



iMac Intel 21.5" EMC 2389 Hard Drive Replacement

Replace the hard drive on your iMac Intel 21.5" EMC 2389.

Written By: Andrew Bookholt



INTRODUCTION

Use this guide to replace or upgrade your hard drive.

This guide also includes steps to upgrade your iMac's hard drive with a SSD. It describes how to install the SSD's temperature sensor so that the Mac's fans will operate at the correct speed.

Before beginning any work on your iMac: Unplug the computer and press and hold the power button for ten seconds to discharge the power supply's capacitors.

Be very careful not to touch the capacitor leads or any exposed solder joints on the back of the power supply.

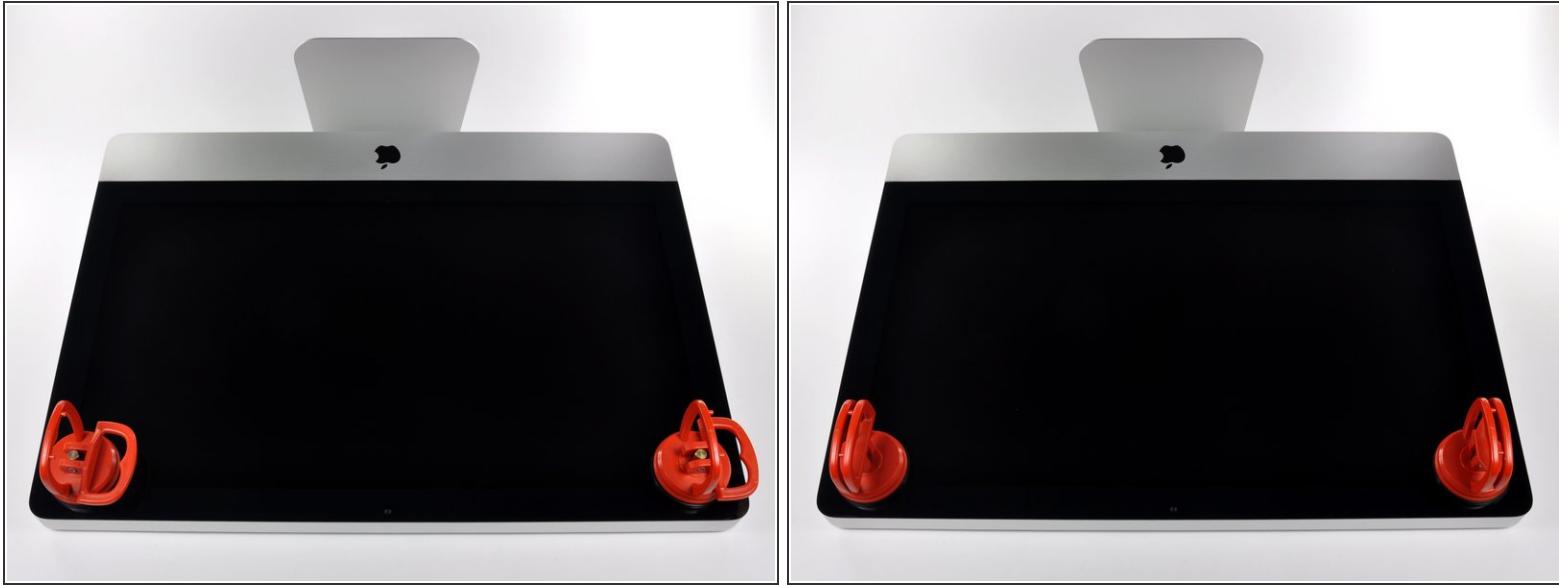
TOOLS:

- Phillips #1 Screwdriver (1)
- Heavy-Duty Suction Cups (Pair) (1)
- Spudger (1)
- T10 Torx Screwdriver (1)
- T8 Torx Screwdriver (1)

PARTS:

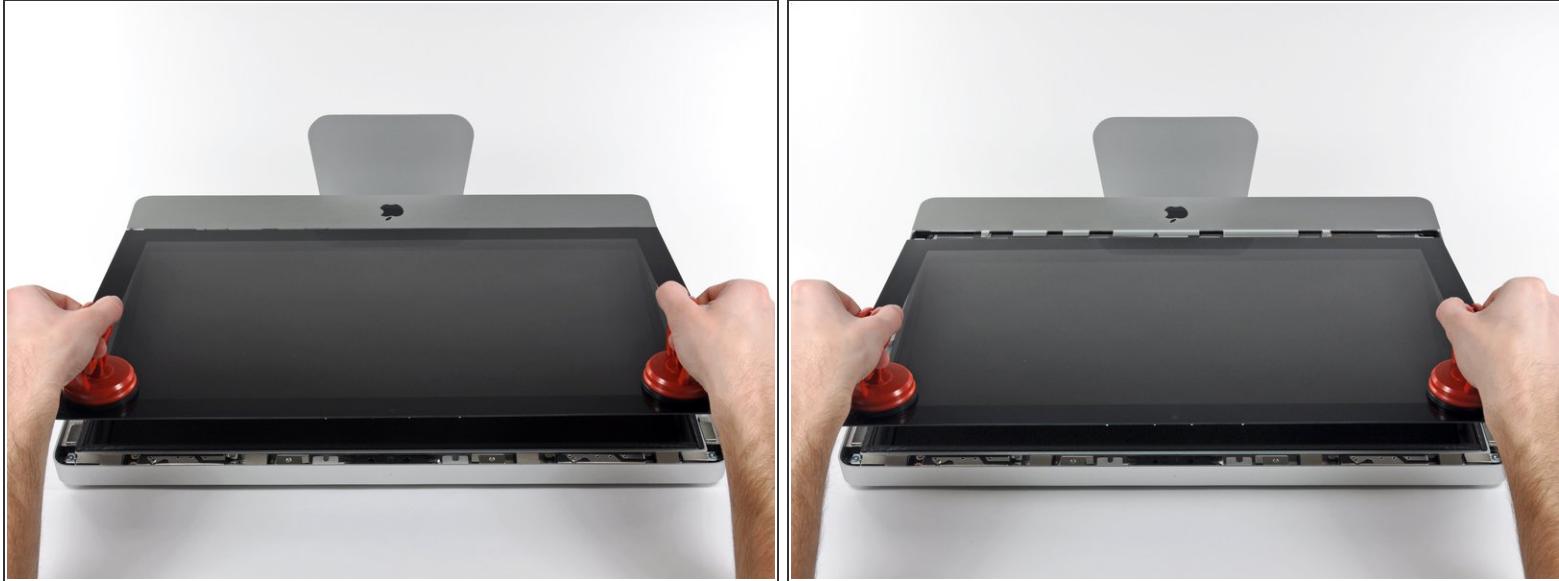
- iMac Intel 21.5" and 27" Late 2009-Mid 2010 SSD Upgrade Bundle (1)
- Universal Drive Adapter (1)
- 1 TB SATA Desktop Hard Drive (1)
- 2 TB SATA Desktop Hard Drive (1)
- 3 TB SATA Desktop Hard Drive (1)
- 4 TB 3.5" Hard Drive (1)
- 2 TB SSD Hybrid 3.5" Hard Drive (1)
- 1 TB SSD Hybrid 3.5" Hard Drive (1)
- 4 TB SSD Hybrid 3.5" Hard Drive (1)
- iMac Intel 21.5" and 27" (Late 2009-Mid 2010) SSD Temperature Sensor (1)

Step 1 — Glass Panel



- ① Before beginning, unplug your iMac and lay it on a soft surface as shown.
- Stick a suction cup near each of the two top corners of the glass panel.
- ① To attach the [suction cups](#) we sell, first position the suction cup with the movable handle parallel to the face of the glass panel. While lightly holding the suction cup against the glass, raise the movable handle until it is parallel with the other handle.
- If your suction cups refuse to stick, try cleaning both the glass panel and the suction cup with a mild solvent.

Step 2



- Gently lift the glass panel perpendicular to the face of the LCD enough to clear the steel mounting pins attached along the underside of the top edge of the glass panel.
- Pull the glass panel away from the lower edge of the iMac and carefully set it aside.

★ During reinstallation, be sure to meticulously clean the inside of the glass panel and the face of the LCD as any dust or fingerprints trapped inside will be annoyingly visible when the machine is turned on.

Step 3 — Display



- Remove the eight 8 mm T10 Torx screws securing the display to the outer case.

ⓘ The last two pictures are detail shots of each side of the display.

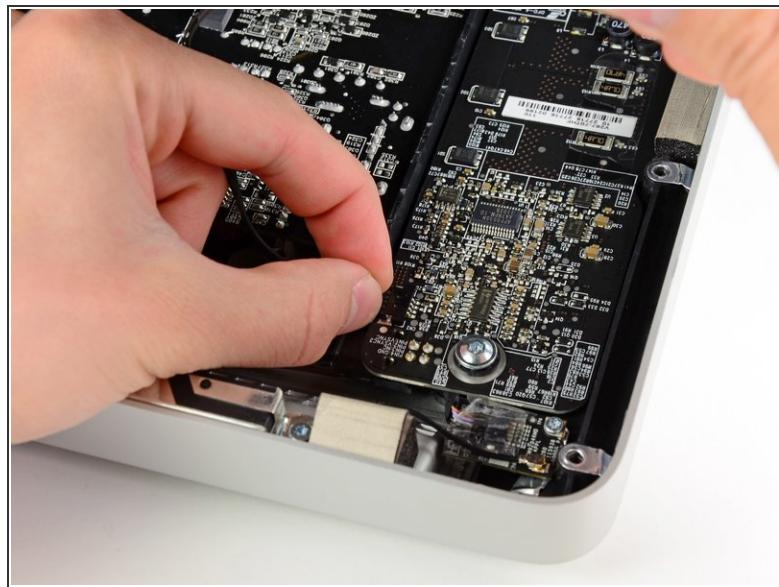
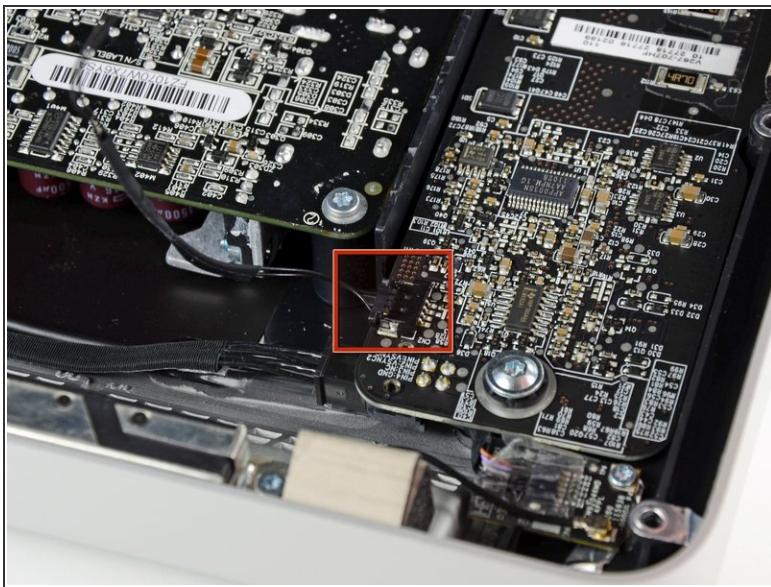
Step 4



- Slightly lift the top edge of the display out of the outer case.

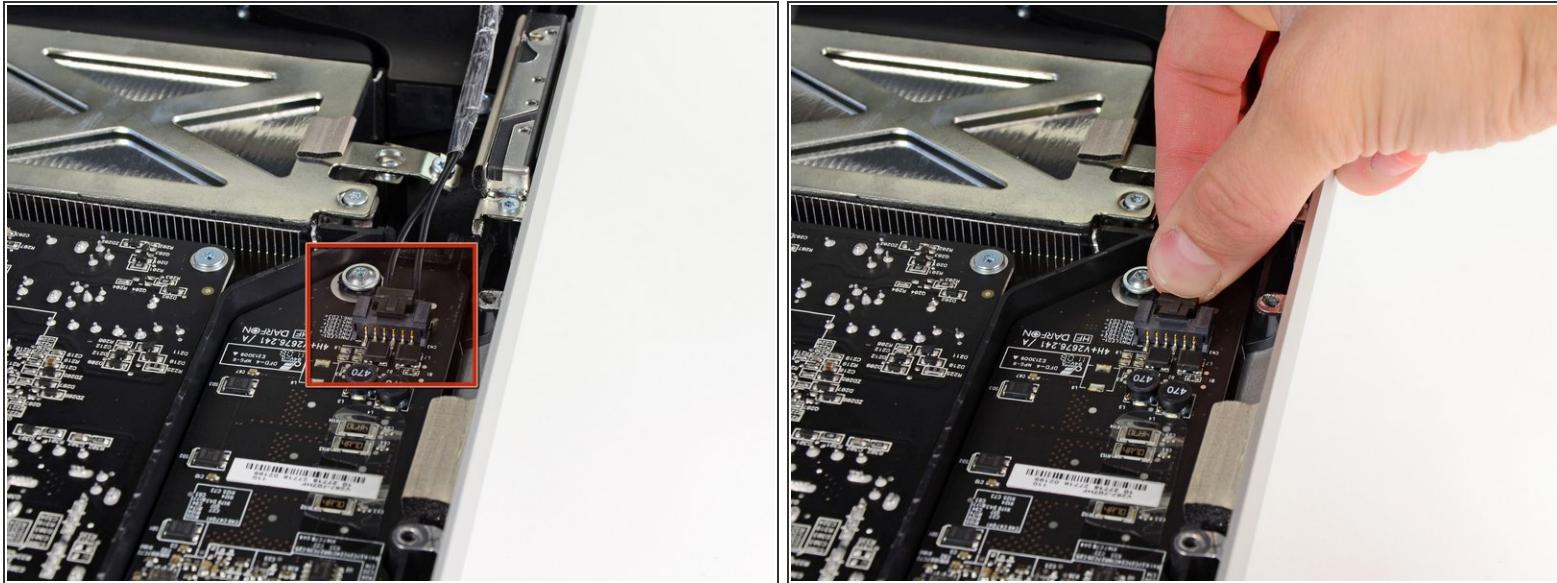
 Do not lift it too much. There are several cables attaching the display to the logic board.

Step 5



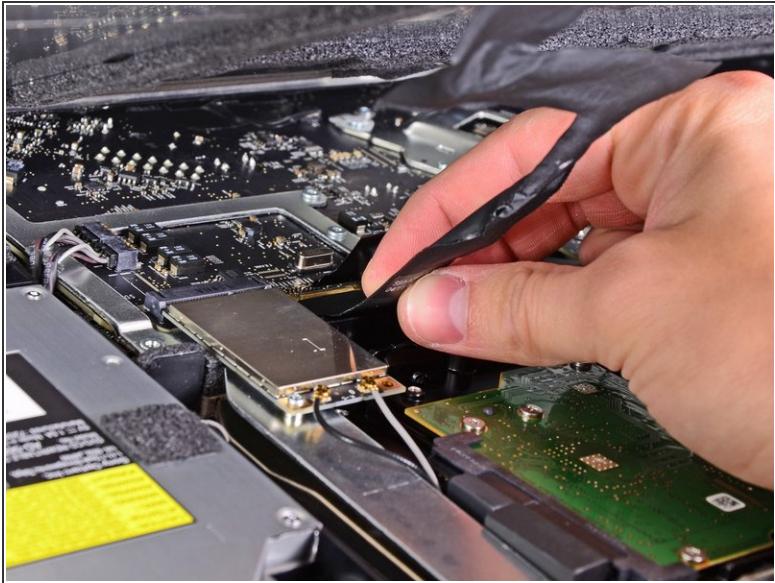
- Pull the vertical sync cable connector out of its socket on the LED driver board near the top left corner of your iMac.

Step 6



- Rotate the display out of the outer case enough to disconnect the LED backlight power cable from the LED driver board.
- *i* Disconnect the LED backlight power cable by depressing the locking mechanism while pulling the connector away from its socket (toward the bottom edge of the iMac).

Step 7



⚠ The display data cable plug has a wire lock. Disengage the plug's lock by rotating the plastic tab so that it points upward. (It is not a pull tab.)

- Pull the display data cable straight out of its socket on the logic board.

⚠ Do not lift up on the display data cable, as its socket is very fragile. Pull the cable parallel to the face of the logic board.

Step 8



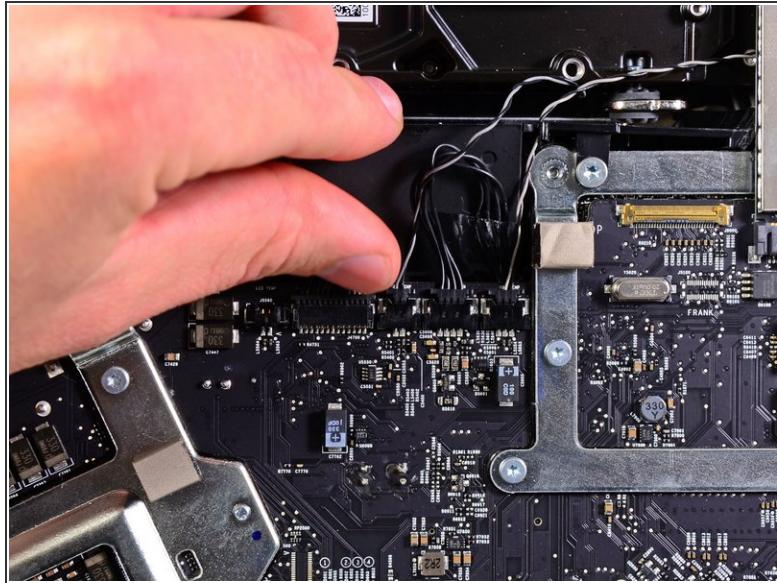
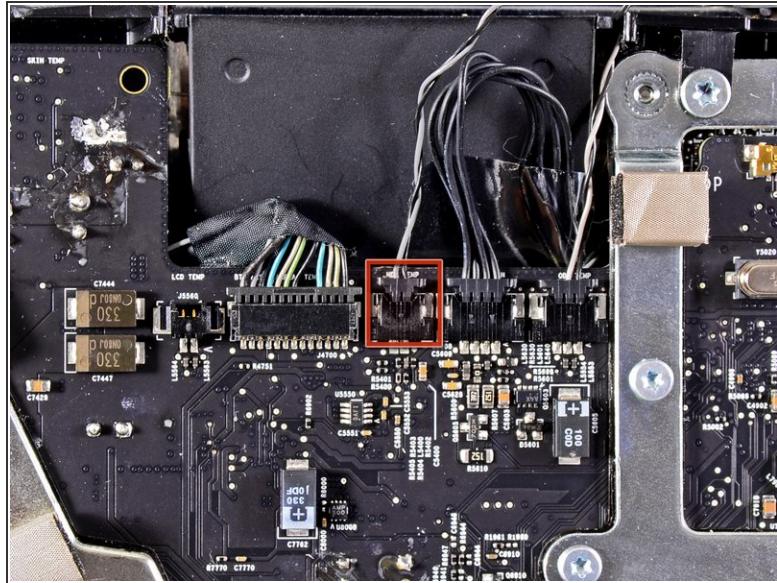
- Disconnect the LCD thermal sensor cable connector from its socket on the logic board.
- *i* If your fan is spinning full speed after completion, check this connection or the hard drive's thermal sensor cable.

Step 9



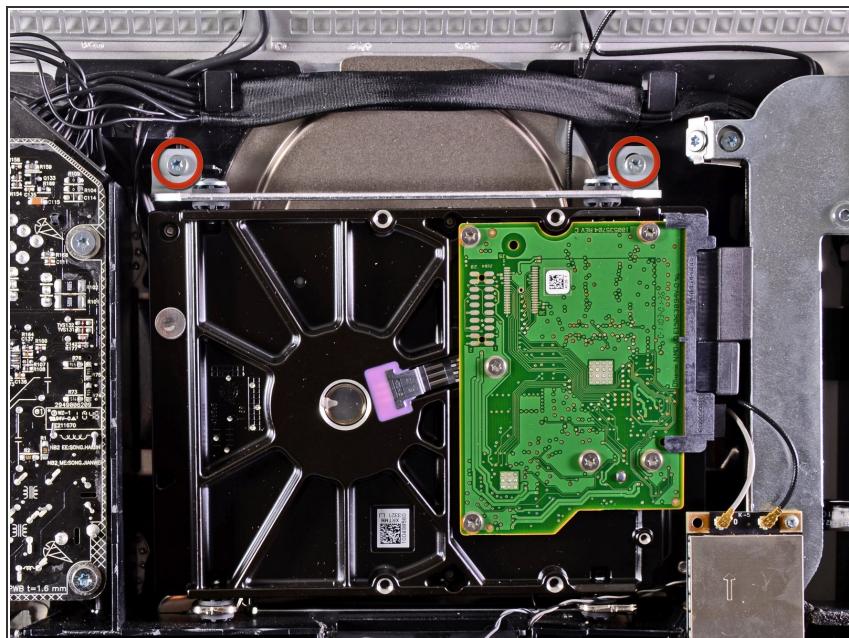
- Carefully pull the display toward the top edge of your iMac and lift it out of the outer case, minding any cables that may get caught.

Step 10 — Hard Drive



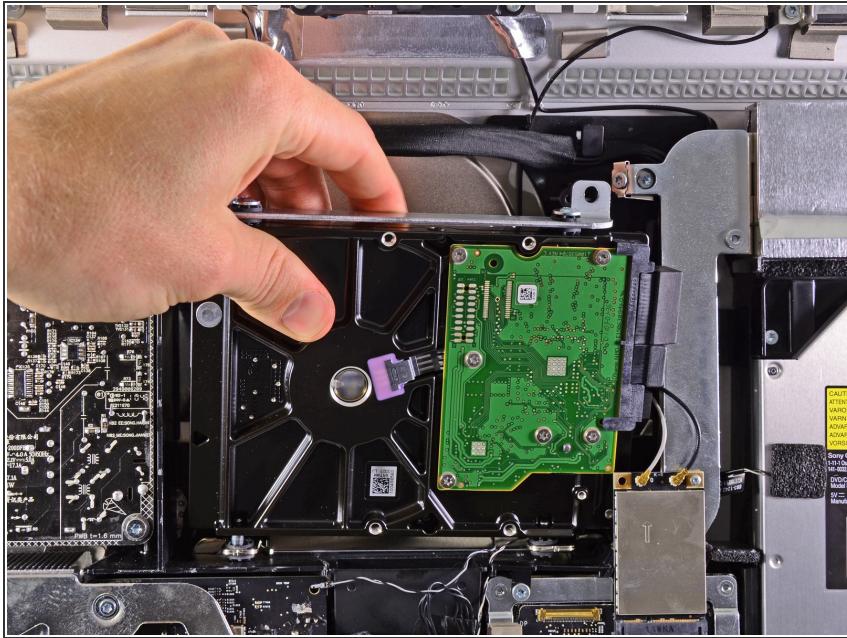
- Pull the hard drive temperature sensor connector toward the top edge of the iMac to disconnect it from its socket on the logic board.

Step 11



- Remove the two 9 mm T10 Torx screws securing the upper hard drive bracket to the outer case.

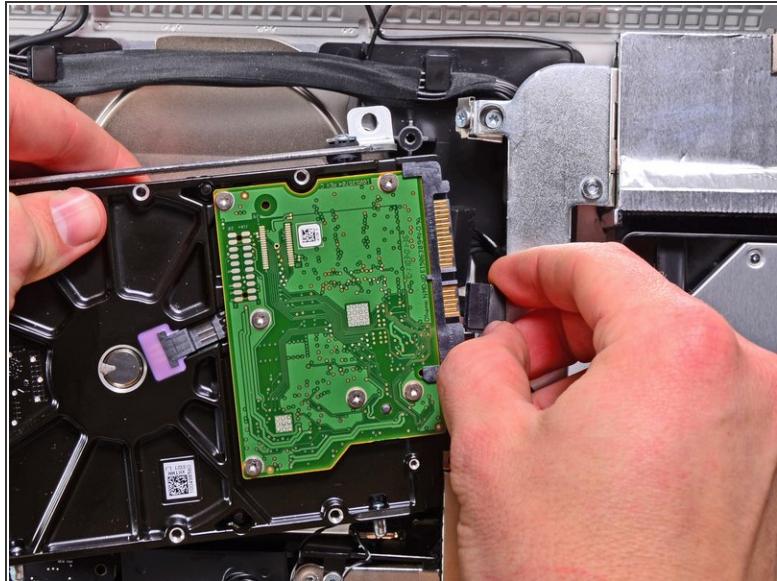
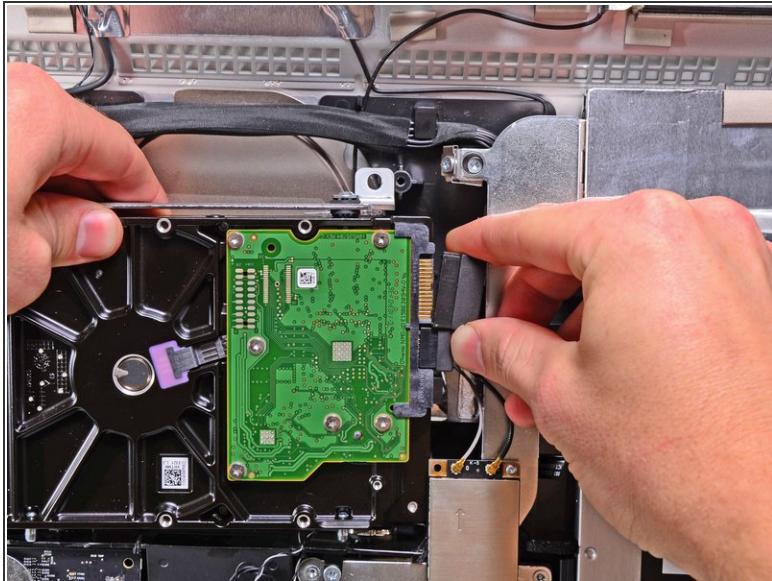
Step 12



- Slightly rotate the hard drive out of the outer case and lift it up off its mounting pins toward the top edge of the iMac.

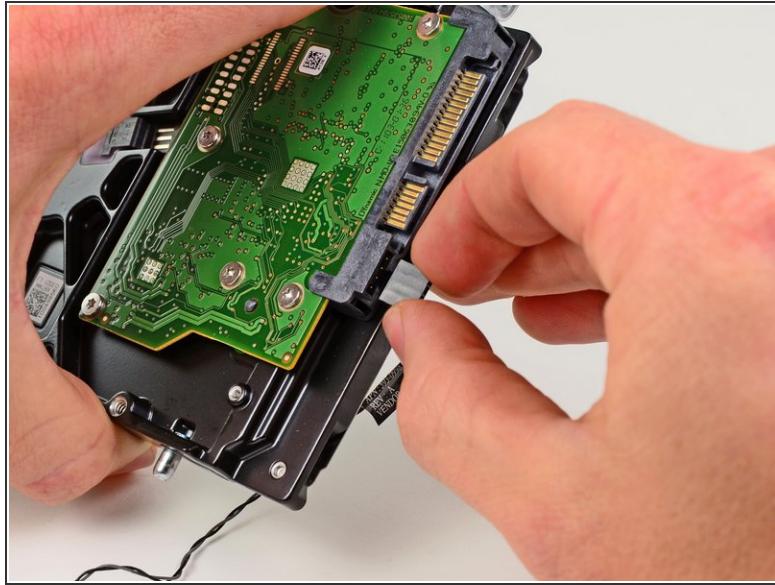
 Be careful not to contact the AirPort card as you lift the hard drive out of its recess.

Step 13



- Disconnect the SATA data cable and SATA power connector from their respective sockets by pulling each connector away from the hard drive.

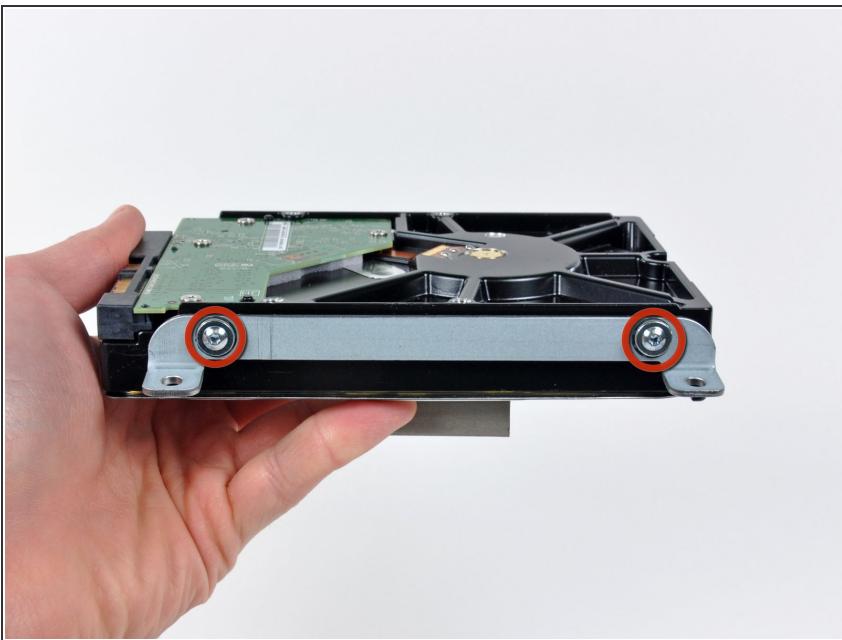
Step 14 — Hard Drive



⚠ Before disconnecting the thermal sensor cable, take note of its orientation. It is extremely important to reinstall the connector in the current orientation so the fans will not run at full speed. If you have multiple pins on your replacement hard drive, put the connector closest to the SATA connections and closest to the PCB board.

- Disconnect the hard drive thermal sensor cable from the hard drive.

Step 15



- Remove the two T8 Torx screws securing the upper bracket to the hard drive.
- Remove the upper bracket from the hard drive.

Step 16



- Remove the two T8 Torx pins from the other side of the hard drive.

Step 17



- Carefully peel off the piece of EMI foam attached to the front of the hard drive.

 Don't forget to transfer this to your new hard drive.

Step 18 — SSD



 Only follow the next ten steps if you are replacing your hard drive with an SSD kit.

- Depress the enclosure's front plate latch with your finger. While holding the latch down, swing the plate out.
- Remove the front plate.

Step 19



- Line up the small SATA connectors so that the narrow side of the connector on the SSD matches the narrow side on the enclosure connector.
- Slide the drive in through the front of the enclosure until the SATA connector is fully seated.

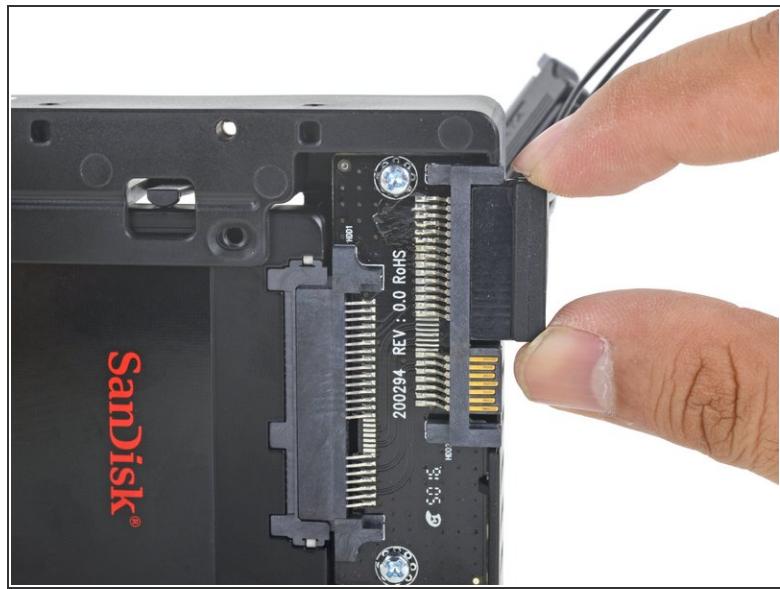
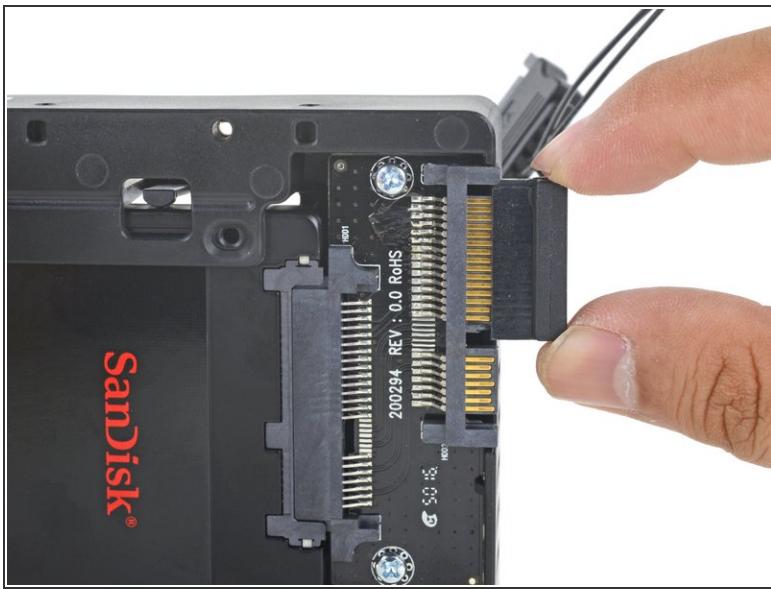
(i) The SSD connects with the enclosure in only one way. If the connectors are not lining up, rotate the SSD and try again.

Step 20



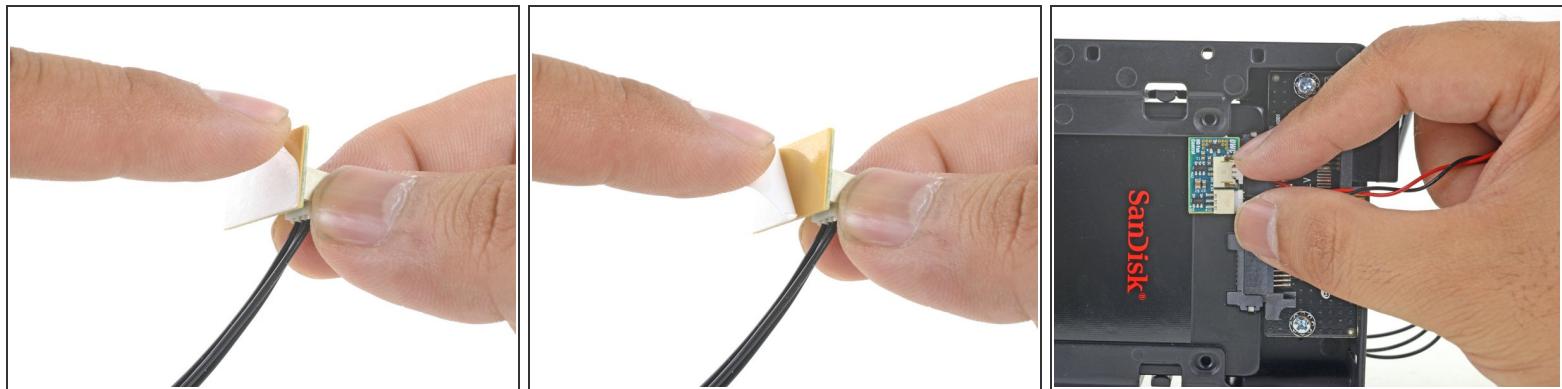
- You may optionally install two Philips #1 screws that came with the enclosure kit to secure the SSD in the enclosure.

Step 21



- Plug the included sensor-enabled SATA power cable into the wide side of the enclosure's SATA connector.
(i) The cable is keyed to connect in only one way. If you can't connect the cable, rotate it 180°, and try again.

Step 22



- Peel the backing off of the adhesive back of the small temperature sensor board.
- Adhere the temperature sensor board to an exposed, metal area of the surface of the SSD, as close as possible to the SATA connector.
- Fold the excess temperature sensor wires so that they are out of the way while you install the enclosure.

Step 23



- Install the mounting pins from the old hard drive onto the sides of the enclosure.

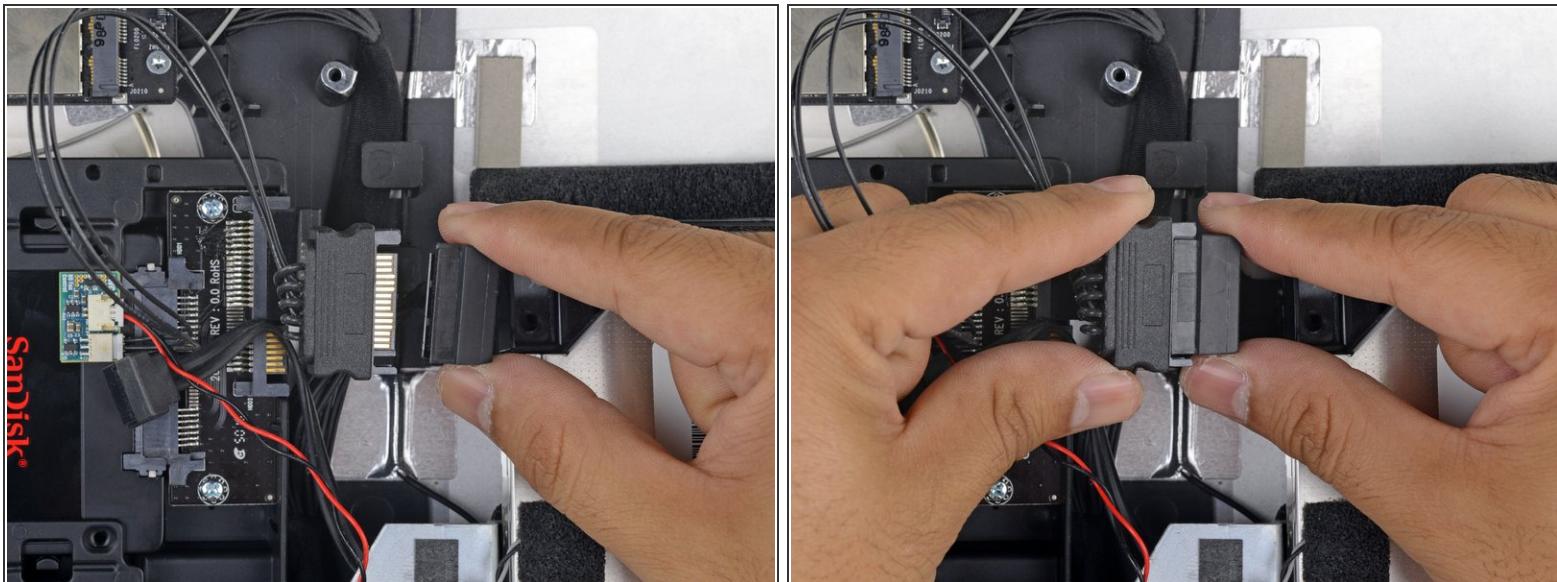
(i) The holes on the enclosure may not be threaded, so screwing the mounting pins into them may require extra effort. Take your time and screw them in slowly, making sure they go in straight.

Step 24



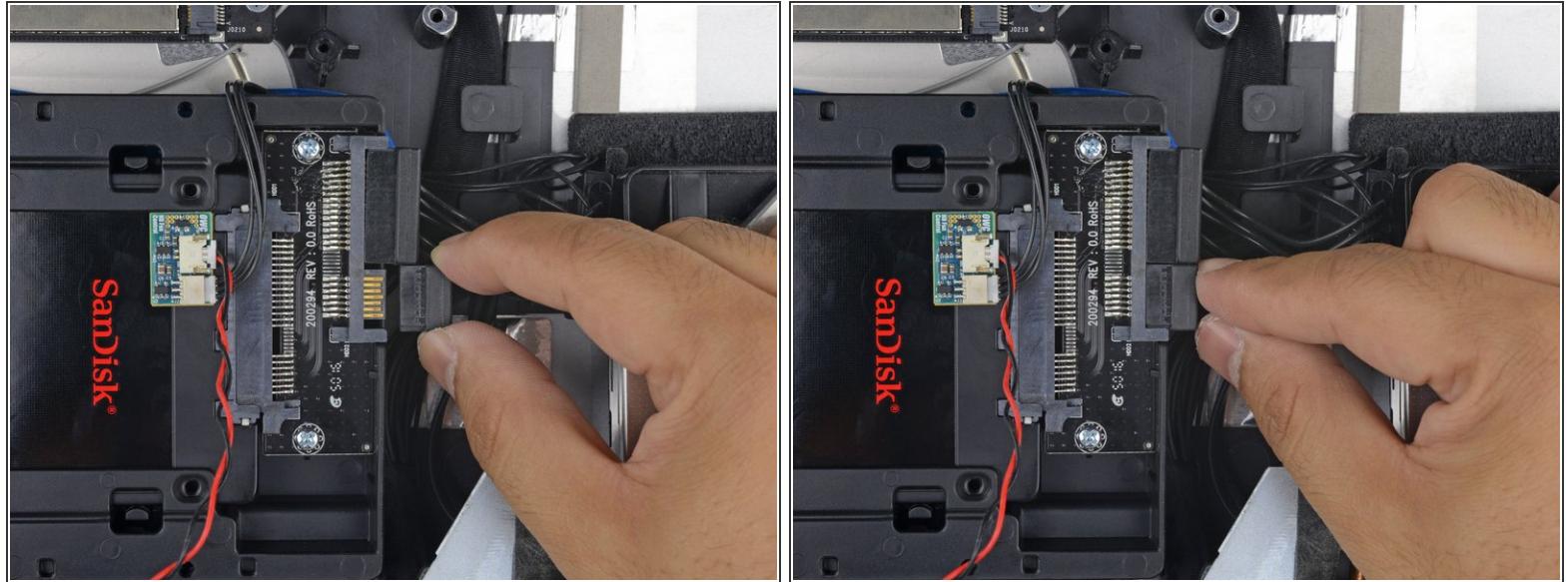
- Attach any mounting brackets removed from the old hard drive onto the enclosure.

Step 25



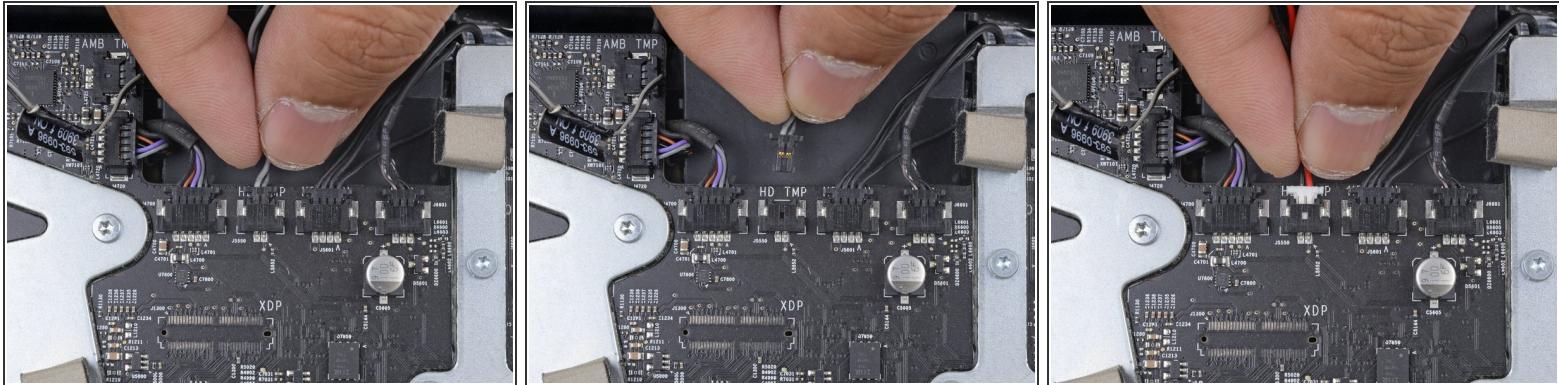
- Connect the iMac's SATA power cable to the new temperature-capable SATA power cable.
- Route the SATA cables where they will not interfere with any other components.

Step 26



- Connect the iMac's SATA data cable to the enclosure's SATA data connector.

Step 27



- Find a connector on the motherboard labeled **HD TMP** or **HDD TEMP**.
 - **(i)** If you have trouble locating it, trace the two-wire temperature cable you disconnected from the old hard drive.
- If the previous temperature cable is still connected to the board here, disconnect and remove it. You will no longer need it.
- Connect the temperature sensor's two-wire red-black cable to the motherboard plug labeled **HD TMP** or **HDD TEMP**.
 - **(i)** The connector is keyed to fit in one way only. If it seems like the connector is not fitting the socket, flip the connector and try again.
- Route the excess wire so it does not interfere with any other components.

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