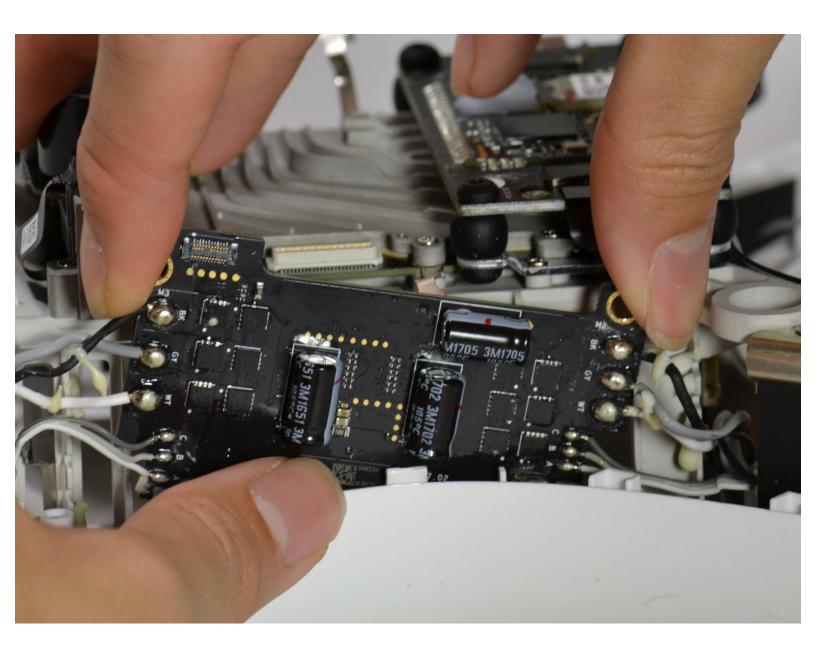


DJI Phantom 4 Advanced Electronic Speed Controller Replacement

How to replace the electronic speed controller on the DJI Phantom 4 Advanced.

Written By: Nicholas Allen



This document was generated on 2020-11-28 06:55:40 AM (MST).

INTRODUCTION

If the motors are intact but not starting, then there is a problem with the electronic speed controller. Use this guide to replace your damaged electronic speed controller.



TOOLS:

- 2mm Hex Key (1)
- JIS #000 Screwdriver (1)
- Soldering Iron (1)
- Metal Spudger (1)
- 1.5mm Hex Screwdriver (1)

Step 1 — Propeller





- Use your finger tips to pinch the damaged propeller.
- Twist the propeller counterclockwise and pull up to remove.

Step 2 — Shell





Remove the eight 7 mm hex screws by turning counterclockwise with a 2 mm hex bit.



- Pry the LED motor covers off with a metal spudger.
- The prying location is marked by an indent that points outward from the arm.

Step 4



 Pry the paper covering off the four corners with a metal spudger.

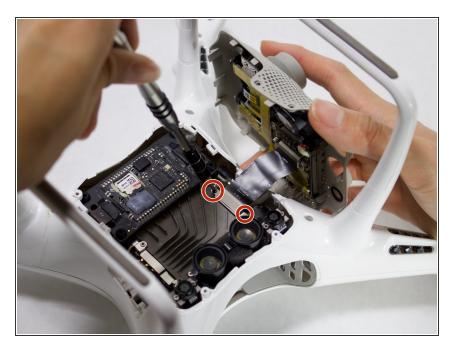


 Remove the twelve 8.7 mm hex screws with a 2 mm hex bit from the motor bases.



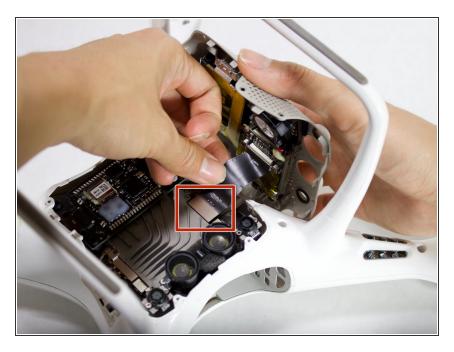


- Flip the drone on its back
- Remove the eight 4.5 mm hex screws by turning them counterclockwise with a 1.5 mm hex bit.
- Separate the mesh from the drone by pulling up gently and rocking left to right.
- ↑ The cable connects from the camera to the drone. Pulling up could rip the connection. Tilt the mesh 90 degrees towards the cable.



 Remove two 1.2mm screws using the JIS #000 bit from the camera cable retaining bracket.

Step 8



 Lift the camera connector at one end with your hand and remove the mesh.

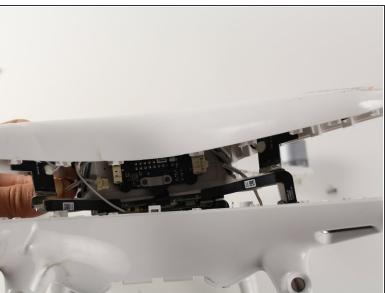






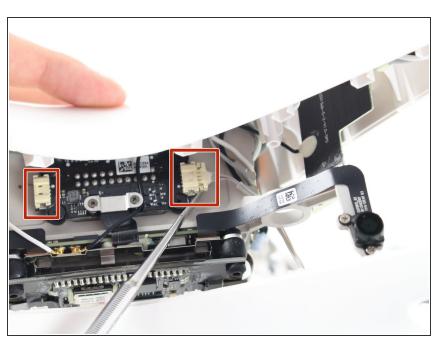
- Remove the two 1.2 mm screws using a JIS #000 bit from the antenna retaining bracket.
- Pull the four U.FL antennae up.
- ↑ The U.FL antenna connectors are fragile.
- Remove the two 4 mm screws using a JIS #000 bit.





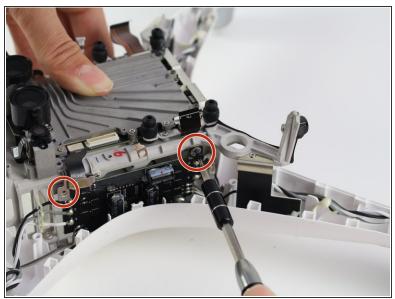
- Pry apart the clamshell at the motor end.
- Separate the clamshell.
- Two wires connect from the lower frame to the upper frame at the front of the drone. Pulling the clamshell apart hard may damage the connectors and wires.

Step 11



- Press the connector tabs with a spudger and pull on the wire simultaneously.
- Remove the shell from the rest of the drone.

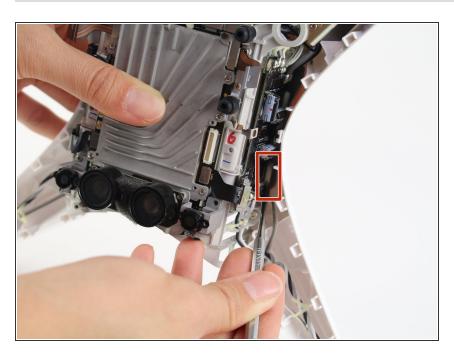
Step 12 — Electronic Speed Controller



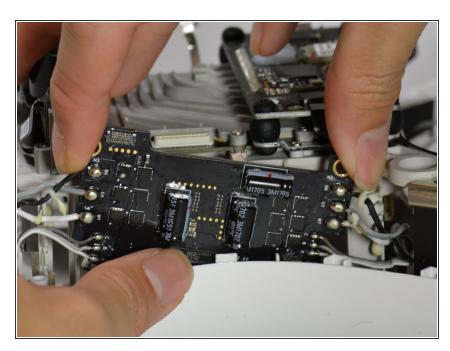


- Remove the two 4 mm screws using the JIS #000 bit.
- Flip the metal bracket to the right and slide up.
- ↑ Take care when handling the metal bracket because it can easily break off.

Step 13

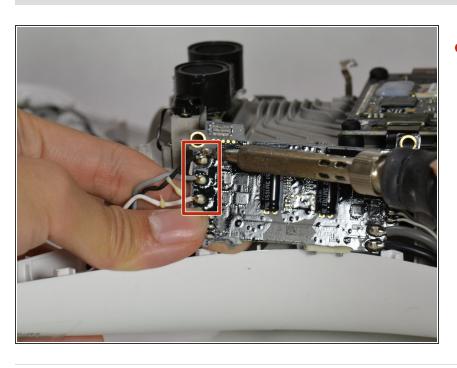


 Unlodge the glue from the board using a metal spudger.



 Jiggle the electronic speed controller board up and away from the drone.

Step 15



 Desolder the motor and LED wires on both sides of the board. For general soldering information, visit this <u>Soldering Technique Guide</u>.

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