

# Way To Fix Drones project

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## **INTRODUCTION:**

This is a compilation of MEMBER GENERATED INFORMATION. The accuracy of all information is limited to the observations and interpretations of the contributing member(s). Errors may be present. It is the responsibility of the user to evaluate the information prior to use

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# Attachment 1

## CG03 Removing the Three Black Wires

**Use of this information is at your own risk.**

### INTRODUCTION:

The infamous "three black wires" have possibly been responsible for the damage of more CGo3 cameras than all other causes combined. One common problem is that when the wires are damaged, people have installed and powered up through the pigtail without properly securing, insulating or removing the damaged wires. The result can be a damaged gimbal board or damaged mainboard in the drone itself.

If the wires are pulled out by a crash, there is often damage to the board, and sometimes remnants of the wire strands remain attached. Both can cause issues if not found and corrected. The process of removing the wires also allows an opportunity to find these issues. Removing the wires removes any possibility they can cause mechanical or electrical problems in the future.

### PROCEDURE:

- 1). Remove damper retainers if installed
- 2). Dismount the rubber dampers:



# Attachment 1

## CG03 Removing the Three Black Wires

3). Remove the three screws on the Contact Cover Plate:



4). Lift Contact Plate out of Upper Camera Mount:



# Attachment 1

## CG03 Removing the Three Black Wires

5). De-solder or clip wires away from Contact Plate:



6). Remove both Gimbal Board Enclosure mounting screws:



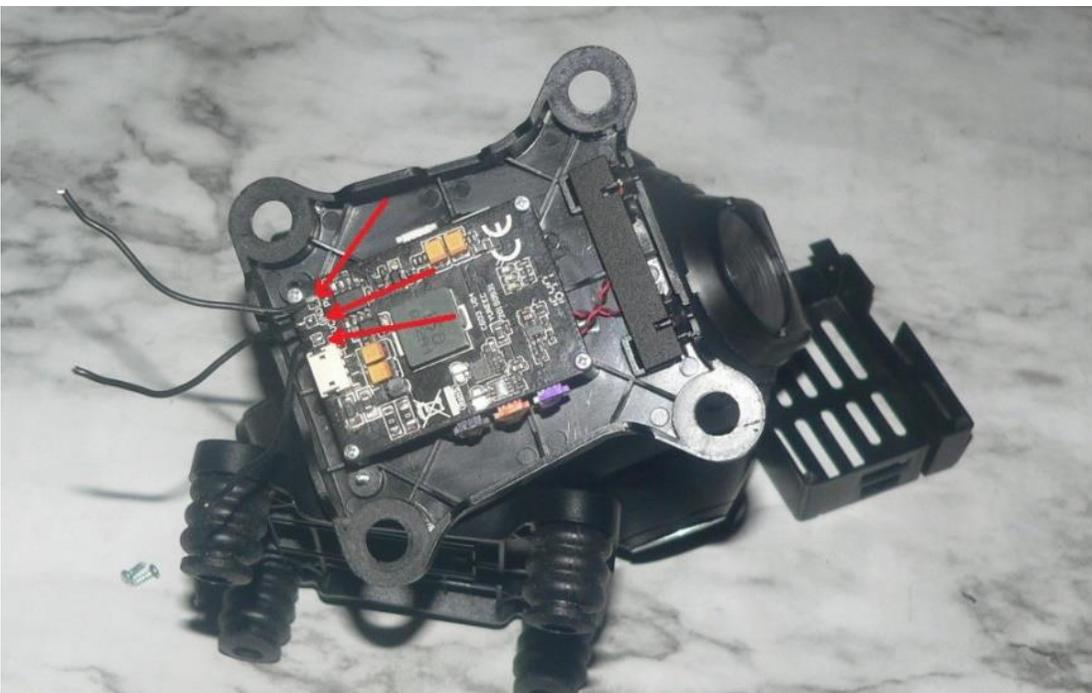
# Attachment 1

## CG03 Removing the Three Black Wires

7). Remove Gimbal Board Enclosure:



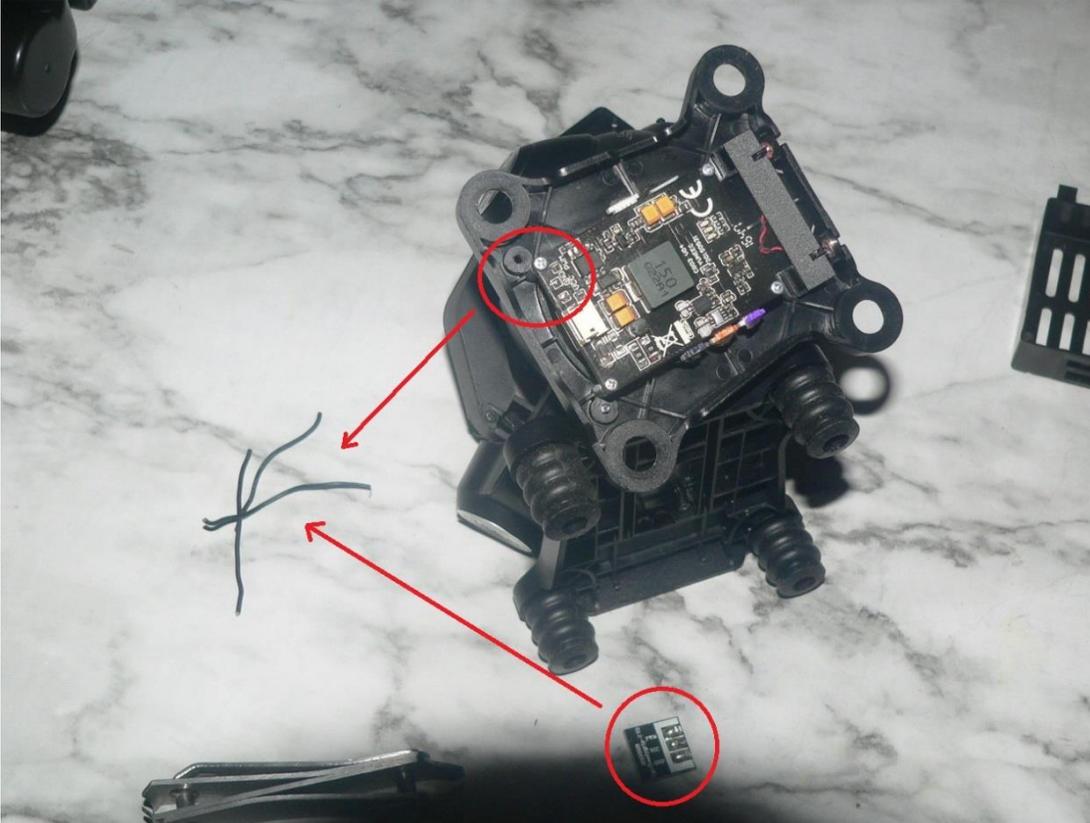
8). De-solder or clip wires away from Gimbal Board:



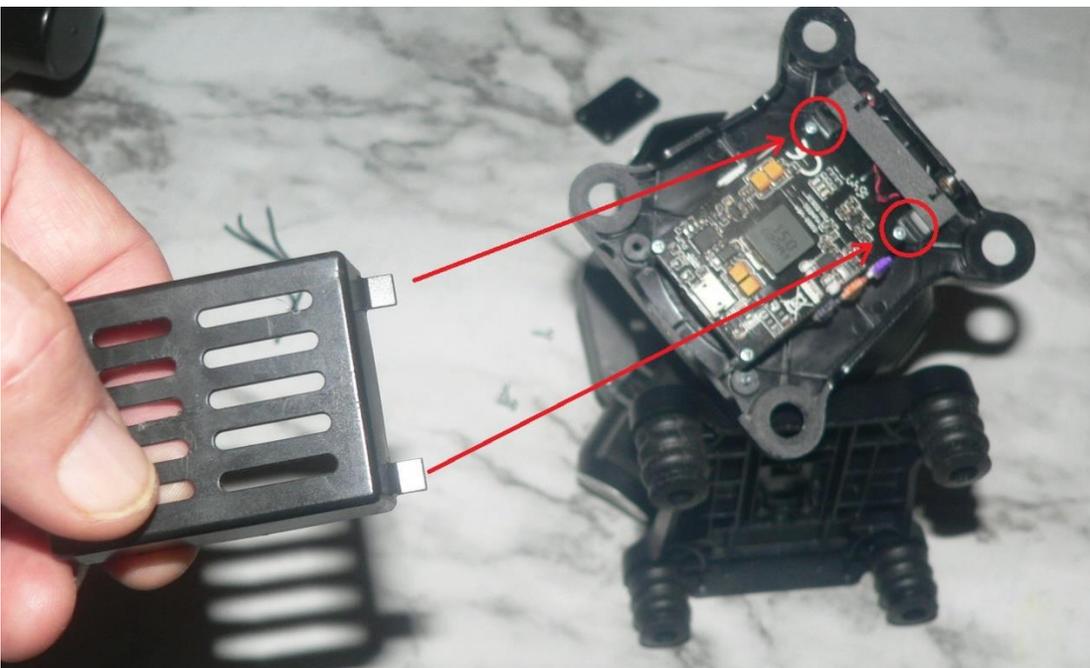
# Attachment 1

## CG03 Removing the Three Black Wires

9). Discard wires or save for later use:



10). Insert the gimbal board enclosure tabs into the mounting slots:



# Attachment 1

## CG03 Removing the Three Black Wires

11). Reinstall both Gimbal Board Enclosure mounting screws:



12). Plug in the Pigtail:

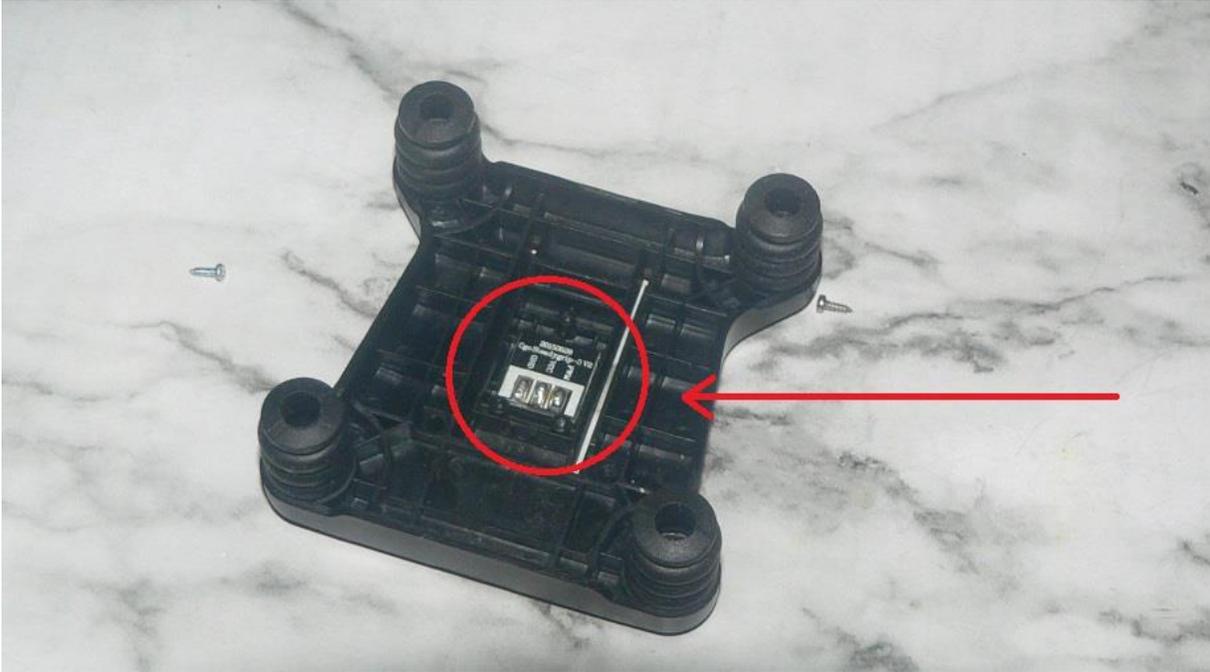


# Attachment 1

## CG03 Removing the Three Black Wires

**NOTE:** Contact plate and cover are installed to maintain structural integrity of the upper mount plate. They no longer perform any electrical function.

13). Install Contact Plate:



14). Install Contact Plate Cover:



# Attachment 1

## CG03 Removing the Three Black Wires

15). Install rubber Dampers.



16). Install Damper Retainers.

## Attachment 2 CGo3 Wi-Fi Board Replacement

**Use of this information is at your own risk.**

1). Remove all eight screws from the rear of the camera (Four on each side):



2). Work rear cover slightly forward to clear the USB and SD Card connectors:



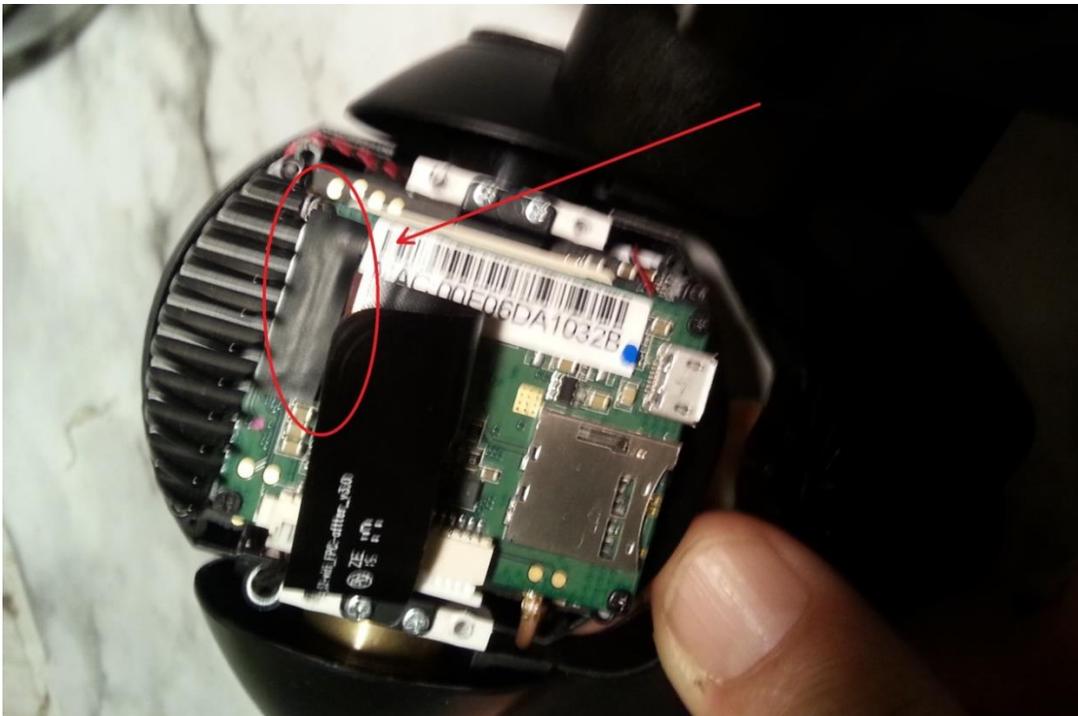
## Attachment 2

### CGo3 Wi-Fi Board Replacement

3). Remove cover:



4). Carefully remove tape from ribbon connector (tape color may vary):



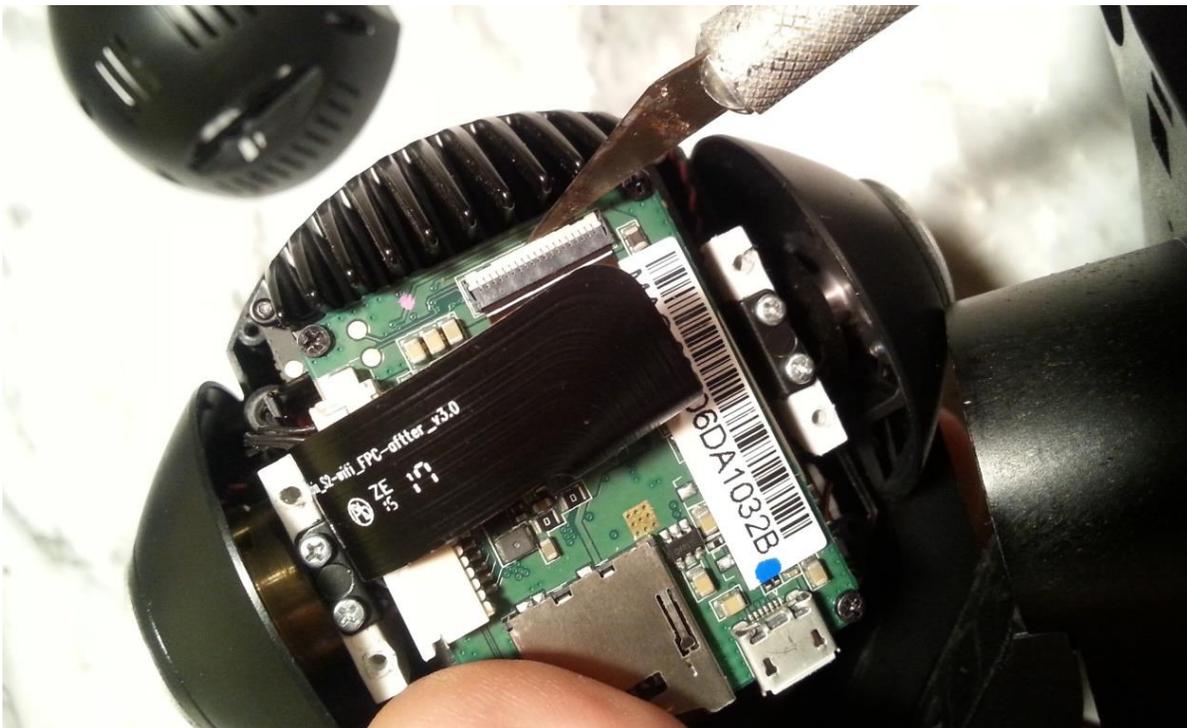
## Attachment 2

### CGo3 Wi-Fi Board Replacement

5). Note the position of the white alignment mark on the ribbon for future reference:



6). Using fingernails or a small tool, lift the back edge of the ribbon lock to release the ribbon:



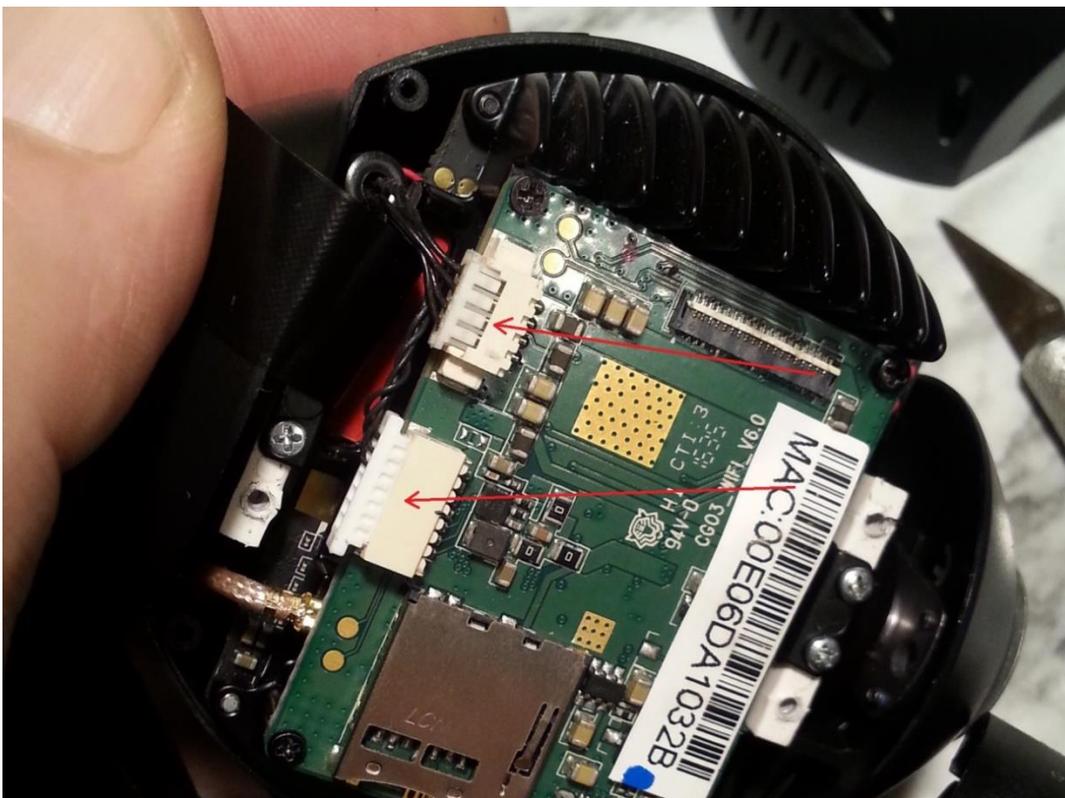
## Attachment 2

### CGo3 Wi-Fi Board Replacement

7). Slide the ribbon out of the connector:



8). Unplug both wiring connectors:



CC

## Attachment 2

### CGo3 Wi-Fi Board Replacement

9). Remove the four mounting screws:



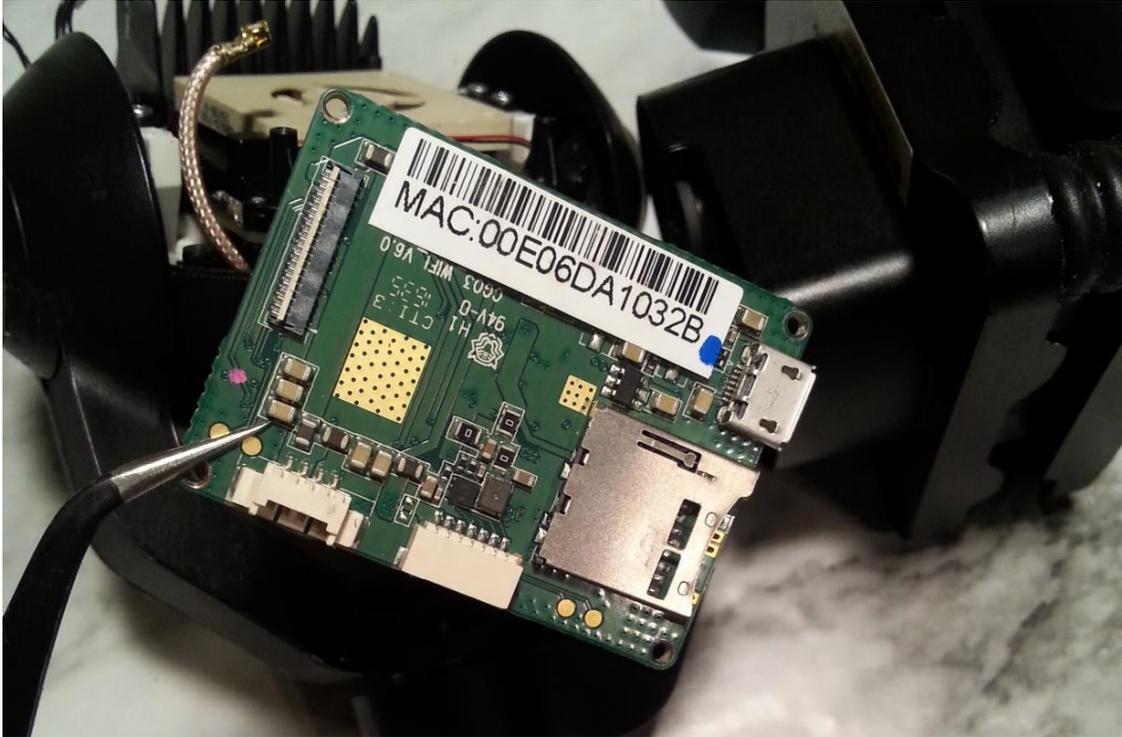
10). Carefully unplug the WIFI antenna.



## Attachment 2

### CGo3 Wi-Fi Board Replacement

11). Remove the old WIFI board:



12). **Carefully** align the WIFI antenna to the socket on the new board, and plug it in:



## Attachment 2

### CGo3 Wi-Fi Board Replacement

- 13). Line the new board up with the mounting posts, and install the four mounting screws:



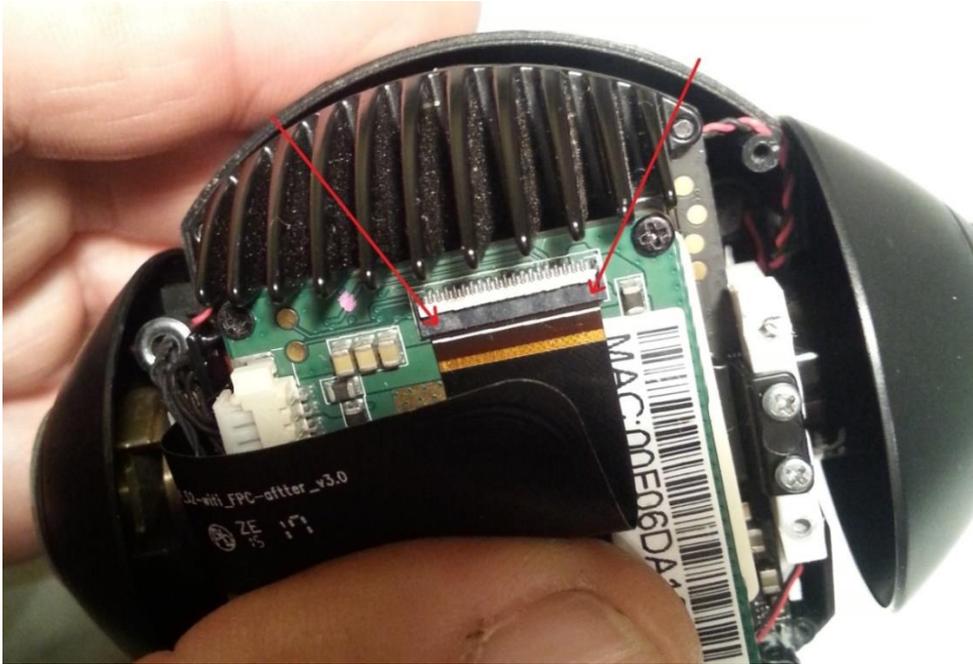
- 14). Plug in BOTH wiring connectors, ensuring both go UNDER the ribbon:



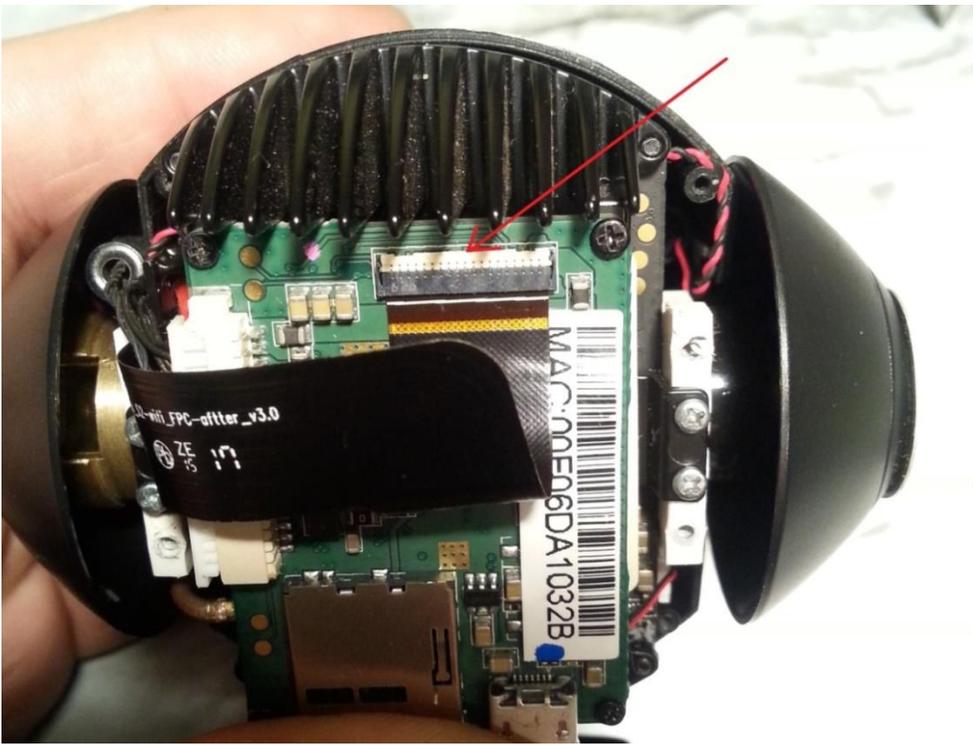
## Attachment 2

### CGo3 Wi-Fi Board Replacement

- 15). Slide the ribbon back into the ribbon connector. **ENSURE** the white alignment mark is even all the way across:



- 16). Close the tab to lock the ribbon in place:

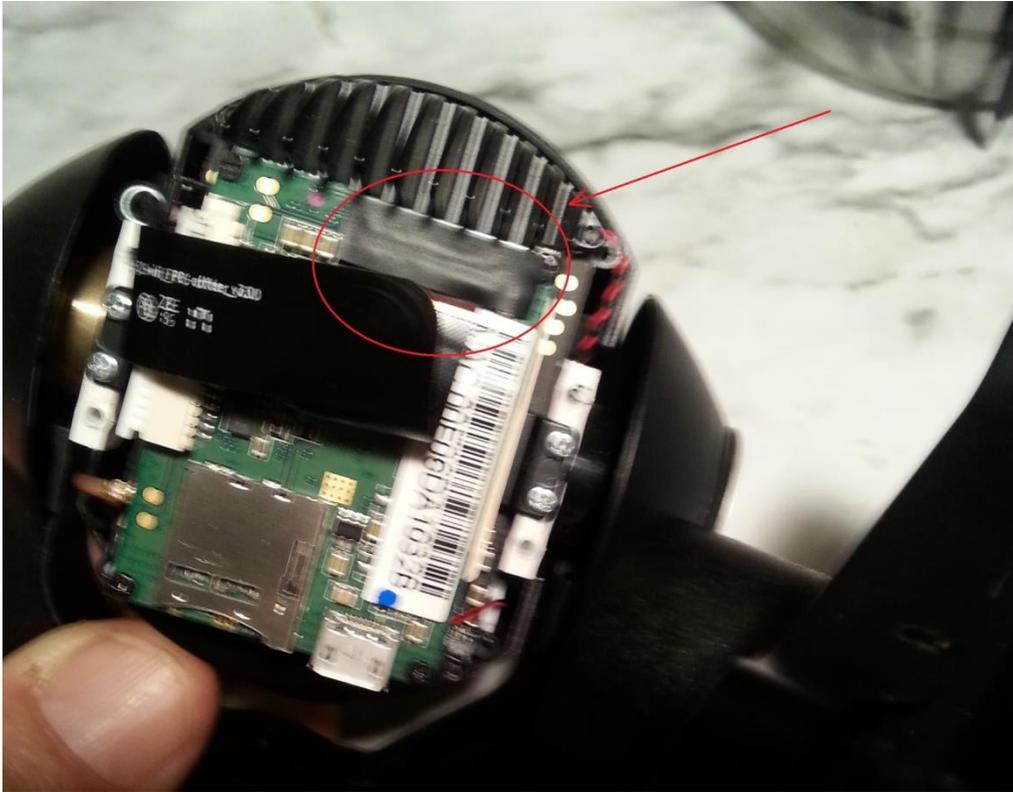


- 17). **OPTIONAL STEP:** Power camera up to check WIFI functionality prior to completing assembly.

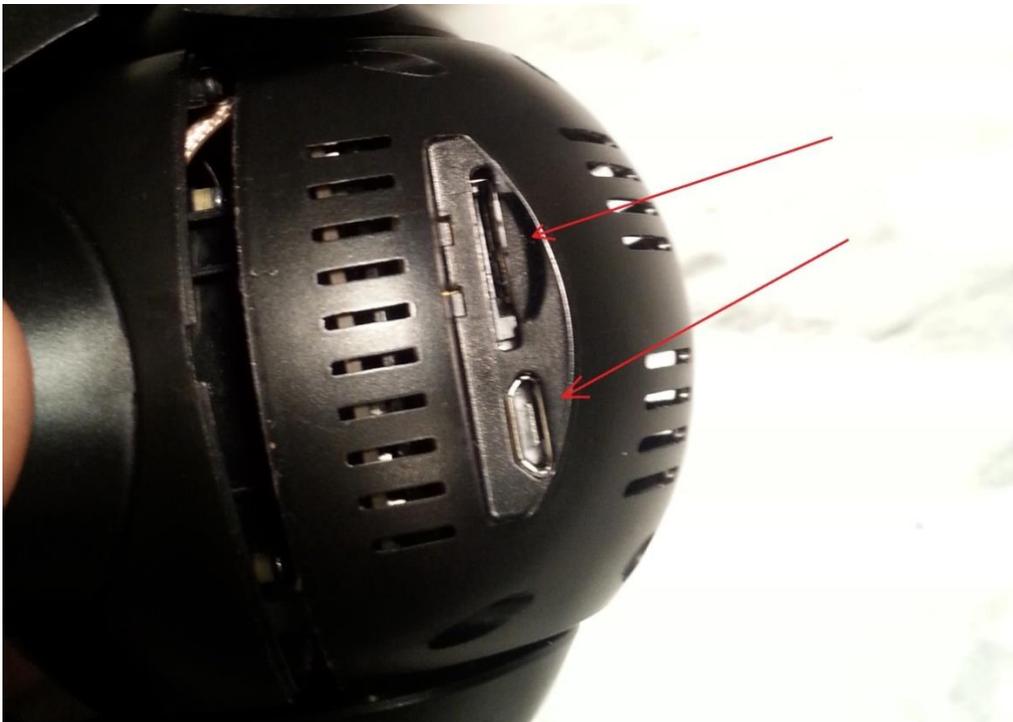
## Attachment 2

### CGo3 Wi-Fi Board Replacement

18). Install the tape over the ribbon connector:



19). Align the rear cover over the USB and SD card connectors, and work the cover slightly back over the connectors:



## Attachment 2

### CGo3 Wi-Fi Board Replacement

20). Install the four silver colored rear cover mounting screws. Two on each side:



21). Align the front cover, ensuring no wires are trapped between the surfaces or screw mounting holes:



## Attachment 2

### CGo3 Wi-Fi Board Replacement

22). Install the four black front cover mounting screws, two on each side



23). You are finished.

# Attachment 3

## CGo3 Rear Arm Alignment

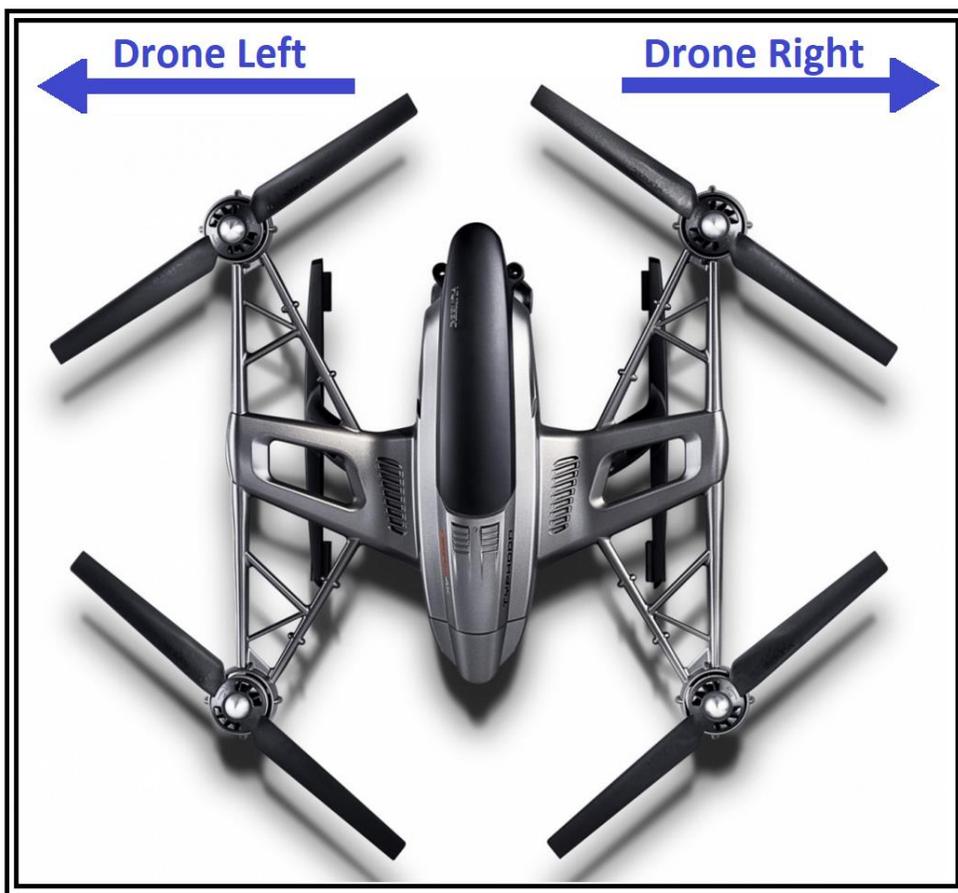
**Use of this information is at your own risk.**

### Introduction:

This project is to realign the CGo3 rear arm if the camera is pointing “Hard Left” or “Hard Right” due to improper rear arm mounting screw alignment during previous work.

### NOTE:

The terms “left” and “right” can become confusing while working on a component that is upside down and is being viewed from the front instead of the rear. The terms “left” and “right” throughout this document will refer to standard “Drone Left” and “Drone Right” as shown here.



### Preamble:

You are going to be working with some thin plastic, small screws and flimsy wire. The words "patience", "careful" and "gently" should govern your work for this project. You will also be touching some electronic components. You need to be mindful of static electricity. An antistatic wrist band, or some sort of grounding are advised. At the very least, ensure you touch something else on the camera BEFORE you touch any of the sensitive components. READ THROUGH THIS FIRST. If you don't feel confident, then don't do it. You can mess your camera up pretty easily with this

# Attachment 3

## CGo3 Rear Arm Alignment

With the nagging aside, here is how to align a CGo3 rear arm if it has been installed incorrectly:

- 1). Use your fingernails, or some thin plastic to pry the label off the rear motor cover. It is held on by contact cement, and if you keep both sides clean, it will go right back on



- 2). Remove THESE TWO screws from the rear motor cover. (leave the other two alone for now)



# Attachment 3

## CGo3 Rear Arm Alignment

3). Remove this one from the side of the rear motor cover



4). And this one from the other side:



## Attachment 3

### CGo3 Rear Arm Alignment

- 5). Pry the "wings" of the rear motor cover out ONLY enough to clear the interferences: (Remember the "Thin Plastic" nag at the start of this note



- 6). Slide the rear motor cover off and set it aside:



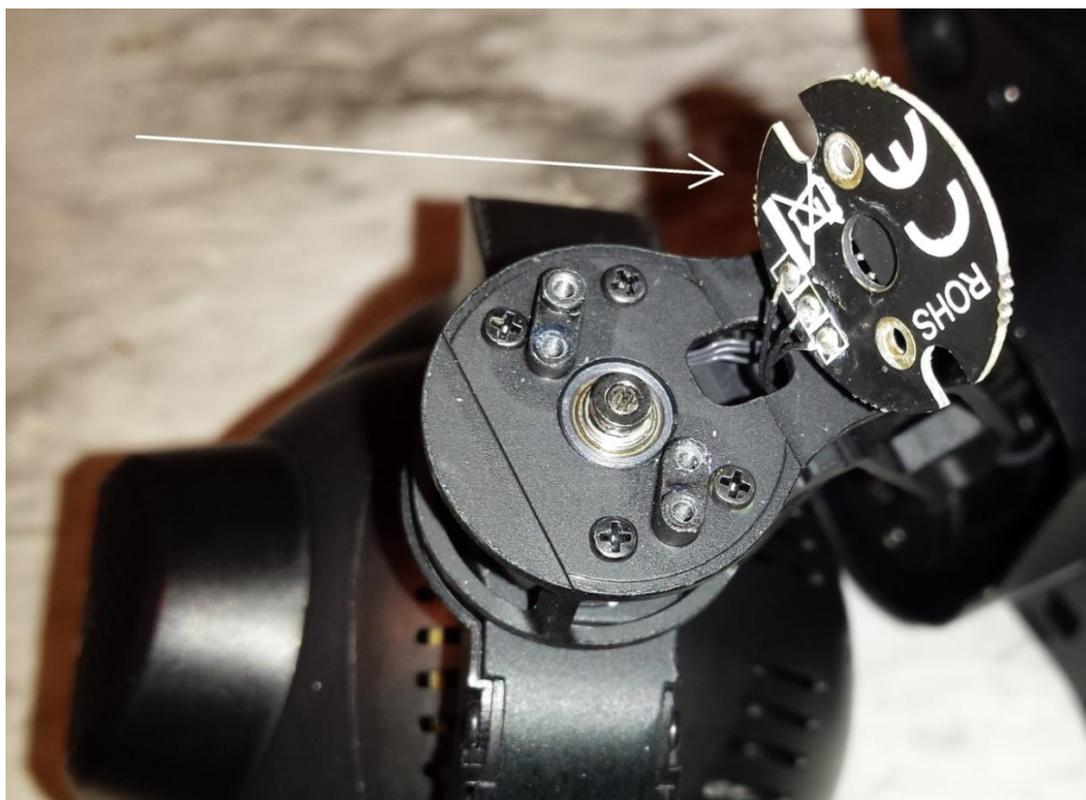
## Attachment 3

### CGo3 Rear Arm Alignment

- 7). NOW remove these two screws from the rear motor position sensor: (Remember the "static electricity" nag.)



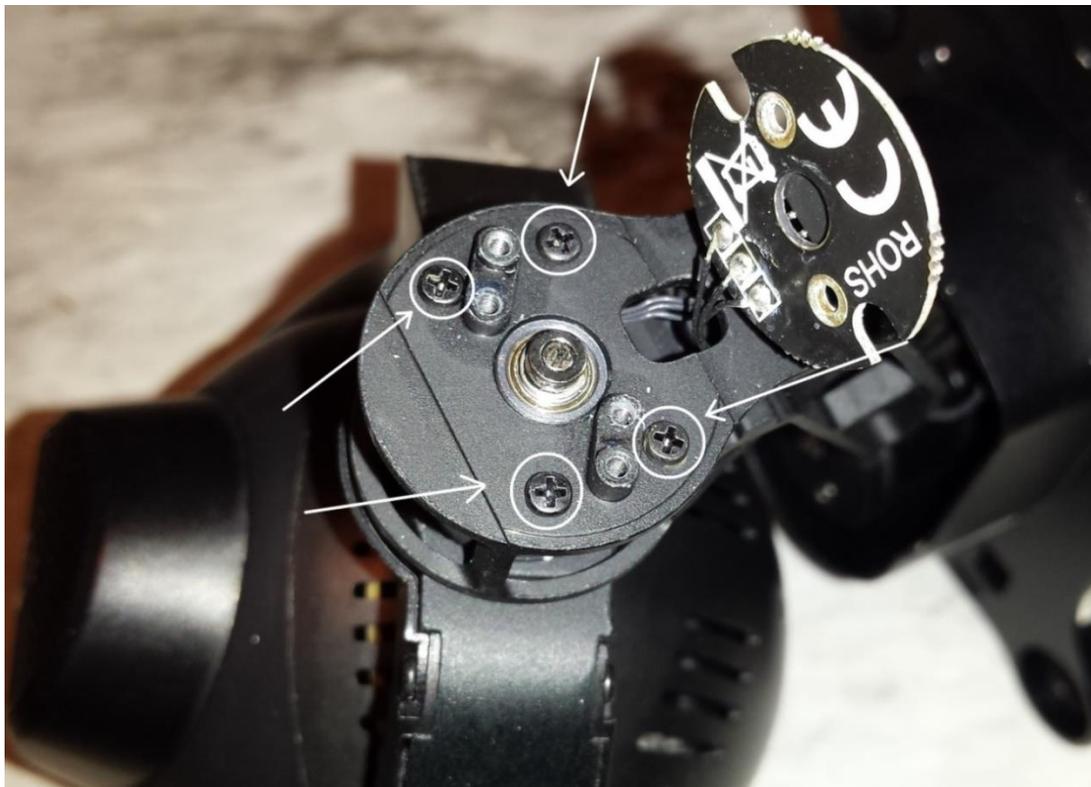
- 8). GENTLY tilt the rear motor position sensor out of the way, (The "flimsy wire" nag):



## Attachment 3

### CGo3 Rear Arm Alignment

9). Remove the four motor mount screws:



10). Gently slide the motor forward out of the support arm cage, and set it aside.

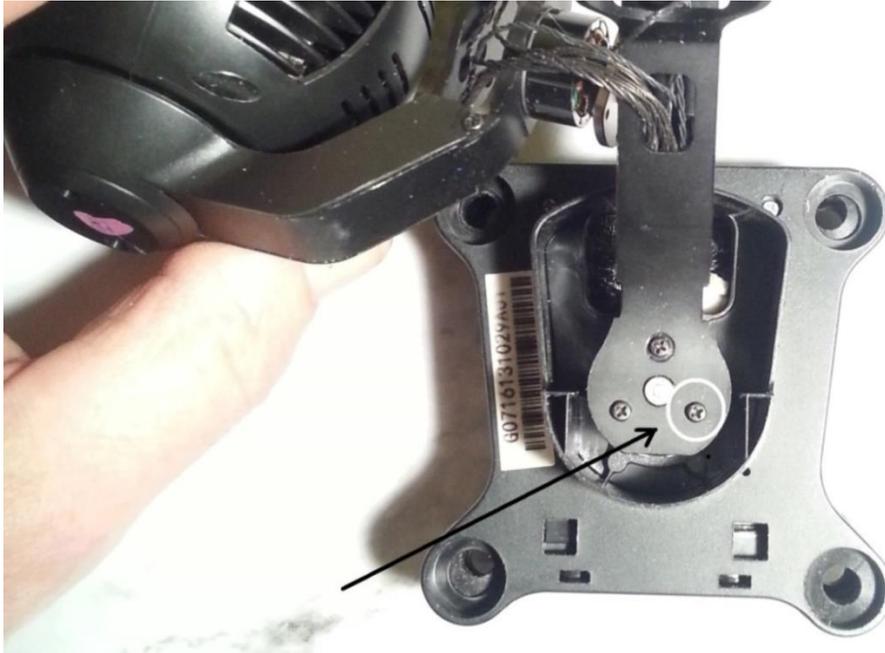


# Attachment 3

## CGo3 Rear Arm Alignment

11). Steps 12) through 16) are related to cameras that were pointing "DRONE RIGHT". IF camera was pointing "DRONE LEFT", THEN skip to Step 17)

12). IF camera was pointing "DRONE RIGHT", THEN remove this screw.



13). Insert a SHORT piece of toothpick, (or similar) into the hole for the removed screw to serve as an alignment pin.

