

## PRODUCT SPOTLIGHT

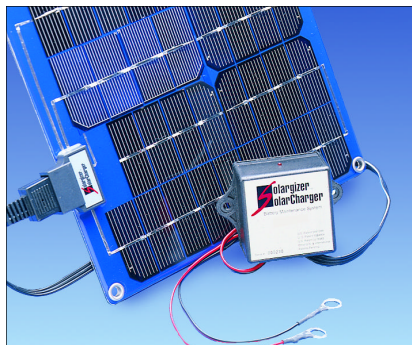
### Solargizer® Solar Charger

Charge and de-sulfate your 12-volt battery with this unique solar pulse charger. It maintains your battery at full capacity — without overcharging. At the same time, it uses our *ReNew-IT Pulse Technology* to prevent the buildup of lead-sulfate deposits on the battery plates. Our technology also provides a charge leveling effect to equalize the charge across all cells.



The Solargizer Solar Charger is available in three models: 2-Watt, (735X602), 5-Watt (735X605) and 10-Watt (735X610). All models work with single 12-volt batteries. The 5-Watt (shown below) and 10-Watt units can also be used with up to four batteries connected in parallel.

Ideal for charging in areas without access to electrical power. Ten-year limited warranty.



## TESTIMONIAL

"We installed 15 Solargizer units on various fleet vehicles including police cars, utility service trucks, emergency support equipment and boats. The test results were outstanding! All 15 vehicles experienced an increase in the batteries capacitance in the face of heavy parasitic loads."

Dennis Buckman  
Owner, Fluid Power Technologies  
Sacramento, California

## SUCCESS STORY

### Food Company Increases Forklift Run Time With PowerPulse

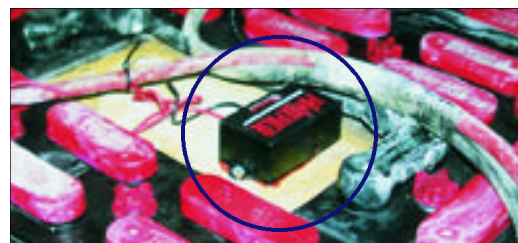
Motive batteries are the most expensive type of lead-acid batteries available, so it's understandable why companies using forklifts, pallet jacks and other motive equipment are anxious to find a way to make these heavy-duty batteries last longer and work harder. The Golden Duck Meat and Poultry Company, a major food company in Houston, Texas, used to suffer from battery problems. But no longer. Now they use the PowerPulse system from PulseTech.

**EQUIPMENT:** The company operates two electric forklifts with 36-volt battery systems. The forklifts are used to load pallets of packaged products onto refrigerated trailers in a cold environment below 40 degrees.

**PROBLEM:** Even after a full recharge, the forklifts still had to be taken out of service during the day so they could be short charged in order to complete the shift. Upon examination, the batteries were showing signs of positive plate bulging at the expansion joints. This indicated a major sulfation buildup problem which was preventing the batteries from accepting a full charge and limiting their use.

**SOLUTION:** The company installed a 36-volt PowerPulse (735X036) system on each forklift battery.

**RESULTS:** Within a month, the sulfation buildup had cleared off the battery plates so the batteries could once again accept, store and release more available energy. The forklifts began lasting a full



Photos: The Golden Duck Meat and Poultry Company uses the 36-volt PowerPulse system (bottom) on its forklifts. PowerPulse has increased run time and reduced charge time on all of the company's forklifts.

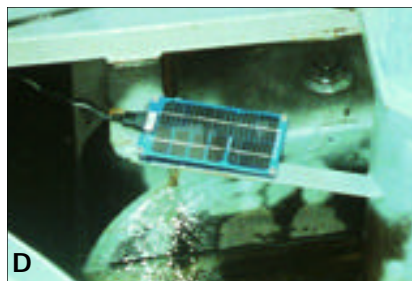
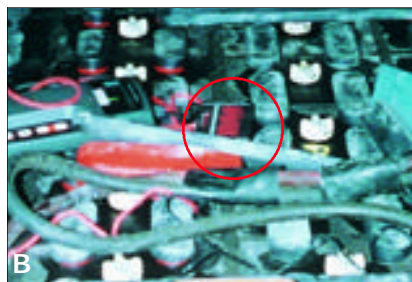
shift which eliminated costly downtime and the need to short charge them. Plus, the voltage readings had improved dramatically with the 18 2-volt cells leveling out substantially.

The forklifts are now in constant operation and the batteries are also no longer in jeopardy of cracking an expansion joint which could have eventually lead to a cell replacement at an approximate cost of \$700-\$1,000.

"I depend heavily on the productivity of the forklifts," says Tony Luong, owner of Golden Duck, "It is clear to me that the PowerPulse was a wise investment. I have seen an overall increase in the battery's ability to store more energy, and they are putting out a longer shift to load trucks for distribution sales."

**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](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.** A power shovel with a 24-Volt Solargizer (735X150).
- B.** A 48-Volt PowerPulse (735X048) on a forklift used by an auto manufacturer. The battery was set to be scraped until the PowerPulse reconditioned the plates. The battery is now back in service and performing like new.
- C.** The RediPulse 36-48 system (735X280) on a private golf cart.
- D.** A marina work barge using a 5-watt Solargizer Solar Charger (735X605) on a 12-volt battery.

## 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 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](http://www.pulsetech.net) or e-mail us at [ppcmarketing@pulsetech.net](mailto:ppcmarketing@pulsetech.net).