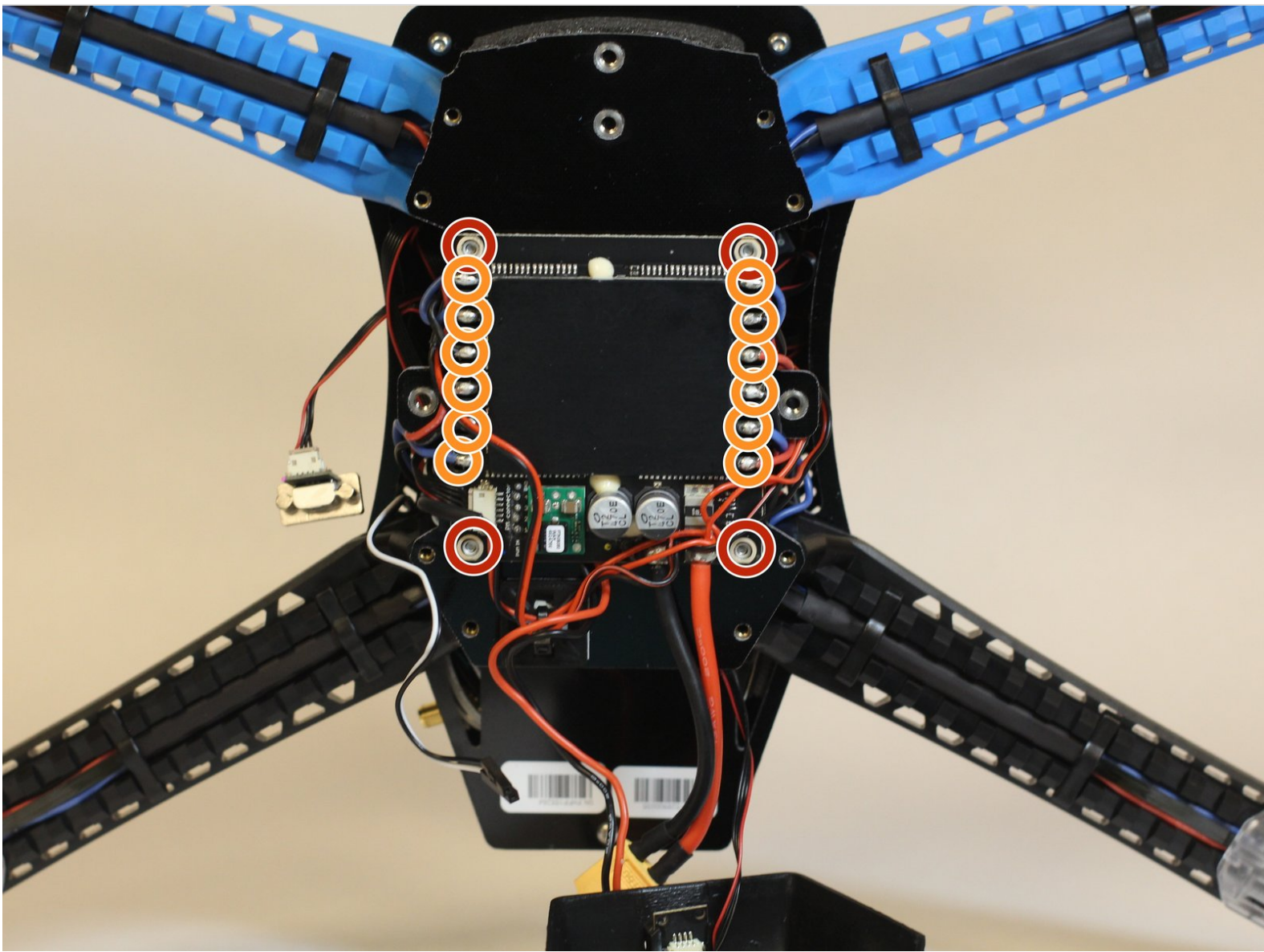# 3DR Iris Plus Quadcopter Electronic Speed Controller (ESC) and Power Distribution Board (PDB) Replacement

This guide walks you through the steps of removing the Electronic Speed Controller (ESC) and Power Distribution Board (PDB).

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INTRODUCTION

This guide walks you through the steps of removing the Electronic Speed Controller (ESC) and Power Distribution Board (PDB) of the 3DR Iris Plus. This part is what communicates commands from the flight controller to the motors, and distributes power to the rest of the drone. As stated in the Troubleshooting Guide, if the drone is powered, but it is not responding, it is possible the ESC/PDB is damaged. This guide requires the use of a soldering iron and a set of screw drivers.

For more information on soldering and desoldering connections, please visit the How to Solder and Desolder Connections guide.

TOOLS:

- 3mm Hex Key (1)
- 2mm Hex Key (1)
- Soldering Iron (1)
- Desoldering Pump (1)

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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!
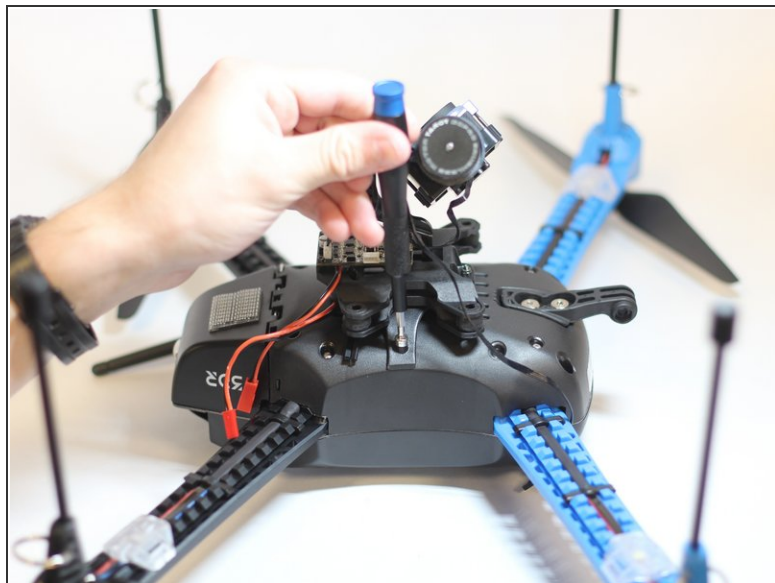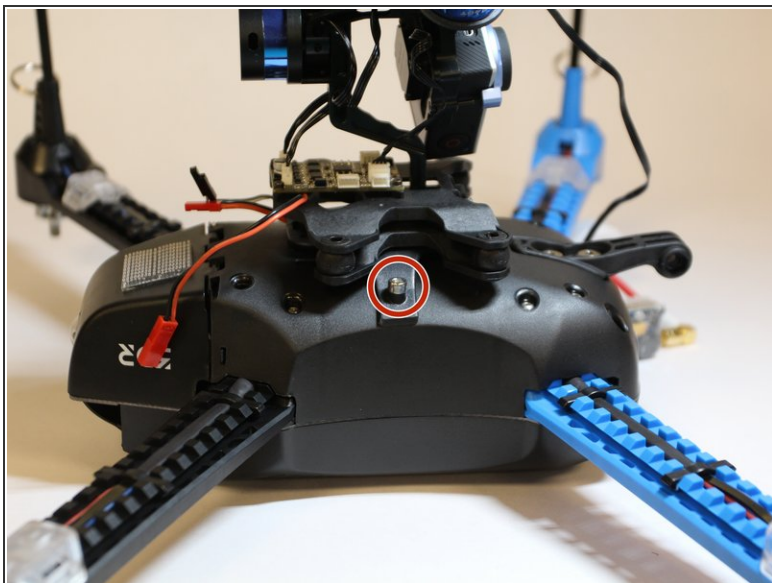
Step 2 — Gimbal
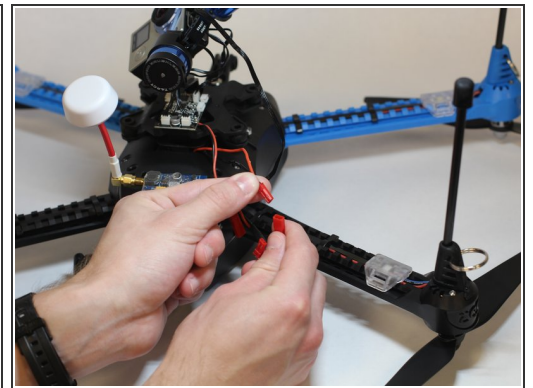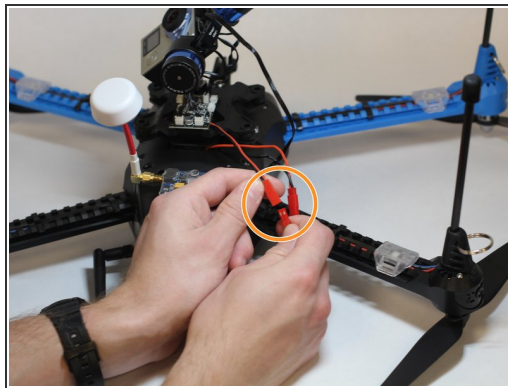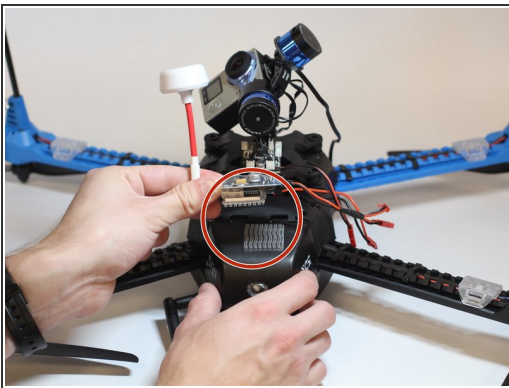
- If your drone is equipped with it, remove the video transmitter.

- Disconnect all cables from the gimbal.

- If your drone has neither the gimbal or video transmitter, you can skip this step.
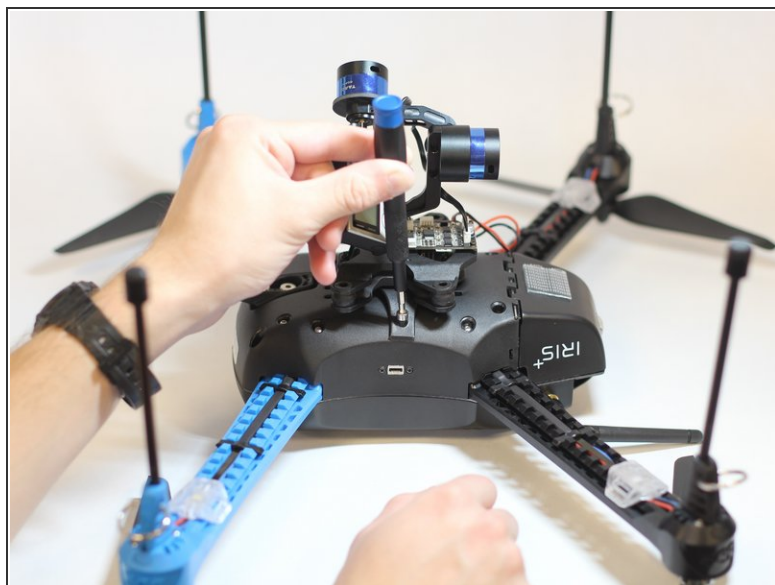
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Step 3

- Unscrew the 16 mm screw attaching the gimbal mount to the body of the drone using the 3 mm Hex screwdriver/key.
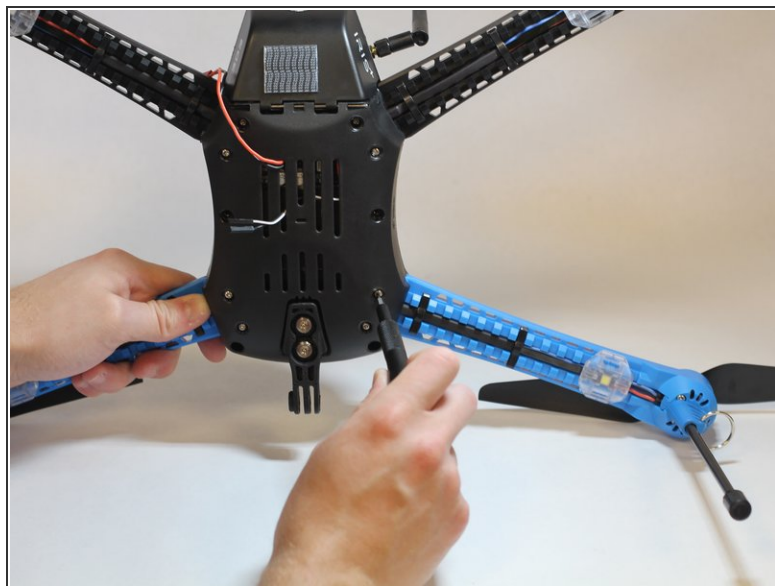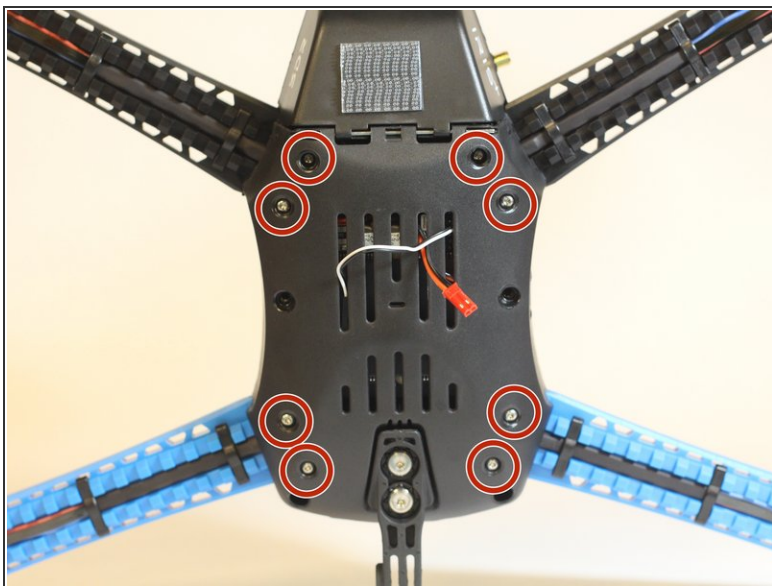
Step 4

- Rotate the drone 180 degrees.

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

Step 5

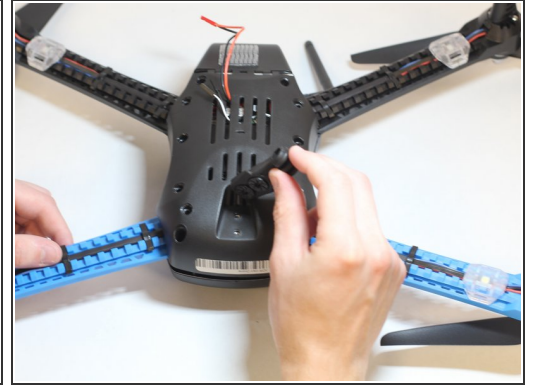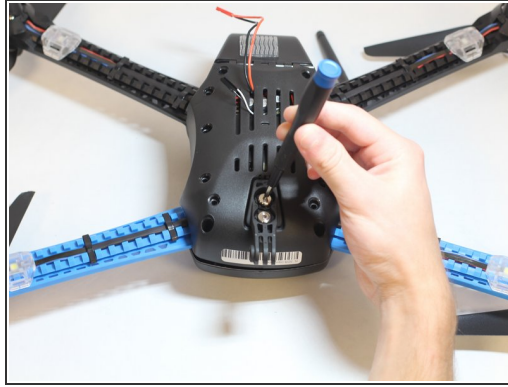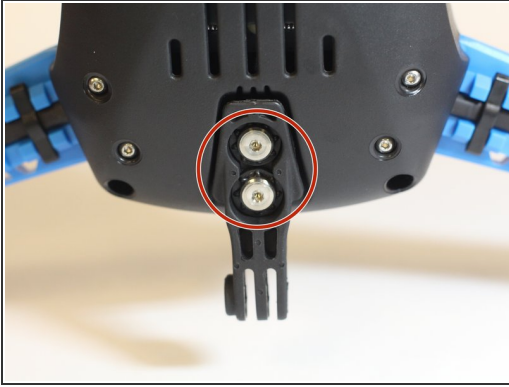- Remove the gimbal mount from the body of the drone.

Step 6 — Bottom Shell

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

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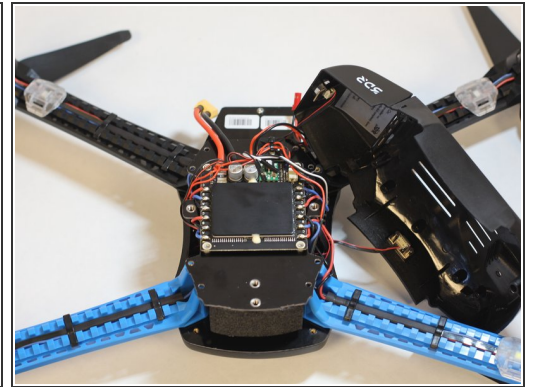
Step 7

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

- Lift to remove the mount.

Step 8

- 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.

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Step 9 — Electronic Speed Controller (ESC) and Power Distribution Board (PDB)
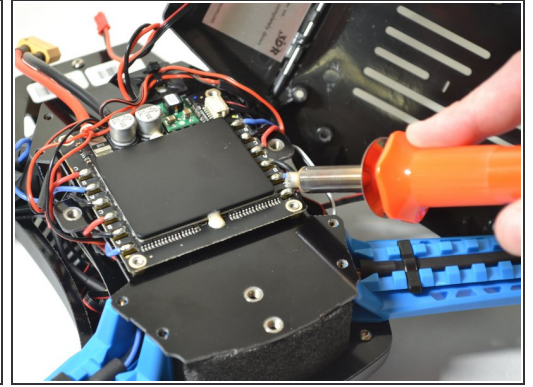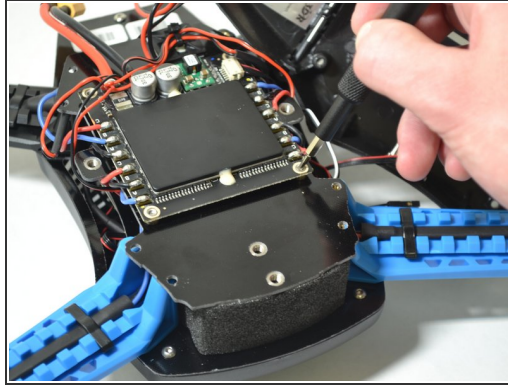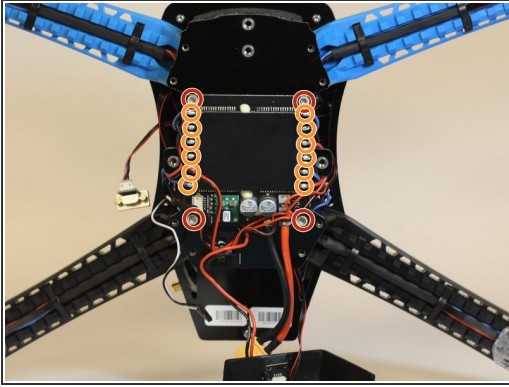
- Unscrew the four 4mm screws that hold the board to the central drone assembly using the 2mm Hex screwdriver/key.

- Desolder the 12 motor wires.

- ⓘ For more information on soldering and desoldering wires, please visit the [How to Solder and Desolder Connections](#) guide.

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