



DJI Phantom 3 Pro Camera Gimbal Arm and Cable Replacement

Steps for removing the camera controlling system and gimbal arms. Replacing the pitch arm and camera cable.

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INTRODUCTION

Uh Oh. If you are like me and have tried to fly your drone in a way that didn't work out so well, you may need to replace your gimbal arm(s) and the cable for your camera. Hopefully you were able to recover these components. This can occur when you collide with a tree or other object. No worries! You can replace those broken components and be soon flying again.



TOOLS:

- [Heavy-Duty Spudger](#) (1)
- [Phillips #0 Screwdriver](#) (1)
- [1.5mm Hex Screwdriver](#) (1)
- [Metal Spudger](#) (1)
- [Tweezers](#) (1)
- [T6 Torx Screwdriver](#) (1)



PARTS:

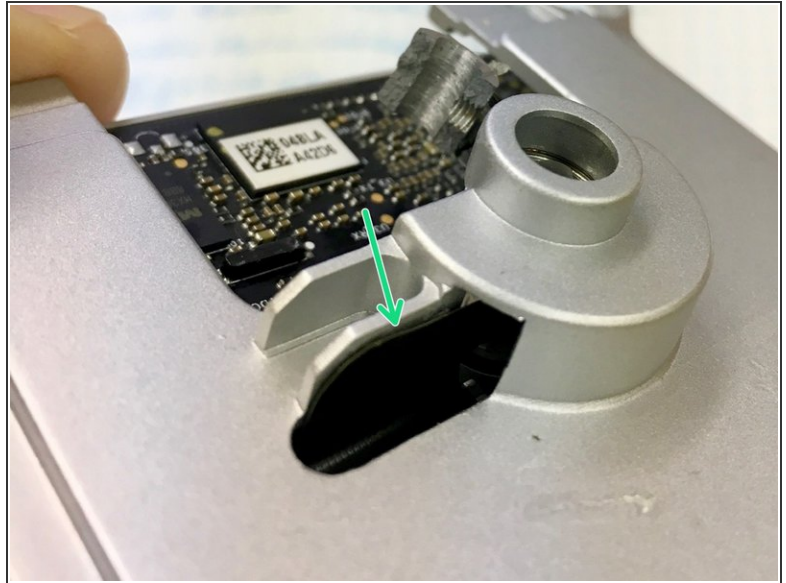
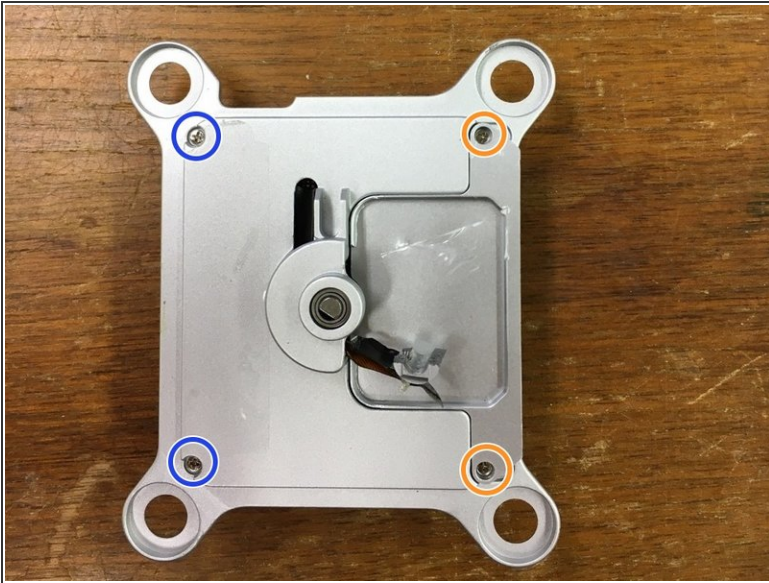
- [DJI Phantom 3 Pro/Advanced Flexible Gimbal Cable](#) (1)
- [DJI Phantom 3 Pro Gimbal Arms.](#) (1)
- [DJI Phantom 3 Standard/Pro/Advanced Damping Rod Set](#) (1)
- [DJI Phantom 3 Standard/Pro/Advanced Vibration Absorbing Rubber Balls](#) (1)

Step 1 — Detach the camera unit.



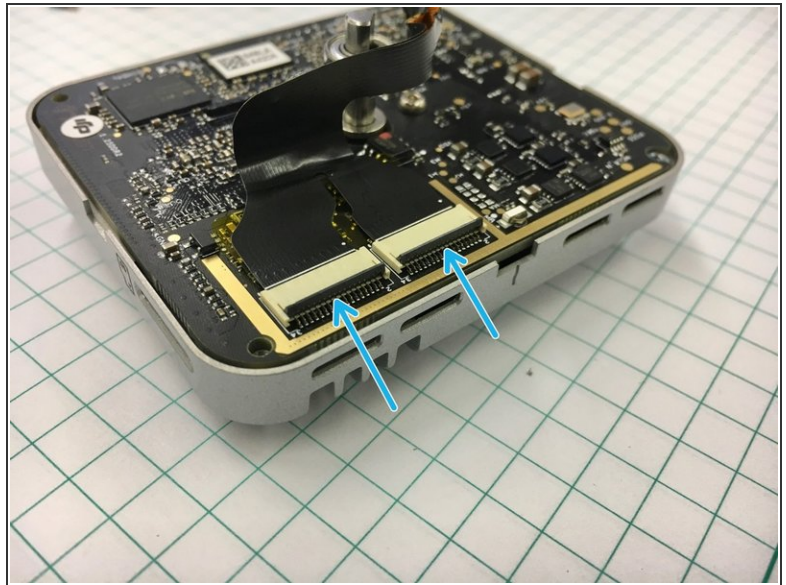
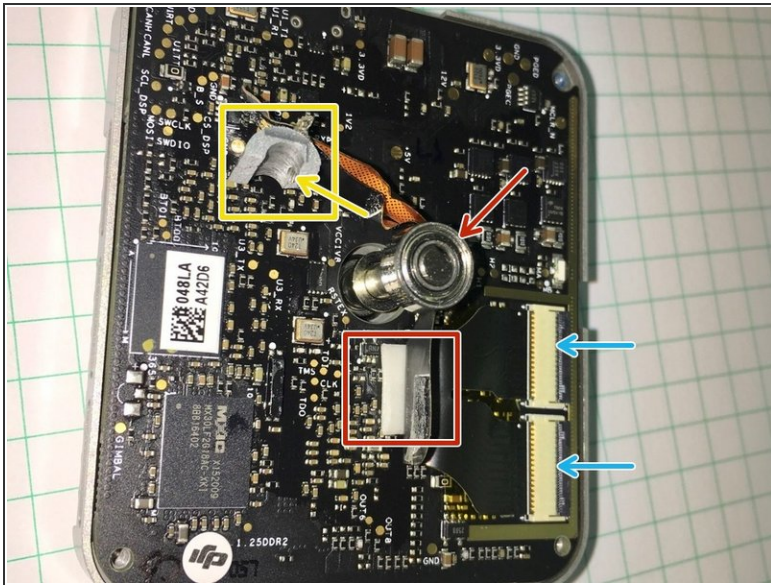
- Pry or pull the clear round retainers from each retaining pin on your camera mount. Remove the pins and the (4) rubber dampers. It's possible that the tabs on the retainers will break, so it may be a good idea to have spares on hand.
- Use a spudger to release the tabs on the (2) grey cables between the camera unit and aircraft. Set the aircraft aside.

Step 2 — Disassembling the camera control case (1)



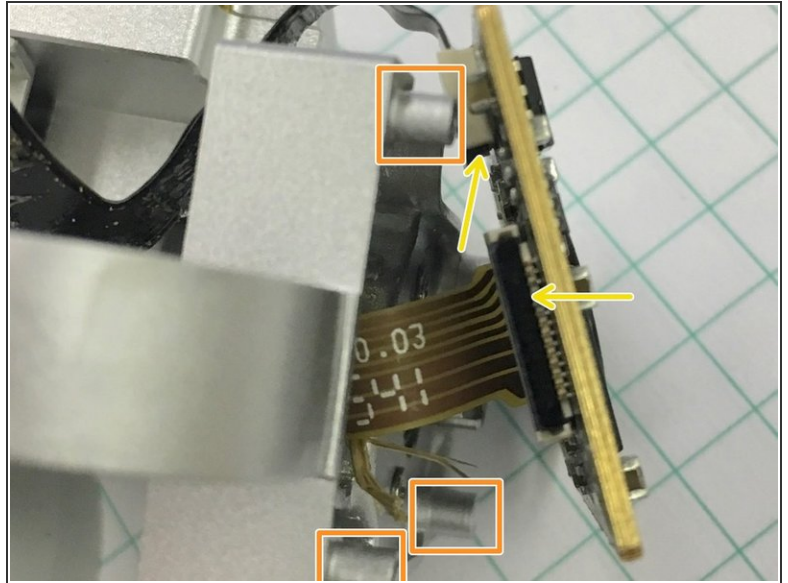
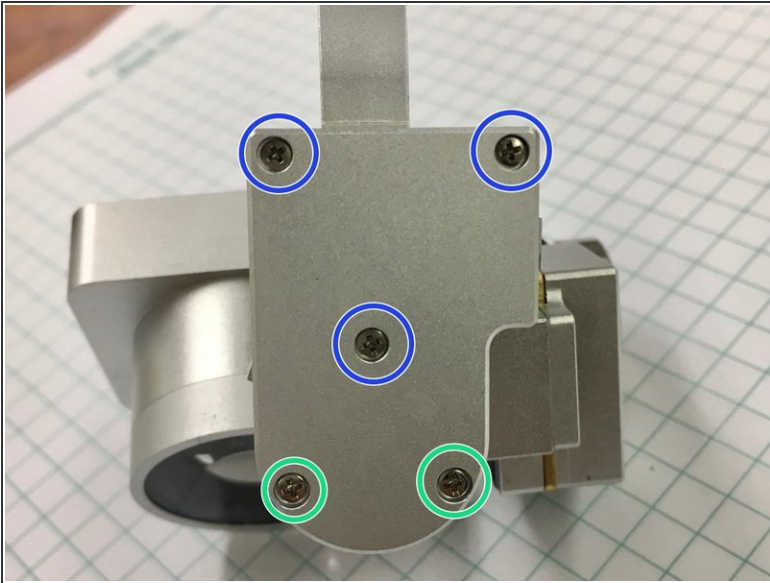
- Remove the (4) Phillips 0 screws from the bottom of the case as pictured. Keep separated as the 2 (Orange) in the plastic cover are shorter. Remove the plastic cover by sliding it out.
- Slide a metal spudger between the ribbon cable and control body where pictured to release the adhesive.
- Gently rock the upper case side to side while pulling the upper half straight from the lower half. Work the upper case free from the bearing and shaft. Watch that the cable doesn't re-attach itself. The bearing may stay in the upper case or on the shaft. If it's on the shaft, then remove it and set aside.

Step 3 — Disassemble the camera control (2)



- Use a plastic spudger to release the white adhesive between the ribbon cable and control board. Remove and set aside the bearing if it is on the shaft.
- Flip up the two brown lock tabs on the cable connection points. Then slide the cable free.
- If your arm is still attached to the shaft, use a 1.5mm Hex bit/wrench to loosen the set screw at the shaft. Slide the arm assembly free of the shaft. You will now want to inspect your control board for physical damage.

Step 4 — Upper Arm Disassembly



- ⓘ Use the metal spudger to detach the cable adhesive along the upper gimbal arm.
- Using a Phillips #0 bit/driver remove the (3) 1 x 5 mm screws from the upper housing. Note their position.
 - Remove the (2) 1.5 x 4.5 mm screws from the curved portion of the body.
 - Carefully to not pull the cables, slide the motor board off the retaining pegs.
 - Use the plastic spudger to flip the release locks on the 2 cables. Finish removing the board from the assembly.
- ⓘ Note (or mark if possible) the position of the keyed motor shaft relative to housing. This will need to be realigned if the motor is removed. Your kit may have included an alignment tool.

To reassemble your device, follow these instructions in reverse order except The last cable connection removed will be the second reinstalled so that you can properly wrap the cable around the camera axis after reassembling the camera. Once the camera is reattached and the cable wrapped, you can insert the cable into the gimbal control and then use a spudger to press down on the cable lock. The slot is extra wide, probably to allow for the cable to be installed after the gimbal motor has been assembled.

Carefully align all cable adhesive points to their proper positions on each arm as you work backward reassembling and installing. Also be sure to properly align the upper arm at 90° to the camera axis as would be normal center. If the lower gimbal motor is removed, use the alignment tool supplied to realign this motor to the shaft and housing.