

# iMac Intel 27" EMC 2429 Hard Drive Replacement

This guide will help you replace/upgrade the...

Written By: Phillip Takahashi



#### INTRODUCTION

This guide will help you replace/upgrade the 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)
Paper Clip (1)
Spudger (1)
TR10 Torx Security Screwdriver (1)
TR8 Torx Security Screwdriver (1)

#### PARTS:

iMac Intel 21.5" and 27" (Mid 2011) SSD Upgrade Kit (1) iMac Intel 21.5" and 27" (Mid 2011) SSD Temperature Sensor (1) iFixit 2.5" to 3.5" SSD/HDD Adapter (1)

#### Step 1 — Glass Panel







- Stick a heavy-duty suction cup near each of the two top corners of the glass panel.
- *i* To attach the <u>suction cups</u>, first position the suction cup with the movable handle parallel to the face of the glass panel (as indicated in the second picture).
- While lightly holding the suction cup against the glass, raise the movable handle until it is parallel with the other handle (as indicated by the third picture).
- i If your suction cups refuse to stick, try cleaning both the glass panel and the suction cup with a damp soft, lint-free cloth. (Dampen with distilled water, and if needed, an equal ratio of distilled water and white vinegar for best results.)
- ⚠ Do not use the suction cups to carry the display glass because if one of them fails to stick, you could drop the screen and break it.
- (i) The original iMac box makes a good place to store the glass panel. Otherwise, a padded horizontal surface, like a towel on a desk, will do nicely.



- 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.
  - ⚠ Don't use the suction cups to carry the glass panel—if either one loses its grip, the panel could fall and break.
  - ⚠ After setting the glass panel down safely, be sure to release the suction cups, as the suction force over time can crack the glass.
- 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.

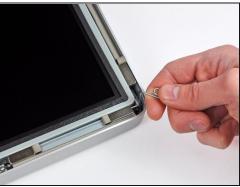
## Step 3 — Display



- Remove the eight T10 Torx screws securing the LCD to the outer case.
- ⚠ Be careful not to touch the display as the oil from your fingers may leave a residue that can be difficult to remove.
- i If necessary, peel the EMI gaskets located near the top center edge of the display assembly.

#### Step 4 — Display







- Carefully lay the iMac stand-side down on a flat surface.
- i Due to tight tolerances, you will have to use a thin hooked tool to lift the display out of the outer case. As seen in the first picture, we made one out of a bent paperclip. A pair of angled tweezers can also work well.
- Use a thin hooked tool to lift one side of the top edge of the display by its steel outer frame.
- (i) After lifting the top edge of the display on one side, hold it out of the outer case while you use a hooked tool to lift the other side.
- Raise and hold the display high enough to access the cables.

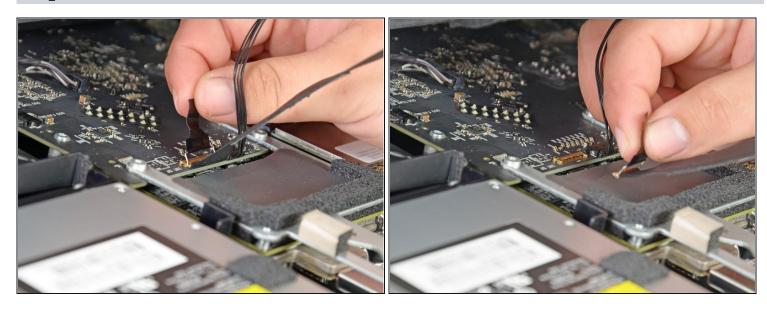
⚠ Do not lift the top edge of the display out of the outer case too far, as several short ribbon cables still connect the two components.



 Disconnect the vertical sync cable in the upper left corner of the screen. Use the tip of a spudger to push on the connector's side tabs and gently walk it out of its socket.



- This step brings your hands close to the exposed rear of the power supply. To avoid a high-voltage shock from the many large capacitors attached to the board, do **NOT** touch the rear of the power supply.
- Disconnect the LED backlight driver cable with your hand by pressing the tab down and sliding it towards the bottom of the display.

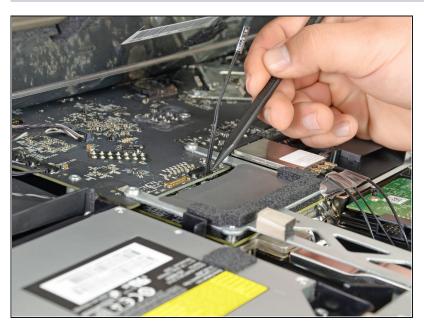


 Pull the black tab straight up to disconnect the latch on the display data cable ZIF connector.

### ⚠ Do not pull up too hard or you will damage the connector and socket.

• Continue to pull the black tab up toward the top of the device, to detach the display data cable.

## Step 8



 Use the tip of a spudger to disconnect the display power cable next to the display data cable.

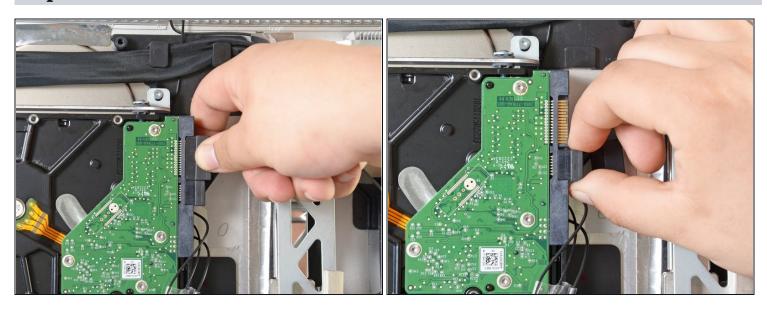


 Carefully pull the display toward the top edge of your iMac and lift it out of the iMac case.

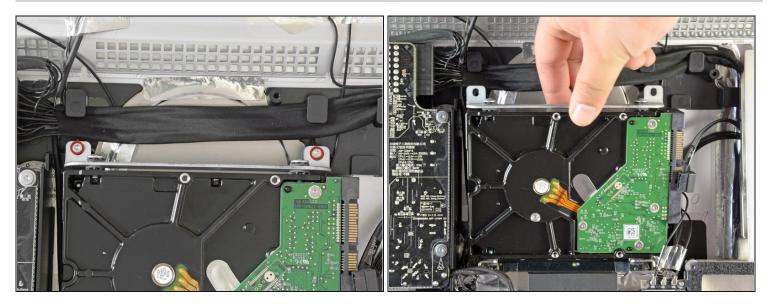


- Lay the display face down on a flat, soft surface.
- if you are replacing the display panel, you will need to transfer additional components from the old panel to the new one. Compare the back of the old display with the replacement display. Note all cables, sensors, and foam cushioning that are missing from the new display.
  - If there is a wire or cable underneath adhesive tape, always pull the tape off first.
     Do not pull on the cable directly.
  - If the cable is glued to the chassis, use a heated iOpener or a hair dryer to soften the adhesive first. You can then slide an opening pick underneath the cable to loosen it. Never pull on the delicate connectors.
  - Slide an opening pick underneath the foam cushion pieces to separate them from the display, and gently pull them off. You may need some double sided tape to re-attach them to the new display.

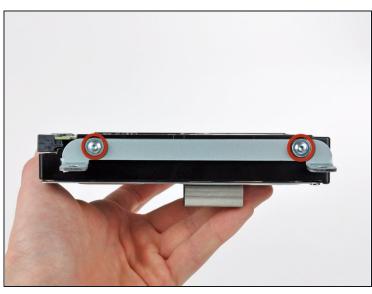
#### Step 11 — Hard Drive



• Disconnect the SATA power and data cables from the hard drive by pulling them straight away from the hard drive.



- Remove the two T10 Torx screws securing the hard drive to the iMac frame.
- Slightly rotate the top edge of the hard drive away from the outer case.
- Lift the hard drive off its two lower positioning pins and remove it from the outer case.





- Remove the two T8 Torx screws securing the upper bracket to the hard drive.
- Remove the upper bracket from the hard drive.
- Remove the two T8 Torx pins from the other side of the hard drive.



- 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 15 — Replace the hard drive with an SSD

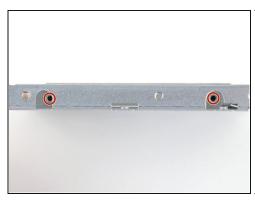






- (i) Follow the next steps if you are replacing your hard drive with an SSD kit.
  - *i* If your SSD enclosure looks like the first image, <u>follow this guide instead</u>.
- Line up the SSD connectors with the metal enclosure's sockets.
- Press the drive against the enclosure sockets until the SSD is firmly seated.
- *i* The SSD connects with the enclosure in only one direction. If the connectors don't line up, rotate the SSD and try again.

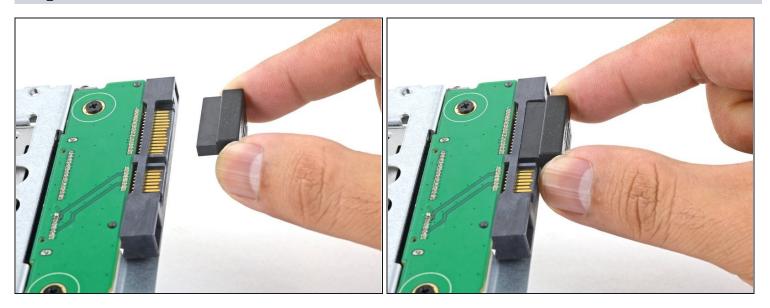
### Step 16



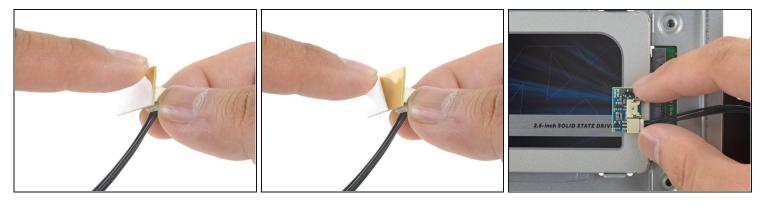




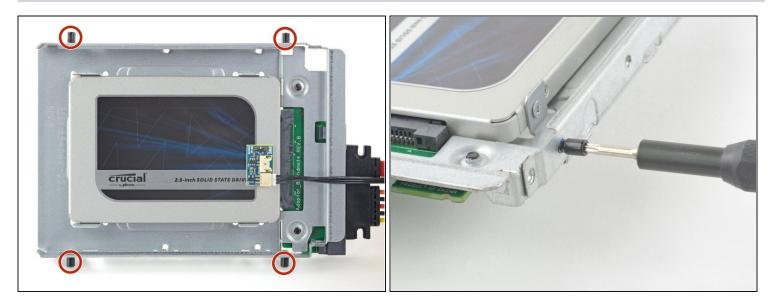
 Use a Phillips screwdriver to install the four silver screws (two on each side) along the edges of the SSD to secure it to the enclosure.



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

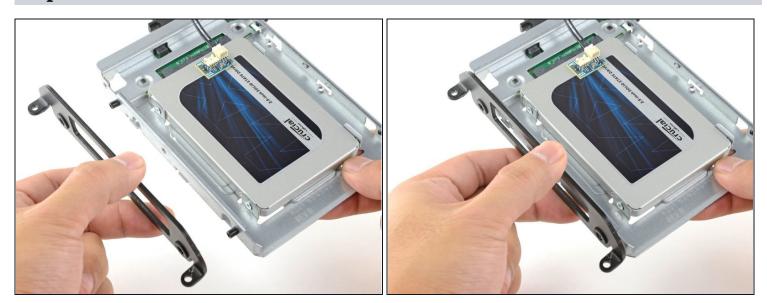


- Peel the white liner off the back of the small temperature sensor board in order to expose the adhesive.
- Adhere the temperature sensor board to an exposed, metal surface of the SSD, close to the SATA connector.
- Fold the excess temperature sensor wires so that they are out of the way while you install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

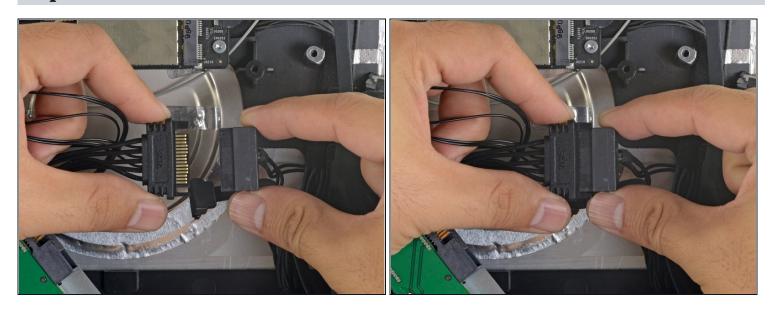


• Use a T8 driver to install the mounting pins from the old hard drive onto the sides of the enclosure.

## Step 20

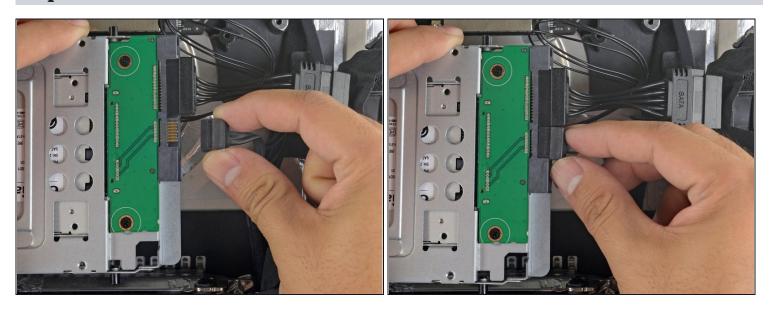


• Attach any mounting brackets removed from the old hard drive onto the enclosure.



• Connect the iMac's SATA power cable to the other end of the new sensor-enabled SATA cable.

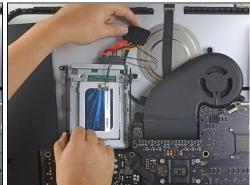
## Step 22



• Connect the iMac's SATA data cable to the enclosure.







- (i) The images used in this step come from a 2017 iMac. Your cables may look slightly different, but the procedure remains the same.
- Slide the SSD enclosure into the space previously occupied by the hard drive.
- Route the SATA cables so that they will not interfere with any other components.
- (i) Try to keep the cables free from any sharp bends, and route them such that they are not pinched.

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