

PulseTalk

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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 never overcharge the battery. The solar panel is virtually indestructible and incorporates the finest quality single grown photo-voltaic solar cell available. An LED light on the circuit box indicates the unit is working properly.

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

"After installing Solargizer on my golf cart, I am convinced that two things have changed: The power of the batteries and the performance of the cart have increased, and the charge time and rate of consumption of water have dropped dramatically. The batteries are four years old and in my opinion are back to the performance we enjoyed when we first bought the cart."

Bob Simpson
Anaheim, California

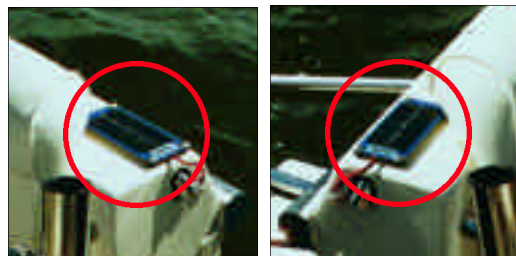
SUCCESS STORY

Battery Power Never A Problem For All-Day Fisherman

Don Diebold lives in beautiful Palm City, Florida so he uses his boat all the time. Also, like most fishermen, Don uses many electronic accessories such as a Global Positioning System (GPS), a depth finder, and most importantly, a two-way radio in case of emergencies. All these systems require a large amount of power that can easily overwork a 12-volt lead-acid battery. Before, that used to be a major problem for Don. But not anymore, because now he uses the Industrial 12-Volt Solargizer® Battery Maintenance System from PulseTech®.

PROBLEM: Don bought his first boat back about ten years ago. He loved it and used it every chance he got to take his friends out for some all-day fishing. But, he soon began suffering from battery problems on a regular basis. They kept dying because he literally worked them to death. And the last thing he wanted to happen was to have his batteries die while he was twenty miles out in the ocean.

SOLUTION: When Don bought a new 25-foot Grady White duel engine boat in 1999, he installed an Industrial 12-Volt Solargizer (735X130) on each of his two 12-volt batteries. By preventing sulfation buildup on battery plates, Solargizer enables the battery to accept more energy when it is charged. This means it has more available energy to power the motor as well as the electronics. Not only does this keep the battery from failing due to abnormal power demand, it also means the boat starts every time. Plus the battery works a lot harder and lasts longer than ever before.



(Top) Don Diebold spends most of his time fishing off the Florida coast on his Grady White. Like most deep sea fishermen, he uses electronic accessories like GPS and depth finders which draw a lot of power. By using an Industrial 12-Volt Solargizer on each battery (bottom left and right), Don knows his batteries will provide the power he needs.

RESULTS: After Don installed the Solargizer units, he never had a battery problem again. In fact, Don recently sold his Grady and it still had the original batteries. According to Don, the Grady dealer couldn't believe it. The batteries looked and performed like they were new. For marine batteries to last that long in Florida's salt water conditions is unheard of. Needless to say, Don installed Solargizers on his new 20-foot Grady White Center Console Boat as well.

"My batteries are just as strong now as they were when I first bought them," says Don, "In fact, I think they are even stronger. It's amazing the difference a Solargizer makes!"

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. 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:

Will ReNew-IT Pulse Technology® work with any type of lead-acid battery?

Yes. They work on any size and any voltage lead-acid battery. This includes all conventional flooded lead-acid batteries and sealed "maintenance-free" batteries, including VRLA, absorbed glass mat (AGM) and even gel cell. Plus, we offer over 60 battery charging and maintenance products, so we have a system that can help you ensure battery performance no matter what type of vehicle or equipment you use.

What is a pulse waveform?

Our ReNew-IT Pulse Technology is defined by a distinct "pulse waveform" that has a strictly controlled rise time, pulse width, frequency, and amplitude of current and voltage pulse. It's the patented combination of the above that makes our products so effective.

Will weather affect my battery?

Yes. What many people don't realize is that extreme cases of heat and cold will increase the speed of sulfation buildup within a battery. For example, when the weather starts to get hotter, the rate of sulfation buildup will actually double for every 10-degree increase in temperature. That means that if the temperature goes from

75° to 95°, sulfation buildup will occur 300% faster than normal.

When it's cold outside, sulfation buildup will rob operational power because the vehicle's fluids will thicken. This means it will take even more power to start the vehicle, so the battery has to supplement this power and the result is a faster buildup of sulfates on the lead plates.

Installing one of our battery charging or maintenance systems will help avoid the destructive effects of the weather because they will prevent lead sulfates from forming, no matter how hot or cold it gets.

Also, keep in mind that the battery's electrolyte can actually freeze if the battery is in an advanced state of discharge, and this could damage the lead plates. At 1.270 specific gravity (100% charged) battery acid will freeze at -83°F, at 1.200 it will freeze at -17°F and at 1.140 (completely discharged) it will freeze at only 8°F. This just proves that it is even more important if you live in areas of extreme cold to install a PulseTech system on a vehicle that will be sitting unused for an extended period.

Our products will prevent the normal loss of battery power no matter how long the vehicle sits, and it will condition the battery so it is more capable of handling extreme cases of weather. 🚗

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 or e-mail us at ppcmarketing@pulsetech.net.

