# iMac Intel 27'' EMC 2309 and 2374 Hard Drive Replacement

Upgrade your hard drive for more storage space!...

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Page 1 of 17

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## INTRODUCTION

Upgrade your hard drive for more storage space!

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)
- TR10 Torx Security Screwdriver (1)
- TR8 Torx Security Screwdriver (1)
- Tweezers (1)

### ⚙ PARTS:

- iMac Intel 21.5" and 27" Late 2009-Mid 2010 SSD Upgrade Kit (1)
- SATA Universal Drive Adapter (1)
- 1 TB 7200 RPM 3.5" 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)
- iFixit 2.5" to 3.5" SSD HDD Adapter (1)

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## 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 [suction cups](), 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.

## 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.

  ⚠ 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.

## Step 4



- Carefully lay the iMac stand-side down on a flat surface.

- ⓘ 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 third picture, we made one out of a bent paperclip.

- Use a thin hooked tool to lift one side of the top edge of the display by its steel outer frame.

- ⓘ 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. A pencil or pen can be placed under the top edge of the display, parallel to the top edge and extending past the edge of the computer, to keep the first side propped up while lifting the second.

- ⚠ 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.

## Step 5



- Use a pair of tweezers to pull the vertical sync ribbon cable out of its socket on the LED driver board near the top left corner of your iMac.

- (i) On some iMacs this may not be a ribbon cable but four separate, very fine and very fragile wires. Be very careful, if the tweezers slip off the plug, you will very likely pull a wire out of the assembly.

## Step 6



- Rotate the display out of the outer case enough to disconnect the LED backlight power cable from the LED driver board.

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## Step 7



- Squeeze the two display data cable connector arms together to unlock it from its socket on the logic board.

- Pull the display data cable connector away from its socket on the logic board.

- ⚠ Be very careful when disconnecting this cable as both the cable connector and logic board socket are extremely fragile. When reconnecting the cable later, use as little force as possible.

## Step 8
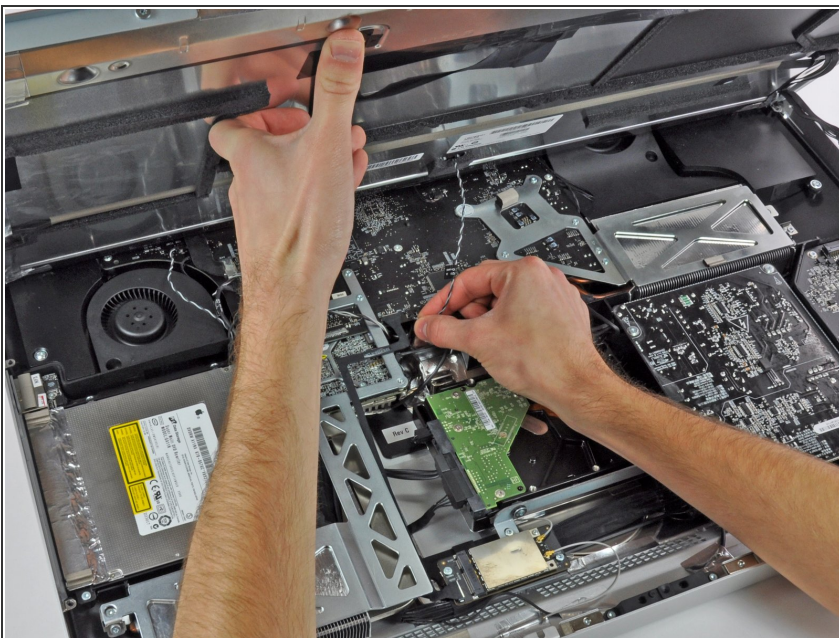


- Lift the display for enough clearance to disconnect the LCD thermal sensor cable connector from its socket on the logic board.

- ⓘ If your fan is spinning full speed after completion, check this connection or the hard drive's thermal sensor cable. The thermal sensor connector socket is very fragile, so be very careful when you connect back the sensor cable.
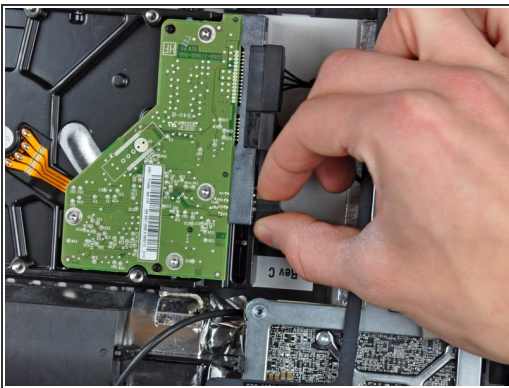
## Step 9



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

## Step 10 — Hard Drive
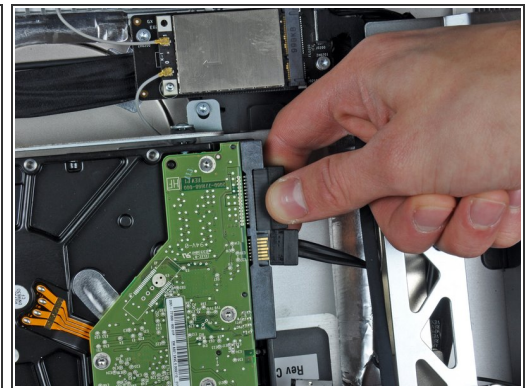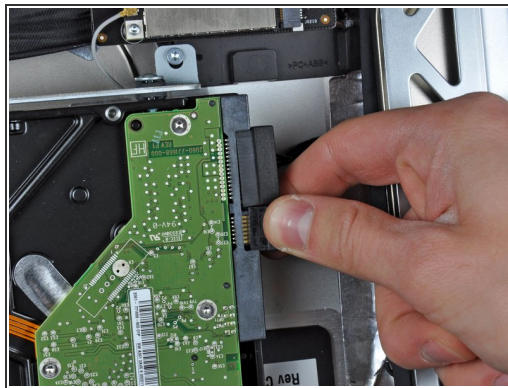


- ⚠️ Before disconnecting the thermal sensor cable, take note of its orientation. It is extremely important to reinstall the connector in the current orientation so the fans will not run at full speed. If you have multiple pins on your replacement hard drive, put the connector closest to the SATA connections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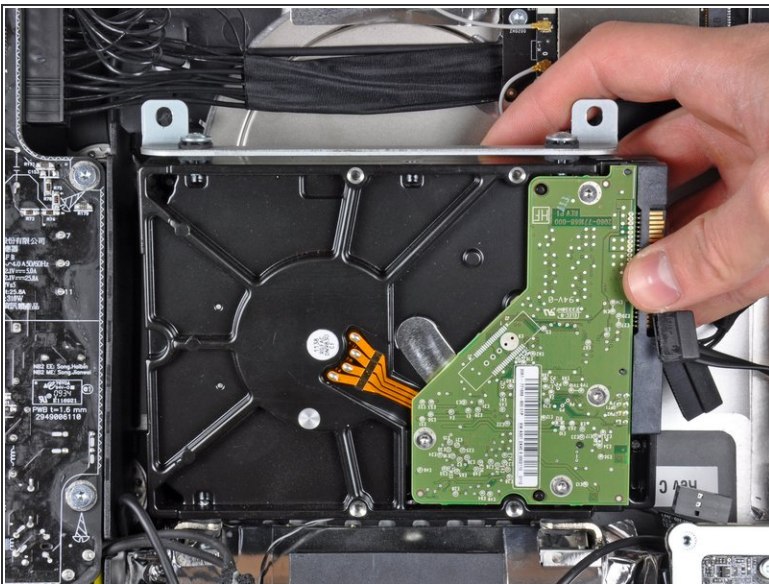
- Disconnect the thermal sensor, SATA power, and SATA data cables by pulling their connectors away from the sockets on the hard drive.

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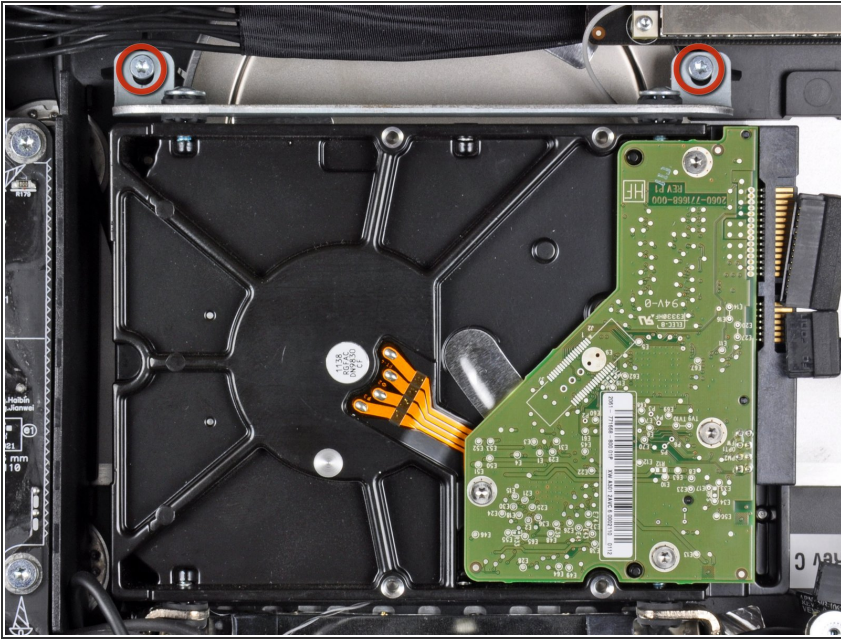
## Step 11



- Remove the two T10 Torx screws securing the upper hard drive bracket to the outer case.
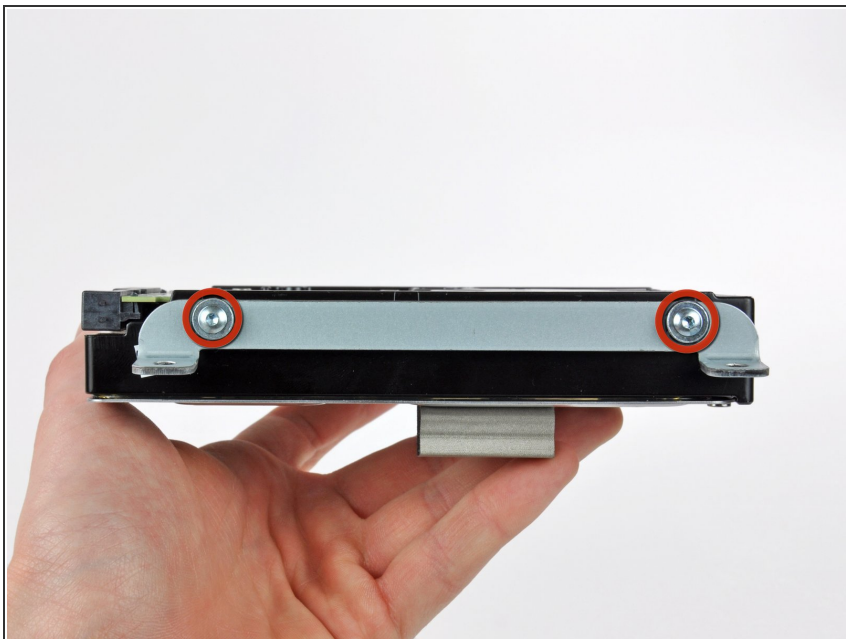
## Step 12



- Slightly rotate 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.

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## Step 13



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

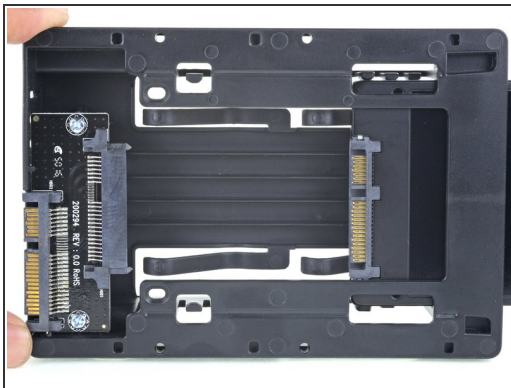- Remove the upper bracket from the hard drive.

## Step 14



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

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## Step 15



- 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 16 — Replace the hard drive with an SSD



- ⓘ Follow the next steps if you are replacing your hard drive with an SSD kit.
  - ⓘ If your SSD enclosure looks like the first image, follow this guide instead.

- Line up the SSD connectors with the metal enclosure's sockets.

- Press the drive against the enclosure sockets until the SSD is firmly seated.
  - ⓘ The SSD connects with the enclosure in only one direction. If the connectors don't line up, rotate the SSD and try again.

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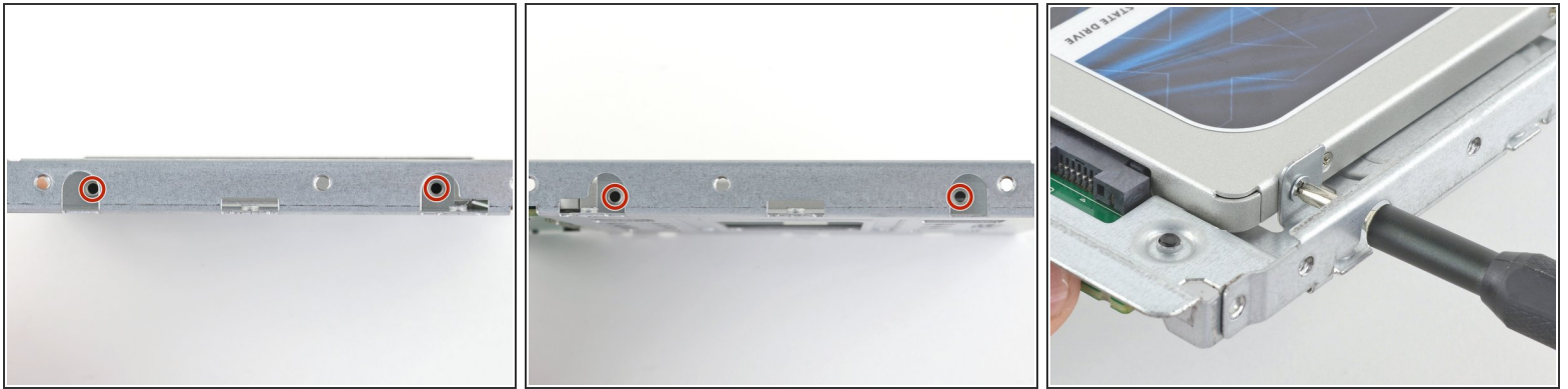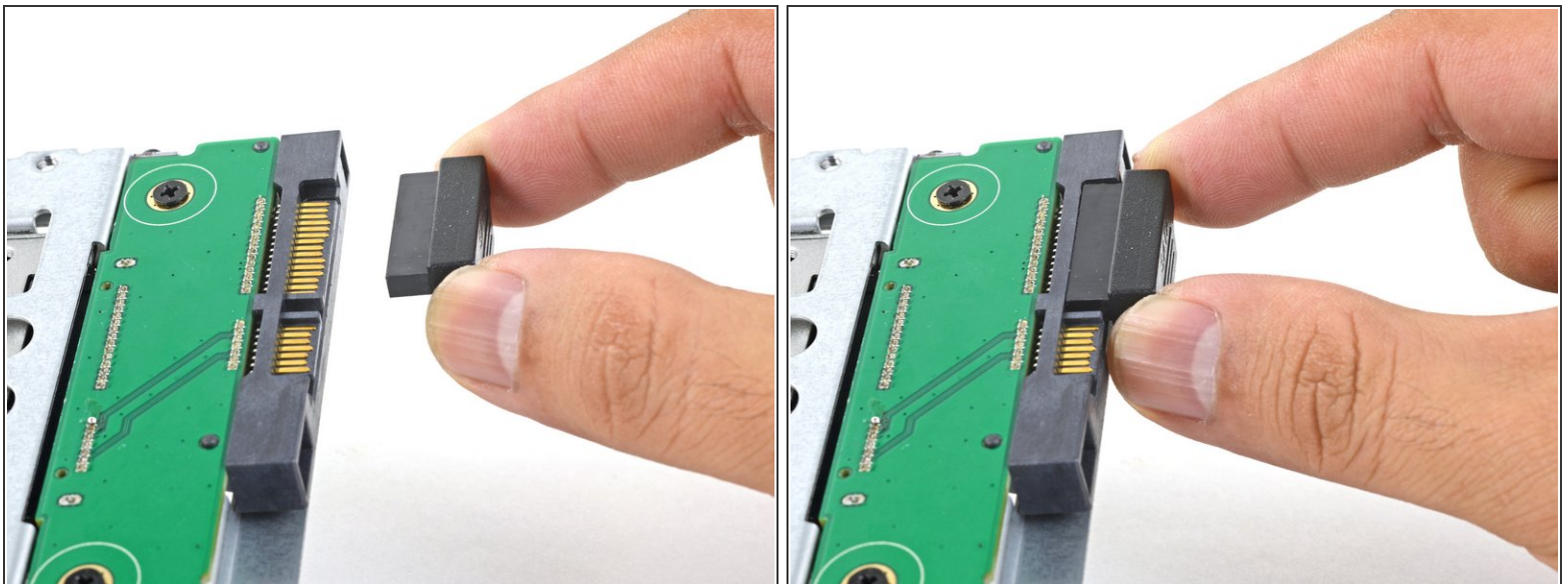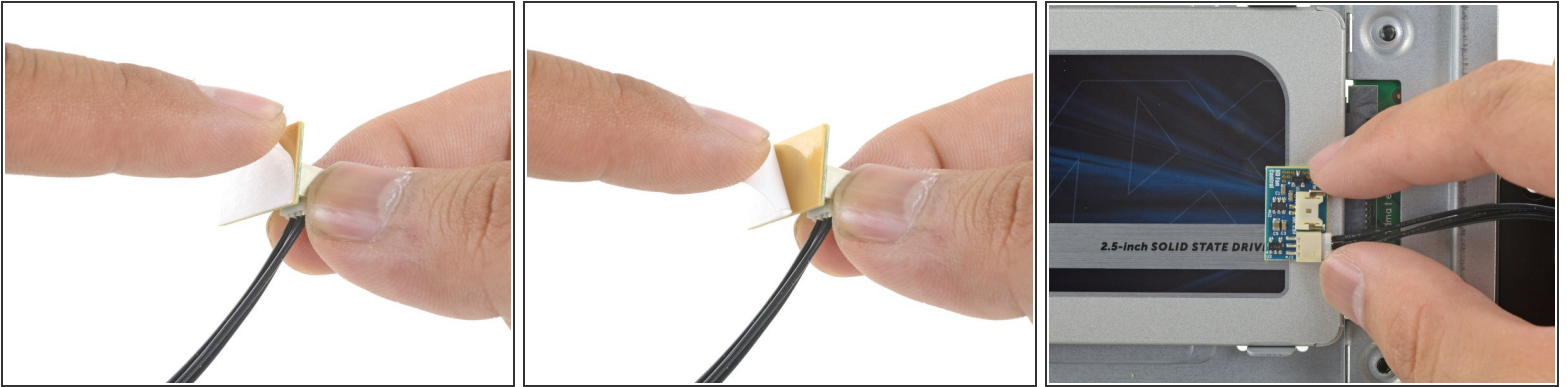
## Step 17



- 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.

## Step 18



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

## Step 19



- 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.
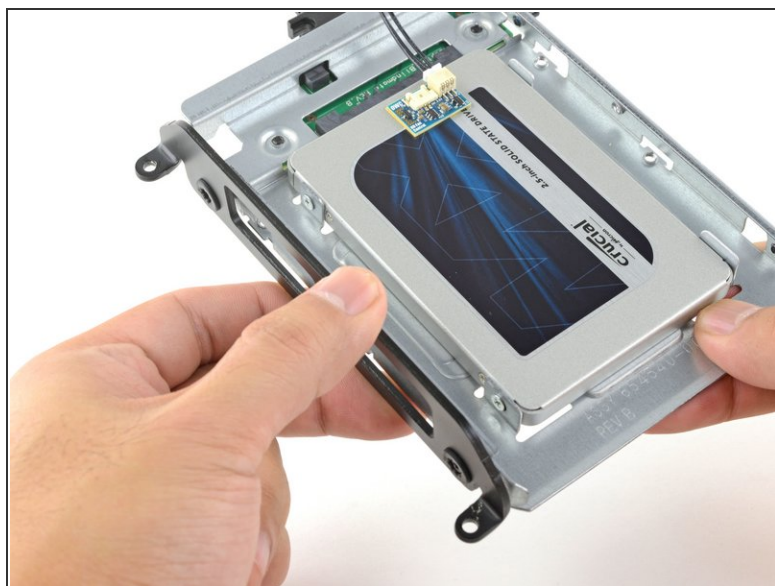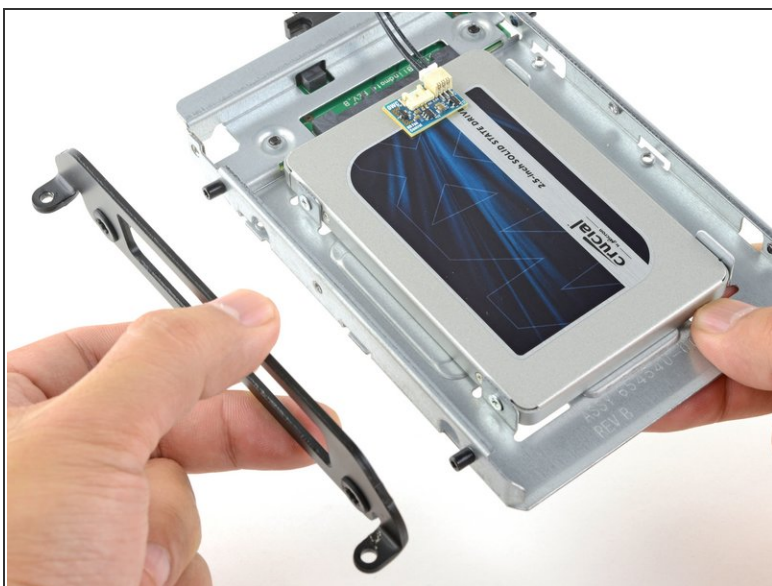
## Step 20
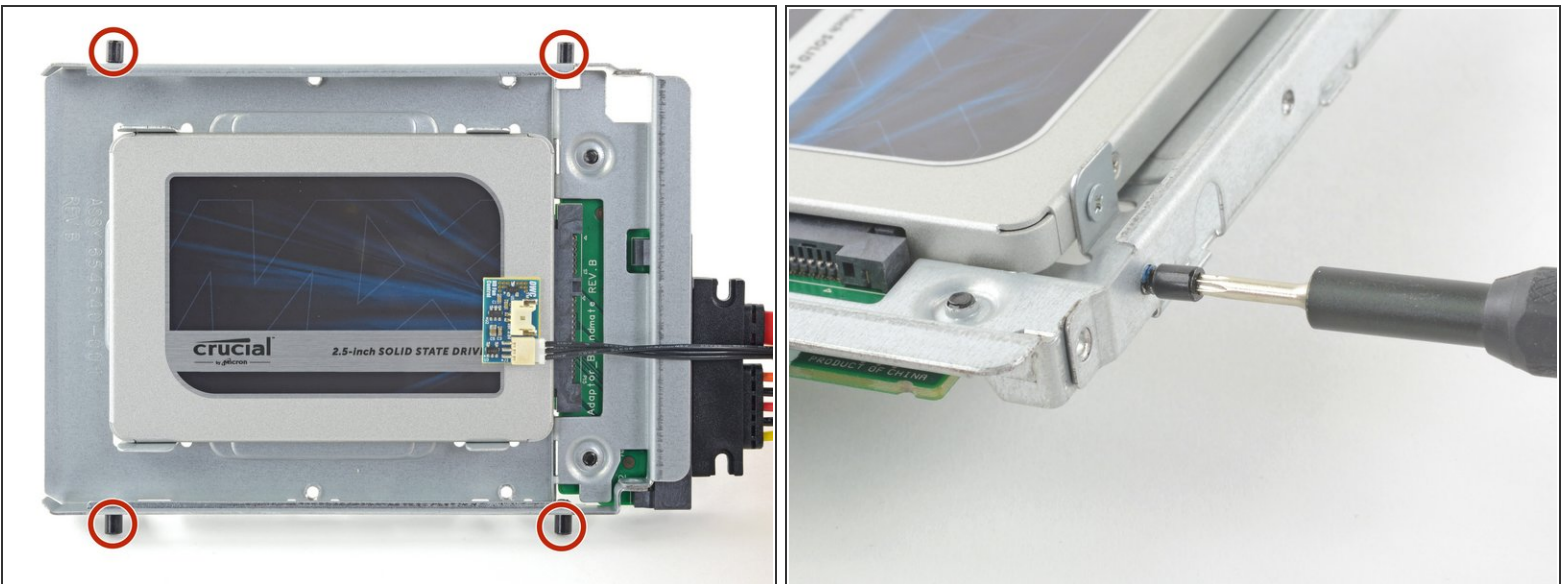


- Use a T8 driver to install the mounting pins from the old hard drive onto the sides of the enclosure.
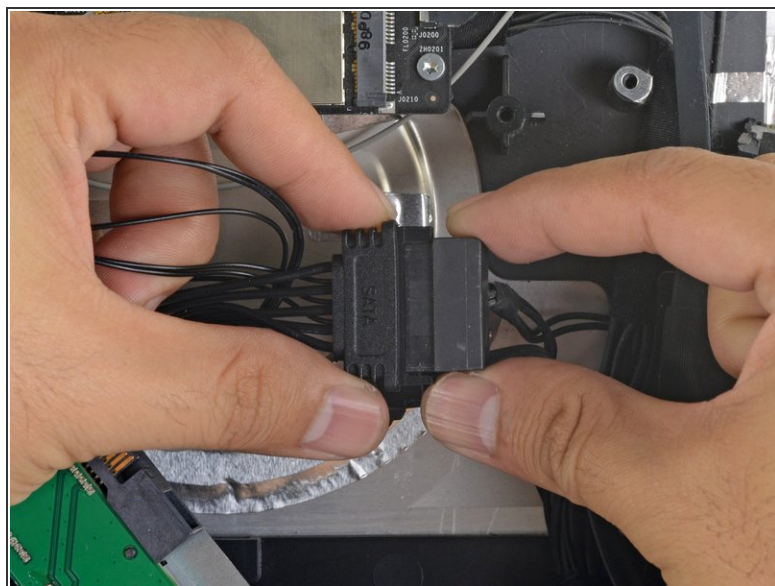
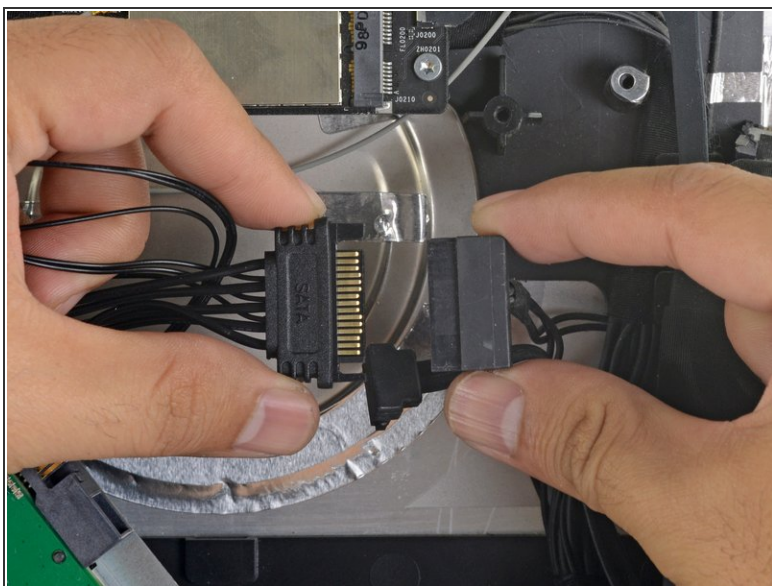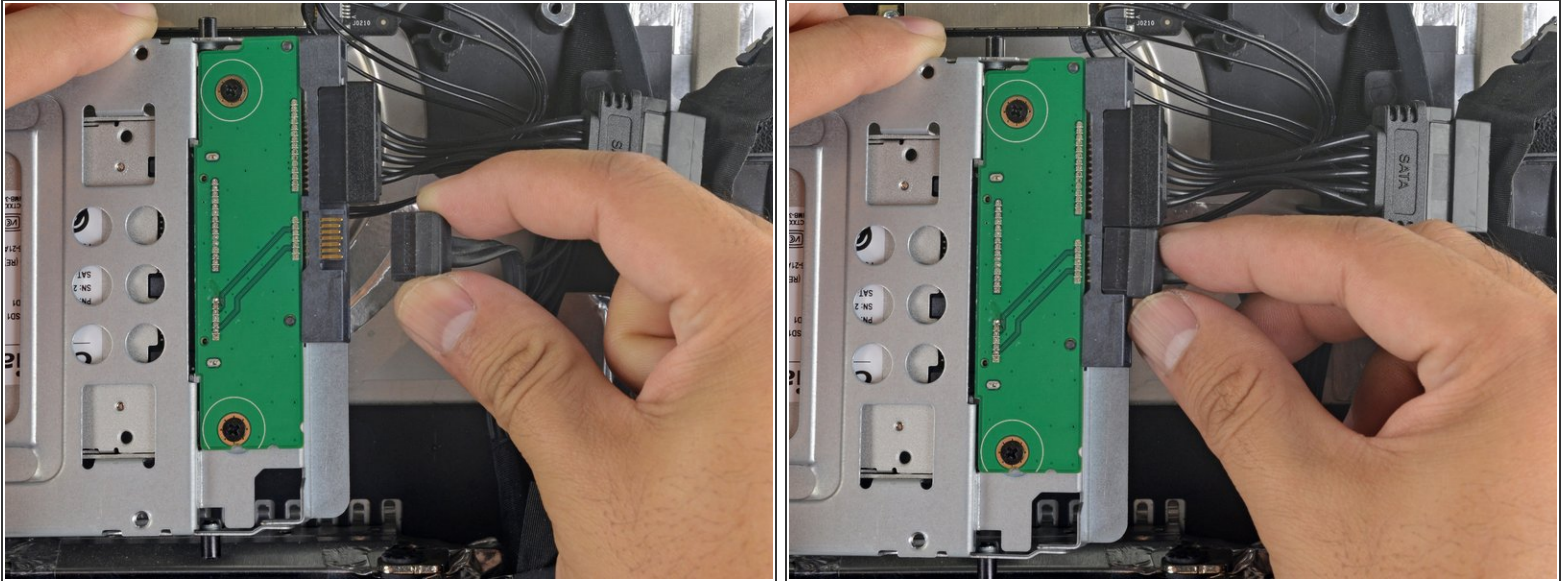This document was generated on 2022-12-08 07:08:12 AM (MST).

## Step 21



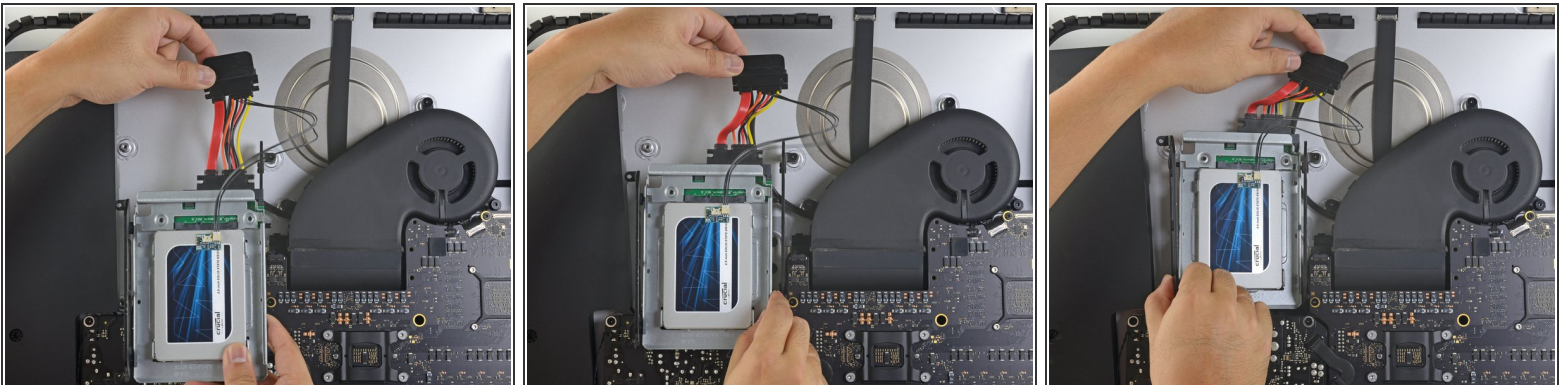- Attach any mounting brackets removed from the old hard drive onto the enclosure.

## Step 22



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

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Page 15 of 17

## Step 23



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

## Step 24



- (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.

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## Step 25



- ⓘ If your motherboard has a socket for a hard drive temperature sensor, follow this step to plug the sensor wires in.

- ● Find the connector on the motherboard labeled **HD TMP** or **HDD TEMP**.
  - ⓘ 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**.
  - ⓘ The connector is keyed to fit in only one orientation. If it doesn't fit one way, rotate it 180° 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.

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