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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

"The RediPulse system is a lifesaver. I was so tired of jumping into one of my (collector) cars, turning the key and finding that the battery was dead. That doesn't happen anymore. My cars start every time I need them and the batteries are stronger than ever."

> Jack Callahan Private Car Collector Southlake, Texas

PowerPulse Helps Prevent Non-Start Problem On Texas Ambulances

East Texas Medical Center in Tyler, Texas has one of the largest rural emergency medical service departments in the United States. It services over 18 counties. Needless to say, battery reliability is extremely important since it could mean the difference between life and death.

By using the PowerPulse Battery Maintenance System, ETMC has virtually eliminated battery problems all together.

EQUIPMENT: The ETMC EMS department has 72 ambulances. Each is powered by either two or three 12-volt leadacid batteries depending on the model.

PROBLEM: According to Eric Switzer, Manager of Fleet Maintenance at ETMC, the ambulance batteries used to suffer from parasitic drain caused by radios, on-board computers and other electronic systems that continued to draw power even while the engines were shut off. As a result, after just two or three days of sitting unused the ambulances wouldn't start because the batteries were dead.

This problem was caused by sulfation buildup (*lead sulfate deposits on the battery plates*). The deposits would prevent the batteries from accepting and releasing a full charge. As a result, the batteries couldn't meet the demand of the electronic systems.

SOLUTION: ETMC installed the 12-Volt PowerPulse (735X012) on all 72 ambulances in February 2001. PowerPulse can be used on up to three batteries in

Success Story





(Top) The East Texas Medical Center EMS department was suffering from dead batteries because of parasitic drain on ambulances sitting unused. Since installing the 12-Volt PowerPulse system (bottom) 17 months ago, they have had very few problems.

parallel.

RESULTS: The PowerPulse systems removed the sulfate deposits from the plates enabling the batteries to once again accept a full charge. It's been 17 months and ETMC EMS reports that they have had very few battery problems. According to Eric Switzer, on the rare occasion when a vehicle won't start it's usually due to human error (i.e. someone left the lights on all night, etc.).

"The batteries are doing very well," states Switzer, "It was a wise decision on my part to install them in the first place."

LEARN MORE: To see how PulseTech products can help increase your battery performance and reliability, visit your local PulseTech dealer.

For a dealer near you, call **1-800-580-7554**. Or go to **www.pulsetech.net**.

PulseTalk

SAMPLE INSTALLS









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

A. The solar panel of two Industrial 12-Volt Solargizers (*735X130*) on a fire truck.

B. Four 12-Volt PowerPulse units (735X012) installed on a set of four 12-volt city bus batteries.

C. An Industrial 12-Volt Solargizer (*735X130*) solar panel mounted on a digger used by a major agricultural company in California.

D. Two 48-volt PowerPulse units (*735X048*) installed on the 96-volt battery system of an electric passenger vehicle.

TECHTALK FAQ

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

How much longer will the battery last with ReNew-IT Pulse Technology?

It's difficult to determine an exact length of time because service life of a battery varies depending on usage. By using ReNew-IT Pulse Technology, though, the life of your batteries will be extended dramatically.

Keep in mind that there is actually enough reactive material in a battery to perform the energy transfer process for many, many years, but sulfation buildup has always prevented that from happening. Now, by preventing, and even removing, sulfation buildup, PulseTech products enable batteries to fulfill their true potential in performance and life cycle.

Our products have been evaluated by several sources, including NASA, Stennis Space Center, Management Equipment Evaluation Program (U.S. Air Force) and the Army Research Lab. The answer from all is the same—"This product does exactly what you say it does!" One source even stated that "we estimate (Solargizer) will add at least eight to ten years of life".

Will PulseTech products benefit other electrical components on my vehicle?

Yes. By maintaining your batteries in peak condition, your alternator does not have to work as hard at recharging your vehicle. The battery will accept a charge more readily and faster so alternator life should be extended. Plus, by maintaining available cranking amps, there will be more available energy going to your starter. The engine will turn over faster, so your starter should last longer, as well.

What are other common causes of battery failure that PulseTech can help?

It's interesting to note that other common causes of battery failure (buckled plates, shedding, overcharging, mossing, etc.) are directly related to sulfation buildup. For example, according to a leading battery service manual buckled plates may be caused by "being overcharged while *sulfat ed* or stored in a deeply discharged state." Sulfate buildup weakens the plates to a point where batteries must be overcharged to accept energy. This will then overheat and warp, or "buckle", the plates.

This service manual also relates shedding of the plates to sulfation buildup. It states that "if material has shed from the plates in small chunks, high charging rates on sulfated plates can be the cause."

All in all, each of these and other common causes can be avoided in most cases through the use of ReNew-IT Pulse Technology products.

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

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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 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 your batteries are stronger and you get up to three times longer life and maximum performance.



For More Information: To learn more about PulseTech battery-related products and how they can help increase your sales, or to order products, just call **1-800-580-7554**, ext. **154**. You can also go to www.pulsetech.net or e-mail us at ppcmarketing@pulsetech.net.

