

iMac Intel 27" Retina 5K Display 2020 Display Assembly Replacement

Follow this guide to replace the display...

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INTRODUCTION

Follow this guide to replace the display assembly on a 2020 Intel iMac 27" Retina 5K.

Some photos in this guide are from a different model and may contain slight visual discrepancies, but they won't affect the guide procedure.

Removing the display on the 2020 iMac Intel 27" Retina 5K Display requires cutting adhesive with a specialized iMac opening tool. After you've completed your repair, you'll need to follow our <u>display adhesive guide</u> to scrape off the old adhesive and replace it with new double-sided adhesive strips.

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.

This procedure involves removing the faulty/broken display, as well as transferring the display data cable and thermal sensor to a new display.

TOOLS:

iMac Intel 27" Cardboard Service Wedge (1)

iMac Opening Wheel (1)

Plastic Cards (1)

Tweezers (1)

Spudger (1)

iFixit Opening Picks (Set of 6) (1)

iOpener (1)

PARTS:

iMac Intel 27" (2012-2019) Adhesive Strips (1)

Step 1 — Install the service wedge



- 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 <u>iFixit</u> <u>cardboard service wedge</u>, follow <u>these assembly</u> <u>directions</u> to put it together.

Step 2 — Insert an opening tool



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 it no more than 3/8" (9.5 mm) into the display. You risk severing antenna cables and causing serious damage if you insert the tool too far.

Step 3 — Slice through the display adhesive







- 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.

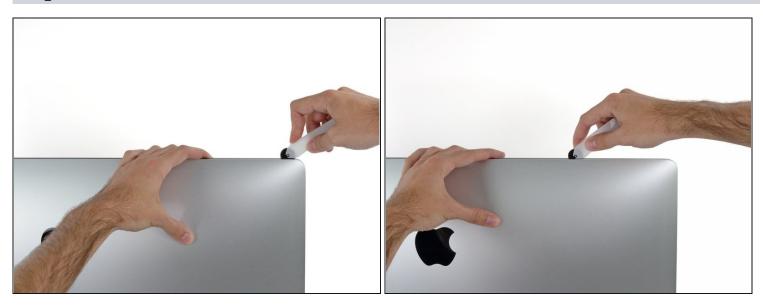
Step 4 — Cut through the remaining adhesive





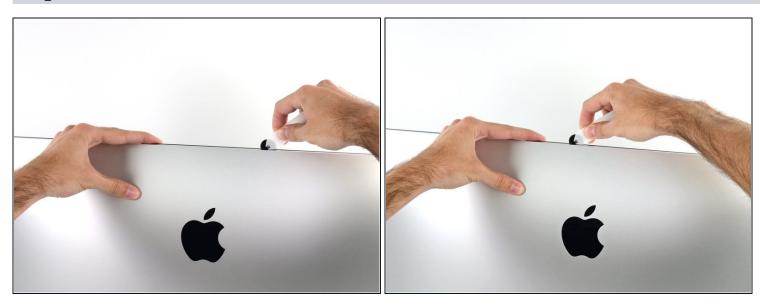


Continue wheeling the tool up around the top left corner.



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

Step 6

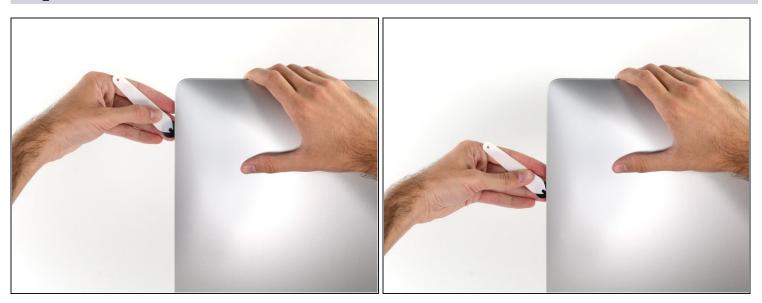


- Continue along the top of the display.
- ② You may want to run the tool back and forth through what you've already cut a few times, to ensure you get as much of the adhesive separated as possible.



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

Step 8



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



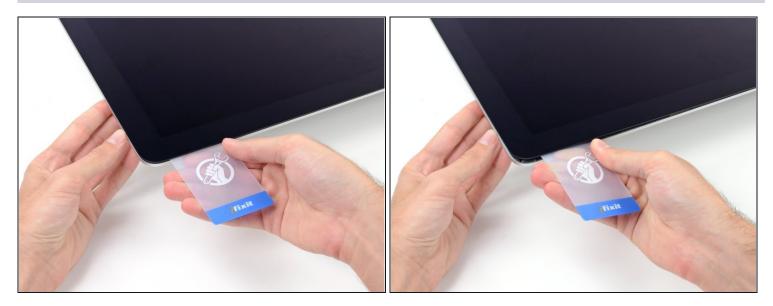
- Finish pushing the opening tool to the bottom of the right side of the display.
- (i) At this point, you'll want to run the tool back around the entire display, to ensure you cut as much adhesive as possible.

Step 10



- (i) While the opening tool did the lion's share of the work, the display will still be slightly adhered to the case. A <u>plastic card</u> 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.

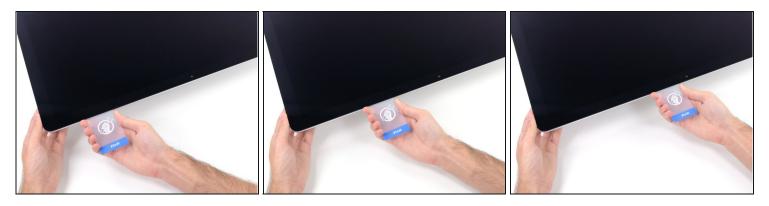
⚠ Be careful not to insert it more than 3/8" (9.5 mm), or you may damage internal components.



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

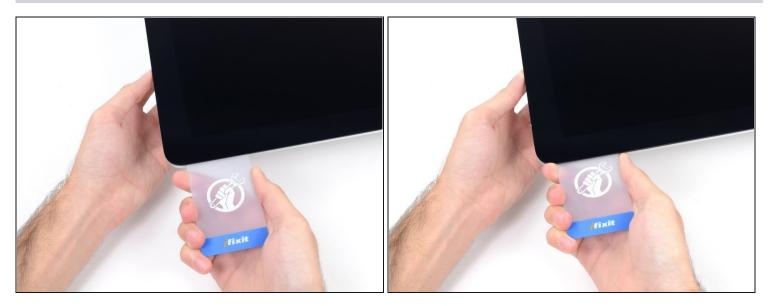
⚠ Using too much force will crack the glass. Work carefully, and don't try to create a gap any larger than about 1/4" (6 mm).

Step 12



 \triangle 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.

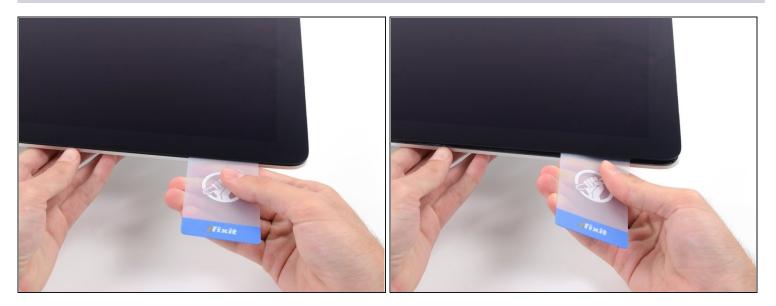


• Put the card into the corner again and let it stay there to keep the adhesive from resettling.

Step 14



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



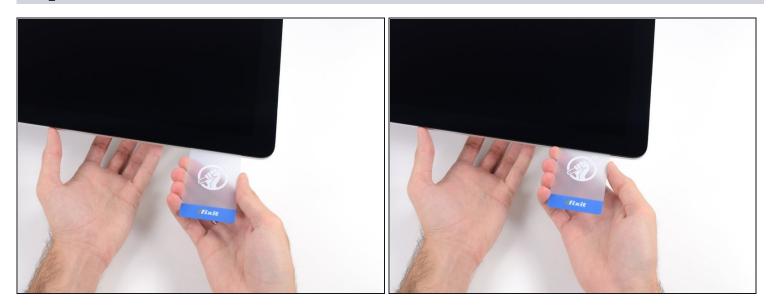
• Gently twist the card, slightly increasing the space between the display and frame.

 \triangle 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.



Insert the card back into the top left corner.

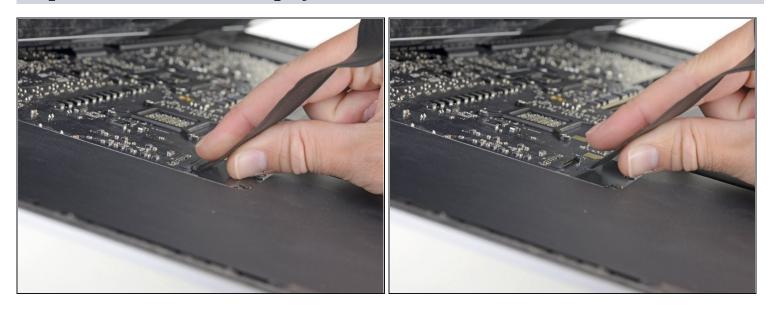
Step 18



- 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.

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

Step 19 — Disconnect the display cables



- While holding the display up with one hand, use the other to unplug the display power cable.
 - (i) 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.

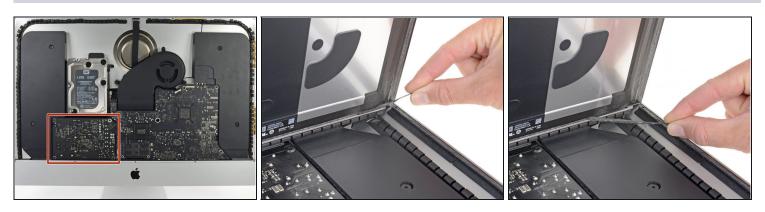
Step 21 — Lift the display





- 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 — Remove the remaining adhesive



- ⚠ Be very careful not to touch the capacitor leads or any exposed solder joints on the back of the power supply (boxed in red).
- Grasp the small tab at the end of one of the bottom edge display adhesive strips and pull the adhesive toward the top of the iMac to remove it.
- Repeat this step with the other adhesive strip and remove it.
- (i) If either adhesive strip breaks before it's removed, use a plastic card to slice through the remaining adhesive.

Step 23 — Remove the display

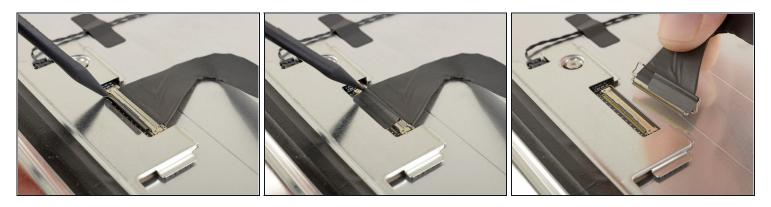






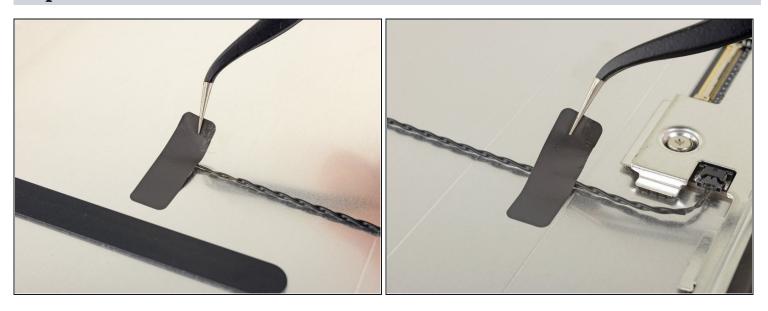
- ⚠ Be very careful handling the display—it's big, heavy, and made of glass. The display has fragile edges. Avoid lifting the display by the corners.
- Lift the display up from the frame and remove it from the iMac. Lay the display face down on a flat, soft surface.
- It may be necessary to slowly lift 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 the adhesive replacement guide for your model when your repair is complete to replace the adhesive strips that secure the display to the rear enclosure.

Step 24 — Remove extra display components

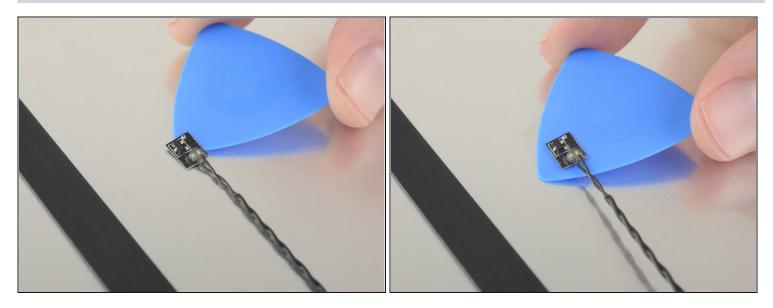


- Gently set the display face-down on a sturdy, flat surface. It may be helpful to put it on a towel or cloth to protect it from dirt or debris that can scratch the front glass.
- Use your fingernail or the pointed tip of a spudger to flip up the retaining flap on the display data connector.
- Pull the display data cable connector straight out of its socket on the back of the display.

Step 25



- If necessary, use an iOpener to heat and soften the adhesive on the two pieces of tape holding the thermal sensor in place.
- Use tweezers to peel the tape off of the thermal sensor and its cable.



- Slide an opening pick under the thermal sensor to separate it from the display.
- it.

Step 27



- Disconnect the thermal sensor from its socket on the back of the display.
- Remove the thermal sensor and transfer it to your new display assembly.

Step 28 — Only the display remains



- 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 and transfer any missing components.
- You may have to transfer the foam cushion pieces on the back of the display. Slide an opening pick underneath the foam pieces to separate them from the display, and gently pull them off. You may need some double sided tape to reattach them to the new display.

Compare your new replacement part to the original part—you may need to transfer remaining components or remove adhesive backings from the new part before installing.

To reassemble your device, follow the above steps in reverse order.

Take your e-waste to an R2 or e-Stewards certified recycler.

Repair didn't go as planned? Check out our **Answers community** for troubleshooting help.