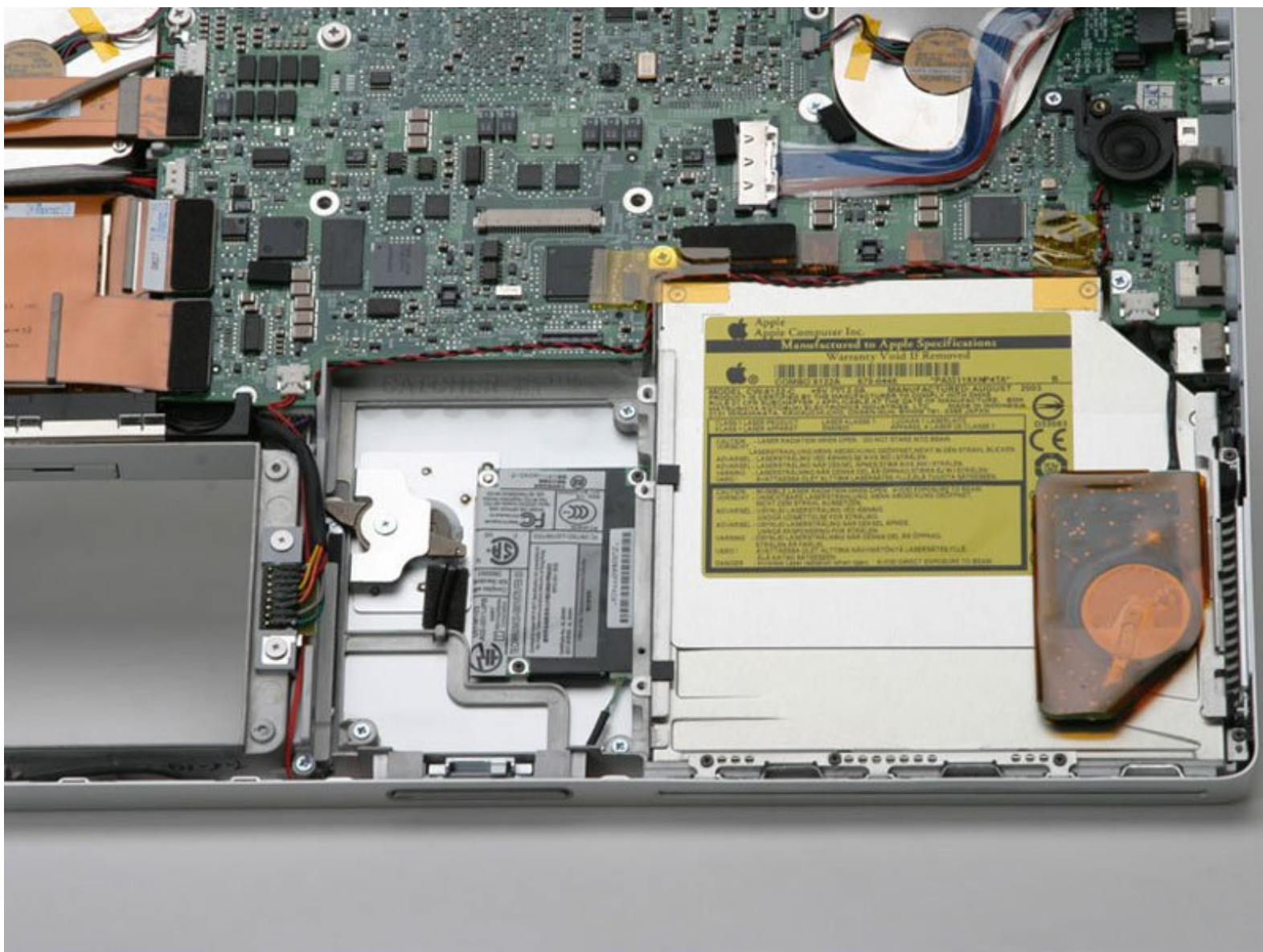




PowerBook G4 Aluminum 15" 1-1.5 GHz

Modem Replacement

Written By: iRobot



INTRODUCTION

56k internal modem, standard on all models.



TOOLS:

- [Coin](#) (1)
- [Phillips #00 Screwdriver](#) (1)
- [Push Pin](#) (1)
- [Spudger](#) (1)
- [T6 Torx Screwdriver](#) (1)



PARTS:

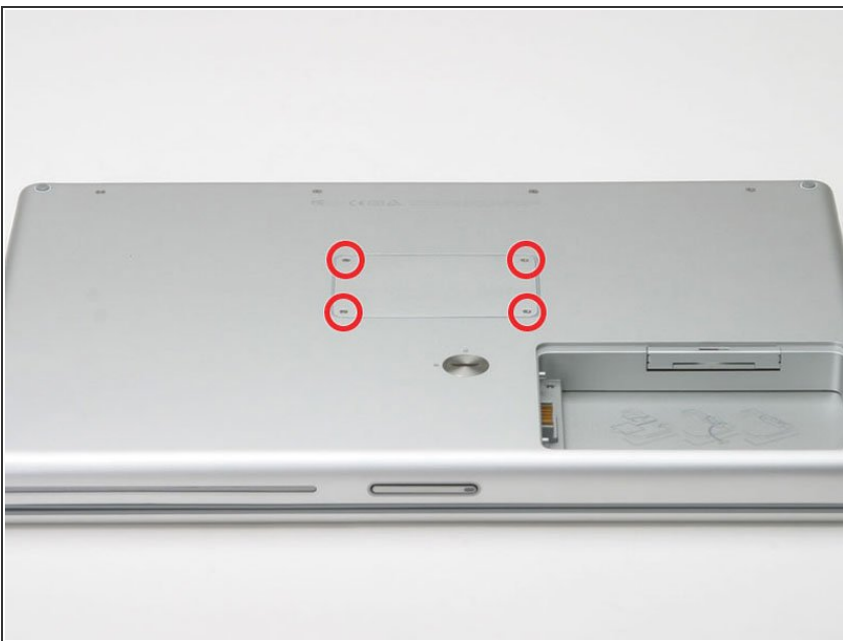
- [G4 Aluminum 15" 1/1.25 GHz Modem](#) (1)
- [G4 Aluminum 15" 1.33/1.5/1.67 GHz Modem](#) (1)
- [G4 Aluminum 15" 1.33 1.5 GHz Modem Cable](#) (1)

Step 1 — Battery



- Use a coin to turn the battery locking screw 90 degrees clockwise.
- Lift the battery out of the computer.

Step 2 — Upper Case



- Remove the four Phillips screws from the memory door.
- Slide the memory door away from the memory compartment.

Step 3



- Remove the following 8 screws:
 - Two 3 mm Phillips in the battery compartment, on either side of the battery contacts.
 - Two 9 mm Phillips on either side of the memory compartment.
 - Four 16 mm Phillips along the hinge.

Step 4



- Rotate the computer 90 degrees clockwise, so that the power receptacle faces you.
- Remove the three 3 mm Phillips screws.
- ★ When replacing these screws, you must place each screw in the correct order. Begin by installing the screw closest to the display hinge, and go out from there.

Step 5



- Turn the computer 90 degrees clockwise so that the hinge faces you.
- Remove the bottom 5 mm Phillips screw on either side of the hinge (two total).

Step 6



- Rotate the computer 90 degrees clockwise, so that the ports face you.
- Remove the three 3 mm Phillips screws.
- ★ When replacing these screws, you must place each screw in the correct order. Begin by installing the screw closest to the display hinge, and go out from there.

Step 7



- Turn the computer over and open the display.
- Remove the 4.2 mm 1/16" H 1.5 hex screws in either corner, next to the display (a T6 Torx driver will also do the job nicely).

Step 8



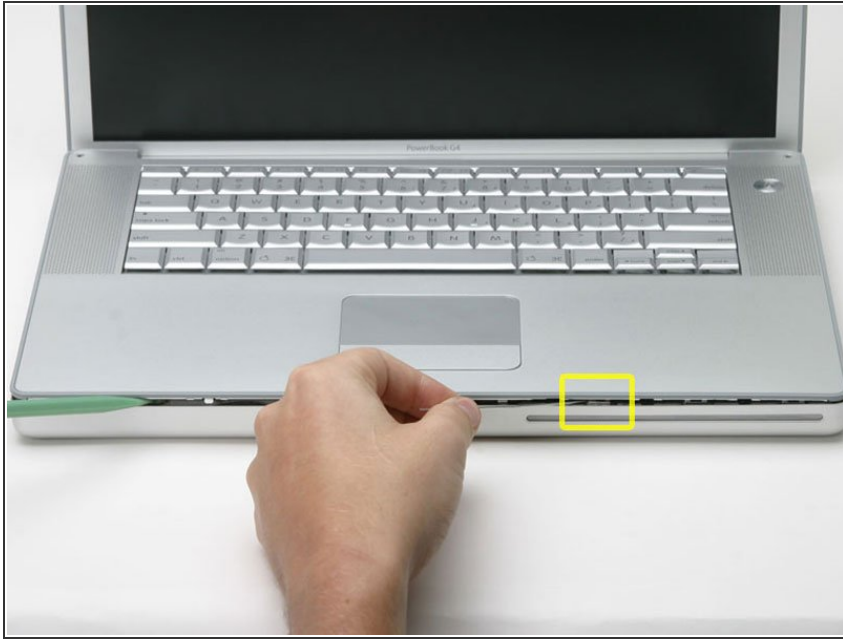
- ⓘ This step covers the hardest part to get inside this computer. Take a deep breath and think happy thoughts.
- Grasp the back corners of the upper case and pull up, disengaging hidden tabs on the sides. Do not pull the upper case off yet; you still need to free tabs in the front of the case.
- ⓘ The seam is beneath the plastic molding on the upper case.

Step 9



- ① There is one latch that stops you from pulling the upper case right off, located on the left side of the optical drive slit. To free the upper case, you will be pulling a thin metal latch toward you, freeing it from the clasp holding it in place.
- Pry up the left side of the upper case slightly with your hand and wedge a spudger into the seam between the upper case and lower case.
- Leave the tool in place applying pressure to the upper case for the next step.

Step 10



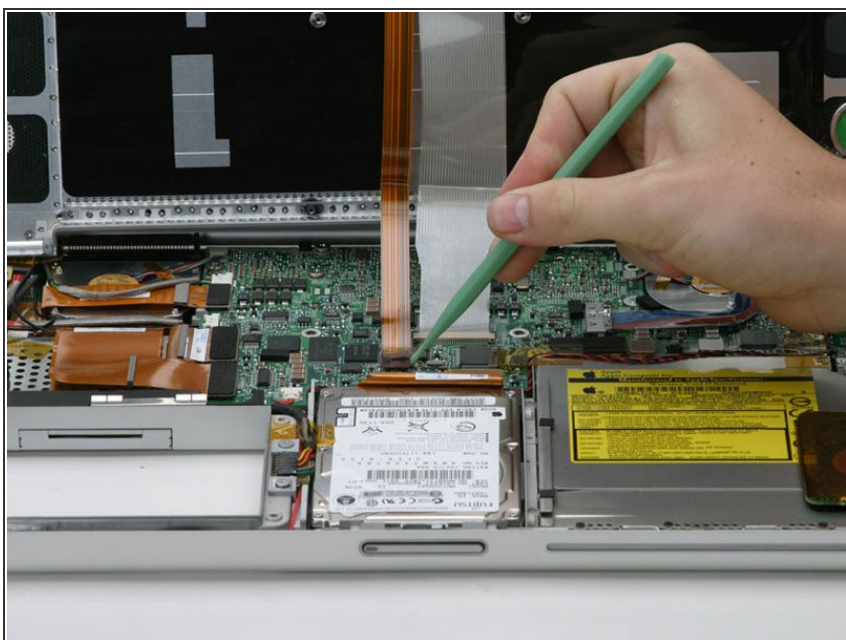
- Place enough pressure on the upper case to allow you to slide a tool just within the seam between upper case and lower case as shown in the picture. A dentist's hook, push pin, or similar tool will work.
- ⓘ Do not yank the upper case off as soon as you free the clasp. The case is attached to the logic board via two ribbon cables.
- Delicately slip the tip of your tool behind the silver metal latch and pull it forward while pulling up on the case. This may take some effort.
- Alternatively, you can free the clasp with a small flathead screwdriver through the CD slot. The clasp is 1-3/16 in (3cm) from the left side of the slot. Use the screwdriver to lift out (or press back) the felt lining; then use the screwdriver to pull the clasp (shiny metal) forward to free it from the catch behind it (dull metal).

Step 11



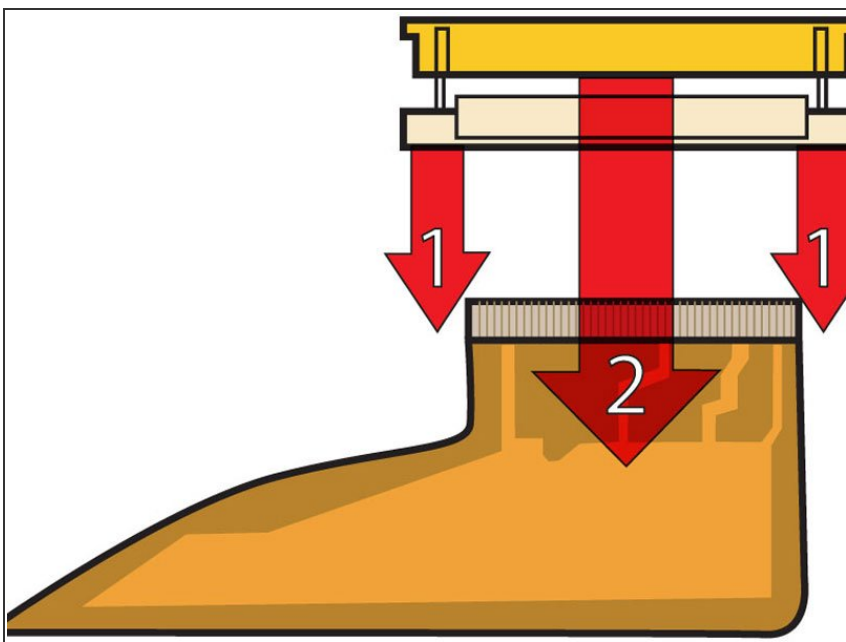
- Lift the back of the case up and work your fingers along the sides, freeing the case as you go. Once you have freed the sides, you may need to rock the case up and down to free the front of the upper case.
- Rotate the upper case up and toward the screen, so that the upper case rests against it.

Step 12



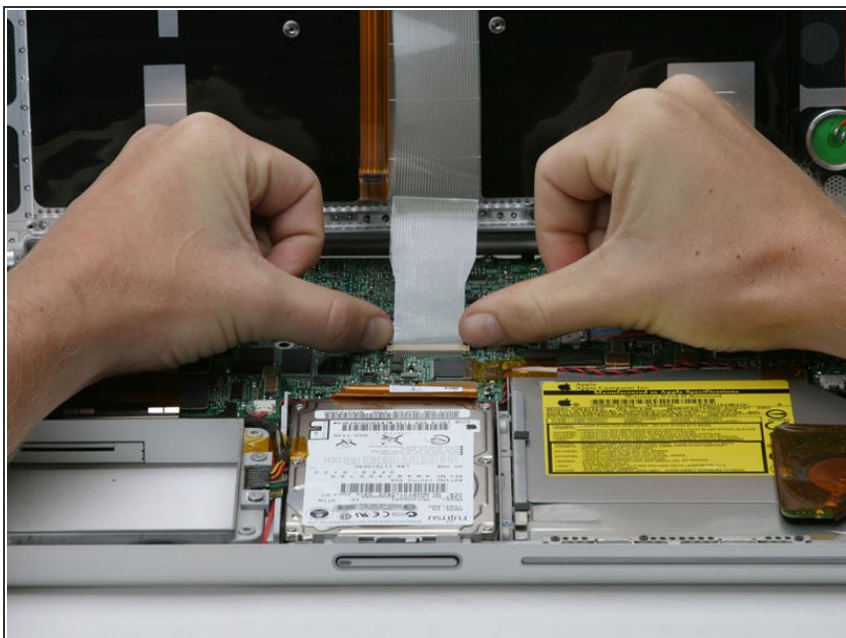
- Remove the orange tape securing the trackpad ribbon to the logic board.
- Disconnect the trackpad ribbon from the logic board.

Step 13



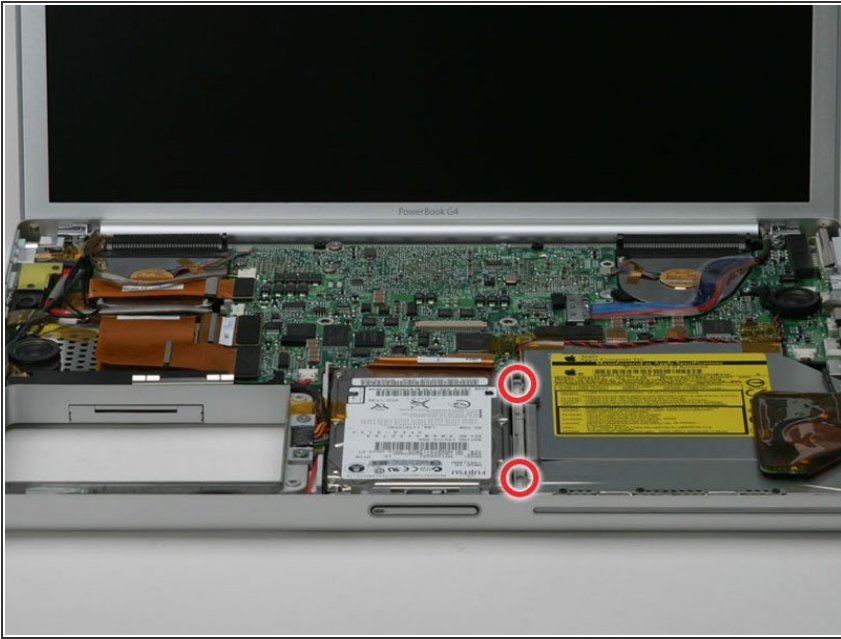
- i** This is a diagram of the keyboard ribbon clamp connector you will disconnect in the next step.
- 1) With your fingernails, grasp the locking bar on either side and pull up a small amount (about 1/16" or 2 mm).
- 2) After disengaging the locking bar, slide the cable out of the connector.

Step 14



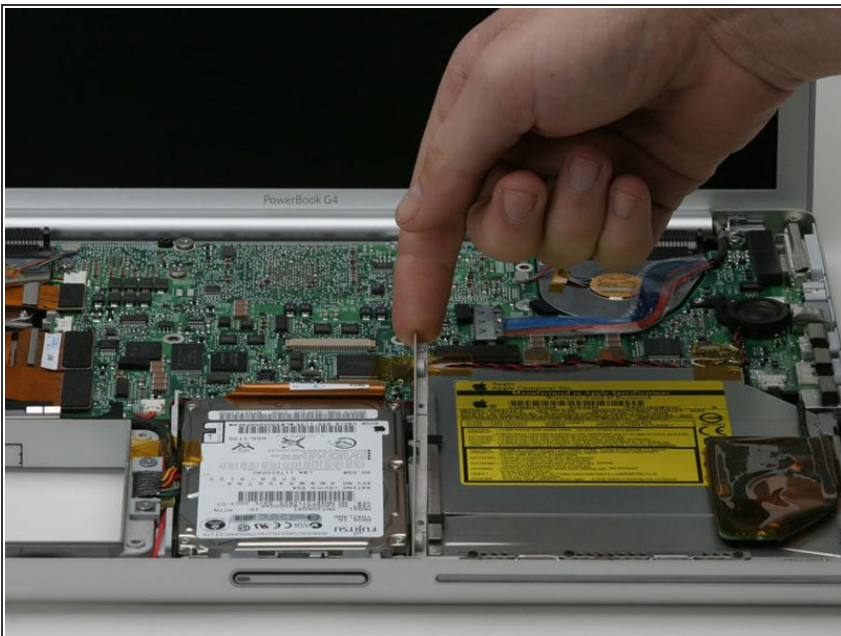
- Loosen the keyboard ribbon clamp by pushing the thin black piece toward the screen, using the tips of your fingers.
- !** The black piece is very fragile and easily broken. Use care when separating it from the main socket.
- Slide the grey keyboard ribbon out of the loosened connector.
- Remove the upper case from the computer.

Step 15 — Hard Drive



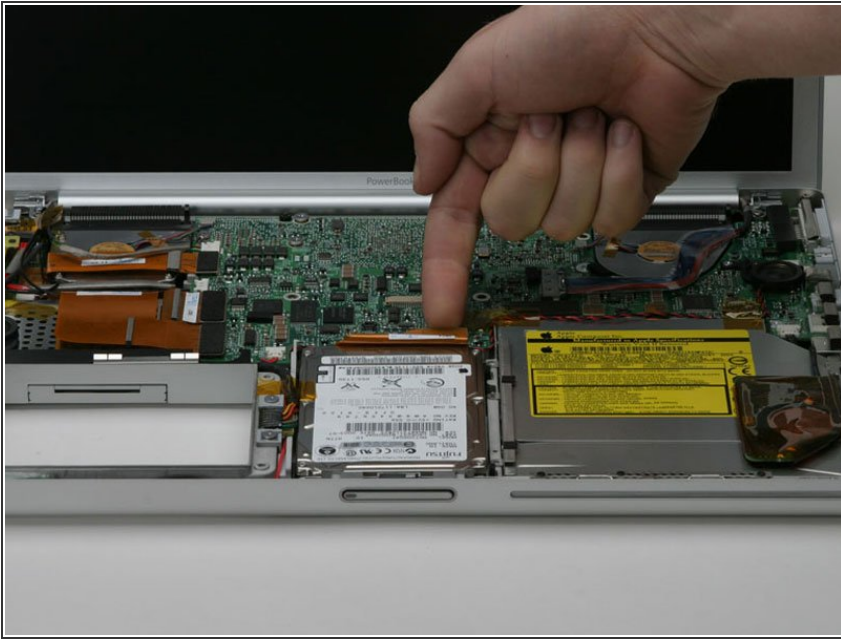
- Remove the two 6 mm long silver Phillips screws from the metal bracket to the right of the hard drive, removing tape as necessary.

Step 16



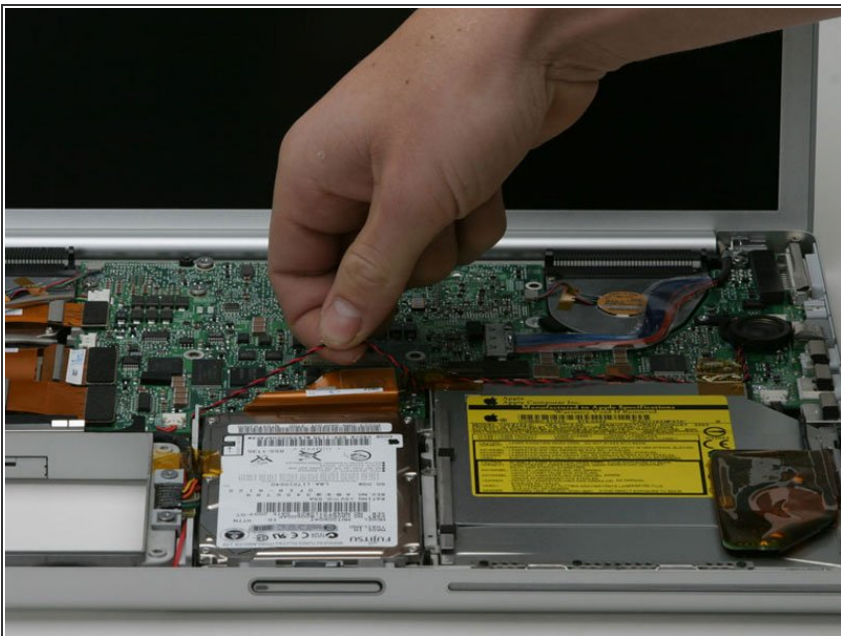
- Use a spudger to lift the metal bracket out of the computer.

Step 17



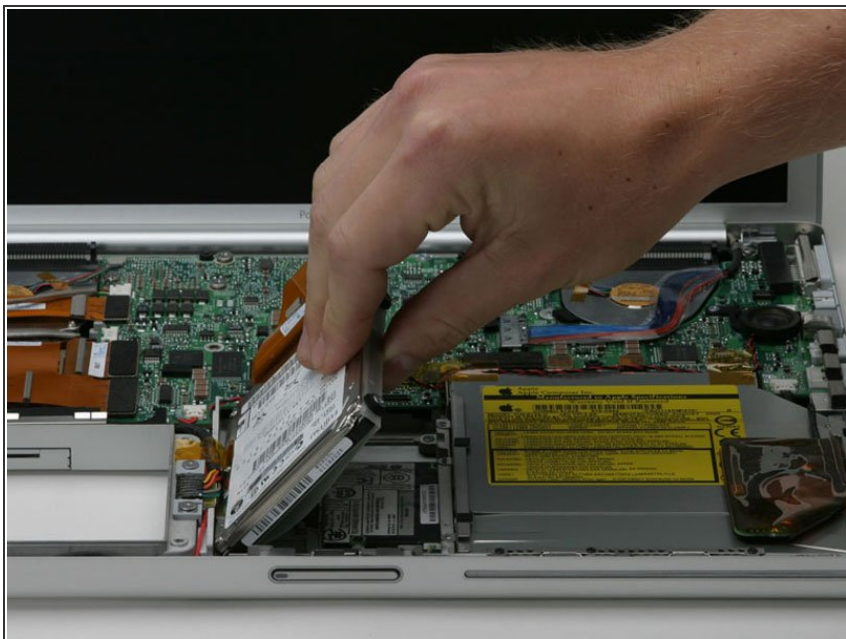
- Disconnect the large orange hard drive cable from the logic board, removing tape as necessary.

Step 18



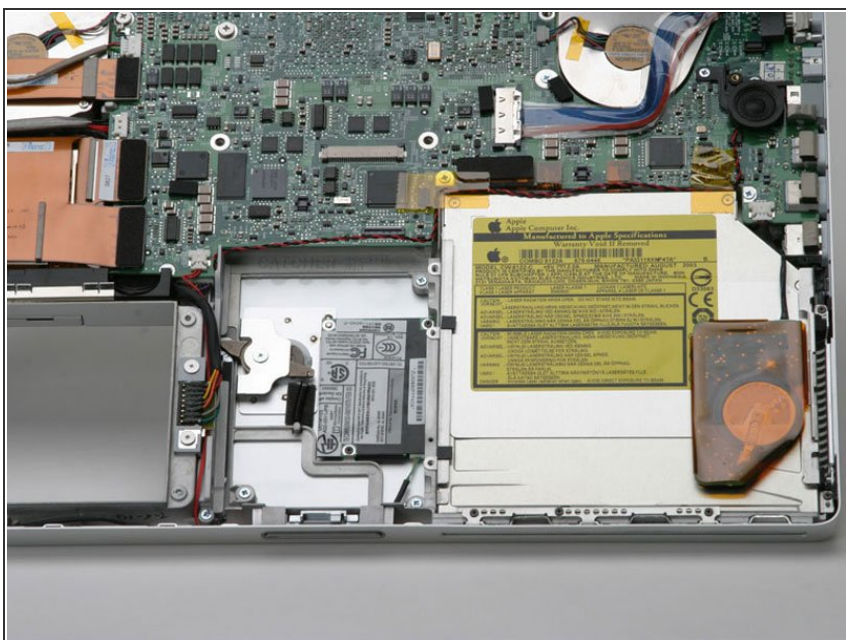
- Deroute the red and black speaker cable from under the fold in the hard drive ribbon.

Step 19



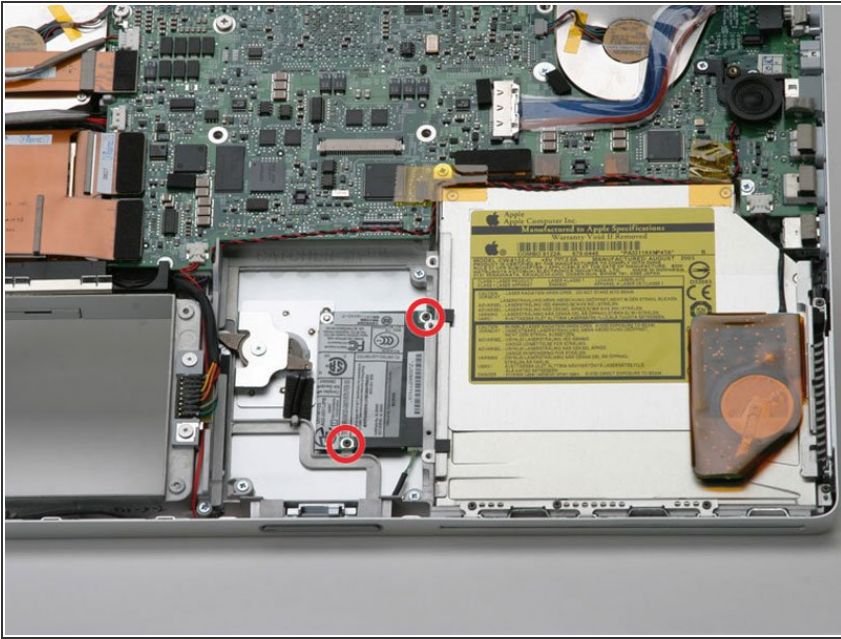
- Lift the hard drive up from the right side and remove it from the computer.

Step 20 — Modem



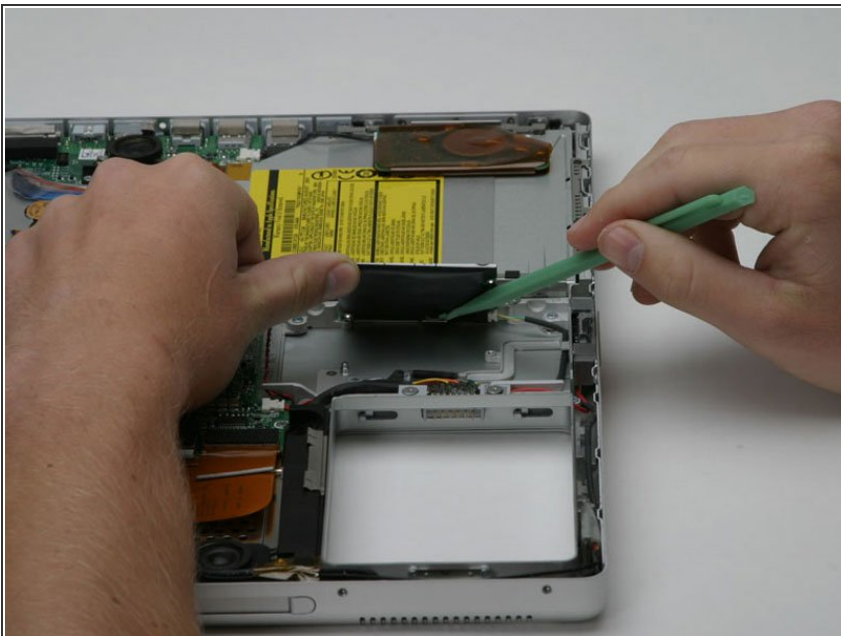
- Your laptop should look approximately like this.

Step 21



- Remove the two black Phillips screws from the modem board.

Step 22



- Lift the modem up from the left side and use a spudger to disconnect the cable attached to the bottom.

Step 23



- Disconnect the modem cable from the modem.

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