

DJI Phantom 3 Advanced Motor Replacement

How to replace a motor on the Phantom 3 Advanced.

Written By: Tate Morell



INTRODUCTION

This guide will show you how to replace each motor. The screws that hold each motor in place will have to be removed and the wires that attach to each motor will have to be desoldered.



TOOLS:

- T8 Torx Screwdriver (1)
- T6 Torx Screwdriver (1)
- Heavy-Duty Spudger (1)
- 64 Bit Driver Kit (1)



PARTS:

- DJI Phantom 3 Standard/Pro/Advanced 2312A Clockwise (CW) Motor (1)
- DJI Phantom 3 Standard/Pro/Advanced
 2312A Counterclockwise (CCW) Motor (1)

Step 1 — Battery





With the battery facing you, locate the two tabs on the top and bottom of the battery as shown.

Remember to disarm and power down your quadcopter before beginning any disassembly.





- Press the two tabs with your finger and thumb, and gently slide the battery towards you, out of the quadcopter frame.
- With your other hand, be sure to hold the quadcopter steady to ensure that it stays still.

Step 3 — Cover



 Turn the Phantom 3 Advanced upside down.



- Remove the four 7mm long 2mm screws with a T-6 screwdriver.
- i There is one screw per arm, located at the tip of the arm.



- Remove the eight 5mm long 2.5mm screws using the T-8 screwdriver.
- There are two 5mm screws on each arm.





- Remove the four 10mm long deep 3mm screws using the T-8 screwdriver.
- (i) There is one screw on each arm located near the landing gear.







- Carefully flip the phantom back over with the motors facing up.
- Peel back the silver stickers from the seam in the cover.
- Using a plastic spudger, slowly separate the two halves of the plastic shell.
- (i) This step requires some force, and the plastic will click loudly as the shell separates.
- Do not fully remove the cover. There is a wire that needs to be detached from the control board before the cover is completely free.







- Slowly remove the upper half of the plastic case about halfway. There is a ribbon cable that's connects the cover and the control board.
- Follow the ribbon cable to the control board and locate the connector that connects the cable to the control board.
- Press the tab on the side of the connector and pull up on the cable.
- Continue to remove the shell the rest of the way.

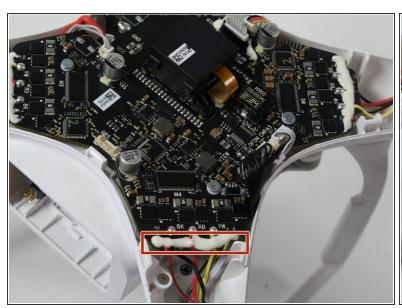
Step 9 — Motor

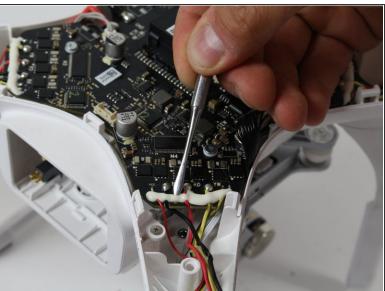




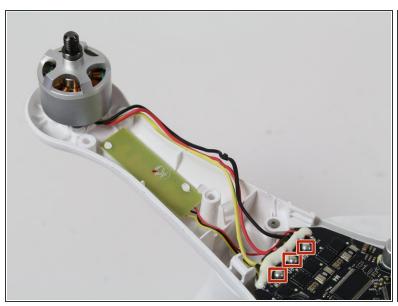


- Turn the drone upside down with the motors facing the table.
- Unscrew the four 5.5mm long 3mm screws directly under the motor using a 2.0mm hex bit screwdriver.





- Remove the glue that covers the three wires that connect the motor to the flight controller. Use a
 plastic opening tool or a metal tool if needed.
- Repeat for each arm.





- Trace the black, yellow, and red wires from the motor to the flight controlle.
- Desolder the three wires where they connect to the flight controller. Check out this desoldering guide to learn how to desolder: <u>Desoldering Guide</u>.
- Take out the motor and repeat for the other motors if needed.

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