



PowerBook Battery Matrix





Improving Battery Performance

When you replace a battery, replace all batteries. Mixing new and used batteries in the PowerBook weakens the new ones. If you are using rechargeable batteries, replace batteries that are running low with a complete set of fully charged batteries.

Batteries work best when positive and negative contact surfaces are clean. If any dirt appears on a contact surface, clean the surface by gently rubbing it with a clean pencil eraser or a soft cloth.

Apple portable computers use three types of batteries:

- Sealed lead acid (SLA)
- Nickel cadmium (NiCad)
- Nickel metal hydride (NiMH)





Table 1

	Macintosh Portable	PowerBook 100	PowerBook 140/145/170	PowerBook 145B/160/165/180
Part Number	076-0376	661-0782	661-0754	661-0789
Model Number	M5137	M3053	M5417	M5653
Battery Type	SLA	SLA	NiCad	NiCad
Ampere Hours	5.4	2.3	2.5*	2.8*
Fully Charged Voltage	6.50	6.00	6.75	6.75

* Systems also compatible with Model M5654 2.9 Ah battery.





Table 2

	PowerBook 150/165c/180c	PowerBook 190/190cs	PowerBook Duo 250/270c	PowerBook Duo 280
Part Number	661-0013	661-0055	661-1735	661-1735
Model Number	M5654	M1906	M1499†	M1499†
Battery Type	NiCad	NiMH [^]	NiMH (Type 2)	NiMH (Type 2)
Ampere Hours	2.9	1.8	1.4	1.4
Fully Charged Voltage	6.75	10.80	13.50	13.50

† Type 2 and Type 3 batteries are both model M1499. However, the batteries are labeled “Type 2” or “Type 3” to distinguish the type of battery.

[^] These systems use the PowerBook Intelligent Battery.





Table 3

	PowerBook Duo 210/230/ 280c/2300c	PowerBook 520/520c/540/540c 5300/5300cs/5300c/ 5300ce
Part Number	661-0053	661-0055
Model Number	M1499†	M1906
Battery Type	NiMH (Type 3)	NiMH^
Ampere Hours	1.6	1.8
Fully Charged Voltage	13.50	10.80

† Type 2 and Type 3 batteries are both model M1499. However, the batteries are labeled “Type 2” or “Type 3” to distinguish the type of battery.

^ These systems use the PowerBook Intelligent Battery.

