

Harness the power of sunshine to maintain vehicle battery systems

The use of solar panels for battery maintenance

By David A. Kolman, Editor

Reason #3 Eliminates air pockets

ENGINE COOLANT EXTRACTION
AND RE-FILLING SYSTEM



ESOC
CEX-550



BENEFITS:

- Uses only two hoses to connect
- Engine coolant is drained, filtered and stored
- Stops automatically at the end of filling process
- May be used to perform coolant pressure or vacuum test
- Can be used for coolant system flush
- A coolant sample can be taken during the draining process.

Optional adapters are available for various engines for both drain and fill.

**Move at the
speed of ESOC**

Call your ESOC Commercial Truck Representative today at 866.909.3762 ext 300 or visit www.esocinc.com



VehicleServicePros.com/10122067



When using solar panels for regular and routine battery maintenance, it is important to select the appropriate ones for the amount of power needed, along with the size and location for mounting.

Photo courtesy of PulseTech

The installation of solar panels for regular and routine battery maintenance can be a solution for commercial vehicles. However, say officials with PulseTech Products, it is important to:

- Choose the right solar panel for the amount of power needed, along with the size and place of the mounting location.
- Select solar products that have the capability to desulfate and maintain all types of vehicles with 12V and 24V lead acid battery systems, including conventional flooded, AGM and VRLA types.

PulseTech (www.pulsetech.net) develops and manufactures next-generation battery testing, maintenance and charging systems.

The officials recommend a solar system utilizing higher efficiency, higher quality crystalline silicon cells that pack more power per square inch than standard amorphous "thin film" solar cells. Typically "crystalline" solar cells have a footprint that is 50-percent smaller than the amorphous cells that are commonly used.

VEHICLESERVICEPROS

Visit VehicleServicePros.com/12054885 to discover how reusable shop towels contribute to a greener fleet and vehicle shop.

Today's solar products can be found for any 12V or 24V battery and typically come in 2-, 5-, 6- and 25-watt versions. The better systems, note the officials, are "protected with a clear, polyurethane plastic coating mounted on a laminated aluminum substrate to make them virtually indestructible and impervious to weather, aging and damage from bumps and knocks."

BENEFITS

As an example of the benefits of a solar maintenance system, PulseTech officials say a top supplier of ready mixed concrete, sand and gravel, asphalt and construction services instituted a battery management program, along with the installation of a compact PulseTech SP-5 (5-watts of power) solar battery charger maintainer. That company's fleet readings, after six months use, showed that Cold Cranking Amps (CCAs) on all trucks were improved by 32 percent, bringing the batteries' performance back to optimum levels.

In another case, a major bottling company had been suffering from severe battery-related problems with its delivery fleet and pallet jacks. Commercial 12V solar panel battery maintenance systems were installed on the trucks,

Continued Page 21

as well as a 24V maintenance system on one of the pallet jacks to desulfate two-year-old batteries that were set to be replaced.

"The maintenance systems offset the parasitic drain and removed enough sulfation build-up to increase the condition of the batteries, and as a result, CCAs on all the truck batteries was up, providing an easier start," say the PulseTech officials. "The pallet jack usage time was also greatly extended between battery recharges, plus the clean battery once again accepted a full charge allowing for a full eight-hour shift usage."

IT IS
clean,
renewable
energy for
vehicles.

SULFATE BUILD-UP

As a battery ages through use or sits unused for periods of time, lead sulfate crystals can enlarge and build-up excessively to the point where they create a physical barrier across the surface of the battery plates, explain PulseTech officials. Before long, this build-up can become so dense that a battery is no longer able to accept or release energy.

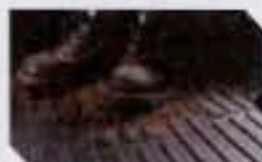
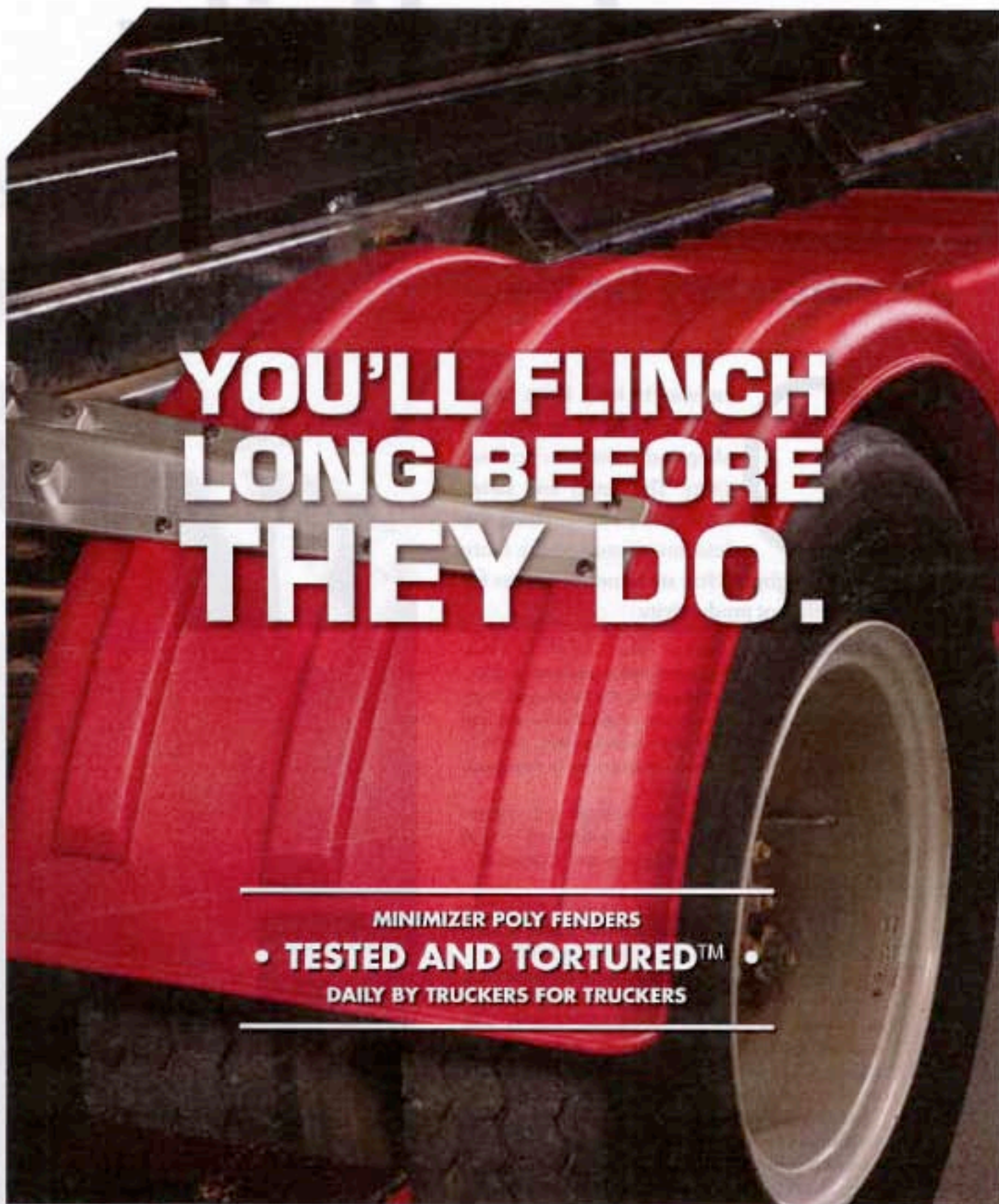
The company's "exclusive Pulse Technology cleans (desulfates) the plates and brings the battery to a like-new state capable of holding a full charge," they say. The technology has been proven "to extend 12V lead acid battery life up to three to five is typical.

"Not only does poorly or inefficiently managed battery maintenance lead

to early failure and unnecessary replacement costs, but can also lead to 'emergency' and expensive jump starts and that takes away from the vehicle's daily schedule and ability to

perform," the officials note.

Downtime is money lost and premature battery replacements, and that, especially for commercial fleets, is a budget breaker. **FMX**



AN AMERICAN FAMILY OWNED COMPANY FOR 30 YEARS

MINIMIZER.COM

800.248.3855

VehicleServicePros.com/10123337