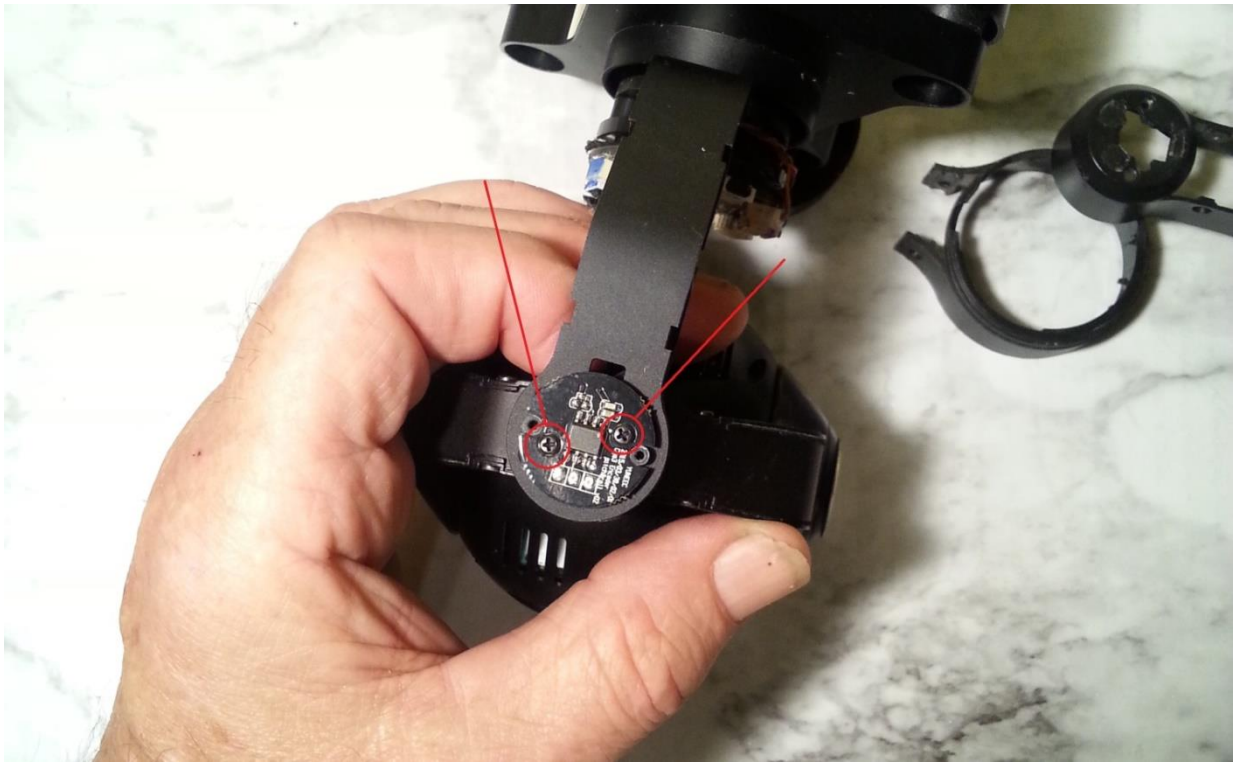
Attachment 11
CGo3+ Yaw Encoder Access

7). Remove the two screws holding the roll encoder:

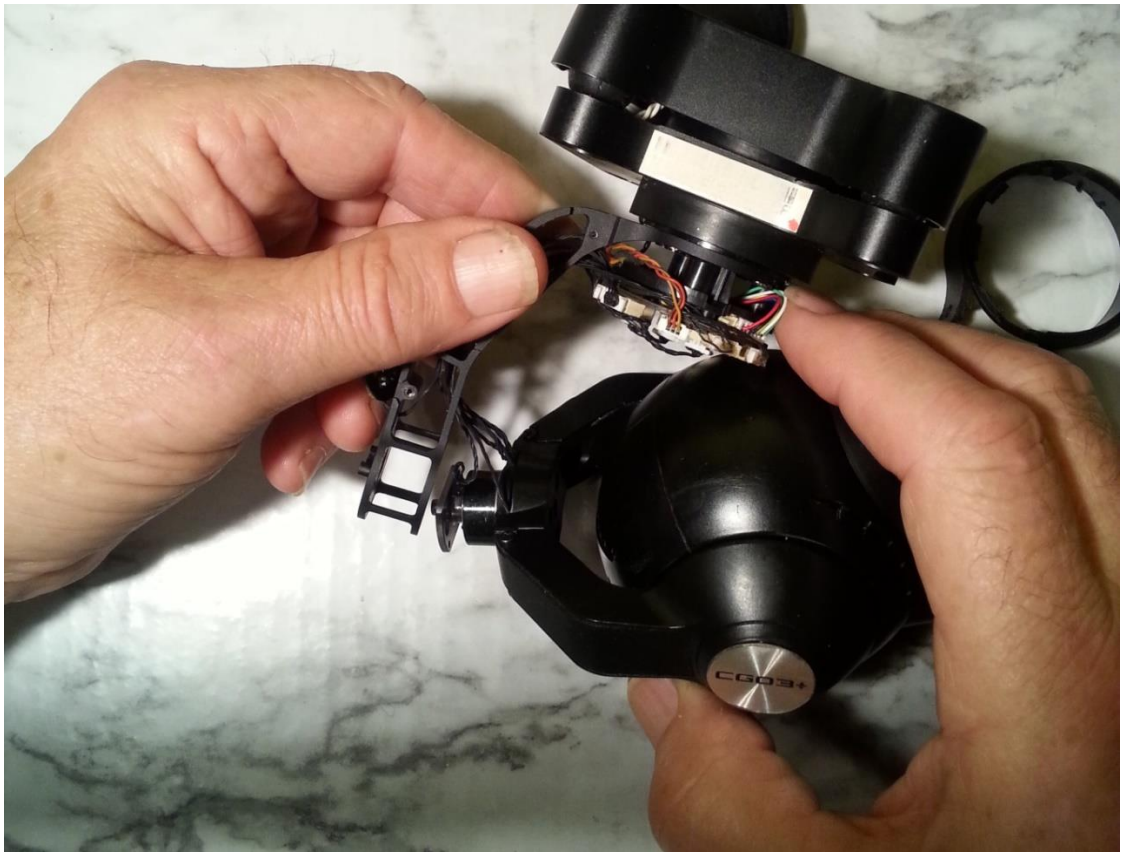


8). Carefully tilt the roll encoder out of the way:

Attachment 11
CGo3+ Yaw Encoder Access

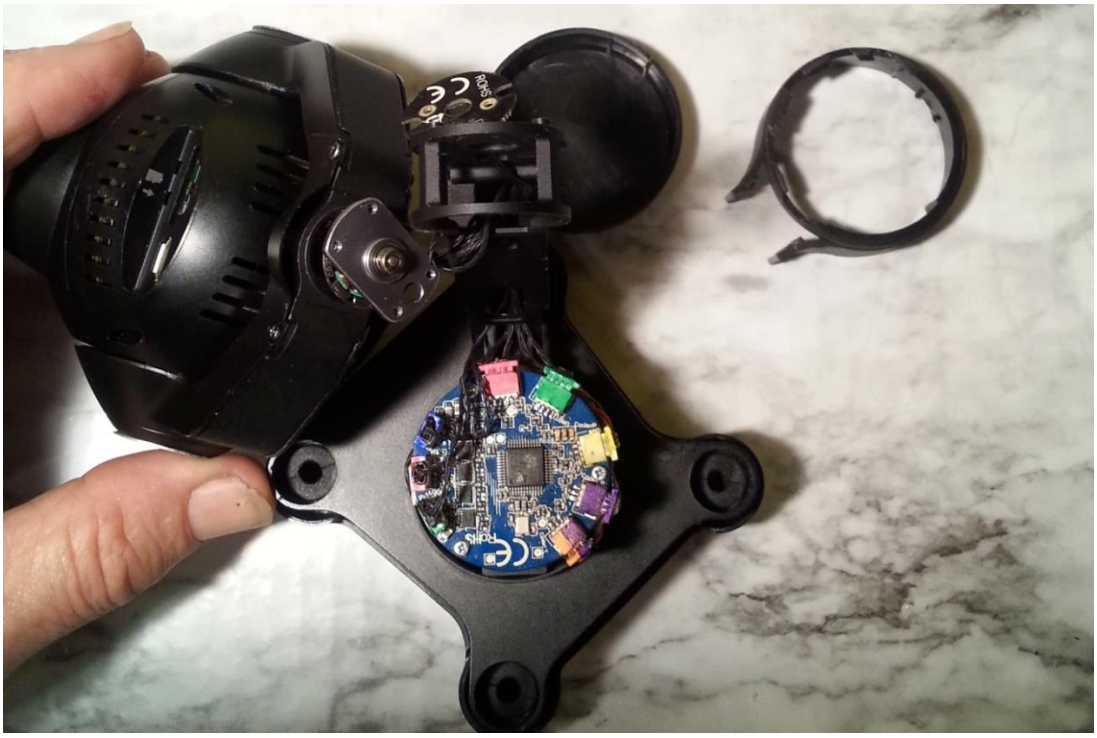
9). Remove the four roll motor screws:

10). Slide the roll motor / camera yoke out of the rear arm:

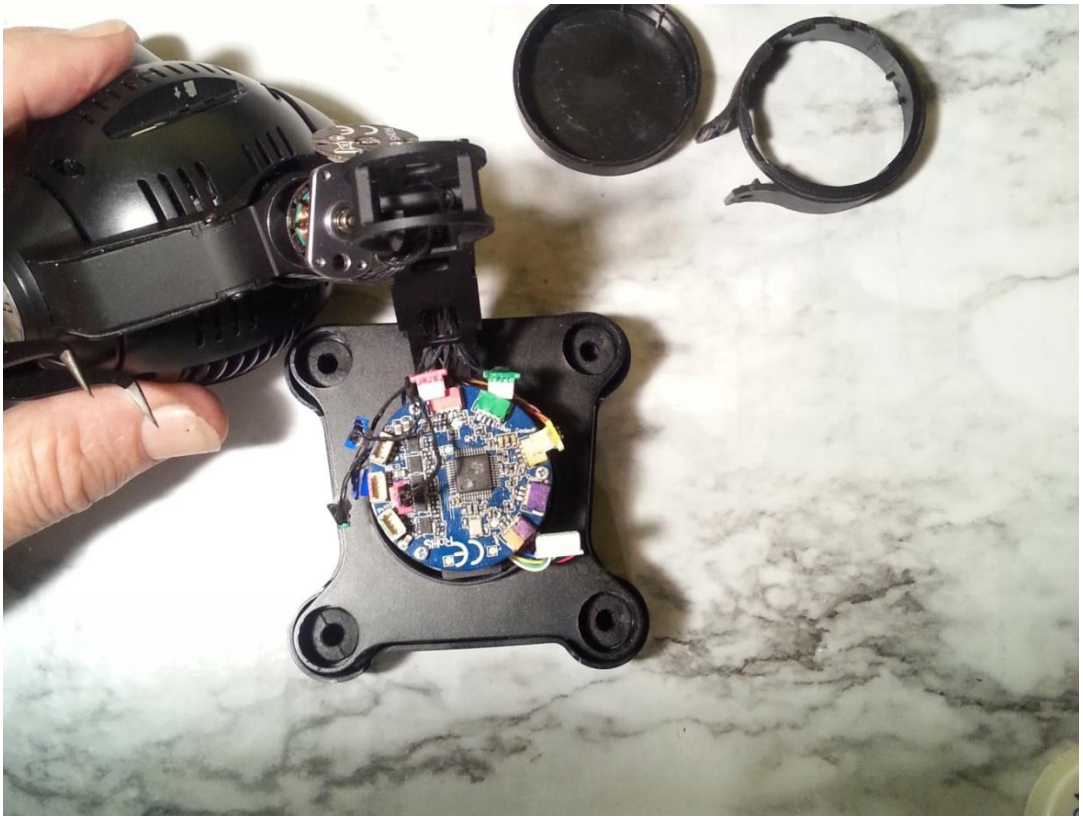


Attachment 11
CGo3+ Yaw Encoder Access

11). Color code ALL accessible gimbal board connectors:

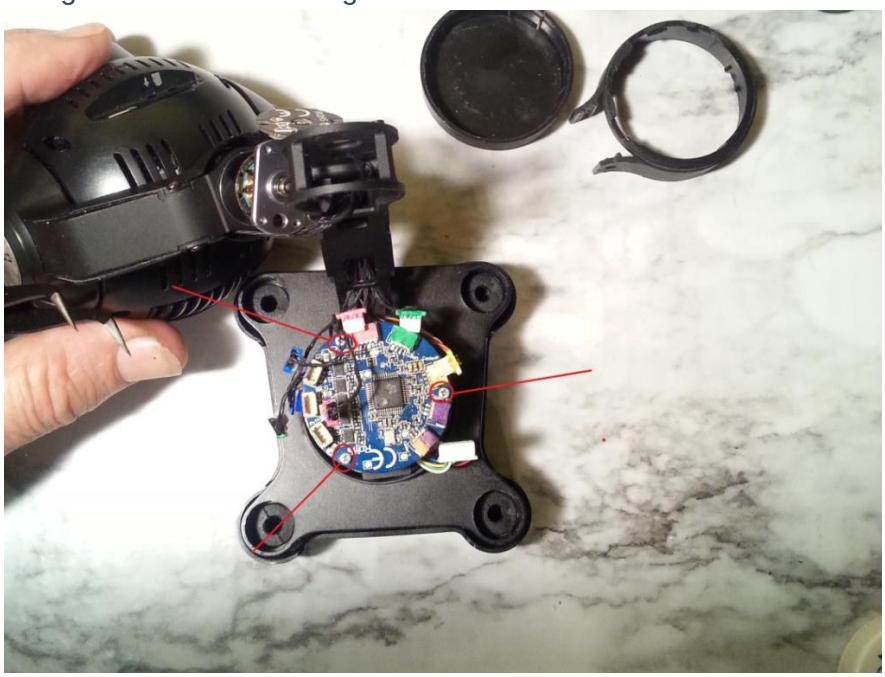


12). Unplug all accessible gimbal board connectors:



Attachment 11
CGo3+ Yaw Encoder Access

13). Remove the three gimbal board mounting screws:

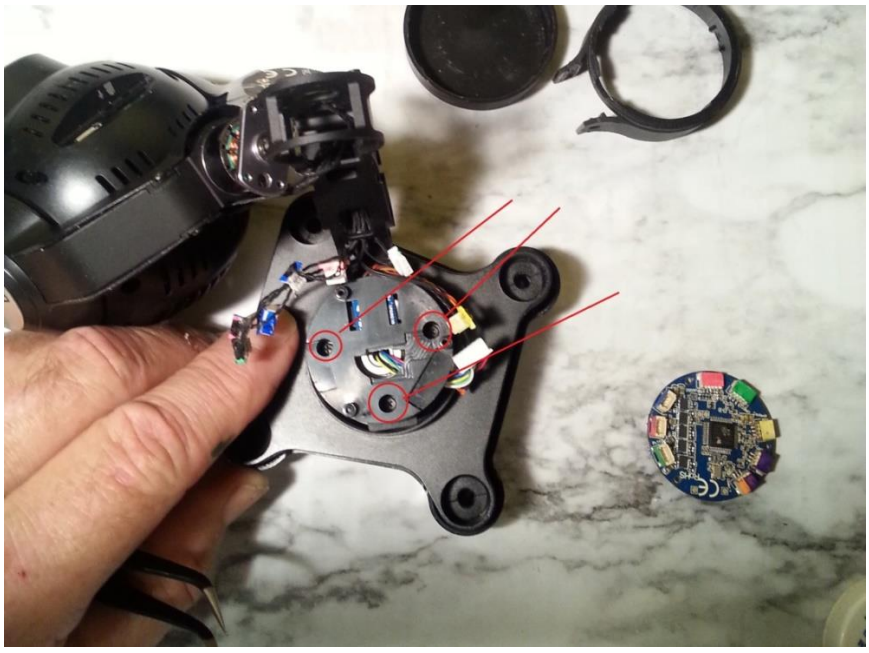


14). Lift out gimbal board.

15). Color code remaining gimbal board connectors,

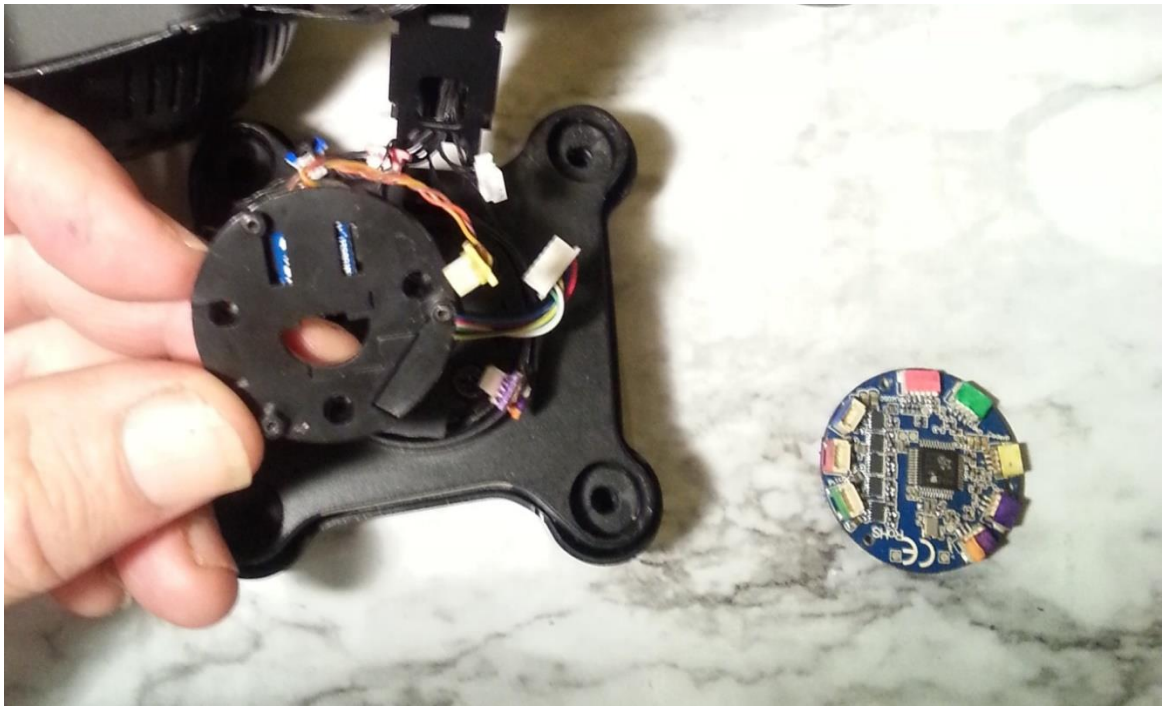
16). Unplug remaining gimbal board connectors,

17). Remove the three gimbal board support mounting screws:



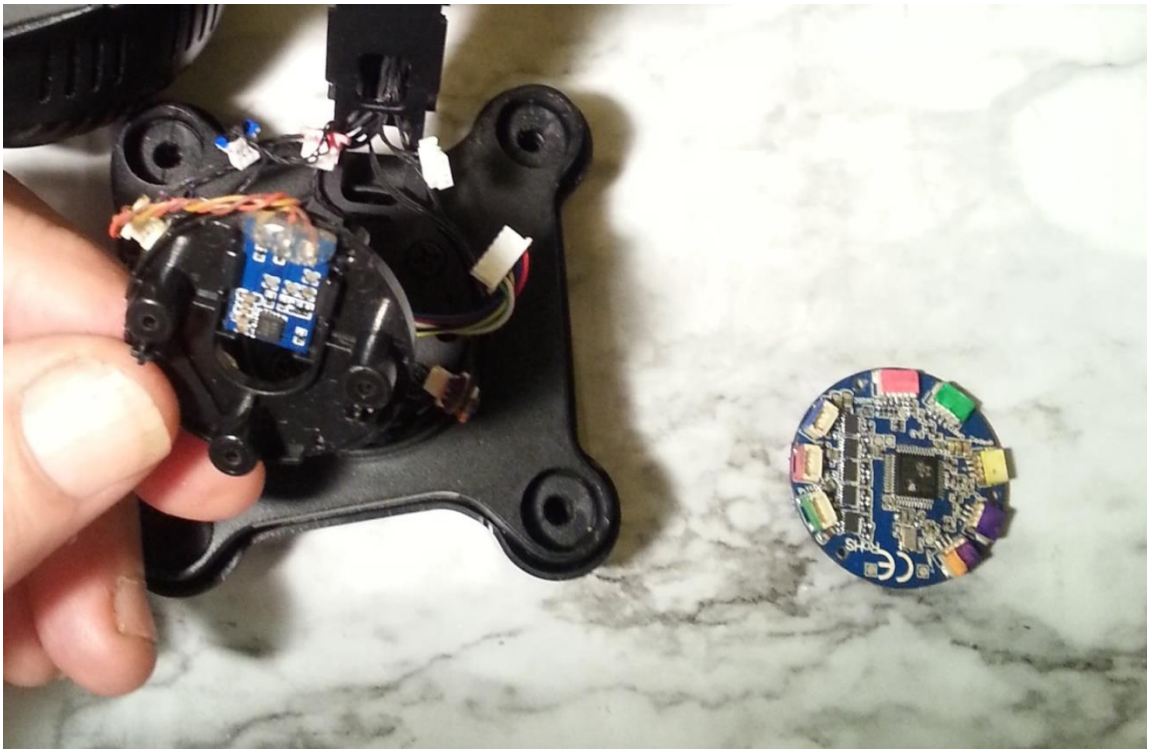
Attachment 11
CGo3+ Yaw Encoder Access

18). Lift the gimbal board support from the frame:



NOTE: This camera has repairs. Wire color, sealant color and general appearance will be different on an OEM assembly.

19). The Yaw Encoder is mounted on the back of the gimbal board support:



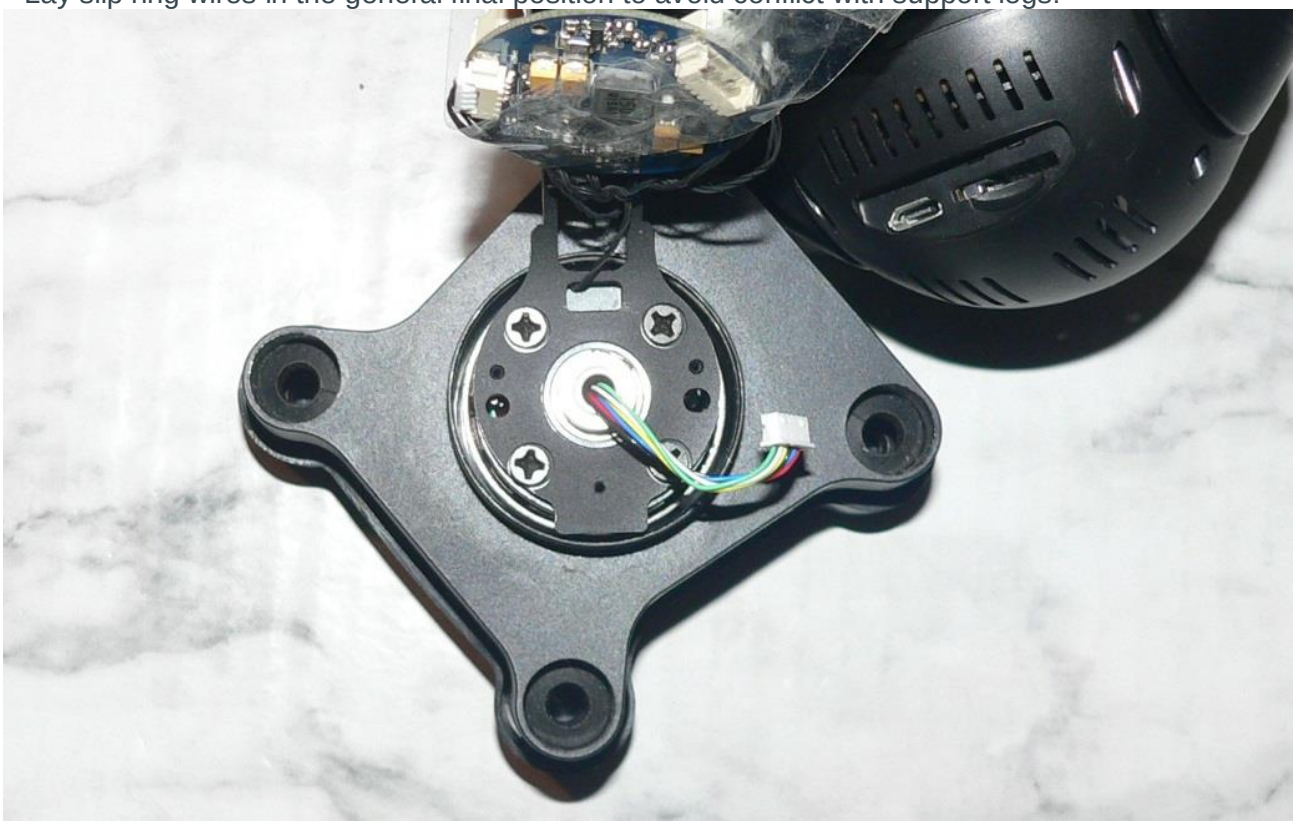
Attachment 11
CGo3+ Yaw Encoder Access

20). Remove old Yaw Encoder:

21). Install new Yaw Encoder:

Attachment 11
CGo3+ Yaw Encoder Access

22). Lay slip ring wires in the general final position to avoid conflict with support legs:

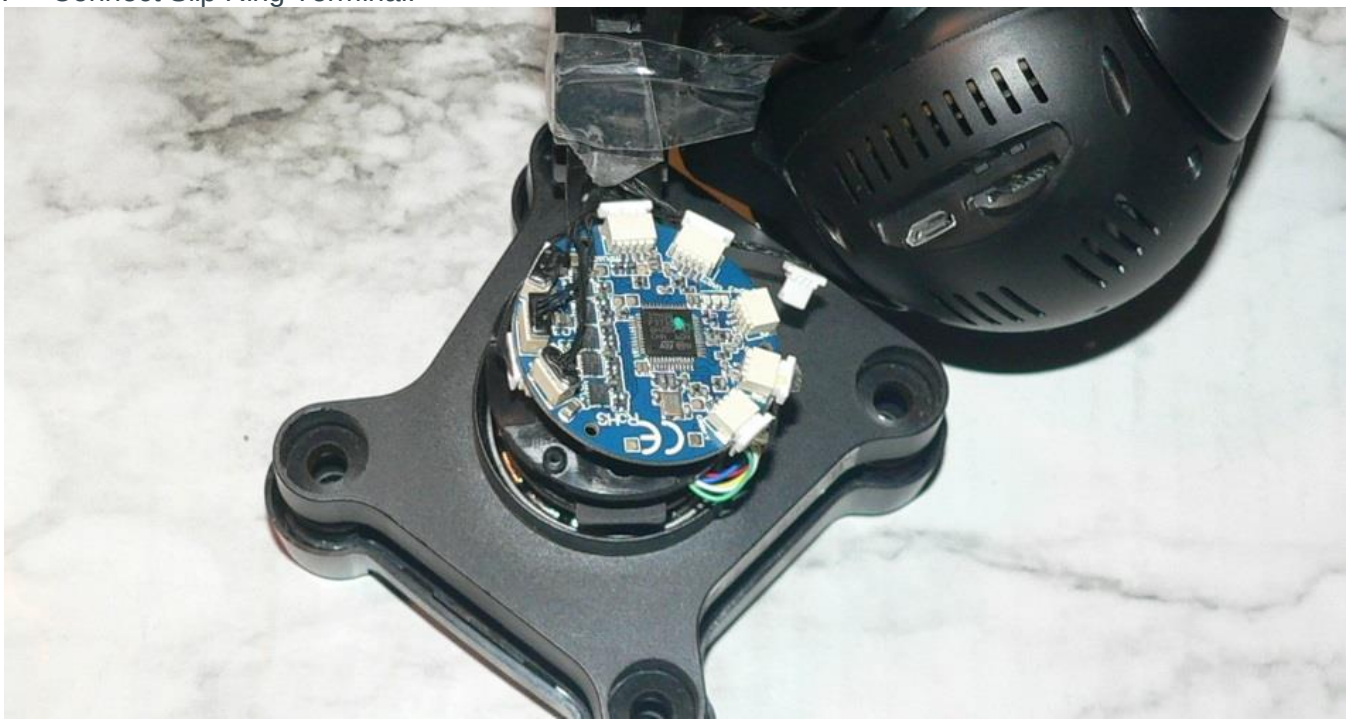


23). Install Gimbal Board / Yaw Encoder Support :

Attachment 11
CGo3+ Yaw Encoder Access

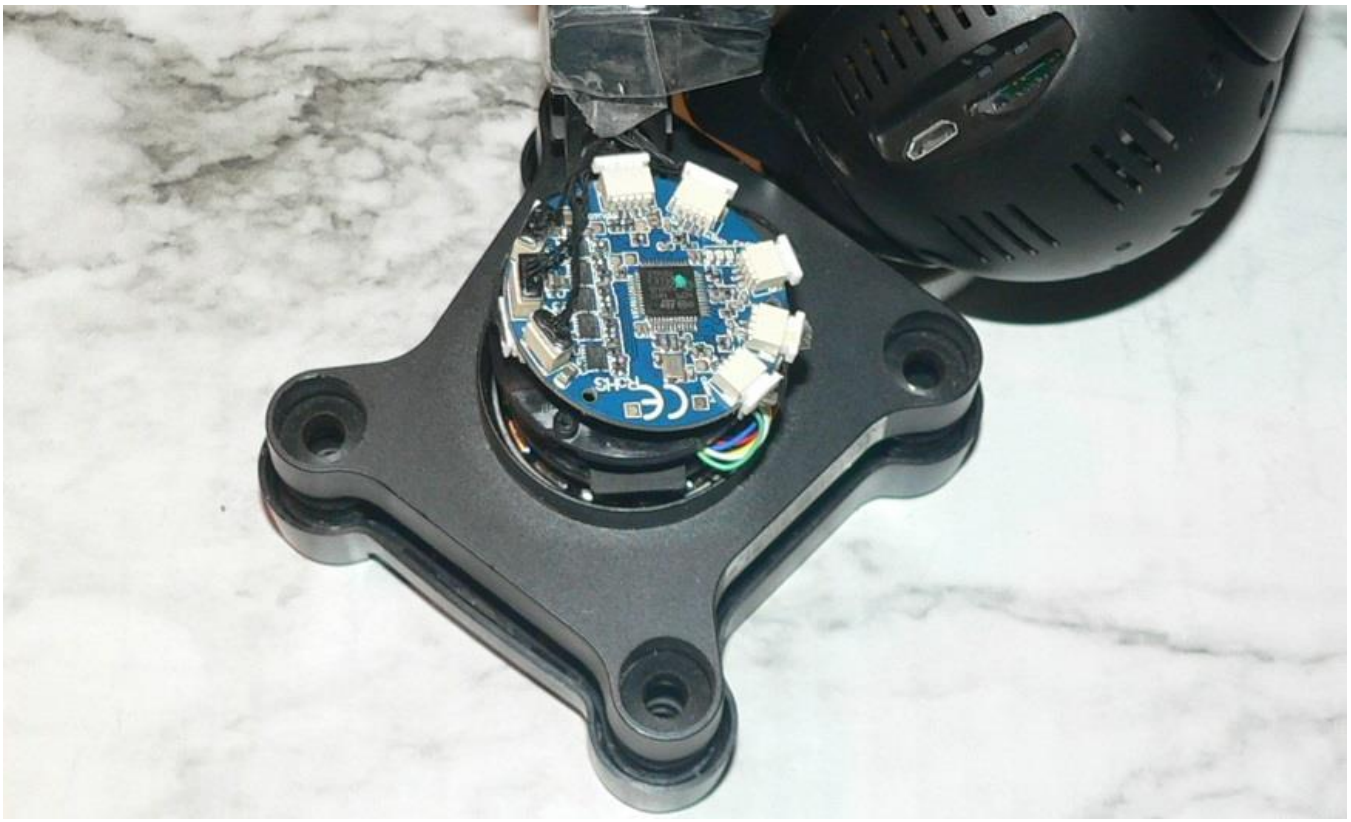
24). Remove temporary strap and lay gimbal board on support:

25). Connect Slip Ring Terminal:



Attachment 11
CGo3+ Yaw Encoder Access

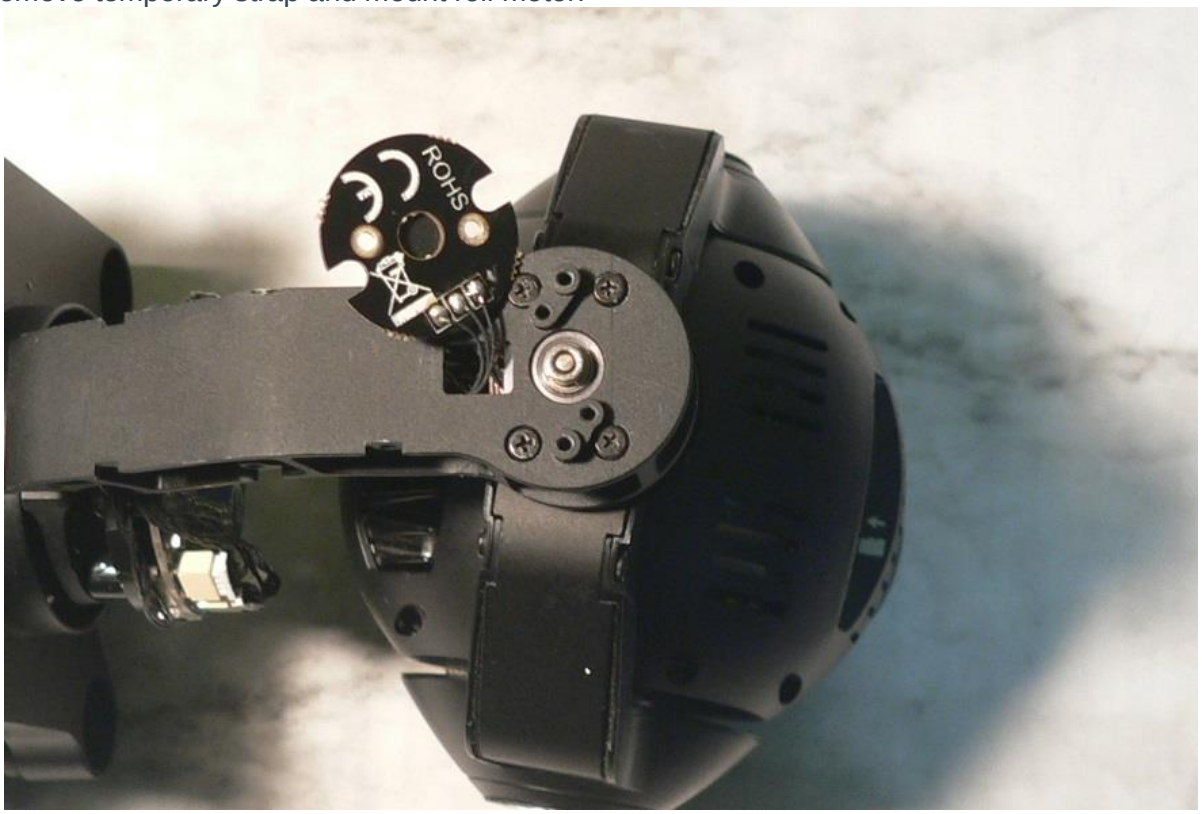
26). Connect Yaw Encoder terminal:



27). Mount Gimbal Board with three screws:

Attachment 11
CGo3+ Yaw Encoder Access

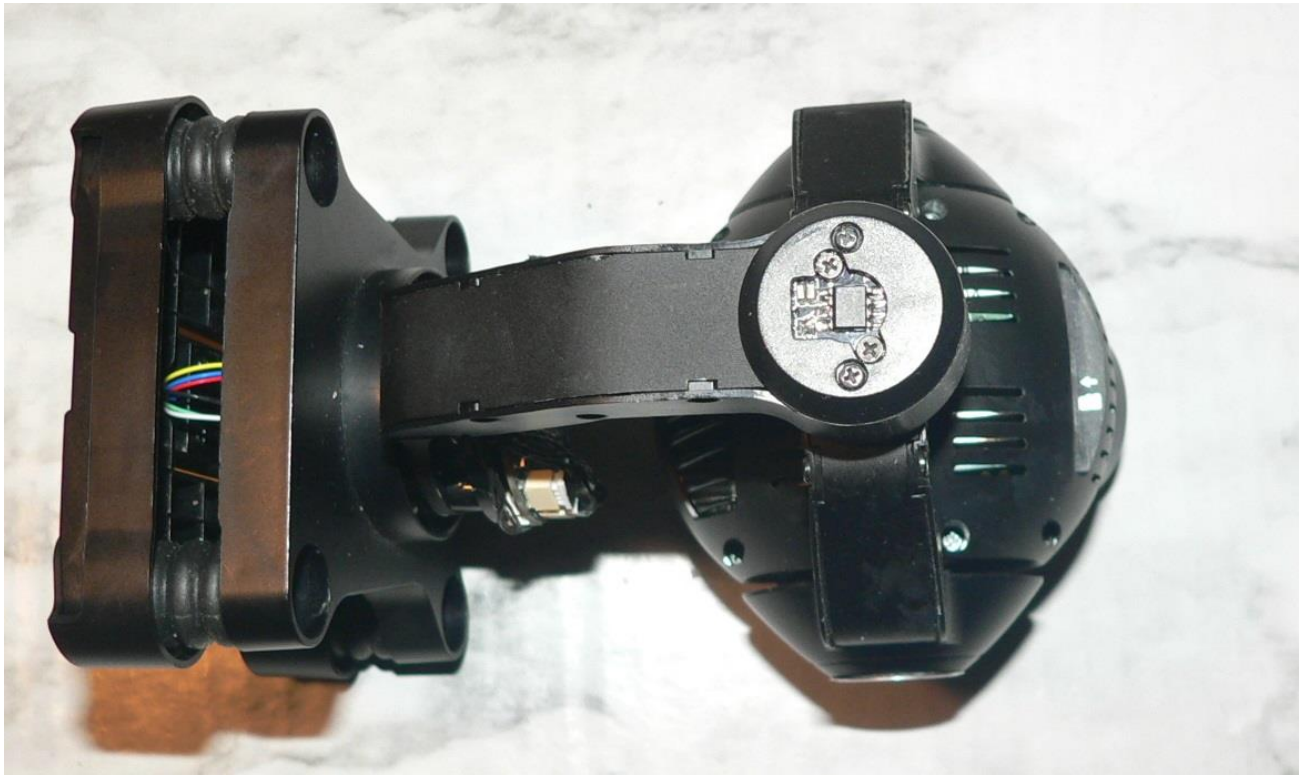
28). Remove temporary strap and mount roll motor:



29). Mount the roll encoder:

Attachment 11
CGo3+ Yaw Encoder Access

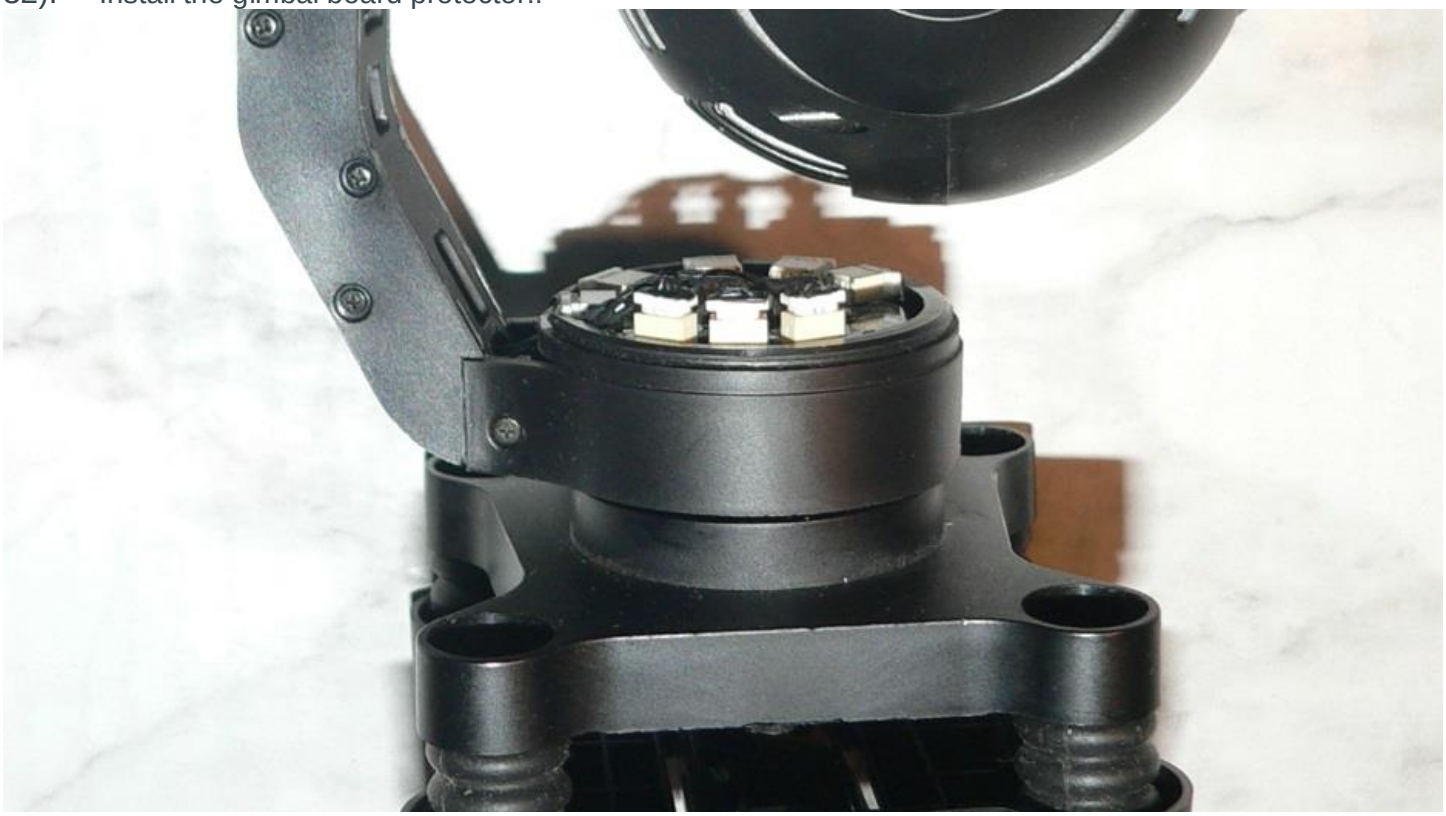
30). Install the rear arm cover and :rear screws



31). Install these three rear arm cover side screws on each side::

Attachment 11
CGo3+ Yaw Encoder Access

32). Install the gimbal board protector::

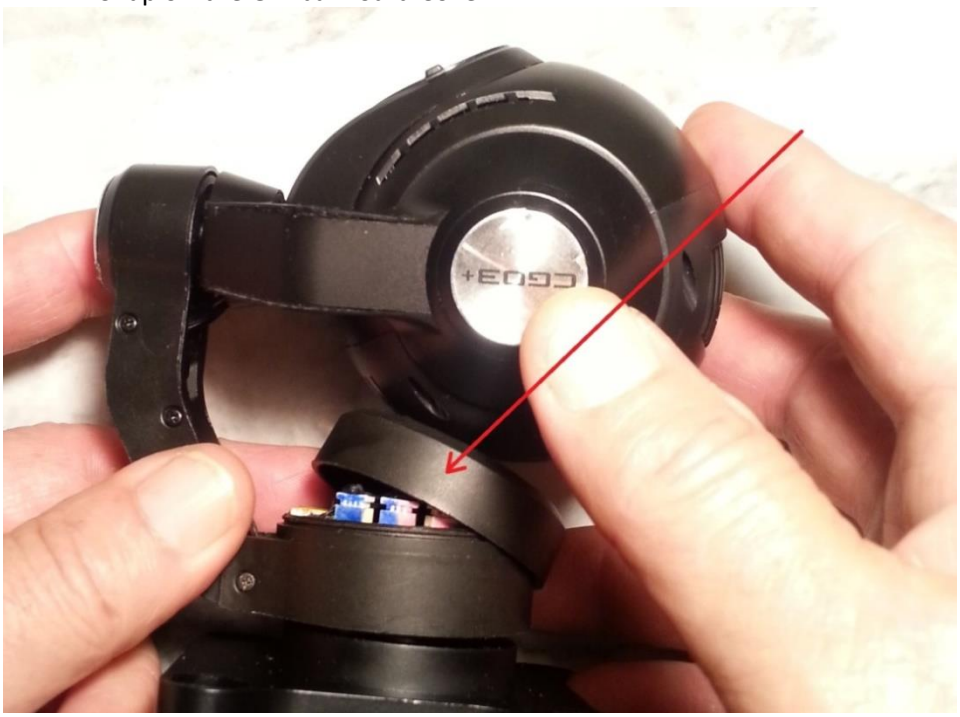


33). Install the gimbal board protector cap::

34). Install rear decoration:

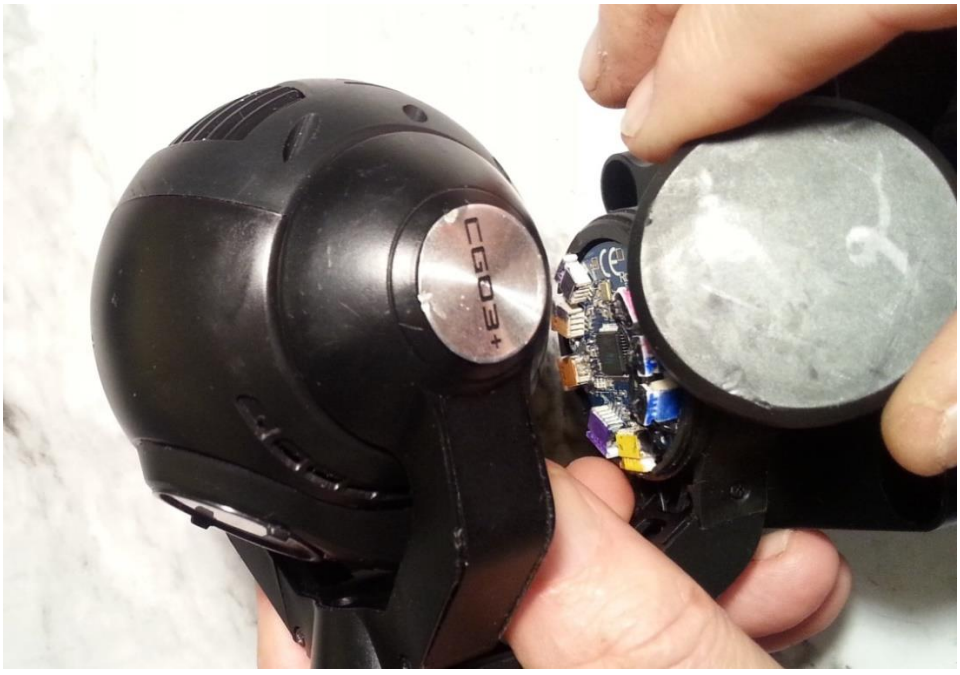
Attachment 12
CGo3+ Tilt (Pitch) Encoder Replacement
Use of this information is at your own risk.

1. Snap off the Gimbal Board Cover:



Note: Rotate camera as needed to maximize available clearance. Do not apply significant pressure. Work with the angles until the cover comes free with as little force as possible.

2. Carefully work the Gimbal Board Cover off, and set it aside.



Attachment 12
CGo3+ Tilt (Pitch) Encoder Replacement

3. Remove the two screws (one on each side) holding the Gimbal Board Enclosure to the rear arm:

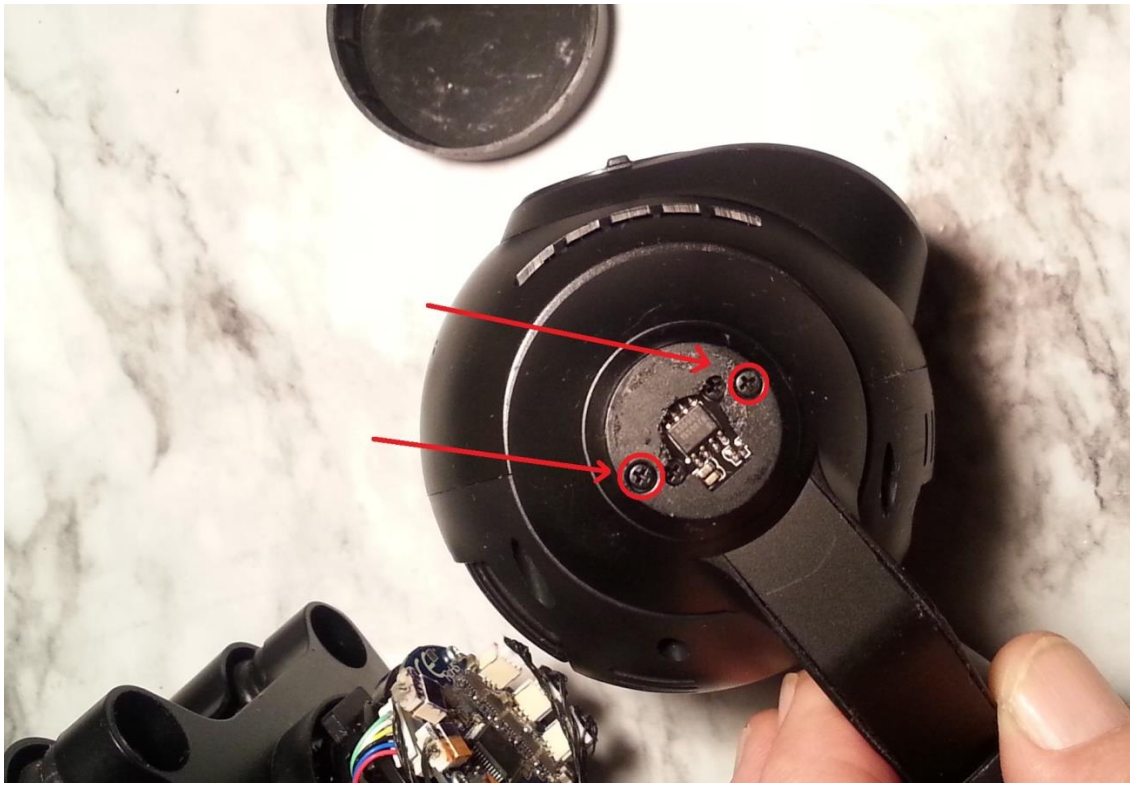
Note: Take full advantage of the gap in the enclosure to clear the connectors. Again, rotate camera as needed to maximize available clearance. Do not apply significant pressure. Work with the angles until the enclosure comes free with as little force as possible.

4. Remove cover:

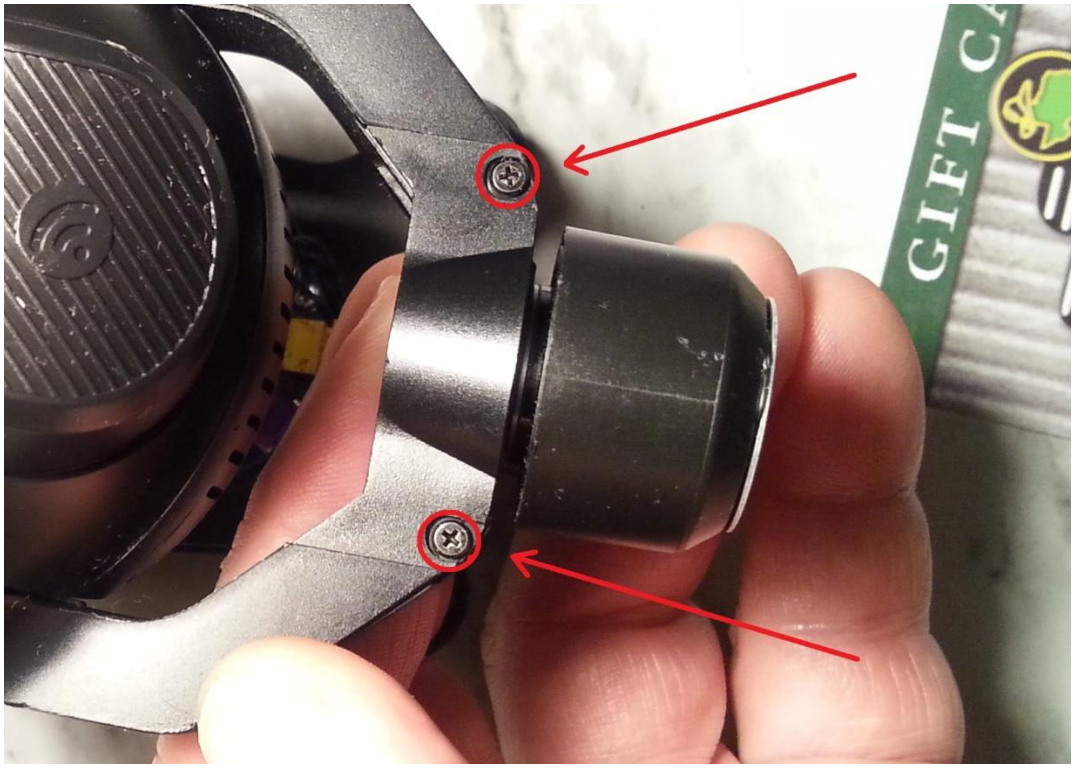
Attachment 12
CGo3+ Tilt (Pitch) Encoder Replacement

5. Use fingernails or thin plastic to remove the label over the Pitch (tilt) motor:

6. Remove these two screws. Leave the other two for now:



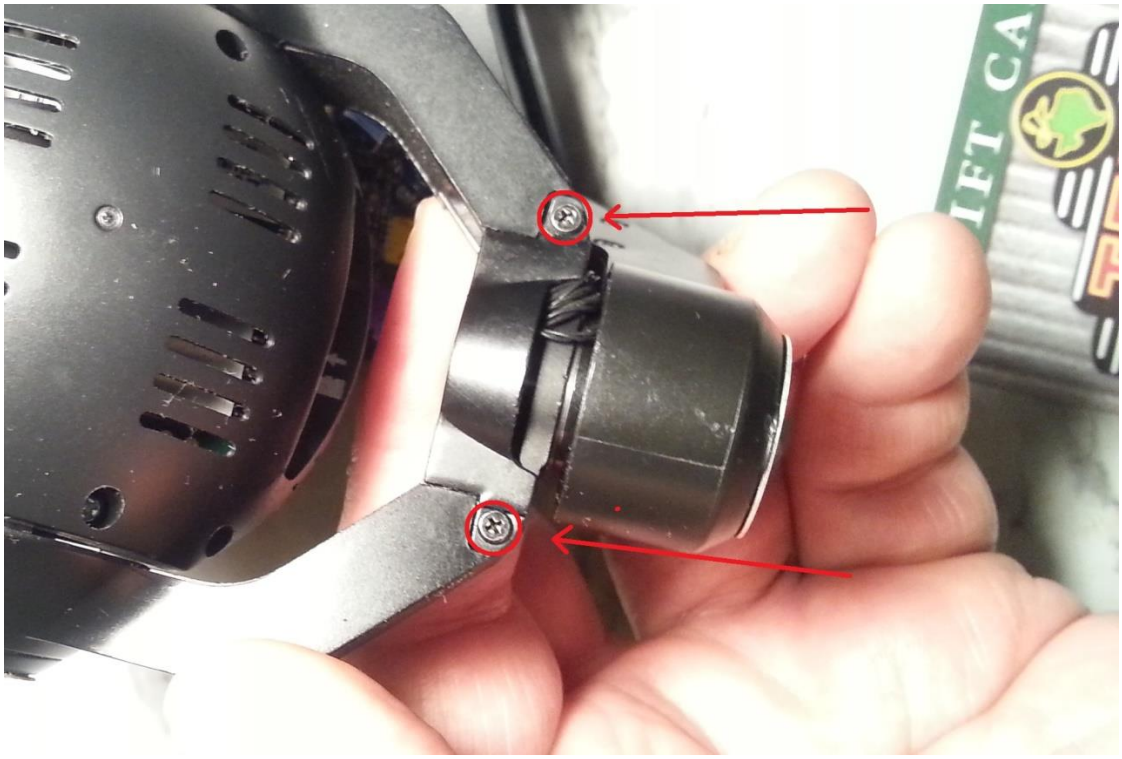
7. Remove the screws from the lower wire cover:



8. Remove the lower wire cover:

Attachment 12
CGo3+ Tilt (Pitch) Encoder Replacement

9. Remove the screws from the Upper wire cover:



10. Remove the upper wire cover:

Attachment 12
CGo3+ Tilt (Pitch) Encoder Replacement

11. Remove these screws from both sides of the rear arm cover:

12. Use fingernails or thin plastic to remove the label over the Roll motor:

13. Remove these two screws. Leave the other two.

14. Spread the rear arm covers enough to clear the latch points:

Attachment 12
CGo3+ Tilt (Pitch) Encoder Replacement

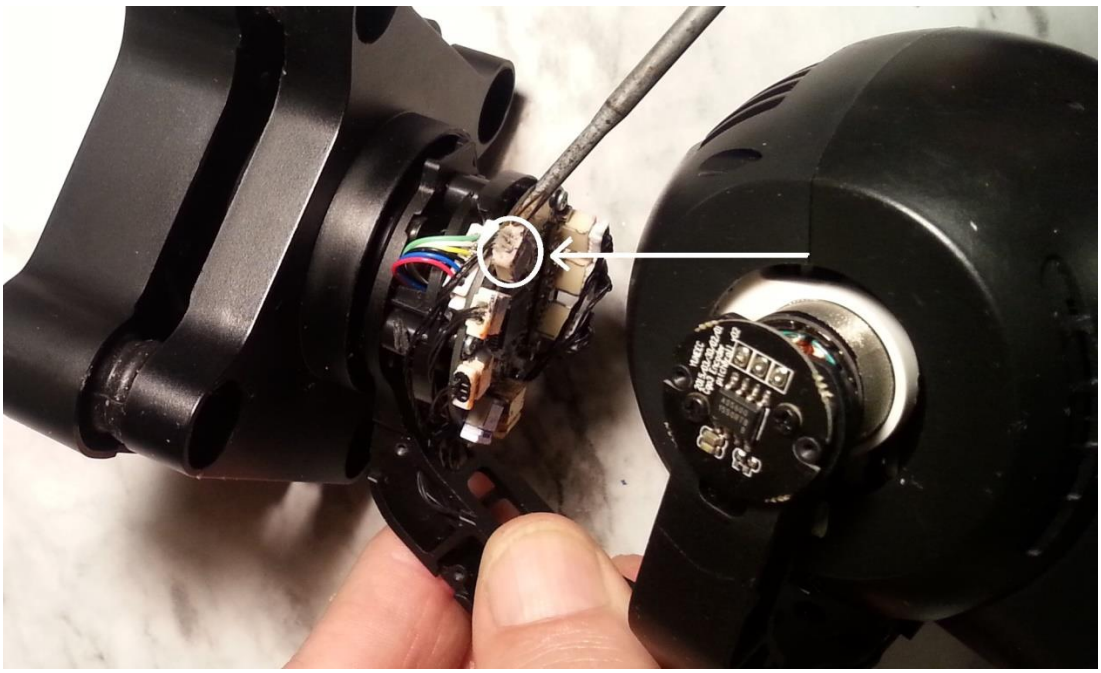
15. Remove the Rear Arm Cover:

16. Spread the pitch arm covers enough to clear the latch points:

Attachment 12
CGo3+ Tilt (Pitch) Encoder Replacement

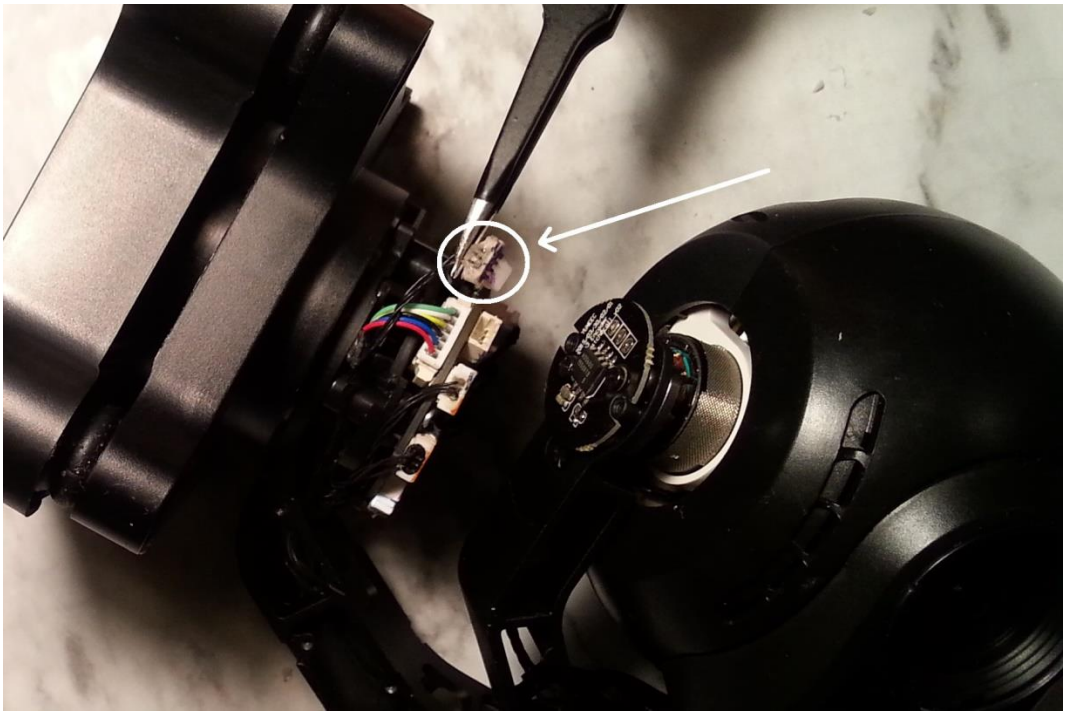
17. Remove the Pitch Arm Cover:

18. Locate the Pitch (tilt) Encoder connector:



Attachment 12
CGo3+ Tilt (Pitch) Encoder Replacement

19. Unplug the Pitch (tilt) Encoder connector:

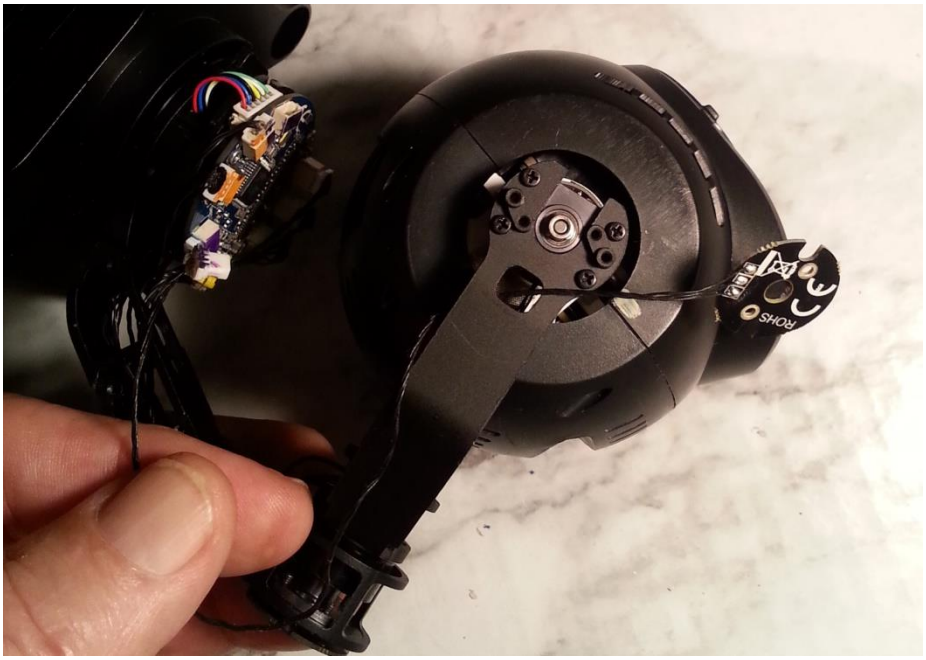


20. Remove the Pitch (tilt) encoder mounting screws:

Attachment 12
CGo3+ Tilt (Pitch) Encoder Replacement

Note: Use caution to avoid damage to the encoder wire if there is any possibility you will need it later. This is a tedious task. Use of tools such as tweezers and dental picks can help.

21. Carefully thread the encoder wire out through the rear arm and pitch arm frames:

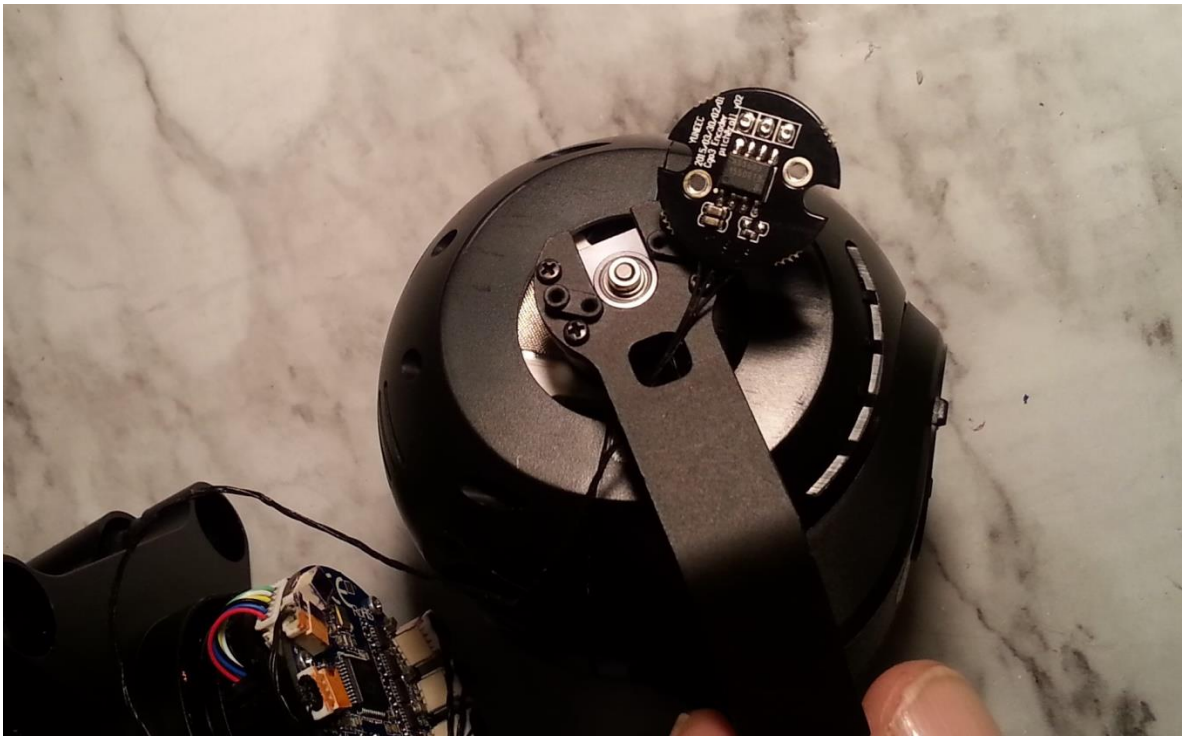


Note: The old encoder should be removed from the work area to avoid any possible confusion regarding which is the old and which is the new.

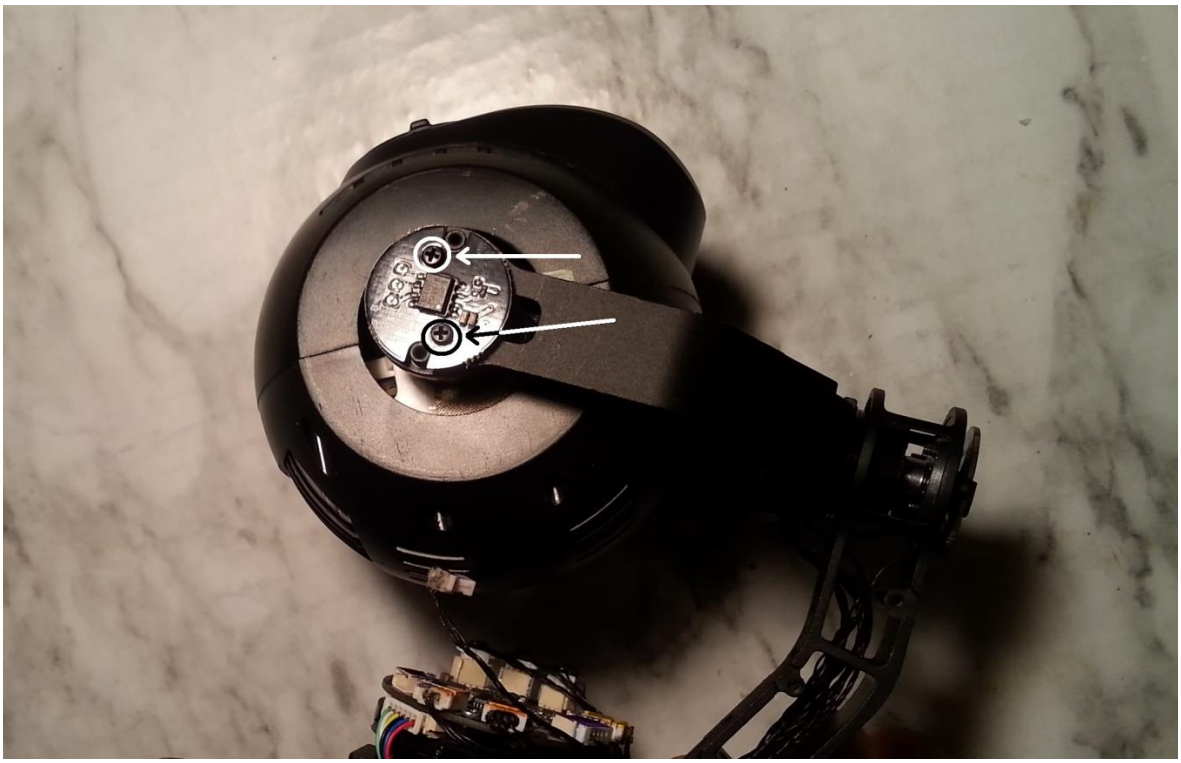
22. Thread the old encoder wire out through the square hole in the Encoder Arm, and set it aside.

Attachment 12
CGo3+ Tilt (Pitch) Encoder Replacement

23. Thread the new encoder wire in through the square hole in the Encoder Arm:

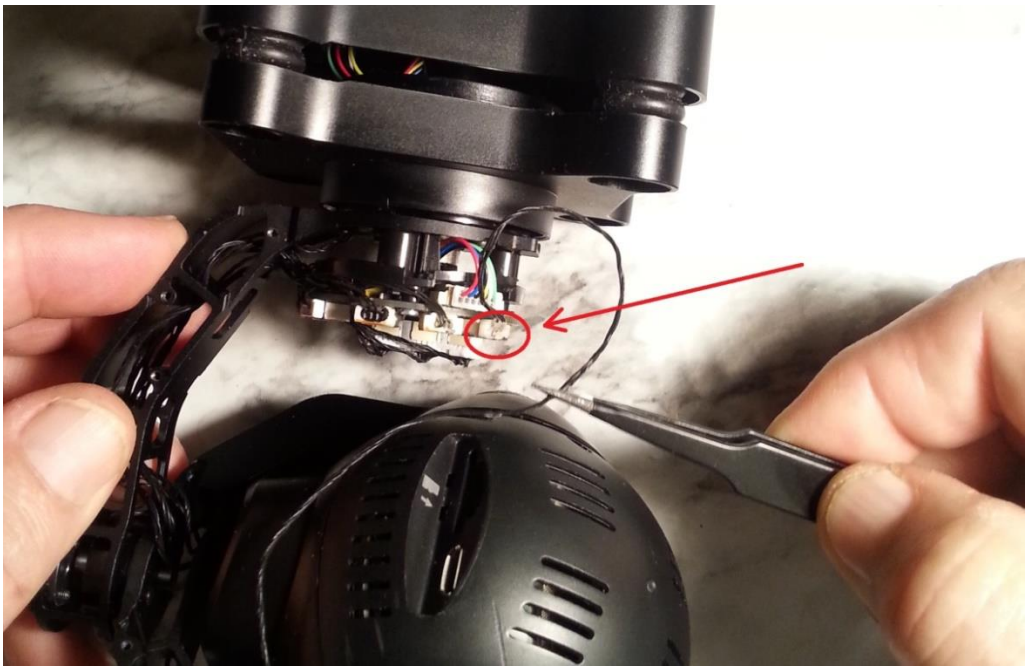


24. Mount the Pitch(tilt) encoder and install the mounting screws:



Attachment 12
CGo3+ Tilt (Pitch) Encoder Replacement

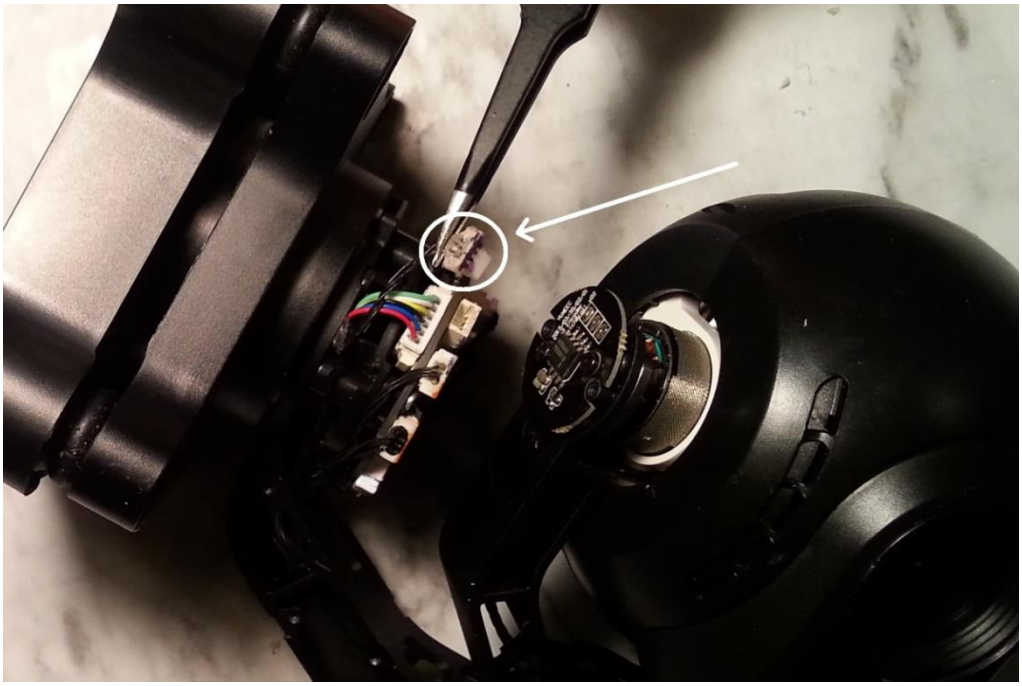
25. IF desired to complete camera assembly without testing the new encoder, then read the NOTE prior to Step 29 and GO TO Step 29.
26. OPTIONAL Step 1 – Plug the new encoder wire into the gimbal board connector.



27. OPTIONAL Step 2 – Power the camera up, and verify proper Pitch (tilt) performance:

Attachment 12
CGo3+ Tilt (Pitch) Encoder Replacement

28. OPTIONAL Step 3 – Unplug the new encoder wire from the gimbal board connector:



Note: Use caution to avoid damage to the encoder wire

29. Carefully thread the encoder wire back through the pitch arm, rear arm and plug into the gimbal board connector.

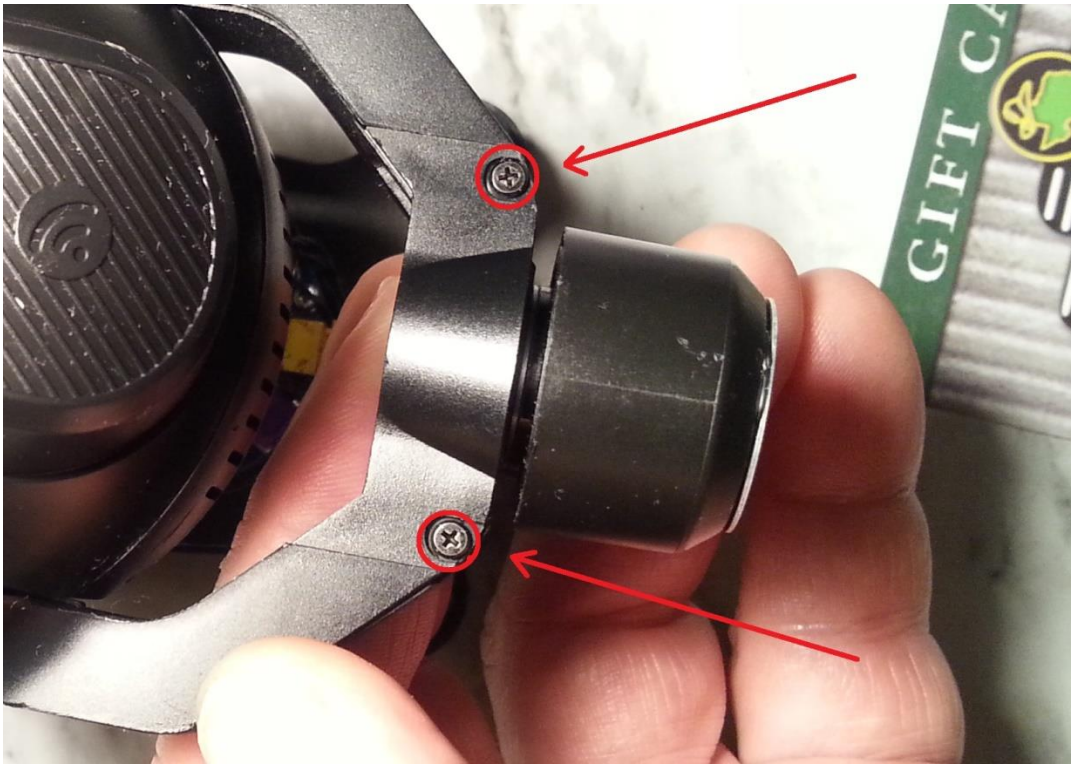
Attachment 12
CGo3+ Tilt (Pitch) Encoder Replacement

30. Install the Pitch Arm Cover and the two screws at the hub:

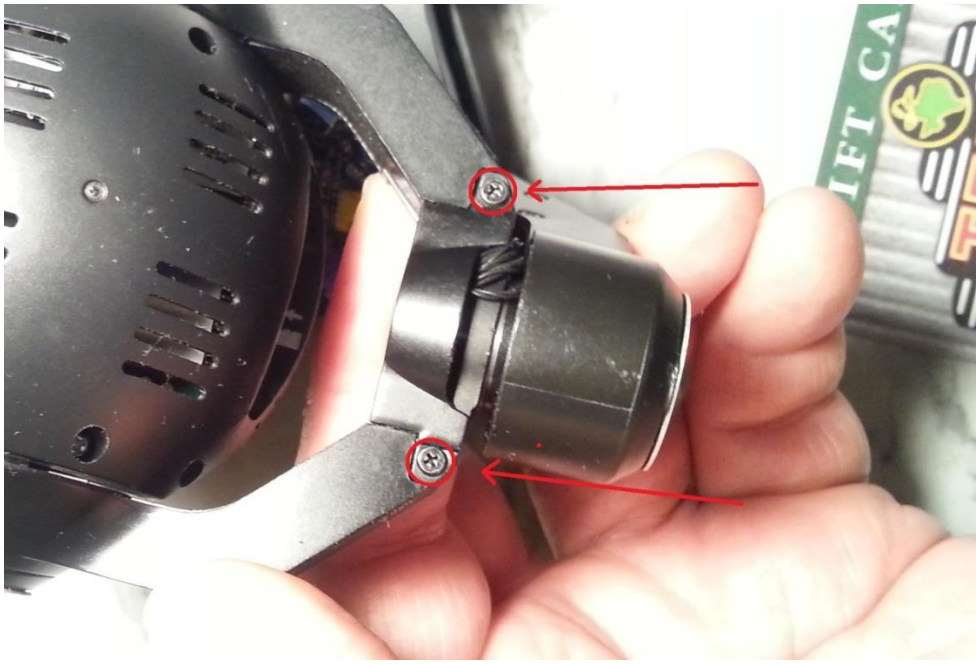
31. Install the Rear Arm Cover and the two screws at the hub:

32. Install the screws on both sides of the rear arm cover:

33. Install the lower wire cover and both screws:



34. Install the Upper wire cover and both screws:



Note: Take full advantage of the gap in the enclosure to clear the connectors. Rotate camera as needed to maximize available clearance. Do not apply significant pressure. Work with the angles and move the enclosure into position over the gimbal board.

35. Work Gimbal Board Enclosure into position over the gimbal board:

Attachment 12
CGo3+ Tilt (Pitch) Encoder Replacement

Note: Use fingernails or plastic tool to pry the Gimbal Board Enclosure arms over the rear arm tabs.

36. Work Gimbal Board Enclosure into position over the gimbal board, and install screws on both sides:

Note: Rotate camera as needed to maximize available clearance. Do not apply significant pressure. Work with the angles until the cover is aligned with the Gimbal Board Enclosure:

37. Move Gimbal Board Cover into position over gimbal board.

Attachment 12
CGo3+ Tilt (Pitch) Encoder Replacement

38. Snap Gimbal Board Cover into place.
39. Replace emblems on Pitch Arm and Rear Arm covers.
40. Power up camera and verify proper operation.