

PowerBook: Resetting Power Manager (10/96)

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TOPIC -----

What is the proper way to reset the Power Manager on each type of Macintosh PowerBook computer?

DISCUSSION -----

*** WARNING ***** WARNING ***** WARNING ***** WARNING ***** WARNING ***

All of the following Power Manager Reset procedures for all of the Macintosh PowerBook computers will permanently remove a RAM disk, if present, and all of its contents.

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What Causes The Power Manager To Need Resetting?

While there are several reasons a PowerBook may need its power manager circuitry reset, most of which involve some kind of power interruption to the unit, there is one very common cause - improper use of the AC Adapter.

The PowerBook power manager circuitry is most often "corrupted" by the AC Adaptor not being plugged into the PowerBook in the proper order. The AC Adapter should ALWAYS be plugged into the AC (wall) outlet before it is plugged into the PowerBook itself.

If you are using a power surge protector bar, make sure the power bar is powered on (usually has some kind of indicator light) before you plug the PowerBook AC Adapter into it. Also never turn off the power to the PowerBook by turning off the power bar's switch.

PowerBook 100

Step 1

Flip the battery contact switch on the rear of the unit to the down position. Step 2 ____ Simultaneously press and hold the rest and interrupt buttons on the side of the unit for 15 seconds. PowerBook 140-180c and 500 Series ------Step 1 _____ Remove the AC Adapter and the battery. Step 2 ____ Let the unit sit without power connected for 3 to 5 minutes. Step 3 _ _ _ _ _ _ Depending on which PowerBook model you have, do one of the following: PowerBook 160, 165, or 180 _____ The previous steps should reset the power manager almost all cases on these models. However, in some cases, the power manager may not be completely reset. Should this be the case, continue on to the next troubleshooting step below. PowerBook 140, 145, and 170 _____ Use two paper clips to simultaneously press and hold for approximately 5-10 seconds both recessed buttons (commonly known as the reset and interrupt buttons) located next to the power button on the back panel of the PowerBook. PowerBook 150 _____ Step 1 ____ Remove the power adapter and battery from unit. Step 2 ____ Push the reset button in the back of the unit with a paper clip and hold for 5 to 10 seconds. Step 3 ____ Plug the AC Adapter into the AC (wall) outlet. Step 4 ____

Attach the power adapter and push the reset button in back again, but just briefly. You should hear a small pop from the speaker; do not be concerned. Step 5 ____ Push main power button in back (large exposed button). The unit should power up. Step 6 ____ Apple suggests charging the battery for at least 8 hours before running on battery power. If the PowerBook powers on, the battery may be reinserted. If it fails to start, the PowerBook may require service. PowerBook 500 series _____ Press the Command, Option, Control, and Power On keys simultaneously. If the computer is on when these keys are pressed, the system will turn off. If the keys are pressed when the computer is turned off, nothing obvious will happen. In both instances, however, the power manager will be reset. PowerBook 200 and 2300 Series _____ Follow this procedure on the PowerBook 200 and 2300 (Duo) series computers: Step 1 ____ Press and hold the power button on the rear of the 200 or 2300 series computer for 30-45 seconds.* * Note: Authorized Apple Service technicians may remove the internal back up battery to reset the power manager. ** Caution: If you are not an authorized Apple Service technician, please note that removing the internal backup battery is not a simple procedure and is not recommended. If anything is damaged in your attempt to remove the battery, it will not be covered under warranty. ** PowerBook 5300 or 190 PowerBook 5300 & 190 Series have two different ways to reset the power manager. PowerBook 5300 or 190 Resetting the PRAM _____ Resetting ("Zapping") the Parameter RAM (PRAM) when the computer is shutdown also resets Power Manager (also called the "PG&E"). This process resets both the power manager and the Parameter RAM. Step 1 _____ Shutdown the PowerBook, not restart.

Step 2 ____ Turn the PowerBook on and hold down the all of the following keys at the same time: Command-Option-P-R keys. Step 3 ____ There will be only a single chime, then the screen will go dark and the green sleep light will be on solid. •• NOTE: THE CHIMES MAY REOCCUR ONCE OR THEY MAY REOCCUR THEN SCREEN GOES DARK. THERE CAN BE VARIABLE RESPONSES AT THIS STEP. .. Step 4 ____ Press the Reset button one more time and it should startup after a brief pause. •• NOTE: IF THE POWERBOOK POWERS OFF AND THE SLEEP DISPLAY LIGHT STAYS ON SOLID GREEN - NO BLINKING, PRESS THE RESET BUTTON ONCE. .. Step 5 _ _ _ _ _ _ If the PowerBook does not turn on from the Reset button, turn the PowerBook on by pressing the Power-On key in the upper right corner of the keyboard. PowerBook 5300 or 190 That Won't Power On _____ This process resets both the power manager and revives PowerBook 5300 and 190 computers which do not initially turn on. In other words, reviving a machine that appears to be a "dead" unit. Step 1 ____ Unplug AC adapter and remove battery. Step 2 ____ Press and hold the Reset button on the back of the machine (under the external video port) for about 45 seconds. Step 3 ____ Plug the AC Adapter into the AC (wall) outlet. Step 4 ____ Attach only the AC Adaptor to the PowerBook (don't put in the battery). Step 5 ____ Press the Reset button one more time and it should startup after a brief pause. *** WARNING ***** WARNING ***** WARNING ***** WARNING ***** WARNING ***

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The Power Manager code can be fully purged by having an authorized service technician disconnect the internal backup battery and let the unit sit for 1 minute with all power removed (the battery pulled and the AC Adapter disconnected). This forces the PowerBook to reload a fresh copy of the code from the system software.

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