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PowerBook Batteries: Types and How To Recycle (2/96)

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TOPIC -----

This article describes the various batteries used in Apple portable products and how to properly dispose of a failed battery.

DISCUSSION -----

Apple utilizes lithium, lead-acid, nickel-hydrate, and nickel-cadmium batteries in our portable products. These batteries should be returned to Apple for recycling or proper disposal.

Customers can take their failed batteries to an Apple authorized service provider who can utilize the Apple Direct Air Shipping and Handling Program to return the failed batteries. Customers may not return the batteries themselves. If they do, it will be returned to them.

Authorized service providers may send failed batteries to the following address:

Apple Computer, Inc.
NiCd Battery Recycling
3011 Laguna Blvd.
Bldg. A
Elk Grove, CA 95758

Lithium Batteries -----

Lithium batteries require disposal when "dead," but you cannot throw them away. In addition to being potentially explosive, lithium is water reactive, requiring these batteries to be disposed of as hazardous waste. Therefore, after removing a "dead" battery from a board, clip off the lead wires (necessary for soldered batteries) and place the battery into the zip-lock wrapper that the replacement battery was taken from. Mark the battery "dead" and return it to Apple, where it will be disposed of following EPA guidelines.

Lead-Acid Batteries -----

The Macintosh Portable and Macintosh PowerBook 100 main batteries are

sealed lead-acid batteries. These batteries, which contain hazardous materials (lead and sulfuric acid), should not be thrown away with regular trash. Send the Macintosh Portable and PowerBook 100 batteries to Apple for recycling. Return batteries that are not physically damaged in the same packaging that new batteries were received in. If the batteries are physically damaged (for example, leaking), do not return them to Apple. Dispose of them according to your local ordinances.

Nickel-Cadmium Batteries

The Macintosh PowerBook 140 and 170 main battery is nickel-cadmium (NiCad). The battery, which contains hazardous materials that can be reclaimed, should be returned to Apple for recycling. Return batteries that not physically damaged in the same packaging that the new batteries were received in. If the batteries are damaged, do not return them to Apple. Instead, dispose of them according to your local ordinances.

** WARNING **

Contacting the +/- terminals with metal objects such as paper clips or key chains can cause burns or start a fire. Always store the battery in its protective cover when not in use.

Nickel-Hydride Batteries

The Macintosh PowerBook Duo batteries are nickel-hydride (NiHy). These should be returned to Apple for recycling. Return batteries that are not physically damaged in the same packaging that the new batteries were received in. If the batteries are damaged, do not return them to Apple. Instead, dispose of them according to your local ordinances.

Article Change History:

- 19 Feb 1996 - Emphasized that only dealers are allowed to mail in batteries.
 - 29 Apr 1994 - Clarified use of address is for authorized service provider only.
 - 15 Mar 1994 - Added address to send batteries to.
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