

Traveling with a battery in your wheelchair or scooter

Both automobiles and electric wheelchairs (or scooters) use batteries, but not all batteries are the same or used for the same purpose. Automobiles use a battery to start the engine to get the car underway, while wheelchairs use a battery as their continuous source of power. For this reason, traditional car batteries will not work very long, or at all, in a power wheelchair. Instead, power wheelchairs and scooters need a "deep-cycle" battery capable of delivering hours of continuous power.

The "deep-cycle" cousin of the traditional automobile lead-acid, "wet-cell" battery can also be found on a power wheelchair. Wet-cell deep-cycle batteries on power wheelchairs is not the type of battery we recommend for any sort of travel. Traditional wet-cell batteries contain sulfuric acid that can spill from a tilted battery or leak from a hairline crack in the battery case. Any acid that escapes from a wet-cell battery will corrode your wheelchair, your wiring, or maybe some important part on an aircraft. That is why most air carriers refuse to carry spillable wet-cell batteries when they remain attached to a wheelchair. Travelers should expect airlines to remove the wet-cell battery(s) from their wheelchair and seal them in a chemical-proof, spill-proof container. At the other end of the flight the wet-cell batteries and the wheelchair will be delivered separately...most often left on the jetway for you to reassemble.

For traveling, we recommend sealed dry-cell or gel-cell batteries. These batteries also contain lead plates and sulfuric acid but since they are sealed, their acid can not escape, cause damage, or crash a plane. If the case around the battery cracks, the material inside is dry, or like Jello®, and takes a long time to leak. Gel and dry cell batteries may be a little more expensive but, for their ease of traveling on aircraft and their low potential for leaking acid on your wheelchair or an important airplane control, they are a worthy investment.

An important note: If you are changing battery types from wet-cell to dry-cell or gel-cell, you must have a battery charger designed for your new type of battery. Dry-cell and gel-cell batteries require a special charger.

When traveling on an aircraft, we suggest making it easy for the airline personnel to disconnect the main power wire from the battery. Hard to find and hidden connections invite the airline staff to remove the entire battery box. This may mean some disassembly of your wheelchair at the beginning of your journey and could mean that removed parts might not make it to the destination with your wheelchair and battery. If the main power wire connects directly to the side of your battery box make a small label covered by clear tape reading "Disconnect Battery Here." If the main connections are hidden, have a repair shop install new "quick lock / quick release" connections in a visible location. Mark each side of the "quick lock / quick release" connection with a small label reading "Disconnect Battery Here." Colored electrical tape (available from most hardware stores) wrapped around the wire near the "quick lock / quick release" connection also helps to identify the power disconnect point.

When it comes to traveling outside of the USA, a little more rocket science is needed to charge your battery. The standard US electrical current is 110 volts while European standard current is 220 volts. The discrepancy in current means that plugging your 110 volt battery charger into a 220 volt European power-house outlet will overwhelm your charger with an extra 110 volts, overload your circuits and destroy your wheelchair. To prevent this you must use a "step-down converter" that will step-down, or reduce the 220 volts European current to 110 volts. HOWEVER...not just any step-down converter will work. The converter units are designed to handle different power requirements. Less expensive units can be used for electric shavers and CD players, heftier models for hair dryers while beefy commercial models are for wheelchair batteries. We recommend contacting the manufacturer of your wheelchair to learn their recommendations and power requirements. Many manufacturers offer their own products, or can recommend products from other manufacturers that will not void the warranty on your wheelchair. REMEMBER...there are no inexpensive "deals" when it comes to purchasing a step-down converter for a power wheelchair. Without a properly rated step-down converter, your first attempt at charging your battery in Europe will be your last!

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