

INDUSTRY SPOTLIGHT

Commercial Trucking

Stronger batteries mean more reliable and efficient trucks.

Long-haul, delivery, service, waste and other commercial trucks all have tremendous battery usage. For example, while they do have on-board charging systems "key off" battery demands are punishing due to GPS, cab heaters, radios, televisions, and other electronic accessories.



Better, cleaner batteries are not a luxury in this industry — they are a necessity. Stronger batteries mean expensive problems such as jump starts (costing \$100 to \$500 each) are virtually eliminated.

Depending on truck type and usage, several PulseTech products can be used. **PowerPulse**® is ideal for frequently-used trucks, while **Solargizer**® and the **Solargizer Solar Charger** are perfect for trucks that are used infrequently and have higher than normal power demands due to on-board electronics equipment.



TESTIMONIAL

"I've been using PulseTech Products for over eight years. The last three years, I have been using Solargizer on my bass boat. On those long tournament days, Solargizer helps keep battery power up. You won't find me without it."

Bonita Staples
Pro Angler & Outdoor Writer

SUCCESS STORY

PowerPulse Keeps Older Car Batteries In Peak Condition

Joe Di Matteo is just one of thousands of people around the world who love to collect classic cars and other vehicles. He is retired from the aerospace industry and has been collecting for years. Currently he has two classic cars: A 1970 442 convertible Oldsmobile and a 1976 Chevy Blazer.

He used to suffer from major battery problems over the years. But that stopped when he began using the 12-Volt Solargizer and PowerPulse Maintenance Systems from Pulsetech.

Problem: Since his two classic cars sit unused most of the time, the batteries were suffering from severe sulfation buildup. That meant he had to recharge them on a regular basis, and then replace them after only three years of use. It was very time consuming, and the batteries could no longer accept a full charge because of the sulfated plates.

Solution: Joe installed a 12-Volt PowerPulse (735X012) unit on each car. This system works on all lead-acid batteries up to 12 volts. They are designed to keep the battery plates clean of lead sulfate deposits so the batteries will provide maximum performance and reliability.

Result: Since installing PowerPulse, Joe's cars start every time and he has never had a problem with dead or weak batteries. In fact, the batteries are now at least seven years old on both and still going strong.

"The PulseTech systems are a lifesaver," says Jack, "I was so tired of jumping into one of my cars, turning the key and finding

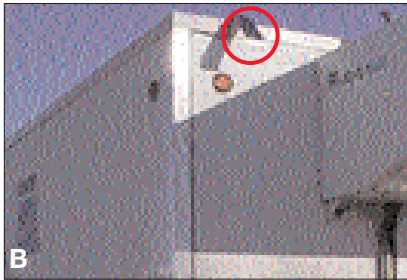
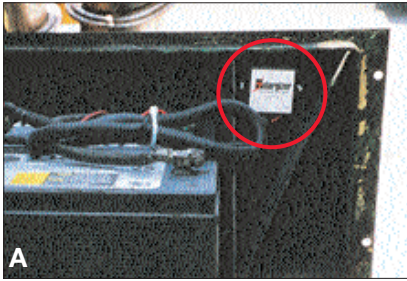


(Top) A 1970 Oldsmobile 442 and a 1976 Chevy Blazer (middle) with 12-Volt PowerPulse Battery Maintenance Systems installed (bottom left and right). Both batteries are at least seven years old and still going strong.

that the battery was dead. That doesn't happen anymore though. Now my cars start every time I need them and the batteries are stronger than ever. No matter how many cars I collect, I'll make sure they each have a PulseTech unit installed."

LEARN MORE: See your local PulseTech dealer to see how our products can help increase your battery reliability. For a dealer near 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) installed on a combine for a major commercial farming in California.
- B. A reefer trailer with an Industrial 12-Volt Solargizer (735X130).
- C. The circuit box of a 36-Volt RediPulse (735X280) on a golf cart at a Texas country club.
- D. A Pulse Charger/World Version (746X725) charging batteries for a solar race car built by the University of Missouri-Rolla.

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, 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: