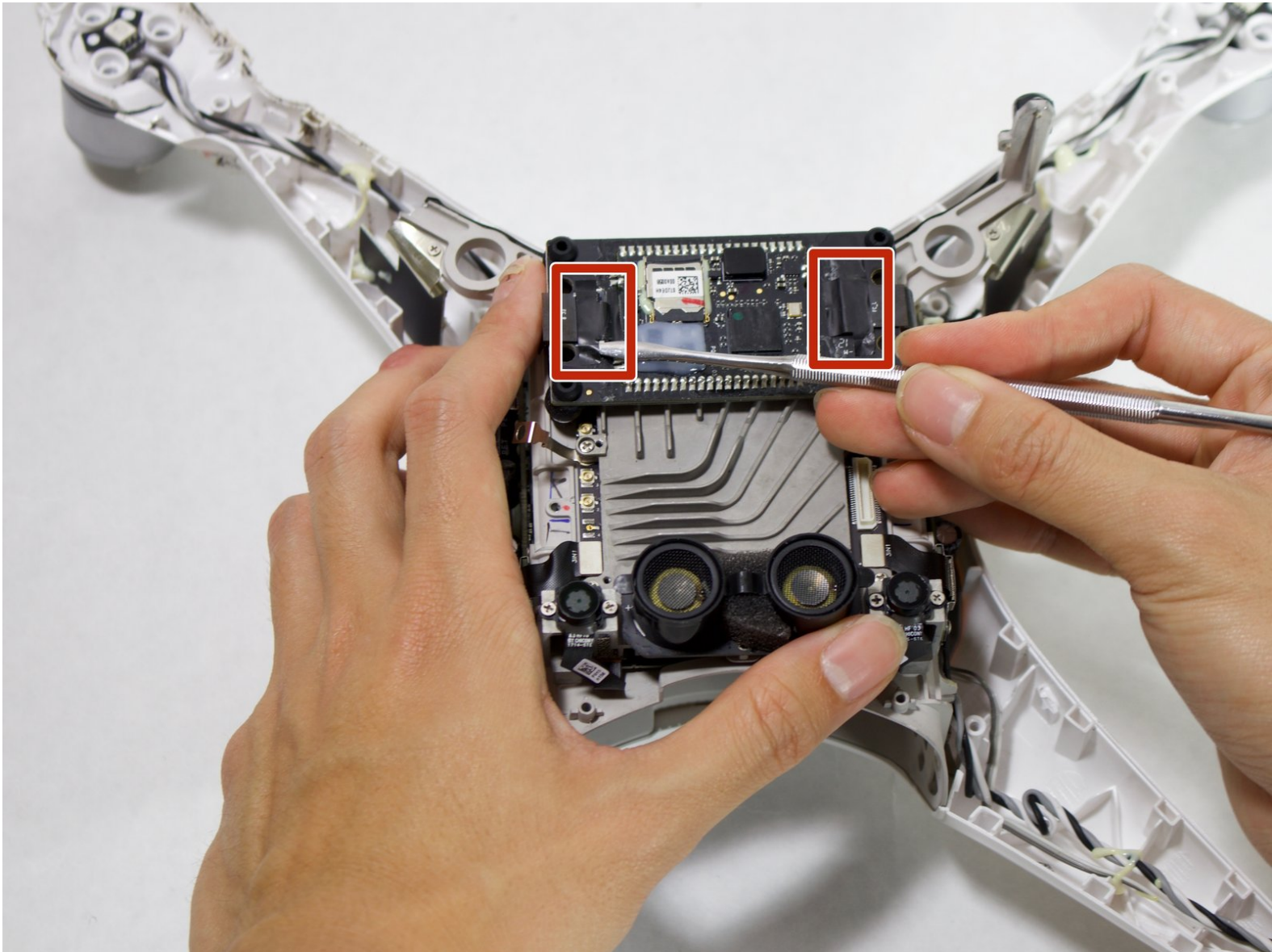




DJI Phantom 4 Advanced Flight Controller Replacement

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



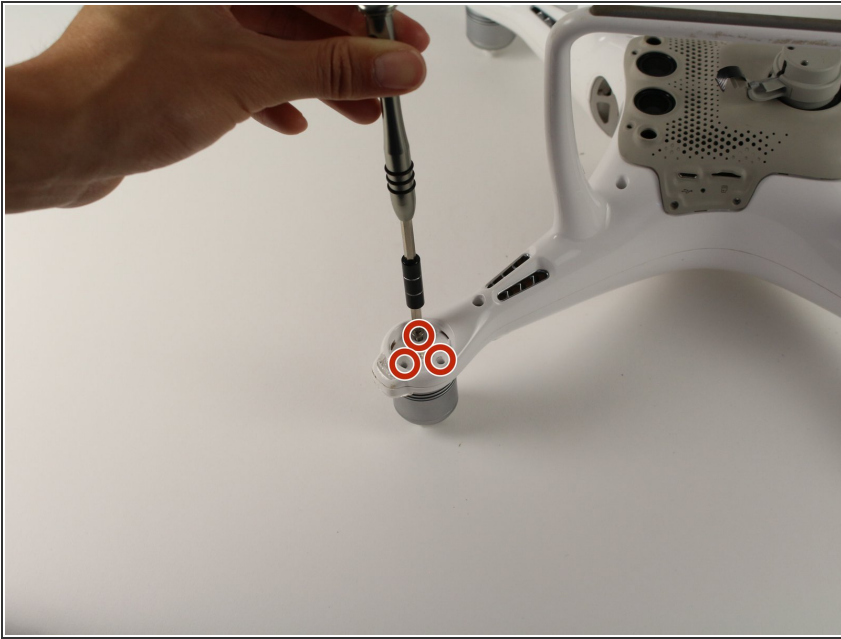
- Pry the LED motor covers off with a metal spudger.
- ⓘ The prying location is marked by an indent that points outward from the arm.

Step 4



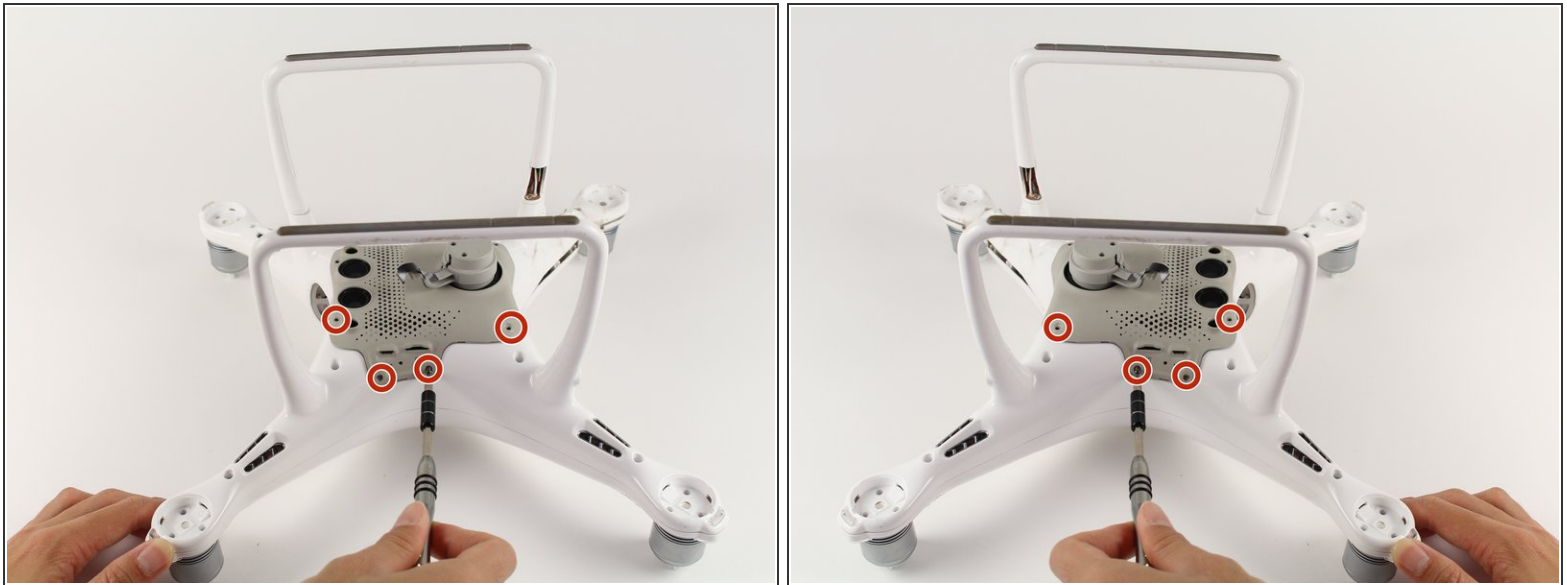
- Pry the paper covering off the four corners with a metal spudger.

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.

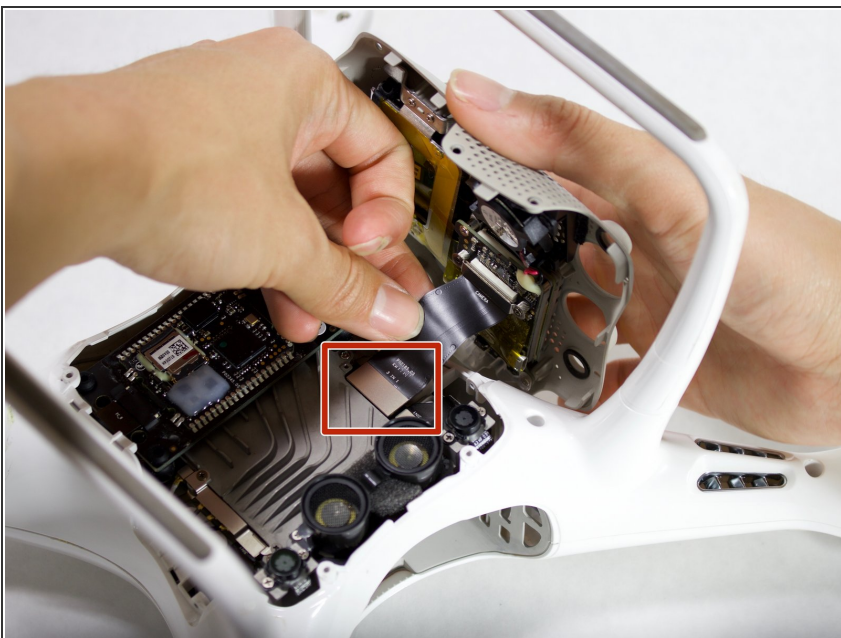
 The cable connects from the camera to the drone. Pulling up could rip the connection. Tilt the mesh 90 degrees towards the cable.

Step 7



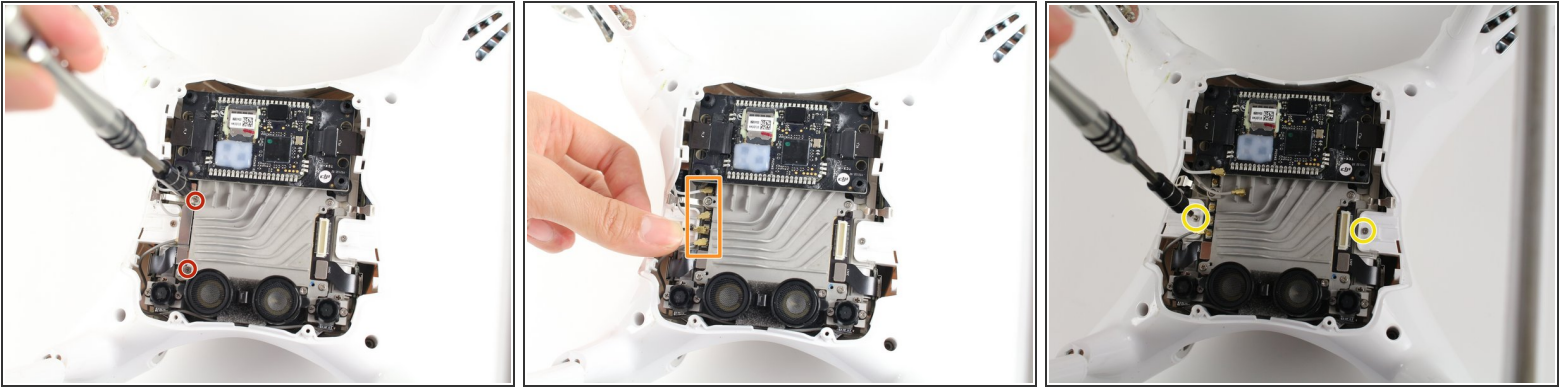
- Remove two 1.2mm screws using the JIS #000 bit from the camera cable retaining bracket.

Step 8



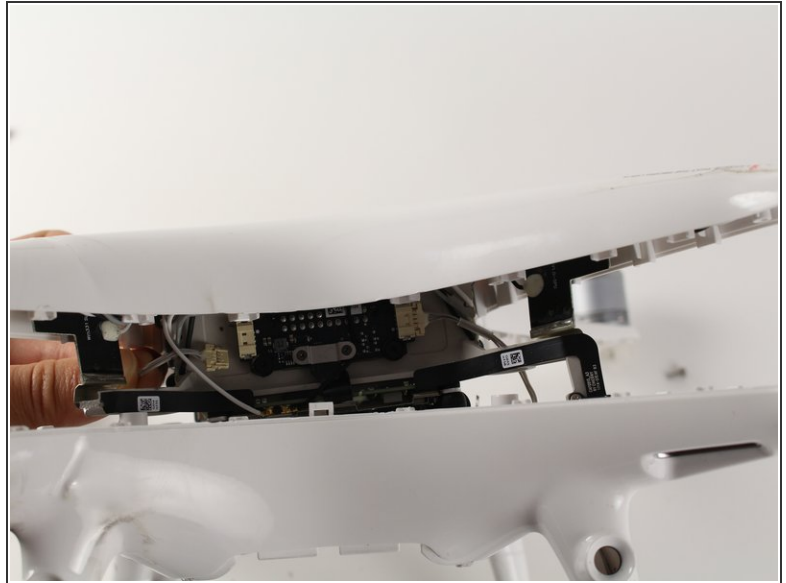
- Lift the camera connector at one end with your hand and remove the mesh.

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.

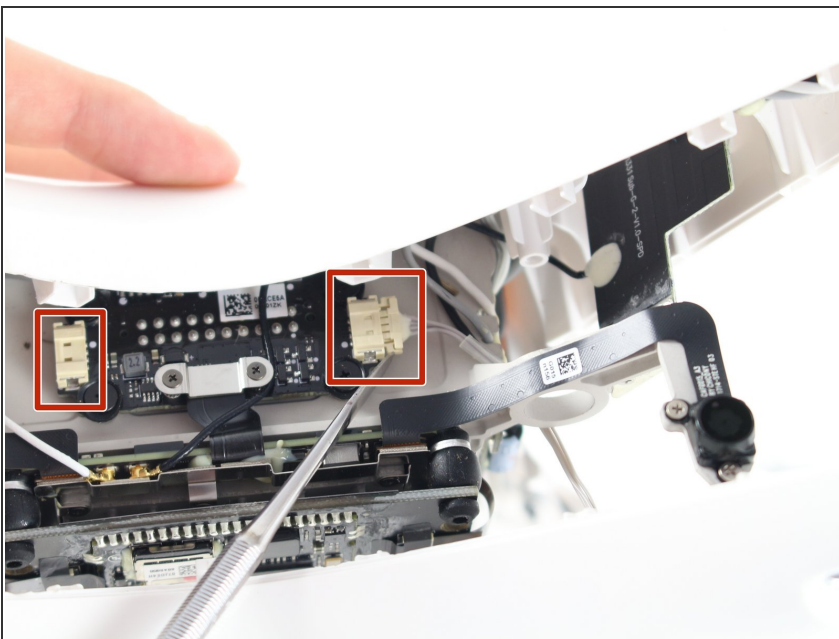
Step 10



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

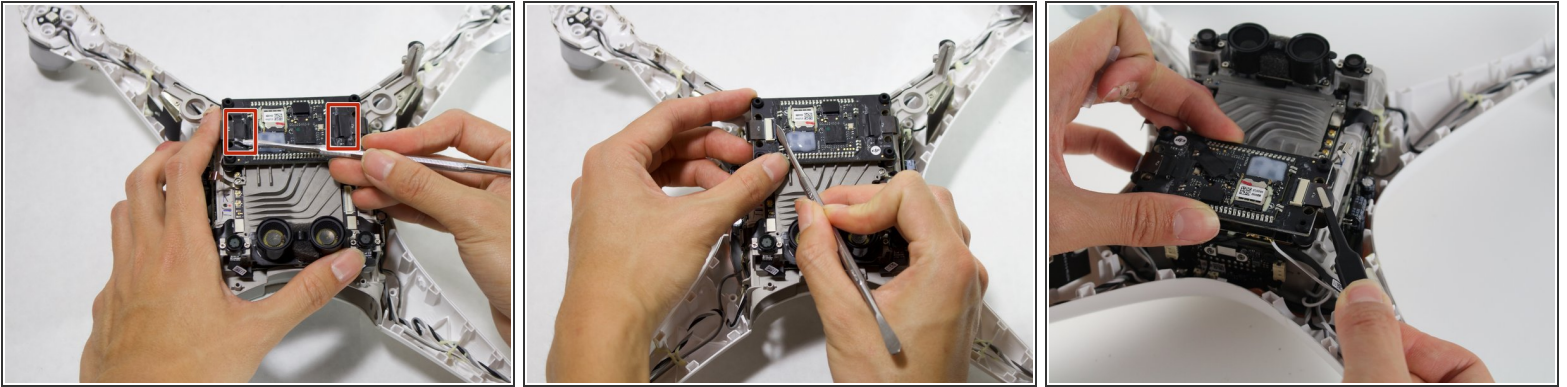
⚠ Two wires connect from the lower frame to the upper frame at the front of the drone. Pulling the clamshell apart hard may damage the connectors and wires.

Step 11



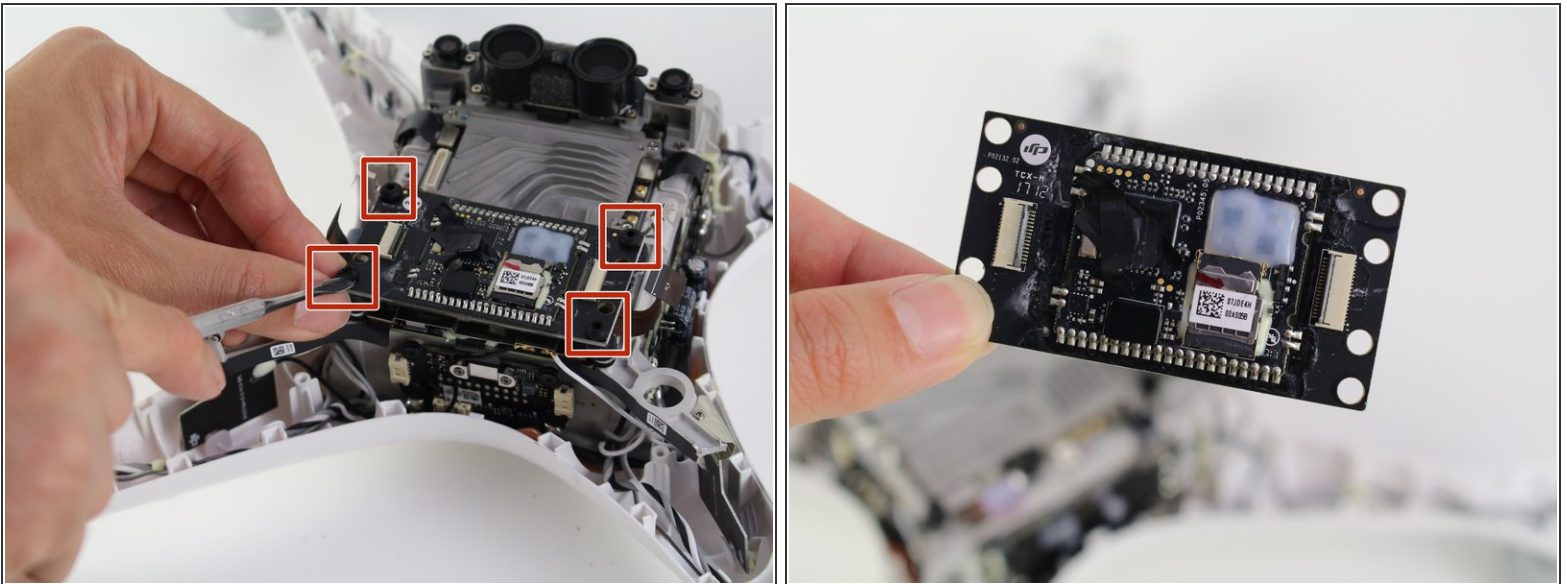
- Press the connector tabs with a spudger and pull on the wire simultaneously.
- Remove the shell from the rest of the drone.

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.