

Powerbook G3 Lombard (1999) USB Repair Manual

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

Identifying the Lombard Powerbook

If the writing under your display only has the words "Macintosh Powerbook G3" as shown, then you have a Lombard.



The design of the rear ports is as in the picture below. Note the two USB ports. The Lombard has only USB ports, and no firewire ports.



Identification of Parts



Heat Sync

Sound Board





Display / TFT / Screen

Power / Charger Board

Processor /Daughter Board

Logic / Motherboard



Required Tools

Torx T8 Screwdriver – available from www.powerbookmedic.com



Flathead Screwdriver & or Philips Head Screwdriver



Keyboard & Modem Removal



Pull the two keyboard tabs back and flip the keyboard back. (Flip back the keyboard while pressing in the two tabs. The picture only shows the left hand tab being pulled back.)



Remove the three Philips head screws from the heat sync as shown. Then, using the metal "handle", pull the heat shield up and out. It should come out easily.



Remove the two Philips screws from the modem as shown. Then, using small flathead screwdriver, gently pry the modem up from it's connector and detach the modem cable from the modem.



To remove the keyboard connector, insert your forefinger under the plastic grasp, and gently pull up. (If it does not come out easily, gently wiggle it from side to side while pulling up.)





To remove the processor, put the flathead screwdriver on the right hand side of the processor as shown. Then gently pry up until the processor pops out. *Do not use too much pressure. If the processor does not easily come out, simply try another location in the bottom right hand corner. It should be relatively easy to pop out.

Remove the processor as shown, and place on a static free surface.

Ram Replacement

Note – To change the ram in the upper slot you do not need to remove the processor. You only need to for the bottom slot.

Using either a flat head screwdriver or your fingernail, pry back the metal fasteners holding in the ram as shown. Do this on each side. It's easier if you do them at the same time. To install new ram, align the grooves, slide in, and push down.

Hard Drive Removal & Replacement



*Note – Some of the pictures show a Pismo motherboard. The hard drive replacement is the same in both models.

Using your thumb and forefinger, grab the orange cable as shown in the picture, and gently wiggle back and forth until the cable is loose. You should now be able to pull the hard drive out using the plastic tab.



*Note: If the hard drive does not come out easily, then the hard drive sled may be holding it in on the back near the power button. If this is the case, use a flathead screwdriver as shown to pull the cage towards you while lifting from the plastic tab. The hard drive and cage should now come out.

Remove the four black Torx screws (2 on each side) with your Torx T8 Screwdriver. (Available from www.powerbookmedic.com)



Then remove the hard drive cable and hard drive from the hard drive sled. You must now remove the orange cable going to the hard drive. To do this, grab the cable as shown, and gently pull straight up. Note: If you use too much force or do not pull straight up, then you will bend some of the pins and will have to straighten them with a flathead screwdriver later.

Screen Removal and Replacement



Tilt the display back, and pull the power button clutch cover upwards. (This can sometimes take a lot of force. The more tilted the display, the easier it is to take off.)



Using your Torx T8 screwdriver, remove the four flathead torx screws on the back of the unit as shown. (Replacement Note: These four screws have flat heads, not the rounded heads like the other torx screws, do not get them confused.)



Using your thumb and forefinger, grab the inverter board as shown, and gently push it towards the display and up. It will snap right out with ease. Do this on the left hand and right hand sides of the inverter. There are two snaps. Grab the cable from the inverter as shown, and in a gentle wiggling motion, remove the cable from its connector.



Then, grabbing the orange cable as shown, remove it from its connector. Repeat for the multi colored inverter cable.



Now, pull the display back up so it is perfectly vertical. Place your hands on the right hand and left hand side of the monitor, and lift the display out of the casing.

Bottom Casing Removal



Trackpad Removal

Remove the 5 torx screws as shown. (There are 3 long silver screws, and 2 short black ones.



Using your forefinger, slide the black plastic sheet from under the trackpad as shown.



This reveals the orange trackpad cable. Using your thumb and forefinger, gently wiggle the orange connector cable from its connector.



Pull this cable back to expose one silver screw. Using your torx T8 screwdriver, remove this screw along with the visible one to the right of it. (Both are long silver screws.) Also, remove the black torx screw as shown in the picture.



Remove the last two torx screws as shown.



Remove the seven torx screws as shown. (Replacement note, the two longer torx screws go on the far left and right hand side of the area under the trackpad as shown)



Remove the two cables from the Sound AC board as shown. (Note these are harder to remove than previous cables. Using needle nose pliers, and grabbing on to the connector and then pulling towards you may help. If you do this, remember to be gentle.)



The casing will now easily come off. Work your way around the entire unit pulling up on the casing as shown. Start at the back right-hand corner, and work your way around to the back lefthand corner. Be gentle. If it doesn't come up easily, then double check to make sure you didn't miss a screw.

Charger Board Replacement



Remove the two long sliver screws from the charger board as shown.



Then, grab the charger board as shown, and gently wiggle it out of its connector. The board should come out with ease. Place the board on a static free surface.

AC / Sound Board Replacement





Remove the black torx screw as shown.

Pull the rib frame out and fold back as shown.

Then remove the cable coming from the modem port.



Now gently pull the sound board up and out as shown. If the sound board gives you problems coming out, then make sure that the metal fasteners are not clipped to anything. You can use a flathead screwdriver to gently pry them back.)

Logic Board Replacement



Disconnect the Pram battery and fan from their connectors. Remove the small torx screw located next to the fan as shown.



Slide the trackpad release free from the motherboard as shown. (Replacment Note: the spring comes loose simply attach it back to the black connector. Make sure the screen release button works before putting the unit back together.)



Next, remove the nut as shown in the picture. You can either use a small allen bit or needle nose pliers as the screw is not on very tight. If you elect to use needle nose pliers, make sure not to let the pliers slip!



Now grab the board as shown, pull up and out. Make sure to rest is on an anti-static surface.

To reassemble, work backwards from these instructions, paying special attention to our special reassembly notes.

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