

# PulseTalk

Published Bi-Weekly by PulseTech Products Corporation, The World Leader In Battery Performance Technology • November 12, 2002

## PRODUCT SPOTLIGHT

### PowerPulse® 36- & 48-Volt Battery Maintenance Systems

**Ideal For High-Voltage Vehicles and Equipment!** No matter what type of industrial equipment you use (forklifts, pallet jacks, scrubbers, etc.), the PowerPulse 36- (735X036) and 48-volt (735X048) models help improve productivity by maximizing battery power and reliability while reducing downtime.

PowerPulse uses our **ReNew-IT Pulse Technology®** to prevent lead-sulfate deposits on the battery plates. By "cleaning" the plates, the battery can charge faster and deeper so your equipment has the power to run full shifts all the time. Clean plates also means there is less heat generated in the battery so it takes much less time to cool down after recharging.

PowerPulse 36 and 48 are also ideal for golf cars, electric vehicles and generators. Five-year limited warranty.



## TESTIMONIAL

"We would park our cars at the airport, go away on a weekend trip, and because you can't turn today's radios completely off there is always a power draw, so we would frequently come back to a dead battery. Since we've installed Solargizers on those vehicles, we have not experienced those dead batteries."

Bruce Varner  
Fire Chief  
Carrollton, Texas

## SUCCESS STORY

# Strong Batteries Means Smooth Sailing For Charter Yacht

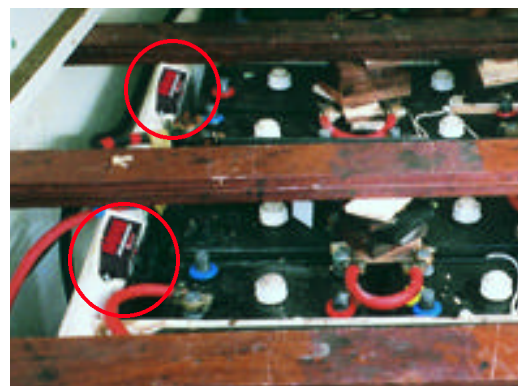
Beautiful skies. Clear weather. The ocean stretching as far as the eye can see. And dead batteries. Not the ideal situation for the vacation of a lifetime aboard a luxurious private yacht. The last thing guests need are power problems due to dead batteries. Fortunately, since they started using Solargizer and PowerPulse, this is a problem several charter captains — and their guests — never have.

Mark Thompson is the captain of the *Lone Star*, a private sailing yacht that has been called a five-star resort at sea. At 85-feet with 2,500 square feet of deck space, it is the second-largest catamaran in the Caribbean. Every month *Lone Star* is a sanctuary for several weary travelers who wish nothing more than to relax and get away from it all as they explore the British Virgin Islands, St. Barts, St. Martin and Antigua.

**PROBLEM:** The yacht takes a lot of power to operate. Most of the time power is supplied by gas-powered generators, but, while guests are relaxing power is supplied by large banks of lead-acid batteries because they are quieter. The problem is, normally, batteries aren't capable of supplying that kind of power for very long.

**SOLUTION:** Captain Thompson installed 24-Volt PowerPulse (85-025) units on the battery banks. Since then, the batteries are capable of storing more energy so they last a lot longer and provide the power he and his guests need.

Mark also installed a 12-volt Solargizer (85-135) on the outboard dinghy used to transport passengers to land. The dinghy is a pivotal part of the guests' experi-



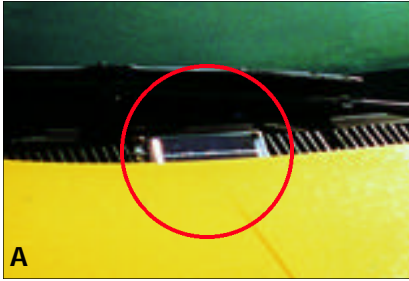
Photos: The *Lone Star* (top) uses the PowerPulse Battery Maintenance System (bottom) to make sure the battery banks are capable of supplying power to all the electrical systems on the ship.

ence. It's used to take them to shopping areas, dive sights, and even to waterski. Starting at a moment's notice is essential. With Solargizer, it always does.

"I understand what it takes to keep our guests happy," says Mark, "and making sure they have power for all their personal needs is one of them. With PowerPulse our battery banks are able to provide power all the time. It saves valuable time and money because I don't have to replace the batteries on a regular basis like I used to. More importantly, it helps our guests enjoy their voyage."

**LEARN MORE:** To see how PulseTech can help you, visit your PulseTech dealer. For the dealer nearest you, call **1-800-580-7554**, or visit **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 Industrial 12-Volt Solargizer (735X130) on a taxi cab.
- B. A RediPulse 6-12 Charge/Maintenance System (735X260) installed on a rider mower at a major golf resort.
- C. An industrial boom with a 24-Volt Solargizer (735X150) solar panel mounted on the side.
- D. A phone company service truck with the solar panel of an Industrial 12-Volt Solargizer (735X130) mounted at the base of the windshield.

## TECHTALK FAQ

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

### Is it possible to recover a dead battery that will no longer accept a charge?

Yes. Although our products are designed for keeping good, new batteries in peak condition for a longer period of time, some of them can, in most cases, be used to bring batteries that will not accept and hold a charge back to useful condition.

Here's what you do: Use a PulseTech 475 (741X475) or 485 Digital Battery Analyzer (741X485) to determine if the battery is a good candidate for recovery (Note: Even though the analyzer may read "REPLACE BATTERY," it could still be recoverable.)

The ideal way to recover a battery is to use our Pulse Charger®/World Version (746X725). Make sure the cells are filled with distilled water and attach the battery to the Pulse Charger. Set the Pulse Charger in the *Pulse & Charge* mode and watch the charger for 20 minutes. If the *Charge Complete* light begins to flash, it is indicating a problem and the battery is probably not recoverable. If the light does not flash, you can proceed.

Put the Pulse Charger on *Pulse Only* mode and pulse the battery for at least 24 hours; then switch to *Pulse & Charge*. The battery should be fully charged within 14 hours. At that point, the Pulse Charger will

shut off automatically so it won't over-charge. Although it is no longer charging, it will continue to pulse the battery.

You can also use the RediPulse Pro-10® (746X900) and the Pulse Recovery System® (746X650) to recover more than one battery at a time. In the case of the Pro-10, the battery must have at least a charge level of at least 11 volts.

Use the 475 or 485 analyzer as described above, then attach the battery to a PRS module and pulse for 24 hours. Next, use one of the analyzers to check the battery for improvement. If there has been at least a 20% increase in Cold Cranking Amps (CCA), you may proceed.

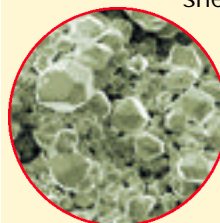
Next, attach the battery to the Pulse Charger on *Pulse & Charge* mode and charge it until the charge cycle is complete. If you do not have a Pulse Charger, use a standard charger and attach it to the battery while the battery is still attached to the PRS unit. This way the battery will be charged and pulsed at the same time. Charge the battery for about four hours, then check for improvement.

Keep in mind that some very badly sulfated battery plates could take several days to clean. Also, not all batteries can be totally recovered. If a battery has a short circuit or physical damage, it is impossible to bring back. 🚫

## 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