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PowerBook Computers: Tips for Transporting (4/95)

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Security: Everyone

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TOPIC -----

I've heard that I shouldn't move my Macintosh PowerBook when it's in the Sleep mode because the heads are not properly parked. Does this mean that I need to shut down my PowerBook before I move it?

DISCUSSION -----

Although the 2.5-inch hard drives used in the Macintosh PowerBook contain a landing zone with an actuator latch feature, Apple's official position is that a PowerBook should be shut down before being transported.

In general, it's okay to transport PowerBook computers while they are asleep, and here's why (note that this same information applies to essentially all modern hard disks).

- The hard disk is the primary component that's vulnerable to damage when transporting a PowerBook. The main concern is vibration (jarring, jiggling, knocking, dropping).
- When the PowerBook hard disk is not spinning, it is locked and is as safe to move as it's ever going to be. In this respect sleep and shutdown modes are identical.
- The only thing to be very careful of when moving a PowerBook (or any other hard disk) is that it not be jarred while the hard disk is spinning up or spinning down. During this period the hard disk is much more vulnerable to damage from vibration.
- After the hard disk is fully up to speed, it is still susceptible to shock or vibration damage.
- When moving a sleeping PowerBook (or a PowerBook 100 even when shut down,

unless you've flipped off the indented battery disconnect switch), there is a slight danger of accidentally hitting a key that would wake up the PowerBook and also power-up the hard disk. Make sure that your PowerBook is solidly closed so it can't accidentally start up.

- If you are running totally off a RAM disk and your system is asleep, wake-up would not spin up the hard disk anyway. So, transporting a sleeping PowerBook that is running totally off a RAM disk is relatively safe.
- Using a PowerBook in a moving vehicle is a risk that the Apple PowerBook manual neglected to mention. Due to the nature of use while travelling, the repeated spin ups and downs of the drive can put it at more risk than in desktop operation. Additional caution should be exercised when using the PowerBook while moving.

Unfortunately, you can't guard against all events. It should really take a determined knock at just the right time to do real damage. If you are reasonably careful (and keep in mind when the PowerBook is most vulnerable), you should be able to travel with your PowerBook (asleep or not) just fine.

Running a PowerBook entirely from a RAM disk is much safer in this case.

For more information on the actuator latch feature, use "PowerBook and Head-Parking" as a search string.

Article Change History

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- 03 Apr 1995 - Noted that drive can be damaged when spinning also.
 - 06 Feb 1995 - Reviewed for technical accuracy.
 - 11 Dec 1992 - Added info that it's okay to move a sleeping PowerBook.

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