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PRODUCT SPOTLIGHT

PowerPulse Battery Maintenance System®

Ideal For Frequently-Charged Vehicles and Equipment!

PowerPulse uses our *ReNew-IT Pulse Technology*[™] to reduce battery downtime and increase battery life up to three times longer. This unique, patented unit is a

performance system that works automatically 24-hours a day. It's powered in two



different ways. When the battery is being charged — by an onboard charger or separate charging system — it will use the charging current as a power source. The rest of the time PowerPulse uses a tiny portion of the battery's own energy.

It's ideal for forklifts, cars, trucks, emergency vehicles, golf carts and more. Choose from 12, 24, 38 and 48-volt models. The 12-volt unit even works with up to three 12-volt batteries in parallel. Five-year limited warranty.



TESTIMONIAL

"Before we installed PowerPulse, we would fully charge (our forklift) battery and it would run for about 1-1/2 hours. Now the same battery averages about 4-1/2 hours. We were about to junk this battery and now it is performing better than our new batteries that are only four months old."

> Melvin Winberry Fleet Maintenance Manager Institutional Distributors

Alaskan Gold Mining Company Increases Battery Life 1200%

Located near Fairbanks, the Fort Knox Gold Mine is the largest gold-producing mine in Alaska, and until one year ago the company was suffering from major battery problems on its heavy-duty equipment. Now, thanks to the patented PowerPulse Battery Maintenance System[®] from PulseTech, battery life and reliability has increased 1200%.

EQUIPMENT: The company uses six large drill rigs for boring blast holes in the ground. Each rig is powered by two 8D batteries connected in series to equal 24 volts.

PROBLEM: On average, the rigs operate 24-hours a day, seven days a week which requires a lot of energy. Unfortunately, the batteries weren't able to supply this amount of power due to lead-sulfate deposits on the plates preventing them from accepting and releasing a full charge. The company tried different batteries, but the longest any of them lasted was one month. As a result the batteries on all six rigs had to be replaced every 30 days — *that's twelve batteries a month.*

SOLUTION: The company installed the 24-Volt PowerPulse system on one of the drill rigs to see if it would improve battery performance and reliability.

RESULTS: Three months later the batteries were still working hard. The company couldn't believe it. Based on that, Fort Knox installed a PowerPulse on the other rigs, as well. To date, it's been one

SUCCESS STORY



The Fort Knox Gold Mine (top) uses 24-Volt PowerPulse units (bottom) on their six drill rigs. Before installing the units, the 8D batteries on each rig were being replaced every month. A year after installing PowerPulse, all the batteries are still going strong.

year since the original unit was installed and the batteries are still working. That's a 1200% increase in battery life (from one to 12 months — and still going).

To learn how PulseTech products can help your customers and increase your sales, visit **www.pulsetech.net**.

To order, just contact PulseTech today at **1-800-580-7554**.

Drill Rig Battery Life

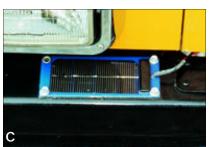
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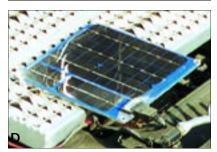
"PulseTalk

SAMPLE INSTALLS









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

A. A pallet jack motive battery using a 24-volt PowerPulse to improve battery reliability, extend service life and increase charge acceptance.

B. A RediPulse 6-12 installed on a police motorcycle.

C. The solar panel of an Industrial 12-Volt Solargizer mounted on the front bumper of a school bus.

D. An over-the-road truck with a 5-Watt Solargizer Solar Charger mounted

TECHTALK FAQ

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

What makes PulseTech products different from other battery chargers and maintenance systems on the market?

RediPulse[®], PowerPulse[®], Solargizer[®] and other battery maintenance systems from PulseTech are the only products in the world that utilize our patented *ReNew-IT Pulse Technology*[™]. And this technology has been scientifically proven (see below for more) to be the most effective method of preventing the main cause of battery problems and failure — *sulfation buildup*.

Some products may claim to provide the same benefits as ours, but most of them merely try to "maintain" the battery by charging them on a constant basis. The problem is too much charging will ultimately overheat and damage the lead plates. In other words, the "cure" could be worse than the disease.

Other products even claim to remove lead sulfate deposits from the plates. But, this too is usually done by over charging the plates in order to literally knock the sulfates loose. In this situation, only a few sulfates are removed as active plate material sheds and falls useless to the bottom of the battery. It's sort of like blowing up the house just to get rid of the termites.

On the other hand, PulseTech products enable the embedded sulfates to leave the

plates and converts them to active electrolyte. They also help prevent them from building up again and won't harm the battery in any way.

What are the benefits of using ReNew-IT Pulse Technology?

The main benefit of our technology is to ensure battery performance so you can rely on your battery any time you need it. As we said above, by cleaning the battery plates ReNew-IT Pulse Technology provides the following benefits:

- Stops the main cause of battery problems and failure: *sulfation buildup*
- Prevents dead batteries and helps your batteries work harder than ever
- Batteries last up to 3X longer
- Batteries charge deeper and maintain greater reserve capacity so they last longer between recharges and provide more *available* power
- Prevents the loss of battery power on vehicles no matter how long they sit unused even months at a time
- Renews dead, sulfated batteries and helps bring them back to life
- Helps protect the environment by reducing the number of discarded batteries
- Works with all lead-acid batteries including sealed, gel cell and AGM.

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.



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