



iMac Intel 27" EMC 2546 Hard Drive Replacement

Follow this guide to replace the hard drive for...

Written By: Andrew Optimus Goldheart



INTRODUCTION

Follow this guide to replace the hard drive for your iMac. Replacing the hard drive requires separating the display and moving the left speaker.

This guide also includes steps to upgrade your iMac's hard drive with an 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.

[video: <https://www.youtube.com/watch?v=ZbnhuZoxkI8>]

TOOLS:

- [Phillips #1 Screwdriver](#) (1)
- [iMac Opening Wheel](#) (1)
- [Plastic Cards](#) (1)
- [Spudger](#) (1)
- [iMac Service Wedge](#) (1)
- [TR10 Torx Security Screwdriver](#) (1)
- [TR8 Torx Security Screwdriver](#) (1)

PARTS:

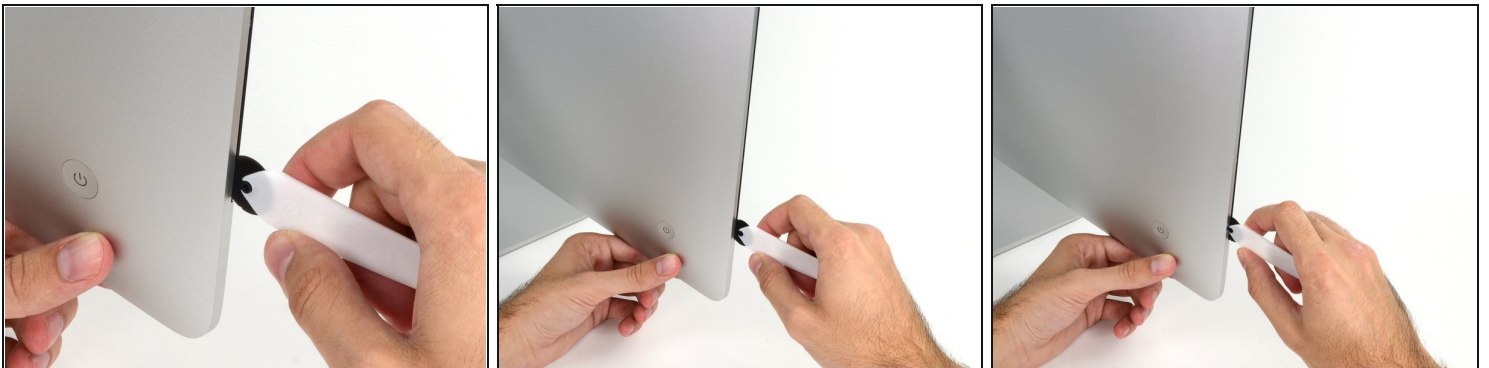
- [iMac Intel 27" \(Late 2012-2019\) SSD Upgrade Kit](#) (1)
- [OWC In-line Digital Thermal Sensor for 3rd party SATA HDD or SSD Upgrade for 27" iMacs 2012 and later models](#) (1)
- [iMac Intel 27" \(2012-2019\) Adhesive Strips](#) (1)
- [iMac Intel 21.5" and 27" \(Late 2012-Early 2019\) SSD Temperature Sensor](#) (1)
- [iFixit 2.5" to 3.5" SSD/HDD Adapter](#) (1)

Step 1 — Display



- 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.
- If you are using the [iFixit cardboard service wedge](#), follow [these assembly directions](#) to put it together.

Step 2



- 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 3



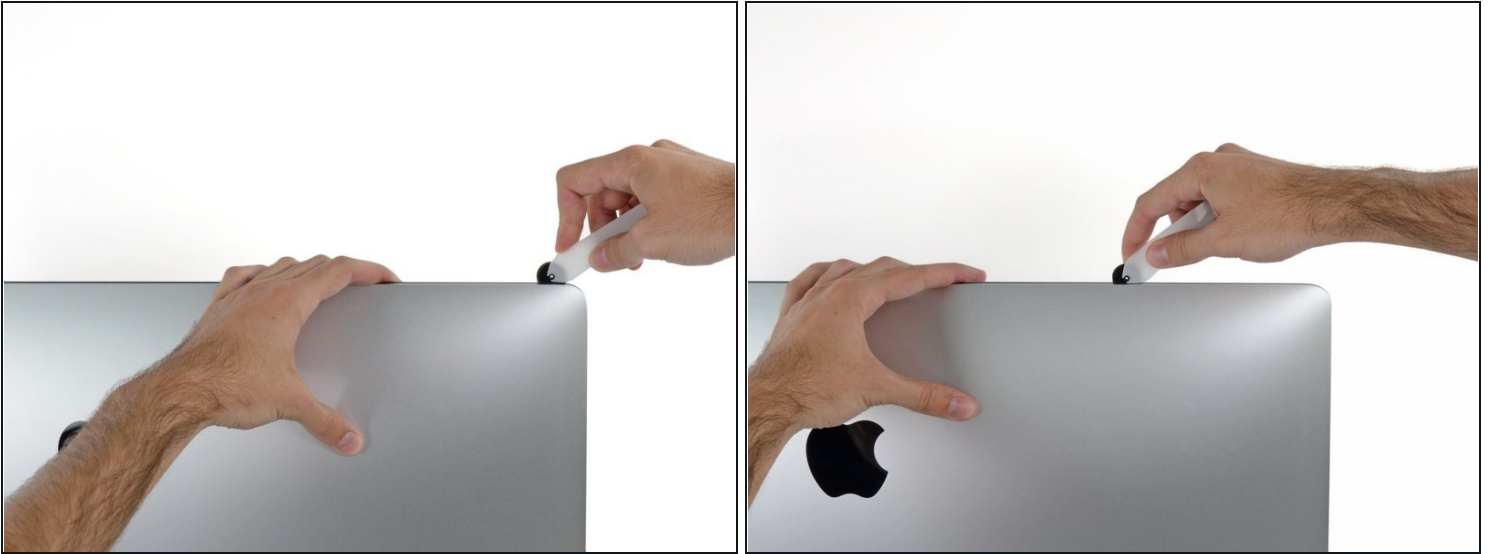
- Use the tool like a pizza cutter—roll it along through the gap, and it will cut the foam adhesive through the center.
- ⓘ Be sure to always push with the handle behind the cutting wheel. If you pull, the wheel might get pulled out of the handle.
- Run the tool up along the left side of the display.

Step 4



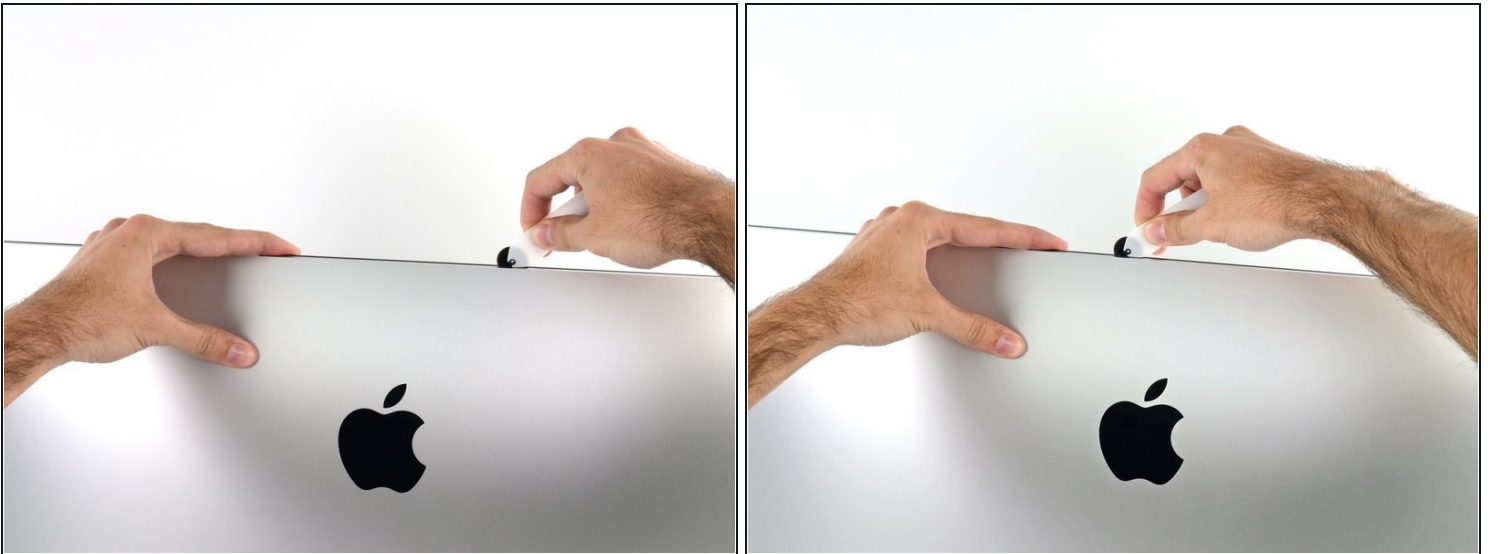
- Continue wheeling the tool up around the top left corner.

Step 5



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

Step 6



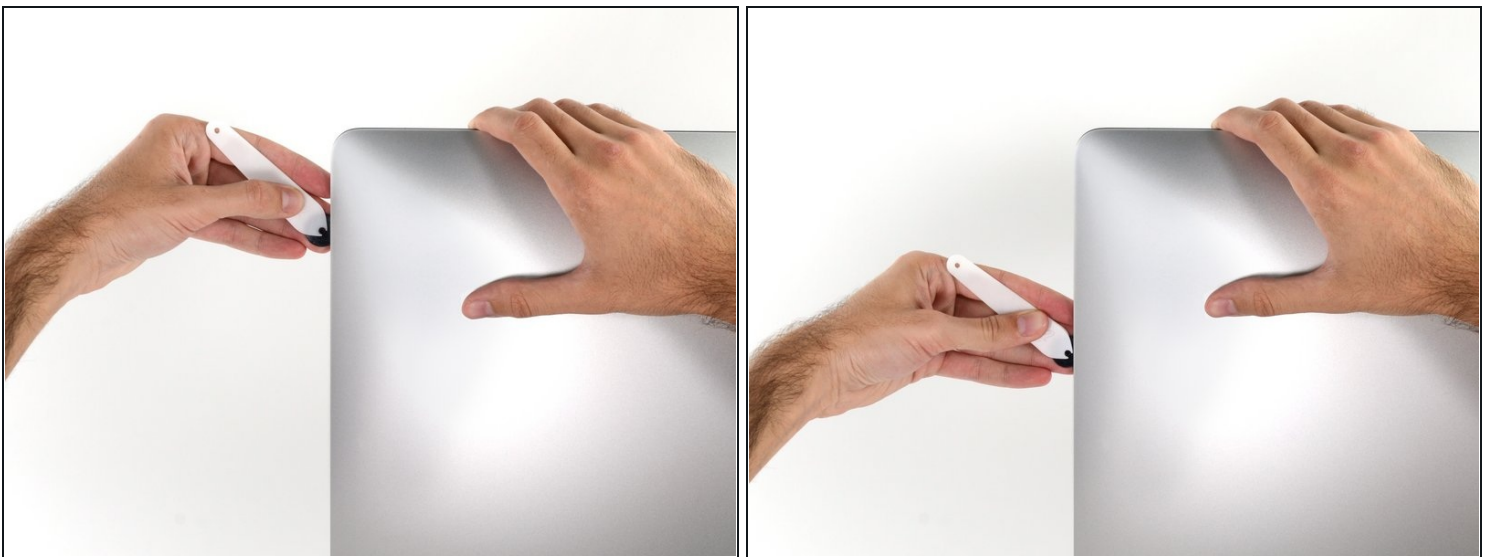
- Continue along the top of the display.
- ① You may want to run the tool back and forth through what you've already cut a few times, to ensure you get as much of the adhesive separated as possible.

Step 7



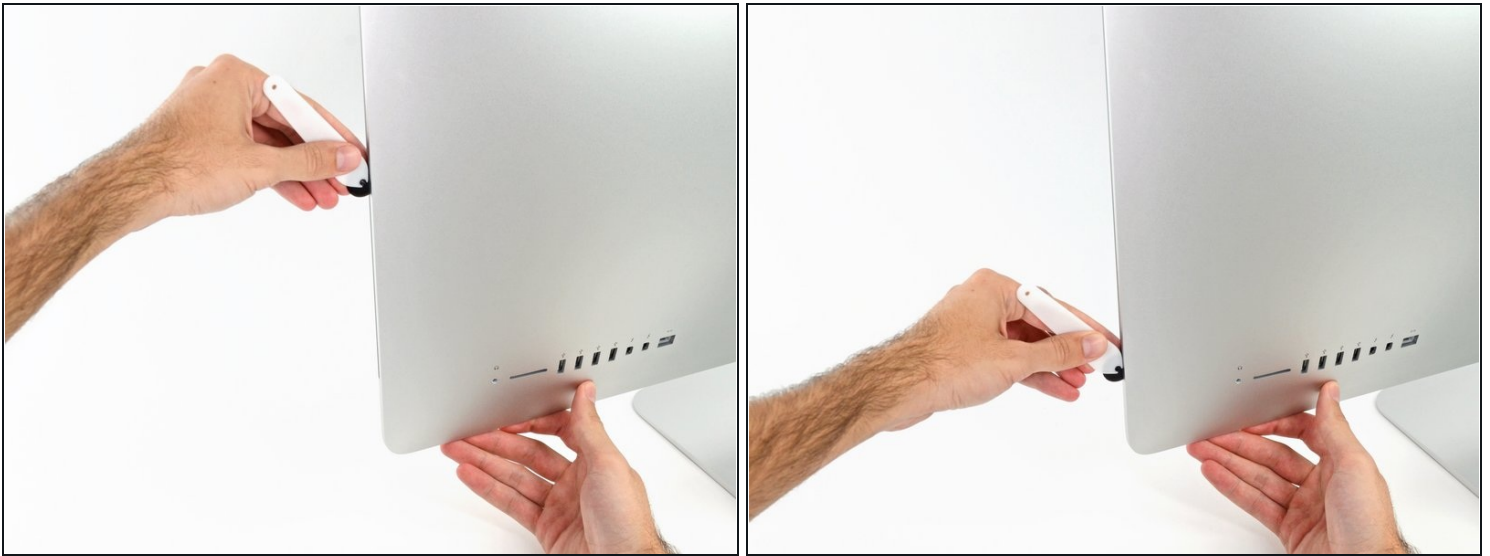
- Push the tool around the top right corner of the display.

Step 8



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

Step 9



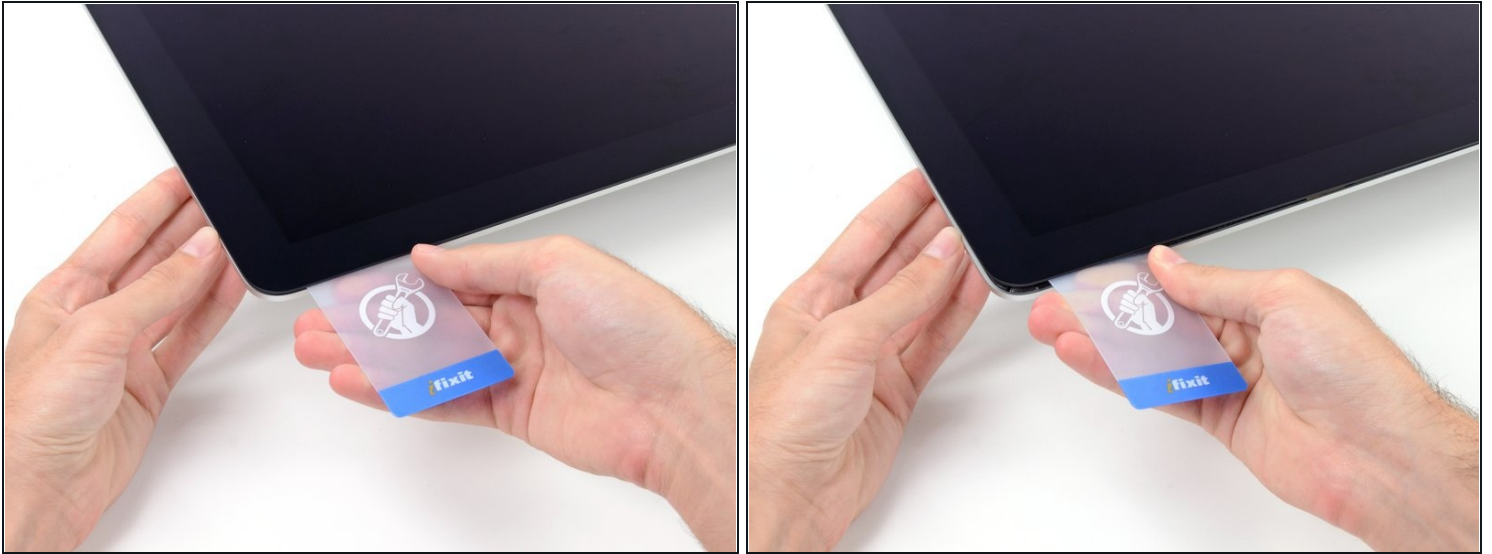
- Finish pushing the opening tool to the bottom of the right side of the display.
- ① At this point, you'll want to run the tool back around the entire display, to ensure you cut as much adhesive as possible.

Step 10



- ① 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 11



- 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 12



⚠ 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.

Step 13



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

Step 14



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

Step 15



- 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 16



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

Step 17



- Insert the card back into the top left corner.

Step 18



⚠ 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.

Step 19



- While holding the display up with one hand, use the other to unplug the display power cable.
- ① 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 20



- 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 21



- Lift the display up to a near-vertical position.
- ① 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 22



- ⚠ 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.

Step 23



⚠ 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.

Step 24



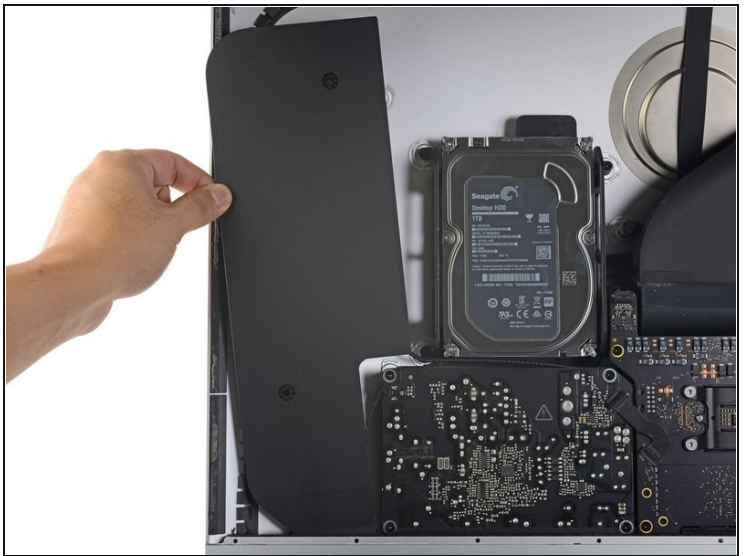
- ⓘ If you are replacing the display panel, you may need to transfer additional components from the old panel to the new one. Compare the back of the old display with the replacement display. Note all cables, sensors, and foam cushioning that are missing from the new display.
- If there is a wire or 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 25 — iMac Intel Speaker Displacement for HDD Guides



- Use a T10 driver to remove the two 10 mm screws securing the left speaker.

Step 26



- Shift the loosened left speaker to the left—enough to uncover the hard drive bracket screws.

Step 27



- Pull straight up on the SATA combo cable to disconnect it from the drive.

Step 28



- Use a T8 driver to remove the two 7.3 mm screws securing the left hard drive bracket to the rear case.

Step 29



- Grab the hard drive and left hard drive bracket together.
- Tilt the left side away from the rear case, and slide the assembly to the left.
- Remove the hard drive and left hard drive bracket from the iMac.

Step 30



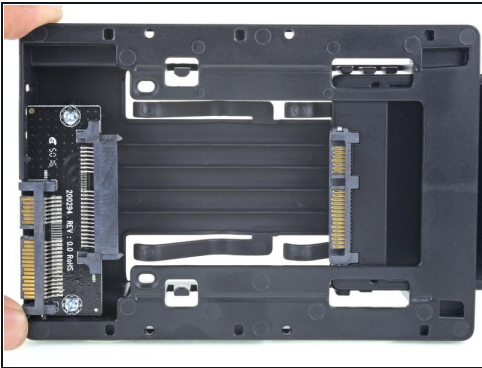
- Remove the left hard drive bracket.

Step 31 — Hard Drive



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

Step 32 — Replace the hard drive with an SSD



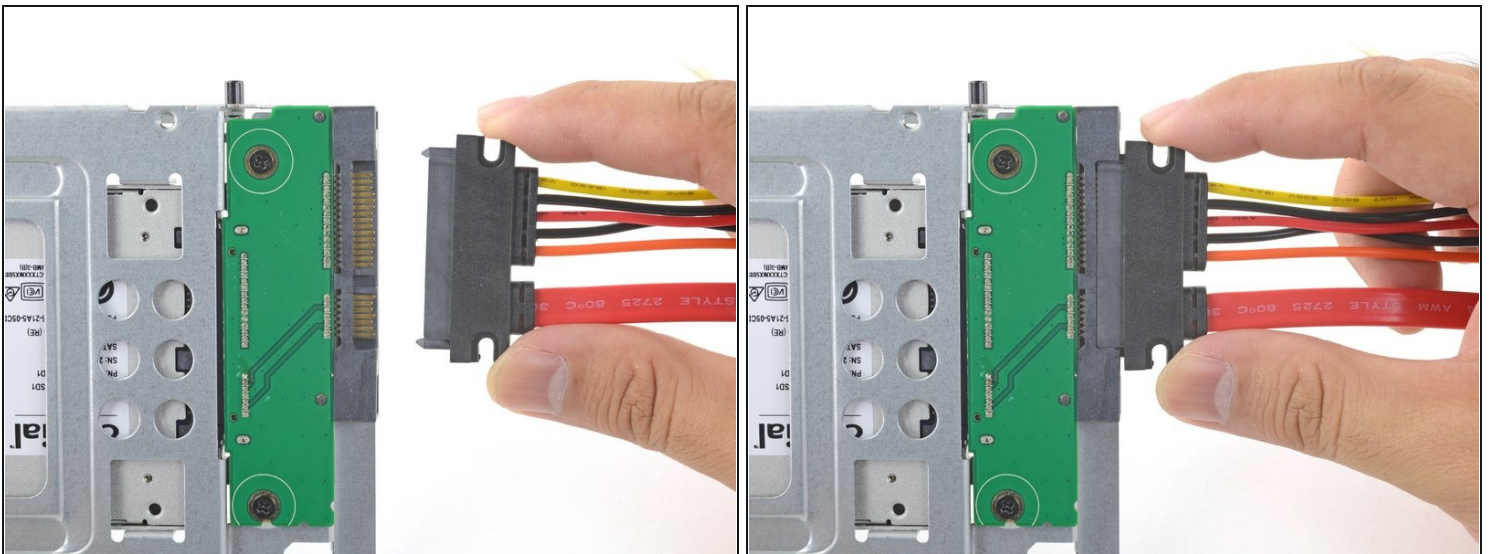
- ① Follow the remaining steps if you are replacing your hard drive with an SSD kit.
- ① If your SSD enclosure looks like the first image, [follow this guide instead](#).
- Line up the SSD connectors with the metal enclosure's sockets.
- Press the drive against the enclosure sockets until the SSD is firmly seated.
- ① The SSD connects with the enclosure in only one direction. If the connectors don't line up, rotate the SSD and try again.

Step 33



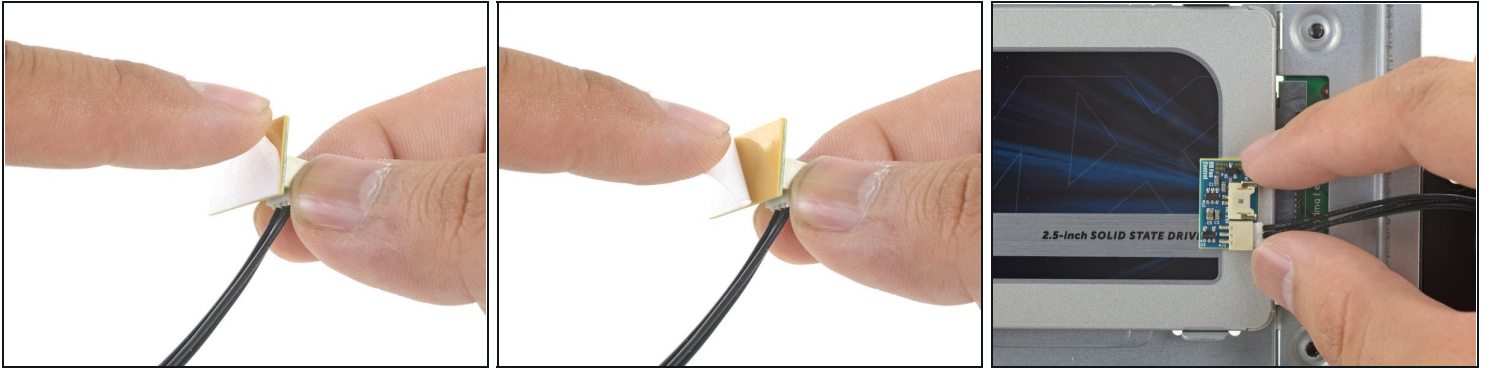
- Use a Phillips screwdriver to install the four silver screws (two on each side) along the edges of the SSD to secure it to the enclosure.

Step 34



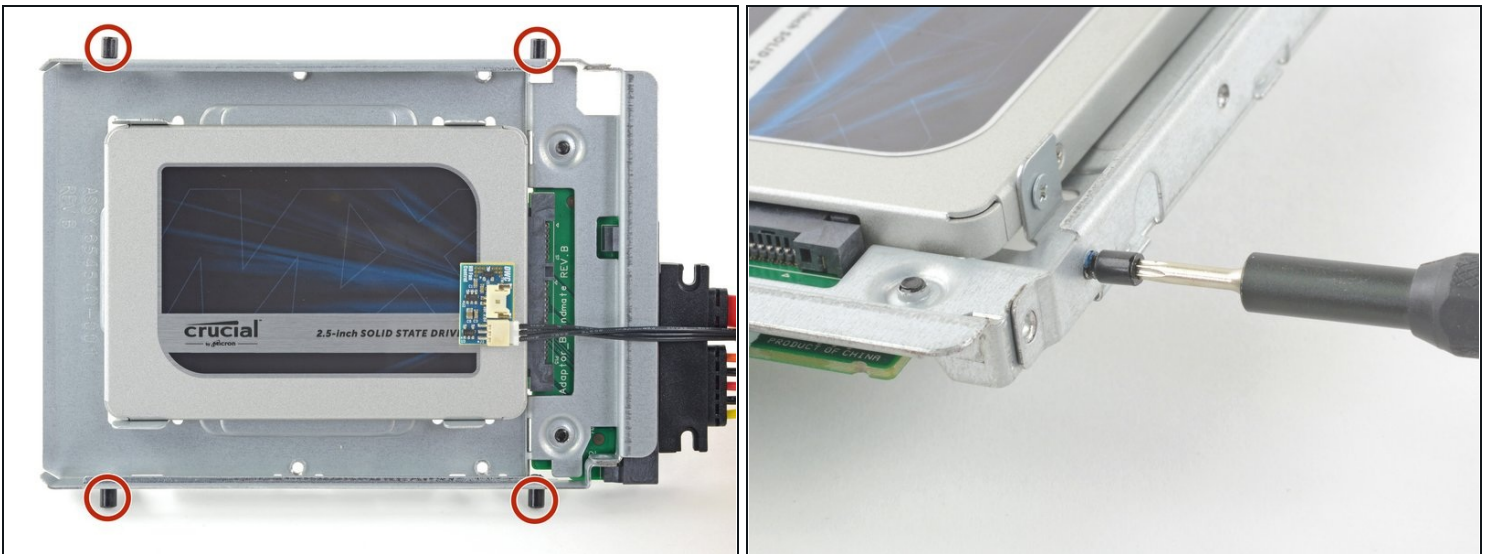
- Plug the included sensor-enabled combo cable into the enclosure's port.
 - ① The cable is keyed to connect in only one orientation. If you can't connect the cable, rotate it 180° and try again.

Step 35



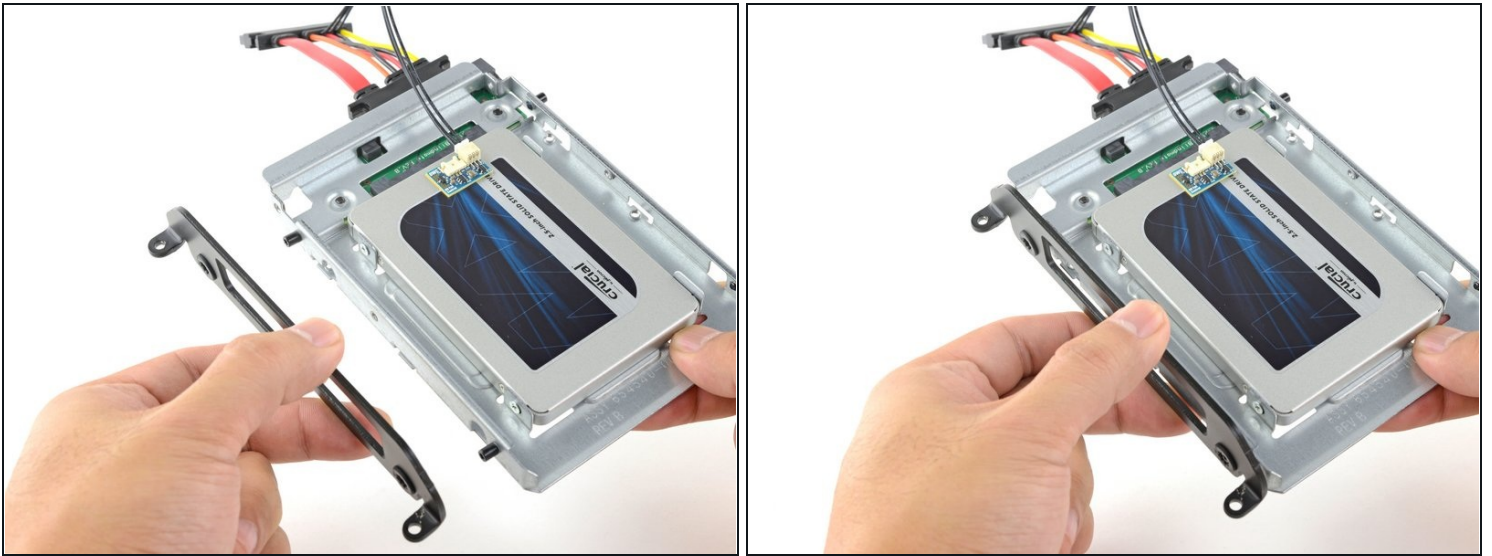
- Peel the white liner off the back of the small temperature sensor board in order to expose the adhesive.
- Adhere the temperature sensor board to an exposed, metal surface of the SSD, close to the SATA connector.
- Fold the excess temperature sensor wires so that they are out of the way while you install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

Step 36



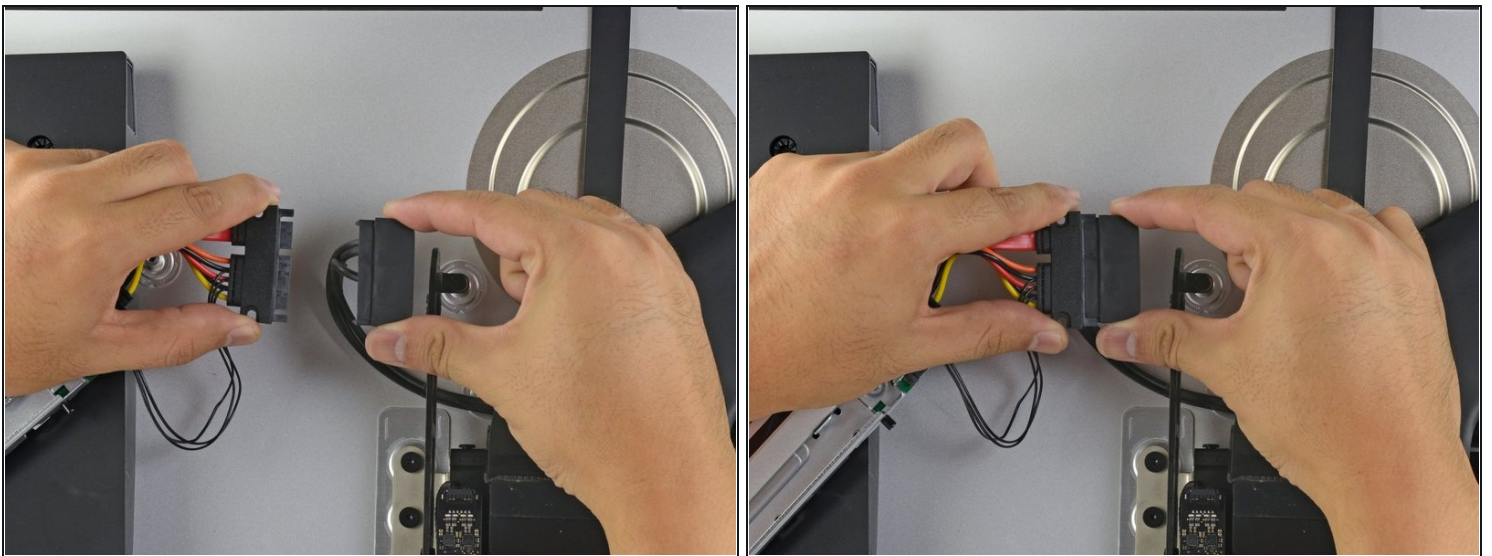
- Use a T8 driver to install the mounting pins from the old hard drive onto the sides of the enclosure.

Step 37



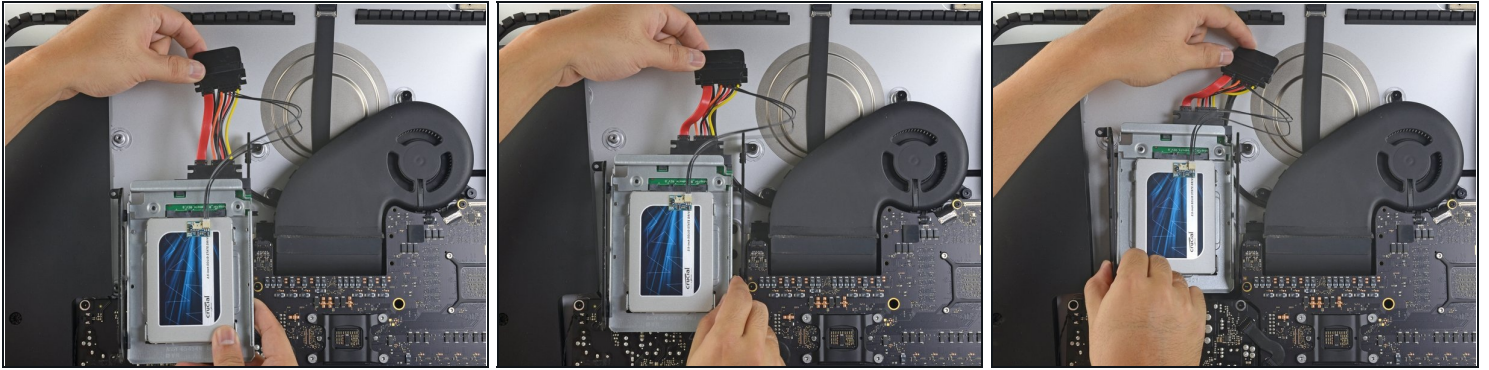
- Attach any mounting brackets removed from the old hard drive onto the enclosure.

Step 38



- Connect the iMac's combo cable to the new temperature-enabled combo cable.

Step 39



- ① 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 cables so that they will not interfere with any other components.
 - ① 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 and use our [Adhesive Strips Guide](#) to reattach the display glass.

Take your e-waste to an [R2 or e-Stewards certified recycler](#).

Repair didn't go as planned? Try some [basic troubleshooting](#), or ask our [Answers community](#) for help.