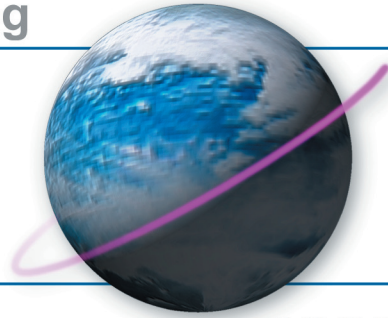


Other World Computing

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OWC Mercury G4 Cube Optical Drive

Installation Instructions

**For the Power Macintosh
G4 Cube 450MHz/500MHz**

Thank you for purchasing an OWC Mercury G4 Cube Optical Drive from Other World Computing!

Please use this reference guide to install your OWC Mercury G4 Cube Combo Drive into your Power Macintosh G4 Cube 450MHz/500MHz.

Before getting started, you will need the following:

- **A well lit clean work space approximately 4'x3'**
- **A soft cloth or rubber mat to place the Cube on while working on it**
- **A #1 Phillips Screwdriver**
- **A Torx T-10 Screwdriver**
- **A Torx T-8 Screwdriver**
- **A blank CD-R disc**



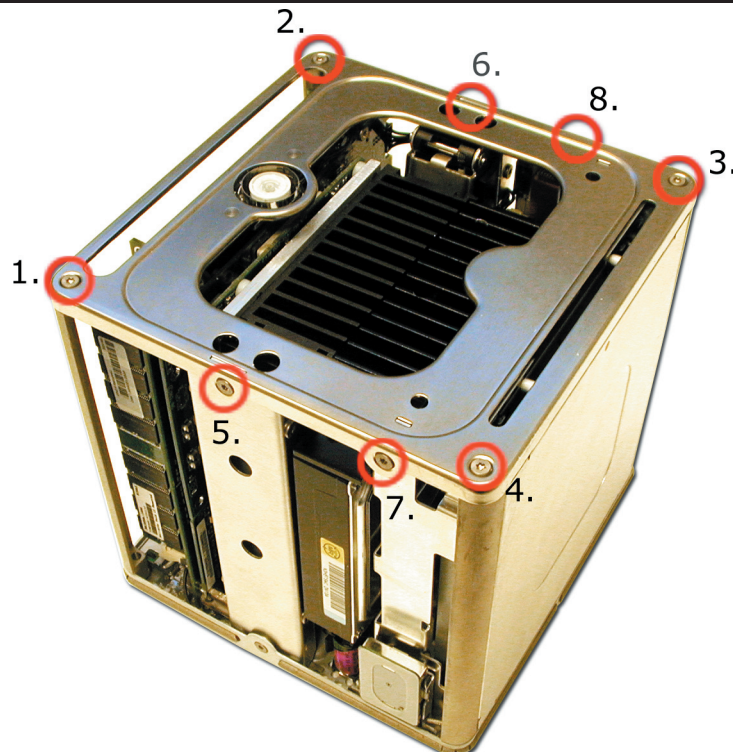
You will need to observe static safe precautions while performing this installation, just like you would for installing memory into your computer. Refer to your original Power Macintosh G4 Cube manual for those steps.

Take a few moments and align all of the components and tools you will need to perform this upgrade so that you don't have to move around much while doing the installation. You will find that if you don't have to reach very far for an item, it will allow you to concentrate on the task at hand.



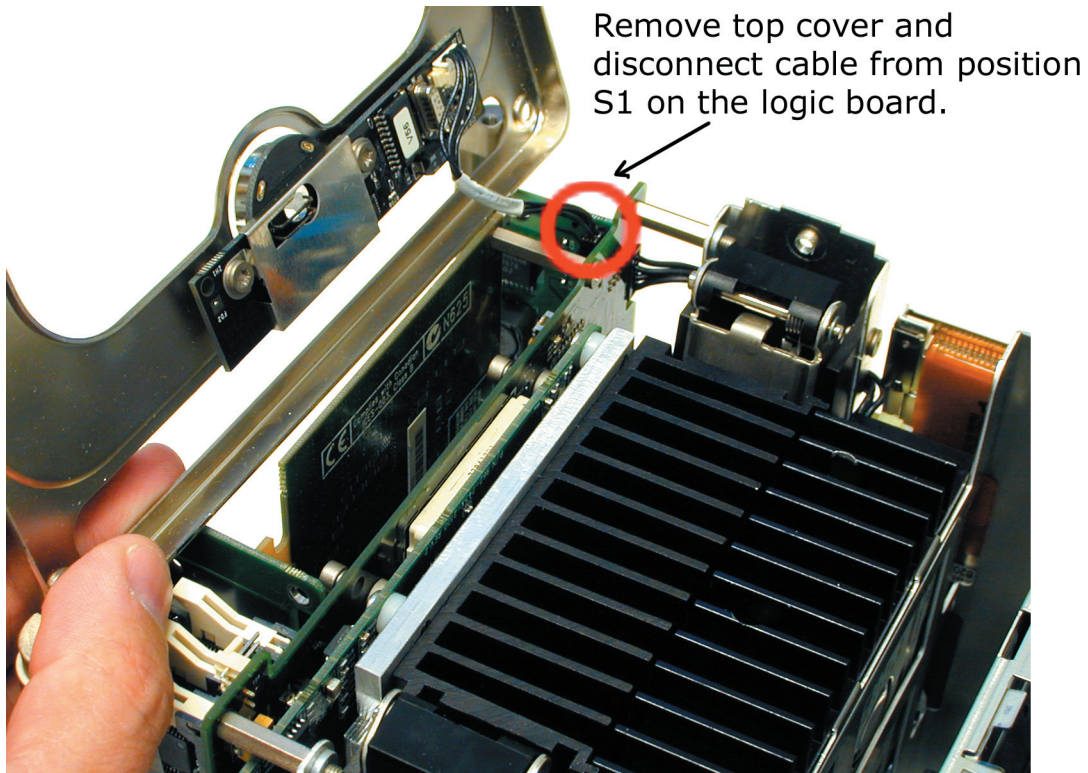
Begin by turning your G4 Cube over on its top. You will want to place the computer on a soft cloth or a rubber mat to keep it from sliding around while you perform this upgrade. A mouse pad works well, just be sure to not scratch the top of your Cube.

Press inward on the core retaining handle and release the locking mechanism as shown.

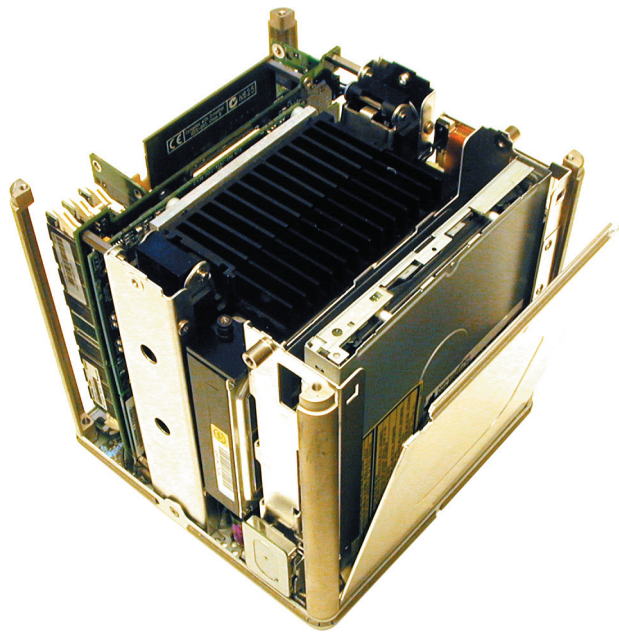


Remove the core from the outer shell and place the shell in a safe location so it will not be in the way or get scratched. Press the core retaining handle back in, locking it in place and turn the core over so the heatsink is facing up as shown.

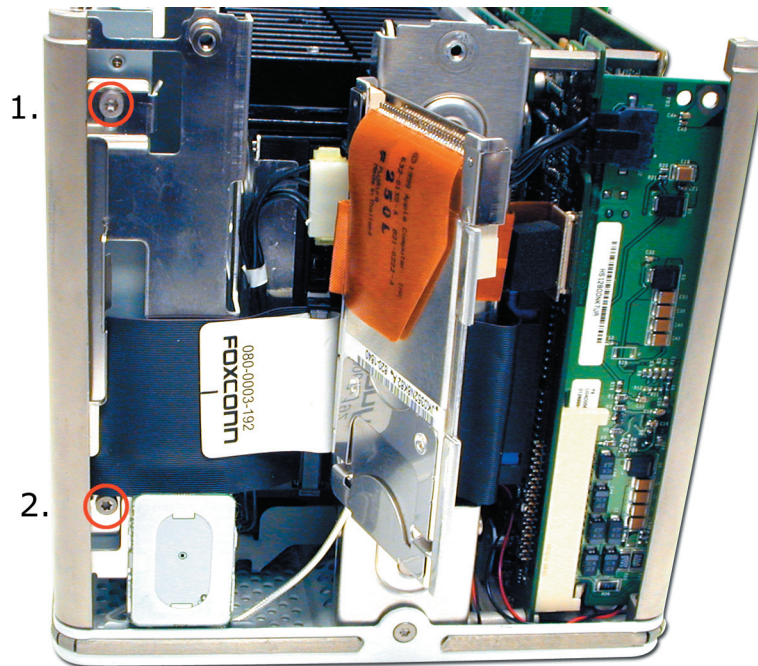
Remove the 8 Torx T-10 screws as shown, note that screw #5 and #6 are longer than the others and extend all the way into the latching mechanism. You will need to replace them back into the same holes when completed.



Gently remove the top cover, lifting it from the side that the optical drive is on. You will notice a cable coming off of the sleep/power switch, which plugs into position S1 on the logic board. Gently remove that cable from the logic board and set the top cover aside in a safe location. The sleep switch plastic cover can fall out of it's housing, if it does, put it back in place.

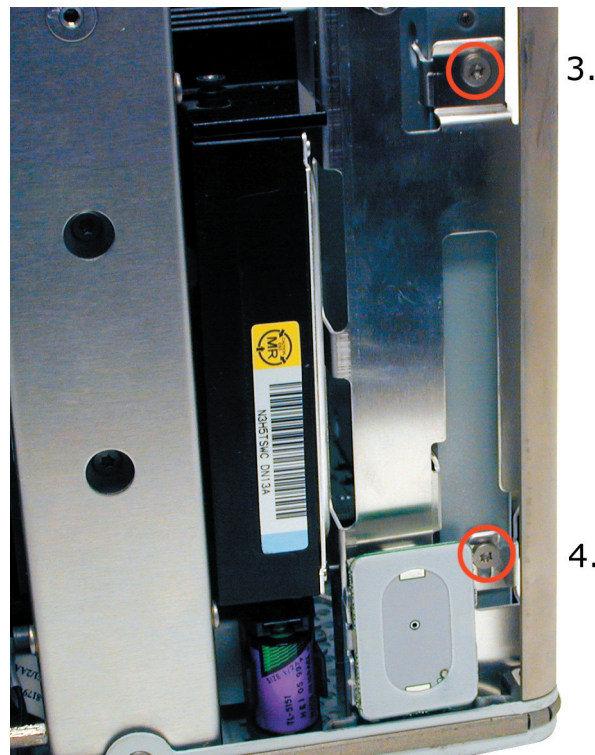


There is a metal cover over the top of the optical drive that you need to remove to gain access to it. Remove the metal cover by gently lifting up on it, releasing it from it's slide in tabs that you will see once it slides free. It slip fits into the bottom of the Cube core and will easily come free once the tabs have been released. Set the cover aside.

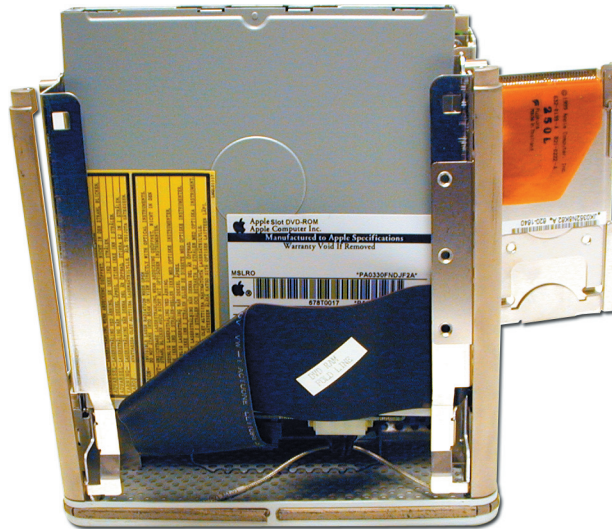


Look at the side of the core that has the Airport card access door on it. If you have an Airport card, you will need to remove it to gain access to this area. The Airport card simply clips in and slides into it's slot, with the antenna plugged into the end. For instructions on how to install or remove the Airport card, refer to your Power Macintosh G4 Cube manual.

Open the Airport access door and unscrew the two Torx T-10 screws shown here. A magnetized screwdriver helps greatly in this situation.



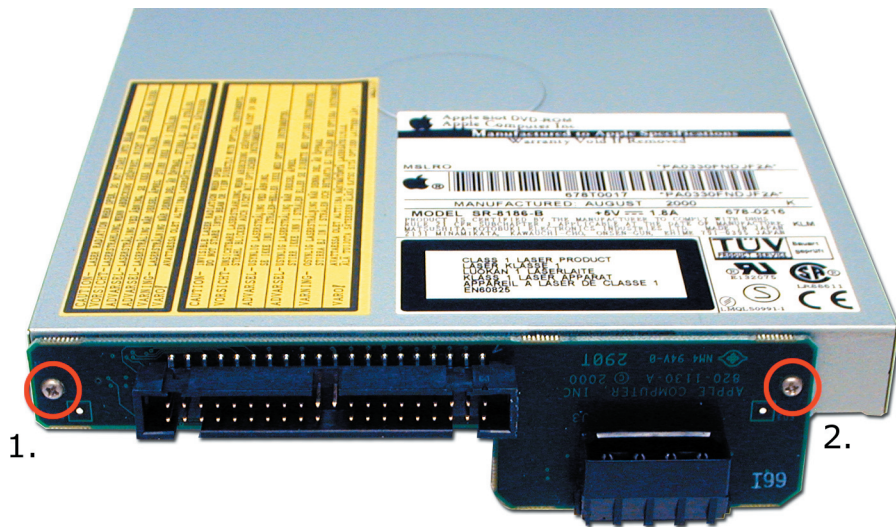
Turn the Cube around to the opposite side and remove the 2 remaining screws that secure the optical drive.



Gently lift upward on the optical drive, it will slide in it's track mount a bit. GENTLY remove the IDE ribbon cable from the backpanel connector. The IDE cable will detach downward toward the bottom of the cube.

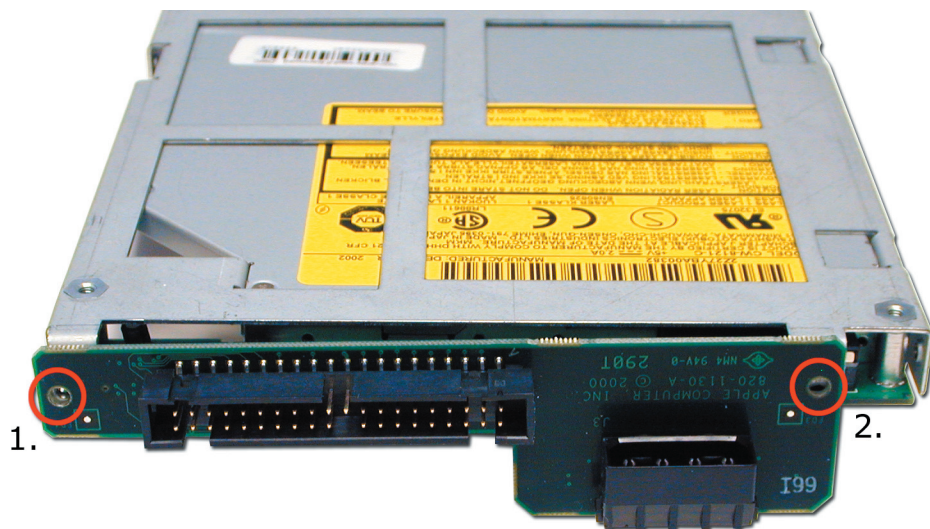
Then, remove the white power connector. That will pull straight toward you, and it will take a gentle rocking motion to get it to release.

These steps require patience to avoid damaging the backpanel connector that attaches to the drive. It is not a sturdy connection and in the next step you will understand why.



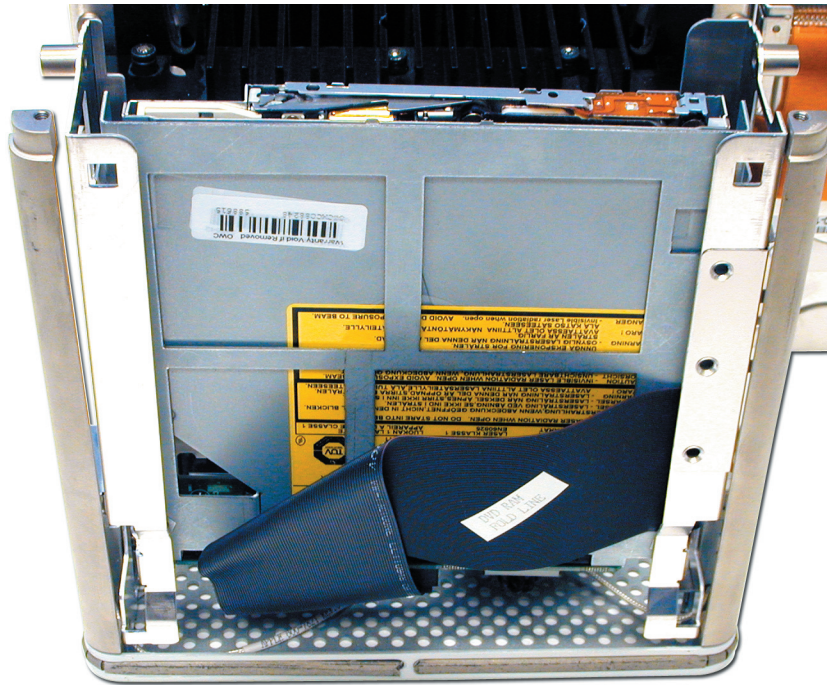
Once the stock optical drive is removed, place it on the table in front of you and look at the backpanel connector. This will need to be removed and transferred to the new drive you're installing.

Notice that the screws that secure the backpanel connector to the drive are VERY small. These screws have a tendency to not hold tight once removed. Unscrew the backpanel connector and set the old drive and screws aside.

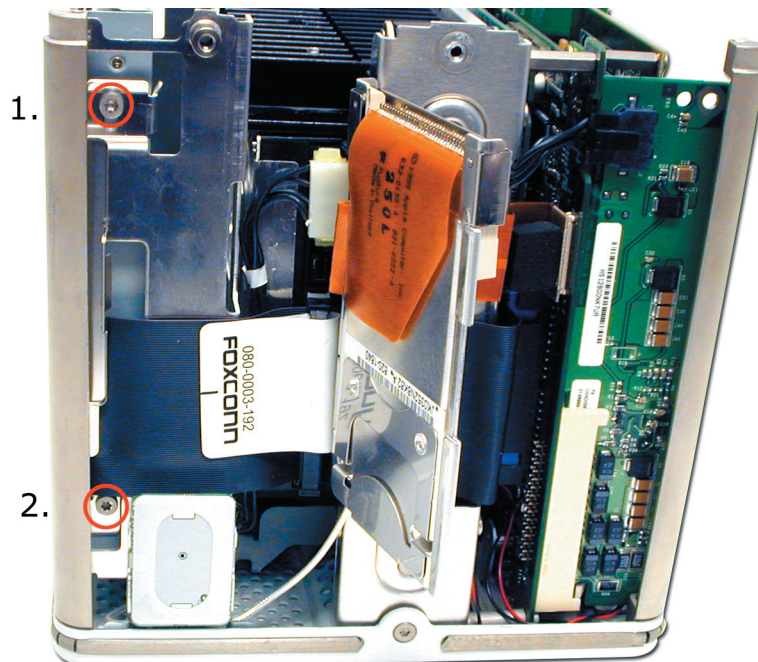


Align the backpanel connector onto the new optical drive as shown and press it's connector into place. You will see that it rocks back and forth a bit on the connector, you will need to insert the included replacement screws to tighten it down properly.

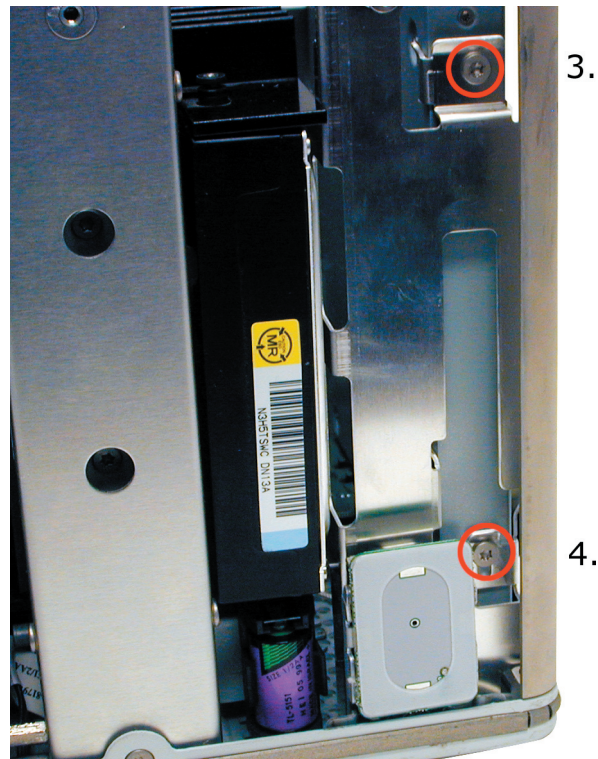
We included these replacement screws, which have a larger diameter and head because they eliminate the problem of the screws becoming loose over time completely.



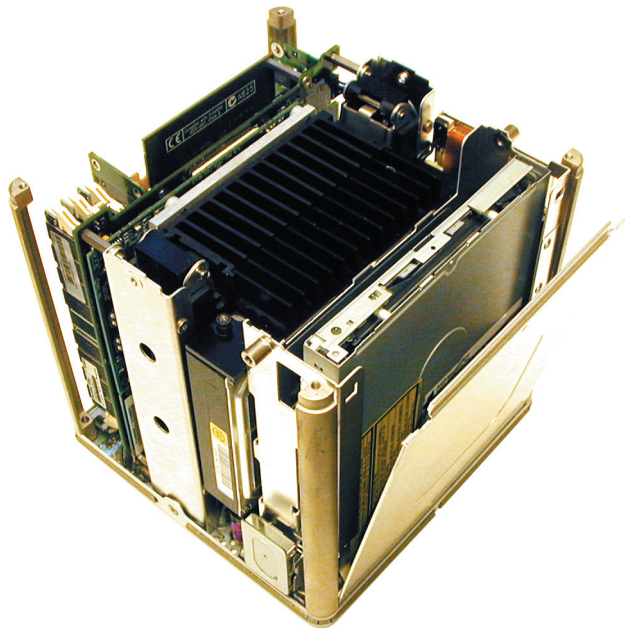
Slide the new optical drive back down into the slot you removed it from, and reattach the IDE and power cords. You may want to do the attachment with the drive lifted up a bit in the slot, it does make for easier access for your fingers.



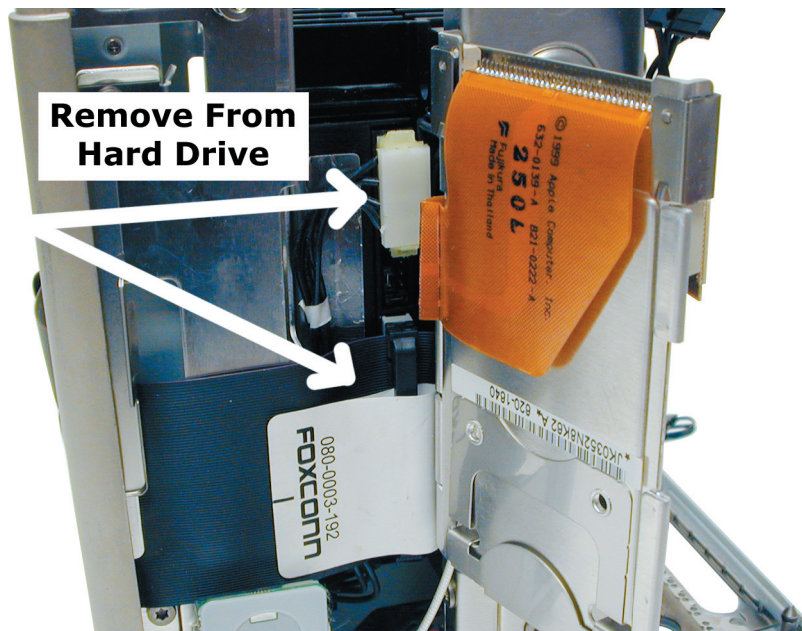
Replace the two Torx T-10 screws from the right side of the chassis. Notice one of the holes is exact sized, and the other is eccentric to allow for adjustment, you won't need to adjust the depth at all, the custom bracketry that the drive uses is perfectly aligned already. Close the Airport access door, and reinsert the Airport card (if equipped).



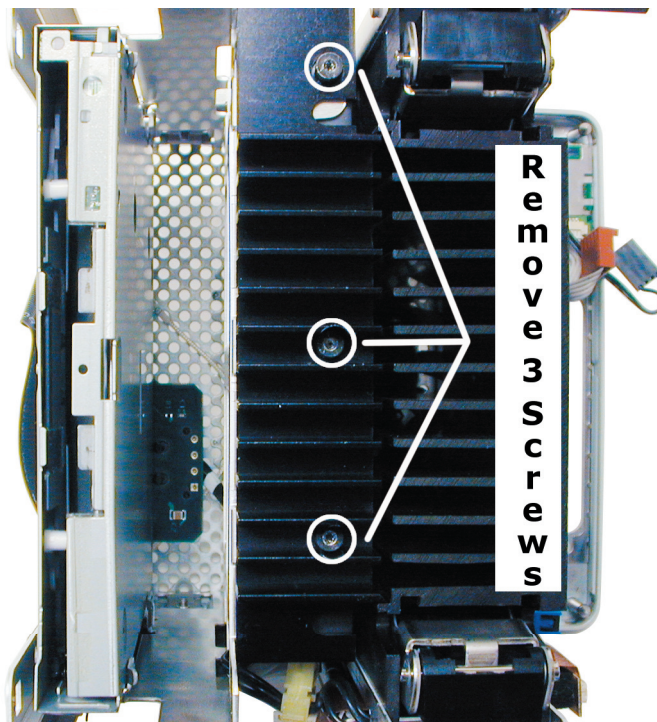
Reinsert the two Torx T-10 screws on the left side of the core.



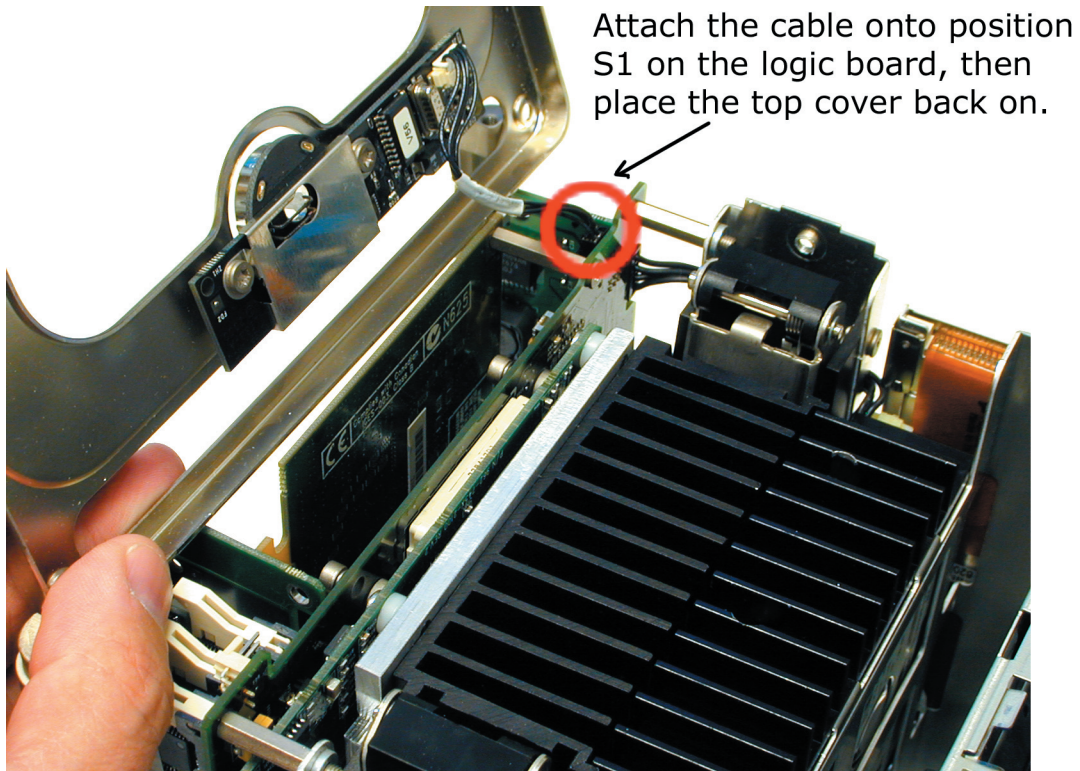
Replace the access panel cover back onto the cube, sliding the two locking tabs back down into place. Make CERTAIN that the cover is fully engaged and not loose at the bottom. If the cover is not fully engaged, the core will become wedged in the chassis and require expert service to repair it.



You may need to change the jumper on the internal hard drive to the Slave position. Some original drives will not need this modification, but you need to remove the drive to determine this. Behind the Airport door, you will see the 2 cables attached to the hard drive. Remove those two cables, the power cable can take quite a bit of wiggling to get it to release.

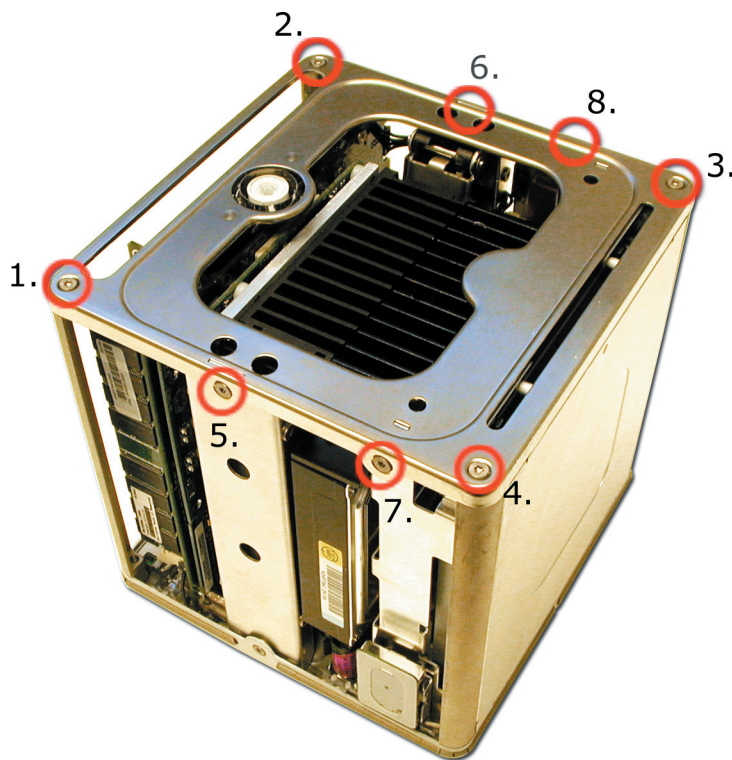


Look at the top of the core and remove the 3 screws from the heatsink attached to the top of the drive, using a Torx T-8 Screwdriver. Slide the drive out of the chassis, and look at the label on the drive identifying how to set it to Slave, usually it is removal of a jumper. Once that is complete, reinstall the drive, heatsink and cables. For a link to diagrams of different hard drive jumper settings, see the troubleshooting section at the end of this manual.



Attach the cable onto position S1 on the logic board, then place the top cover back on.

Retrieve the top cover and attach the sleep switch cable back onto position S1 on the logic board. It is the only connector in that area and can only be attached one direction.



Set the top cover back onto the cube core. You will have to align the corner posts, access cover, and side posts to get the cover to slide back in place. Start inserting the Torx T-10 screws as shown, and do remember that #5 and #6 are the long screws you removed that extend into the latch mechanism. Tighten the screws snug once all have been inserted, but do not overtighten as the aluminum used for the corner posts can bind up and NOT allow the screws to be removed if overtightened.



Retrieve the top Cube shell and place it on it's top on a soft surface. Turn the Cube core over and press the locking handle in to release it, and then gently insert the core back into the shell. Press the latch mechanism down to lock it into place, and reattach all of your cables.

You're ready to try out your new OWC Mercury Cube Combo Drive! Boot the system up and insert a blank CD-R disc - you should be greeted with a dialog box asking what you wish to do with it. The OWC Mercury Cube Combo works natively with all of your favorite CD creation applications!

Troubleshooting:

- If your Cube will not boot, make very sure that you set the internal hard drive to SLAVE.
- For jumper setting information on all popular IDE hard drives, visit our tech center at: http://eshop.macsales.com/tech_center/index.cfm?page=data_inthdd.html
- If your optical drive is not recognized, try resetting the CUDA / PMU reset button on the logic board. You will have to remove the top cover to do so, it is located behind the video card.
- If your optical drive will not eject discs, you may not have the daughtercard attached to the back of the new optical drive fully. Open your Cube back up and make certain the daughtercard is fully seated onto the adapter card on the back of the new drive.
- If you purchased a 4x DVD-R OWC Mercury Optical Drive and are not able to burn DVD-R discs at 4x, try different media. The drive mechanism used is very picky about which media it will burn at the rated 4x speed. At this time the most reliable media has been Maxell, and Ritek (both 4x rated) Also, 8x media seems to work perfect.
- If your drive is not properly recognized as supported, install the latest revision of system update for your OS (10.2.8, 10.3.3, etc.). If that does not work, download Christian Moeller's freeware PatchBurn II software (<http://www.patchburn.de>) - that will fully enable all iApps and finder burning.