

## **Guide to Mobility Scooter Battery Maintenance**

To ensure long life and maximum distance with your mobility scooter, look no further than the performance of its battery as a key component to getting you where you want to go. Generally, a battery will need to be replaced in two to three years, after 300 to 400 cycles of charging and discharging. A high-quality battery that is properly charged and maintained will go a long way toward helping you get the most from your mobility scooter. Failing to take the proper maintenance and charging procedures could shorten the battery's life and even leave you stranded with an inoperable mobility scooter. Always have a charger on hand or may be an idea to keep an extra, fully charged battery on hand in case of emergencies.

Before you begin charging your mobility scooter's battery and embark on a maintenance program, you should carefully read the owner's manual. Manufacturers may use different kinds of batteries, and they may have specific recommendations for the make and model that powers your mobility scooter. Some batteries require special setup and charging before their first use. The manual helps you get started in the right manner.

To help you enjoy years of good battery life, consider our guidelines, which we organize into four categories:

### **Charging Your Battery**

It sounds simple: If you keep your batteries fully charged, you'll enjoy reliable performance, optimal power and maximum battery life. But managing through some of the little details, such as when and how to charge your batteries, can impact performance.

Here are tips to help you:

- Protect your batteries from extreme heat and cold. It can permanently damage them.
- Use the charger that came with your battery for the safest and most efficient charging. Chargers are matched to the type and size of batteries.
- Using a charger which is not Amp matched for the size of your batteries can reduce the life of your batteries and can also cause the integral rated fuse to blow.
- If you are not going to use your mobility scooter for a few days, fully charge your battery then disconnect the battery from the scooter. Remember to periodically check the level of charge and always charge the batteries the night prior to using the scooter.
- Do not charge your batteries for more than 14 consecutive hours. Overcharging does not improve performance and actually can have a negative effect.
- If you use your mobility scooter less than once a week, charge its batteries at least once every two to three weeks for a minimum of eight hours. If you only use the scooter for in the home or very short distances check the battery indicator display on your scooter while traveling to get a good indication of the level of the batteries. If the indicator still shows a full charge while pulling away from a stop you may not need to charge the battery unless you plan on using the scooter the next day for its full range capability.
- If you use your mobility scooter every day for significant distances, get in the habit of charging its batteries when you are finished for the day..
- Do not leave your battery charger plugged in to the wall outlet or scooter constantly when the scooter is not in use.
- Do not use an extension cord with your battery charger; always plug your charger directly in the wall outlet.



## **Storing Your Battery**

The life of your battery is affected by how it is stored. If you store your mobility scooter in a damp place, for example, moisture build up on the terminals could reduce the effectiveness of the battery and or charging. Here are ways to get the most of your battery through good storage techniques.

- If you plan on not using your scooter for an extended period, disconnect the battery from the mobility scooter and make sure it is fully charged.
- Periodically check your batteries condition once a week by placing the battery pack on your scooter and by visually checking the battery gauge on your scooter by turning on the scooter and driving the scooter for a while. Do not allow your battery gauge to drop in the red section of the gauge.
- Store your mobility scooter batteries in a cool, dry place.
- Avoid storing your scooter in places where it can be exposed to extreme temperatures, either too hot or too cold. Where possible take your battery pack inside.
- Never charge a battery that has been inadvertently exposed to freezing temperatures until you allow it to return to room temperature.
- During storage, periodically charge the batteries at least once a month for larger batteries. Two to three weeks for small type batteries

## **Cleaning Your Battery**

Thankfully, you will not have to clean your battery too often. It usually is encased in a place where it is not directly exposed to the elements. But you should periodically check for any potential issues and follow these tips:

- Wipe down the battery with a soft cloth if you notice dirt or condensation on the outside due to damp weather, or if it gets wet.
- Make sure the terminals are clean and free from acid build up; also keep the terminals well greased, as this can help prolong battery life

## **Optimizing Your Battery Life**

Think about it this way: Driving conditions affect battery life, as winding surfaces, carpet, hills and even weather can affect how much power your mobility scooter needs to get you where you are going. Conditions rarely are ideal, but you can take a few steps to keep your battery power strong.

- Limit the baggage weight on your mobility scooter.
- DO NOT carry any passengers as this could cause a safety issue and invalidate your scooter and battery warranty
- Avoid steep inclines greater than specified in your user manual.
- Maintain an even speed on your mobility scooter.
- Avoid stop-and-go driving.
- Make sure the battery is fully charged before you drive for the day.
- If possible, plan your route so you take as many hard, flat surfaces as possible.
- Maintain the proper tire pressure on your mobility scooter (if applicable)
- Remember to keep an extra, fully charged battery on hand for emergencies

## Warning signs your battery needs replacing

**You're getting less and less range with your mobility scooter despite starting with the full charge.**

- Your scooter battery indicator light shows less than a full charge even though you are charging it the recommended number of hours, or the indicator light rapidly declines once you put the mobility scooter to use.
- You're losing speed or power or are experiencing delayed reactions with your mobility scooter despite having a full charge
- Improper use or improper care of a mobility scooter can also have an adverse effect on your scooter batteries. Not obeying the manufactures maximum weight capacity or using your scooter on surfaces not recommended by the manufacture such a grass, loose gravel or prolonged inclines can cause damage to your scooters transaxle. Excessive side to side movement in your transaxle is a good sign of improper use of the scooter. Improper use can cause an excessive strain to the motor, more power draw from your batteries, and can result in battery and transaxle failure.

## Battery Disposal Tips

**If the battery is damaged or cracked, immediately enclose it in a plastic bag before disposal.**

- To dispose of the damaged battery or a battery no longer holding a proper charge, contact your local waste disposal agency or an authorized battery provider for help with disposal or recycling. Do not simply put them in the trash.

## Charger Tips

The best way to charge your scooter is to monitor the charger indicator lights. Your charger should have a power indicator light and a charging/completed indicator light to show when the batteries are at peak charge. They typically show green or the charge light will go off when fully charged. Some chargers have only one combined power and charge light which will turn from red to green when charging is complete.

Some newer chargers have a float or trickle charge mode where the light may flash green when in float mode (please read your chargers instruction manual for more details) Other chargers can flash when there is a charger failure (usual both the power indicator light and charging light).

## Lithium Ion Battery Chargers

With the introduction of Lithium Ion batteries used in mobility scooters the chargers used with these batteries are different to the regular chargers used with SLA (sealed lead acid) batteries. **DO NOT** use a SLA charger to charge Lithium Ion batteries and vice versa as it can cause damage to the batteries and or the scooters electronics.

**For more information or help with trouble shooting your scooter or power wheel chair please call us on:**

**(702) 265-2441**