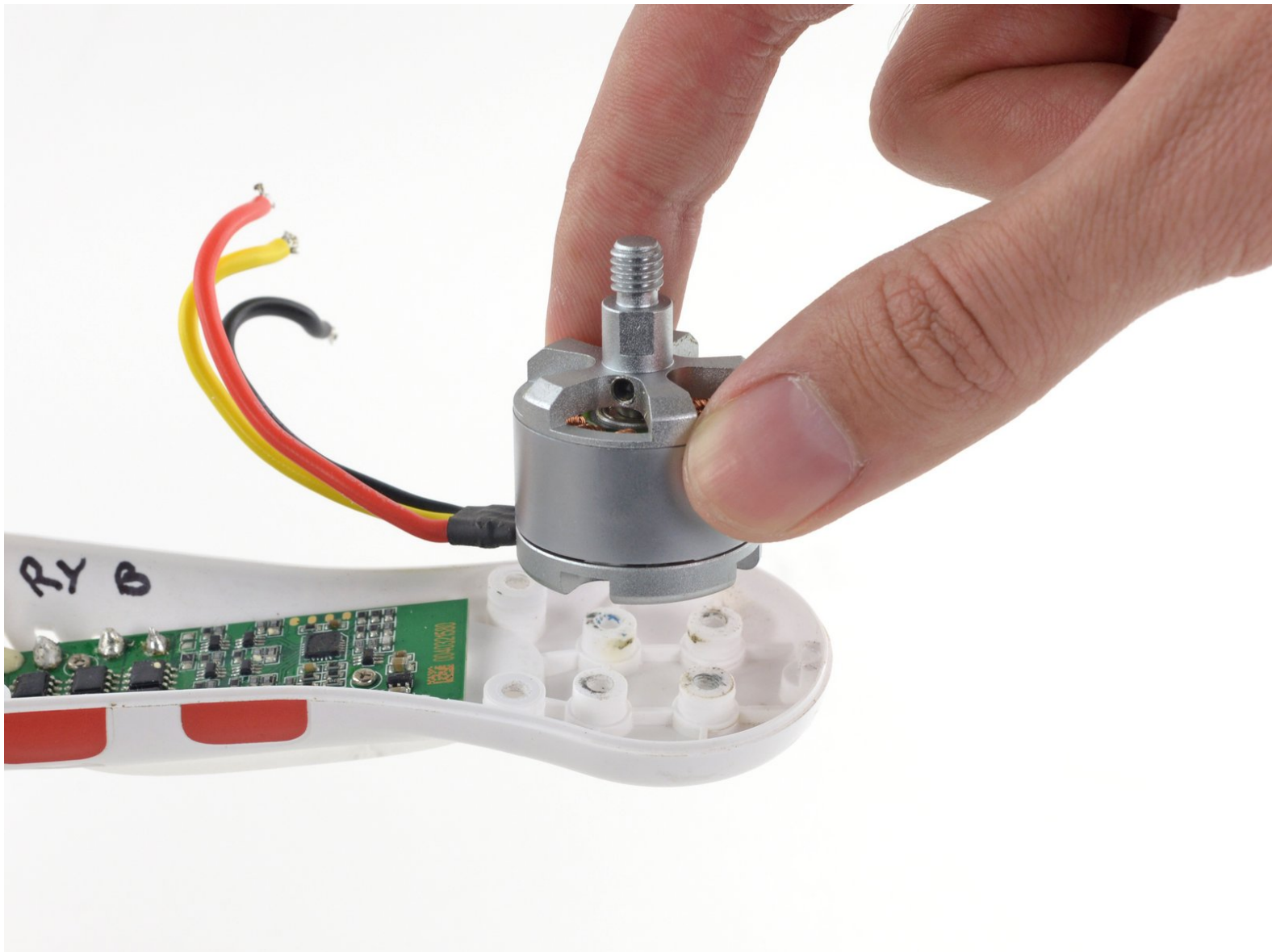




# DJI Phantom Motor Replacement

Use this guide to remove or replace a motor in your DJI Phantom drone.

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## INTRODUCTION

Replace or upgrade your Phantom motors. This guide requires soldering.

**Each motor's direction is determined by the order of its leads on the ESC, so when you're replacing, be sure to match the original order.** Motors on opposite arms will have the same direction, so check the other arm for reference.

If you're ordering a replacement, be sure to get the right thread direction for your motor, or the propellor collet will loosen during flight.



### TOOLS:

- [12mm Socket or Wrench](#) (1)
- [2 mm Hex Screwdriver](#) (1)
- [Phillips #0 Screwdriver](#) (1)
- [Soldering Iron](#) (1)



### PARTS:

- [DJI Phantom CCW Motor](#) (1)  
*Use this to replace a motor with a silver propellor collet.*
- [DJI Phantom CW Motor](#) (1)  
*Use this to replace a motor with a black propellor collet.*

## Step 1 — Open the Battery Compartment



- Press down on battery door release tab to flip the battery door open.

## Step 2 — Remove the Battery



- Pull out the battery pack.
- ⚠ Avoid pulling on the battery wires, excess stress may break the wires, damage the power connectors, or crack the internal solder joints.

### Step 3 — Disconnect the Battery



- Pull the two halves of the XT60 power connector apart.

⚠ It's a tight fit, so be careful not to hit your drone or yank on the cables when it releases!

### Step 4 — Identifying Silver and Black Collets



- Silver-topped propeller collets unscrew counter-clockwise
- Black-topped propeller collets unscrew clockwise



## Step 5 — Unscrewing Silver Collets



- **For propellers with silver collets:** Use a 12 mm wrench or socket to loosen silver collets in the **counter-clockwise** direction.
- Once free, unscrew and remove the collet.

## Step 6 — Unscrewing Black Collets



- **For propellers with black collets:** Use a 12 mm wrench or socket to loosen black collets in the **clockwise** direction.
- Once free, unscrew and remove the collet.

## Step 7 — Remove the Propeller



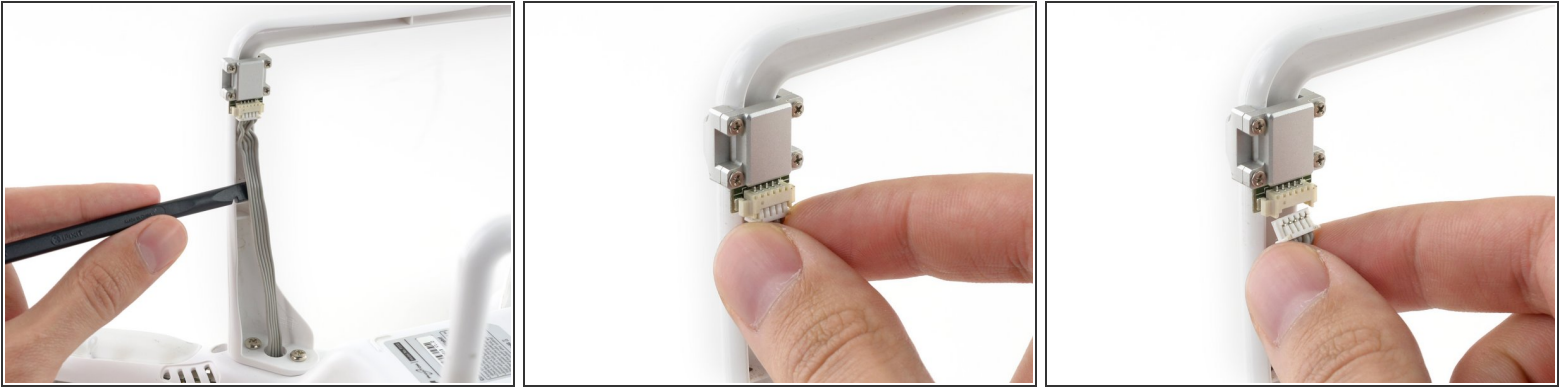
- Gently press down the motor shaft and lift the propeller up to remove it.

## Step 8 — Remove Case Screws



- ⓘ After removing all four propellers, flip the drone over.
- Remove the following screws from the underside of the drone:
  - Twelve 2.0 mm hex screws
  - Four Phillips #0 screws

## Step 9 — Unplug Magnetometer



- Loosen the cable from the plastic landing gear.
- Unplug the magnetometer molex connector.

## Step 10 — Remove the Top Shell

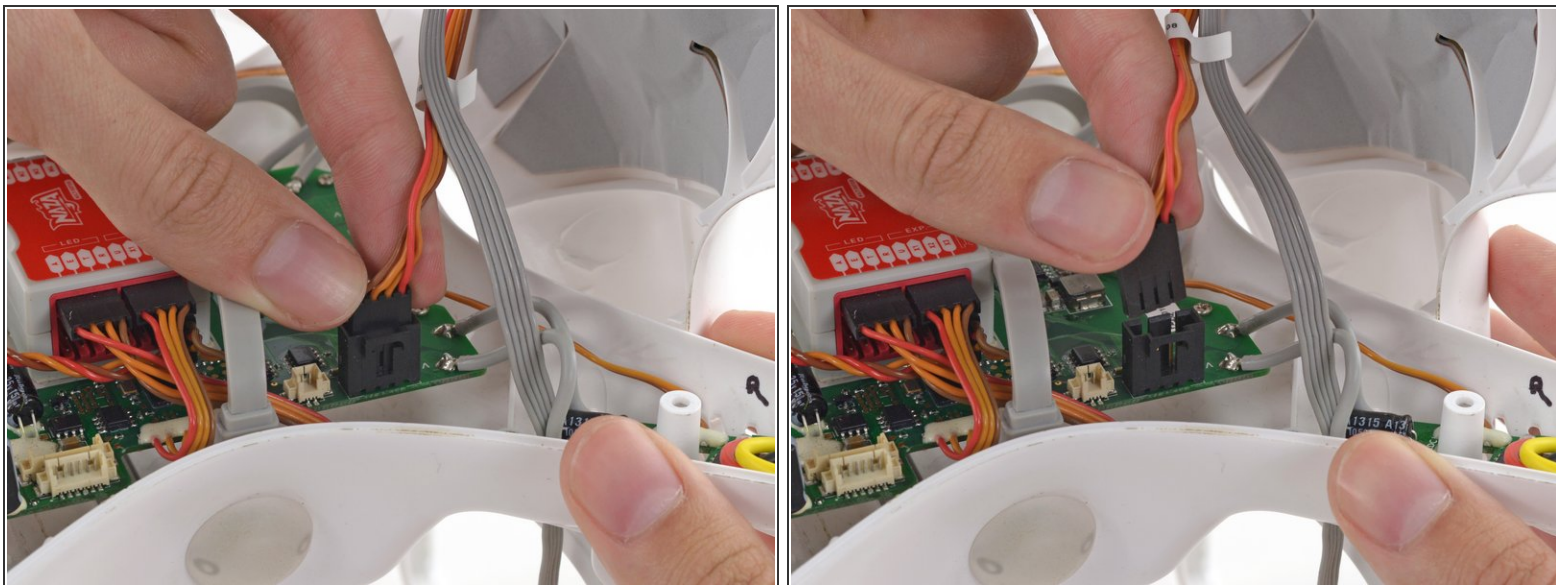


- Lift up on the top portion of the shell and set it on its side.

**⚠ Do not** attempt to fully remove the case. The GPS and Magnetometer cables connect the top shell to the rest of the Phantom, be careful not to stress or break these cables.

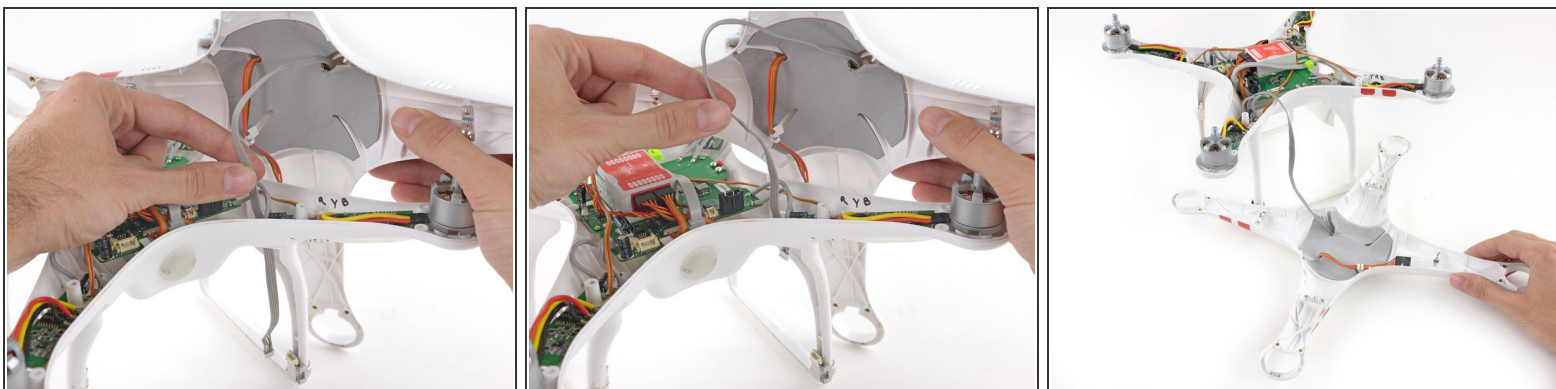


## Step 11 — Disconnect GPS Cable



- Lift the GPS cable molex connector up out of its socket on the main board.

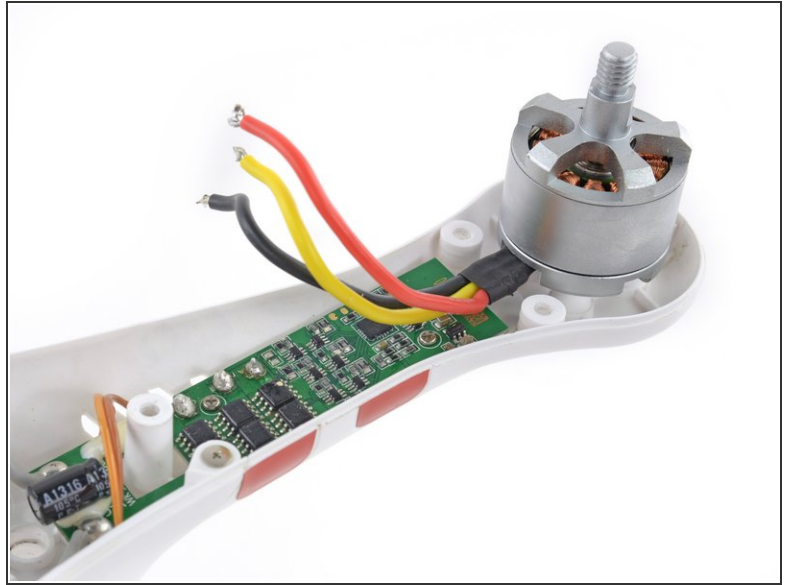
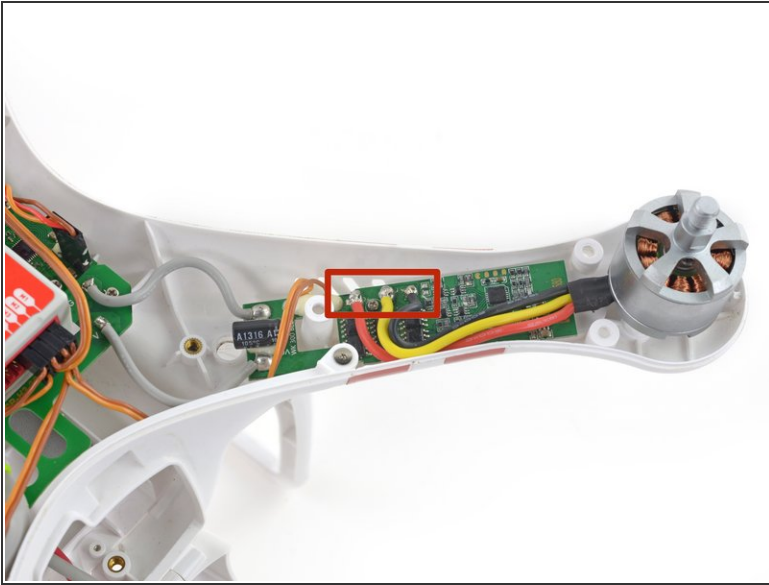
## Step 12 — Loosen Magnetometer Cable



- Gently pull the slack of the magnetometer cable through the case bottom shell.
- The case top shell should now have enough slack to work on the interior of the Phantom.



## Step 13 — Motor



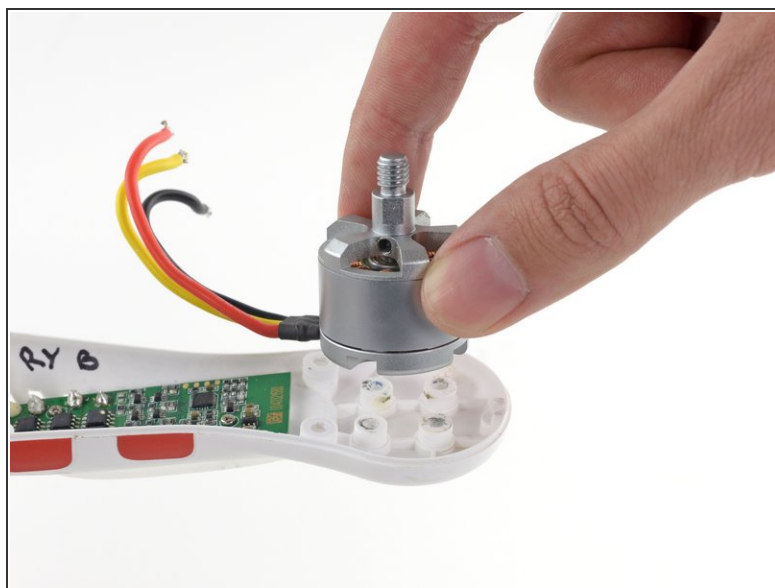
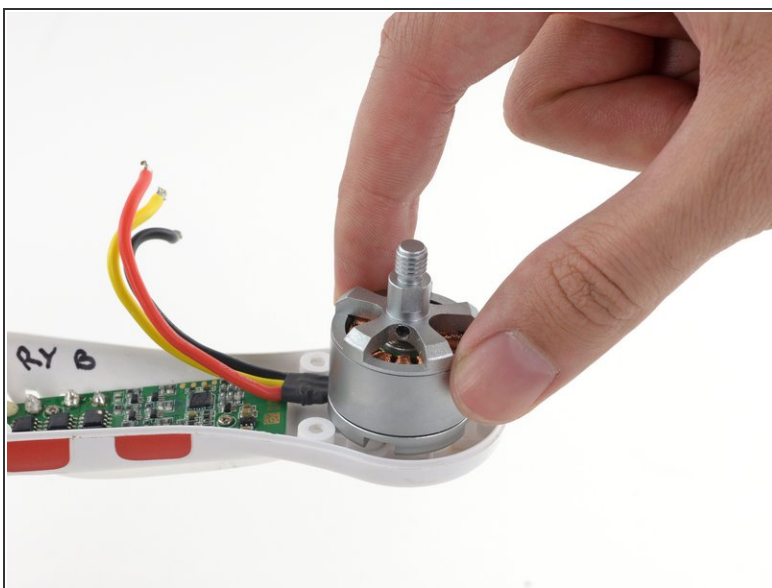
- Desolder all three motor wires from the speed controller board.
    - Follow our [soldering guide](#) to learn how, or just to brush-up on your skills.
- ⚠ Be careful not to melt the plastic case bottom shell with your soldering iron or damage any electronic components.
- 🔧 When you're reassembling, solder the motor leads back in their original order. **This may be different from the picture.** Motors on arms across from each other have the same color order, so check the opposite arm for reference.

## Step 14 — Unmount the Motor



- Unscrew the four 2 mm motor hex bolts from the case bottom shell.

## Step 15



- Remove the motor from the Phantom.

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