

iMac Intel 21.5" Display Adhesive Strips Replacement (Custom Notch)

Removing the display requires cutting through...

Written By: Arthur Shi



INTRODUCTION

Removing the display requires cutting through the adhesive around the perimeter of the screen. After the adhesive is cut, it cannot be used to re-seal the display in place, so you'll need to apply a new set of adhesive strips.

This guide includes steps showing how to cut a notch in the adhesive strip, allowing the iMac's microphone to function properly. If your adhesive strip already contains a notch, <u>follow this guide instead</u>.

Some images in this guide use an older iMac, which has minor visual differences. These differences do not affect the repair procedure.

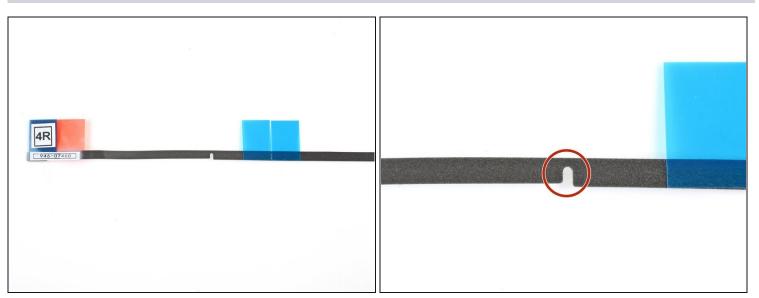


iMac Intel 21.5" (2012-2019) Adhesive Strips (1)

Step 1 — Install an iMac service wedge

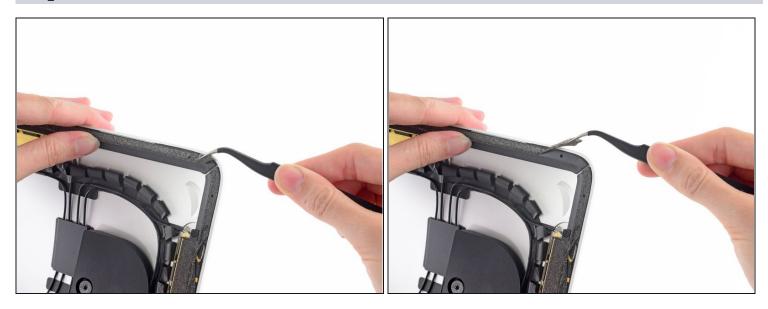


- With the hinge free to move, the iMac will be unbalanced and hard to work on. Place an <u>iMac service wedge</u>, in the stand to stabilize the iMac.
 - (i) If you are using the <u>iFixit</u> <u>cardboard service wedge</u>, follow <u>these assembly</u> <u>directions</u> to put it together.
- ▲ If you are not using an iMac service wedge, be very careful when installing and working behind the display—it can easily fall out and break if the iMac moves unexpectedly.



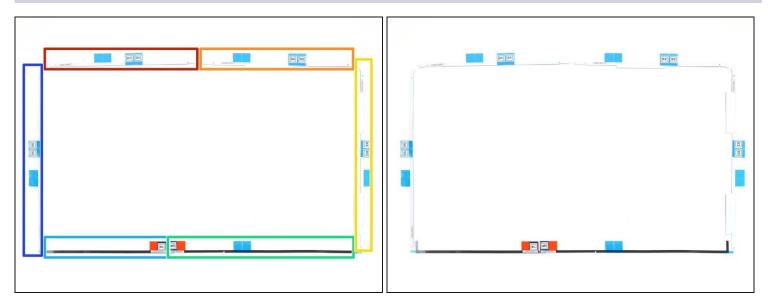
- ① This guide includes steps showing how to cut a notch in the adhesive strip, allowing the iMac's microphone to function properly.
- If your adhesive strip labeled 4R already contains a notch, <u>follow this guide instead</u>.

Step 3 — Remove the old adhesive



- (i) Before you install new adhesive strips, remove all of the old adhesive from the perimeter of the rear enclosure.
 - If you are re-using your existing display, you must also remove the old adhesive from the back of the display.
 - Peel off the old strips of adhesive using <u>tweezers</u> or your fingers. Start at the bottom and peel *upward* towards the top of the device.
- After all the old adhesive is removed, carefully clean off the adhesive residue with highconcentration isopropyl alcohol (90% or greater) and a lint-free cloth. Wipe in one direction, not back and forth.
- **Don't skip this step**, or your new adhesive strips may not bond properly, and the display may fall out of your iMac.

Step 4 — Lay out the adhesive strips



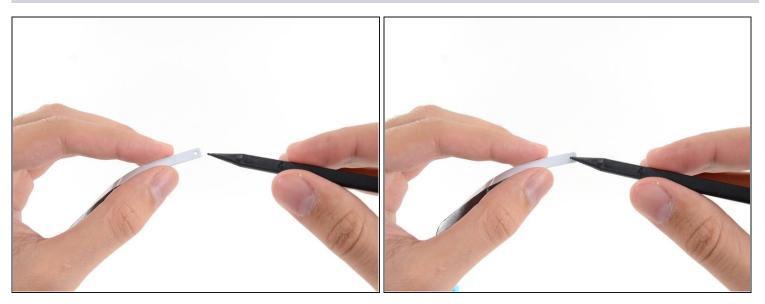
- Lay out the adhesives strips beforehand so you won't accidentally install a strip in the wrong place:
 - Strip 01 on the top left
 - Strip 02 on the top right
 - Strip 03 on the right vertical
 - Strip 4R on the bottom right, dark side facing up
 - Strip 4L on the bottom left, dark side facing up
 - Strip 5 on the left vertical

Step 5 — Remove the backing from the first adhesive strip



- Start with the strip labeled 3 (or 03), which goes on the right vertical side of the rear enclosure.
- (i) Before you peel off any backing, line the adhesive strip up along the frame of the iMac to get an idea of where it goes.
- Peel the short piece of backing off the back of the strip.

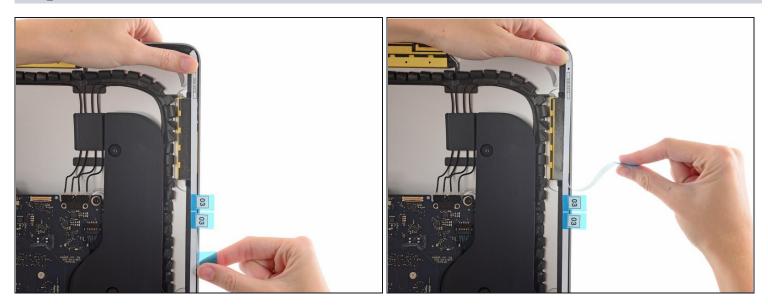
Step 6 — Apply the first adhesive strip



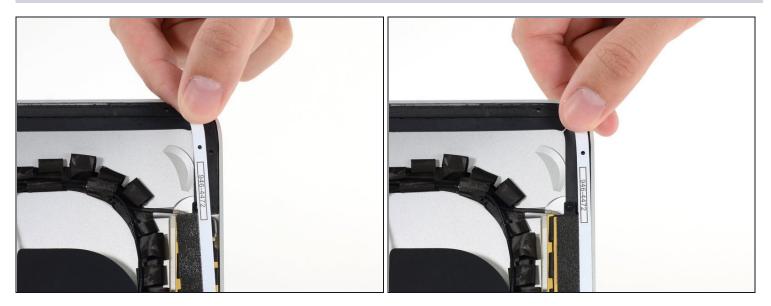
• Insert the tip of a spudger into the hole at the end of the strip where you just removed one layer of backing. Insert the spudger from the side that still has a layer of backing on it.



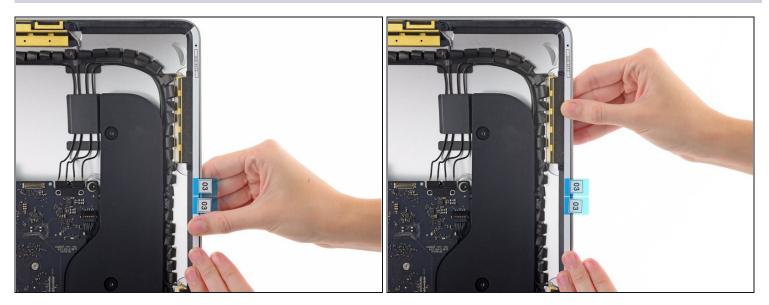
- With the spudger still poking through the hole in the adhesive strip, push the spudger tip into the corresponding hole in the frame of the iMac.
- Using the hole and spudger to anchor the position of the adhesive strip, line the strip up against the right edge, gently pulling up against the spudger to ensure the strip is taut, and stick it onto the frame.



- Once you've aligned the bottom half of the adhesive strip, peel the longer piece of backing out from behind the strip.
- If the bottom half isn't aligned properly, you can carefully peel it up and re-stick it before peeling off the lower backing strip. Be sure to use the spudger tip to anchor the top.

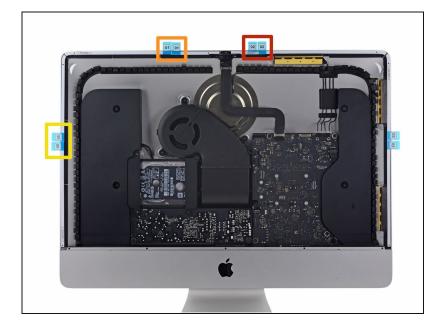


• Align the upper half of the strip with the right edge of the rear enclosure, and stick it down.



- Use your finger to smooth out the strip. Make sure it is neatly aligned with the right side of the frame and that it sits flat.
- (i) Do not peel off the front adhesive backing yet.

Step 11 — Apply the remaining adhesive strips

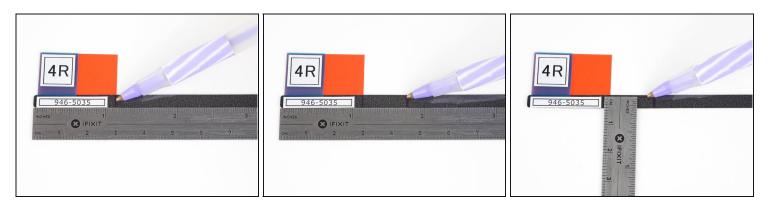


- Work your way counterclockwise around the perimeter of the iMac, adding three more adhesive strips in the same manner:
 - Strip 02 on the top right
 - Strip 01 on the top left
 - Strip 05 on the left vertical

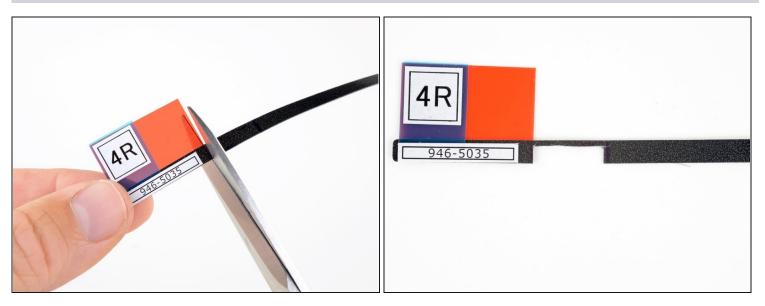
Step 12 — Cut the microphone notch



To avoid blocking the microphone port with adhesive, strip 4R must be modified before use. A small notch must be cut out of the lower edge of the adhesive strip to accommodate the microphones.



- Measuring from the left end of strip 4R (the end with the labels) make two marks on the strip as guides for where to cut.
 - Make the first mark 1¹/₈ inches (28.6 mm) from the left edge.
 - Make the next mark 1³/₄ inches (44.5 mm) from the left edge.
- Measuring from the bottom edge of the strip, make a third mark in between the first two 5/32 inches (4 mm) up from the bottom edge.
- (i) This cut will be very close to the top edge of the adhesive strip, but it's important that you leave material over top of the adhesive strip for proper sound isolation. When in doubt, remove less material than you think you need to. If the adhesive still covers the microphone you can always make the notch bigger.

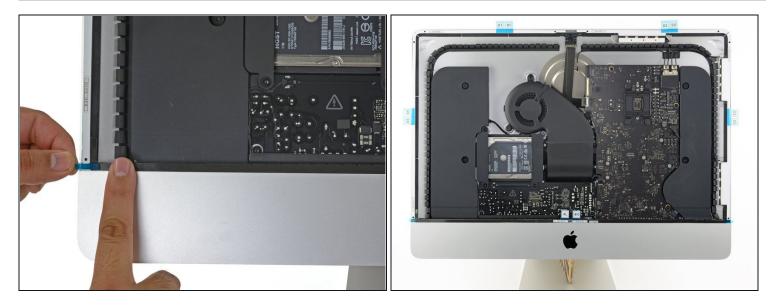


- Very carefully cut along the marks you made with a pair of scissors or a razor blade.
 i After cutting, your microphone notch should look like the one in the second photo.
- Before removing the backing, place your adhesive strip on the iMac and make sure the notch lines up with the microphones.

Step 15 — Apply the lower adhesive strips



- (i) The two remaining strips (4L and 4R) do not have guide holes and are more difficult to place than the previous ones. Before sticking them down, we recommend first setting them in their respective places on the iMac to get comfortable with their placement.
- Grasp the red film pull tab on the 4R adhesive strip and pull to remove the backing from the strip.
- Align the strip on the bottom edge of the rear enclosure such that the right end of the strip sits next to—but does not overlap—adhesive strip 3.
- Run your finger along the length of the adhesive strip to ensure it is straight and unwrinkled, pressing down as you go to adhere the strip to the iMac.



• Repeat the previous step for the 4L adhesive strip, placing it along the left half of the bottom edge of the iMac.

i Once you've applied all the adhesive strips, the iMac should look as shown in the photo.

Step 17 — Install the display

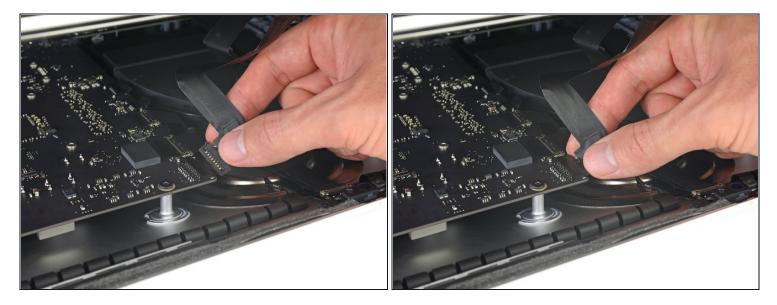


• Gently set the display in place over the iMac and align it carefully.



- Use painter's tape or masking tape to temporarily secure the bottom edge of the display to the iMac's enclosure.
 - (i) The tape preserves the display's alignment, and allows you to safely swing the top edge of the display open to access the display cables.

Step 19 — Test the display



- (i) At this point it's a good idea to test your repair, in order to make sure your iMac works properly before you seal it back up. Follow the next three steps to temporarily reconnect the display cables and boot up your iMac prior to pulling the protective film off the adhesive strips.
 - (i) If you've already verified that your iMac is working correctly and are ready to seal it up, <u>skip to step 22</u>.
- Insert the display power cable into its socket on the logic board.



• Use a pair of tweezers or your other hand to gently insert the display data cable connector into its socket on the logic board.

i Be sure to press it straight into the socket, and insert it completely.

• Secure the metal retaining bracket on the display data cable downwards towards the logic board.



- Set the display back on the iMac's rear enclosure.
- At this time, plug in your iMac, power it on, and test your repair before moving on to actually sealing up the computer. Be sure to check for full functionality of any hardware you removed or disconnected.

A When you are finished, shut the iMac down and **unplug the power cord** before you continue.

Step 22 — Seal the iMac



A Verify that your iMac is turned off and unplugged from power before you continue.

- After confirming that your iMac functions properly, disconnect the display cables and carefully lean the display forward.
- Remove the film from the two bottom strips by reaching in from above with a pair of tweezers and pulling the blue tabs straight up from the bottom edge of the display.

Step 23 — Reconnect the display cables



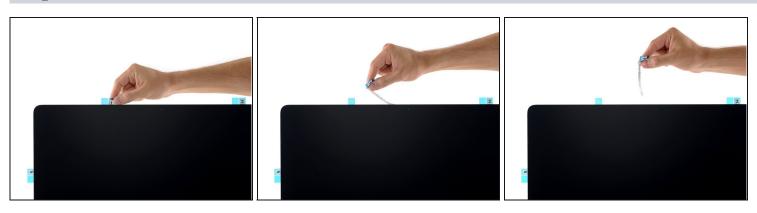
- Reconnect the display power and data cables for the final time.
 - Remember to secure the metal retaining bracket on the display data cable.

Step 24 — Remove the remaining adhesive backing

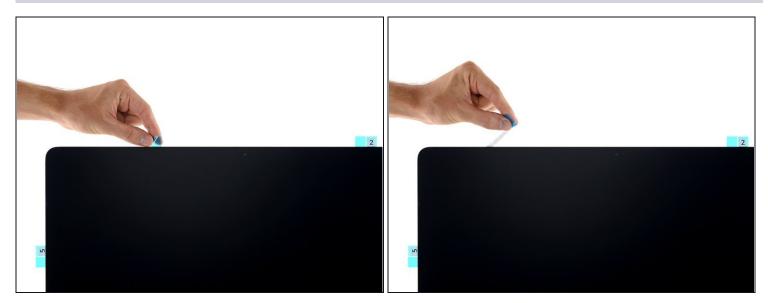


- (i) Check the glass directly in front of the webcam for dust and other contaminants. If necessary, wipe it down with a <u>microfiber cloth</u> before you seal up the display.
- Steady the display with one hand as you remove the protective film in the following steps, or rest it lightly against the iMac's enclosure.

Step 25

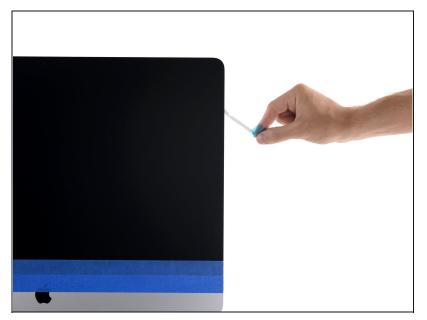


• Remove the protective film from strip 01 by pulling its tab straight up.



• Remove the other side of the protective film from strip 01.

Step 27



• Repeat the previous steps to remove the protective films from all the remaining adhesive strips.



- To ensure a strong bond, carefully tip the iMac flat on its back (with the screen facing straight up) and press carefully but firmly around all four edges of the display.
- Remove the tape securing the display to the rear enclosure.

Check the display after 24 hours to make sure that it is not loose on the iMac.