The Wayback Machine - https://web.archive.org/web/20040602232620/http://mywebpages.comcast.net:8…
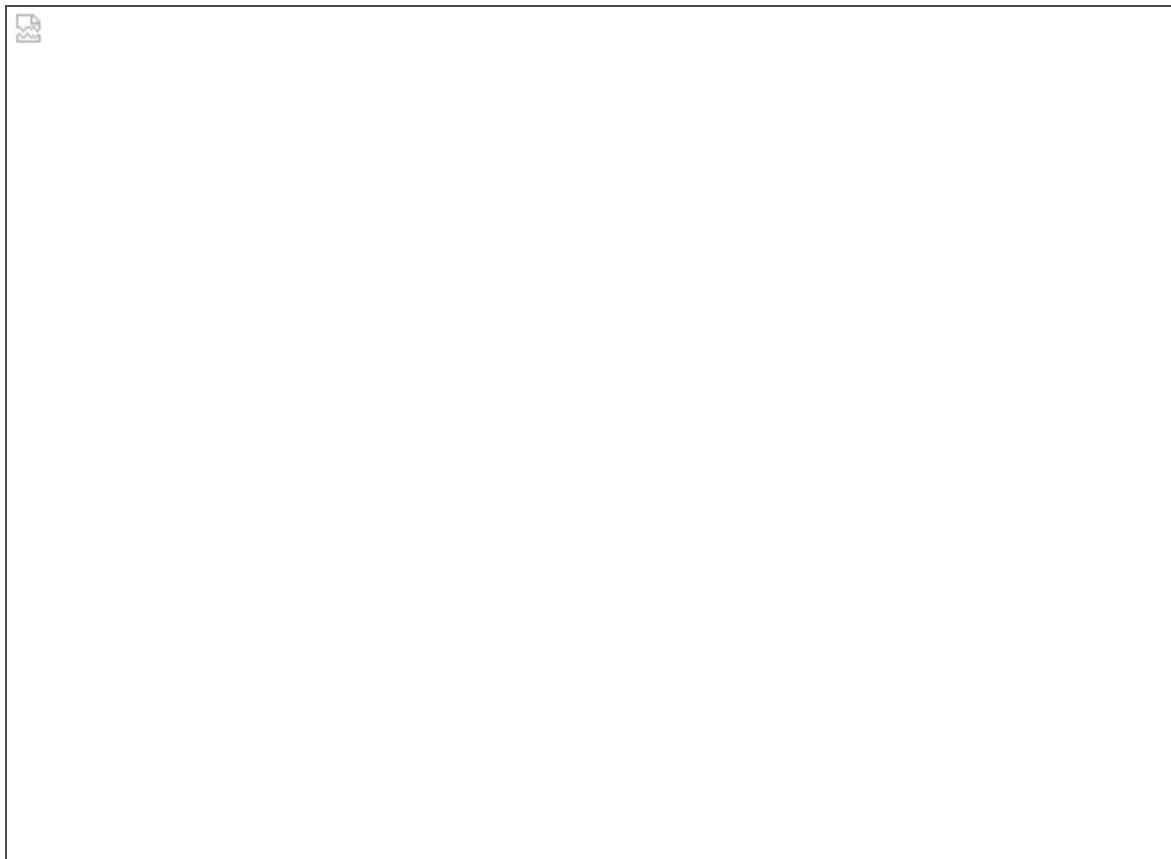
macdan

PowerBooks Lombard (1999) and Pismo (2000) optical Expansion Bay Module drive replacement and interface PCB modification

Using a 'standard' Lombard/Pismo optical drive 'sled' one can install just about any modern 'slim' optical drive into a Lombard or Pismo including CD-RWs and DVD-R 'SuperDrives'. For more infos go to my PowerBook EBM page.

This page details how to replace an optical Expansion Bay Module (EBM) drive mechanism in a PowerBook Lombard or Pismo drive sled. It's really very simple mostly, anyone who can use a small screwdrive can do the basic job. The only tricky part relates to the replacement drive's ATA bus setting, whether it's settable (or set) to bus Master or not. If it's not, the EBM's interface PCB can be modified so the PowerBook sees the drive as bus Master.

Start by removing the four side screws and sliding the old optical drive out of the sled.

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remove screws

PowerBook DVD-ROM Module

remove screws

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Now you're down to the bare sled.

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To be bootable with the cmd-C key-combo,
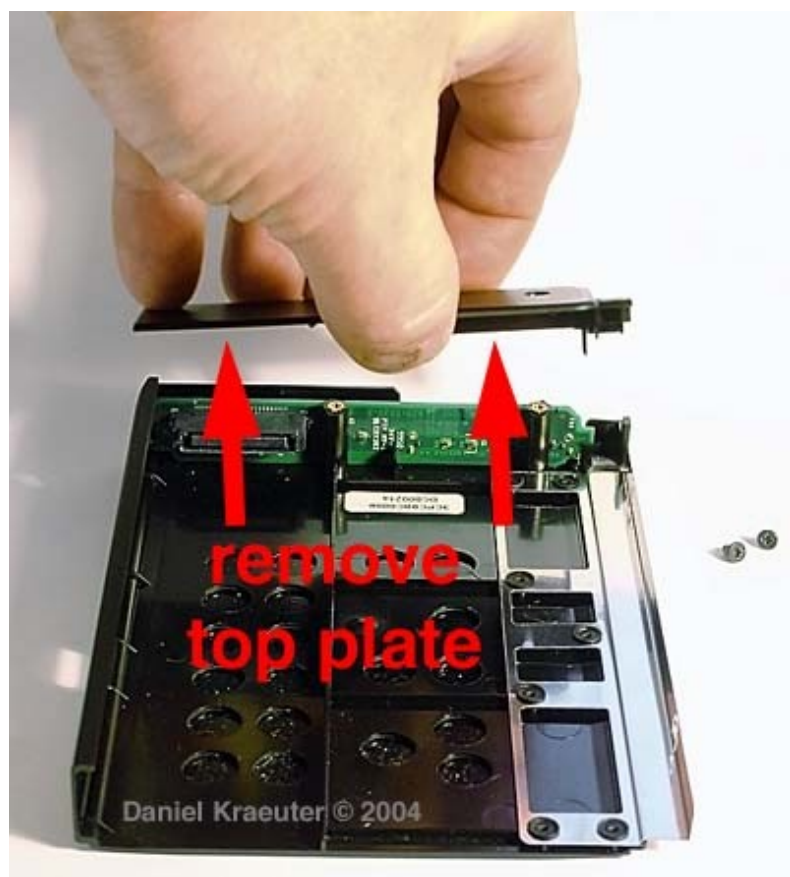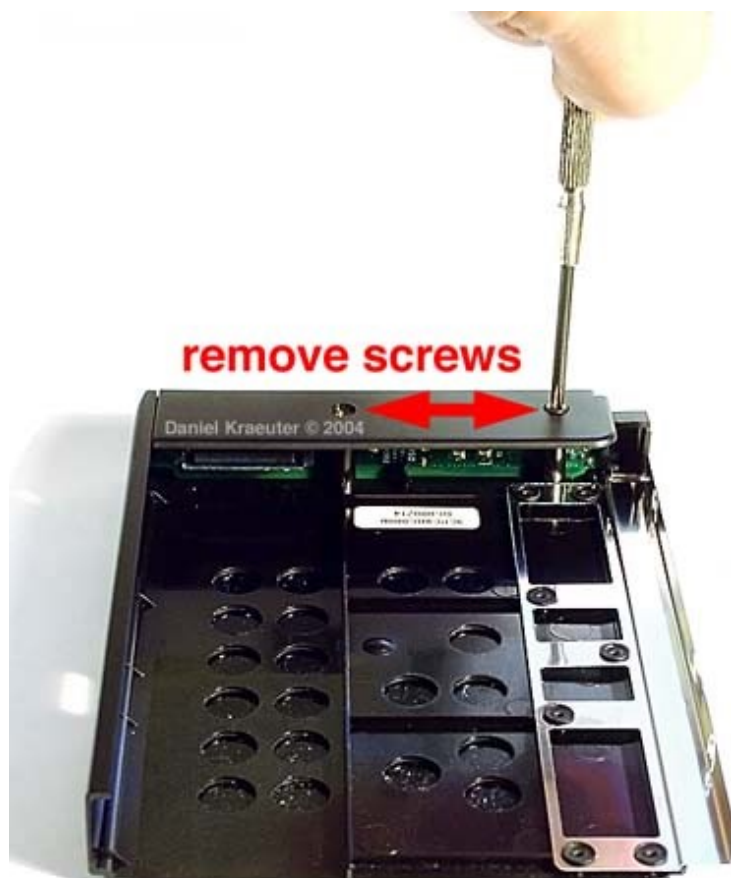an optical EBM drive should be set to bus

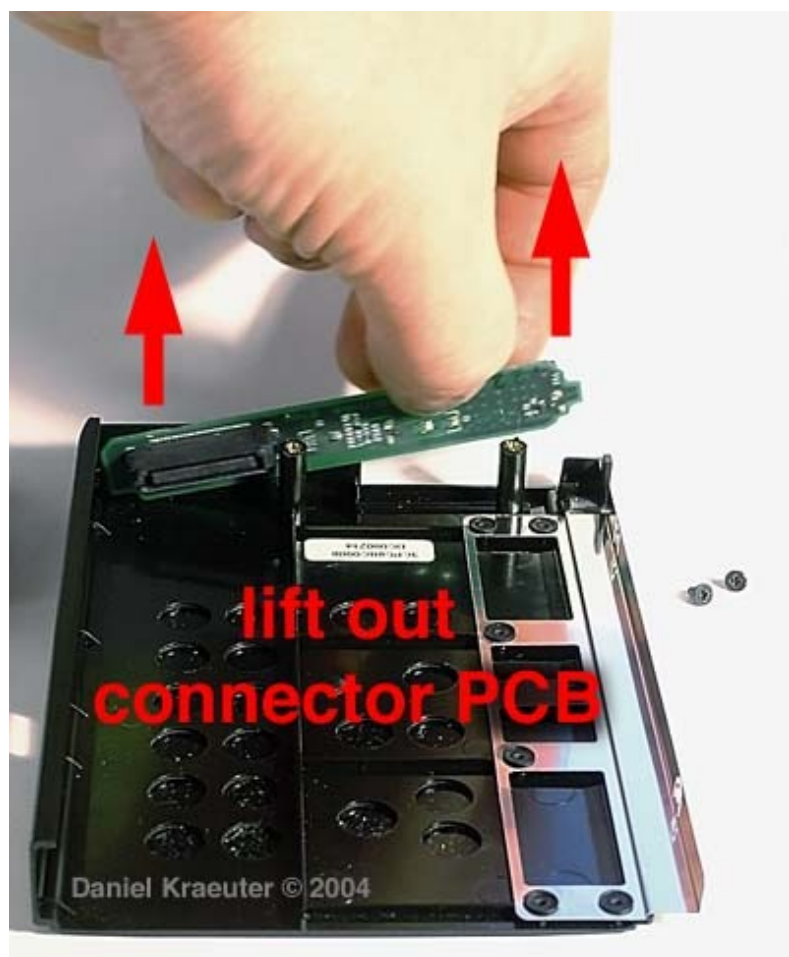Master. Apple OEM drives usually have a Master/Slave/Cable Select switch.

However, many aftermarket drives don't have a switch. If the drive you're using has a M/S/CS switch then you can just set bus Master on the drive itself.
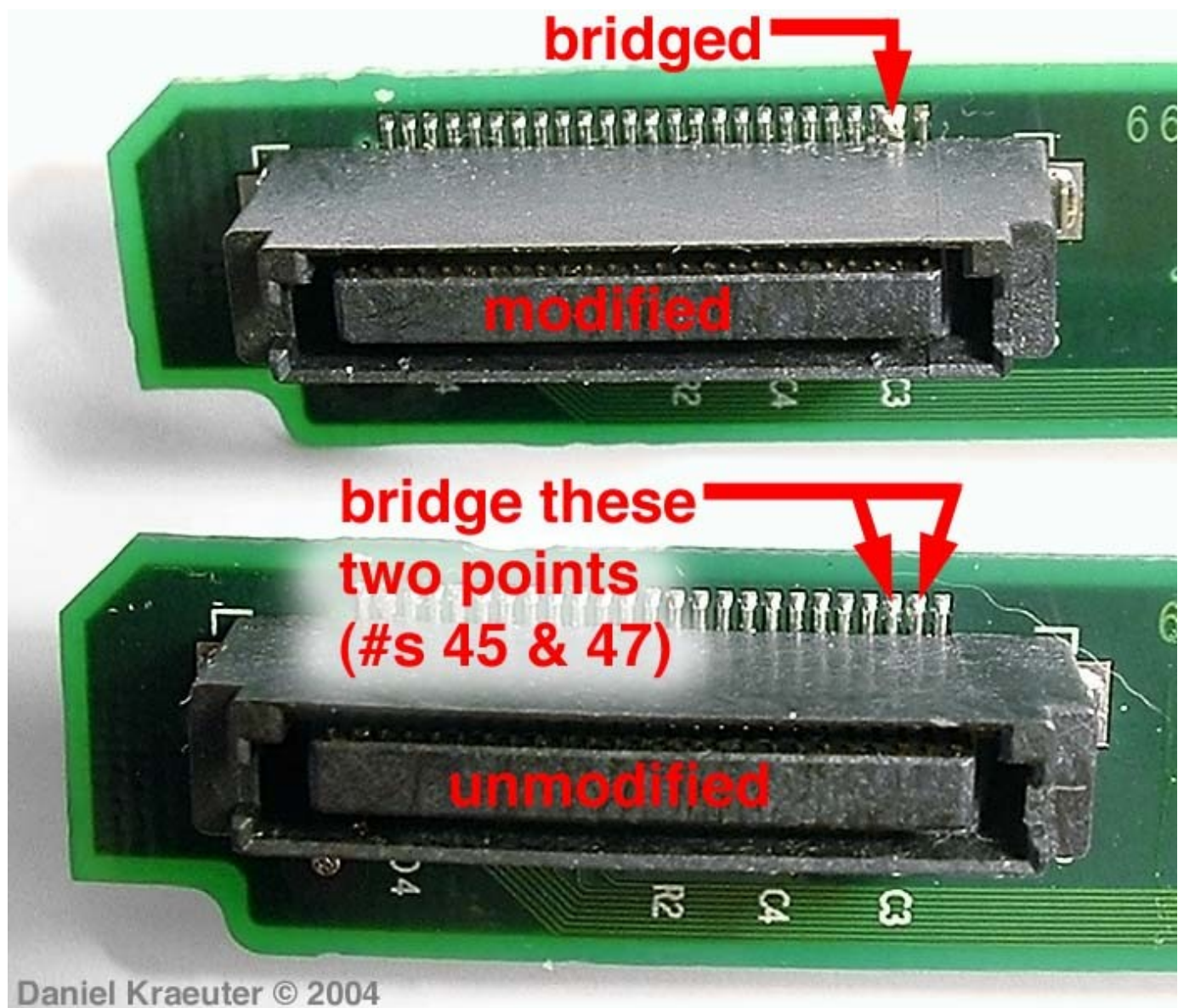
But if the drive isn't settable (or set) to Master you'll have to force the 'Book's EBM bus to see it as bus Master. Easiest way is to short a pair of lines on the interface PCB, simply put a small solder bridge between pins 45 and 47 on the interface PCB's drive connector. This seems to work for most drives but I've had reports that with some drives it may not. In some of those cases, shorting pin 47 to pin 49 worked. Go figure! :-)

If you need to modify the EBM's interface PCB you'll have to pull the PCB from the sled - easy and obvious enough, but for those who'd like some pictures . . . :-)

remove screws

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remove top plate

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To set to bus Master you can short lines 45
and 47 on the interface PCB with a small
solder bridge. If that doesn't work, try
shorting pin 47 to pin 49, 49 is the last pin
on the right side there.

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