MPulsefalk

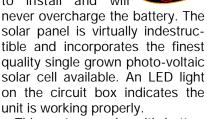
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PRODUCT SPOTLIGHT

12-Volt Solargizer® Battery Maintenance System

Solar-powered battery maintenance. This system (735X130) keeps battery plates sulfate free. It also prevents the normal loss of battery power on stored vehicles and equipment no matter how long they sit unused — even months at a time.

The entire unit is weatherproof, easy to install and will



This system works with batteries up to 12-volts and is ideal for heavily-used or stored vehicles and equipment. It also works with up to three 12-volt batteries in parallel. Ten-year limited warranty.



TESTIMONIAL

"My diesel truck batteries never lasted past 50,000 miles. I started using Solargizer and now I've driven over 100,000 miles and they are still going strong. I now have a RediPulse, PowerPulse or Solargizer system installed on every vehicle and piece of equipment I own and operate."

Rory Hogensen Colbert, Oklahoma

SUCCESS STORY

Forklifts at R&M Energy Get 50% More Run Time with PowerPulse

R&M Energy Systems in Houston, Texas, manufactures high-quality equipment for the oil and gas drilling, production and pipeline industries and select industrial markets. The company has locations in North and South America and Europe, including eleven manufacturing facilities.

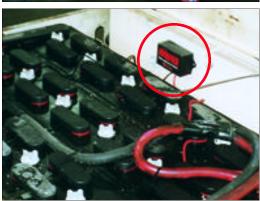
With the large range of products it offers, on-time inventory and shipping is vital, which means forklift performance at it's manufacturing facilities is very important. That's why the company uses the PowerPulse Battery Maintenance System from PulseTech. PowerPulse helps make sure forklift batteries give peak performance all the time.

EQUIPMENT: The company has six fork-lifts at its facility in Willis, Texas. Each forklift has a 36-Volt battery system, and they are used off-and-on during every 24-hour period (about 12 hours total).

PROBLEM: According to Jeff Rushing, Maintenance Lead Man at R&M Energy, the equipment is given a full charge over the weekend, but during the week they are only charged when needed. Due to these erratic charging cycles, the batteries became heavily sulfated (lead-sulfate deposits on the battery plates) which meant the forklifts had to be taken out of service in order to be recharged frequently during the day.

SOLUTION: In February of 2002, Jeff was introduced to the 36-Volt version of the PowerPulse system (735X036) by a





(Top) R&M Energy Systems uses six forklifts at its manufacturing facility in Willis, Texas. Average use is around 12 out of every 24 hours. (Bottom) After installing the 36-Volt PowerPulse system on each forklift, run time increased about 50%.

PulseTech dealer in Tyler, Texas. A unit was installed on each of the six forklifts.

RESULTS: The PowerPulse system cleaned the sulfate deposits off the battery plates so the batteries could once again accept, store and release more available energy. To date, forklift run time has increased about 50%. That means the equipment runs a full 18 hours between charges instead of just 12.

Jeff Rushing also reports that when the battery is low on power, they don't get the "acid smell" as much as they used to due to reduced internal resistance.

LEARN MORE: To see how PulseTech can help increase battery performance see your local PulseTech dealer. For a dealer near you call **1-800-580-7554**, or go to **www.pulsetech.net**. **№**

SAMPLE INSTALLS









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

- **A.** 24-Volt Solargizers (735X150) installed on a fleet of de-icers used by a major airline.
- B. A city bus using a 24-Volt PowerPulse (735X024) to ensure battery performance.
- C. The solar panel of a 5-Watt Solargizer Solar Charger (735X605) mounted on top of a concrete truck.
- D. Dead, sulfated batteries being recovered by the RediPulse 6-12 Charge/Maintenance System (735X260).

TECHTALK FAQ

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

Can PulseTech products be used on more than one battery at a time?

It depends on the model. The RediPulse 6-12 is designed for use on one 6- or 12-volt battery, but it can also be used on two 6volt batteries connected in series to equal 12 volts. The 12-volt PowerPulse model can be used on up to three 12-volt batteries connected in parallel. The Industrial 12volt Solargizer can also be used on up to two batteries in parallel to prevent sulfation buildup on the plates, but if you want to maintain voltage in the battery you need to use one unit for a single 12-volt battery or two 6-volt batteries connected in series.

In a series application, you would use the total of the series voltage to size the unit. For example: Either the PowerPulse 24 or the 24-volt Solargizer can be used on two 12-volt batteries connected to equal 24 volts. Both also offer a 36-volt unit and PowerPulse even includes a 48-volt model. The RediPulse 36-48 model can be used on either a 36- or 48-volt battery system.

Each Solargizer unit is also designed to work on batteries up to their designated voltages. A 12-Volt Solargizer will work on batteries up to 12-volts, a 24-Volt will work on battery systems up to 24 volts and the 36-Volt will work on battery systems up to

36 volts. The PowerPulse 24, 36 and 48volt systems are "voltage specific" which means they are designed to work only with their designated voltages: A 24-volt PowerPulse on a 24-volt battery system only, and so on.

The Solargizer Solar Charger will also charge more than one battery at a time. The 2-Watt works on two 12-volt batteries in parallel, while both the 5- and 10-Watt units work with up to four batteries in parallel.

Both the RediPulse Pro-10 and the Pulse Recovery System can be used to desulfate and/or charge multiple 12-volt batteries at one time.

Will PulseTech products damage electrical systems on cars and other vehicles?

No, they will not. The pulsing energy is absorbed within the battery and is not "seen" elsewhere in the system. Our technology has been applied to a variety of military vehicles with very sensitive launching or computer systems with no interference or problems. Our products have also been evaluated by a major auto manufacturer and has passed all the emissions tests they put the products through. PulseTech products can only enhance a vehicle electrical system — not detract. M

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 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.

