iMac Intel 21.5" EMC 2389 AC Inlet Replacement
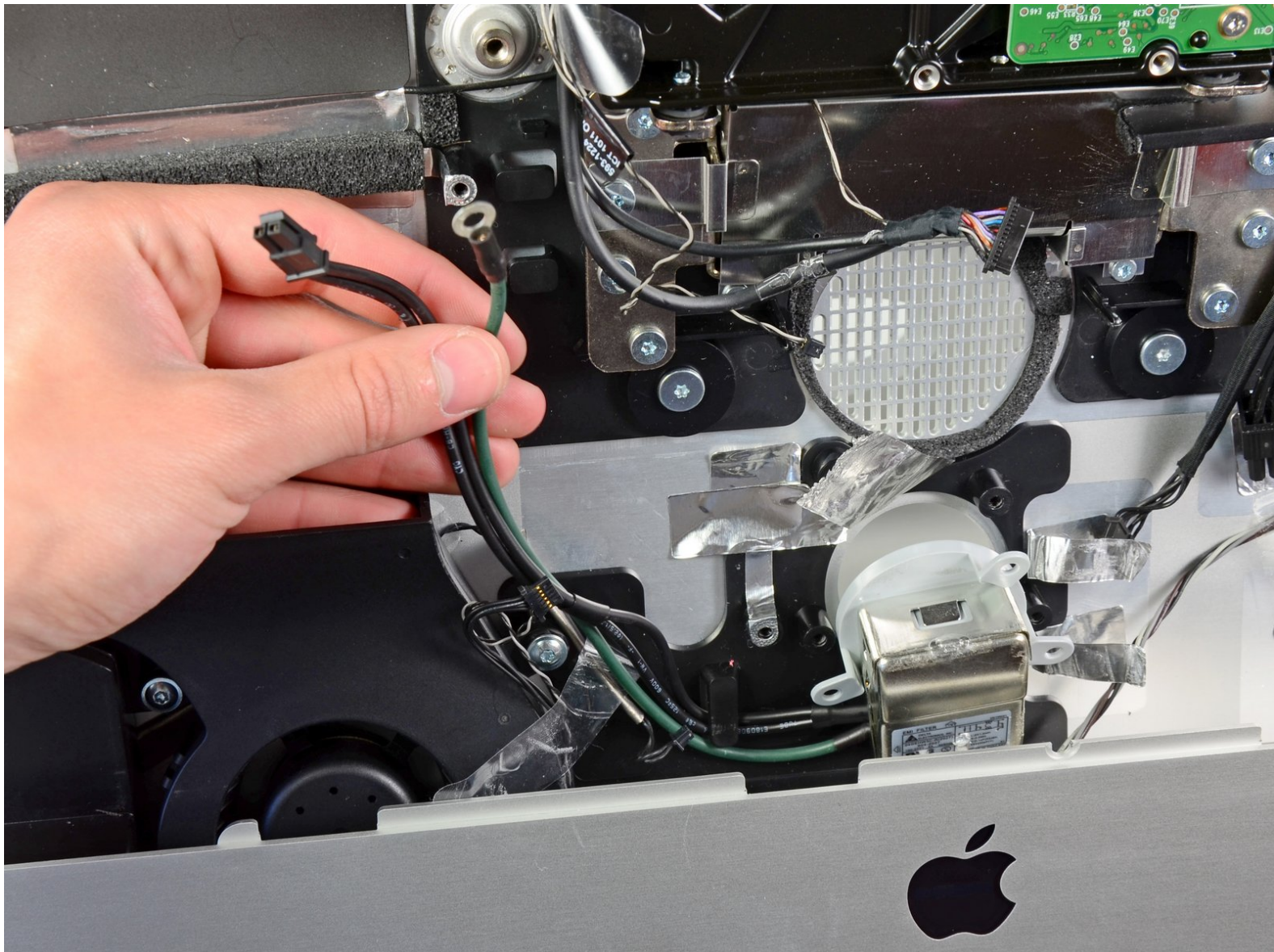
Replace a broken AC inlet in your iMac Intel 21.5" EMC 2389.

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INTRODUCTION

Use this guide to replace a broken AC inlet.

🔧 TOOLS:

- 5mm Nut Driver (1)
- Heavy-Duty Suction Cups (Pair) (1)
- Phillips #2 Screwdriver (1)
- Spudger (1)
- T10 Torx Screwdriver (1)

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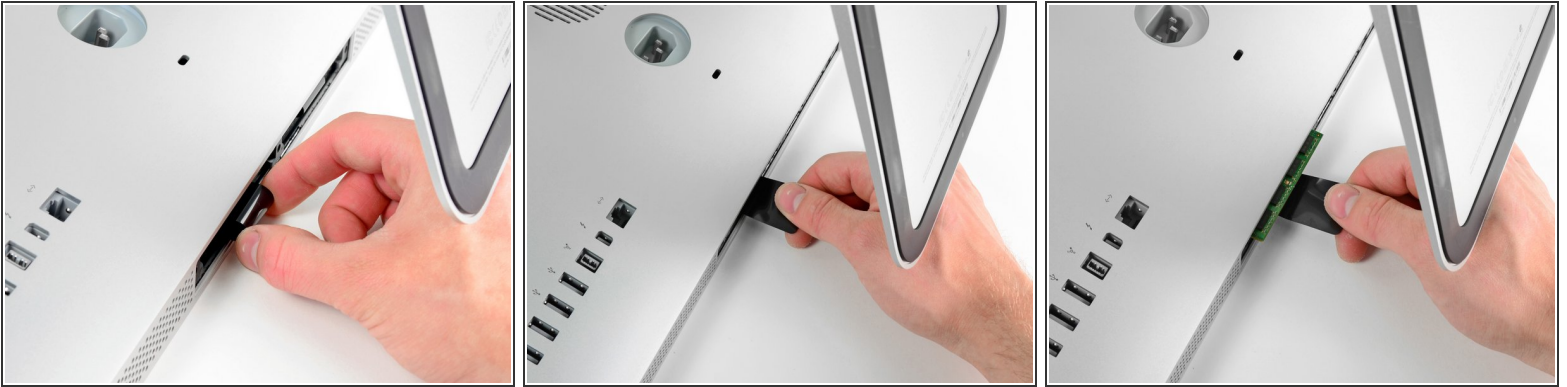
Step 1 — Access Door

- Unplug your iMac's AC cord along with any peripheral devices.

- Lay your iMac face-down on a soft, clean surface as shown.

⚠️ Be sure there isn't any dirt or debris on your work surface, as it may scratch the glass panel on the front of your iMac. We recommend placing a towel between the iMac and the work surface.
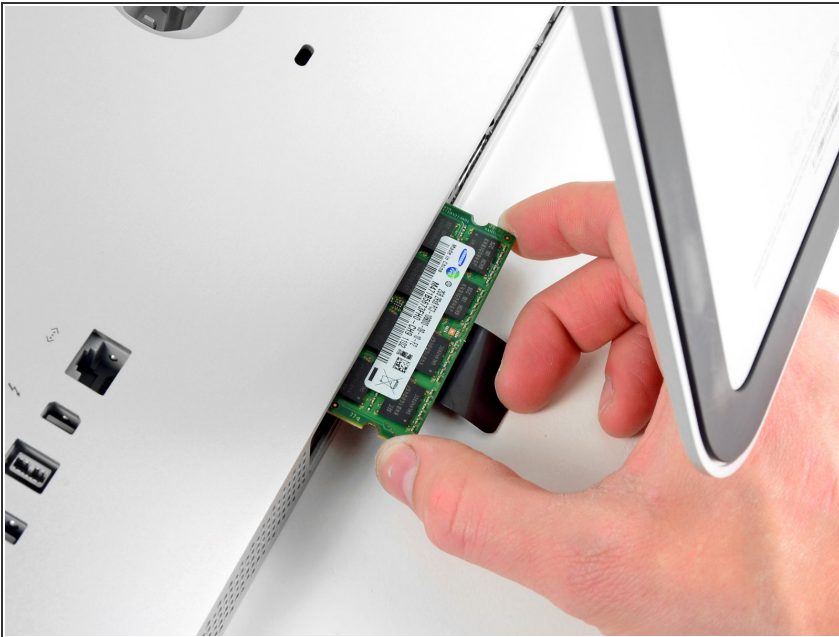
- Loosen the three Phillips screws securing the access door to the bottom edge of your iMac.

ⓘ All three screws will remain captive in the access door.

- Remove the access door.

Step 2 — RAM

- Gently slide the black plastic RAM pull tab out from the RAM slot.

- Pull the black plastic tab away from the bottom edge of the iMac to eject the module(s) on that side of the RAM bay.

- ⓘ This may require a bit of force.

Step 3

- Slide the old RAM module(s) out of their slots in the RAM bay and set them aside.

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Step 4

- Repeat the process in the previous steps to remove the RAM module(s) from the other side of the RAM bay.
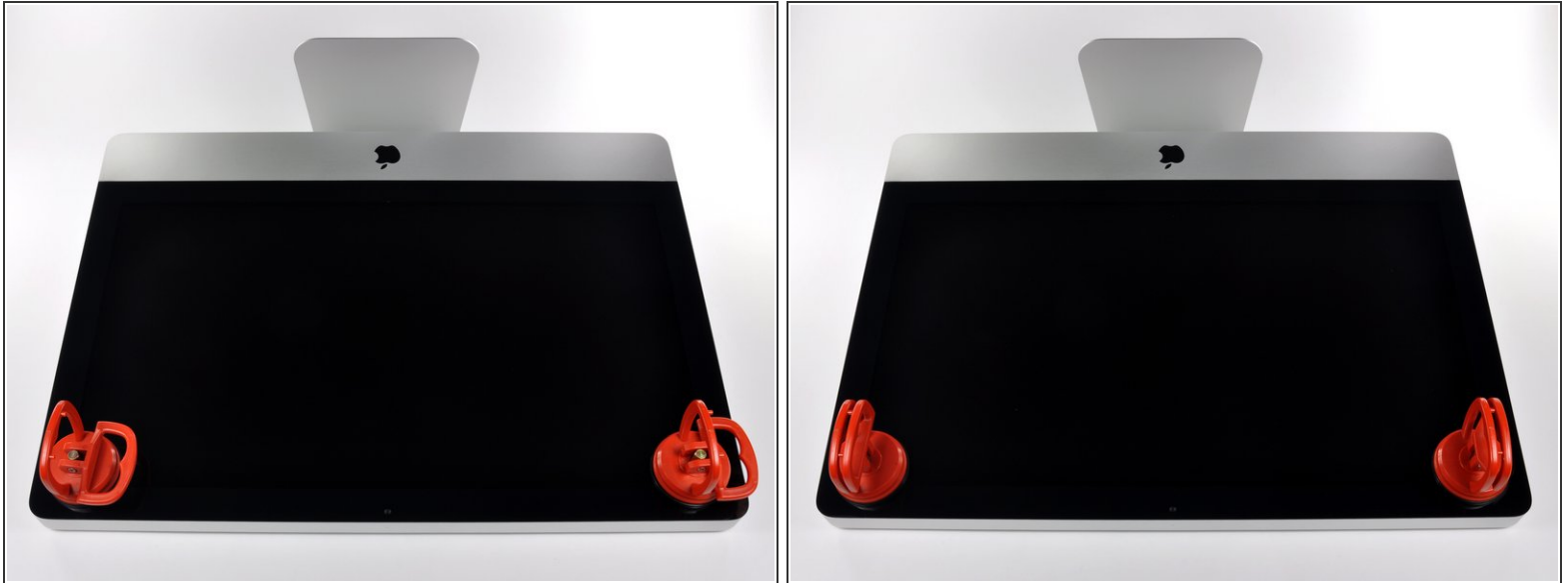
Step 5

- ⚠️ When installing new RAM modules, it is important to orient them correctly.

- Be sure the small notch cut into each RAM module (shown in the first picture) mates with the protrusion in each RAM slot (shown in the second picture).

- ⓘ Your iMac has four RAM slots. Be sure to slide each RAM module into its slot horizontally. This will prevent getting the modules stuck between two of the adjacent slots.

- ⓘ Once you have oriented the new RAM modules correctly, gently slide them completely into the iMac and use your thumbs to firmly seat them in their sockets.

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Step 6 — Glass Panel

ⓘ Before beginning, unplug your iMac and lay it on a soft surface as shown.

● Stick a suction cup near each of the two top corners of the glass panel.

ⓘ To attach the [suction cups](#) we sell, first position the suction cup with the movable handle parallel to the face of the glass panel. While lightly holding the suction cup against the glass, raise the movable handle until it is parallel with the other handle.

● If your suction cups refuse to stick, try cleaning both the glass panel and the suction cup with a mild solvent.

Step 7

- Gently lift the glass panel perpendicular to the face of the LCD enough to clear the steel mounting pins attached along the underside of the top edge of the glass panel.

- Pull the glass panel away from the lower edge of the iMac and carefully set it aside.

- ⭐ During reinstallation, be sure to meticulously clean the inside of the glass panel and the face of the LCD as any dust or fingerprints trapped inside will be annoyingly visible when the machine is turned on.

Step 8 — Display

- Remove the eight 8 mm T10 Torx screws securing the display to the outer case.

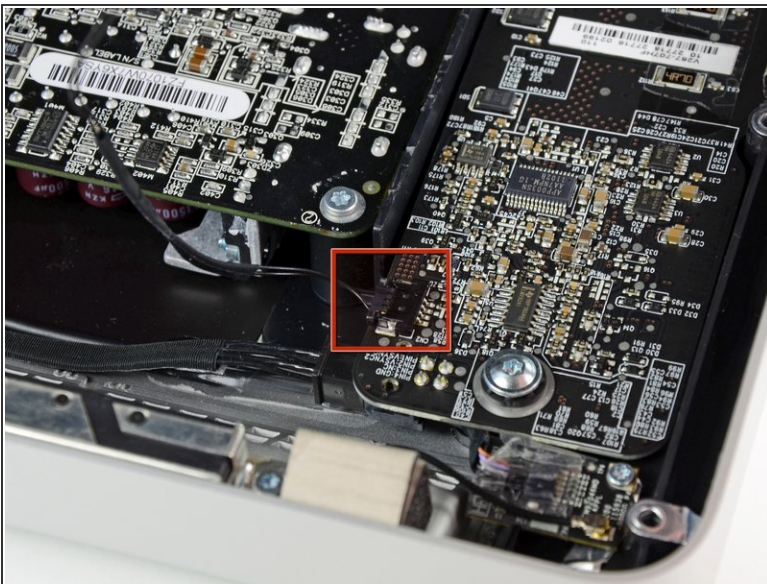 - ⓘ The last two pictures are detail shots of each side of the display.

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Step 9

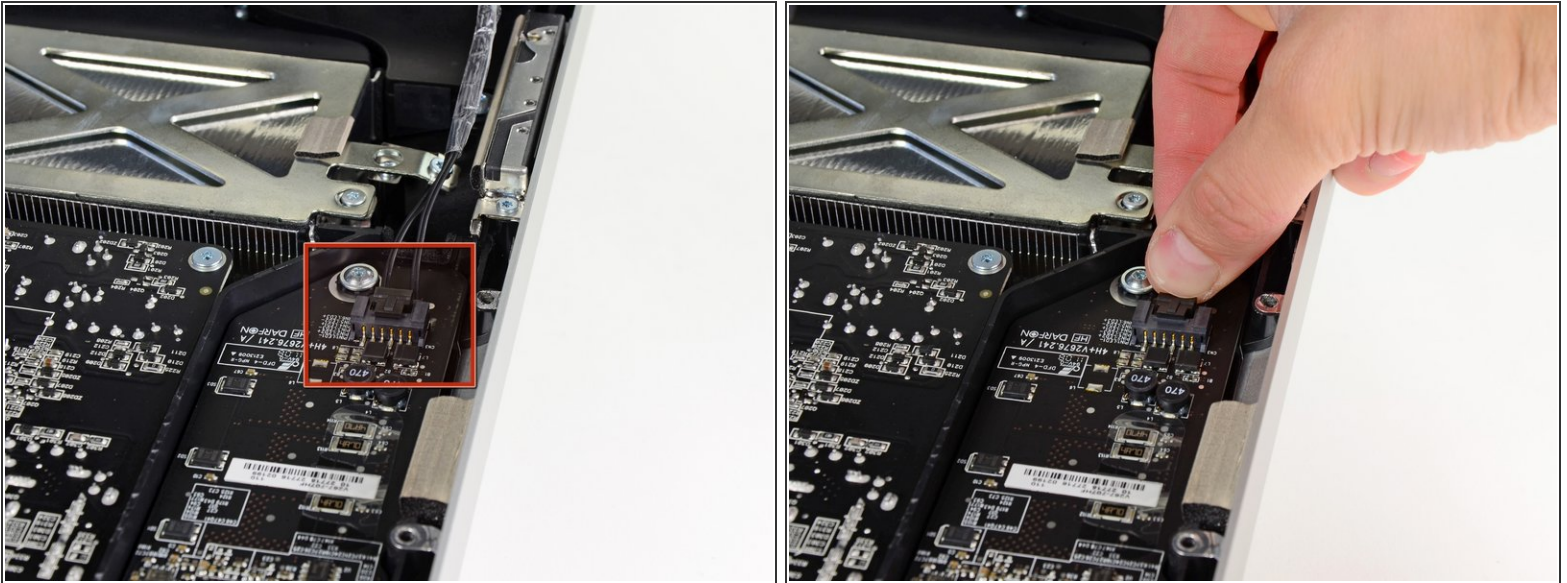- Slightly lift the top edge of the display out of the outer case.

- ⚠ Do not lift it too much. There are several cables attaching the display to the logic board.

Step 10

- Pull the vertical sync cable connector out of its socket on the LED driver board near the top left corner of your iMac.
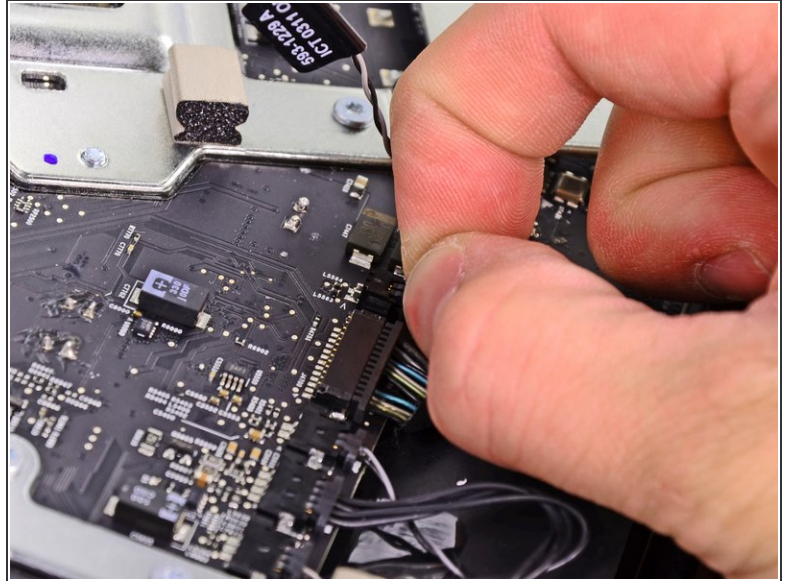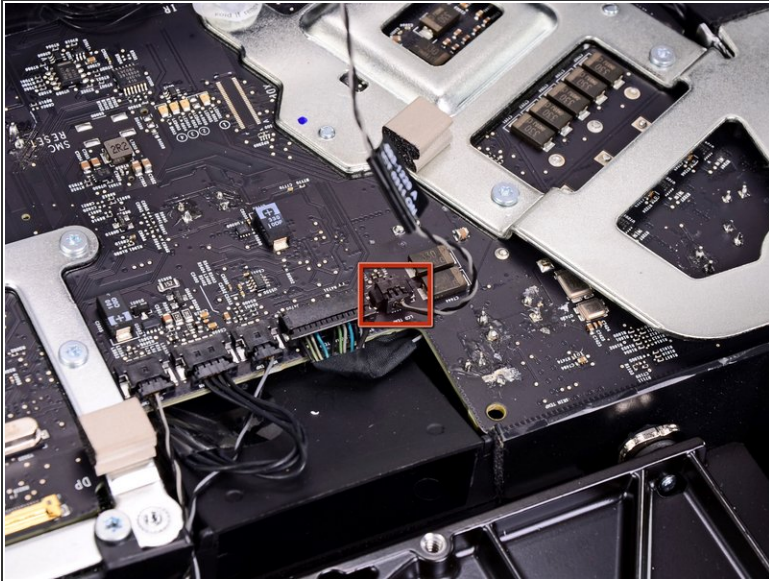
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Step 11

- Rotate the display out of the outer case enough to disconnect the LED backlight power cable from the LED driver board.

- ⓘ Disconnect the LED backlight power cable by depressing the locking mechanism while pulling the connector away from its socket (toward the bottom edge of the iMac).

Step 12

⚠ The display data cable plug has a wire lock. Disengage the plug's lock by rotating the plastic tab so that it points upward. (It is not a pull tab.)

● Pull the display data cable straight out of its socket on the logic board.

⚠ Do not lift up on the display data cable, as its socket is very fragile. Pull the cable parallel to the face of the logic board.

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Step 13

- Disconnect the LCD thermal sensor cable connector from its socket on the logic board.

- ⓘ If your fan is spinning full speed after completion, check this connection or the hard drive's thermal sensor cable.
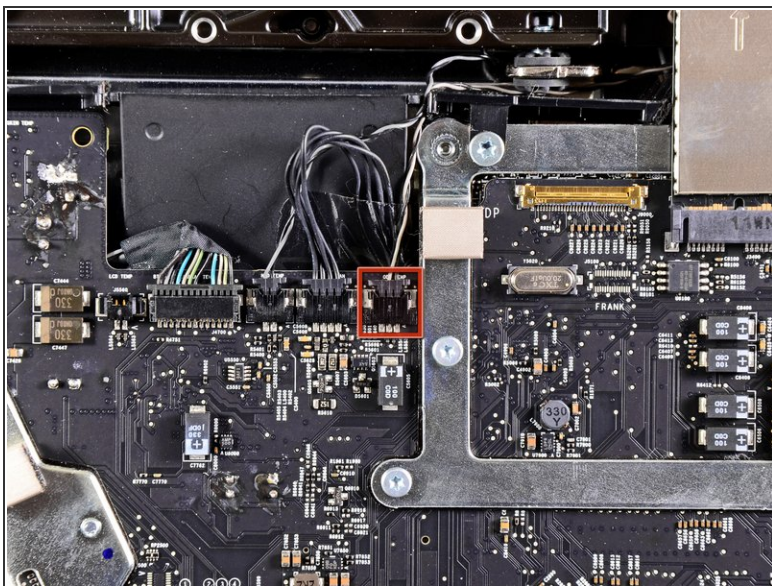
Step 14

- Carefully pull the display toward the top edge of your iMac and lift it out of the outer case, minding any cables that may get caught.
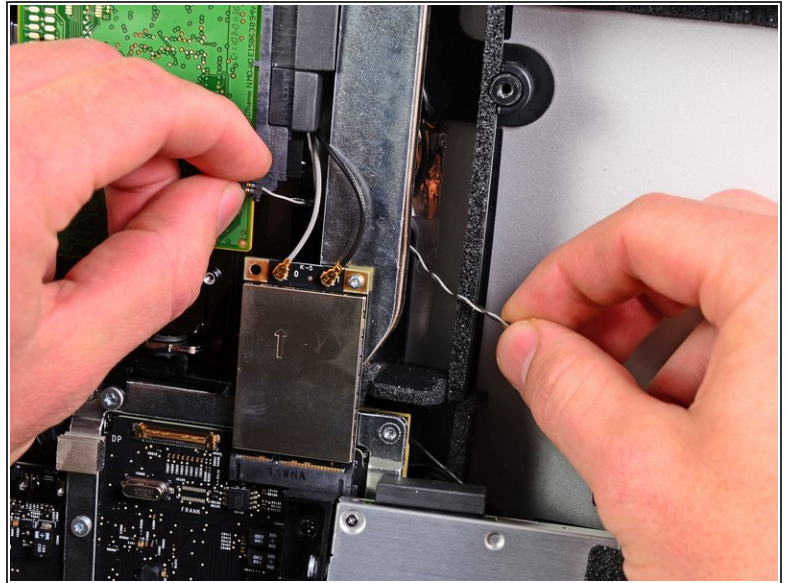
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Step 15 — Optical Drive

- Remove the following four screws:
  - One 9.3 mm T10 Torx screw with a large head
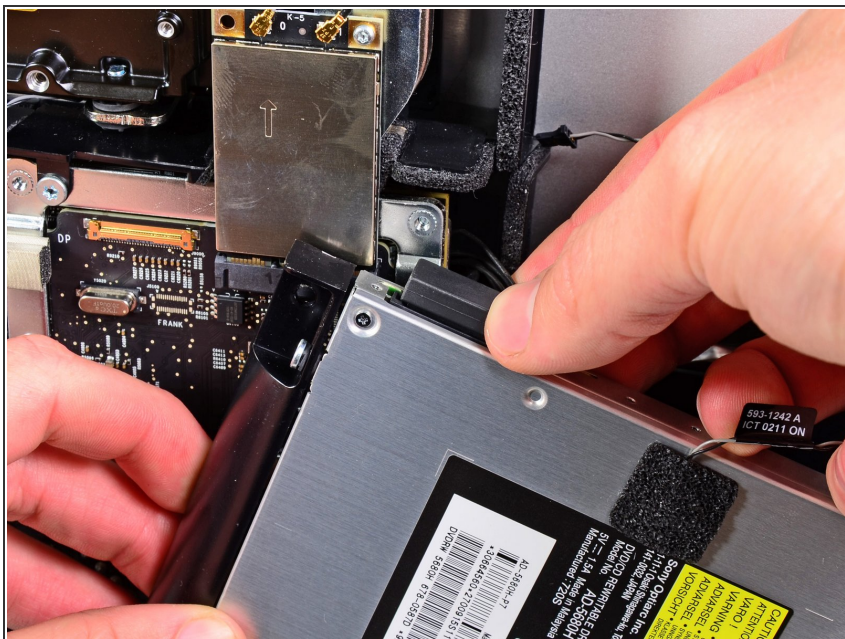 - Three 9.3 mm T10 Torx screws with a normal sized head

Step 16

- Pull the optical drive thermal sensor connector toward the top edge of the iMac to disconnect it from its socket on the logic board.
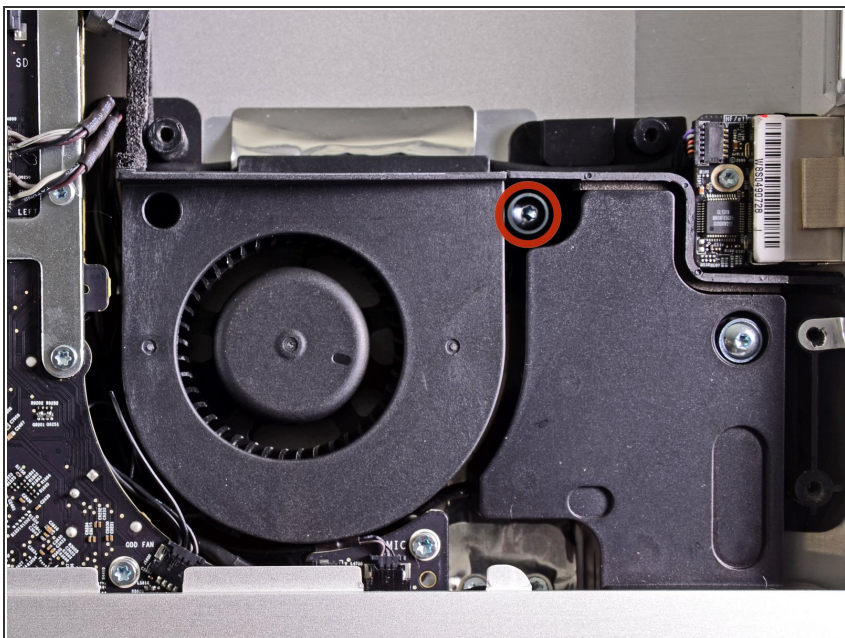
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Step 17

- Lift the inner edge of the optical drive and maneuver its connector past the GPU frame attached to the logic board.

- Carefully pull the optical drive off its mounting pins on the right side of the outer case to gain clearance for disconnecting the optical drive cable.

- Allow the optical drive to hang down as you de-route the optical drive thermal sensor connector from behind the GPU heat sink.
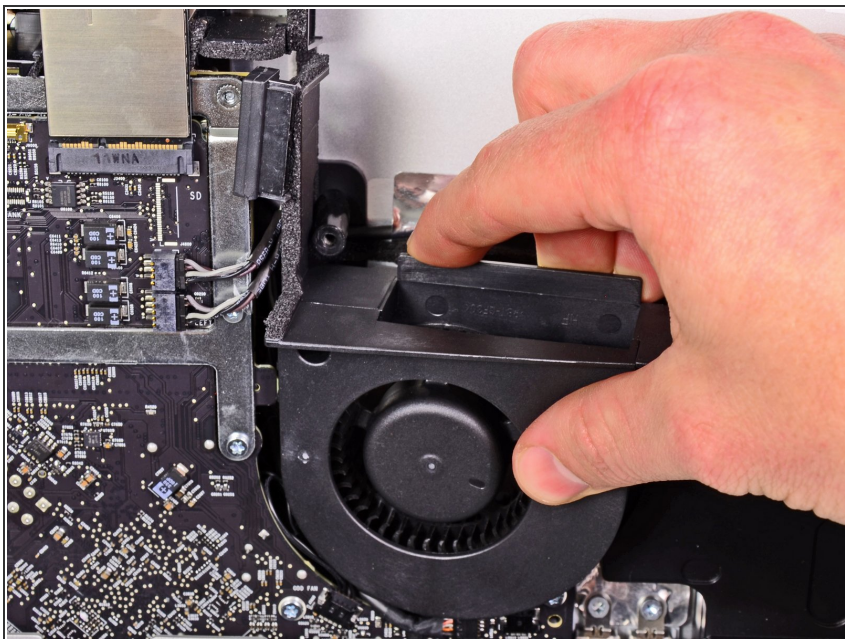
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Step 18

- Disconnect the optical drive cable by pulling its connector away from the optical drive.

- Remove the optical drive from the iMac.

- (i) Do not forget to also move the thermal sensor from the optical drive to the enclosure when you install the second hard drive.
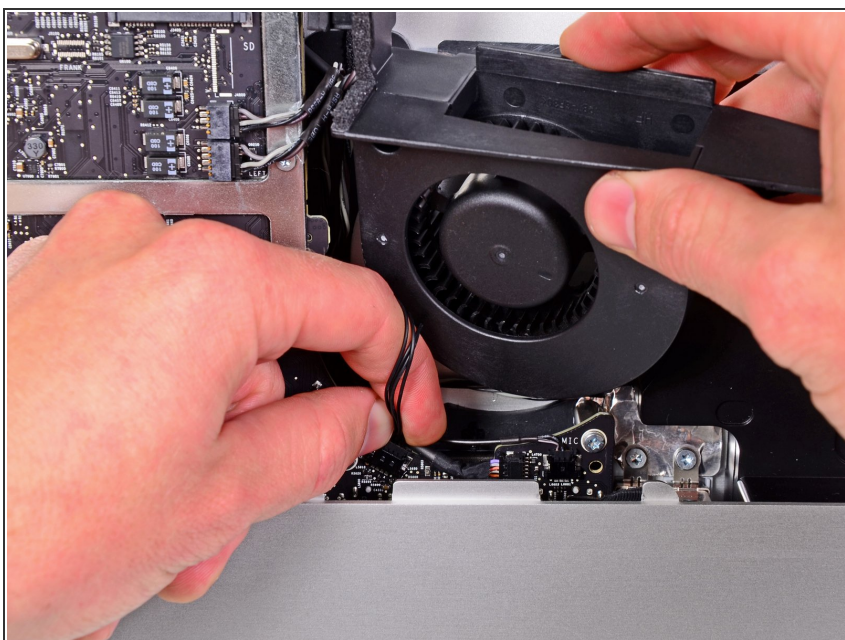
Step 19 — Optical Drive Fan

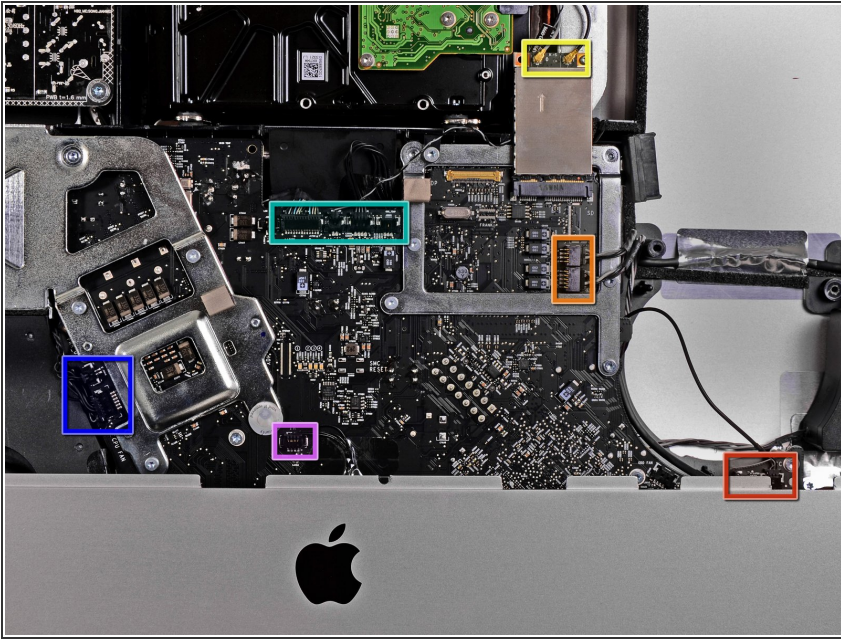- Remove the single 13 mm T10 Torx screw securing the optical drive fan to the outer case.

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Step 20

- Pull the optical drive fan off the pins attached to the outer case.

Step 21

- Pull the optical drive fan connector out of its socket on the logic board.

- Remove the optical drive fan from the iMac.
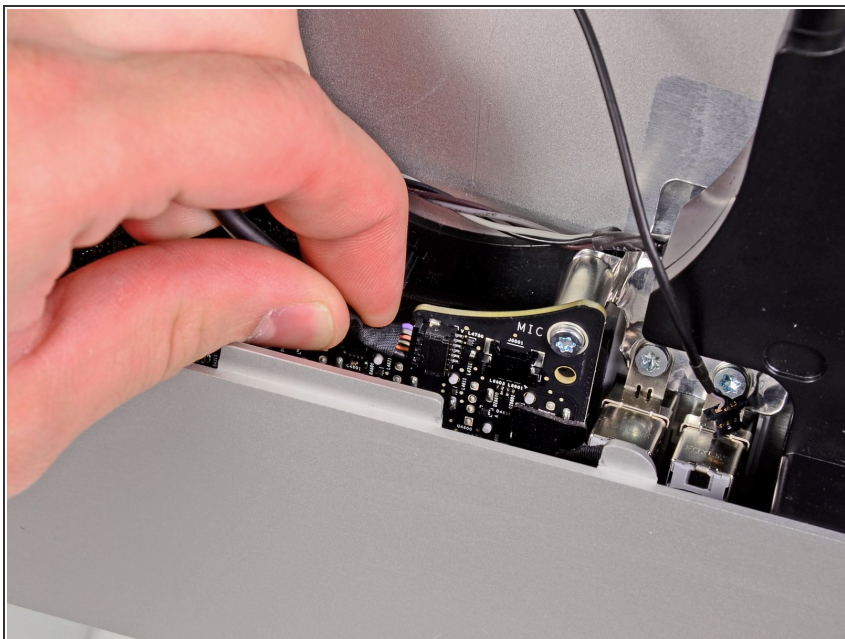
Step 22 — Logic Board

- In the proceeding steps, you will disconnect the following cables:
  - SD Board and microphone
  - Left/Right Speaker
  - Wi-Fi Antenna
  - Bluetooth/Ambient Light Sensor/Camera/Left Temperature Sensor, Hard Drive Temperature Sensor and Hard Drive Fan
  - CPU Fan/Ambient Temperature and Power Button
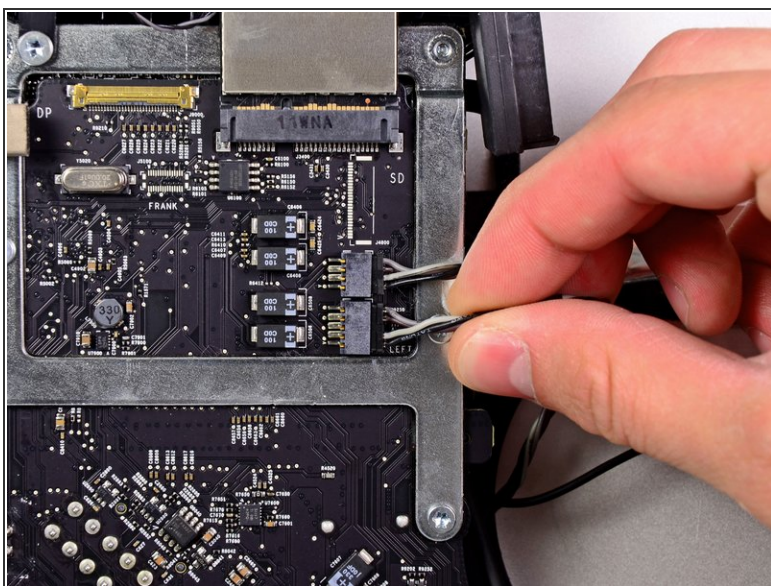 - IR Sensor

Step 23

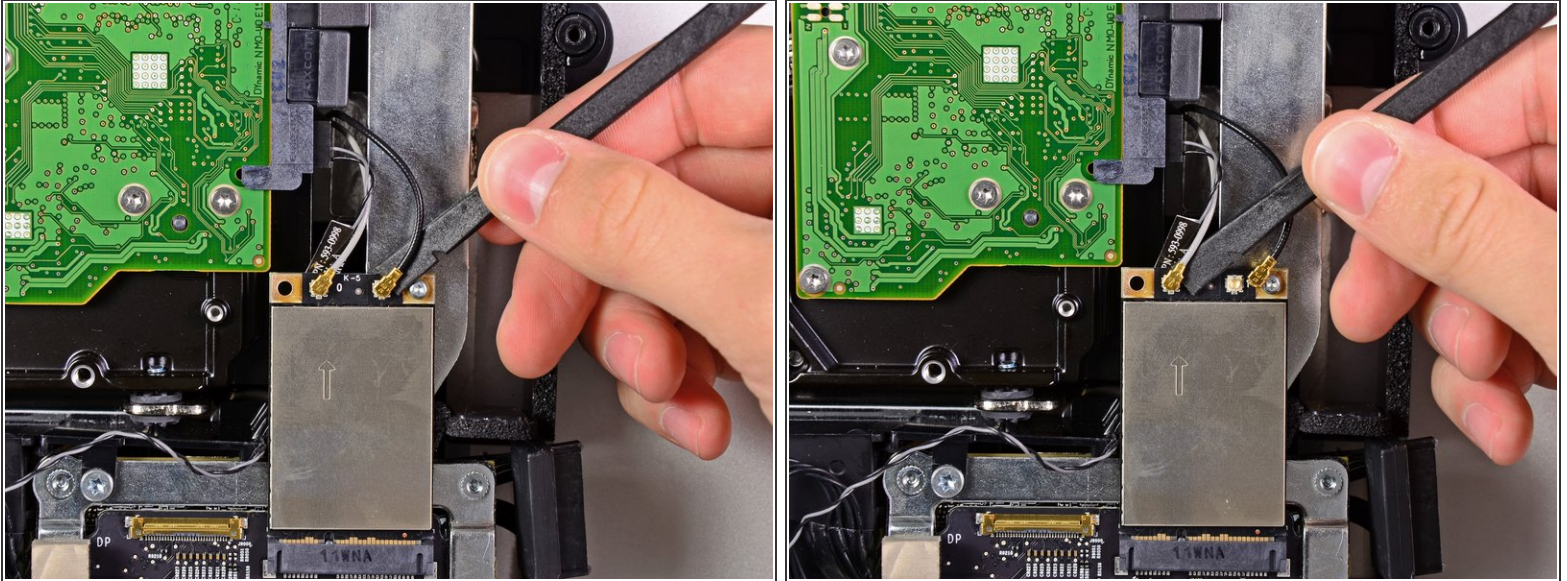- Pull the microphone cable connector toward the top edge of the iMac to disconnect it from the logic board.

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Step 24

- Pull the SD board cable out of its socket on the logic board.

Step 25
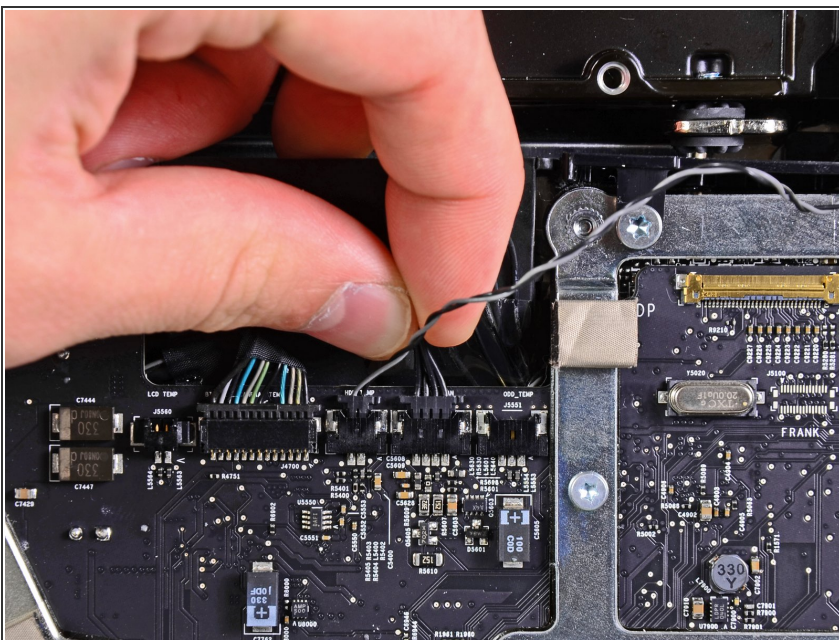

- Disconnect the left speaker and right speaker cables by pulling their connectors toward the right side of the iMac.

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Step 26

- Use the flat end of a spudger to pry both AirPort antenna connectors up from their sockets on the AirPort board.

- (i) The gray antenna attaches to the socket on the left and the black antenna attaches to the socket on the right.

Step 27

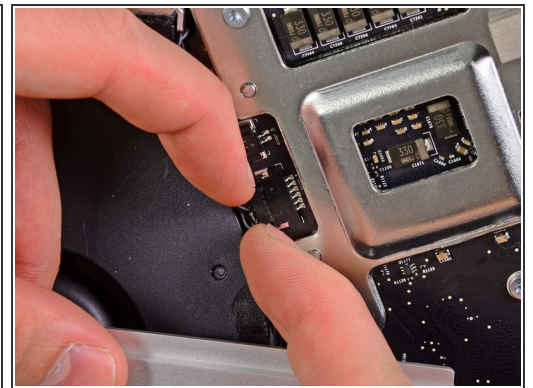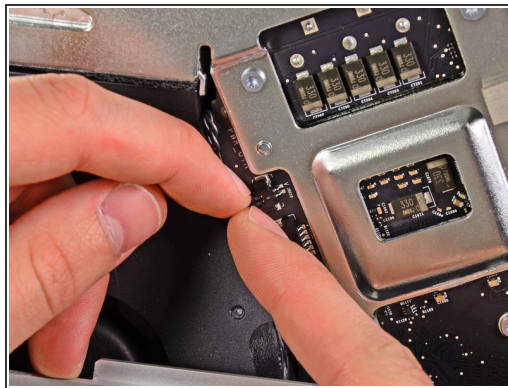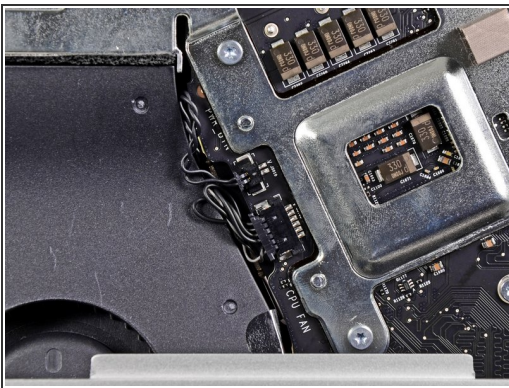- Disconnect the hard drive fan by pulling its connector toward the top edge of the iMac.

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Step 28

- Pull the hard drive thermal sensor cable out of its socket and toward the top edge of the iMac to disconnect it from the logic board.
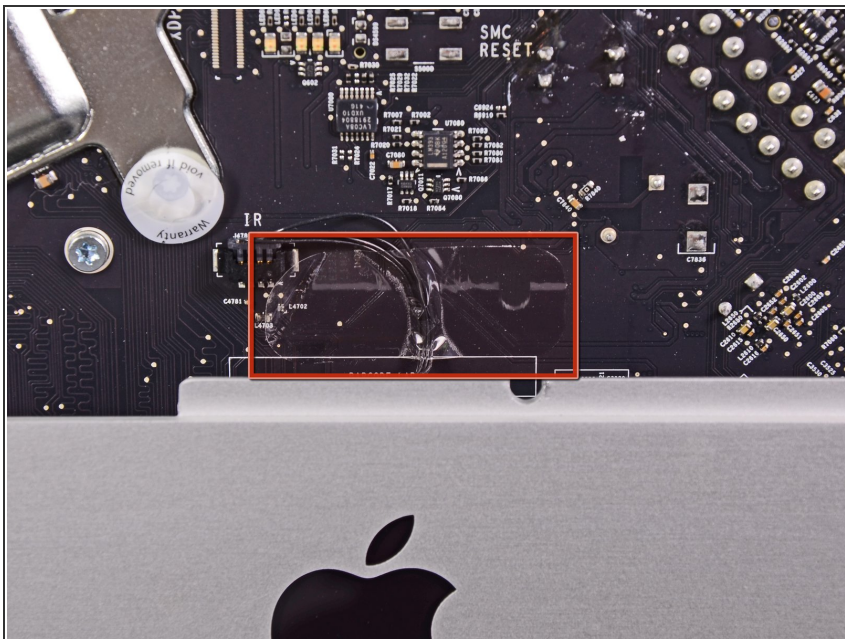
Step 29

- Use your thumbnails on both sides of the Bluetooth/ambient light sensor/camera/left temperature connector to push it toward the top edge of the iMac and out of its socket on the logic board.
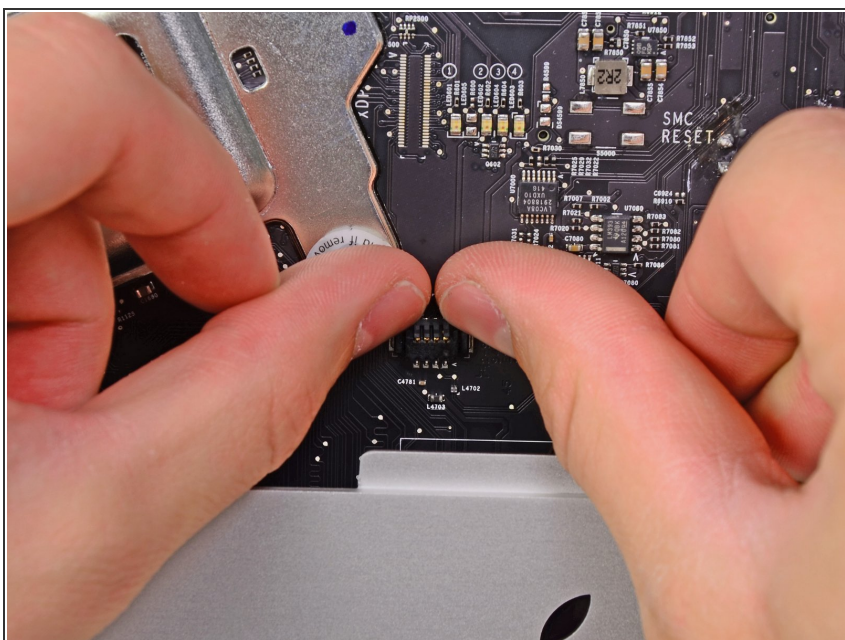
Step 30

- Pull the CPU fan/ambient temperature sensor connector toward the bottom left edge of the iMac and out of its socket on the logic board.

- Pull the power button connector toward the bottom left corner of the iMac to disconnect it from its socket on the logic board.

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Step 31

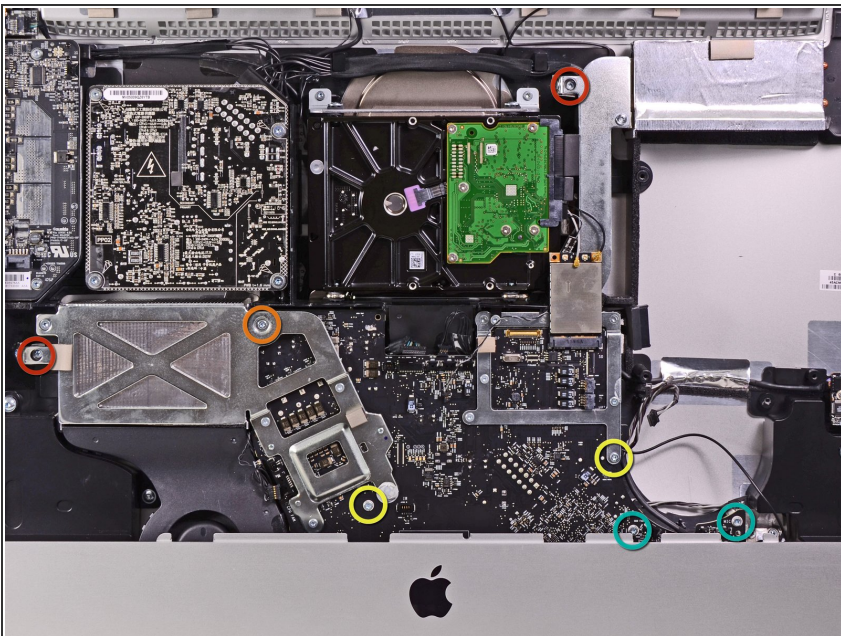- Remove the piece of tape covering the IR sensor cable.

Step 32

- Use your thumbs to push the IR sensor connector out of its socket and toward the top edge of the iMac.
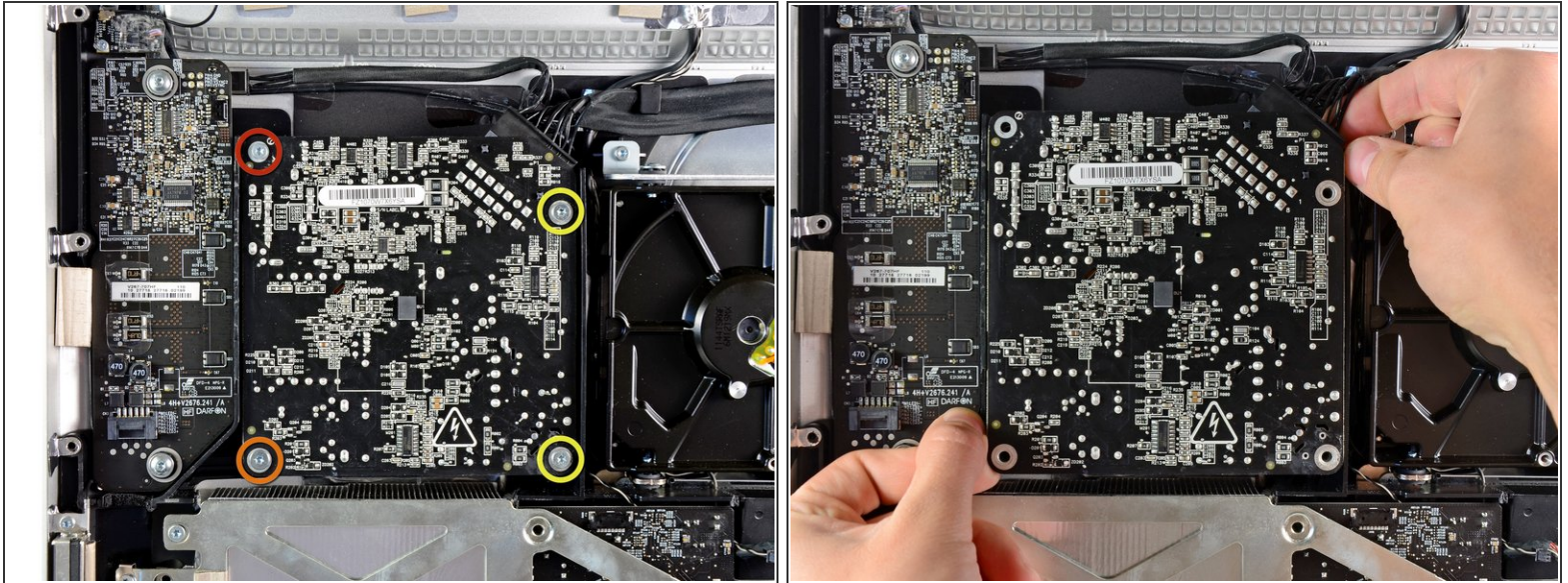
Step 33

- Pull the IR sensor board up from behind the front face of the outer case.

- Remove the IR sensor and set it aside.

Step 34

- Remove the following seven screws:
  - Two 7 mm T10 torx screws
  - One 30 mm T10 Torx screw
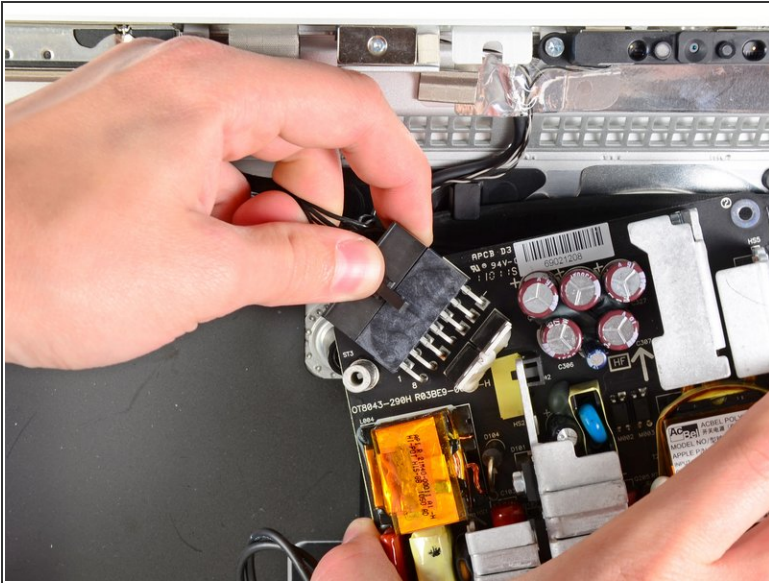 - Two 25 mm T10 Torx screws
  - Two 21 mm T10 Torx screws

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Step 35

⚠ 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.
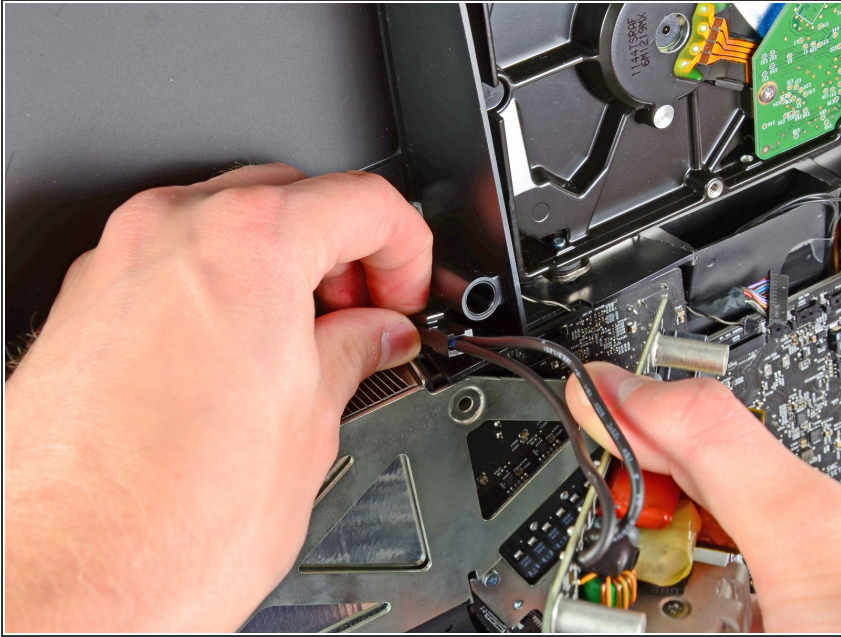
- Remove the following four screws:
  - ● One 9.3 mm T10 coarse-threaded screw
  - ● One 25 mm T10 coarse-threaded screw
  - ● Two 22 mm fine-threaded screws
- Pull the upper right and lower left corners of the power supply away from the rear case to dislodge the mounting posts attached to the power supply's corners.
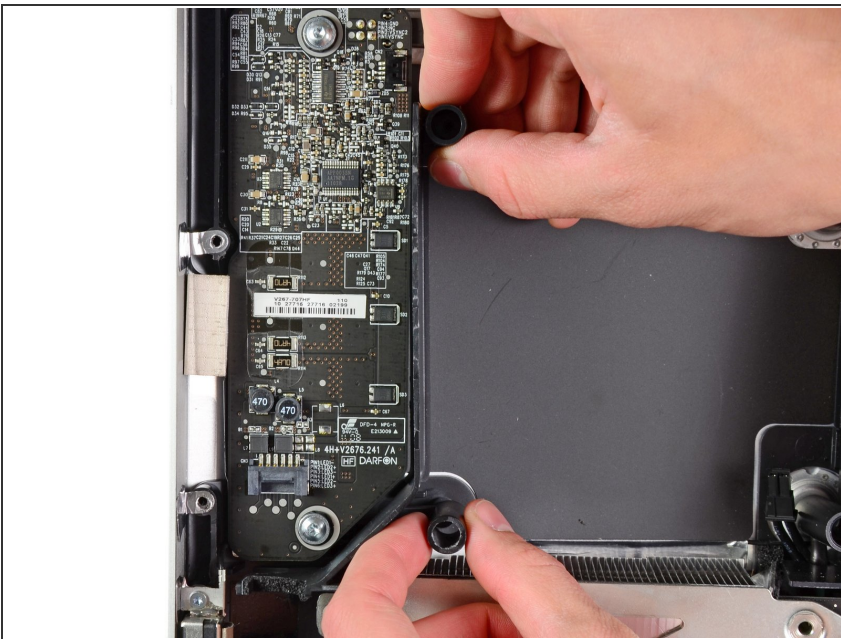
Step 36

- Carefully lift the power supply out of the outer case and rotate it to expose the cable lock as shown, minding the DC-out and AC-in cables still attaching it to the iMac.

- Disconnect the DC-out cable by depressing the locking mechanism on the connector while you pull the connector away from its socket on the power supply.

- Once the locking mechanism has cleared the socket, pull the DC-in connector away from the power supply.
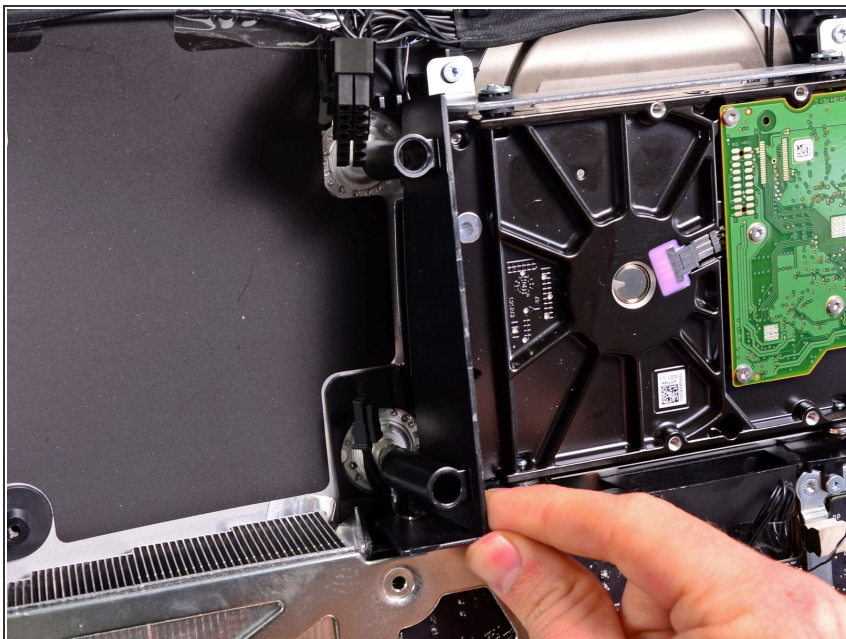
Step 37

- Disconnect the AC-In cable by depressing the locking mechanism while pulling the connector away from its socket.

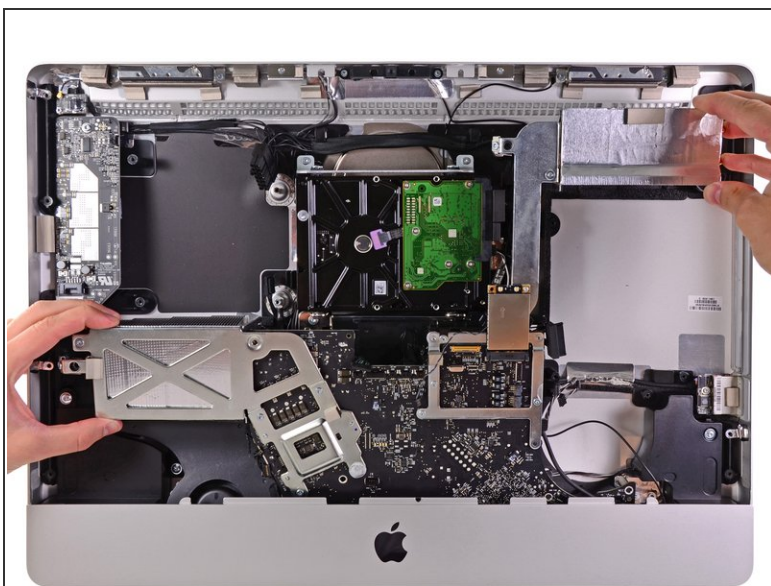- Remove the power supply from the outer case.

Step 38

- Remove the plastic wall that is installed directly to the right of the LED driver board.
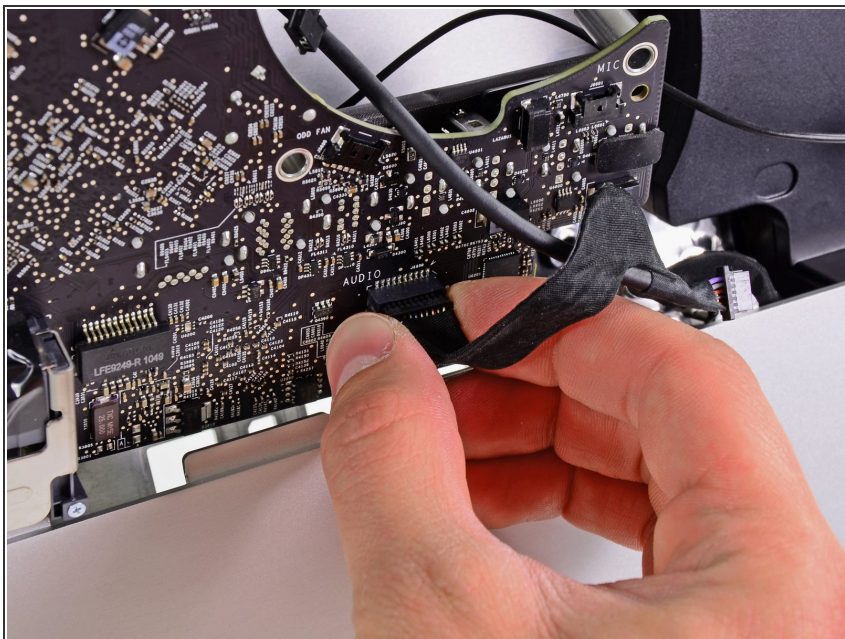
Step 39

- Remove the plastic pressure wall installed next to the hard drive.

Step 40

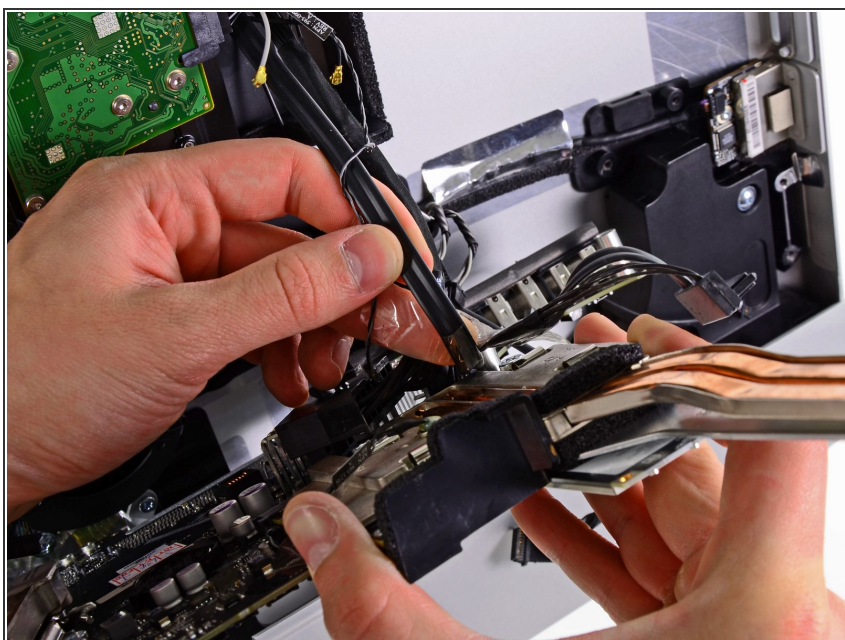
- Slightly pull the logic board away from the back of the outer case, then lift it upward to clear the lower front face of the outer case.

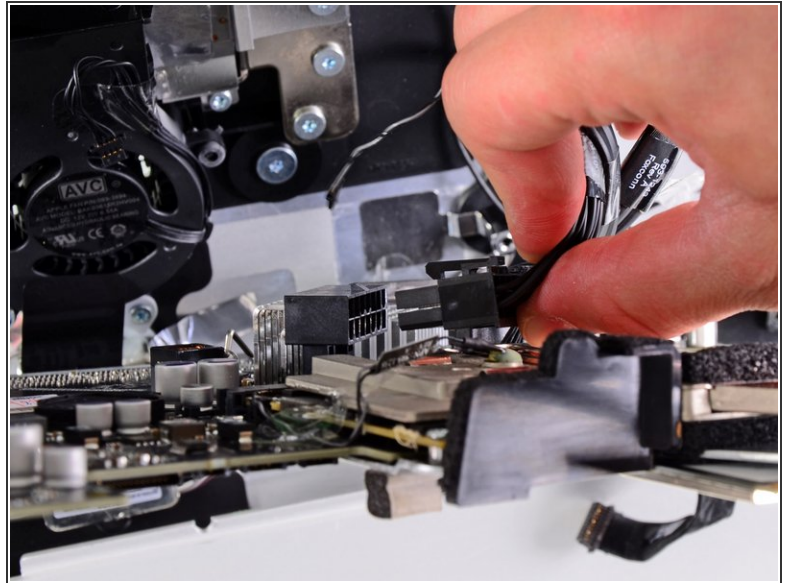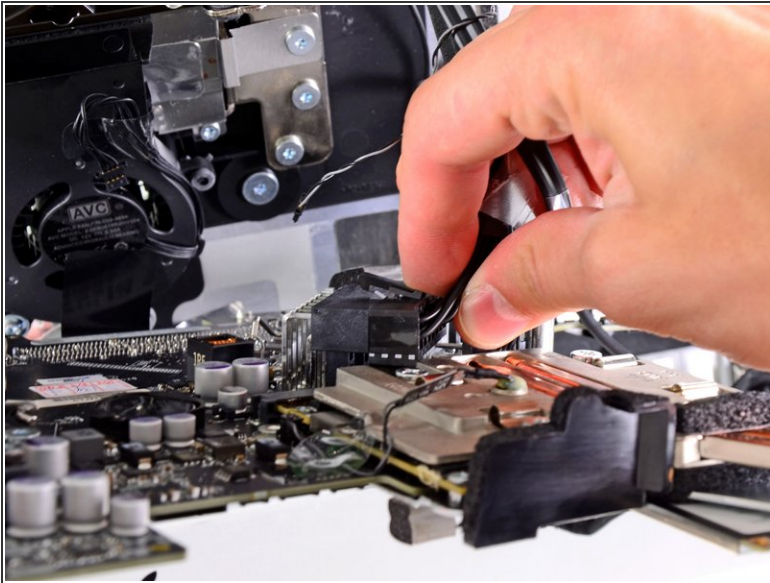This document was generated on 2020-01-10 09:44:16 AM (MST).

Step 41

- Disconnect the audio port cable by pulling its connector away from the front face of the logic board.
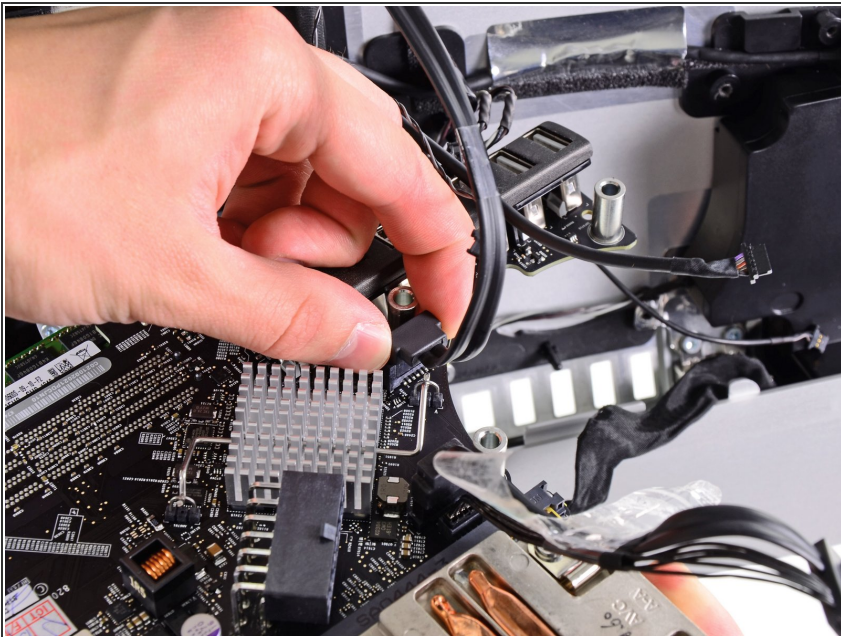
Step 42

- If present, peel off the tape securing the hard drive SATA cable to the logic board.

Step 43

- Depress the locking mechanism and carefully pull the DC-In cable out of its socket on the back of the logic board.
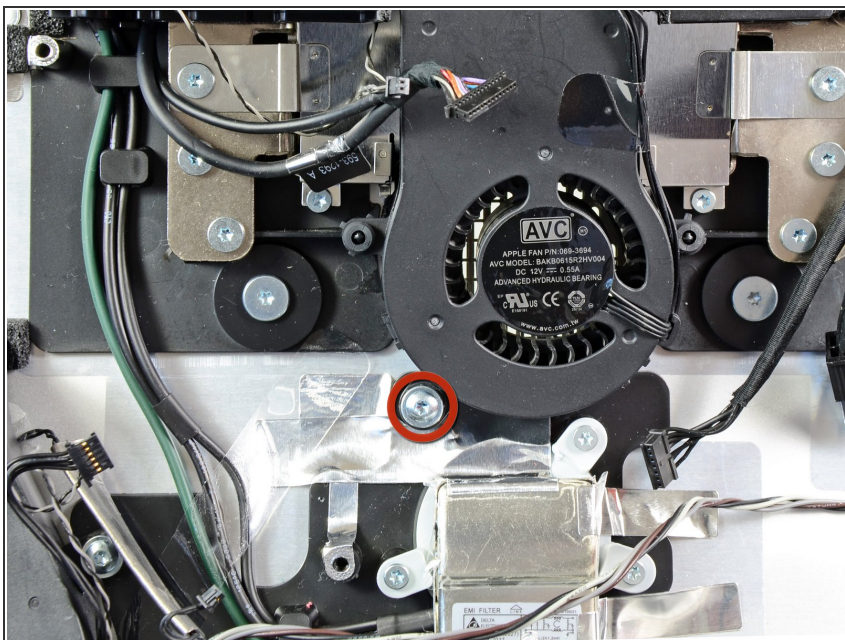
Step 44

- Being careful not to damage the socket on the logic board, gently pull the hard drive SATA data cable straight out of its socket on the logic board.

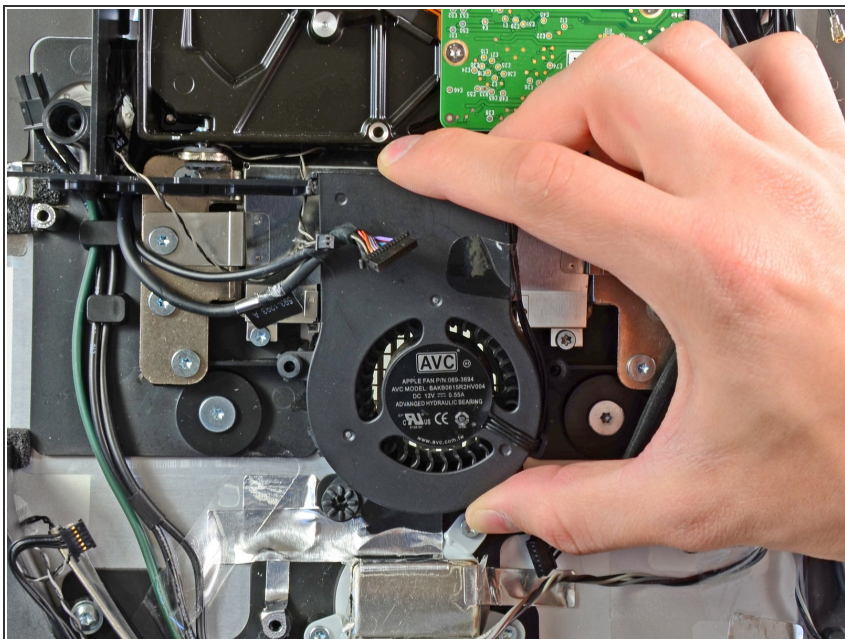- Remove the logic board, minding any cables that may get caught.

📌 When reinstalling the logic board, plug in a mini display port cable and a USB cable into the outer USB port before tightening the logic board screws to ensure proper alignment.
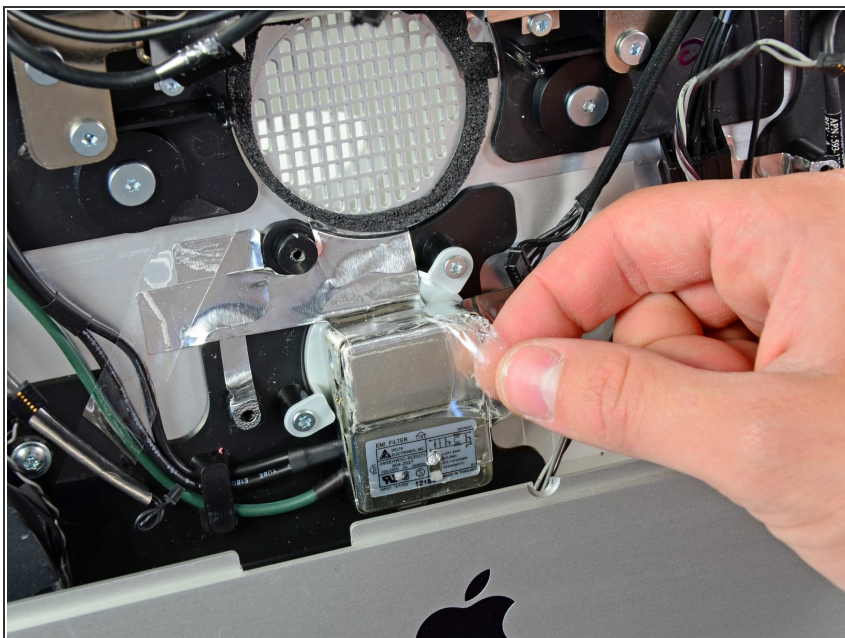
Step 45 — Hard Drive Fan

● Remove the single 13 mm T10 Torx screw securing the hard drive fan to the outer case.
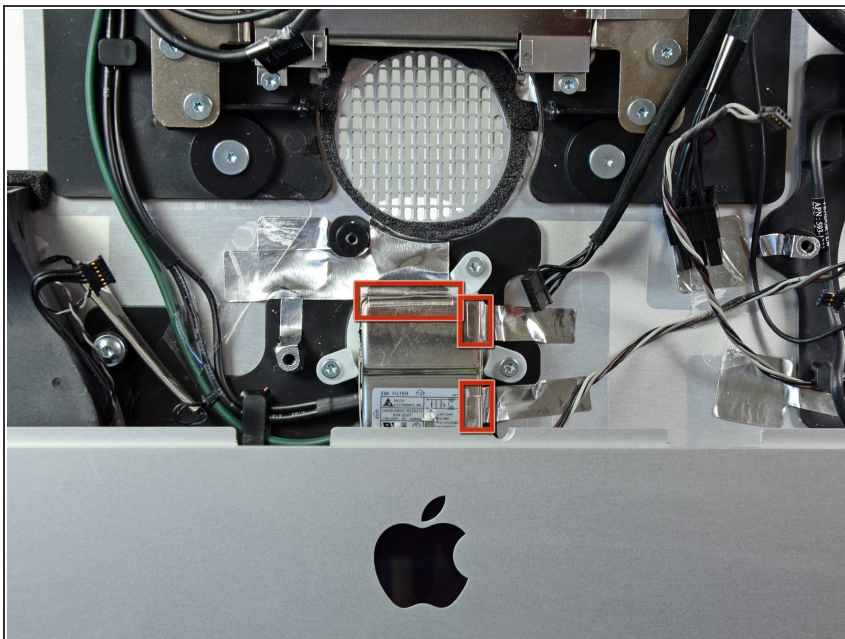
Step 46

- Pull the hard drive fan away from the back of the outer case and remove it from the iMac.
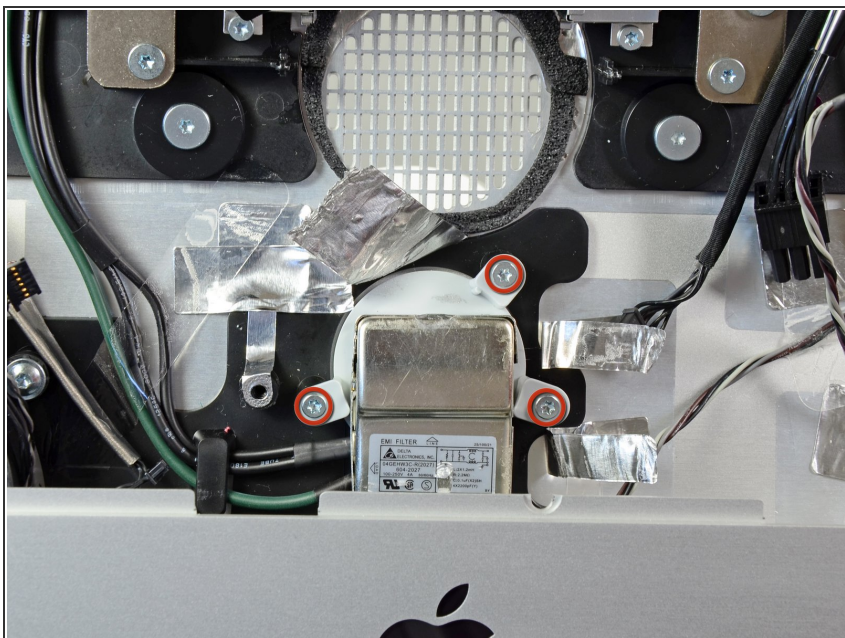
Step 47 — AC Inlet

- Remove the piece of clear tape covering the body of the AC inlet.

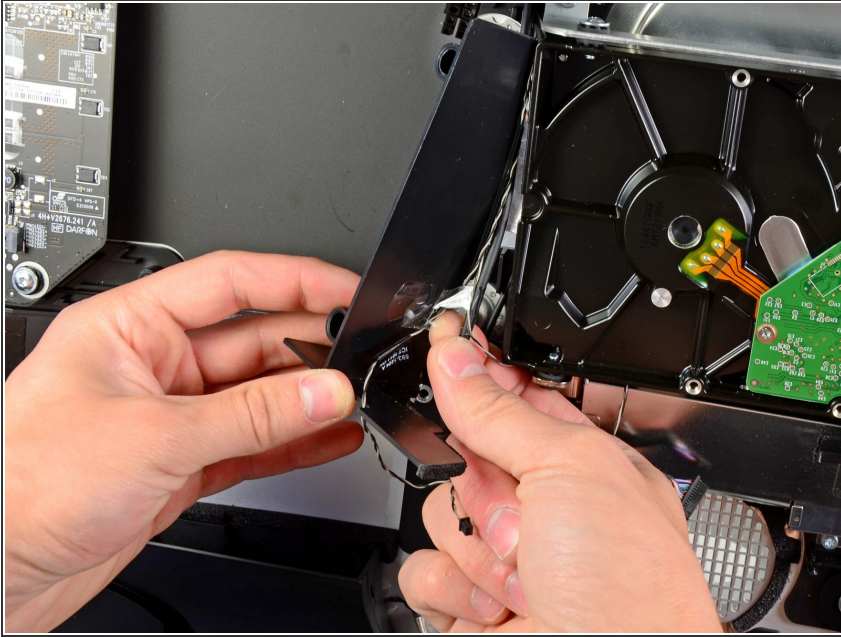This document was generated on 2020-01-10 09:44:16 AM (MST).

Step 48

- Peel the three pieces of aluminum tape off the body of the AC inlet.

- (i) It is not necessary to completely remove the tape from the body of the iMac.
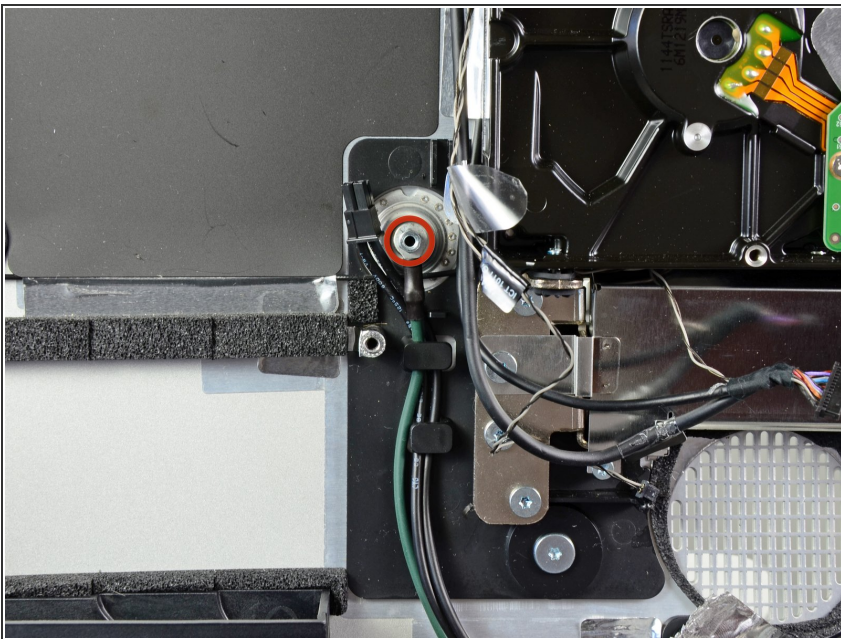
Step 49

- Remove the three 9.3 mm T10 Torx screws securing the AC inlet to the outer case.
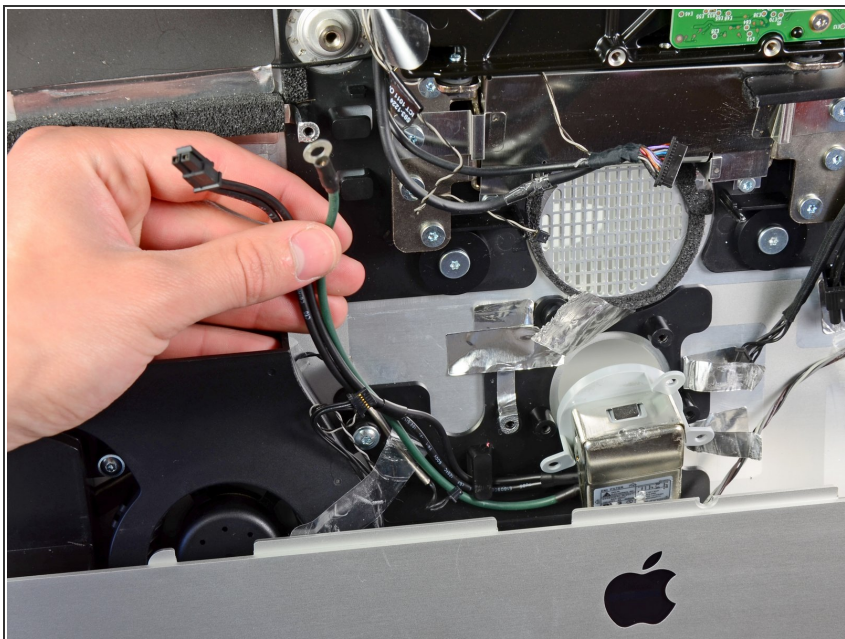
Step 50

- ⓘ Follow this step if your hard drive pressure wall is still installed.

- Pull the plastic wall installed just to the left of the hard drive away from the outer case.

- Peel back the piece of tape securing the thermal sensor cables and remove the plastic wall from the iMac.

Step 51

- Use a 5 mm nut driver to remove the 15.7 mm long standoff securing the AC inlet ground loop to the outer case.

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Step 52

- De-route the AC inlet and ground cables from their retainers in the outer case and remove the AC inlet assembly from the iMac.

To reassemble your device, follow these instructions in reverse order.