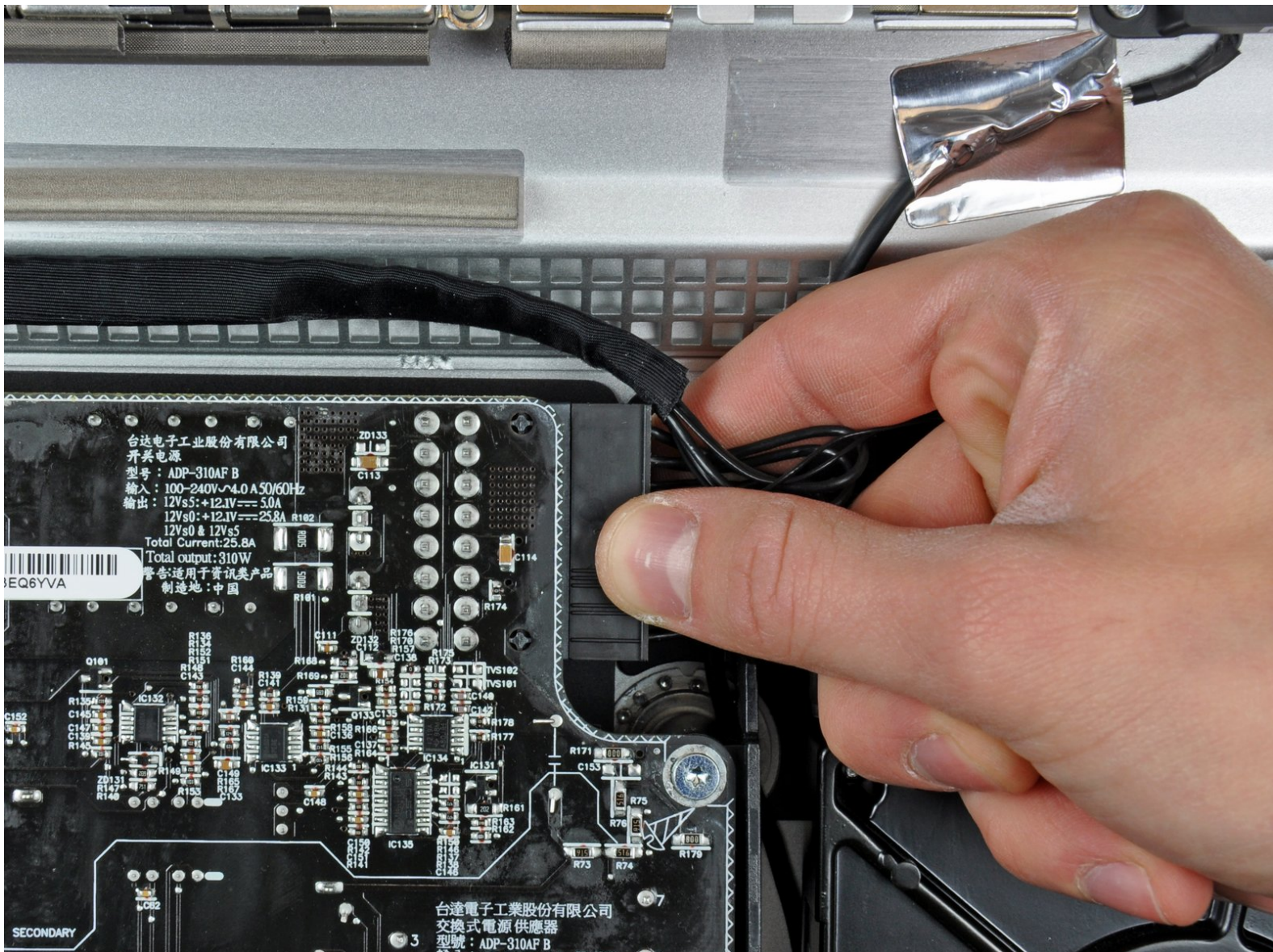




iMac Intel 27" EMC 2309 and 2374 Power Supply Replacement

Use this guide to replace a faulty power supply.

Written By: Andrew Bookholt



INTRODUCTION

Use this guide to replace a faulty power supply.

[video: <http://www.youtube.com/watch?v=IMmZXb8plh0>]



TOOLS:

- [Heavy-Duty Suction Cups \(Pair\)](#) (1)
- [Paper Clip](#) (1)
- [TR10 Torx Security Screwdriver](#) (1)
- [Tweezers](#) (1)



PARTS:

- [iMac Intel 27" \(EMC No. 2309\) Power Supply](#) (1)
- [iMac Intel 27" \(EMC No. 2374\) Power Supply](#) (1)

Step 1 — Glass Panel



- Stick a heavy-duty suction cup near each of the two top corners of the glass panel.
 - ⓘ To attach the [suction cups](#), first position the suction cup with the movable handle parallel to the face of the glass panel (as indicated in the second picture).
 - While lightly holding the suction cup against the glass, raise the movable handle until it is parallel with the other handle (as indicated by the third picture).
 - ⓘ If your suction cups refuse to stick, try cleaning both the glass panel and the suction cup with a damp soft, lint-free cloth. (Dampen with distilled water, and if needed, an equal ratio of distilled water and white vinegar for best results.)
- ⚠ Do not use the suction cups to carry the display glass because if one of them fails to stick, you could drop the screen and break it.**
- ⓘ The original iMac box makes a good place to store the glass panel. Otherwise, a padded horizontal surface, like a towel on a desk, will do nicely.

Step 2



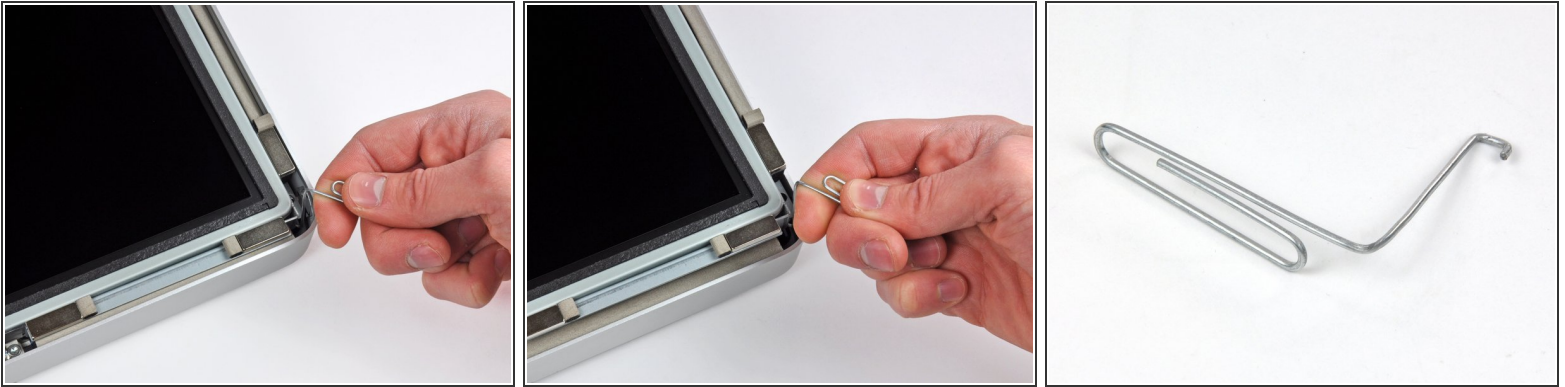
- Gently lift the glass panel perpendicular to the face of the LCD, enough to clear the steel mounting pins attached along the underside of the top edge of the glass panel.
- Pull the glass panel away from the lower edge of the iMac and carefully set it aside.
 - ⚠ Don't use the suction cups to carry the glass panel—if either one loses its grip, the panel could fall and break.
 - ⚠ After setting the glass panel down safely, be sure to release the suction cups, as the suction force over time can crack the glass.
- 🔧 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 3 — Display



- Remove the eight T10 Torx screws securing the LCD to the outer case.

Step 4



- Carefully lay the iMac stand-side down on a flat surface.
 - ⓘ Due to tight tolerances, you will have to use a thin hooked tool to lift the display out of the outer case. As seen in the third picture, we made one out of a bent paperclip.
 - Use a thin hooked tool to lift one side of the top edge of the display by its steel outer frame.
 - ⓘ After lifting the top edge of the display on one side, hold it out of the outer case while you use a hooked tool to lift the other side. A pencil or pen can be placed under the top edge of the display, parallel to the top edge and extending past the edge of the computer, to keep the first side propped up while lifting the second.
- ⚠ Do not lift the top edge of the display out of the outer case too far, as several short ribbon cables still connect the two components.**

Step 5



- Use a pair of tweezers to pull the vertical sync ribbon cable out of its socket on the LED driver board near the top left corner of your iMac.
- ⓘ On some iMacs this may not be a ribbon cable but four separate, very fine and very fragile wires. Be very careful, if the tweezers slip off the plug, you will very likely pull a wire out of the assembly.

Step 6




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

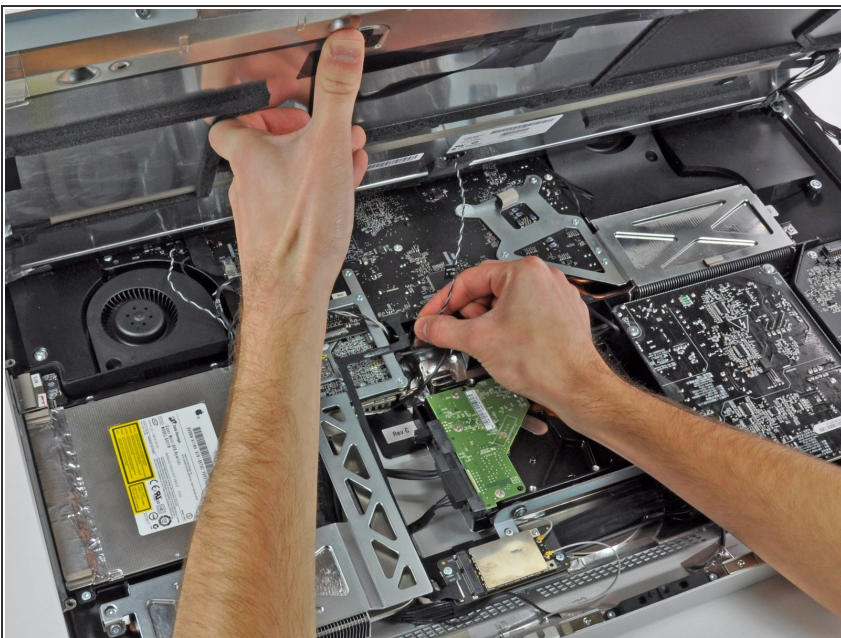
Step 7



- Squeeze the two display data cable connector arms together to unlock it from its socket on the logic board.
- Pull the display data cable connector away from its socket on the logic board.

 **Be very careful when disconnecting this cable as both the cable connector and logic board socket are extremely fragile. When reconnecting the cable later, use as little force as possible.**

Step 8



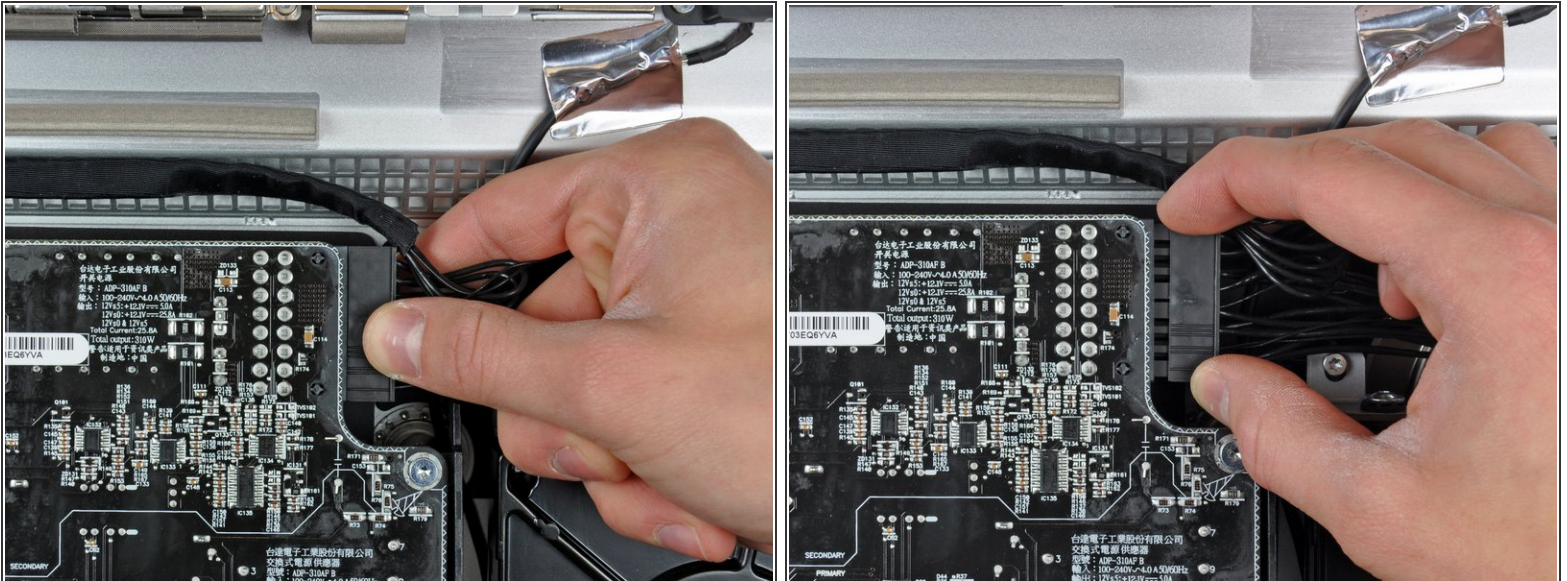
- Lift the display for enough clearance to disconnect the LCD thermal sensor cable connector from its socket on the logic board.
- ⓘ If your fan is spinning full speed after completion, check this connection or the hard drive's thermal sensor cable. The thermal sensor connector socket is very fragile, so be very careful when you connect back the sensor cable.

Step 9



- Carefully pull the display toward the top edge of your iMac and lift it out of the outer case.

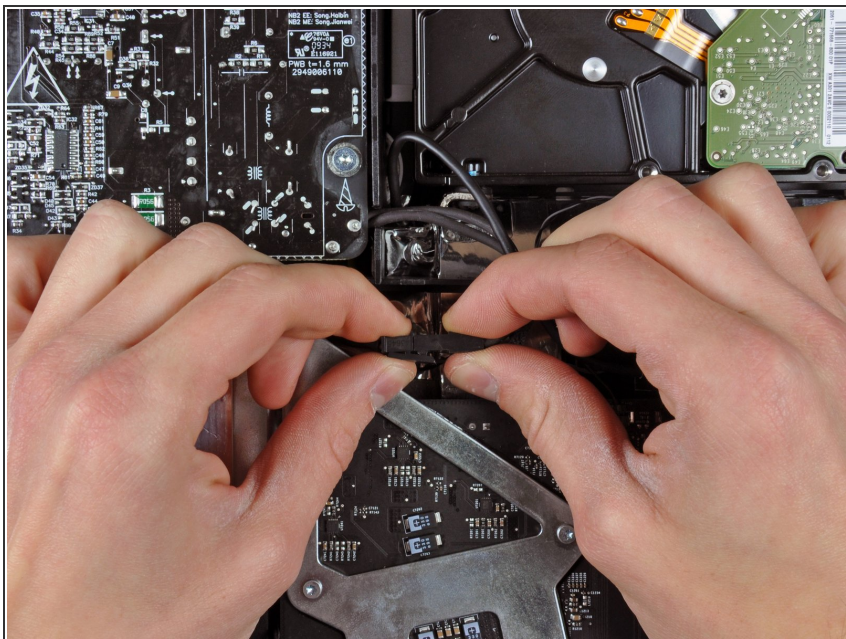
Step 10 — Power Supply



⚠ The next few steps bring your hands close to the exposed face of the power supply. To avoid a high voltage shock from the many large capacitors attached to the board, **do not** touch the face of the power supply.

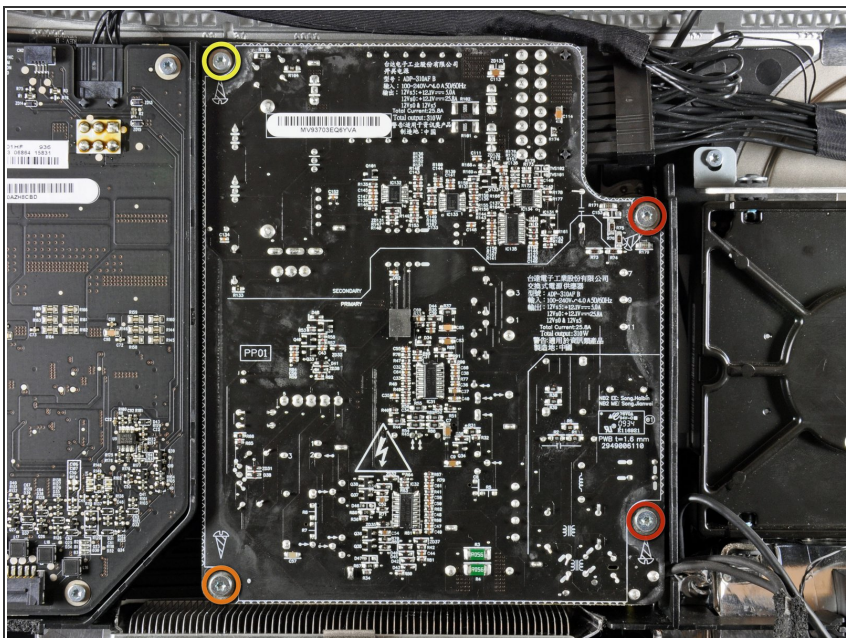
- Disconnect the DC power cable by using your index finger to depress the locking mechanism on the back of the connector while you pull the connector away from its socket on the power supply.
- Once the locking mechanism has cleared the socket, pull the DC power connector away from the power supply.

Step 11



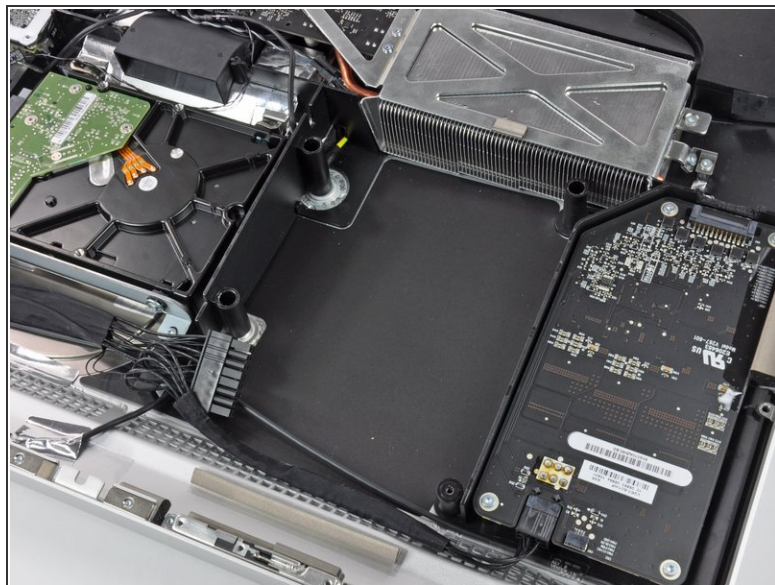
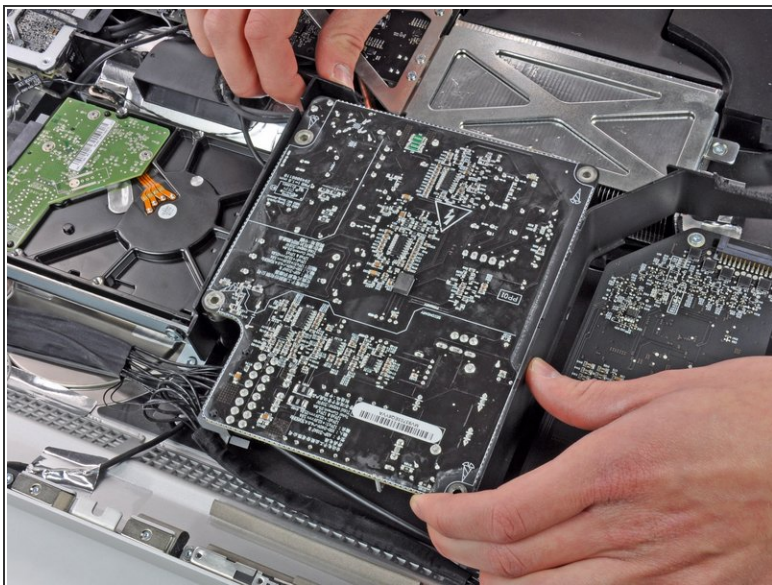
- Disconnect the AC power inlet cable by depressing the locking mechanism while pulling the connector away from its socket.

Step 12



- Remove the following screws securing the power supply to the outer case:
 - Two fine-thread shouldered T10 Torx
 - One coarse-thread shouldered T10 Torx
 - One short coarse-thread T10 Torx

Step 13



- Lift the power supply out of the outer case while gently de-routing it from any wires that may get caught.
- ⓘ Two plastic brackets may lift out with the power supply. Their correct orientation is shown in the second picture.

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