iMac Intel 27" Retina 5K Display Hard Drive Replacement

Replace the Hard Drive in your iMac Intel 27" Retina 5K Display.

Written By: Sam Goldheart

INTRODUCTION

Replacing the hard drive requires separating the display and removing the left speaker.

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)
- iMac Opening Tool (1)
- Plastic Cards (1)
- iMac Service Wedge (1)
- Spudger (1)
- T10 Torx Security Bit Screwdriver (1)
- iMac Intel 27" (2012-2017) Adhesive Strips (1)
- T8 Torx Screwdriver (1)

PARTS:

- iMac Intel 27" Late 2012-Mid 2017 SSD Upgrade Bundle (1)
- iMac Intel 27" 5K Late 2014 and Mid 2015 Hard Drive Cable (1)
- iMac Intel 21.5" and 27" (Late 2012-Late 2015) SSD Temperature Sensor (1)

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Step 1 — Display

- Starting on the left of the display, near the power button, insert the iMac Opening Tool into the gap between the glass panel and the rear case.

- ⚠ The hub on the iMac Opening Tool will keep you from pushing the wheel in too far. If using a different tool, insert no more than 3/8" (9.5 mm) into the display. You risk severing antenna cables and causing serious damage.
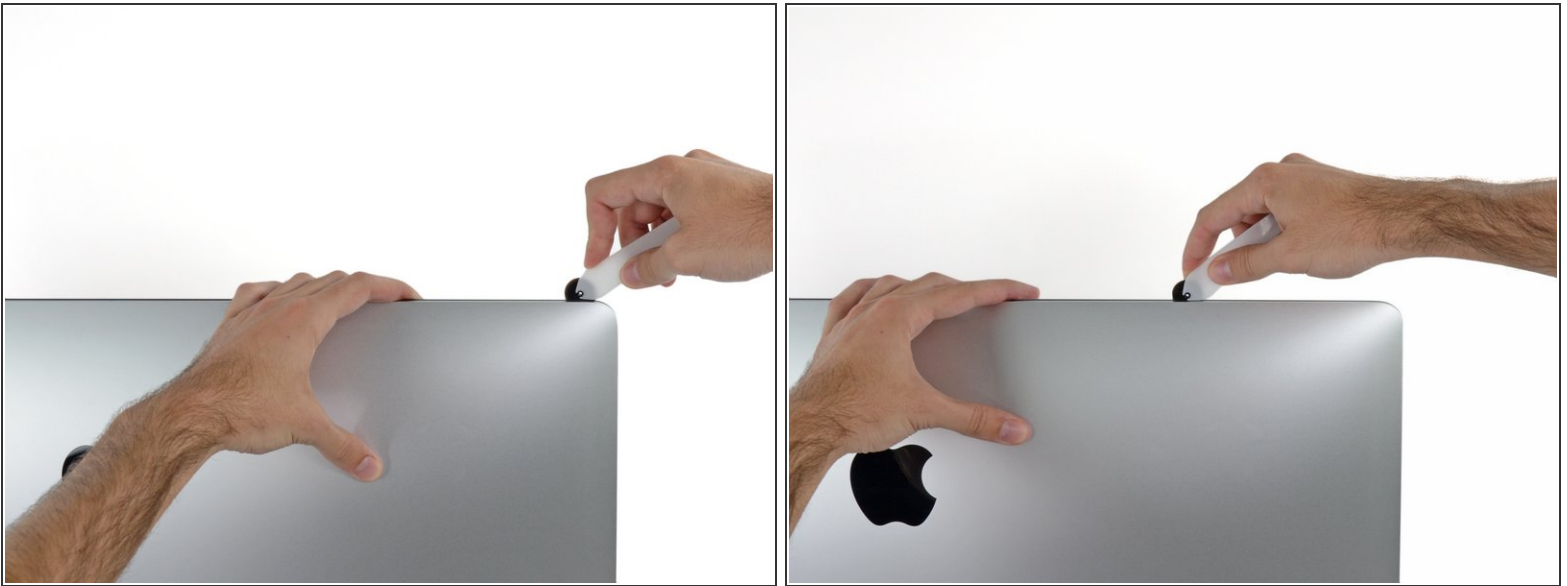
Step 2

- Use the tool like a pizza cutter—roll it along through the gap, and it will cut the foam adhesive through the center.

- ⓘ Be sure to always push with the handle behind the cutting wheel. If you pull, the wheel might get pulled out of the handle.

- Run the tool up along the left side of the display.

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Step 3

- Continue wheeling the tool up around the top left corner.

Step 4

- Cut the adhesive along the top left of the display.

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Step 5
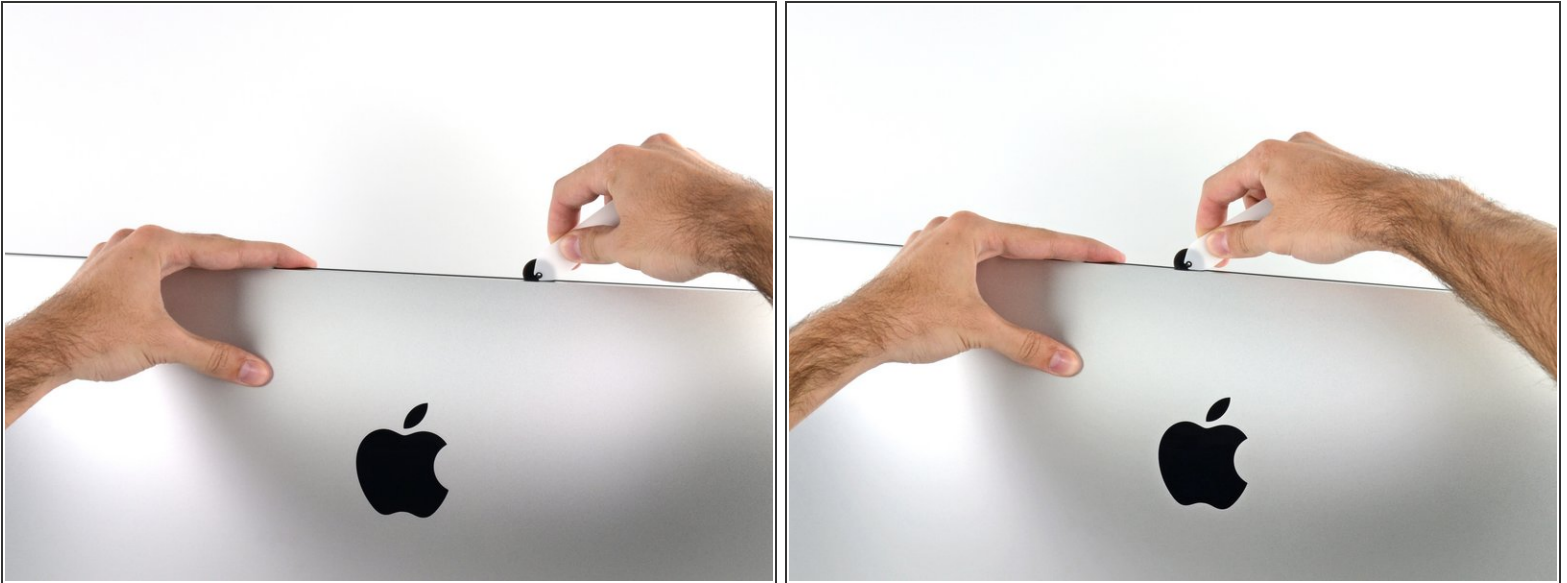
- Continue along the top of the display.

- (i) You may want to run the tool back and forth through what you've already cut a few times, to ensure you get as much of the adhesive separated as possible.

Step 6

- Push the tool around the top right corner of the display.

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Step 7

- Wheel the tool down along the right side of the display.

Step 8

- Finish pushing the opening tool to the bottom of the right side of the display.

- ⓘ At this point, you'll want to run the tool back around the entire display, to ensure you cut as much adhesive as possible.

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Step 9

ⓘ While the opening tool did the lion's share of the work, the display will still be slightly adhered to the case. A plastic card will be necessary to free up the last of this adhesive.

● Set the iMac face-up on a table.

● Starting from the top right corner of the iMac, insert a plastic card between the display and frame.

⚠ Be careful not to insert it more than 3/8" (9.5 mm), or you may damage internal components.

Step 10
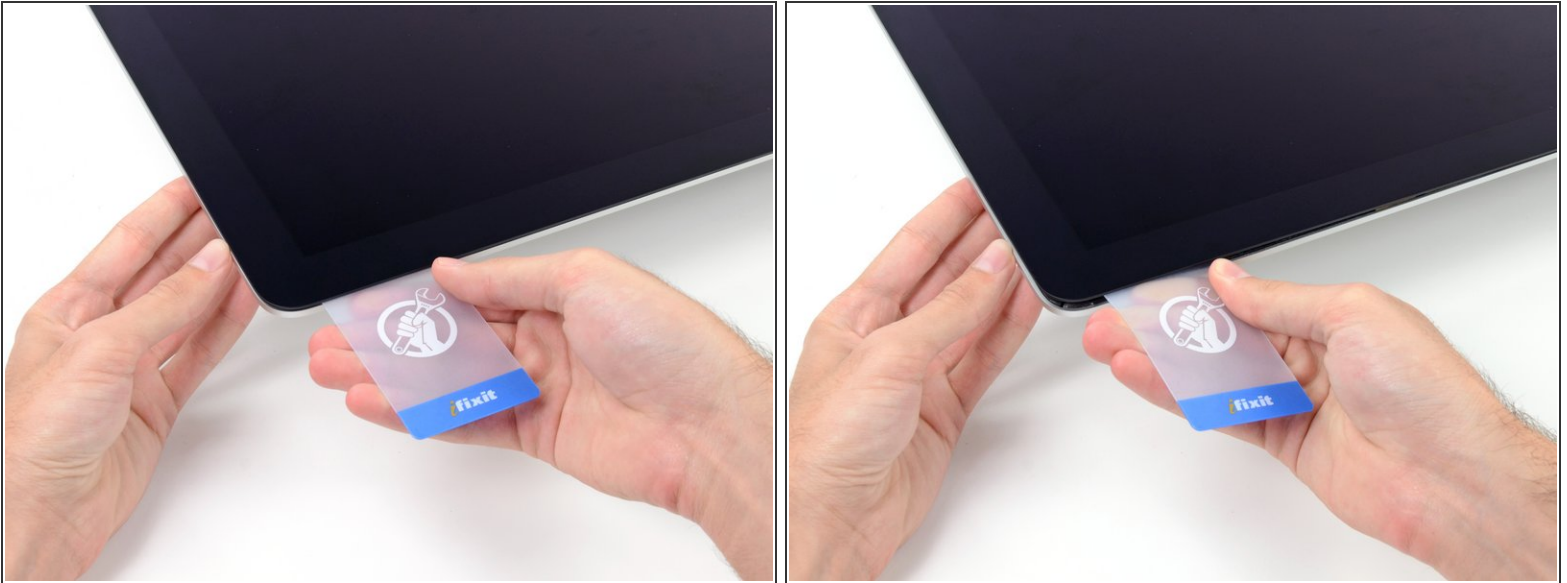
- Gently twist the plastic card to open the space between the display and frame, and cut any remaining adhesive near the corner.

  ⚠️ Using too much force will crack the glass. Work carefully, and don't try to create a gap any larger than about 1/4" (6 mm).
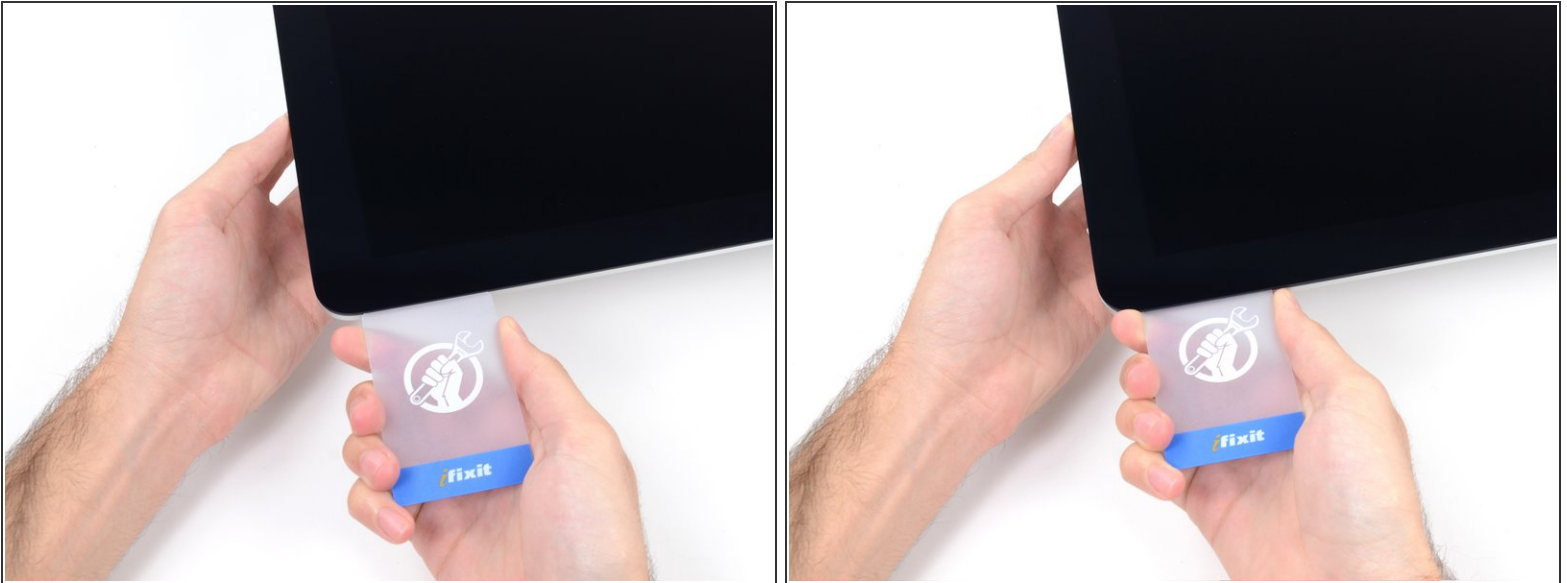
Step 11

⚠️ Be sure to stop cutting before the iSight camera in this step, or you may damage it.

- Slide the card toward the center of the display, to cut any remaining adhesive.

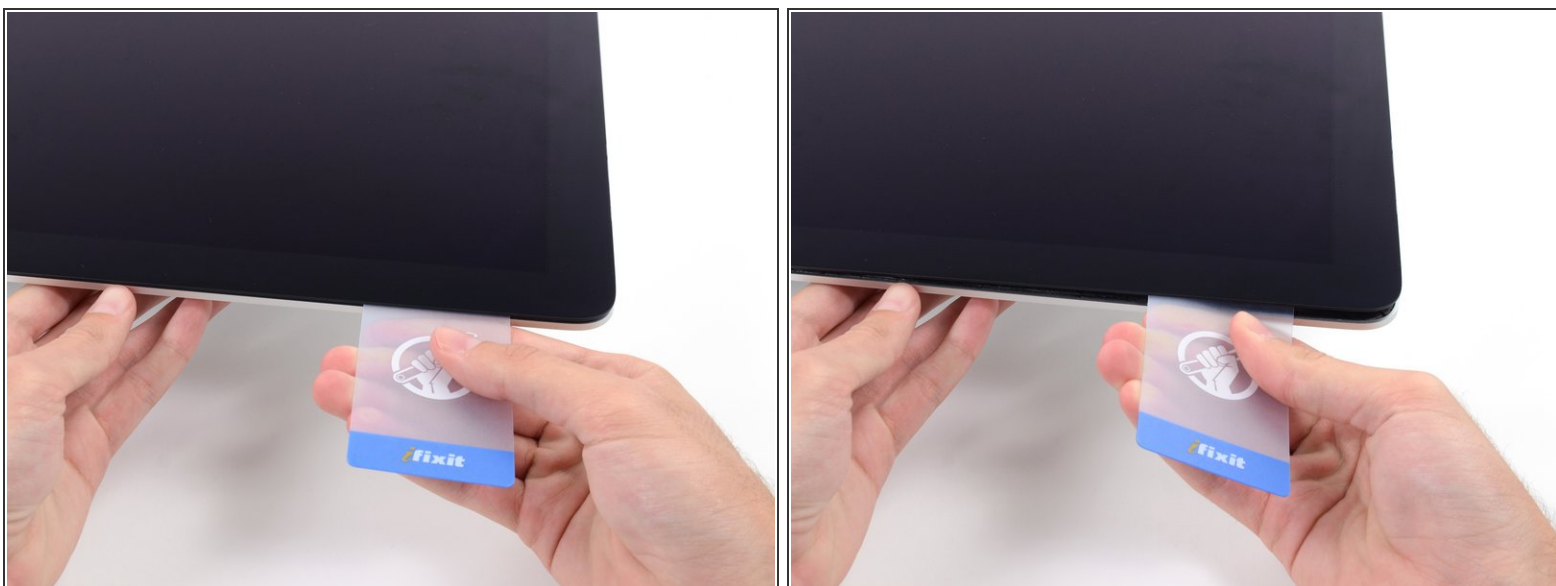This document was generated on 2020-02-28 06:28:06 AM (MST).

Step 12

- Put the card into the corner again and let it stay there to keep the adhesive from resettling.

Step 13

- Insert a second card into the gap between the display and frame in the top left corner.

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Step 14

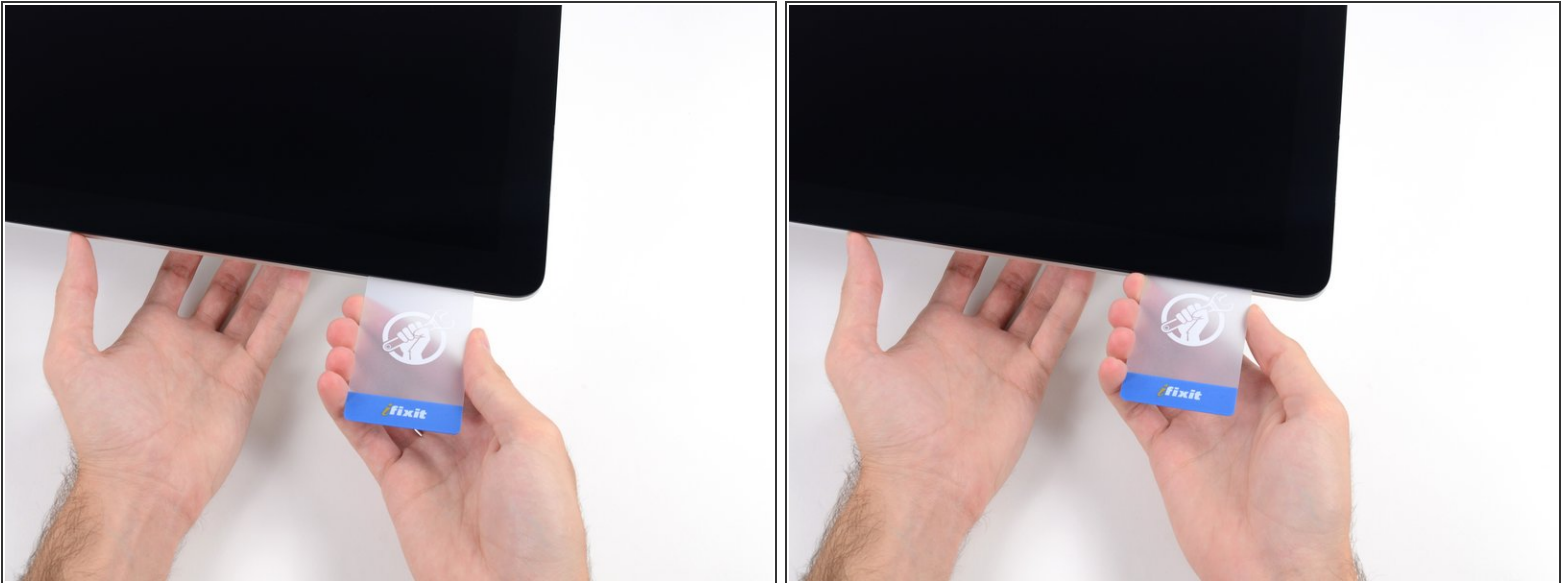- Gently twist the card, slightly increasing the space between the display and frame.

⚠️ As with the other side, move slowly to allow the adhesive to break, and be careful not to over-stress the display glass.

Step 15

- Slide the plastic card toward the center, again stopping just before the iSight camera.

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Step 16

- Insert the card back into the top left corner.

Step 17

⚠️ Only lift the display a few inches—it is still attached to the iMac by data and power cables.

- With the cards inserted as shown near the corners, gently twist the cards to increase the gap between display and case.

- If there are any sections that seem to stick and won't separate, stop twisting and use one of the cards to cut the adhesive in the problem area.

- Begin to lift the top of the display up from the frame.

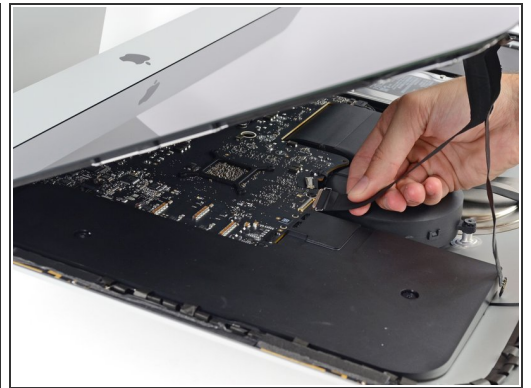This document was generated on 2020-02-28 06:28:06 AM (MST).

Step 18

- While holding the display up with one hand, use the other to unplug the display power cable.
  - ⓘ Lift the display up enough to have easy access to the connections, but not so much that you stretch the cables and stress their connections (about 8").

Step 19

- Flip up the metal retaining bracket on the display data cable.

- Disconnect the display data cable.
  - ⚠ This is a delicate connection that can easily be broken. Be sure to pull the display data cable connector straight out of its socket, toward the top of the iMac.

Step 20

- Lift the display up to a near-vertical position.

- At this point there is still a strip of adhesive along the bottom of the display, that will hold the display to the frame like a hinge. You can loosen this adhesive by working the display up and down a few times.

- Remove as much of the adhesive as possible by grabbing it at the outer edges, and then pulling or rolling it towards the middle.

Step 21

⚠️ Be very careful not to touch the capacitor leads or any exposed solder joints on the back of the power supply (boxed in red).

● If necessary, a plastic card can be used to cut any remaining sections of the bottom adhesive strip.

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Step 22

⚠ Be very careful handling the display—it's big, heavy, and made of glass. The display has fragile edges. Avoid lifting the display by the corners.

- Lift the display up from the frame and remove it from the iMac. Lay the display face down on a flat, soft surface.

- It may be necessary to slowly lift from one side, to peel against the remaining adhesive.

⚑ After the adhesive is cut, it cannot be used to re-seal the display in place. Follow this guide when your repair is complete to replace the adhesive strips that secure the display to the rear enclosure.

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Step 23

(i) If you are replacing the display panel, you may 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.

- 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 directly 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.
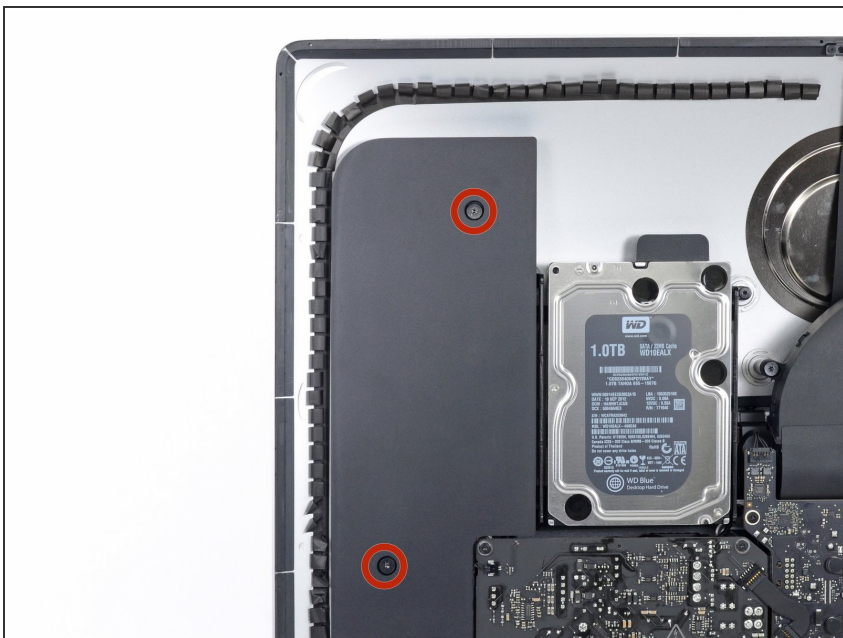
Step 24

- With the hinge free to move, the iMac will be unbalanced and hard to work on. Repairs can be completed with the iMac laying down, but are faster and easier with an [iMac service wedge](#).

Step 25 — Left Speaker


- Remove two 10.0 mm T10 screws.

Step 26

- Unplug the left speaker cable from its socket on the logic board. Be sure to pull straight up out of the socket.

- De-route the cable from the gap between the hard drive and logic board.

- ⓘ If the gap between the hard drive and logic board is too narrow for the speaker cable, disconnect it and leave the cable in place.
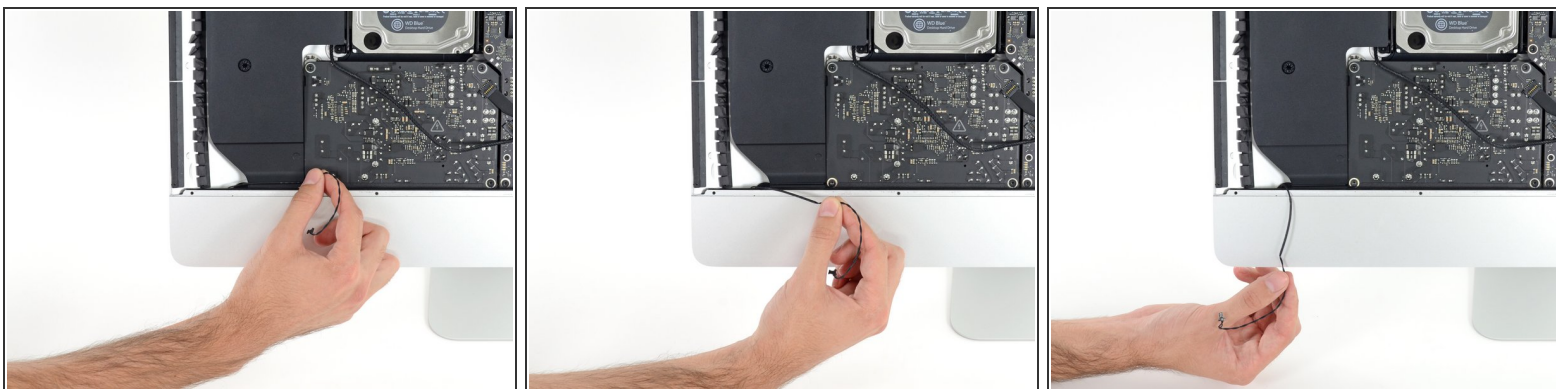
Step 27

- ⚠ Be careful not to touch any solder joints on the back of the power supply. Capacitors may be charged enough to give you a dangerous shock.

- Use a spudger to disconnect the power button connector from its socket on the logic board.

Step 28
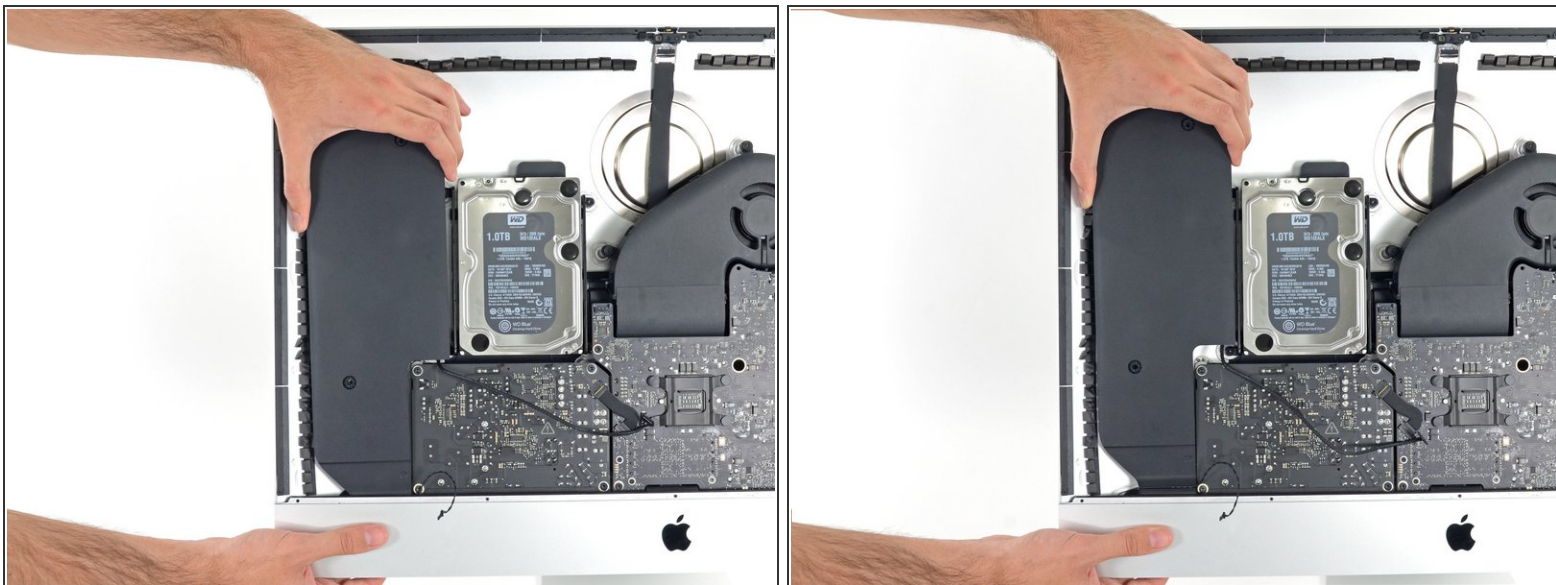
- Lift the left speaker straight up, until the power button cable is exposed (about 0.5").

Step 29

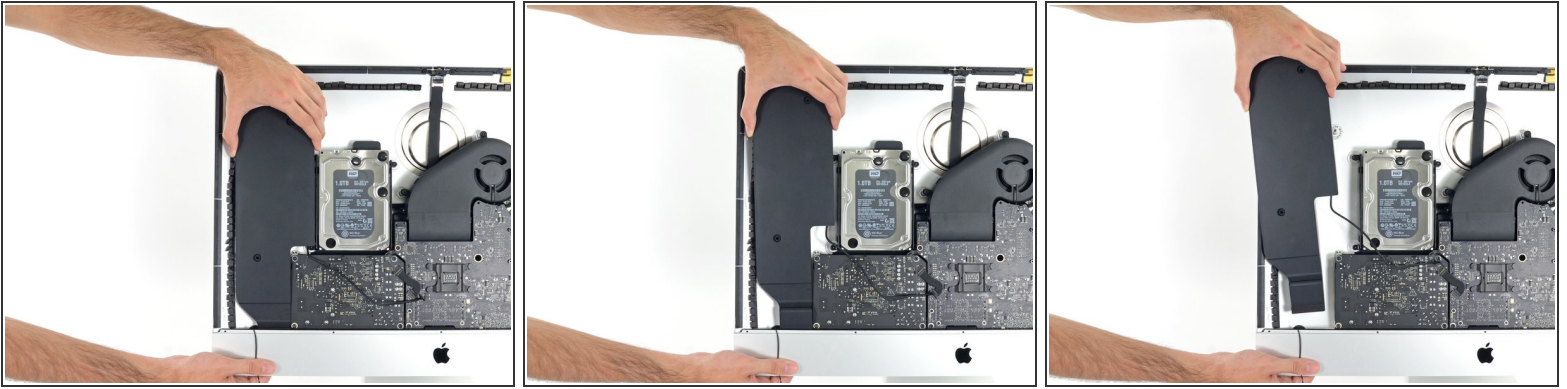- Gently de-route the power button cable from its groove in the left speaker.

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Step 30

- Lift the left speaker straight up and remove it from the iMac.

- (i) If the gap between the hard drive and logic board was too narrow to free the speaker cable earlier, gently pull it free as you remove the speaker.

  - Push from the connector end as you pull from the speaker end to thread the cable under the hard drive's right bracket.

Step 31 — Hard Drive

- Pull straight up on the SATA data/power cable to disconnect it from the drive.

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Step 32

- Remove two 7.3 mm T10 screws securing the left hard drive bracket to the rear case.

Step 33

- Grab the hard drive and left hard drive bracket together.

- Tilt the left side up away from the rear case, and slide the assembly to the left.

- Remove the hard drive and left hard drive bracket from the iMac.

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Step 34

- Remove the left hard drive bracket.

Step 35 — Hard Drive

- Remove the four 8.1 mm T8 screw posts from the hard drive, and transfer them to the replacement drive enclosure.

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Step 36 — SSD

- ⓘ Only follow the next 8 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.
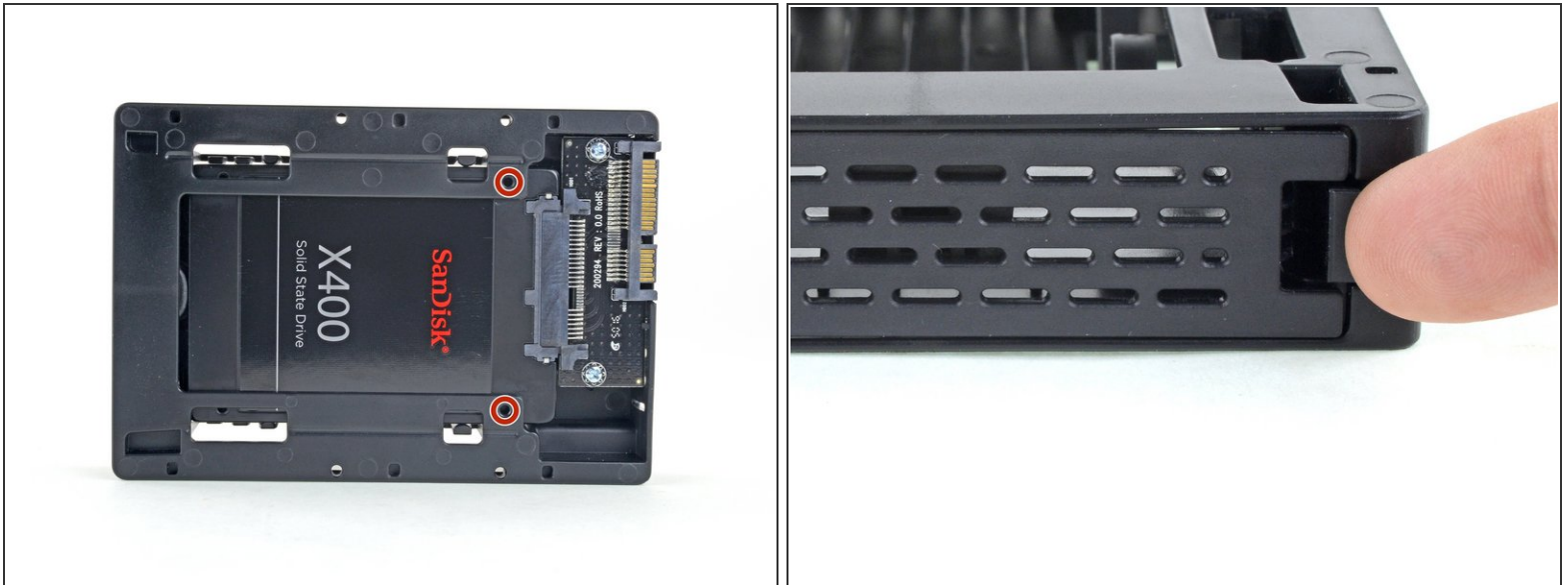
- Remove the front plate.

Step 37

- Line up the small SATA connector so that the short side on the SSD connector matches the short side on the enclosure connector.

- Slide the drive in through the front of the enclosure until the SATA connector is fully seated.
  - ⓘ The SSD connects with the enclosure in only one way. If the connectors are not lining up, rotate the SSD and try again.

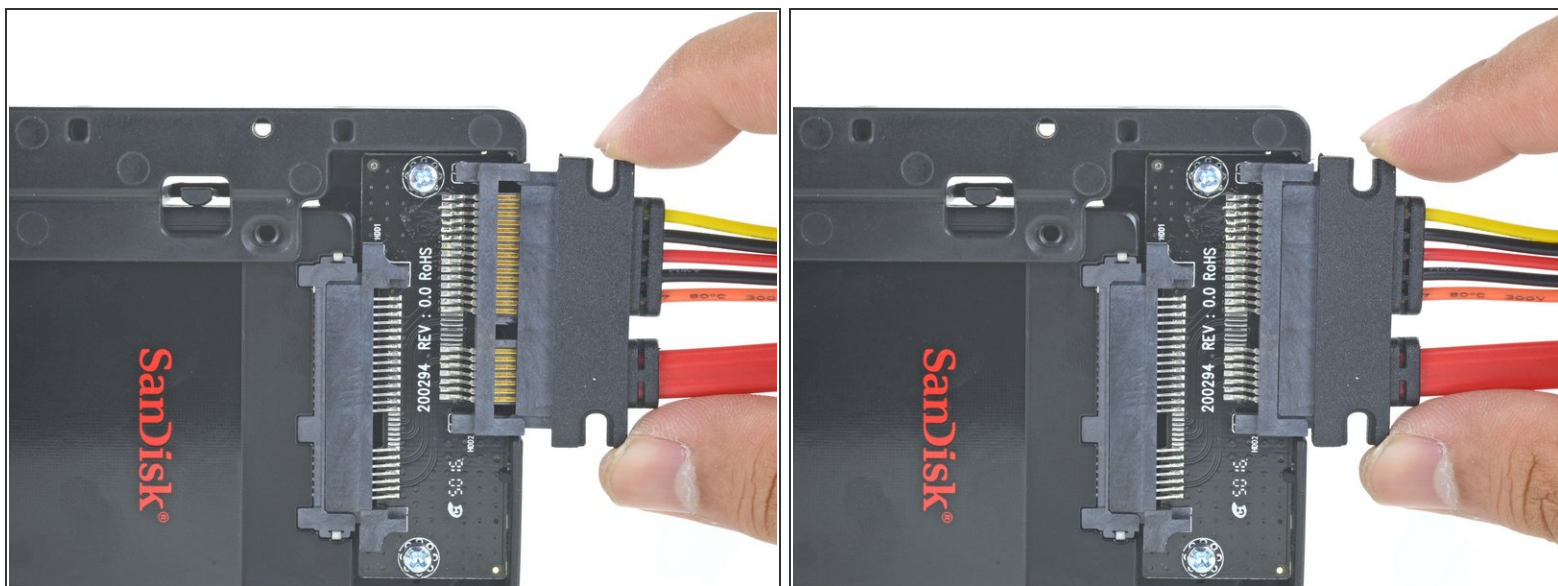This document was generated on 2020-02-28 06:28:06 AM (MST).

Step 38

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

- Replace the front plate.

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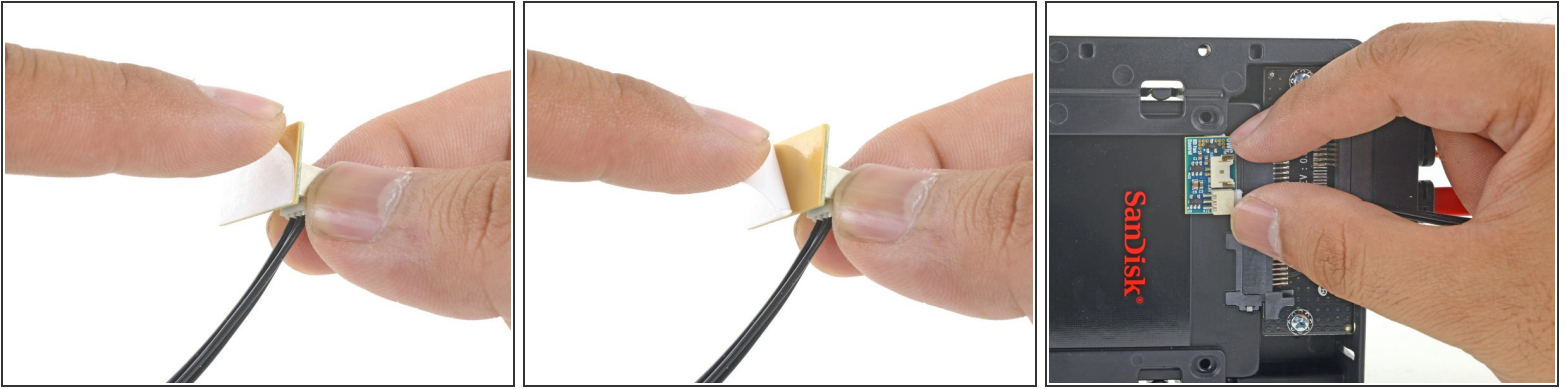
Step 39

- Plug the included sensor-enabled SATA cable into the enclosure's port.

  - ⓘ Line up the narrow side of the cable connector with the narrow side of the enclosure connector. The cable is keyed to connect in only one way. If you can't connect the cable, rotate it 180°, and try again.

Step 40

- 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 41
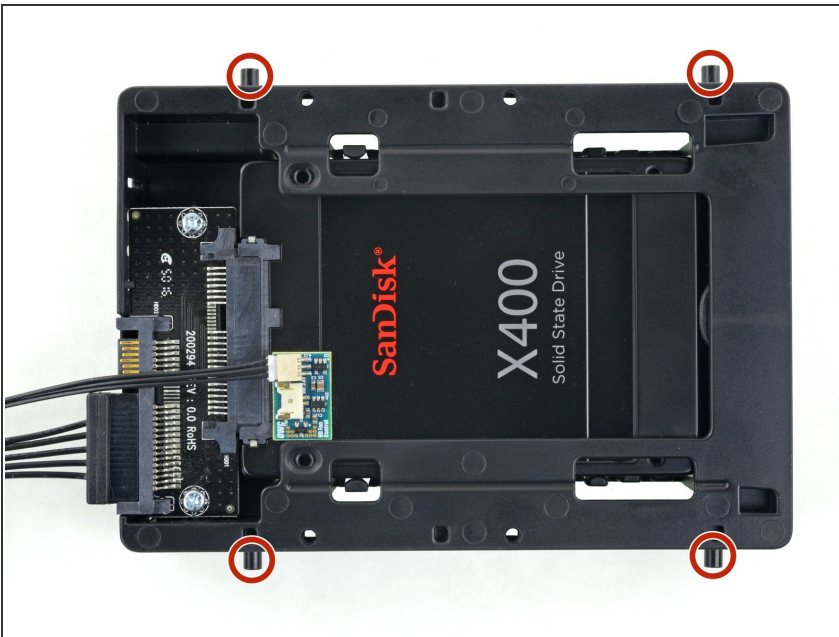
- Install the mounting pins from the old hard drive onto the sides of the enclosure.

- ⓘ 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.

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Step 42

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

Step 43
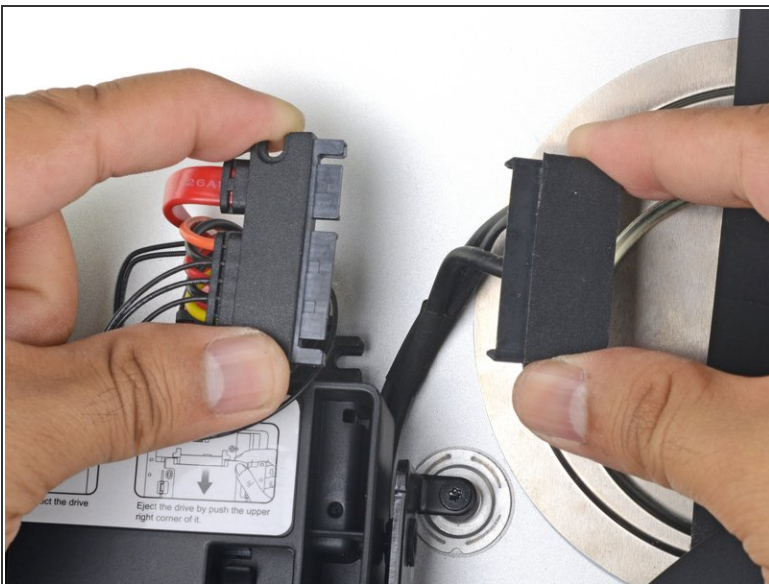
- Attach the iMac's SATA-combo cable to the new temperature-capable SATA-combo cable.

- Route the SATA cables where 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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To reassemble your device, follow these instructions in reverse and use our [adhesive strip replacement guide](#) to reattach the display glass.

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