

## PRODUCT SPOTLIGHT

### RediPulse® Charge/Maintenance System

For vehicles and equipment stored indoors. RediPulse is an ac-powered system designed to prevent the normal loss of battery power on stored vehicles and equipment no matter how long they sit unused — *even months at a time*. It includes a specially-designed 110-volt ac adapter that works 24-hours a day when plugged into an electrical outlet.



This system is ideal for cars, boats, motorcycles, snowmobiles, farm equipment, emergency vehicles, recreational vehicles, golf cars and much more.

Choose from two models: One for 6 and 12-volt lead-acid batteries (735X260) and another for 36 and 48 volts (735X280). The 6-12 includes both lugs and clips with quick disconnects for easy installation. The 36-48 has lugs only. Five-year limited warranty.



## TESTIMONIAL

"We are very pleased with the savings in battery costs as well as the dramatic reduction in battery-related downtime and man-hours we've experienced since we started using Solargizer."

Sharon Miedki  
Director of Transportation  
Durango School District  
Durango, Colo.

## SUCCESS STORY

### Miami Dade County Reduces Battery Purchases 38%

The Miami-Dade County Transit department is the 16th largest public transit system in the United States, and the largest transit agency in the state of Florida. Their Metrobuses offer reliable transportation to thousands of people a day so, needless to say, vehicle dependability is extremely important.

A major factor in maintaining this dependability, as well as reducing maintenance costs, is making sure the lead-acid batteries on each bus are in prime condition all the time. That's why MDT started using both the Pulse Recovery System® and the PulseTech Digital Battery Analyzer from PulseTech.

**Problem:** Each of the MDT Metrobuses uses four Group 31 batteries connected in a series/parallel configuration. In 1999, MDT was forced to purchase 549 batteries within a short six month period to replace dead and problem batteries. At a cost of about \$60 a battery, they spent a total of almost \$33,000. And that was in just one of their garages. Total battery purchases for all the garages in the Miami-Dade system was much higher.

**Solution:** MDT began a battery maintenance program that included using the Pulse Recovery System to remove lead-sulfate deposits from the battery plates. By removing this buildup it enables the batteries to accept, store and provide more energy to the buses. It also helps batteries last longer.

**Results:** During the six-month period after MDT began using the PRS, purchases



(Top) Miami-Dade Transit Metrobuses use four lead-acid batteries each. In 1999, MDT spent almost \$33,000 to purchase new batteries during a six-month period. (Bottom) After MDT began using the Pulse Recovery System® from PulseTech, battery purchases dropped 38%.

dropped to 339 batteries. That's a 38% reduction and a savings of \$12,600.

Side Note: Due to a personnel change in the department in 2001, the MDT stopped using the PRS. As a result, battery purchases shot up 50% over a one-year period. Once they realized the increase in purchases, the MDT immediately reestablished the PRS program. They also began using PulseTech Digital Battery Analyzers to test batteries as they are removed from the buses

**LEARN MORE:** See your local PulseTech dealer to see how our products can help increase your battery reliability. For a dealer near you, call **1-800-580-7554**. Or visit [www.pulsetech.net](http://www.pulsetech.net)

## SAMPLE INSTALLS



Installing PulseTech products is easy and well worth the time. Shown above are examples of actual customer installations:

- A. An electric-powered reproduction of a 1904 motor car with a 48-Volt PowerPulse (735X048) mounted under the seat.
- B. An Industrial 12-Volt Solargizer (735X130) solar panel mounted on a taxi cab.
- C. 12-Volt PowerPulse (735X012) maintaining a 12-volt 8D battery in peak condition on a fire engine.
- D. The solar panel of an Industrial 12-Volt Solargizer (735X130) on an automated irrigation system.

## TECHTALK FAQ

Presenting a series of frequently-asked questions regarding the benefits of PulseTech products and how they can help your customers:

### How quickly will sulfation buildup occur on a brand new battery?

The rate of sulfation buildup on a battery will vary greatly depending on battery usage and condition. It will occur faster on batteries that are used infrequently but will still affect frequently-used vehicles (see next question).

Also, keep in mind that even brand new batteries may already be sulfated when they are installed on your vehicle. According to a leading service manual in the battery industry, "since sulfation buildup is likely to occur whenever batteries are neglected for long periods of time, it can occur in new batteries in stock as well as used ones."

Sulfation buildup begins to occur the moment battery acid is added to a battery. So as new batteries sit in storage or on a store shelf, they, too, can suffer from this buildup.

In order to ensure battery performance at all times, it is best if a ReNew-IT Pulse Technology product — such as RediPulse, PowerPulse and Solargizer — is put on your battery the moment it is installed in your vehicle.

### Since sulfate buildup occurs more often in infrequently-used batteries, will I need

### ReNew-IT Pulse Technology even if a vehicle is operated on a frequent basis?

Absolutely. Even frequently-used batteries charged by the alternator on a consistent basis may suffer from sulfate accumulations. This is especially true for cars, taxis, express delivery trucks, buses and other vehicles.

According to a leading service manual in the battery industry, "it is possible for a vehicle to develop an *undercharged* battery if it is constantly driven at slow speeds and left idling for long periods, as in heavy traffic and combined with high electrical load conditions". Since the vehicle is moving at slower speeds or idling, the alternator is not allowed to charge at an optimum rate.

The result is a battery that is not fully charged even though the vehicle is running all day. And since it isn't fully charged, it will begin to sulfate. A vicious circle is then created because the more the battery sulfates, the less energy it will accept and the battery will be undercharged even more. Ultimately, it too will die.

By keeping the battery plates clean with ReNew-IT Pulse Technology, the battery capacity is increased so it will accept and store energy more efficiently which will help eliminate the problem of battery undercharging. 🛠️

## Scientifically-Proven Technology

Independent studies by researchers at Oakland University and Ohio State University recently confirmed that ReNew-It Pulse Technology increases battery efficiency and battery life dramatically. These two-year studies showed that our technology allowed a more even distribution of lead-sulfate crystals over the surface area of the battery plates. It also revealed a significant reduction in the size of crystals. These changes greatly improve a battery's ability to store and provide energy.

Our technology also prevents sulfate-induced corrosion that is the primary cause of shedding of active material on the plates. As a result, the life span of the battery is increased dramatically.



*(Left) A battery plate covered in heavy sulfation buildup which reduces the battery's ability to accept, store and release energy. (Right) ReNew-It Pulse Technology™ cleans these lead-sulfate deposits off the plates and converts them to active electrolyte. This process exposes the active material on the battery plates which means batteries are stronger so you get up to three times longer life and maximum performance.*



Visit this local PulseTech dealer today:

**PulseTech**  
Products Corporation