Routine Battery Maintenance Recommended As Part of Your Vehicle Winterization Plans

SOUTHLAKE, TX—NOVEMBER 19, 2012—Fuel conditioners, antifreeze additives, oil additives and body finish products are items consumers typically consider when winterizing their vehicles for the season.

Batteries, often out-of-mind until the vehicle won't start, also should be part of the winter prep checklist. Simple and inexpensive battery maintenance will provide a reliable start this season and for years to come.

"Battery failure, especially in cold and inclement weather, can be avoided as failure is never cheap or convenient," said Pete Smith, President of PulseTech® Products Corp, a Texas-based company that has been maximizing battery performance while minimizing battery-related expenses for individuals, companies, fleets and military forces since 1994.

Ever wonder why a battery "dies"? The interaction of sulfuric acid with the surface area of the lead plates is at the heart of a battery's ability to create, store and release energy. Basically, a battery is able to store and supply energy if enough of the active plate material is available to allow an energy transfer to occur naturally. In theory, batteries should last many years, but they usually don't because of a series of detrimental problems caused by "excessive sulfation buildup" related to the natural and necessary formation of sulfate crystals that can, if left unattended, crystallize and harden forming a coating on the on the surface of lead battery plate that can lead to premature battery failure.

Smith said the answer is routine maintenance, which should not only include the regular cleaning and tightening of cable ends and battery terminals, checking battery acid levels (if the system allows), but most importantly the routine use of an intuitive Battery Charger, Maintainer and Desulfator such as the PulseTech XC100-P. This product, which can be applied to any 12-Volt lead acid battery (VRLA, AGM and flooded cell), uses a state of the art design coupled with PulseTech's patented Pulse Technology, enables the user to easily and routinely maintain their batteries internal state of health by automatically providing patented pulse conditioning and the optimum charge it needs to enable peak performance. A proprietary algorithm also protects the battery from damage due to overcharging or overheating.

According to Smith, what makes PulseTech's patented Pulse Technology so unique and effective is a distinct pulse waveform. This waveform, created through years of research, has a strictly controlled rise time, pulse-width, frequency and amplitude of current and voltage pulse. No other known battery charging or battery maintenance system has these specific characteristics. Pulse Technology is used as a "tool" designed specifically to remove and prevent the buildup of damaging lead-sulfate deposits on battery plates in a non-harmful way, so a battery can accept, store and release maximum power all the time

extending battery life up to five times.

"It's like giving your battery vitamins," said Smith.

Cold weather, according to Smith, can cause a real "Domino Effect" leading to battery failure.

"When it's cold outside, sulfation buildup in combination with the slow down of the chemical reaction within the battery will rob the battery's ability to provide operational power and is only exaggerated as vehicle fluids thicken due to the cold. This cold condition causes even more available power and capability to be taken from the battery to start the vehicle, so the battery has to work harder than normal to provide additional power demanded by the vehicle and as a result realizes a further reduction in voltage causing faster buildup of sulfates on the lead plates," he said.

According to Smith, the answer for battery performance is to employ a simple, technology enabled year-round maintenance program to keep batteries operating at optimal performance. Now, simple "plug and play" maintenance provided by the various PulseTech products (AC, DC or Solar powered) can be employed, keeping batteries performing long past currently expected life cycles and out of the waste stream, landfills and smelters.

In 2012, PulseTech introduced a technological breakthrough in battery maintenance products capable of turning a single 6V or 12V battery charger into a workhorse charging up to four lead acid batteries in a single application.

The <u>QuadLink Battery Charger Multiplier</u> turns any brand 6V or 12V DC battery charger up to 8 amps (using the standard 2-prong output connector) into a 4-station battery charger, automatically splitting and distributing all of the charger's capabilities into 10-minute sequencing charge segments. Depending on the charger's capability, QuadLink can distribute charges to up to four AGM, gel-cell, VRLA inducing or deep cycle for marine, standard automobile and truck and even small motorcycle batteries. The QuadLink works with ANY 6V or 12V battery, regardless of size of CCA rating.

The four-way switcher is capable of charging the batteries whether they are individually connected or connected as a group in a 24, 36 or 48 volt series making battery maintenance during the winter easy and eliminating the need to rotate batteries on a single charger.

For more information on PulseTech Products, please go to www.pulsetech.net.