Apple White “Ice” iBook Dual USB Repair Manual

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This manual is presented as a guide in order to help you repair problems on your powerbook. Working on a powerbook can be dangerous if not done properly. We at Powerbookmedic.com take no responsibility for any damage or harm done to yourself or your powerbook as a result of reading this guide.

Suggestions for making this manual better? Email: sales@powerbookmedic.com

Tools Needed for Take Apart:

Torx T8 Screwdriver – Available from our online store
Torx T6 Screwdriver – Available from our online sore
Philips head screwdriver (small and medium size screwdrivers)

Always remove the battery and power supply from the computer before beginning any take apart or repair!

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Battery Removal

Removing the battery is the first step of any repair. First, unplug your unit. Then, close the display (if open) and turn the unit over. Locate the battery lock as shown in red in the picture.

Using either a flat head screwdriver or a coin (anything with a flat surface) turn the security latch to the left as shown. Turn it until the notch is facing the “unlock graphic.”

The battery will then pop up slightly. Grasp the battery as shown, and pull it up and out of the computer.

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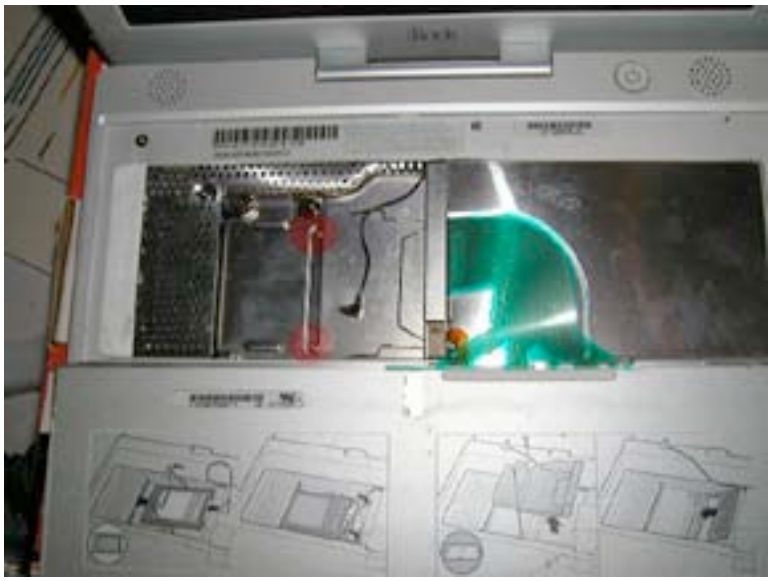
Keyboard Removal

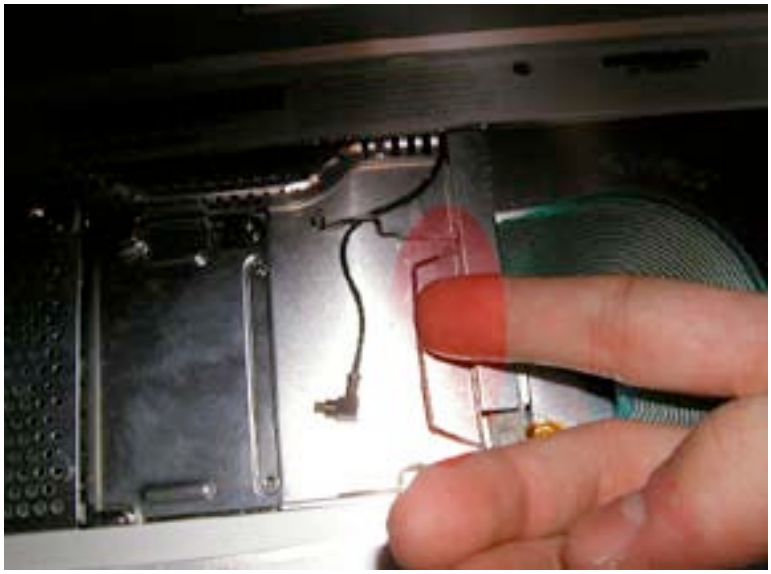
Before proceeding, you must first remove:

Battery

Pull the left and right keyboard tabs in towards you, and lift the keyboard up and flip towards you. (The picture only shows the right tab being pushed in, but it is easier if both are done at the same time.)



Remove the two Philips head screws as shown. (Note – If an airport card is installed, it will have to be removed first.)



Press the airport card holder down and then towards the left to release the spring.

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Lift the airport card holder up and out of the frame as shown.

Gently Grasp the ribbon cable from the keyboard and pull up. You may want to gently wiggle it from side to side if it does not come off easily.

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Ram Replacement

Before proceeding, you must first remove:

Battery

This step does not require removal of the keyboard. To remove ram, gently pry back the two metal connectors on each side of the ram chip as shown. (Only one side is shown, but it is easier is both are pried back at the same time.) The ram chip will “pop” up. Grasp it, and gently pull it out of its socket.

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Bottom Casing Removal

Before proceeding, you must first remove:

Battery

Remove the 3 Torx T8 screws as shown using a Torx T8 screwdriver. (Available from Powerbookmedic.com)

Around the corner of the case, you will notice the bottom feet. Pry up these feet (plastic part only as shown) using a flat head screwdriver. Do not do this to the foot on the battery. Only do this to the 3 feet on the corners of the iBook.

Remove the 3 philips head screws located under each of the feet.

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Lift the metal foot holders out of their socket, and place them in a place such as a zip lock bag.

Note: There are a lot of screws in the disassembly procedure. We recommend that after each couple of steps, you put the screws from that step in a zip lock bag and label the bag so you aren't confused later.

Locate two Philips head screws inside the battery bay, and remove them. The location is shown in the picture.

There are two springs in the battery bay that will come out once you remove the casing. Make sure to put these back in place when you reassemble the unit.

In the battery bay there is a plastic latch which holds the casing on. Use a flathead screwdriver to gently pry this out, and pull up from the corner at the same time. Do not use excessive force or you will break your case! Be careful!

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Gently work your way around the case. In some parts you may have to use a flathead screwdriver to release the tension around the case. The bottom does not come out easily, and you may have to work at it for a while.

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Bottom Shield Removal

Before proceeding, you must first remove:

Battery
Bottom Casing

The bottom shield is held on with two long strips of grey tape, 3 pieces of yellow tape, and 5 philips head screws. Their locations are shown in the picture. Remove all of these pieces.

You can then lift the bottom shield up and off of the unit as shown.

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Internal Fan Replacement

Before proceeding, you must first remove:

Battery
Bottom Casing
Bottom Shield

Locate the internal fan. (It is near the cd drive) Remove the one Philips head screw as shown. Lift the fan up and out, and then remove the fan cable from its connector.

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Top Case Removal

Before proceeding, you must first remove:

Battery
Keyboard
Bottom Case

Note: You do not have to remove the bottom shield or fan to remove the top case.

Remove the 4 philips head screws as shown. (There is one on the right of the picture that is hard to see, but make sure it is removed.)

Remove the 3 philips head screws shown in red. (Ignore the hand in the picture.)
Note: These screws will strip easily! Make sure you apply enough downward pressure when you are removing them, or they will strip.

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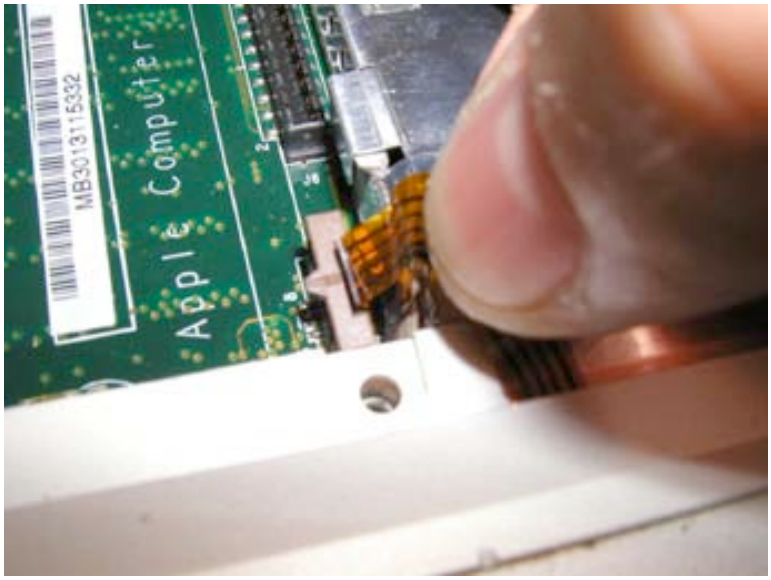
Locate the magnet on the top case as shown in the picture. Using a flat head screwdriver or flat tool, gently pry the magnet up and out.

This will reveal another Philips head screw. Remove the screw as shown.



Remove the trackpad connector cable by gently grabbing it as shown and lifting up.

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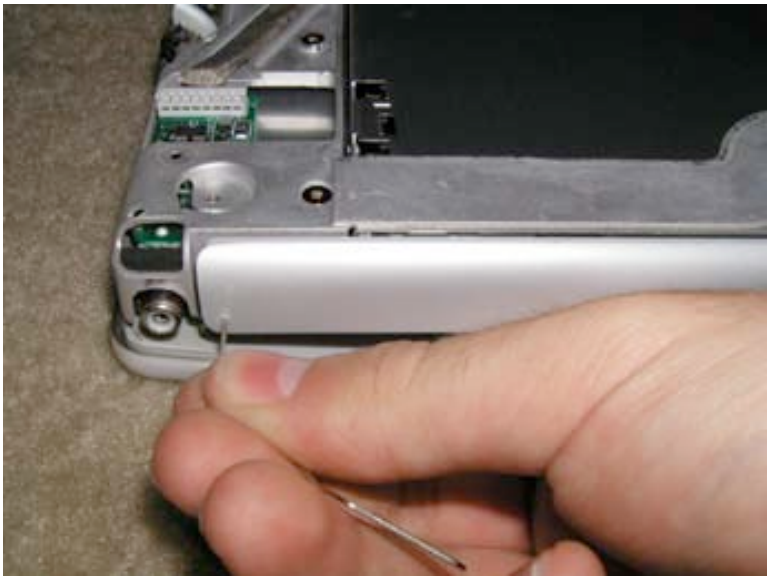
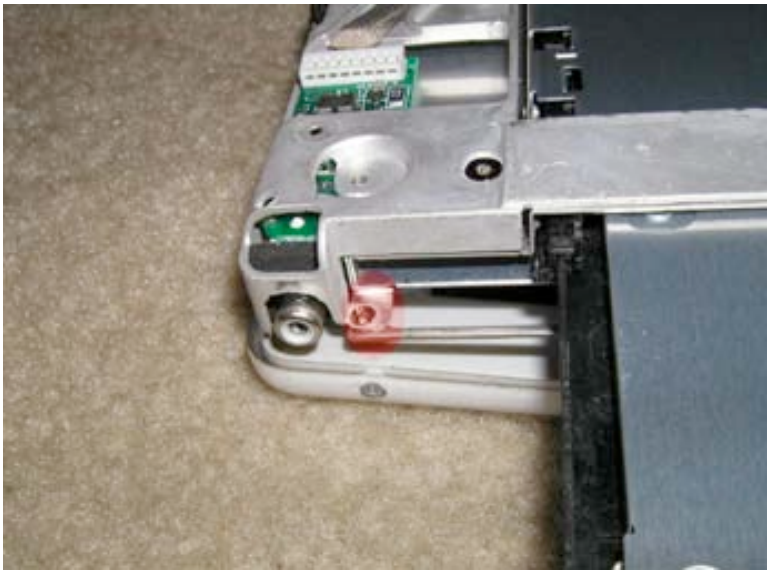
Locate the white strip of tape on the side of the top case as shown. Pry the tape up, and remove the strip. You will need to put this back when you reassemble the unit, so place the strip in a clean place.



Flip your unit over now, and locate your cd or dvd drive. Use a paper clip to manually open the drive as shown. (Just stick the paper clip into the hole, and the drive will pop out.)



On both sides of the drive will be a small Philips head screw. Remove both screws. (The picture only shows one, but both need to be removed.)

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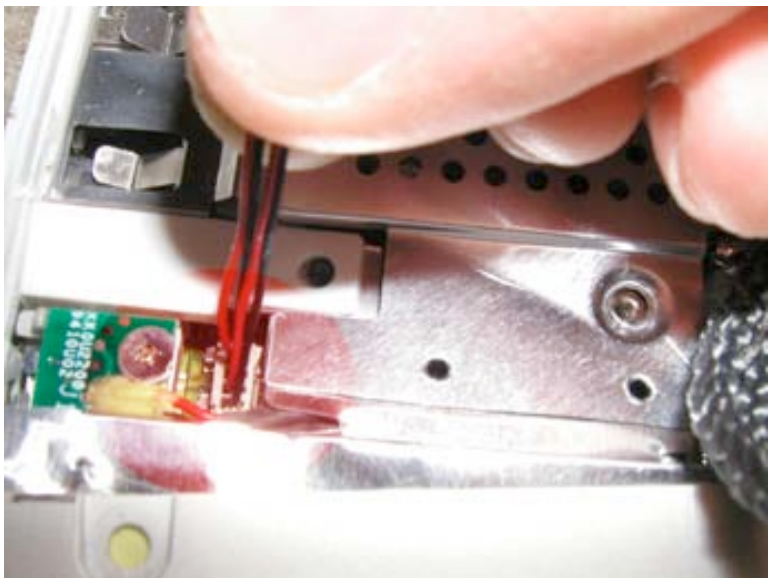
The top case will now be loose to lift up. (You won't be removing the trackpad yet.) Start on the top right hand corner near the AC input and DVD drive, and gently lift the case up.

Undo the power button cord (the blue and white cable) from the logic board.)



Now, remove the speaker cable (Black and red wire) from the logic board. The top case will now lift up and out of the iBook.

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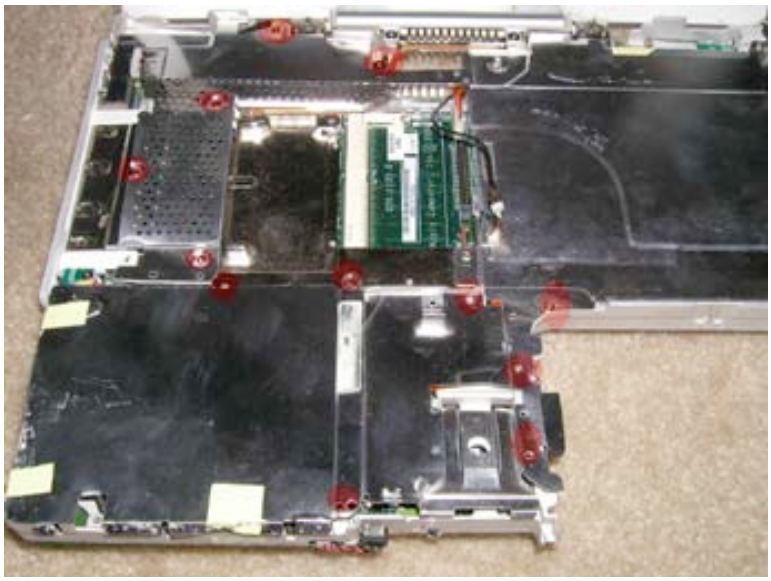
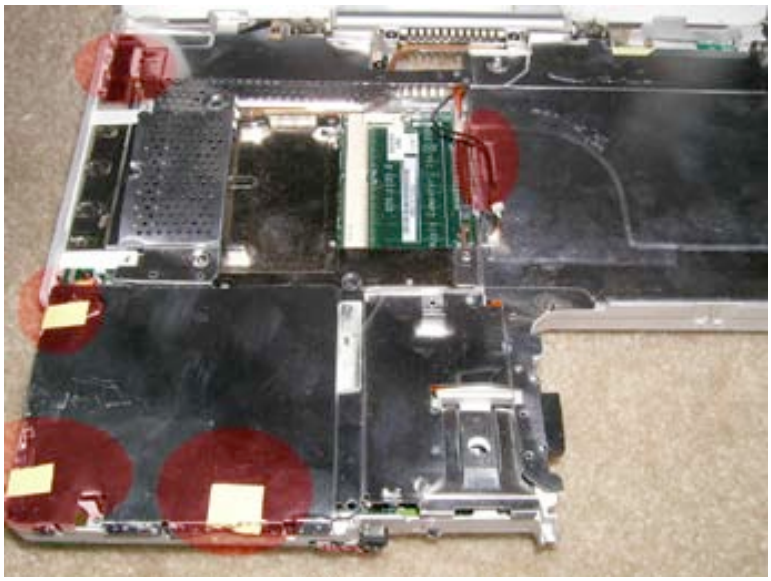
Top Shield Removal

Before proceeding, you must first remove:

Battery
Keyboard
Bottom Case
Top Case



Remove the 12 philips head screws as shown. When removing the screws, make a note of which goes where to help with the reassembly process.



Peel up the 3 yellow pieces of tape and two foil strips from the locations shown. Do not remove the pieces, just peel them back so they aren't connecting the top shield to anything else.

Now, carefully lift the top shield up and off of the computer being careful not to bend it.

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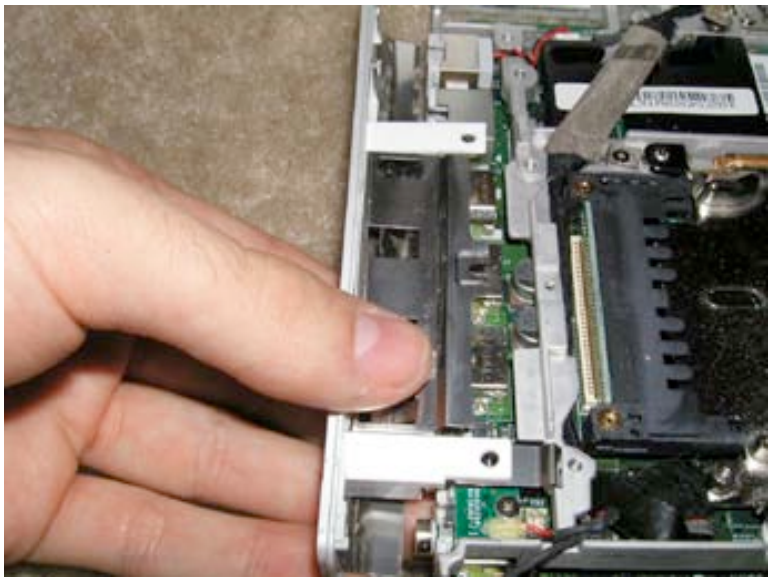
Port Bezel Removal

Before proceeding, you must first remove:

Battery
Keyboard
Bottom Case
Top Case
Top Shield

On the left hand side of the unit, locate the port cover. (The piece covering the USB, Firewire, etc…) Remove the two Philips head screws as shown.



Pull the port cover out and off as shown.

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Hard Drive Removal

Before proceeding, you must first remove:

Battery
Keyboard
Bottom Case
Top Case
Top Shield

Disconnect the orange cable from the logic board as shown. Note that this cable says “To Main Board” on it.

On the left of the drive notice the black piece of tape holding the microphone cable. Lift the tape up to release the cable.

Then, from the top right corner of the hard drive bracket, lift the drive up and out.

Remove the orange cable from the hard drive as shown. Pull the cable directly out or you risk bending the pins on the hard drive. Note that the cable for the hard drive says “TO HDD”

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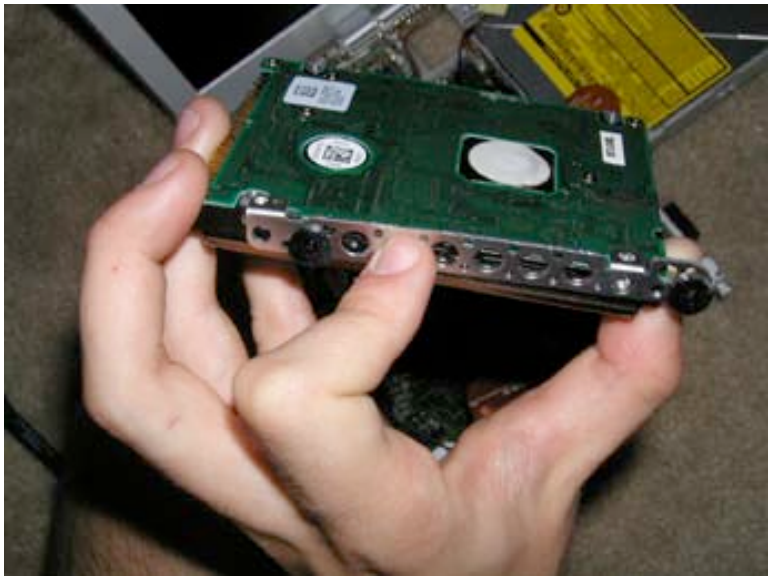

On the side of the drive is a metal plate with two rubber washers. This is on both sides. Make sure to transfer these pieces to the new hard drive you are installing. (The rubber ends go over the black screws on both sides.)

When installing the new drive, make sure the cables are being connected to the correct place…note the words on the cables!

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Modem Removal

Before proceeding, you must first remove:

Battery
Keyboard
Bottom Case
Top Case
Top Shield

Remove the strip of tape holding the display cable to the modem. Be extremely careful with the display cable. You do not want to put this cable under a lot of stress.

Remove the two Philips head screws as shown. (The red dot is shown on top of the cable, but the screw is underneath the cable.)

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Tilt the modem up and out as shown.

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Display Removal

Before proceeding, you must first remove:

Battery
Keyboard
Bottom Case
Top Case

Top Shield

First, locate the hard drive, and undo the black strip of tape holding the microphone cable in place.

Next, locate the black display cable right next to the hard drive brack and PCMCIA card cage. Gently pull the cable up to release it from its connector.

Locate the cd drive, and remove the yellow strip of tape holding the backlight cable to the drive.

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Remove the inverter cable from the logic board as shown.

If you have not done so in a previous step, remove the Philips head screw in the location shown.
Also, if you have not done so already, remove the piece of tape connecting the display cable to the modem. (See modem removal for more information.

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Remove the two Philips head screws in the location shown. Hold the monitor while you do this to prevent damage.

Lift the display module up and out of the computer. If a cable is stuck, do not pull on it, gently work it up and out. Never pull!

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Back Casing Removal

Before proceeding, you must first remove:

Display Module

With the display removed, begin by removing the two Torx T6 screws from both sides of the display. (You should remove a total of 4 screws, two from each side)

Next, you will need to pry the back panel (case with Apple logo) off. It is best to start at a corner as shown, and pull the casing in the opposite direction as the LCD. You may need to use a flat too to help you at first. After you get started, the casing will come off easily.

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Lift the back casing off and away from the rest of the display module, and place it on a clean surface.

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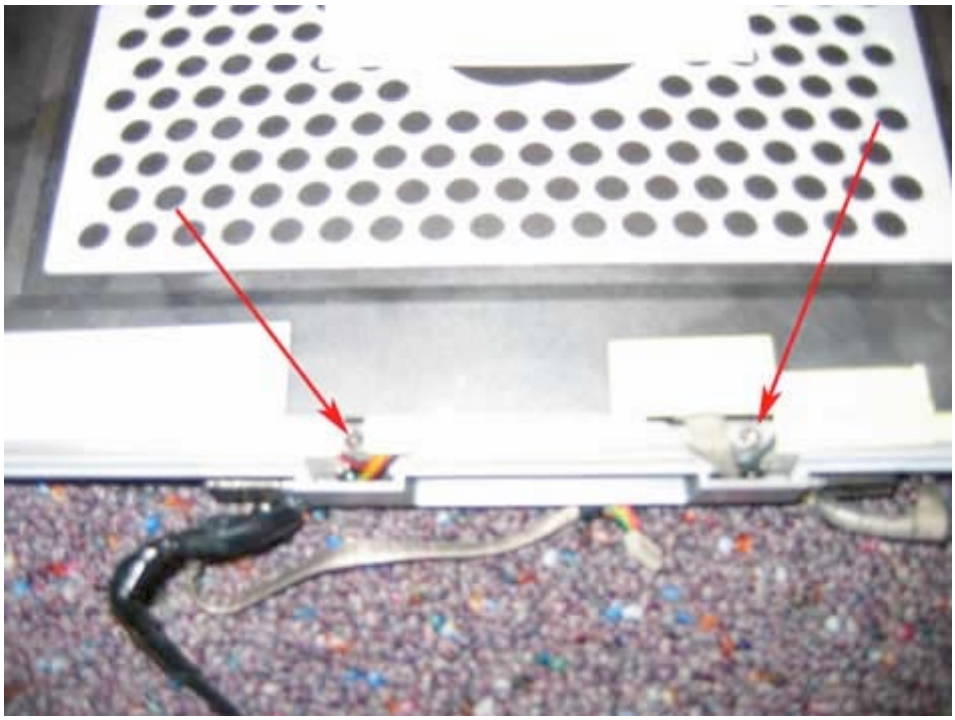
Clutch Cover Removal

Before proceeding, you must first remove:

Display Module
Display Back Casing



Begin by removing the two Philips head screws in the location shown (near where the cables enter the display)

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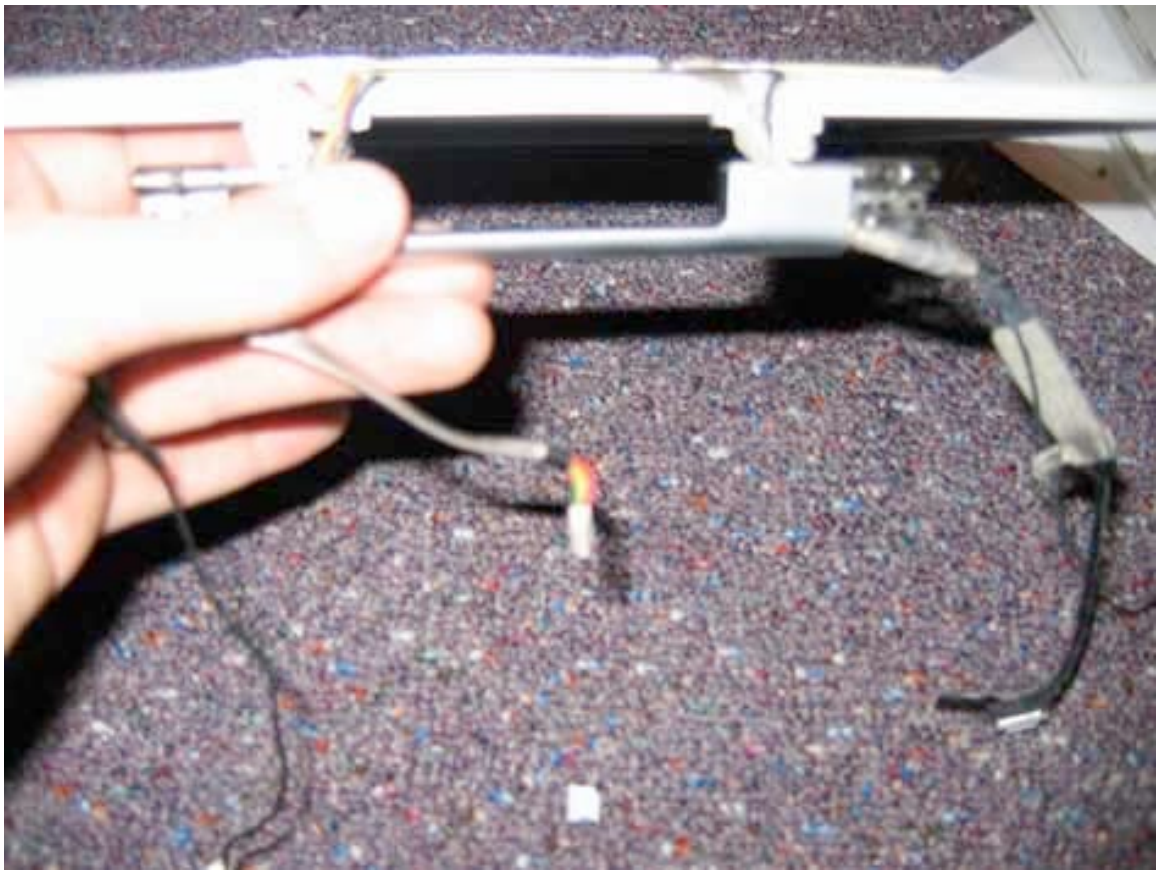
This will allow the clutch cover to simply be pulled off as shown. *Note that there are two small white plastic ends on either side of the clutch cover. If these fall off you will need to place them back on and hold them in place while placing the clutch cover back on. The grooves on these pieces line up with the clutch cover. **Also, when replacing the clutch cover, note the location of the screw holes in the cover. It is possible to put this piece on backwards.



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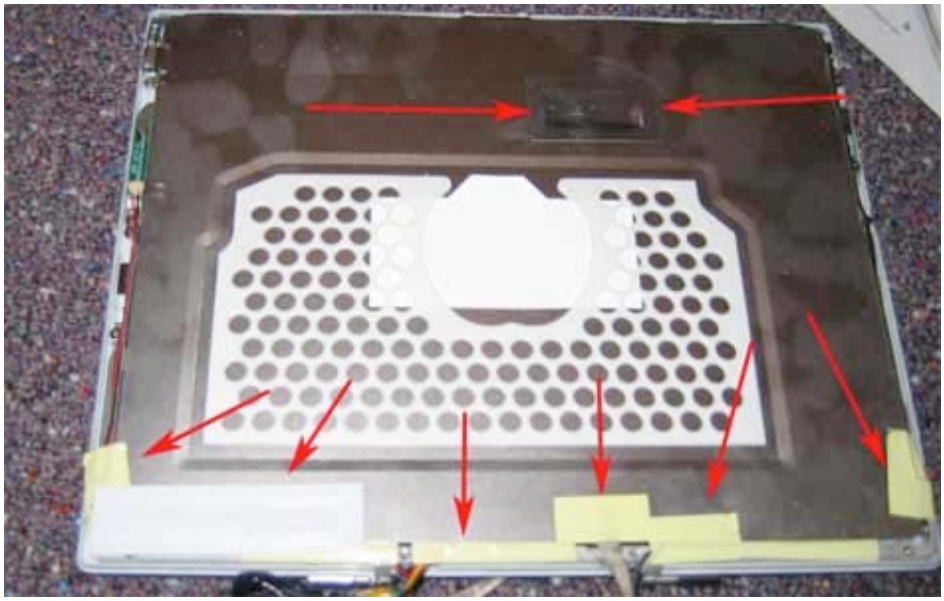
LCD Removal

Before proceeding, you must first remove:

Display Module
Display Back Casing

On the side of the display casing you will notice two U shaped notches. In these notches there are Philips head screws, two on each side of the display. Remove all four screws.



Remove all the pieces of tape holding the thin metal sheet in place. The location of the tape can vary from model to model, so use the picture below as a guide. Make sure to remove the Aluminum tape in the middle of the cover as well.

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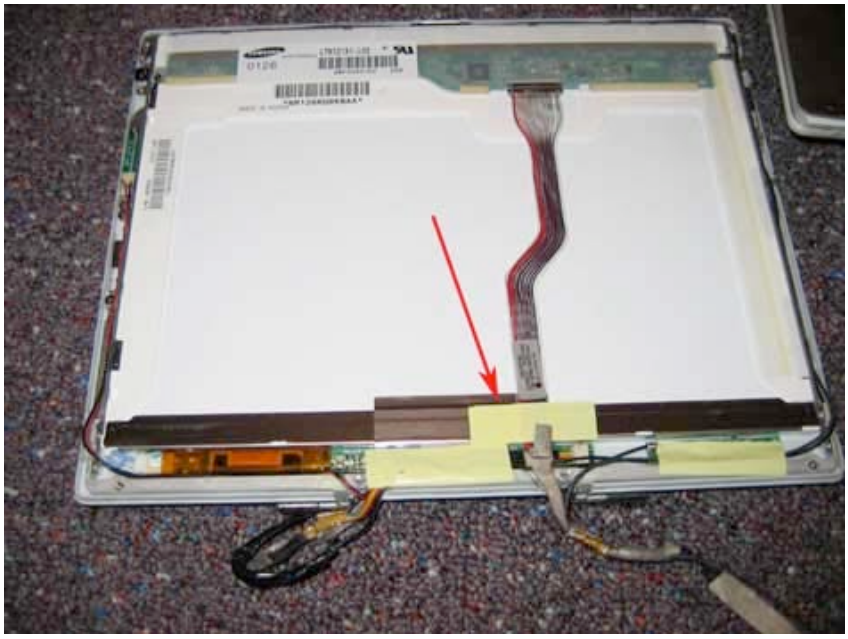
You can now lift up the back shield. Lift it completely off and place on a clean surface.



Remove the piece of tape holding down the display cable in the location shown.

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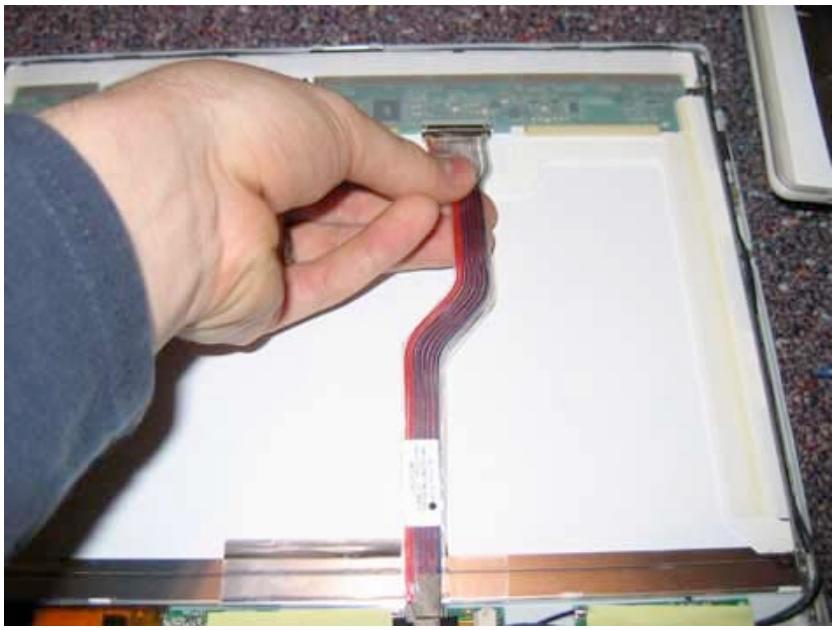

Disconnect the display cable from the LCD by gently grabbing it as shown and then pulling it towards you. It should come out very easily.

The LCD panel will not be free to be moved. Lift up the display, and pivot it towards the left hand side where the inverter cable enters the LCD.

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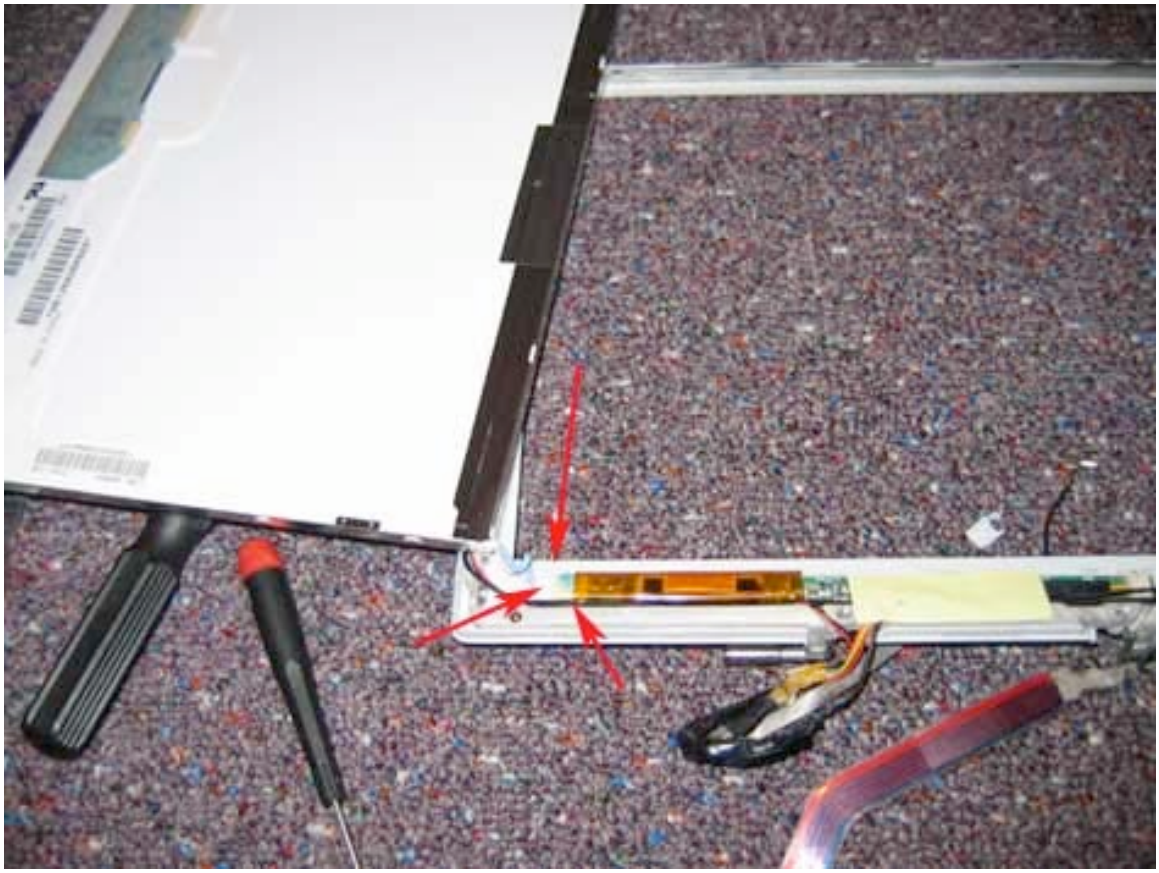
Pivot the LCD all the way to the left as shown, and disconnect the inverter cable connector from the Inverter board at the location shown.



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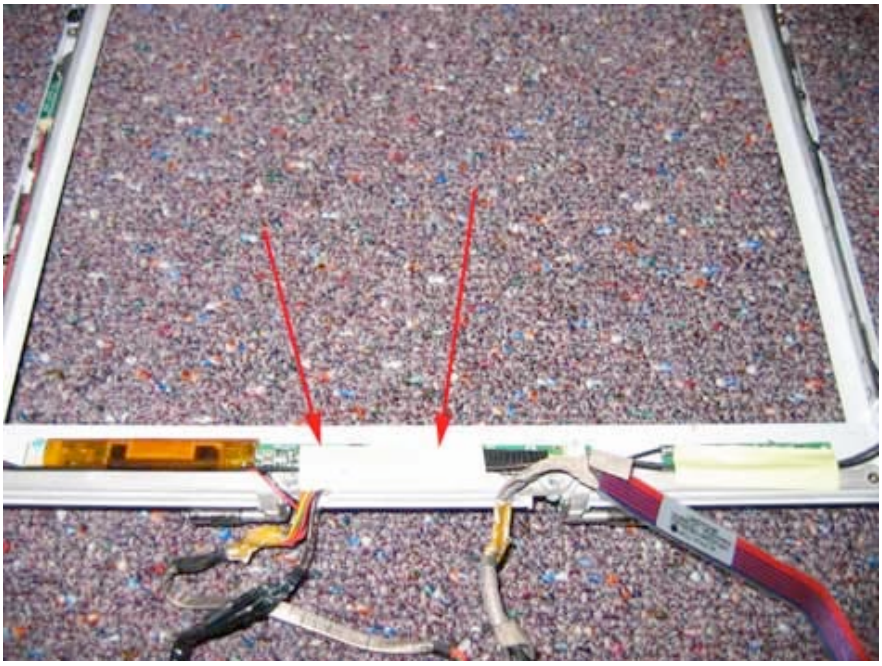
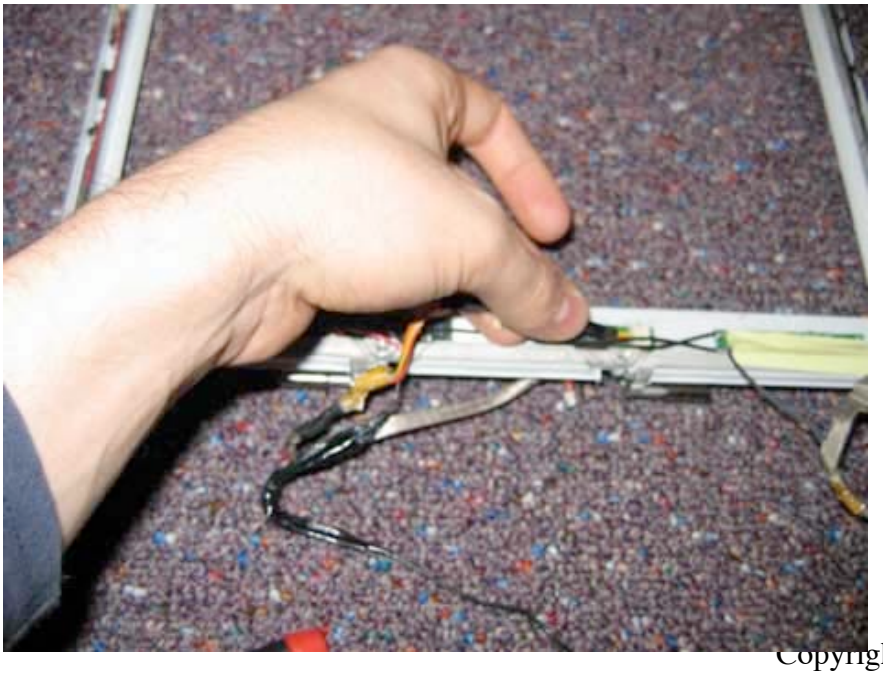
Inverter Board

Before proceeding, you must first remove:

Display Module
Display Back Casing
LCD Module



Begin by removing the yellow strip of tape in the location shown.



Undo the inverter cable connector from the inverter board by gently pulling the cable out. You may need a flat tool to help aid in the task.

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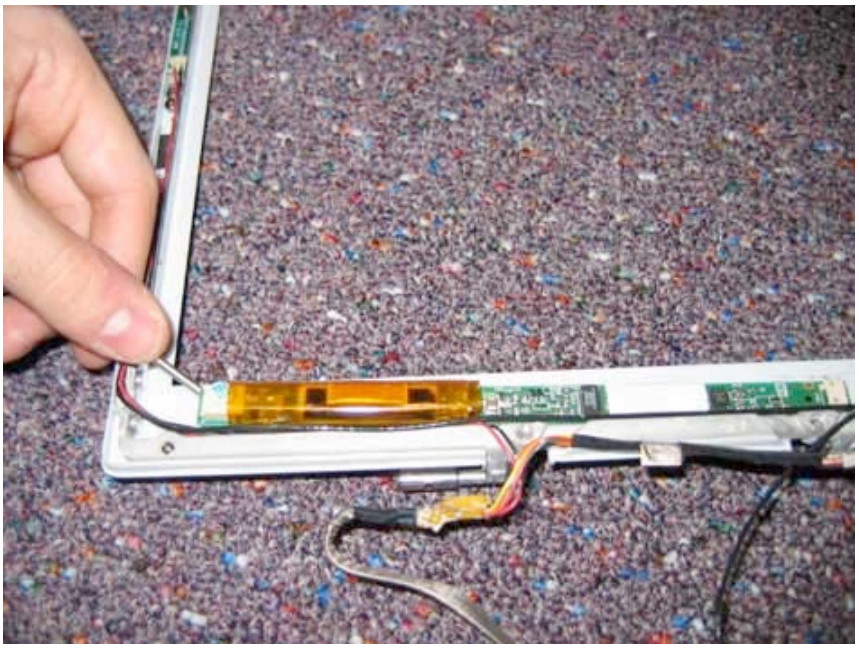
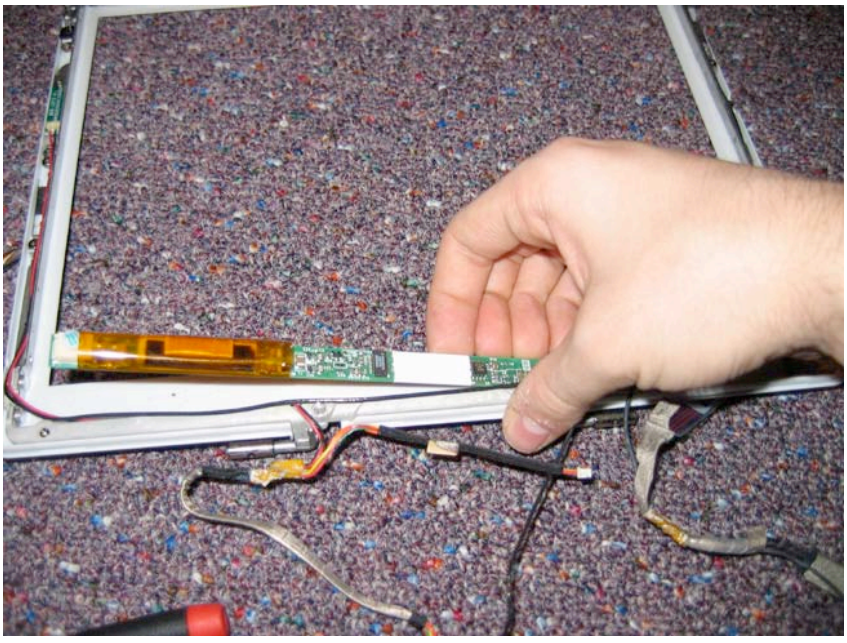


The inverter board is held in place by adhesive tape. You will need to use a flat tool to pry up the board. It is best to do this from the left hand side of the board. Put a flat tool under the board, and gently pry up.



Lift the inverter board up and out.

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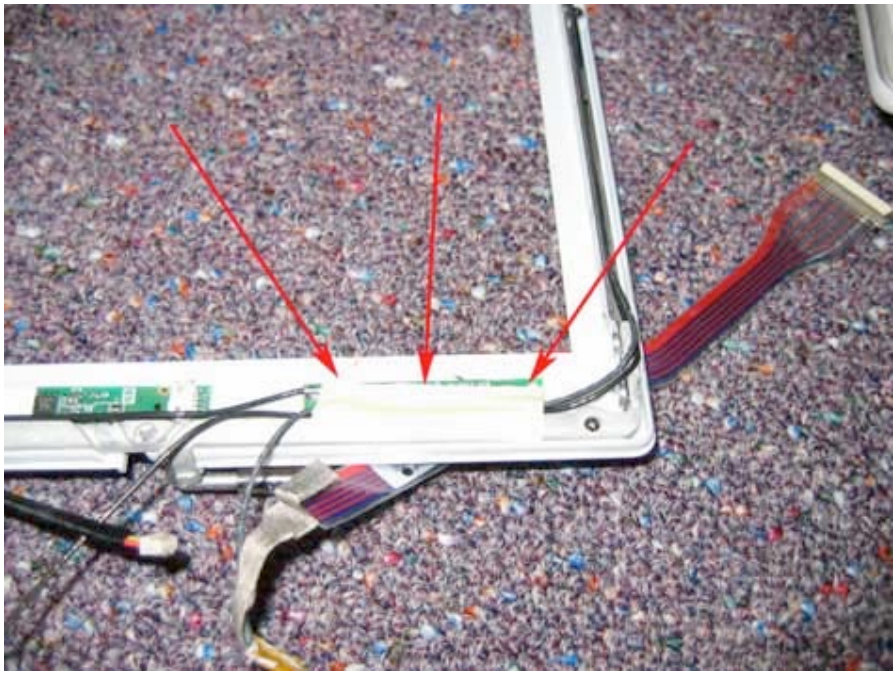
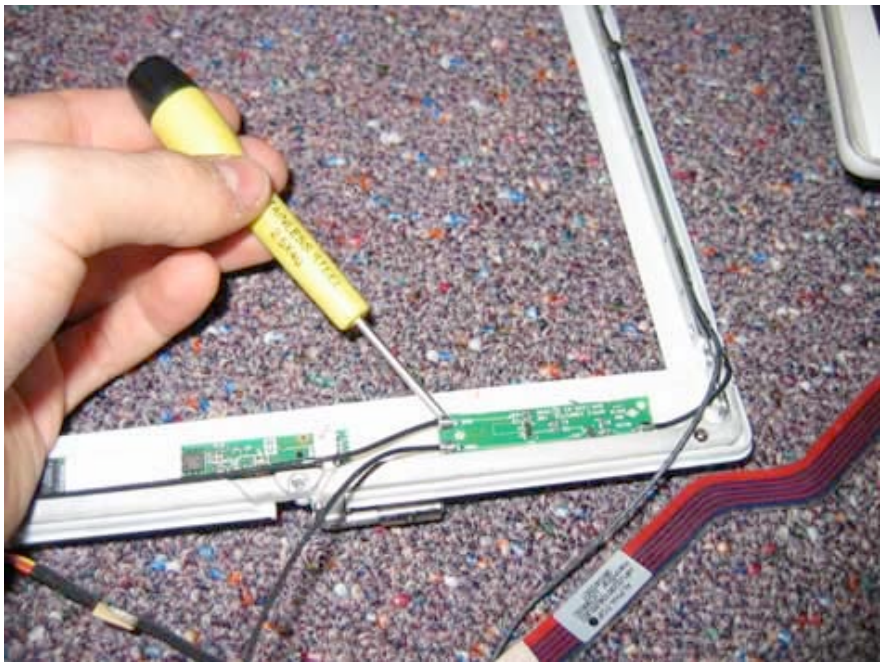
Airport Antenna Cable

Before proceeding, you must first remove:

Display Module
Display Back Casing
LCD Module



Begin by removing the piece of yellow tape in the location shown (bottom right hand corner)



Next, you need to pry up the green airport board as shown below. It is held on by a light adhesive.

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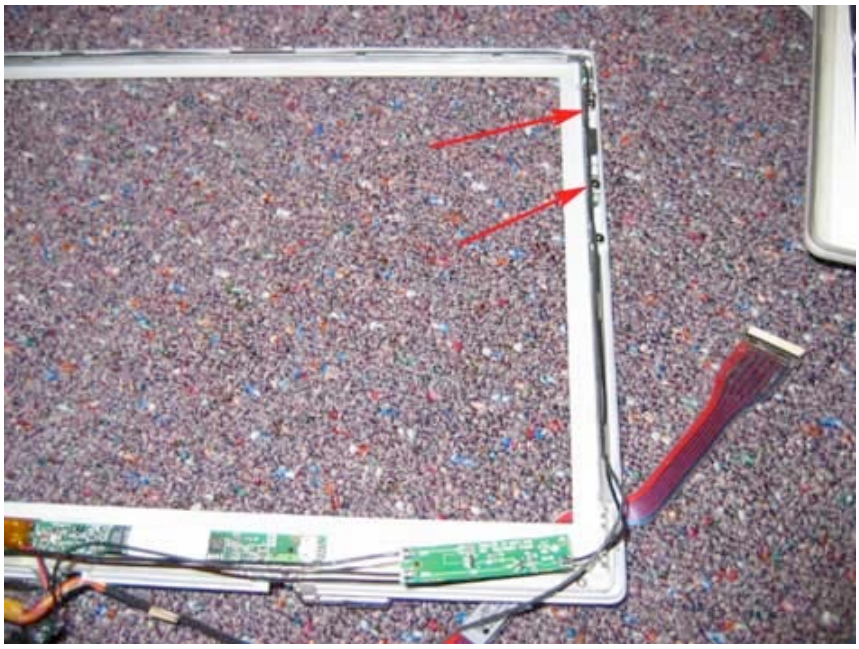
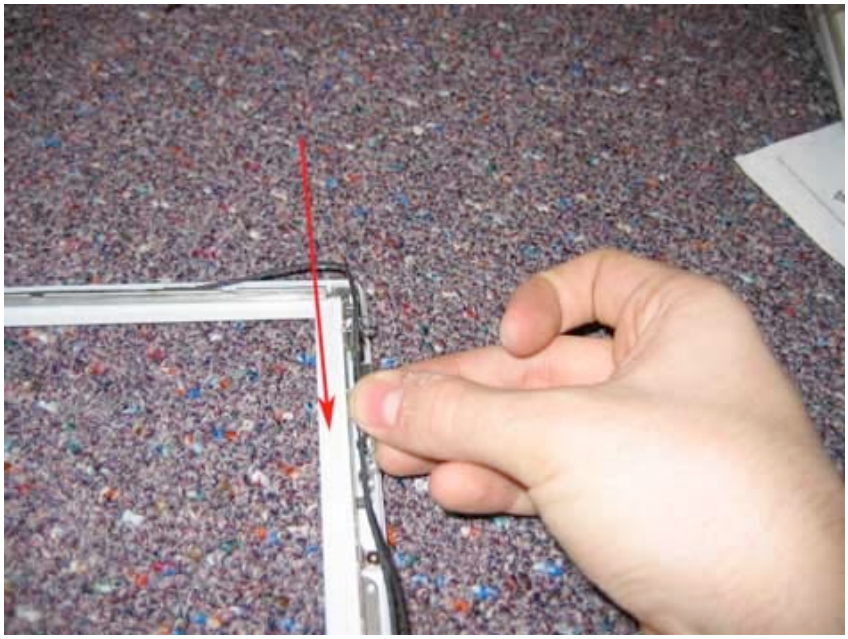


Remove the two Philips head screws in the locations shown below.



With the screws removed, tilt the metal piece with cable attached up and out towards you. Note that there is a cable that keeps going past this piece. That is the microphone cable and is not a part of the airport cable assembly.

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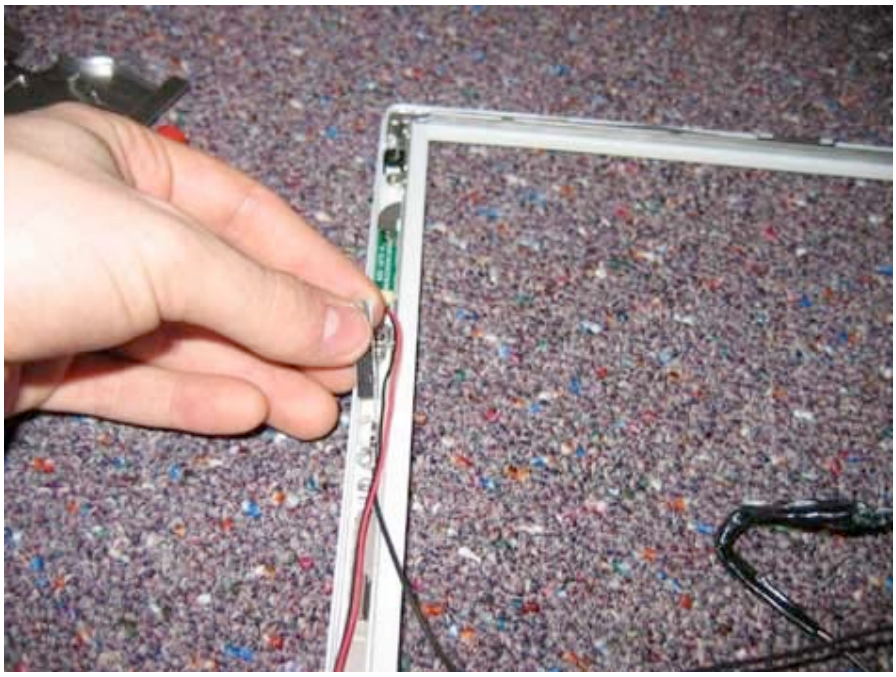
Now, on the left hand side, repeat the procedure. Remove the two Philips head screws from the locations shown below.



With the screws removed, tilt the metal piece with cable attached up and out towards you.

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The cable assembly should now be loose. If it is not, make sure you have removed any tape that may be holding the cable in, and make sure the cable has been guided out of all of the metal clips that hold the cable in along the side of the display. (Just pull up on the cable to release it from the clips)

Next, remove the tape holding the display cable and airport assembly together. It may take several attempts to get the tape off. Separate the cables. When replacing, it is not necessary to tape the cables back together, but you can do so if you have some yellow tape.

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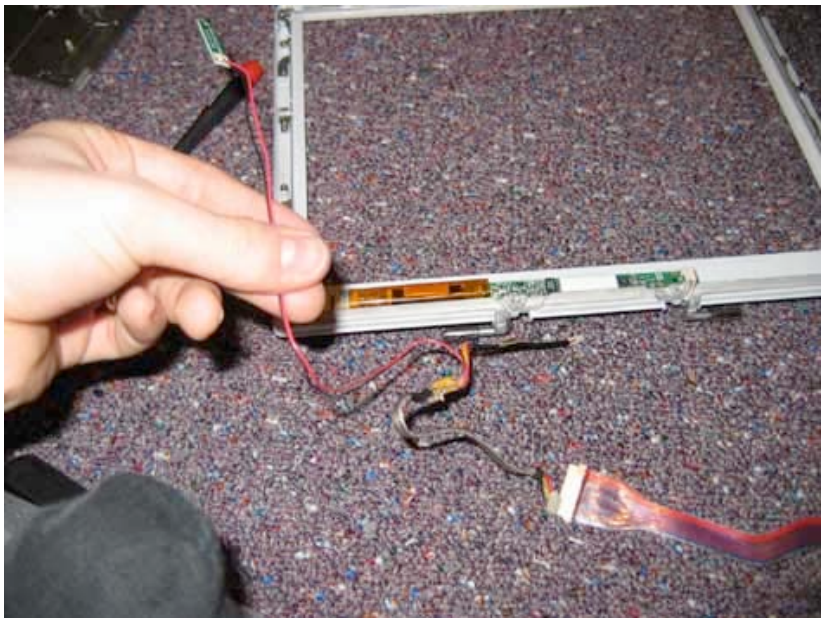
Reed Switch / Inverter Cable

Before proceeding, you must first remove:

Display Module
Display Back Casing
LCD Module

Begin by removing the Philips head screw in the location shown.



Guide the reed switch cables out, and if held in place by any tape, remove the tape.

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Next, remove the tape holding the inverter cable microphone cable together. It may take several attempts to get the tape off. Separate the cables. When replacing, it is not necessary to tape the cables back together, but you can do so if you have some yellow tape.

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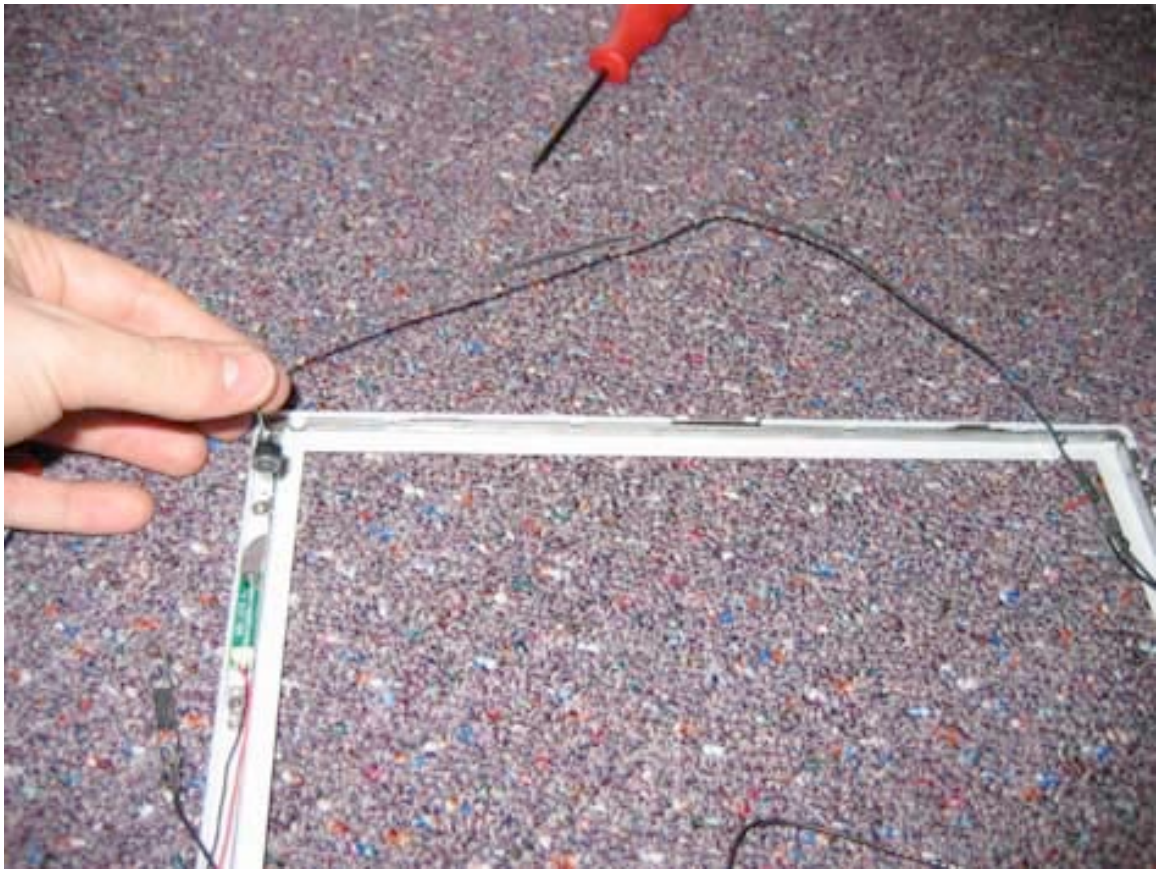
Microphone Assembly

Before proceeding, you must first remove:

Display Module
Display Back Casing
LCD Module

The microphone is located in the top left of the display. Then guide the cable all the way around the bezel and remove it from the inverter cable by undoing the tape holding the cables together.



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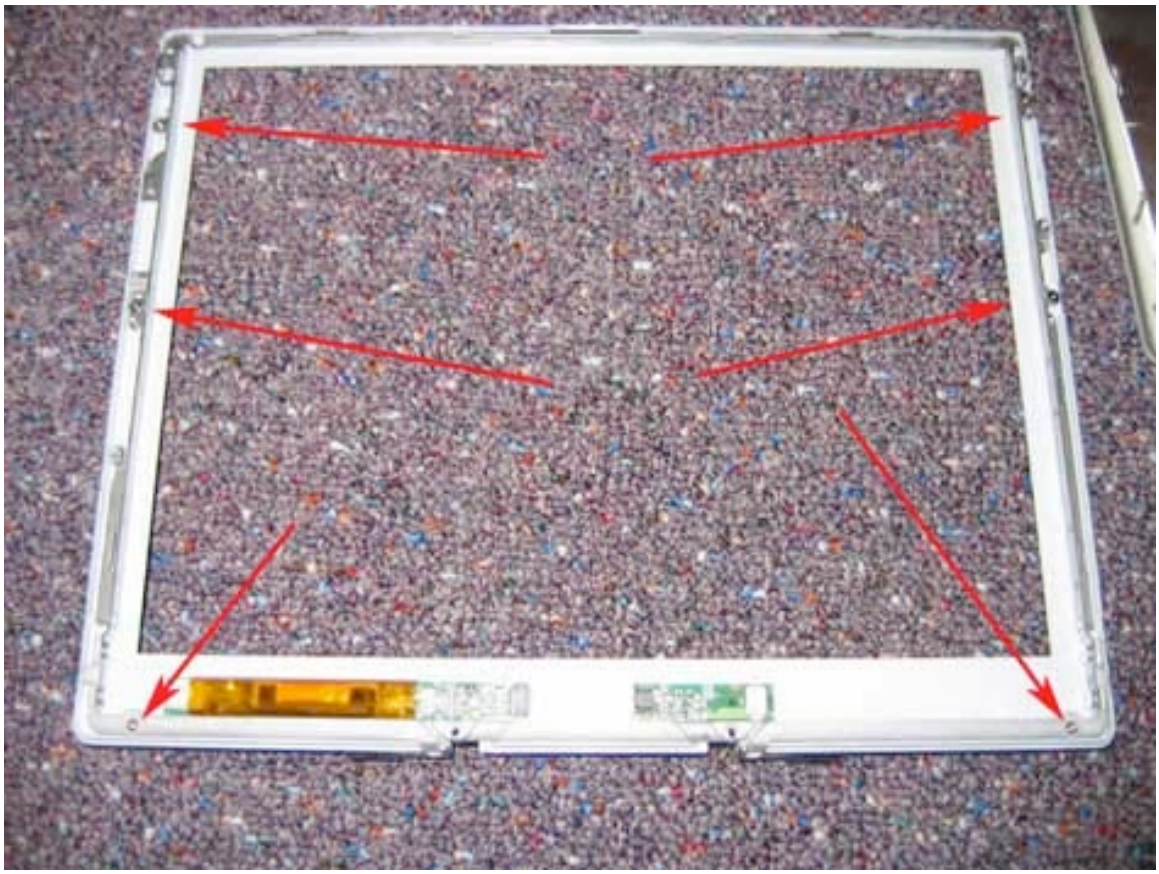
Hinge / Clutch Assembly

Before proceeding, you must first remove:

Display Module
Display Back Casing
LCD Module
Clutch Cover
Inverter Board
Antenna Cable
Reed Switch / Inverter Cable
Microphone Cable

Remove the six Philips head screws from the locations shown in the picture, and then just lift the clutch assembly out of the unit.



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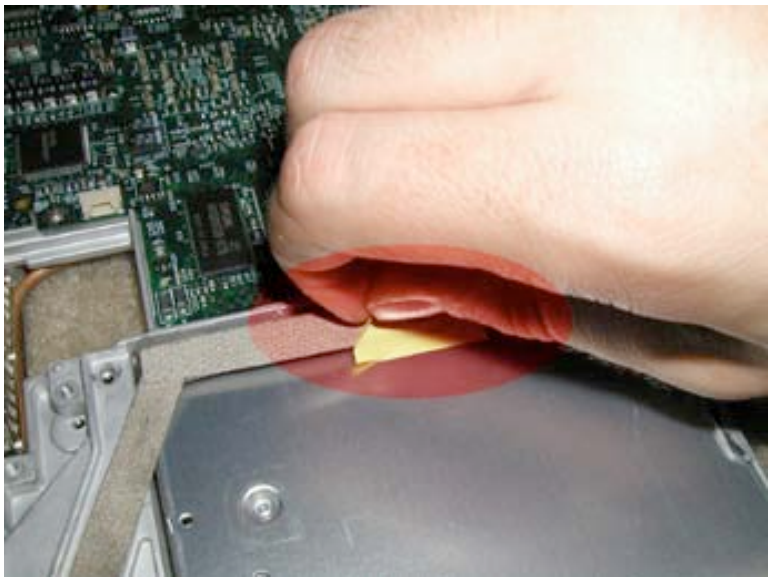
Optical Drive Removal

Before proceeding, you must first remove:

Battery
Keyboard
Bottom Case
Top Case
Top Shield
Bottom Shield

Flip the unit over and locate your cd drive. Locate the two Philips head screws shown in red, and remove them.



Locate the yellow piece of tape holding the cable going across the drive, and lift it up to let the cable be free from the drive.

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Flip the unit back over. If you have not removed the display, Locate the cd drive, and remove the yellow strip of tape holding the backlight cable to the drive.

Grab the drive by the sides ONLY as shown. Tilt the drive up and then out.

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On the back of the drive, locate the two Philips head screws shown in red and remove them. Disconnect the cable, and note that the cable says " TO CD ROM" This is so you don't confuse it in reassembly.

If installing a drive that that not have a front "white" bezel, remove the bezel from the drive you are removing, and put it on the one you are installing. See below:

Drive Bezel Replacement

The procedure for changing the drive faceplate varies by what type of drive you have. The instructions are covered below per drive:

CD-ROM – On the top of the drive, locate the Philips head screw immediately in front and center of the bezel. Remove this screw. On the left hand side, notice a white tab. Push this tab in with a flat head screwdriver or other flat tool. Do this on the right side as well. Then, using a flat head screwdriver, gently go around the bezel and pull the bezel off. Be careful not to damage the bezel.

DVD-ROM - On the top of the drive, locate the two Philips head screws immediately in front and on the left and right hand side of the bezel. Remove these screws. Tilt the bezel down and off of the drive.

CDRW Drive – Notice on the top left and right of the drive there are two tabs holding the bezel in place. Push these tabs down and out to release the bezel, and then remove the bezel.

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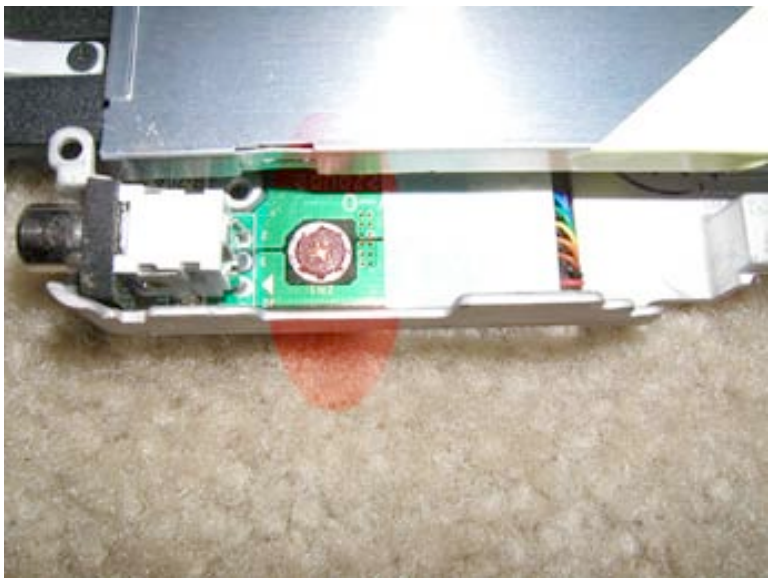
DC-IN Board Removal

Before proceeding, you must first remove:

Battery
Keyboard
Bottom Case
Top Case
Top Shield
Bottom Shield



Note: You need to remove the optical drive before continuing with this step. See the step above.

Turn the unit over, and remove the Philips head screw holding the DC Board in place.

Turn the unit back over, and remove the DC board cable from its connector as show. (It is the multi colored wire that was previously taped to the CD/DVD drive.)

The cable will now be free to be removed and replaced.

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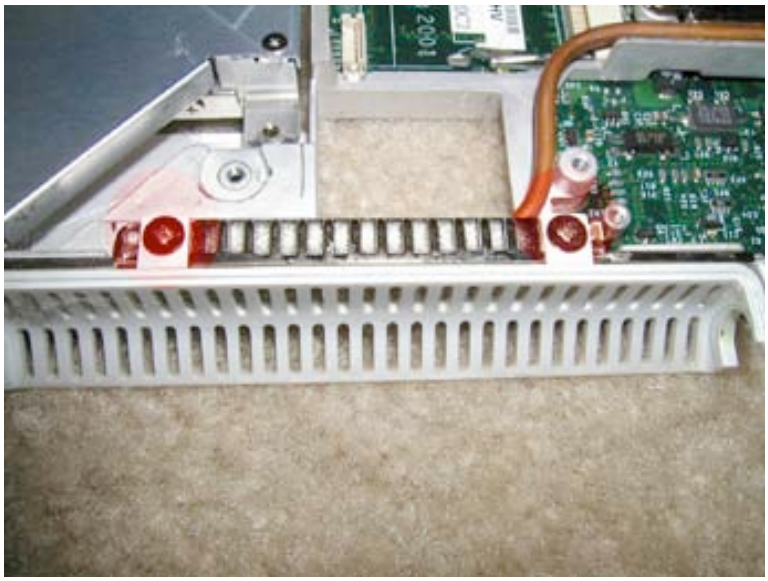
Logic Board Removal

Before proceeding, you must first remove:

Battery
Keyboard
Bottom Case
Top Case
Top Shield
Port Bezel
Display Module

Locate the reset button next the USB and firewire ports. Remove the Philips head screw from the top of the rest button., and disconnect the cable from the logic board.



Remove the two screws from the vent shield as shown, and remove it from the computer.

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Remove the last screw from the heat spreader as shown.

Lift the heat spreader up and off of the laptop.

Turn the laptop over, and remove the four Philips head screws from the locations shown.

Then on the right hand side of the logic board, notice the black strip of tape, and remove it.

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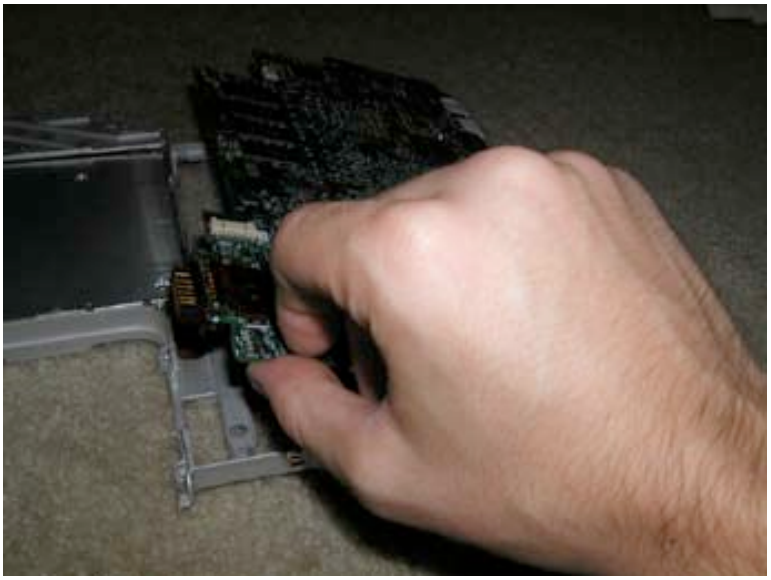

From the left hand side of the logic board, tilt the logic board up and out as shown.

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