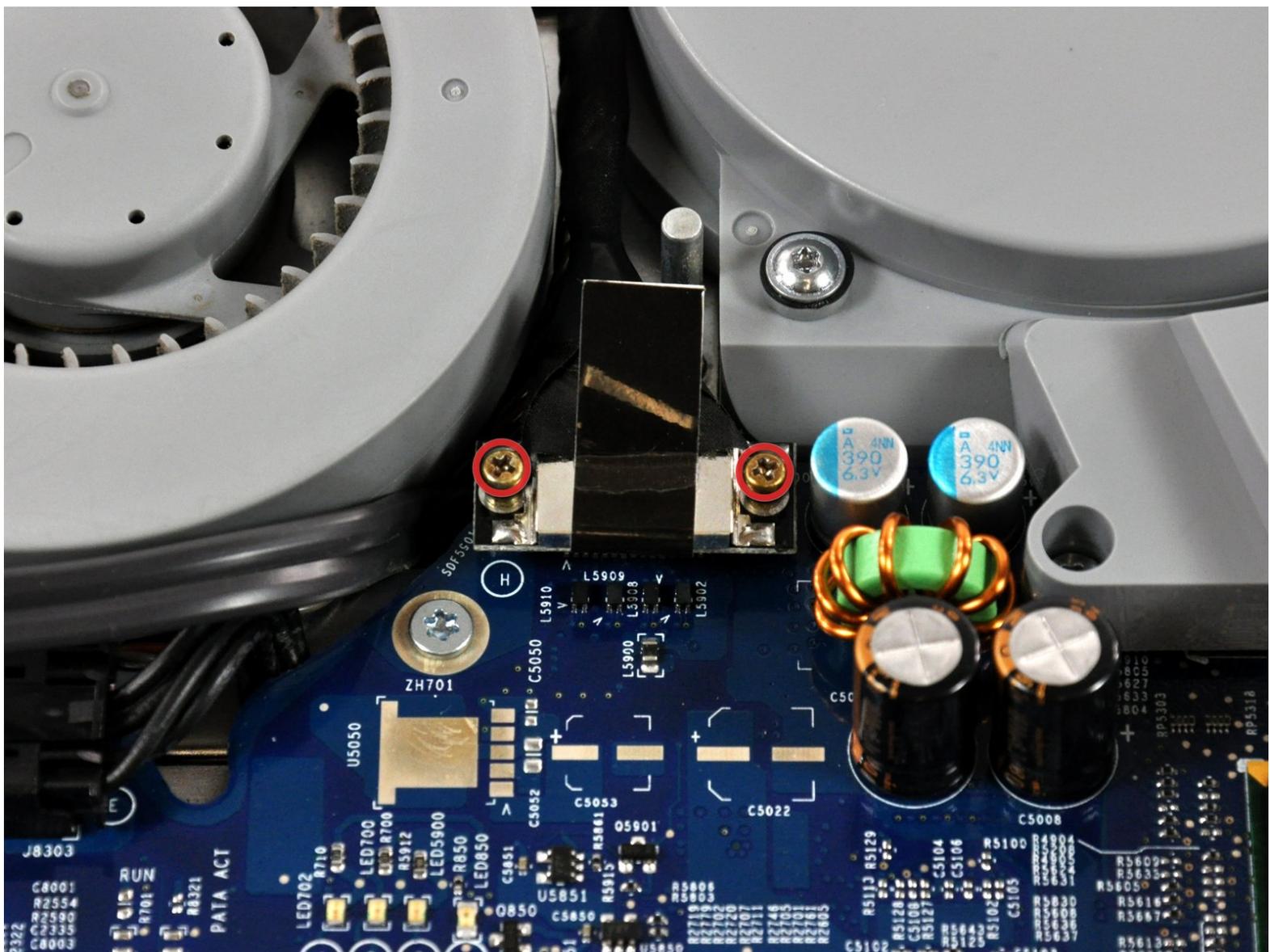




iMac G5 20" Model A1076 Midplane Assembly Replacement

Written By: John



INTRODUCTION

Remove your midplane assembly to gain access to your display and front bezel.

TOOLS:

- [Phillips #1 Screwdriver](#) (1)
- [Spudger](#) (1)
- [TR10 Torx Security Screwdriver](#) (1)

PARTS:

- [iMac G5 20" \(EMC No. 2008\) Lower Fan](#) (1)
- [iMac G5 20" \(EMC No. 2056\) Lower Fan](#) (1)

Step 1 — Rear Panel



- Lay the iMac display-side down on a flat surface.
- Loosen the three Phillips screws securing the rear panel to the iMac.

⚠ These screws are captive in the iMac. The center screw will stop turning after about 3.5 turns and the outer screws will stop turning after about 5.5 turns. Do not try to remove these screws from your iMac.

Step 2



- Lift the rear panel slightly near the bottom of the iMac.
- Pull the rear panel toward yourself and remove it from the iMac.

Step 3 — RAM



- Rotate each of the two RAM retaining arms away from the RAM chip.
- Pull the RAM chip straight away from its socket.
- ⓘ Repeat this process for the other RAM chip.
- ☑ Be sure the RAM arms are rotated fully outward before installing new RAM chips.

Step 4 — Inverter



- Remove the following three screws securing the inverter to the chassis:
 - Two 7.9 mm Phillips.
 - One 26 mm Phillips.

⚠ When reinstalling the inverter, be careful to route the purple and black cables around the screw mount. It is very easy to pinch the cable and damage the insulation.

Step 5



- Slide the inverter toward the edge of the mid-plane, then lift it out of the iMac.

⚠ Be careful to not pry up against the RAM brackets.

- ☞ When reinstalling the inverter, press the blue and white cables down in the edge of the midplane before lowering the inverter down into the midplane. The black cable can be routed near the hard drive thermal sensor cable.

Step 6



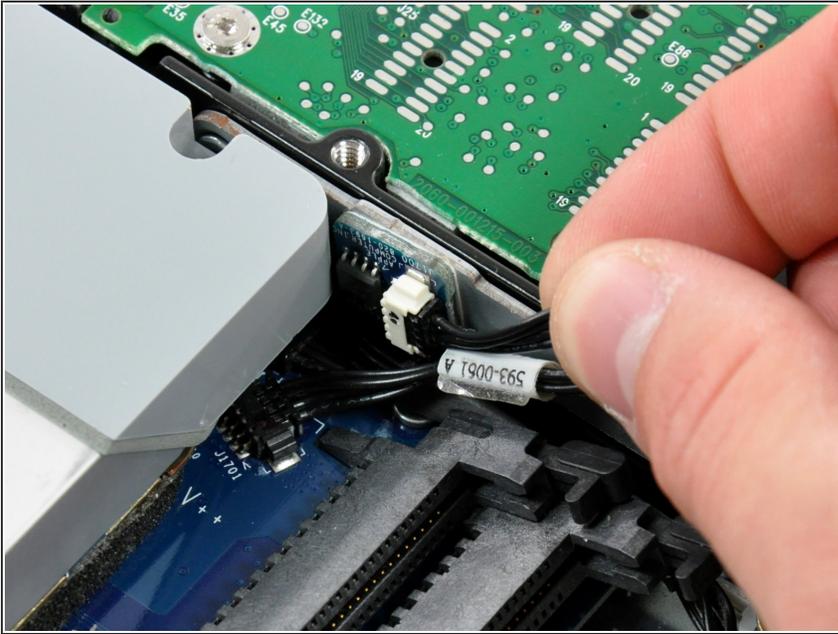
- Disconnect the large inverter cable connector from the inverter by pulling straight away from its socket.

Step 7



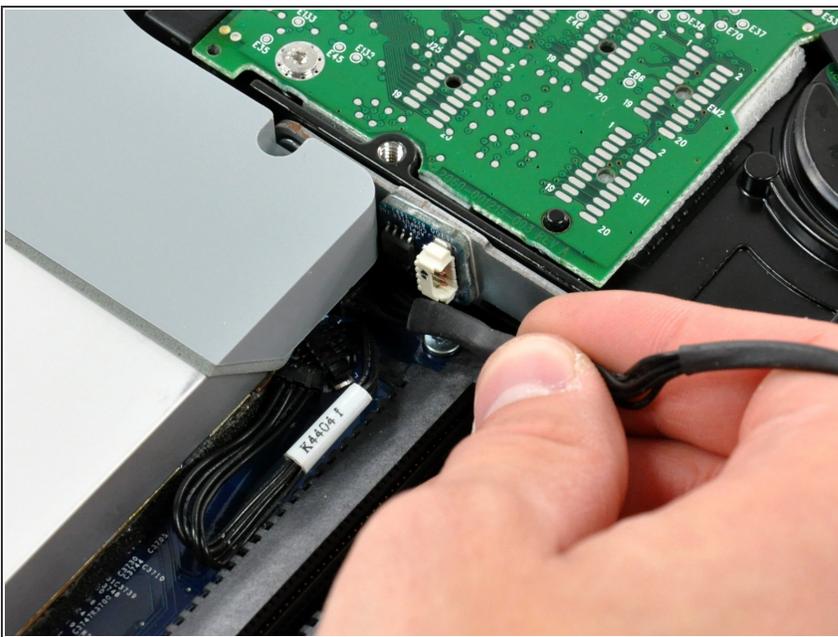
- Disconnect the small inverter cable connector by pulling it straight away from its socket.

Step 8



- Disconnect the hard drive thermal sensor cable from the thermal sensor board on the hard drive bracket by pulling the cable away from the heat sink.

Step 9



- Gently pull the black inverter cable to disconnect it from the logic board.
- ★ If you have trouble plugging this cable back in during reinstallation, remove the [fan duct](#) for more room to work.

Step 10



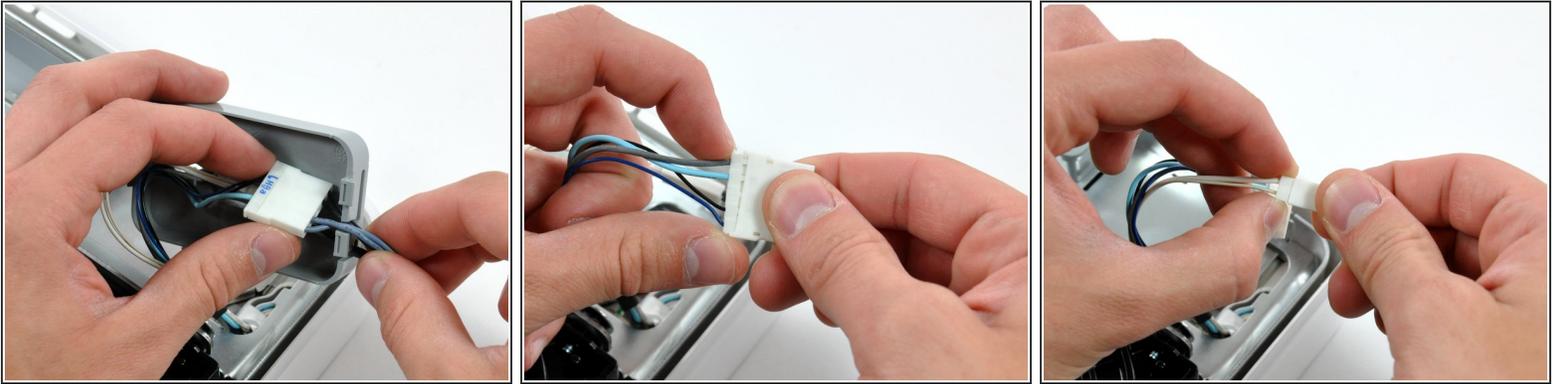
- Flip up the inverter cable cover from its left edge and lift it out of the chassis.

Step 11



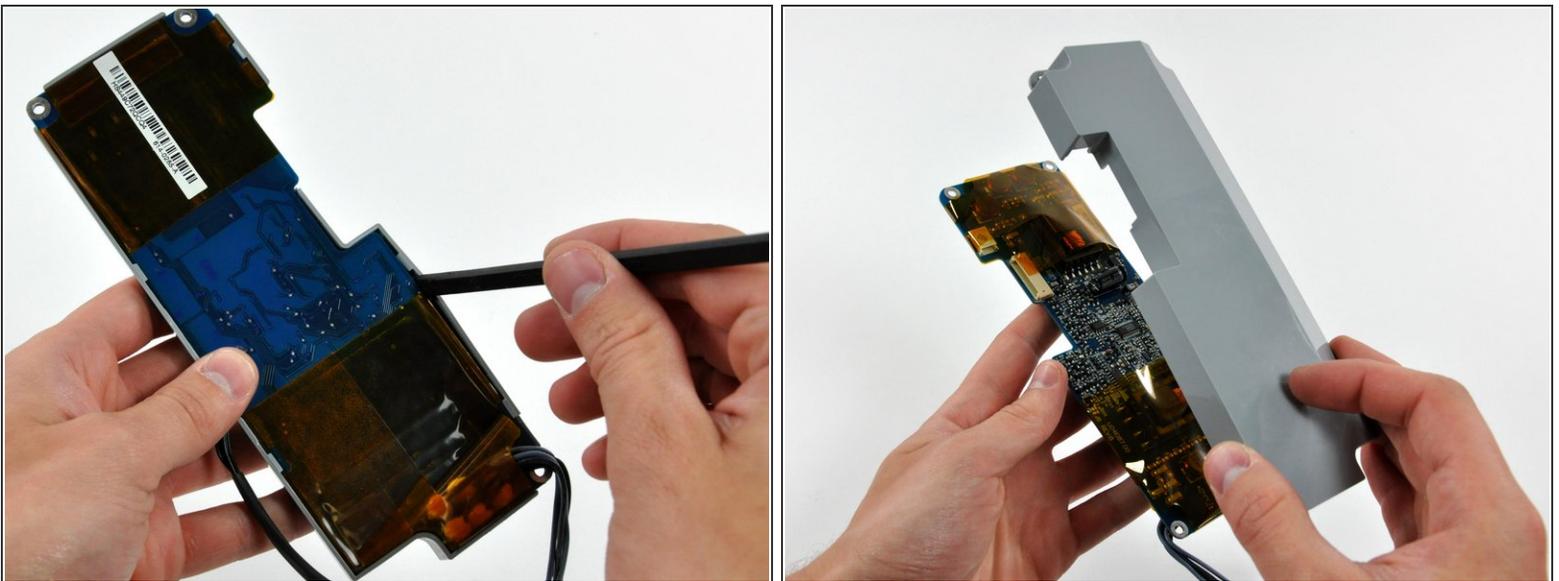
- De-route the inverter cables from the inverter cable cover hook.

Step 12



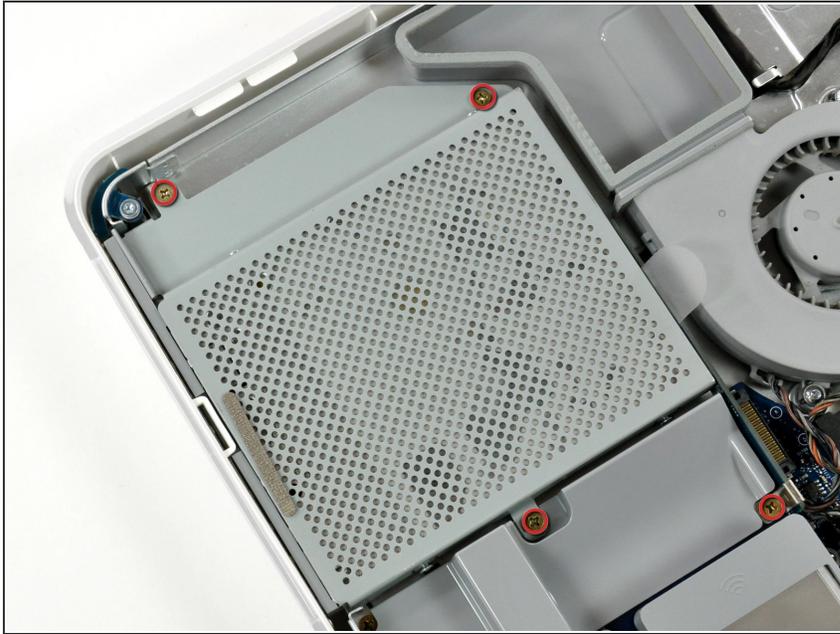
- Remove the inverter cables from the inverter cable cover, and disconnect both connectors.

Step 13



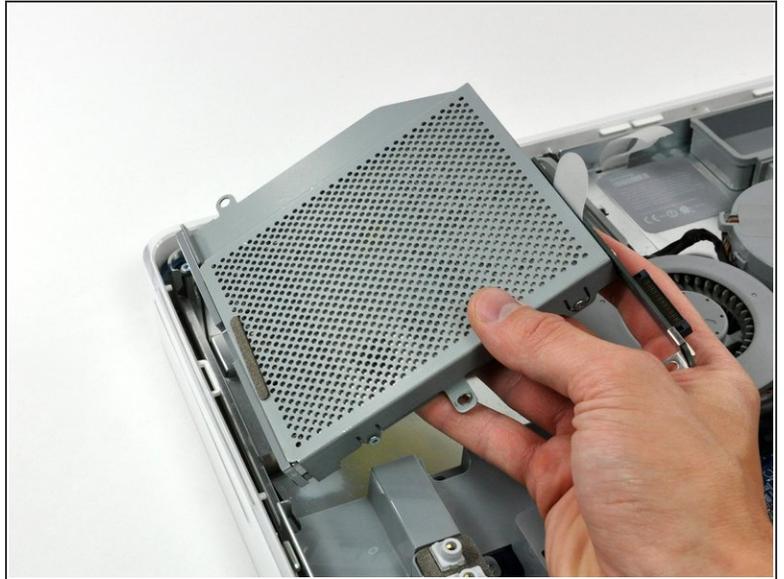
- ☑ If you wish to replace just the inverter board, use a spudger to pry off its plastic cover.

Step 14 — Optical Drive



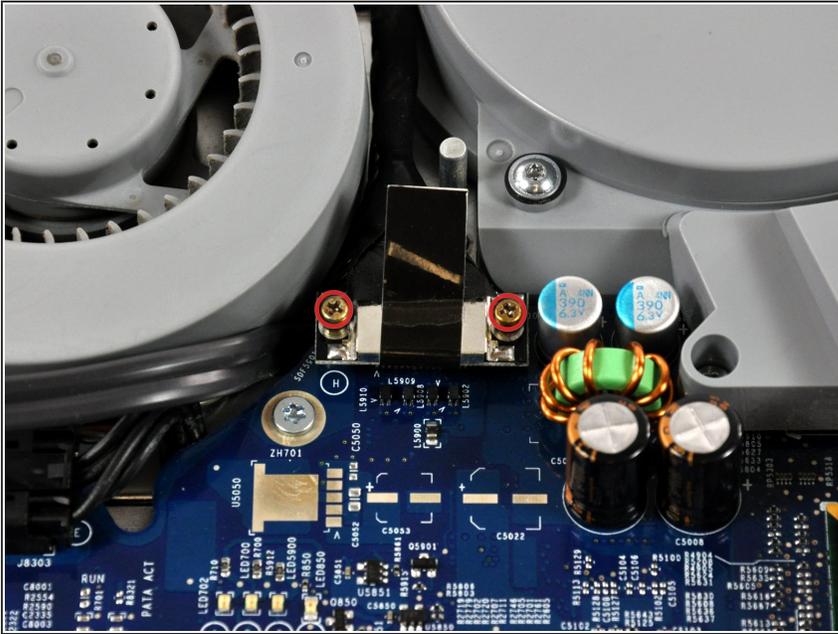
- Remove the four 7 mm Phillips screws securing the optical drive to the midplane.

Step 15



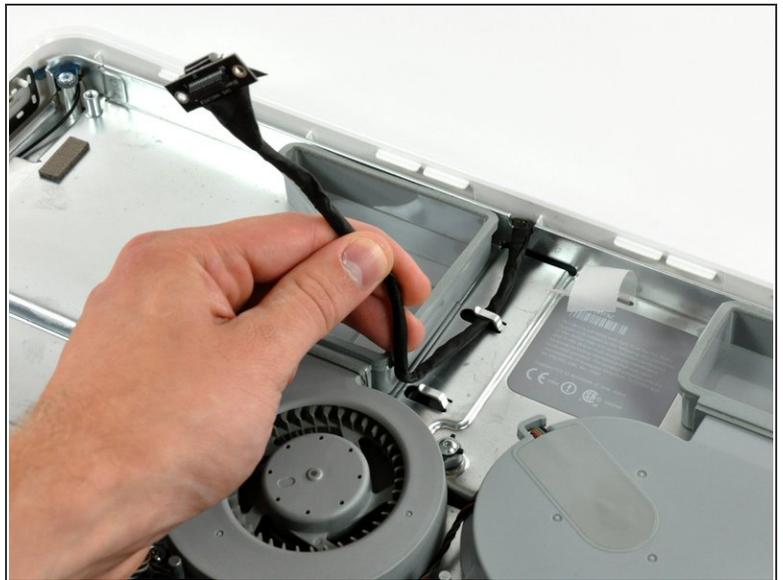
- Pull the optical drive up by its white pull tab to disconnect it from the logic board.
- ⚠ Lift the free end of the optical drive just enough to clear the fan cover. Lifting the free end of the optical drive too far may break the plastic positioning pins off the front bezel.
- Lift the free end of the optical drive slightly, then pull it away from the edge of the rear case to clear the two plastic positioning pins.
- Lift the optical drive out of your iMac.
- 🔧 When reinstalling your optical drive it may be necessary to set the bezel attached to the open end of the drive on the plastic positioning pins molded into the front bezel of the iMac and pull the connector side of the drive toward the edge of the rear case, bending it outward slightly, to properly seat the connector.

Step 16 — Midplane Assembly



- Remove the two 7.3 mm shouldered Phillips screws securing the display cable connector to the logic board.

Step 17



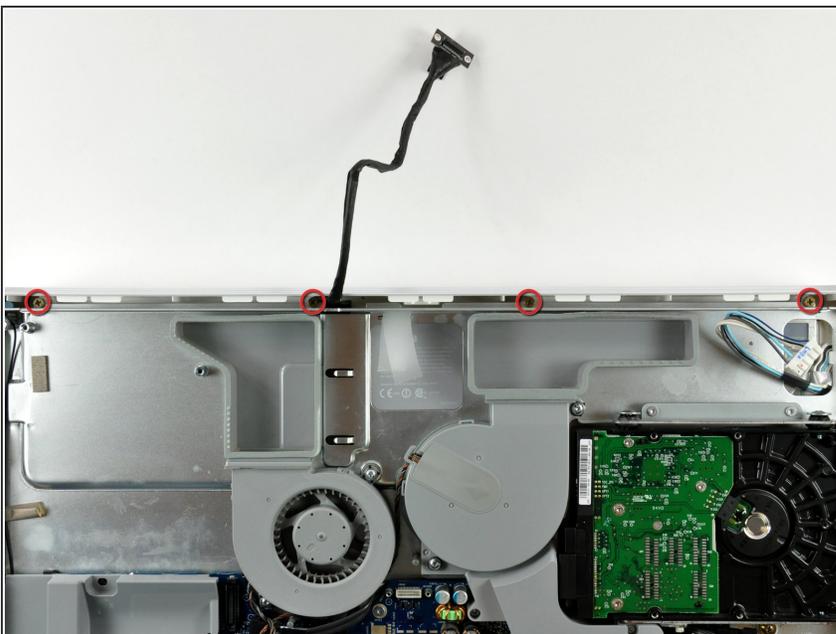
- Pull the display data cable up off the logic board by its black pull tab.
- De-route the display cable from the two aluminum fingers in the mid-plane.

Step 18



- Loosen the center Phillips screw securing the power supply to the front case.
- ⓘ This screw will remain captive in the power supply.

Step 19



- Remove the four coarse-thread 7.8 mm Phillips screws along the top edge of the iMac.

Step 20



- Remove the following two screws:
 - One 7 mm Phillips.
 - One 26 mm Phillips.

Step 21



- Lift the midplane assembly out of the front case.
- ⓘ Be mindful of the inverter cables on the hard drive side of the midplane that may get caught as you lift out the midplane.
- ☑ During reinstallation, insert the screw heads protruding from the speakers along the lower edge of the midplane into the holes in the front bezel and thread the inverter cables through the openings in the midplane before lowering the top edge down into the front bezel.

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