

eMac Hard Drive Replacement

This guide shows how to replace the hard drive for an eMac.

Written By: Chris Green



INTRODUCTION

The hard drive in the eMac is pretty tough to get to, and requires disassembling most of the computer.



TOOLS:

- Phillips #2 Screwdriver (1)
- 2.5 mm Hex Key (1)

Step 1 — Door Removal







- It should be noted that these guides are written based on a late-model eMac (2005, 1.42GHz, DDR). They will differ slightly from the older model eMacs that use PC-133 RAM.
- Lay the eMac screen-down on a flat surface. I've found it convenient to use a carpeted floor because the computer is so heavy.
- Remove the single phillips #2 screw on the RAM door, and remove the door
 - The screw is captive in the door, so don't worry about losing it.

Step 2 — Bottom Screw Removal



- Before starting this process it's important to note that the eMac can have some seriously dangerous voltages inside of it, thanks to the CRT display. Before working on an eMac, you should unplug it, press the power button to clear any stored charge on the motherboard, and then let it sit for 24-hours (or more) to allow the CRT to discharge.
 - You can read more about CRT safety procedures here. If you aren't experienced with working on devices featuring a CRT, it's recommended that you don't proceed any further.
- On the bottom side of the eMac, remove the following screws:
 - A single 2.5mm hex screw
 - Two #2 phillips screws

Step 3 — Top and Side Screws



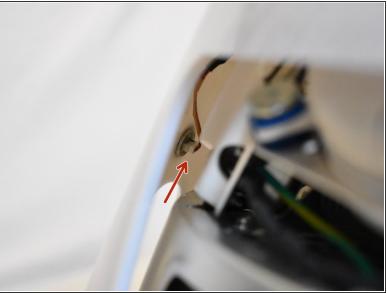




Remove two 2.5mm hex screws from each of the other sides of the computer.

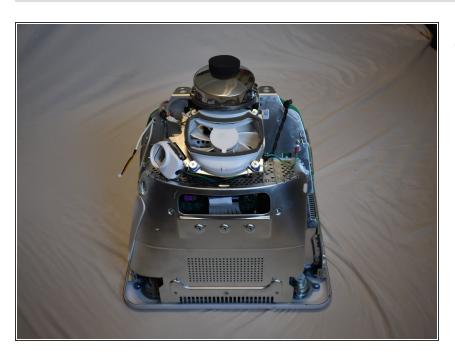
Step 4 — Power Button Cable





- Now, the shell can almost be separated from the computer.
- ↑ There is a cable that connects to the power button. This must be disconnected before removing the housing completely.
- Lift the housing enough to allow you to fit your hand through the access door, and disconnect the cable at the power button.

Step 5 — Shell Removal



 Now the entire shell can be removed from the computer.

Step 6 — Panel Removal



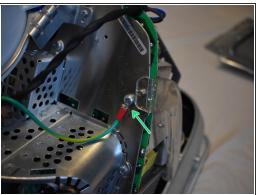


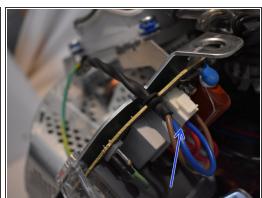


- The motherboard access panel is held on by 4 phillips #2 screws.
- Remove the screws, then use your fingers to pull on the top tabs to separate the panel from the computer frame.

Step 7 — Cables



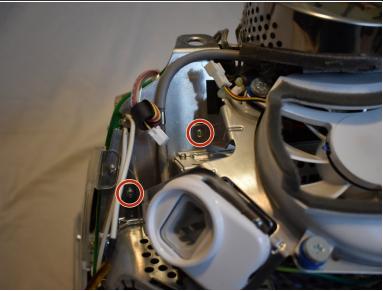




- To remove the fan assembly, several cables must be disconnected first:
 - 3-pin fan cable
 - Ground wire, requires phillips #2 screwdriver
 - 2-pin AC cable to power supply

Step 8 — Screws





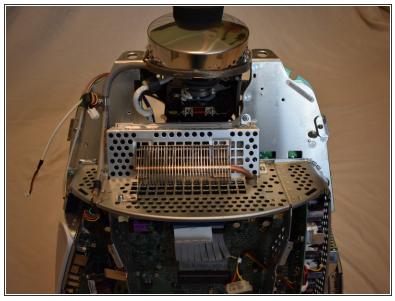
- Now remove the following screws securing the fan assembly:
 - 3x coarse thread phillips #2
 - 1x machine thread phillips #2

Step 9



 There may be a zip tie holding another cable to the fan assembly, cut it to remove the fan assembly.

Step 10 — Assembly Removal

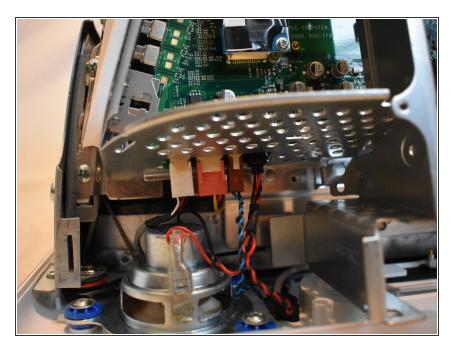




You should now be able to remove the fan assembly.

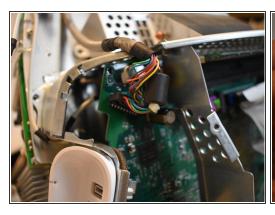
⚠ Doing this will expose more of the CRT neck, be careful not to touch this area because it can contain high voltages (and is fragile)

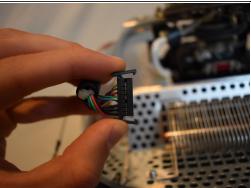
Step 11 — Bottom Connectors

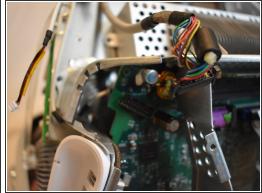


 There are four connectors at the bottom of the motherboard that must be removed.

Step 12 — Display Connector

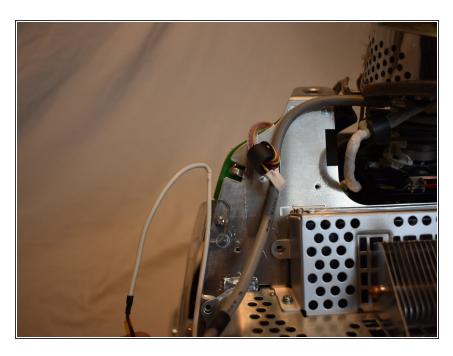






 There is a large display connector that must be removed. This can be done by squeezing the tabs and pulling.

Step 13 — Power Button Cable

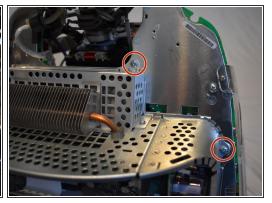


 The power button cable may be tucked in the casing, you will need to un-tuck it.

Step 14 — Screws







- There are several phillips #2 screws that hold the eMac motherboard assembly to the rest of the computer. They will all need to be removed.
 - 2 large ones near the drive bay door.
 - 7 smaller ones scattered around

Step 15 — Screws (Continued)





More of the screw locations from the previous step

Step 16 — Motherboard Assembly



 The motherboard assembly should now come free.

Step 17 — Power Cable





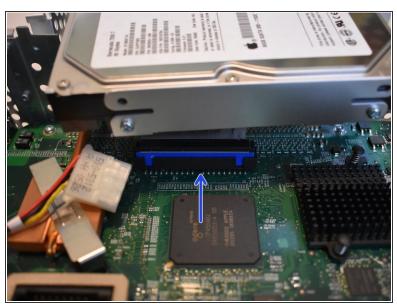
Disconnect the 4-pin hard drive power connector.

Step 18 — Caddy Screws



- The hard drive is fastened to a caddy. In order to remove it, the caddy must be removed first.
- It is secured to the motherboard assembly with two phillips #2 screws. Remove them, but don't pull the drive out yet.

Step 19 — IDE Cable





- The drive is still connected with an IDE cable, which is folded under the caddy.
- Disconnect the IDE cable from the motherboard, and lift the drive caddy out.

Step 20 — Drive Screws







- The hard drive is held in the caddy with four phillips screws. Remove them.
- Also disconnect the IDE cable from the drive. It can now be removed from the caddy.

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