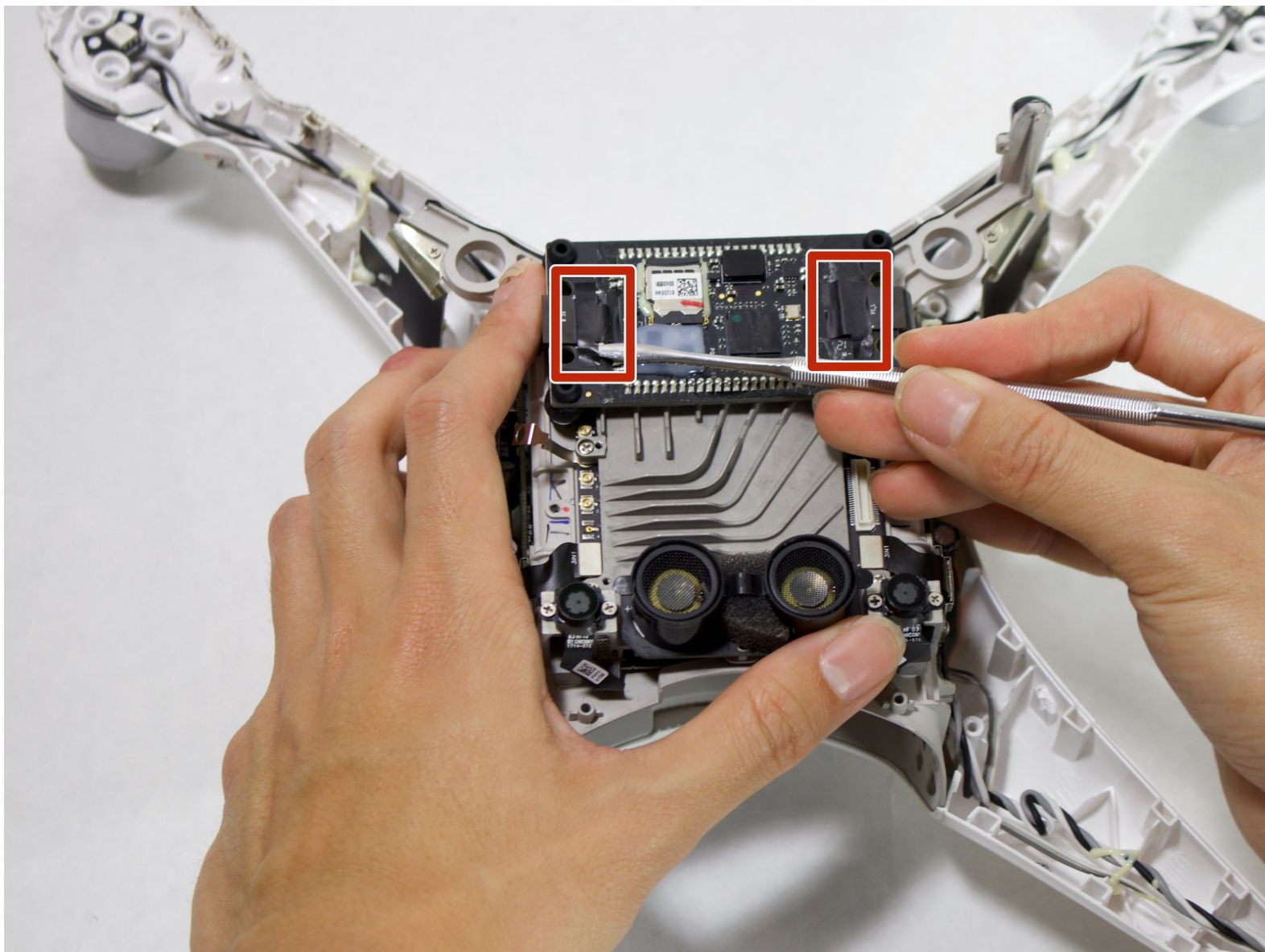




DJI Phantom 4 Advanced Flight Controller Replacement

How to replace the DJI Phantom 4 Advanced flight controller.

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INTRODUCTION

The flight controller houses sensors and firmware that are critical to the drone's functionality. If your drone experiences in-flight drifting or errors with the IMU after calibration, your flight controller board may need to be replaced. To replace the board, you need a JIS #000 screwdriver, a 2mm hex bit, a 1.5mm hex bit, and a metal prying tool. Take special care when removing and installing the U.FL connector.



TOOLS:

- [1.5mm Hex Screwdriver](#) (1)
 - [2 mm Hex Screwdriver](#) (1)
 - [Metal Spudger](#) (1)
 - [JIS #000 Screwdriver](#) (1)
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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.

Step 3



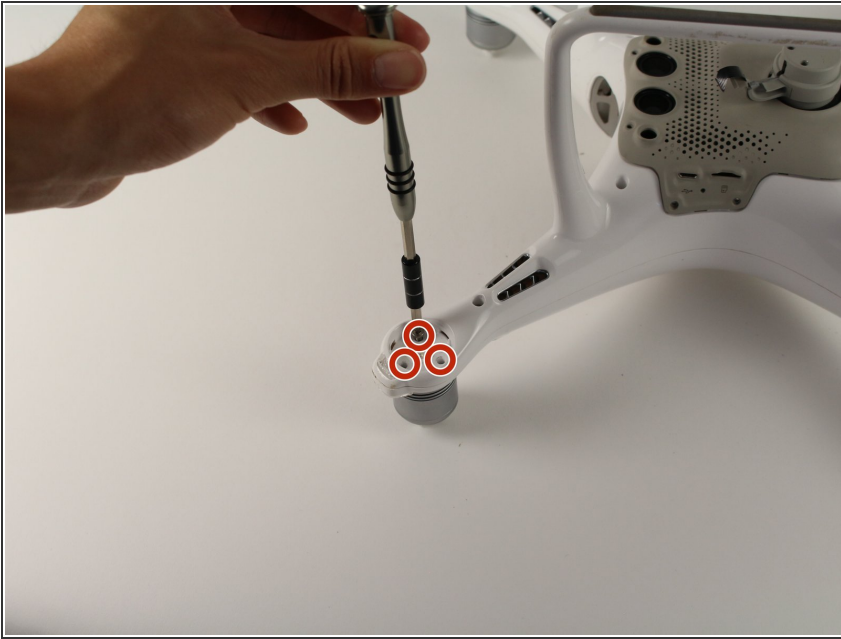
- Pry the LED motor covers off with a metal spudger.
- ⓘ The prying location is marked by an indent that points outward from the arm.

Step 4



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

Step 5



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

Step 6



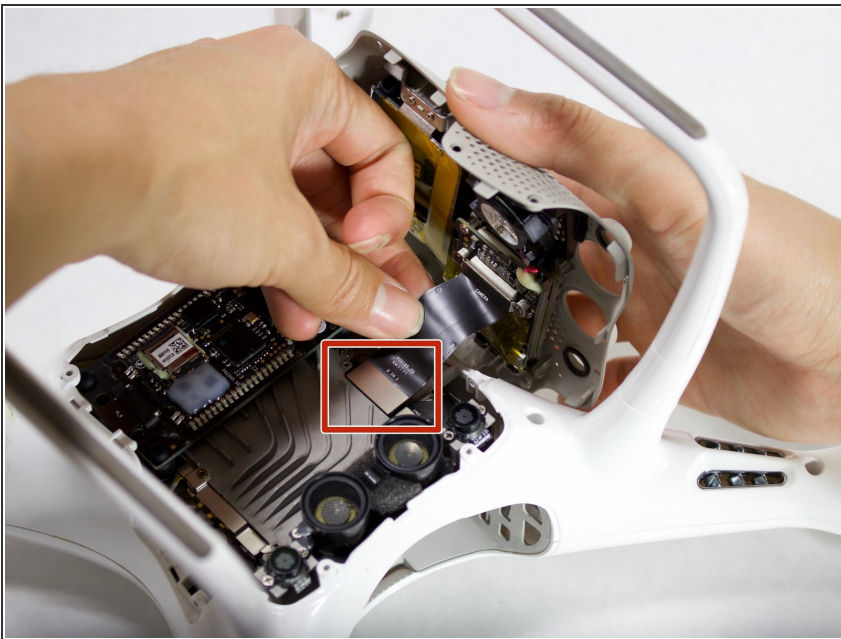
- Flip the drone on its back
 - Remove the eight 4.5 mm hex screws by turning them counterclockwise with a 1.5 mm hex bit.
 - Separate the mesh from the drone by pulling up gently and rocking left to right.
- ⚠ The cable connects from the camera to the drone. Pulling up could rip the connection. Tilt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

Step 7



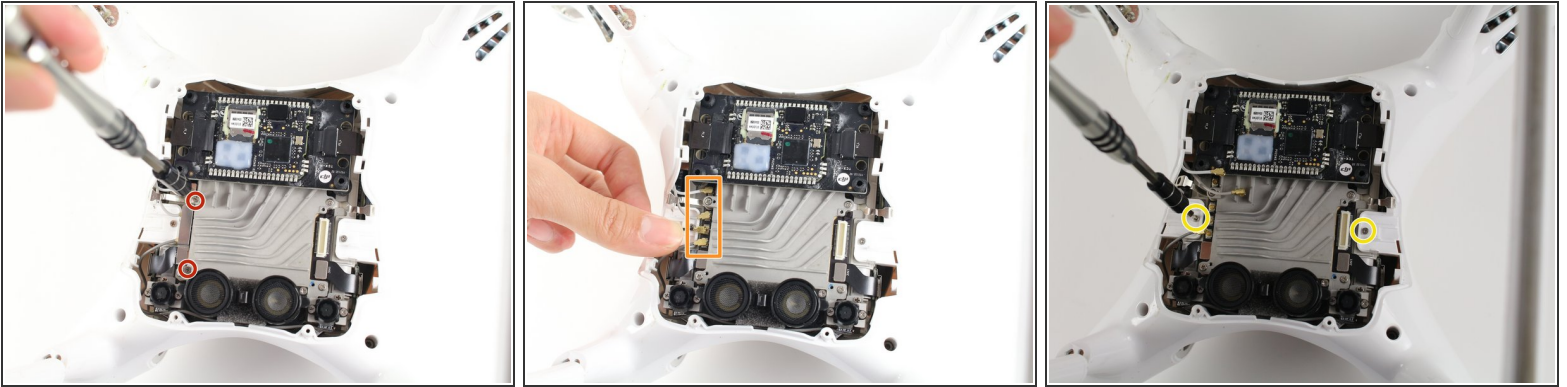
- Remove two 1.2mm screws using the JIS #000 bit from the camera cable retaining bracket.

Step 8



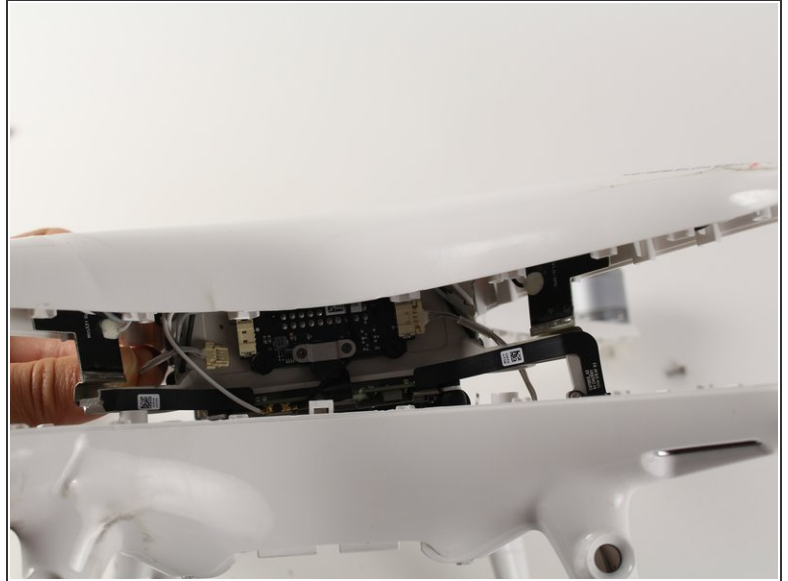
- Lift the camera connector at one end with your hand and remove the mesh.

Step 9



- 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.

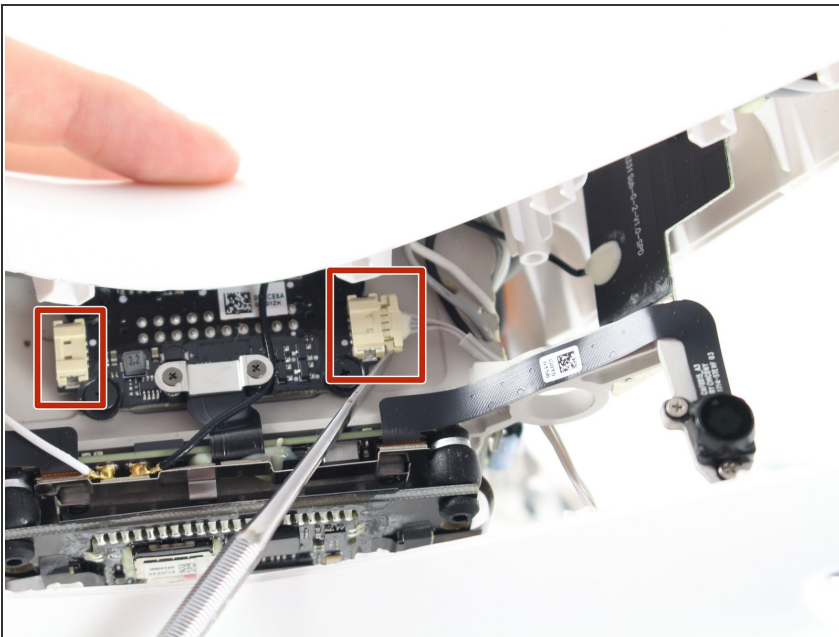
Step 10



- Pry apart the clamshell at the motor end.
- Separate the clamshell.

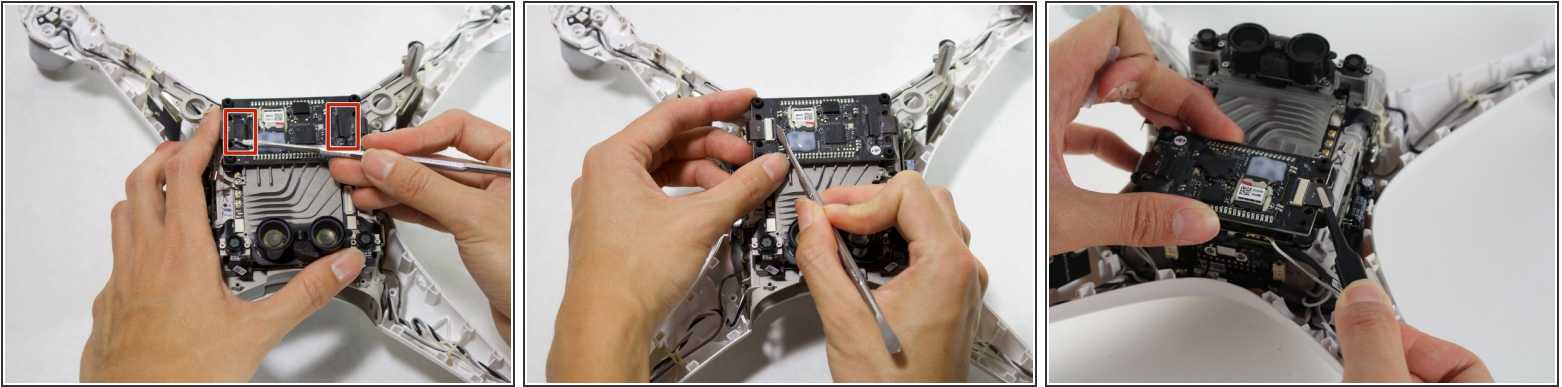
⚠ Two wires connect from the lower frame to the upper frame at the front of the drone. Pulling the clamshell apart hard may damage the connectors and wires.

Step 11



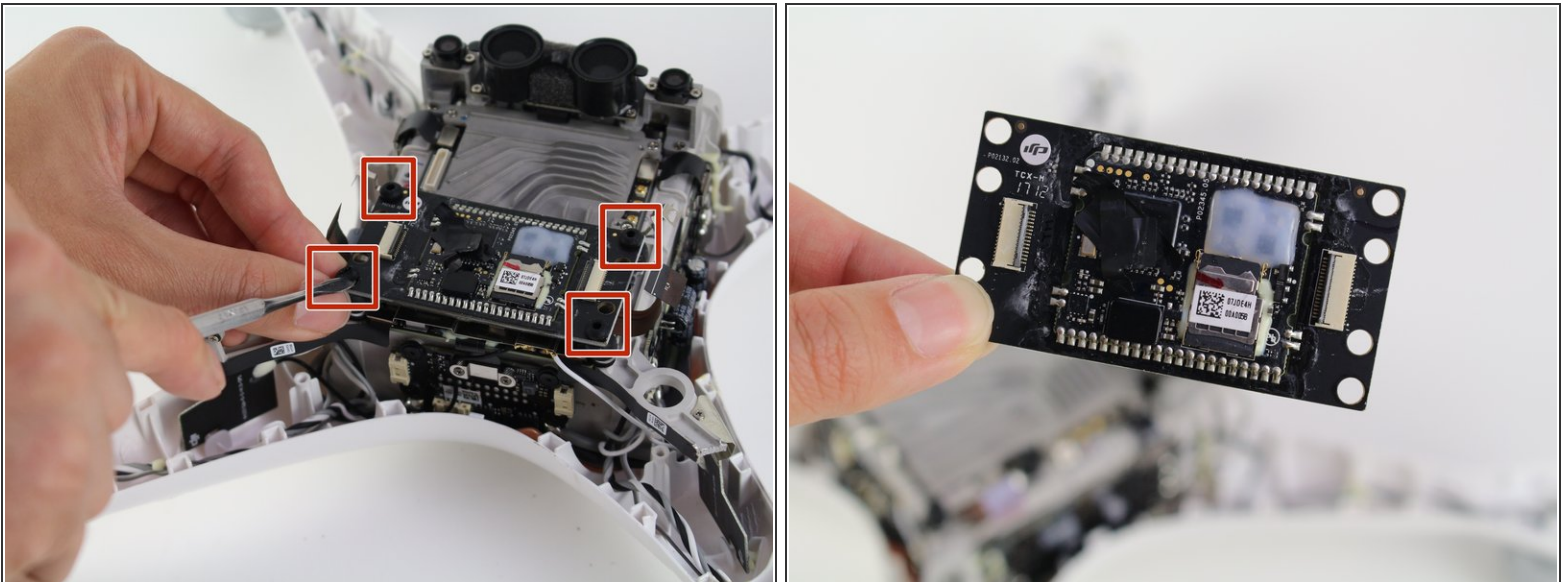
- Press the connector tabs with a spudger and pull on the wire simultaneously.
- Remove the shell from the rest of the drone.

Step 12 — Flight Controller



- Peel the electrical tape off.
- Unlock the connector by prying up on the black latch.
- Pull the ribbon cable out with tweezers.

Step 13



- Remove the flight controller vibration dampers by pushing the dampers into the mounts with the spudger.

⚠ Be careful not to tear the rubber isolators. Replace the rubber isolators if damaged.

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