

CNC Flybarless Head for the 4G6

(Version 1.0)

Instructions by Dkfuji.

Pictures and setup guide made by Tom Z.



Items included in package:

- 1 X CNC FBL Rotor Head
- 2 X Blue Dampeners
- 2 X Black Spacers
- 2 X Main Grip Long Link Screws
- 2 X Lever Screws and Washers
- 2 X Head Pins

Items needed to complete the build:

- 1 X CB100 Link Set
- 2 X Mix Arms from your original head (remove the balls)
- 2 X Main Blade Grips
- 2 X Long Links for your original head
- Thread Lock

Package Contents



Parts Layout



- 1) Remove your old head and keep the grips and mix arms with the shouldered screws.
- 2) Take your mix arms and mount them to the rotor head with the included screws and washers. Make sure you use loctite to secure the screws. They will spin out if you do not. Also make sure that the arms are reasonably slop free but do not bind to the washers and move smoothly and free. Note: Remove the balls on the mixer arms first.



- 3) Now fit the dampeners into the rotor head and install the feathering shaft and main grips from your old head.





4) Now build the long links by using your old links. **Please note: In order to get zero pitch at midstick it may be necessary to shorten the link. I had to trim about .5mm off the threaded end of the slotted link section to accomplish this.**



- 5) The short links are a combination of the "L" shaped CB100 link, trimmed link shaft and the ball link. They are all on the link out of the CB100 link package. First unscrew both links from the threaded shaft. Then cut the threaded portion of the shaft off. Now attach the ball links back onto the now shortened all threaded shaft. You should now have a short link with the "L" shape on one end and the larger diameter link on the other. Repeat the procedure for the other short link.



- 6) Attach the short links to the mix arms using your old mix arm shouldered screws as in the picture. You must install the shouldered screw from the open side of the ball link (one side is larger than the other). Looking at the head from the side, the longer side of the arm is on the right and the short link goes on the back side of the arm. Again use the loctite.



- 7) Attach the long links using the supplied black screws and glass spacers (again don't forget the loctite). There are two options here. You can just use the one supplied spacer for a docile heli or use your old spacer (red or silver) in addition to the supplied spacer to up the aggressiveness of your heli. It is your choice here. Make sure that the links are snug but not binding. The glass spacers slide nice and smooth against the plastic links.

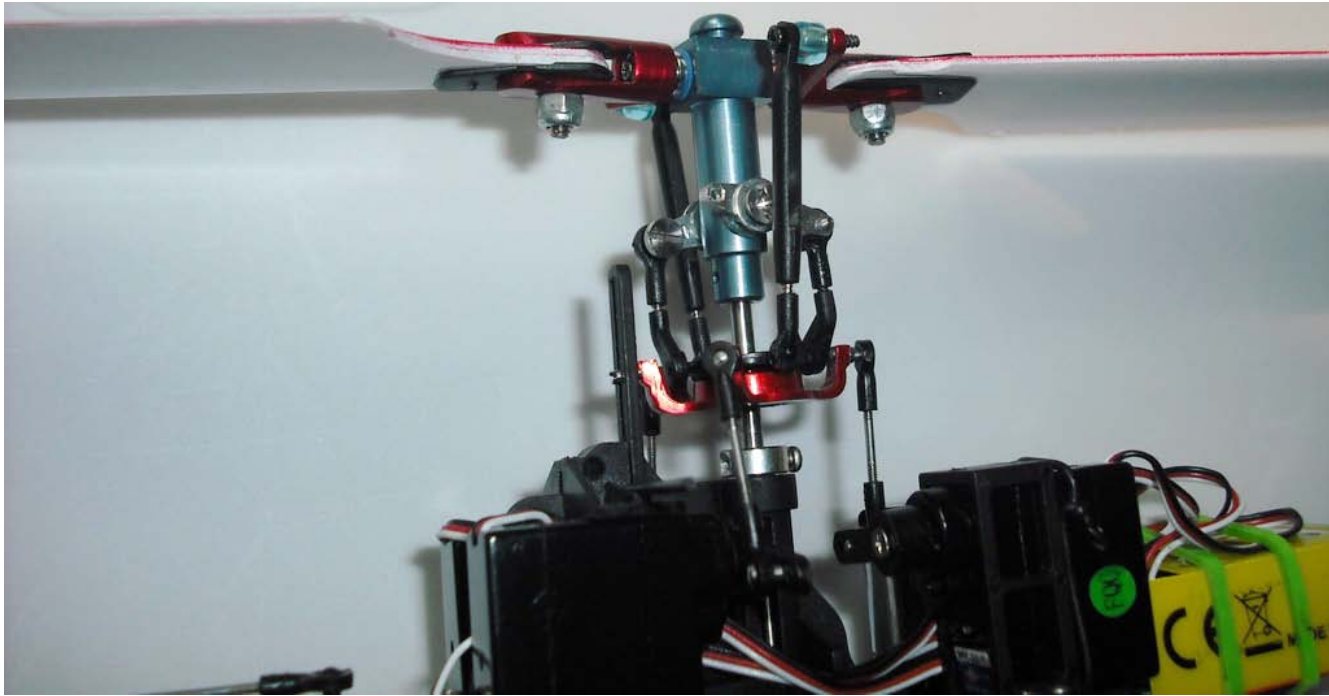
One Supplied Spacer:

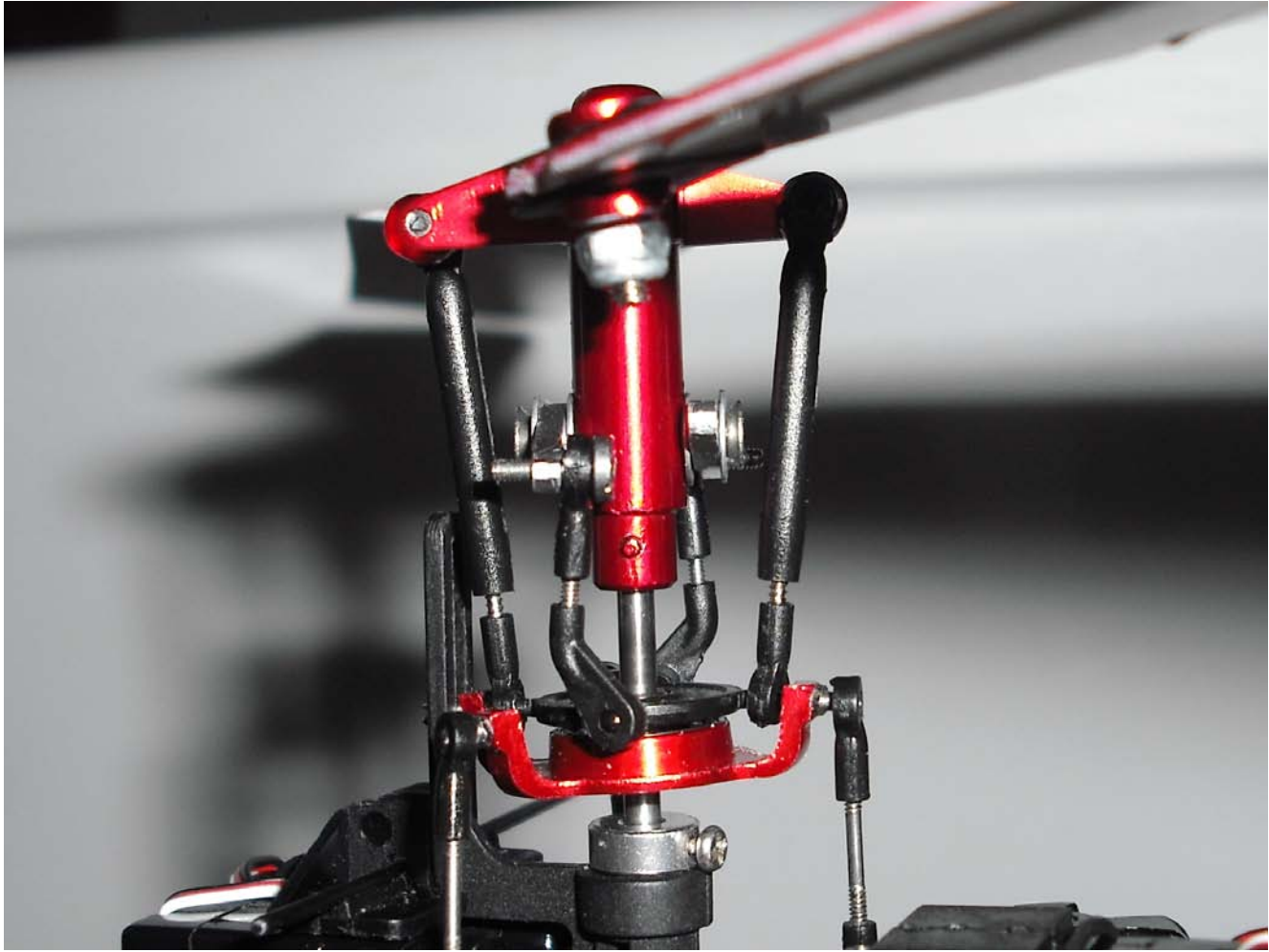


Old spacer (red or silver) in addition to the supplied spacer:



- 8) Now you can install the head assembly onto your mainshaft (using one of the supplied head pins) and attach the links to the swash plate. **Make sure that the "L" shaped link is pointing the correct direction as pictured.**





- 9) Adjustments now are made at midstick. You should have zero pitch at midstick and the mix arms need to be level. Adjust the links as needed to accomplish this.

- 10) Initially, the 3 Axis Gyro should be adjusted as follows: Delay Pot = 5%, Ail/Ele Pot = 50%, Servo Extent Pot = 40%, Rudder Extent = full rudder travel.

- 11) Settings in the 2801Pro are Gyr/Pat -> PLT = -150 and PIT = 40. These are only starting points. You can adjust to your flying style as needed.

See this post for over 40 pictures I took for this setup guide.

<http://www.rcgroups.com/forums/showpost.php?p=15834630&postcount=23>