. ····· 1]

3 Drill 6mm and 3mm holes to the front bed and bolt it to the front end of subframes.

[M3 × 12 ⊕ Screw ·····4
M3 Nut ·····4
M3 Plate Washer ·····4]

4 Attach body mounting bolt (R) to the main frames.

[M3 ×12 Cap B. ·····2]

5 Bolt the radius support arm to the inner side of the main frame.

[M2 ×10 ⊕ Screw·····2
M2 Nut ·····2]

6 The main frames bolt to the subframe. Make sure that the top face of the subframe and the front edge of the main frames cross correctly at 90 degree angles.

[M3 × 8 Cap B. ·····6
M3 N.N. ·····6]

7 Bolt cross member (B) between the main frames using serrated washers and cap bolts.

[M3 × 8 Cap B. ·····2
M3 Serrated Washer ·····2
M3 Plate Washer ·····2]

2 Ball Bearing Installation

8 Bolt 3 ball joints to the main frames and the tip of radius support arm. See Drawing.

[M2 × 10 ⊕ Screw·····3
M2 Nut ·····5]

9 Bolt a ball joint to the arm of slide ring ass'y and put the slide ring ass'y to the square cut out of main frames. The arm must be placed on right side of main frame. See Drawing.

[M2 × 10 ⊕ Screw·····1
M2 Nut ·····2]

10 Assemble the pinion gear, clutch bell and the 626(196C) ball bearing.

[M4 × 4 Set B. ·····2
M3 × 8 Cap B. ·····1
M3 × 10 × 1 Plate Washer ····1]

11 Temporarily attach 10 into the main frame. [M3 × 30 Cap B. ·····2
M3 N.N. ·····2]

12 Temporarily set 1910 and 1970 ball bearings into the main frame.

[M3 × 30 Cap B. ·····4
M3 N.N. ·····4]

3 Power Unit Assembly

※When using the ENYA Engine, remove the throttle lever and replace with the throttle lever and spacer contained in this kit with J.I.S standerdized screw.

[M3 × 25(JIS) Cap B. ·····1
M3 Spring Washer ·····1
Using 2.4mm Hex. Wrench]

※When using the O.S. Engine, Remove the throttle lever and attach the throttle adapter contained in this kit to the engine, and replace throttle lever again.

[M3 × 4 Set B. ·····2]

13 Enlarge the hole of the cooling fan using the tapered reamer, for a close fit. Do not over enlarge the hole.

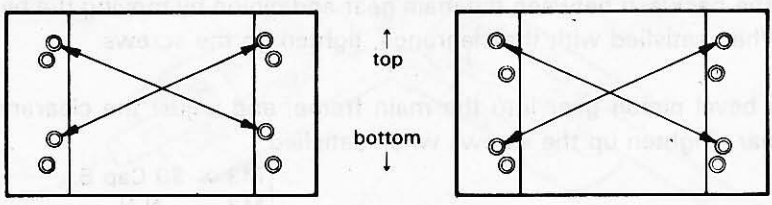
14 Install the cooling fan to the engine, without prop washer, and tighten firmly.

15 Attach the pulley to the cooling fan with 2 clutch bolts.

16 Hook the small ring of clutch spring into the small hole of clutch shoe, and put the large ring in the groove of clutch bolt.

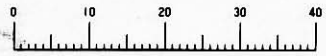
17 Slip clutch shoes over clutch bolts and secure with "E" rings.

18 Bolt the engine to the engine mounting block. [M3 × 15 Cap B. ·····4
M3 Plate Washer ·····4
M3 Spring Washer ·····4]



ENYA 49X

OS 50, FSR



19 Blank

20 Bolt the cooling shroud to the main frames. Flange of the shroud must be positioned in front of the bent plates of the main frame.

M3 × 12 Cap B.	4
M3 Plate Washer	4
M3 N.N.	4

21 Put the engine starting belt over the clutch bell, and mount the power unit into the main frame.
Notice : Add a little grease to the clutch pilot bearing.

M4 × 12 Cap B.	6
M4 Plate Washer	6
M4 Serrated Washer	6

4 Main Shaft, Drive Gear & Swash Plate Assembly

22 Insert one end of the pitch control rod into the 2mm hole in the pitch control ring, then slide the unit about half way down the main shaft.

23 Insert the upper plate lock, swash plate and swash plate collar, in that order, from the bottom of the main shaft.
Notice : The pitch control rod must move freely in the main shaft. If there is any friction, check to see that the bent ends are exactly 90 degrees.

24 Insert the main shaft through the top bearing, then insert the bent end of the pitch control rod into the 2mm hole of the slide ring ass'y, then drop the main shaft into the bottom bearing.

25 Add the main gear spacer and bolt the main gear to the main shaft.

M3 ×15 Cap B.	1
M3 N.N.	1

26 Pull the main shaft, and push down the upper plate lock, then tighten up the bolt on the upper plate lock. At this time, the upper plate lock must be 90 degrees from the 3mm hole in the main shaft.

27 Adjust the backlash between the main gear and pinion by moving the bearing housings. When satisfied with the clearance, tighten up the screws.

28 Put the bevel pinion gear into the main frame, and adjust the clearance with the main gear. Tighten up the screws when satisfied.

M3 × 30 Cap B.	2
M3 N.N.	2

5 Under Carriage & Fuel Tank Installation

29 Install the cross members(D), undercarriage spacers and the braces to the main frames.

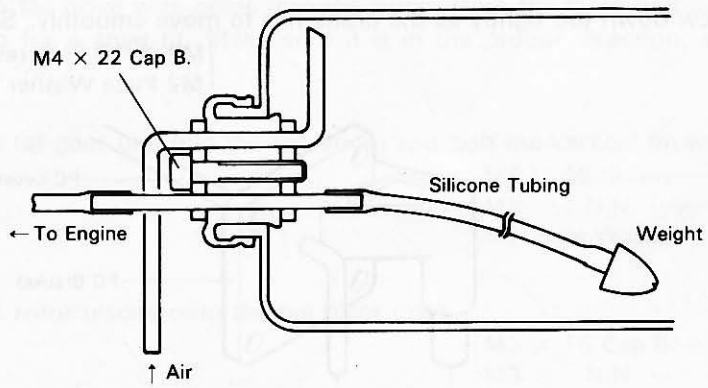
[M3 × 25 Cap B. ·····4
M3 N.N. ·····4]

30 Bolt on the undercarriage clamps and skids.

[M3 × 10 Cap B. ·····8
M3 N.N. ·····8]

31 Bond the rubber caps to both ends of the skids.

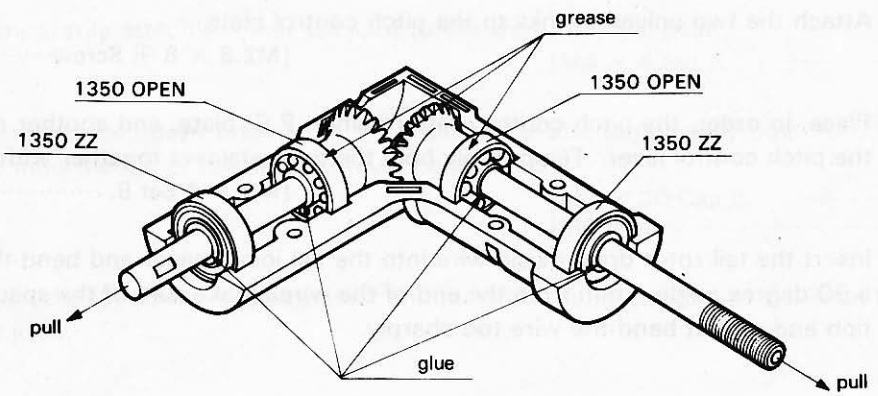
32 Assemble the fuel tank cap as shown, then insert it into the tank, and secure with the M4 × 22 Cap B. .

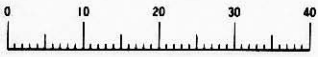


6 Tail Rotor Unit Assembly

33 Remove all oil from the tail rotor shafts and the inner ring of ball bearings. Assemble the tail gears and ball bearings as shown. Glue the shafts and bearings with a little cyanoacrylate and grease the gears and bearings well, then cover and screw the housings together.

[M2.3 × 8 ⊕ Screw·····4
M2.3 Nut ·····4]





34 Screw on tail rotor hub (counter clockwise) to the output shaft tightly and secure with a little cyanoacrylate.

35 Place the tail rotor bearings into the tail blade grips and secure with nuts and bolts.

[M2 × 10 ⊕ Screw·····8
M2 Nut ·····8]

36 Bolt two ball joints to the arms of the tail blade grips.

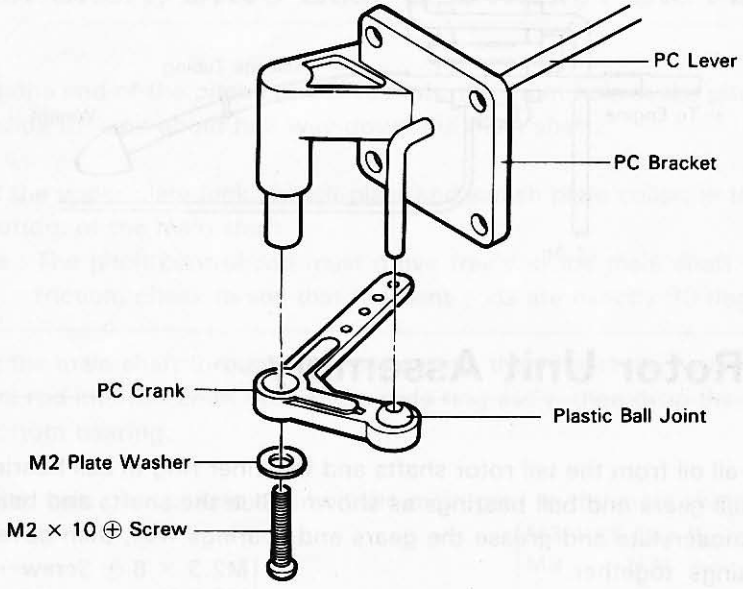
[M2 × 10 ⊕ Screw·····2]

37 Bolt the tail bracket and tail P.C.bracket to the tail gear housing.

[M3 × 8 Cap B. ·····4]

38 Insert the tail P.C. lever to the tail gear unit. And connect up the plastic ball joint to the crank. Secure the crank in the bracket with a screw and plate washer. Do not screw down too tightly as the crank has to move smoothly. See sketch.

[M2 × 10 ⊕ Screw·····1
M2 Plate Washer ·····1]



39 Attach the two universal links to the pitch control plate.

[M2.3 × 8 ⊕ Screw·····2]

40 Place, in order, the pitch control plate retainer, P.C. plate, and another retainer to the pitch control lever. Temporarily hold the two retainers together with set bolts.

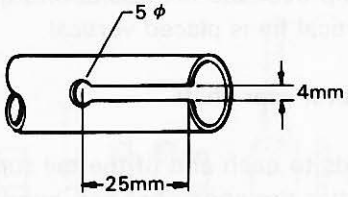
[M3 × 4 Set B. ·····4]

41 Insert the tail rotor drive music wire into the tail joint spacer and bend the wire at a 90 degree angle, 5mm from the end of the wire. Make sure of the spacers direction and do not bend the wire too sharply.

42 Put the bent end of the wire into the 2mm hole in the tail joint. Push the spacer into the tail joint and secure it with set bolts. [M4 × 4 Set B. ·····2]

43 Insert the tail joint (with wire) into the input shaft of the tail unit and fasten.
[M4 × 4 Set B. ·····2]

44 Drill and cut the small diameter end of the tail boom as shown.



45 Insert the tail drive wire guide into the boom from the large end and push it into the boom for a snug fit. Make sure it is in the proper direction, and do not use too much force.

46 Insert the tail gear unit into the tail boom and bolt the vertical fin with tail clamps.
[M3 × 12 Screw·····4
M3 N.N. ·····4
M3 Plate Washer ·····4]

47 Install tail rotor blades onto the tail rotor grips.
[M3 × 15 Cap B. ·····2
M3 N.N. ·····2]

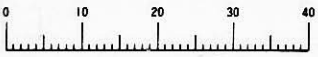
Notice : Install tail rotor blades with correct surface placement. M3 × 15 cap bolts and nuts must not be tightened too much. Just tighten the blades with a slight slack so they fan out by centrifugal force when the tail rotor blades are rotating.

48 Bolt the horizontal stabilizer to the tail boom with tail clamp. Make sure of the clearance between tail rotor blades.
[M3 × 12 Screw·····2
M3 N.N. ·····2
M3 Plate Washer ·····2]

49 Temporarily attach another tail joint to the shaft of bevel gear.
[M4 × 4 Set B. ·····2]

50 Place the tail boom retainer to the main frame and temporarily bolt. At this time the inner flange of the retainer must be forward.
[M3 × 30 Cap B. ·····4
M3 N.N. ·····4]

51 Insert the tail boom to the retainer and mark on the music wire at the 2mm hole of tail joint.



52 Remove the tail boom and cut the wire 5mm longer than the mark. Add the joint spacer to the wire paying attention to direction and bend the wire 90 degrees at the mark.

53 Remove the temporarily attached tail joint at step 49 and attach it to the front tip of tail drive wire. [M4 × 4 Set B. ·····2]

54 Slide the tail support clamp over the tail boom, and attach the boom to the main frame. Make sure the vertical fin is placed vertical.

55 Bolt the tail joint to the bevel gear shaft.

56 Epoxy the tail support ends to each end of the tail support. The ends must be 90 degrees to each other. After the epoxy has set, bend the front end to match the angle of cross member(D).

57 Bolt the finished tail support to the cross member(D) and the tail support clamp.

[M3 × 10 Cap B. ·····2
M3 N.N. ·····2]

7 R/C Equipment and Linkage Installation

58 Attach 4 cap bolts to the top front bent plates of the main frame from the bottom side with M3 nuts.

[M3 × 12 Cap B. ·····4
M3 Nut ·····4]

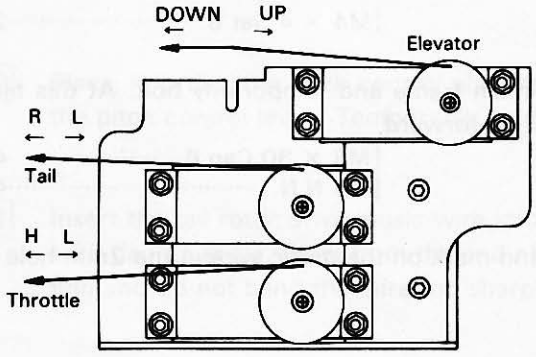
59 Bolt servo frames, adjusting the width to fit your servos.

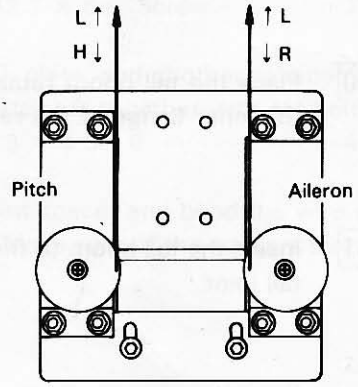
[M3 × 8 Cap B. ·····4
M3 × N.N. ·····4]

60 Install servos to the mount and bolt them to the main frame.

[M2.6 × 10 ⊕ Screw ·····20
M2.6 × Servo Mounting Nut ··20
M3 × 10 Cap B. ·····3
M3 N.N. ·····7]

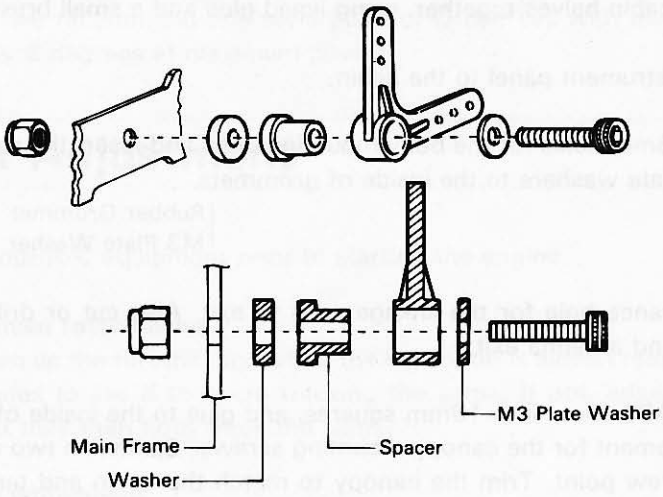
Notice : Make sure of the servo's direction of rotation prior to installation. There may be a requirement for a reverse servo.





61 Bolt bell cranks to the main frames.

[M3 × 25 Cap B. ·····2
M3 N.N. ·····2
M3 Plate Washer ·····2]



62 Screw on one each universal link to both ends of the two M2.3 × 17 threaded rods, and adjust them to 43mm long. (from the tip end of universal link to the other) Apply these tie rods to connect with the ball joints of slide ring Ass'y and main frame. Adjust the length of the tie rods so the slide ring Ass'y can be moved smoothly in the square cut out from bottom to top.

63 Hook up each servo as shown in the construction drawing.

When the pitch (elevator) and roll (aileron) servos are at neutral, the swash plate must be horizontal. Throw of the swash plate arms is 6mm each way from neutral. (total movement is 12mm.) Stroke of the slide ring Ass'y is approximately 9mm (Stabilizer system head). In case of rigid rotor installations, the stroke is approx. 8mm. All of these strokes are temporarily set before flight.

Throw of the throttle lever and motor control servo must be equal. Throw should be adjusted so that the engine can be stopped at will.

Connect the tail pitch control crank and yaw control(rudder)servo using the flexible P.P. rod (black and white plastic rod) using M2.3 × 17 threaded rods and quick links. When the servo is neutral, the crank is also neutral. Throw of the tail pitch control lever (2mm steel wire) is 5mm each way. Temporarily set the tail blades at a plus 5~10 degrees setting when the servo is at neutral.

Adjust the two tail pitch control plate retainers for a little clearance and apply some grease to the plate and retainers. The flexible P.P. rod must be secured in several places to prevent bending or flexing during operation. Use the P.P. rod brackets and vinyl tape.

8 Cabin Construction

64 Glue both cabin halves together, using liquid glue and a small brush.

65 Glue the instrument panel to the cabin.

66 Drill three 6mm holes for the body mounting bolts and insert the rubber grommets. Glue M3 plate washers to the inside of grommets.

[Rubber Grommet 3
M3 Plate Washer .....3]

67 Cut a clearance hole for the linkage rods to exit. Also cut or drill for the switch mounting and antenna exit.

68 Cut scrap ABS sheet into 10mm squares, and glue to the inside of the cabin walls as reinforcement for the canopy mounting screws. Sandwich two or three squares at each screw point. Trim the canopy to match the cabin and temporarily attach to the cabin with tape. Drill three 2mm holes at the reinforced areas done in step 68.

69 Install the receiver and battery, using foam rubber and tape for vibration protection. Install switch to the cabin, and attach canopy with self tapping screws.

[M2.3 × 5 Tapping Screw .....3]

Protect the servo and receiver leads from the sharp edges of the metal parts by tying or taping together.

9 Rotor Head Assembly Installation

70 Install the rotor head and hook up by reference to the "Rotor Head Assembly Manual".

Notice : The clearance between main and tail rotor blades is at least 15mm. If necessary, cut the main rotor blades away to keep that clearance.

After Construction Checklist

Upon completion of this kit, go back over every step to make sure that there are no loose nuts, bolts, misalignment or binding of moving components. Check all linkage for proper movement by using your transmitter.

■ **Center of Gravity**

This position is very critical and is located between the center of the main shaft and 5mm forward, without fuel. To check CG, insert a small screwdriver into the 4mm hole at the top of the main frame and lift it up. Adjust battery and/or receiver placement so that the helicopter balances level, viewing it from the side.

- **Main Rotor Pitch Adjustment**
  Follow the instructions for your rotor head. Pitch may vary according to such factors as total weight, engine power, main blade diameter and your own preferences. For initial set-up, we recommend you set a pitch of 0 degrees with minimum power, and approximately 8 degrees at maximum power.

In Flight Adjustment

Range check your R/C equipment prior to starting the engine.

- **Tracking of main rotor blades.**
  Gradually open up the throttle, and when the helicopter is almost ready to lift off, watch the rotor blades to see if they are tracking the same. If not, adjust the pitch of one blade, so that they then both track the same.

- **Needle valve adjustment**
  Adjust mixture control screw and needle valve according to the manufactures instructions. If after flight fine adjustment is required, make sure that it is not adjusted too lean.

- **Tail rotor pitch**
  Face the helicopter into the wind, and gradually open the throttle. If the tail boom moves to the right (nose moving left) increase the pitch, and if it moves opposite, decrease the pitch. To adjust the tail mixing system of your transmitter, refer to the manufactures instructions.

FLIGHT SAFETY

If you are new to R/C helicopter flying, please seek assistance from an experienced R/C helicopter pilot. Initial helicopter adjustments are not easy, and a mistake in construction could bring about a serious accident. In case your helicopter should crash, or be damaged, inspect it closely for other possible damage not immediately seen. Replace all damaged or suspect parts prior to re-flying. Since control is accomplished by relatively weak radio signals, they are subject to disturbance by noise, so do not fly near buildings or where people or spectators are nearby. Be alert and safety concious at all times.

SPARE PARTS

Spares can be obtained from your dealer, using the parts number and name. Follow this instruction manual when repairing.