iMac Intel 21.5" EMC 2544 Fan Replacement
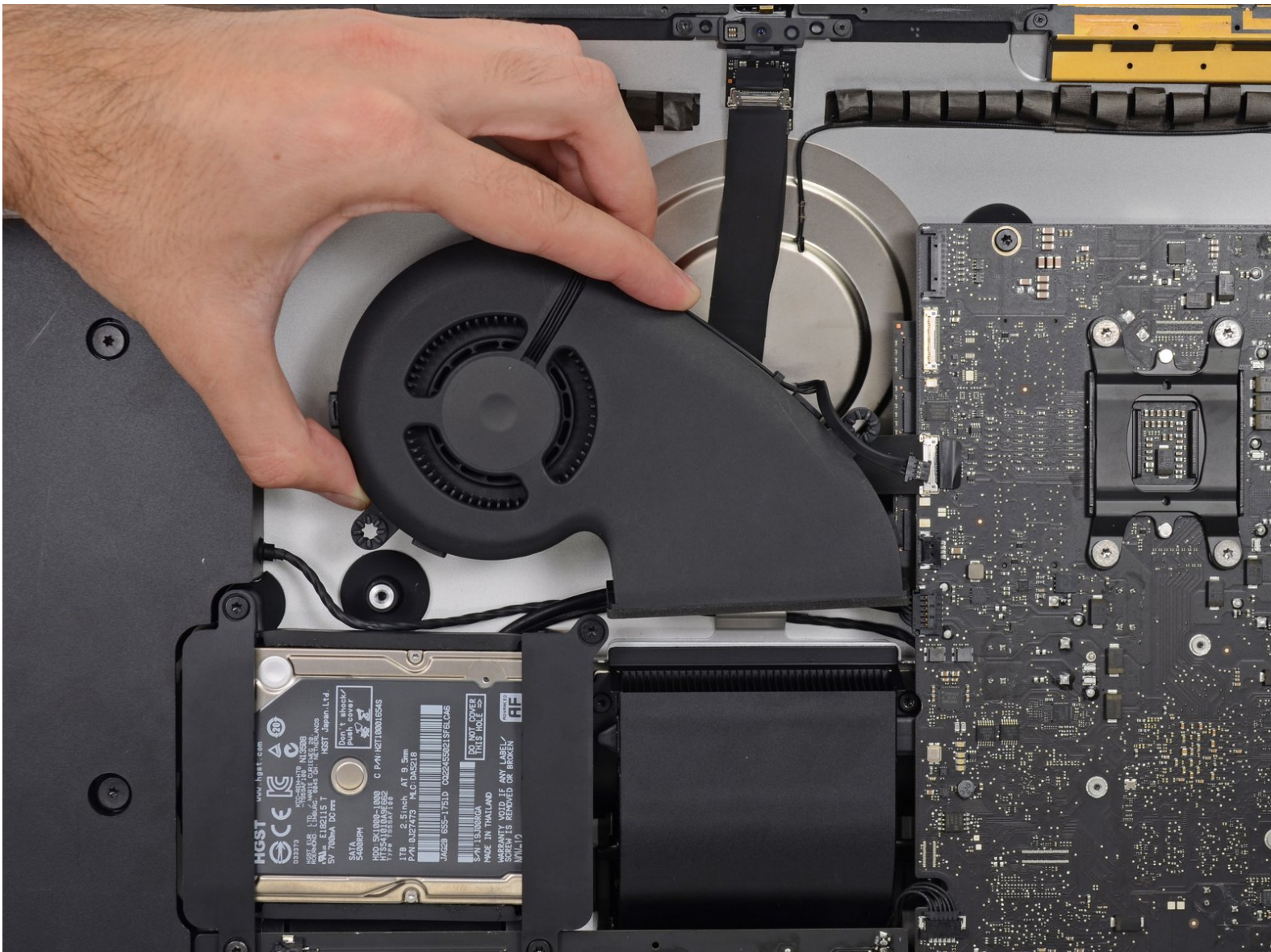
Replace a broken or noisy fan in your iMac Intel 21.5" EMC 2544.

Written By: Sam Goldheart

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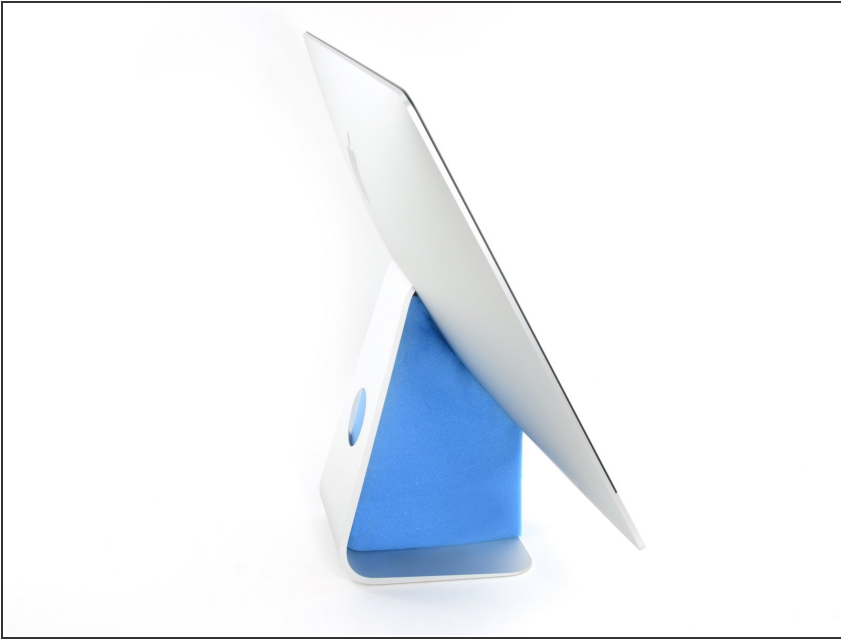
INTRODUCTION

Use this guide to replace the fan.

TOOLS:

- Plastic Cards (1)
- T10 Torx Screwdriver (1)
- Spudger (1)

PARTS:

- iMac Intel 21.5" (Late 2012 - Mid 2014) CPU Fan (1)
- iMac Intel 21.5" (2012-2017) Adhesive Strips (1)

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Step 1 — Display

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

📌 **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. Only handle the board by the edges.

Step 2
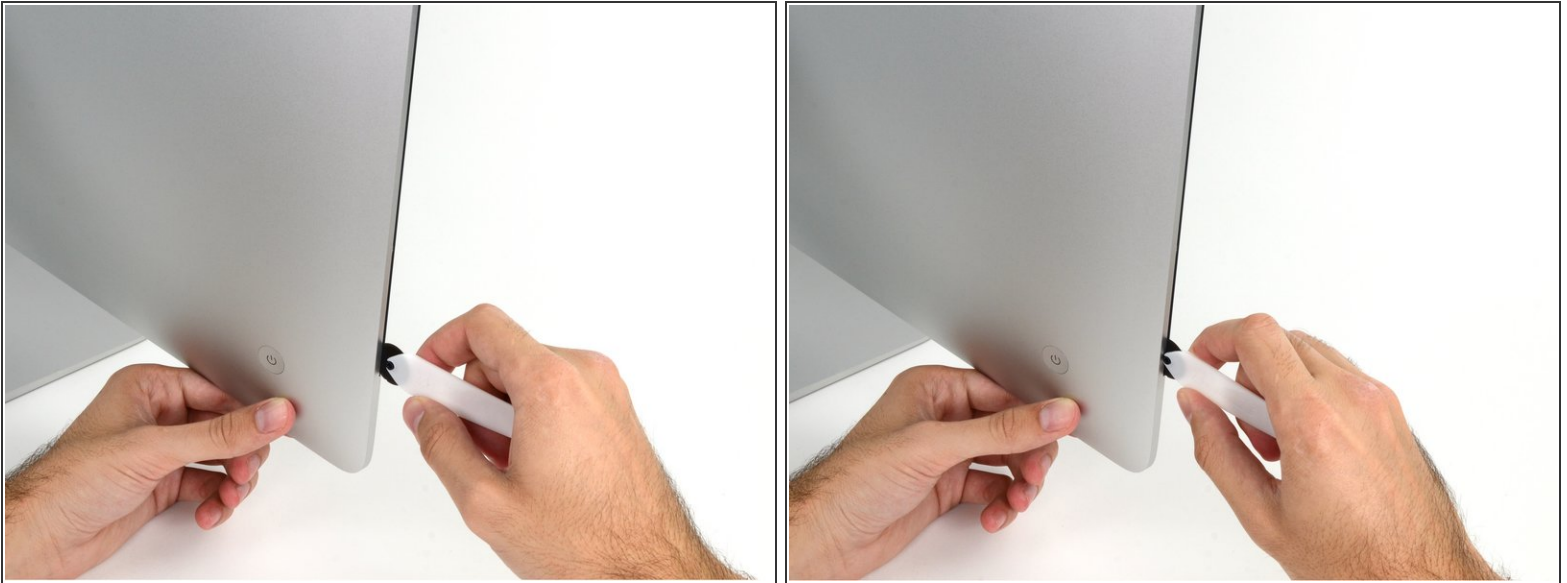
- Starting on the left of the display, near the power button, insert the iMac Opening Tool into the gap between the glass panel and the rear enclosure.

⚠ 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" into the display. Otherwise, you risk severing antenna cables and causing serious damage.

⚠ Be gentle! The glass may crack if pried too much. Use a hairdryer to heat the edges and loosen the tape if the room temperatures are low.
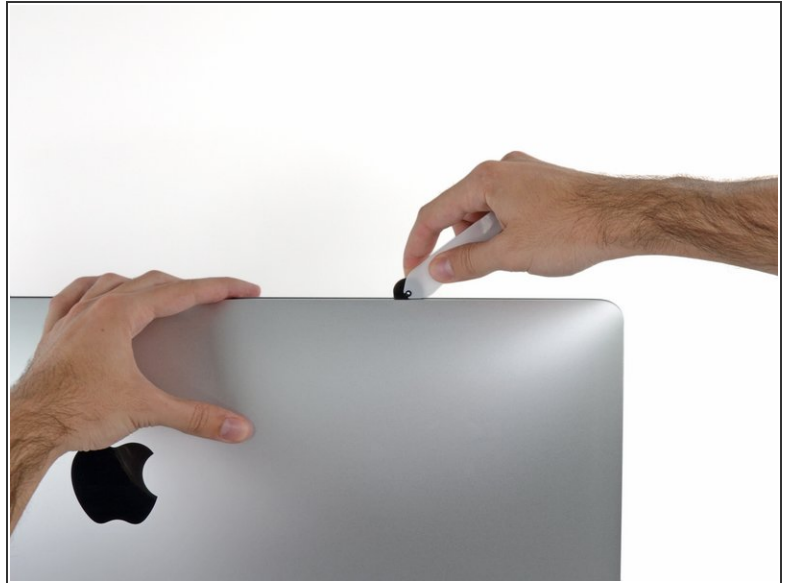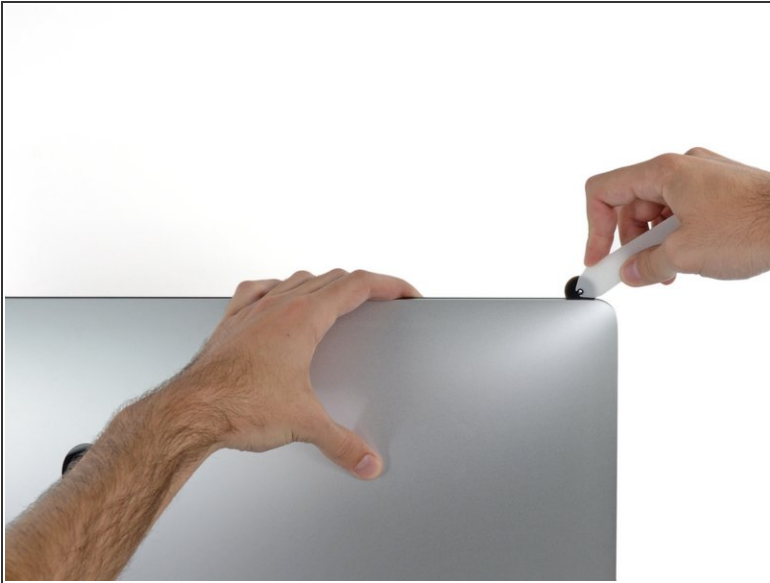
Step 3

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

- (i) 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.
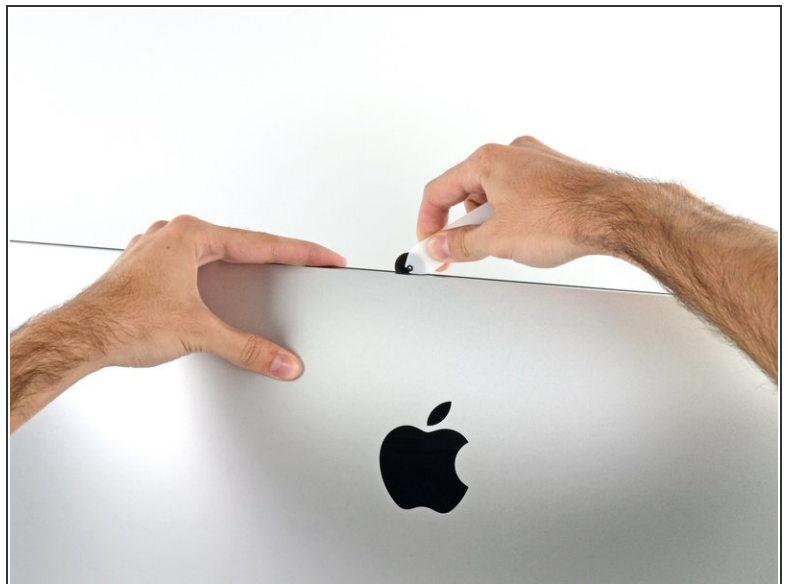
Step 4
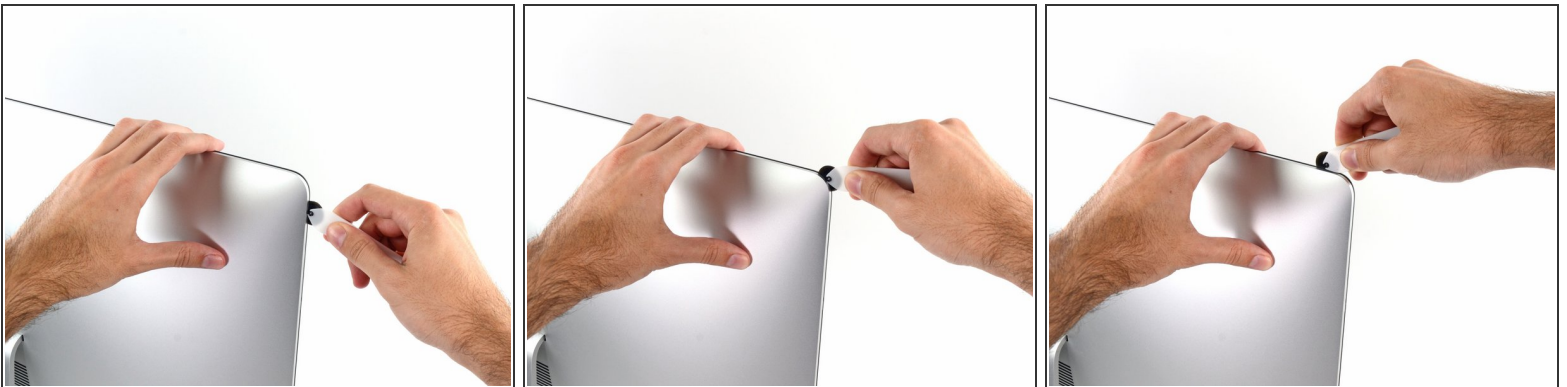
- Continue running the tool up around the top left corner.

Step 5

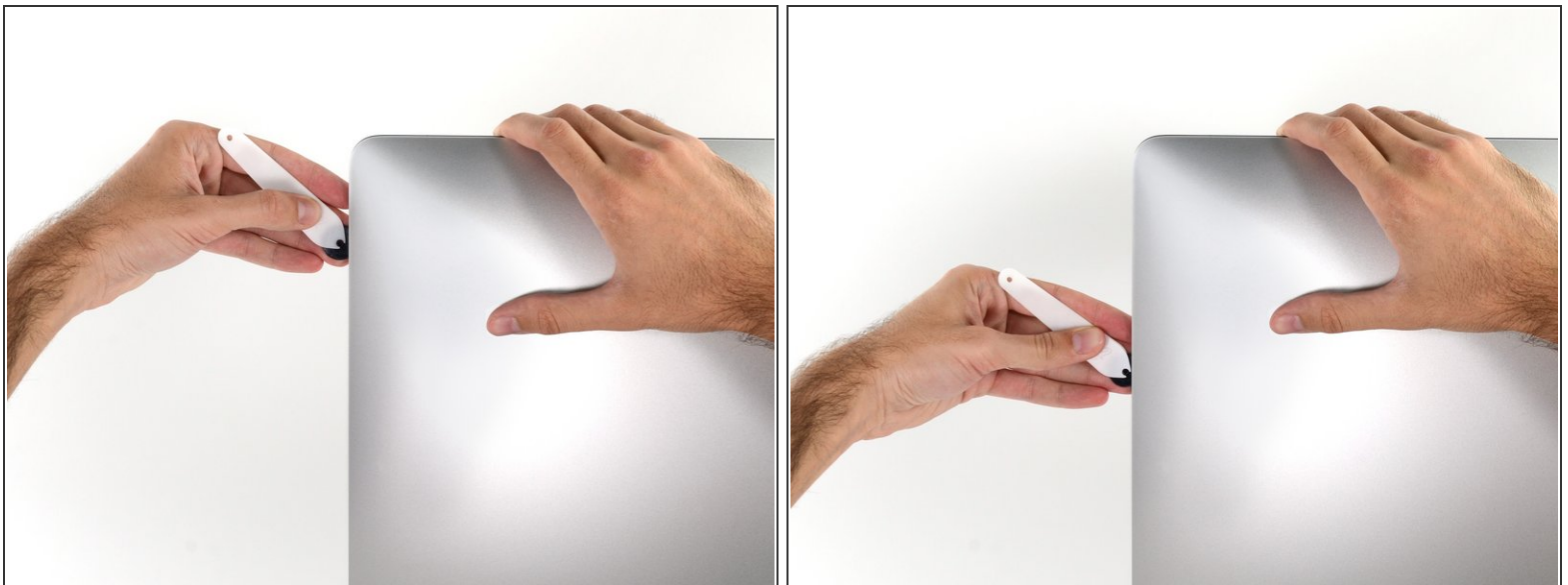- Cut the adhesive along the top left of the display.

Step 6

- Continue along the top of the display.

- 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.

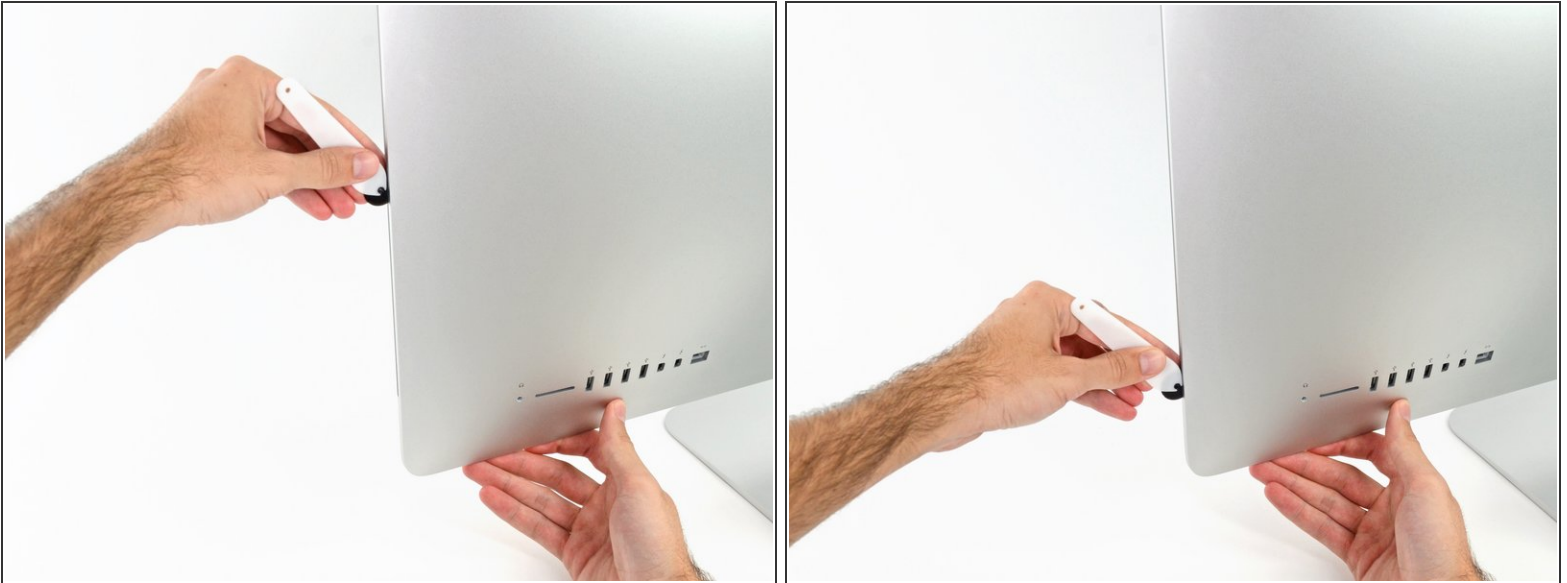This document was generated on 2019-09-23 08:50:20 AM (MST).

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.

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Step 9

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

- (i) 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 10

- (i) While the opening tool cut most of the adhesive, 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, wedge a plastic card between the display and frame.

- ⚠ Be careful **not** to insert the plastic card more than 3/8", or you may damage internal components.

Step 11
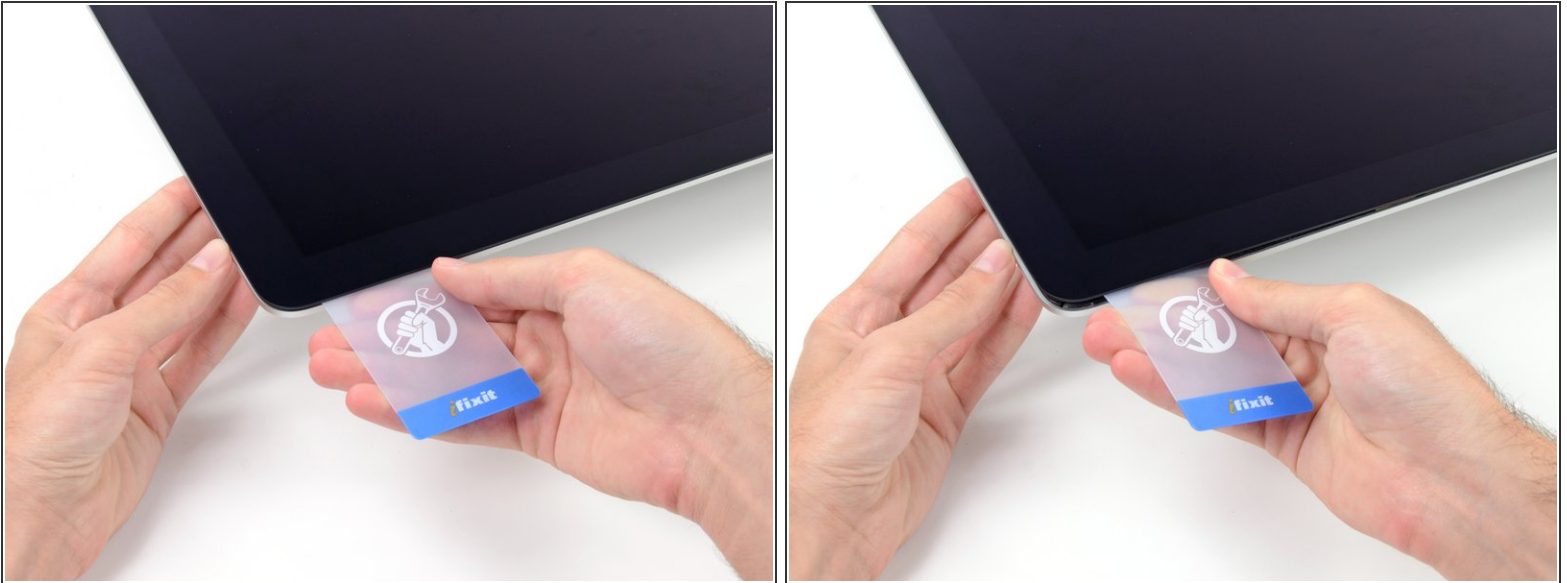
- Gently twist the plastic card sideways to create a gap between the display and frame.

- Move slowly and be careful not to stress the display glass too much—you only need to make a gap of about 1/4".
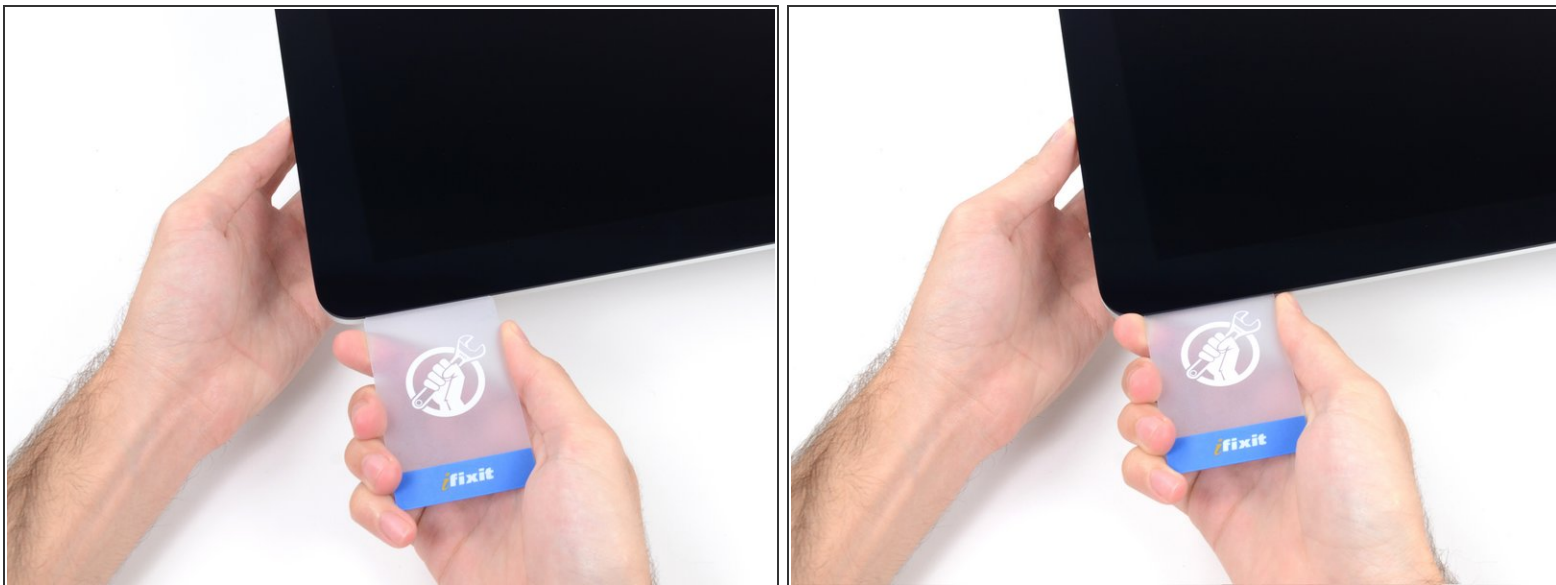
Step 12

- Slide the card toward the center of the display to cut any of the remaining adhesive along the top right corner of the iMac.

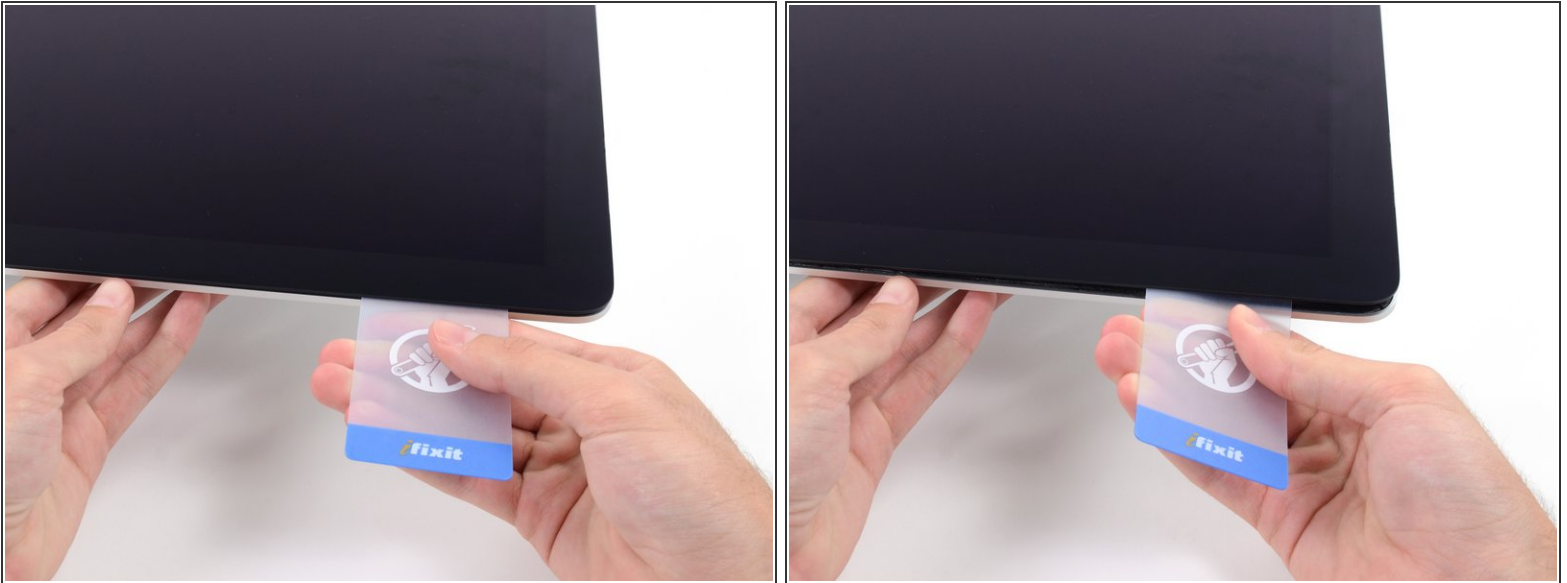⚠️ Be sure to **stop** before the iSight camera, or you may damage it.

Step 13

- Wedge the plastic card into the top right corner once again and let it stay there to keep the adhesive from resettling.

Step 14

- Insert a second plastic card into the gap between the display and frame located at the top left corner of the iMac.

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Step 15


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

- (i) As with the other side, twist slowly to allow the adhesive time to separate, 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.

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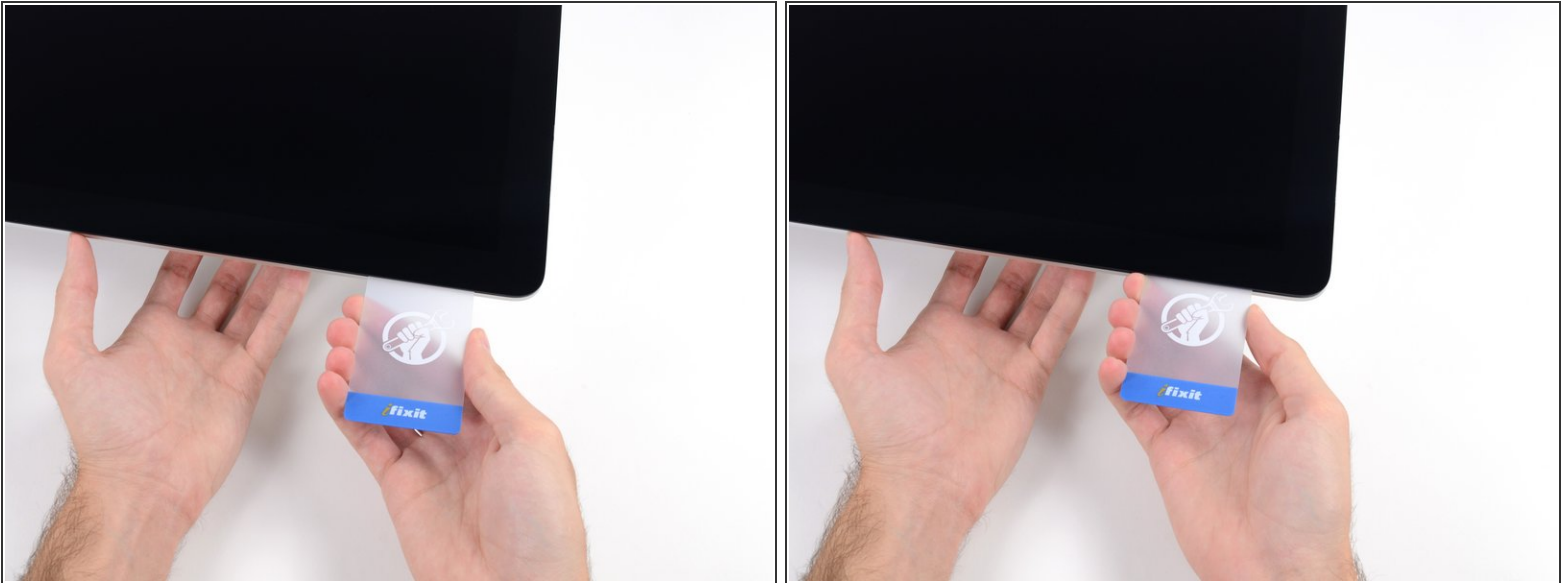
Step 17

- Wedge the plastic card back into the top left corner.

Step 18

- With both plastic cards inserted as shown near the corners, gently twist the cards sideways 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 remaining adhesive.

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

- ⚠ Only lift the display a few inches—the display data and power cables are still connected to the logic board.

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Step 19
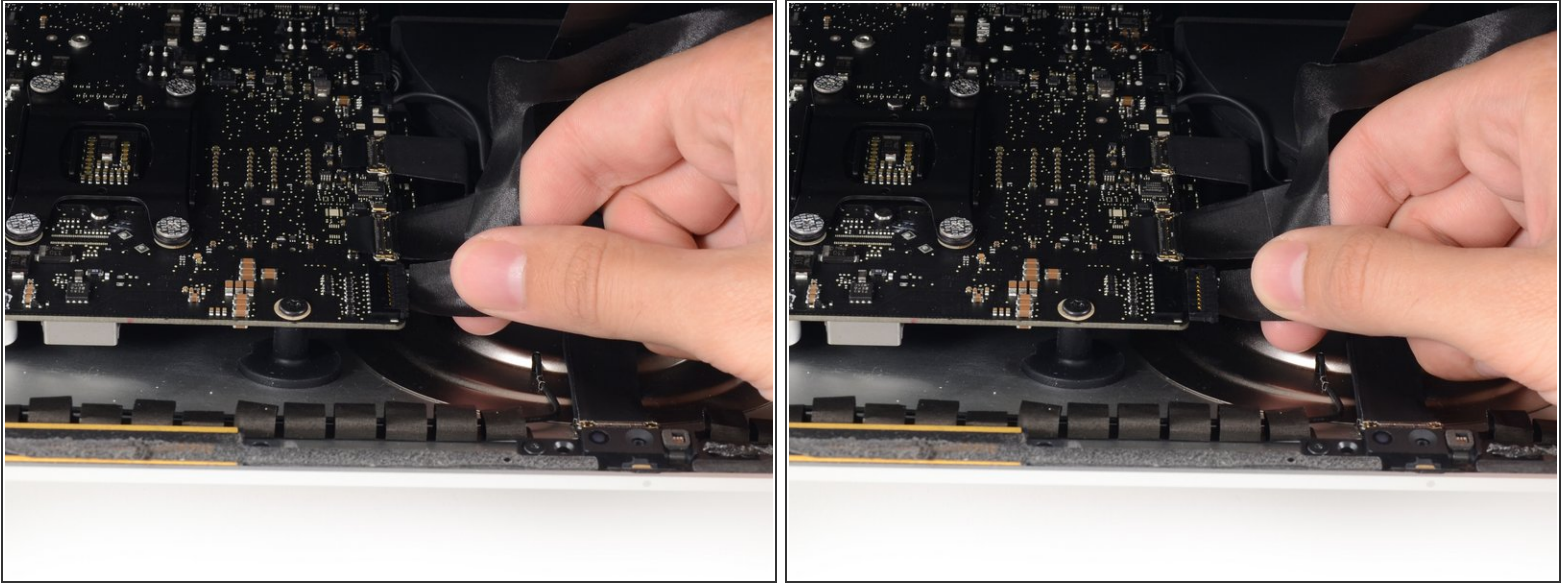
- While holding the display up with one hand, use the other hand to unplug the display power cable. Make sure that you pull the cable out from the plastic tab, and not by pulling on the color wires.

- ⓘ Lift the display up enough to have easy access to the connector, but not so much that you stretch the cables and stress their connections (about 8").

Step 20
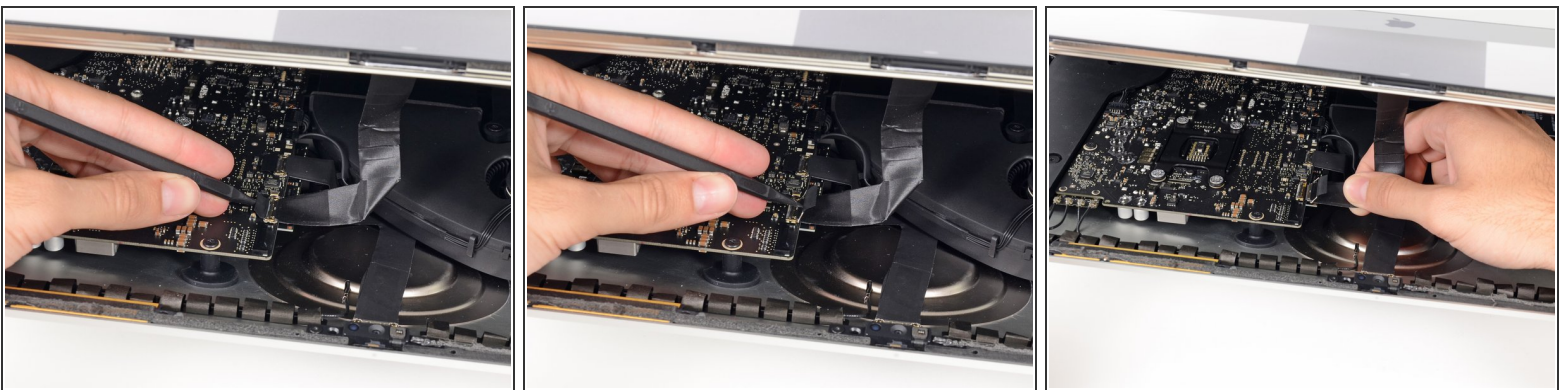
- Use the tip of a spudger to flip up the metal retaining bracket on the display data cable.

- Carefully pull the display data cable from its socket on the logic board.

- ⚠ Be sure to pull the display data cable connector straight out of its socket.

Step 21

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

- (i) 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.

Step 22

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

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Step 23

- Lift the display up from the frame and remove it from the iMac.

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

⚠ Be very careful handling the display—it's big, heavy, and made of glass.

📌 During reassembly, remove all traces of old adhesive from the iMac, then head over to our iMac Intel 21.5" Retina 4K Display (2017) Adhesive Strips Replacement guide to install the new adhesive before reinstalling the screen.
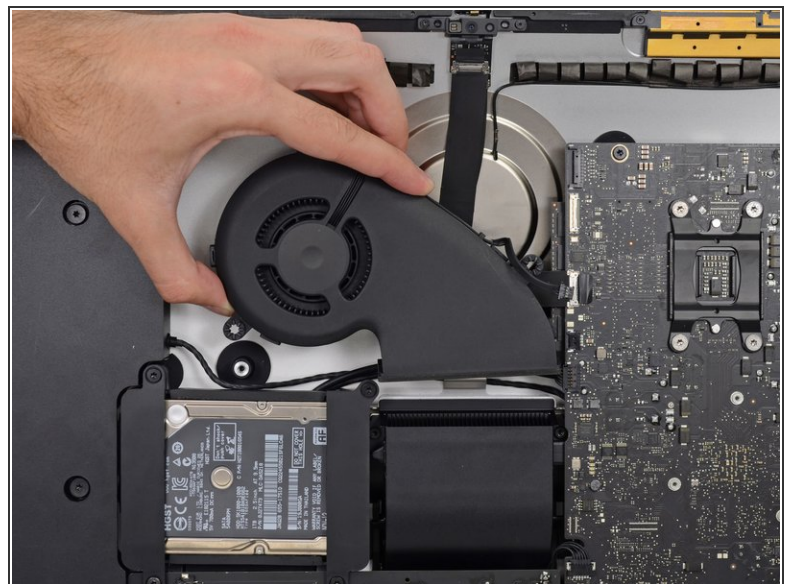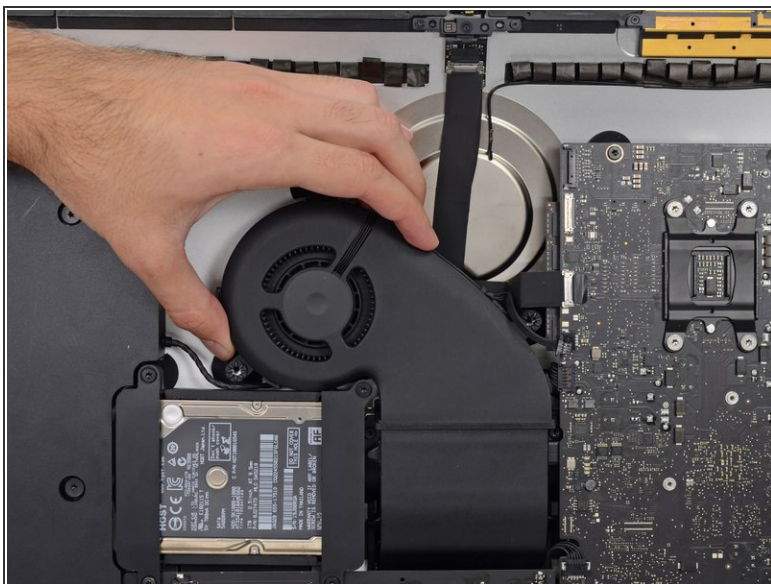
Step 24 — Fan
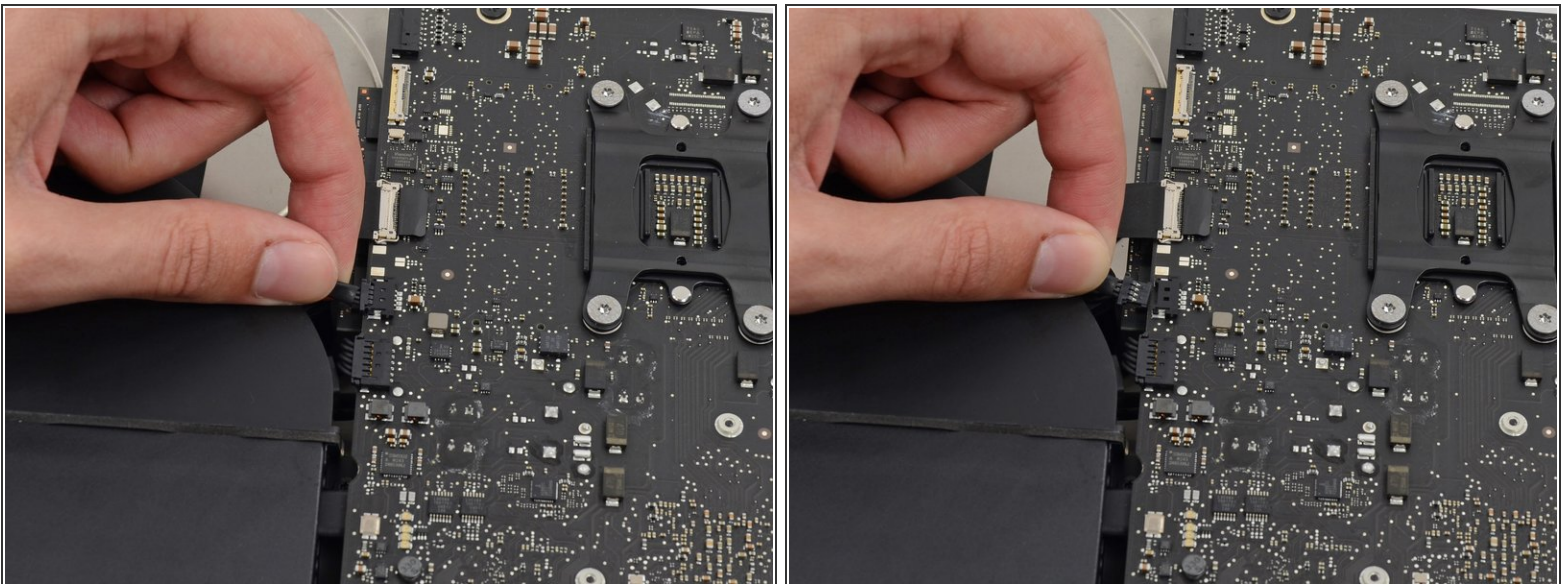
- Disconnect the fan cable connector from its socket on the logic board.

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Step 25

- Remove the three 12.3 mm T10 shoulder screws from the fan enclosure.

Step 26

- Remove the fan from the iMac.

To reassemble your device, follow these instructions in reverse and use our Adhesive Strips Guide to reattach the display glass.

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