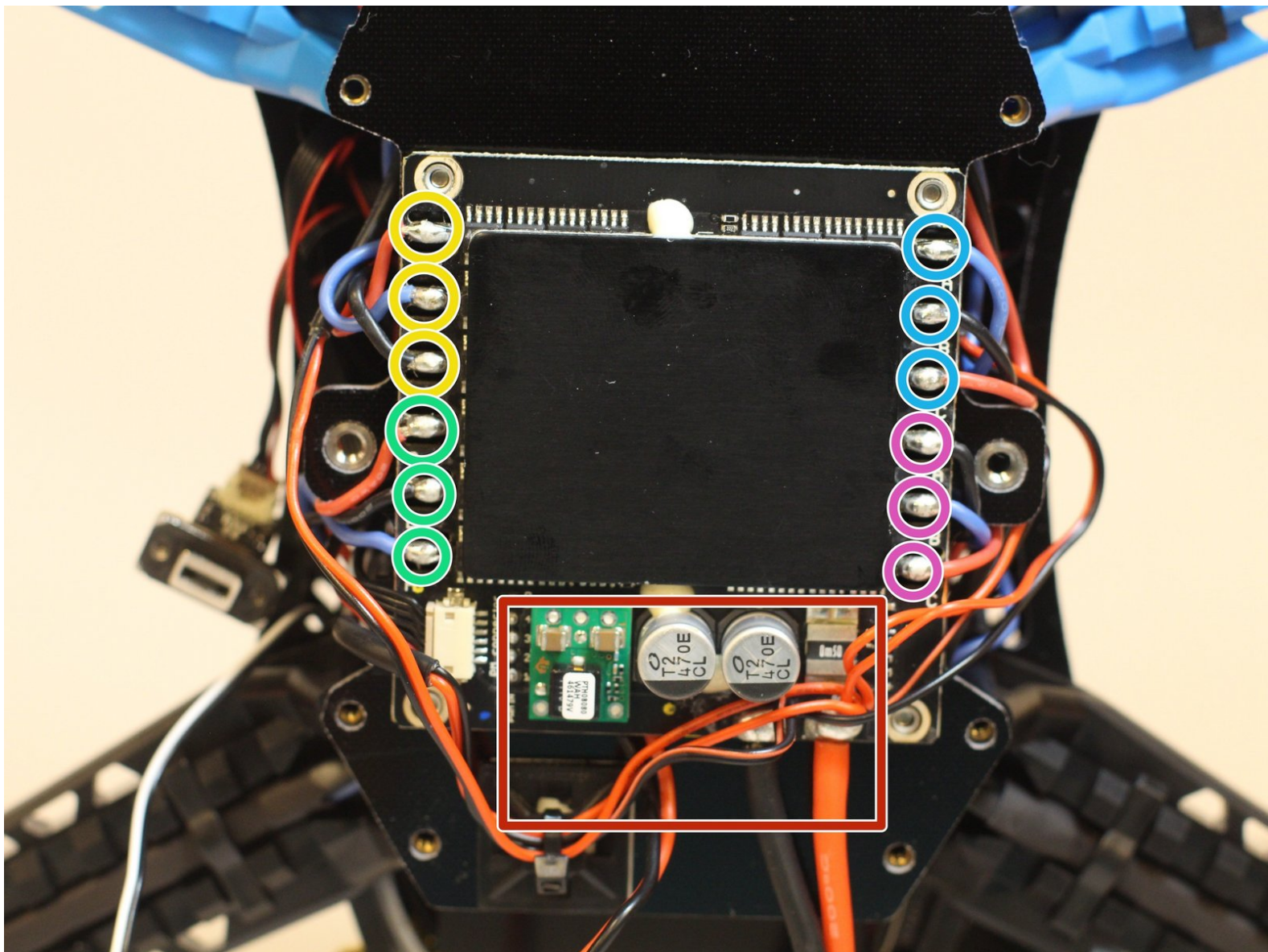




# 3DR Iris Plus Quadcopter Motor Replacement

This guide will walk users through removing and replacing one of the propeller motors in the 3DR Iris Plus.

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## INTRODUCTION

The propeller motors are a crucial component in providing power to the propellers so that the 3DR Iris Plus can fly. However, if you are experiencing any problems with one or more motors that is preventing the drone from flying (which can be diagnosed using our troubleshooting guide), you will need to replace them. This guide details how to replace one of the motor assemblies used within the 3DR Iris Plus.



### TOOLS:

- [3mm Hex Key](#) (1)
- [2mm Hex Key](#) (1)
- [Soldering Iron](#) (1)



### PARTS:

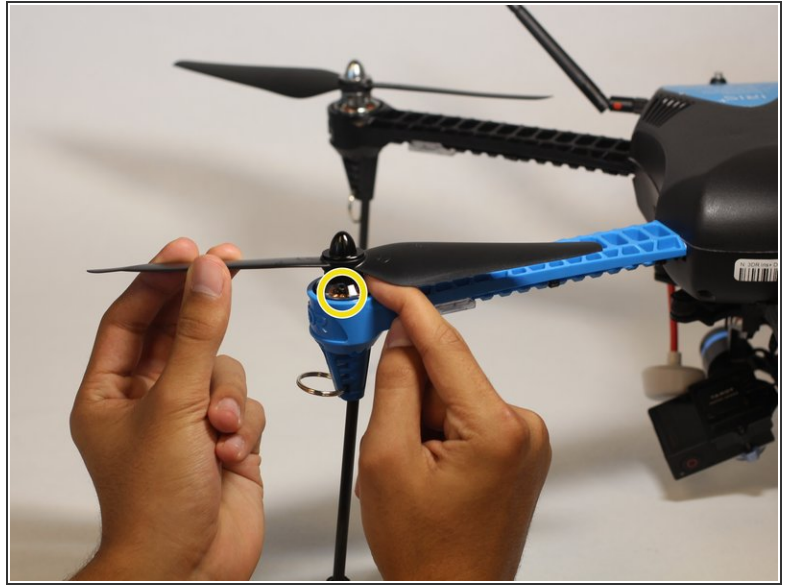
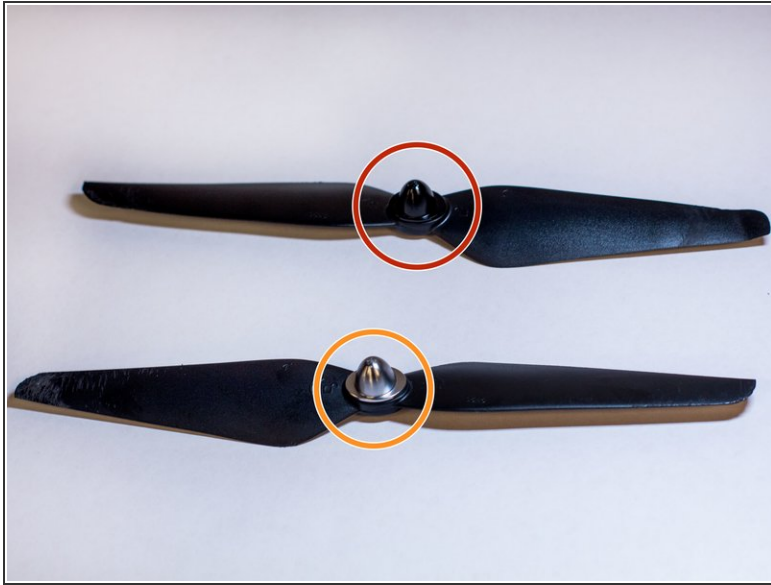
- [3DR Iris Plus Motor Assembly](#) (1)

## Step 1 — Battery



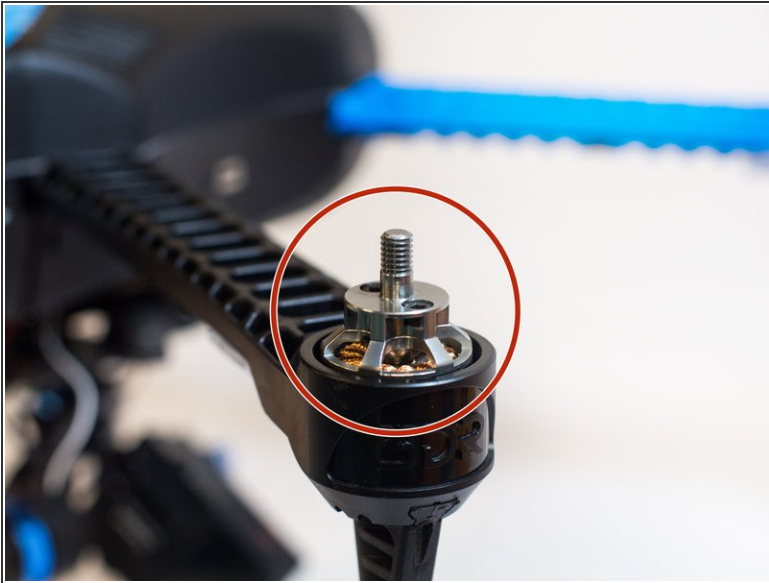
- Power off the drone by holding down the power button.
  - Remove the battery by disconnecting it from the main battery connector.
  - Press the power button again to ensure all electricity is discharged.
- ⚠ This step is imperative as it is dangerous to handle drone components with a running current!

## Step 2 — Propeller



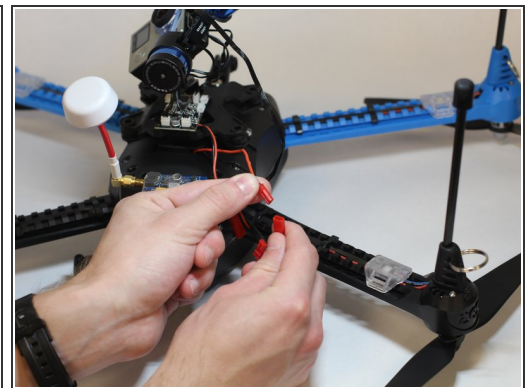
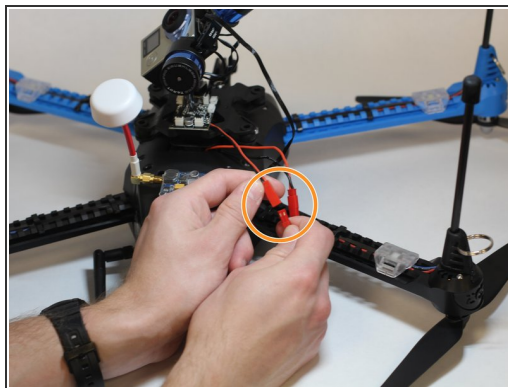
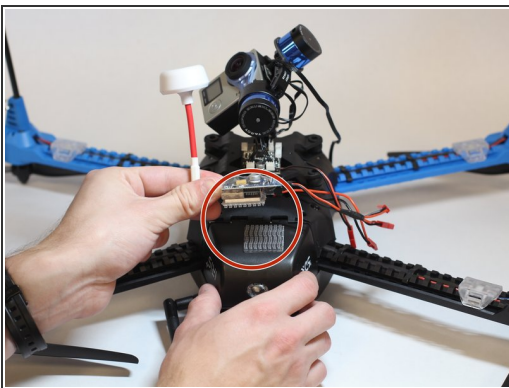
- i Take note of the propeller cap color (either black or silver).
- Hold down the motor assembly and twist the propeller clockwise to unlock it (you should feel some resistance until it starts to unscrew freely).
- Hold down the motor assembly and twist the propeller counterclockwise to unlock it (you should feel some resistance until it starts to unscrew freely).
- This is the motor assembly.

## Step 3



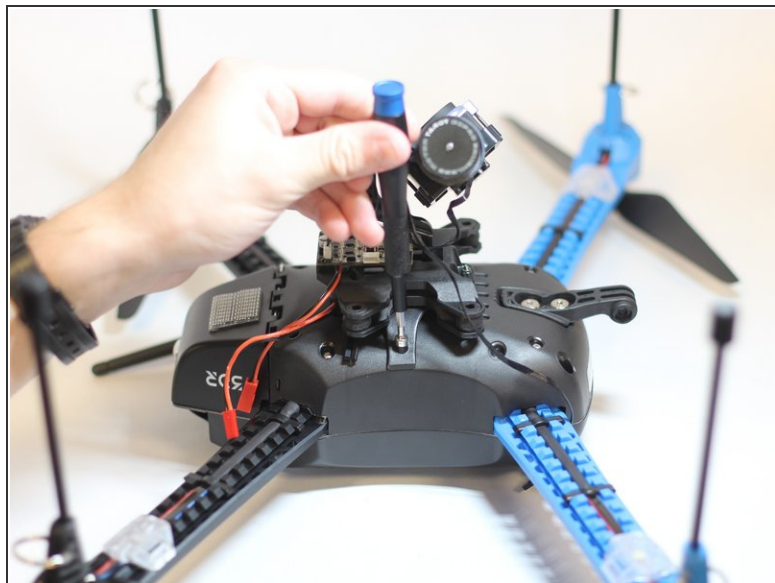
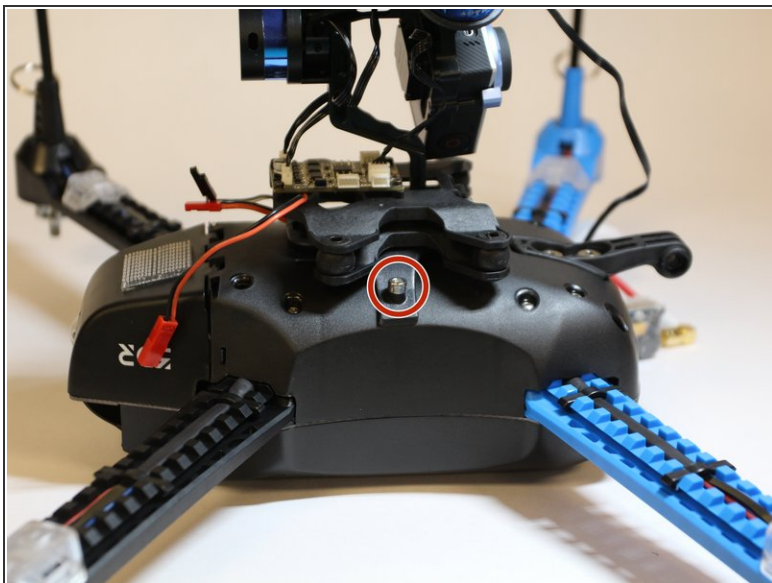
- Ensure that the propeller cap color (black or silver) matches the propeller screw cap color.
- i* There are two different types of propellers so make sure you're using the correct one.

## Step 4 — Gimbal



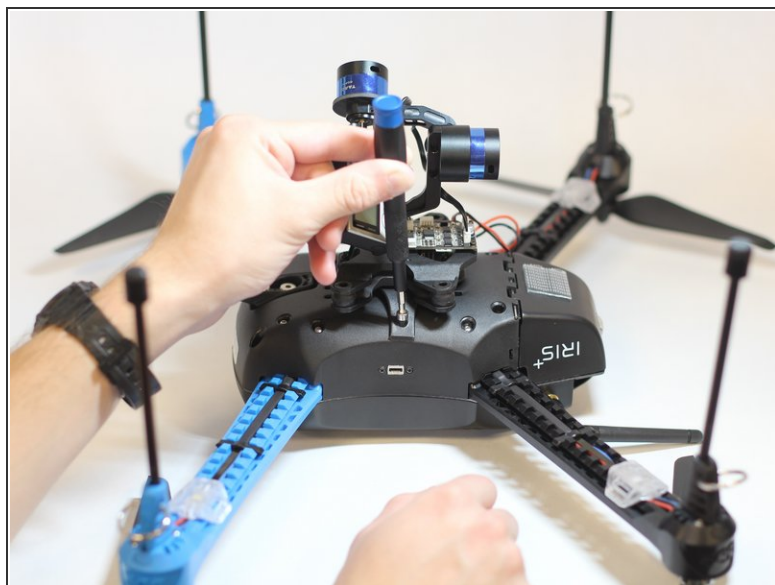
- If your drone is equipped with it, remove the video transmitter.
- Disconnect all cables from the gimbal.
- If your drone has neither the gimbal or video transmitter, you can skip this step.

## Step 5



- Unscrew the 16 mm screw attaching the gimbal mount to the body of the drone using the 3 mm Hex screwdriver/key.

## Step 6



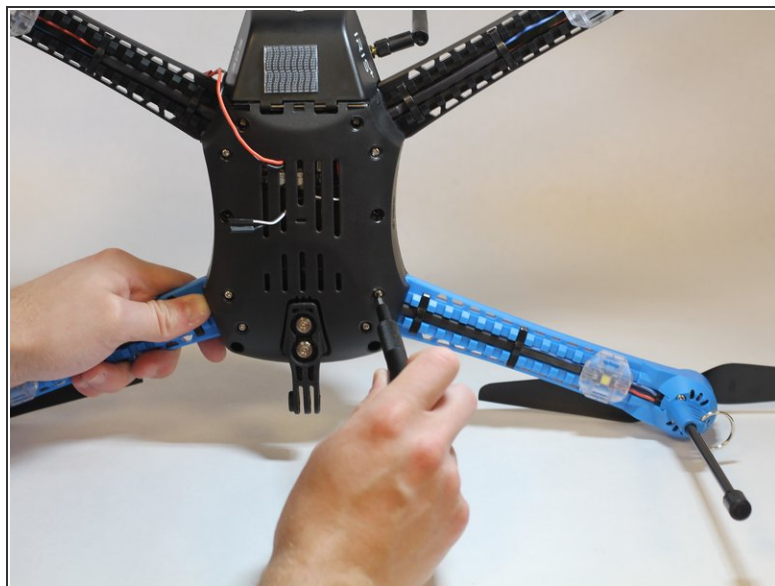
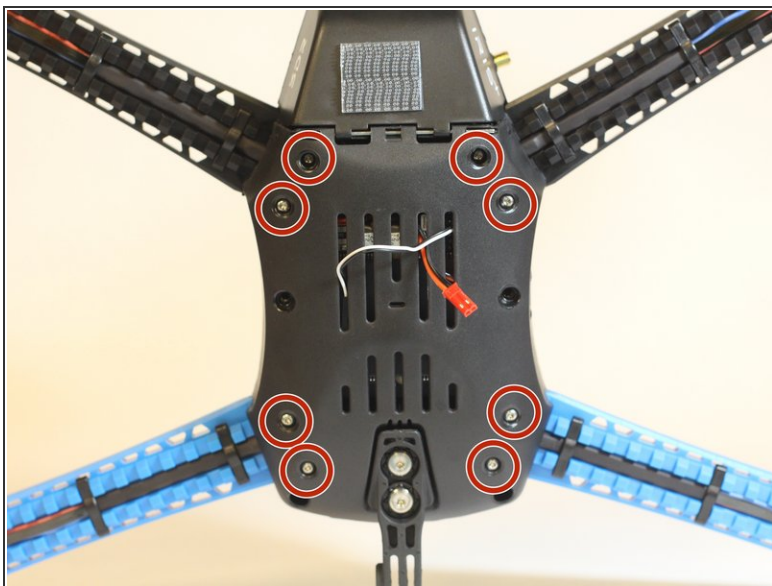
- Rotate the drone 180 degrees.
- Unscrew the other 16mm gimbal mount screw using the 3 mm Hex screwdriver/key.

## Step 7



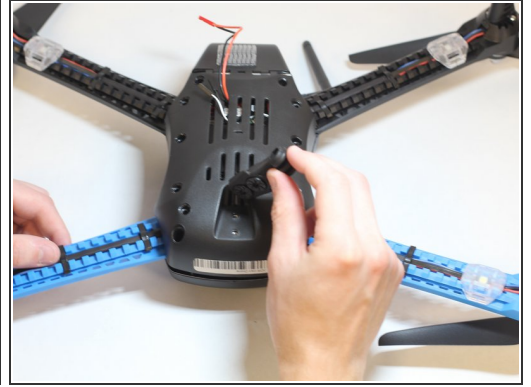
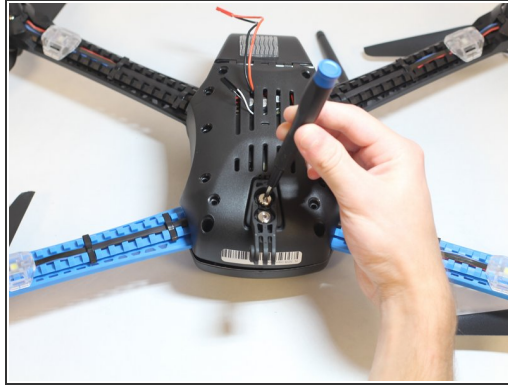
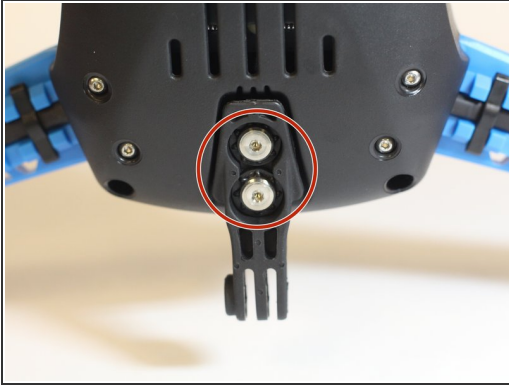
- Remove the gimbal mount from the body of the drone.

## Step 8 — Bottom Shell



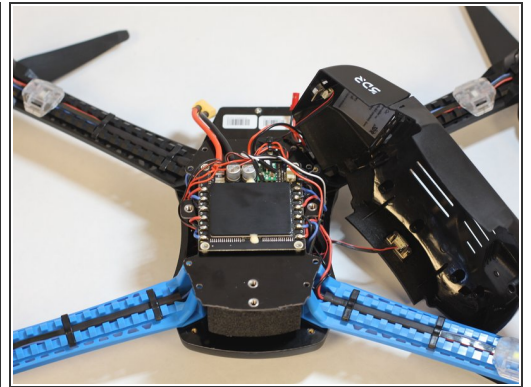
- Remove the eight 11mm screws attaching the underbody of the drone using the 2mm Hex screwdriver/key.

## Step 9



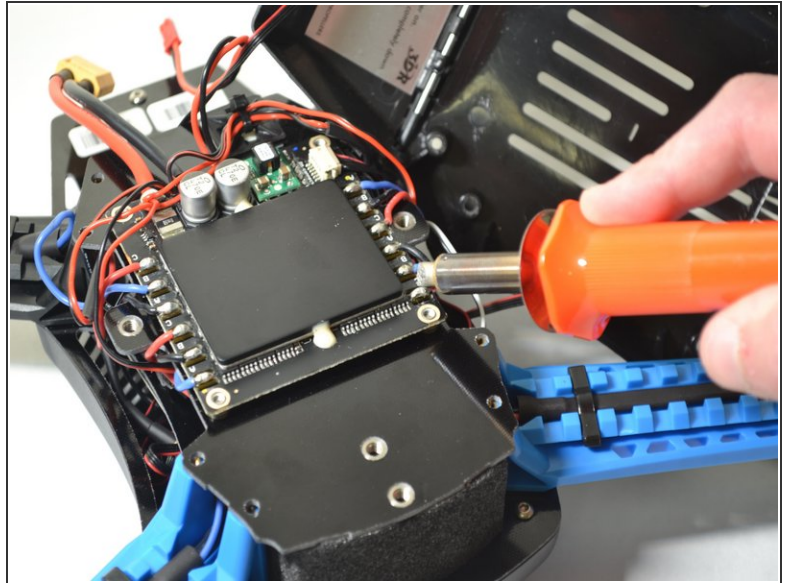
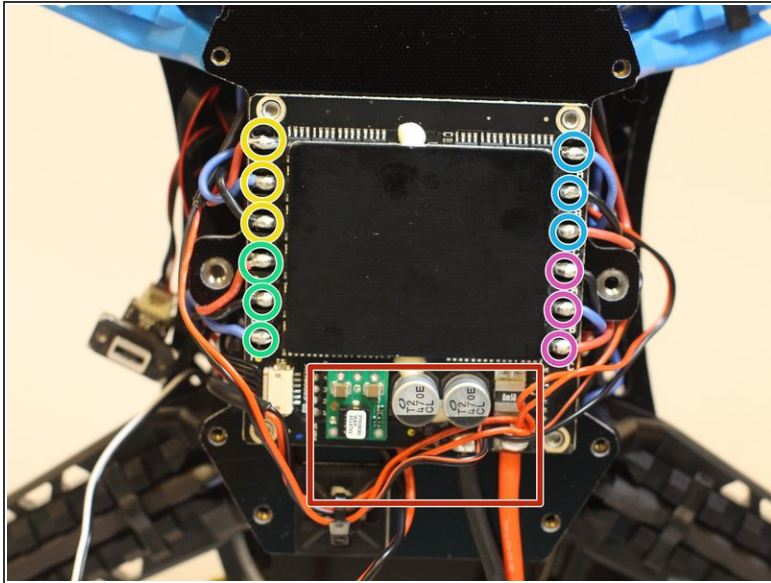
- Remove the two larger, 12mm screws attached to the Go Pro mount using the 3mm Hex screwdriver/key.
- Lift to remove the mount.

## Step 10



- Feed both wires through the grill of the bottom shell.
- Lift to remove the shell.
- ⓘ There are two cables tethering the shell to the body of the drone. It is difficult and unnecessary to remove them. Simply lay the shell to the side.

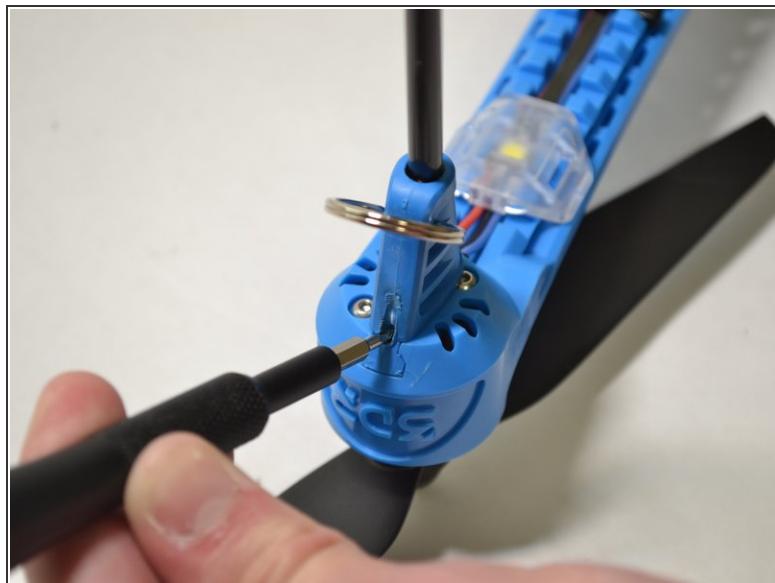
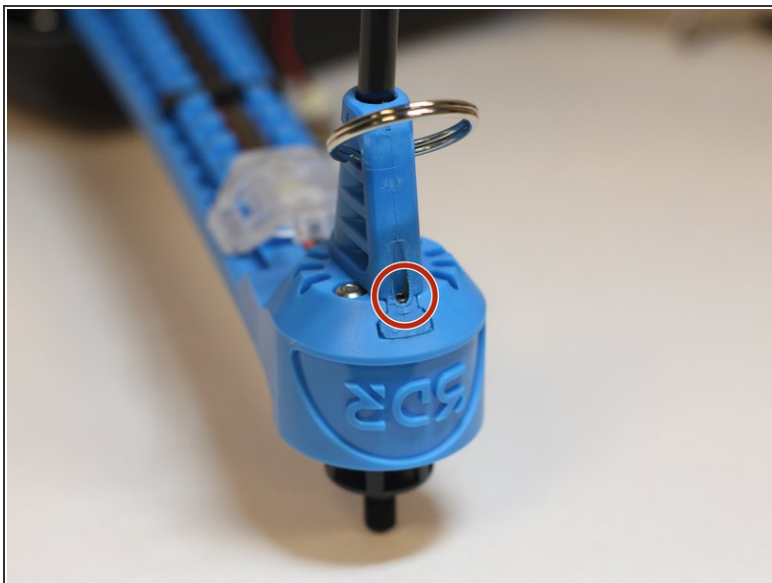
## Step 11 — Motor



- Ensure that the drone is in the same orientation as the picture (power connector and capacitors on the bottom).
- Top-left motor power cables
- Top-right motor power cables
- Bottom-left motor power cables
- Bottom-right motor power cables
- Desolder the motor power cables closest to the motor that you are replacing (the cables in each corner route to the closest leg).

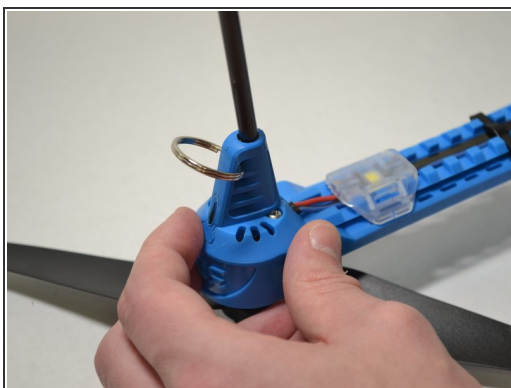
⚠ Exercise caution and follow proper desoldering procedures to ensure safety.

## Step 12



- On the leg that the motor is attached to, remove the 8mm screw that holds the long leg foot in place using the 1.5 mm Hex screwdriver/key.

## Step 13



- Slide the leg foot out of the leg assembly.

## Step 14



- Remove each of the plastic clips holding the motor cables in by snapping them out.
- Remove the two 9mm screws using a 2 mm Hex screwdriver/key. Once removed, the motor will hang freely from the leg chassis.
- Remove the LED assembly by snapping it off the clips that are attached to the drone leg.

## Step 15



- To remove the motor assembly, pull the motor assembly through and out of the leg chassis.

To reassemble your device, follow these instructions in reverse order.