## Quick Tips!

Corrosion on battery terminals can cause premature battery failure! As the name implies, "lead-acid" batteries contain acid...sulfuric acid, in fact. Mixed with distilled water, the solution is known as electrolyte. While the electrolyte is a necessary electrochemical component of the battery, it can be a catalyst for corrosion. Here's how...if a flooded battery is damaged by a crack in it's case, then electrolyte can leak out...and, if a flooded or AGM (Hawker®) battery overheats, it can emit hydrogen gas through any cracks caused by damage or through the vent ports. When electrolyte or hydrogen gas mixes with other contaminates (anti-freeze fumes, grease, oil, humidity, dirt, etc.) and oxygen, corrosion grows on the terminals. As corrosion builds, the metal on metal contact between the posts and the cables is reduced...thereby adding resistance (to either accepting or delivering energy). If unable to accept a charge, the battery will naturally self-discharge, the plates will sulfate, and the battery may prematurely fail. In addition, if the corrosion grows to the point that it touches the battery box wall, you just may have created a parasitic energy drain. So to keep your batteries functioning properly... KEEP THEM CLEAN. Good news... Hawker® batteries (by design), when used in a vehicle with a properly tuned electrical system, rarely vent...and rarely corrode!

## Did you know:

that Hawker® has joined the social media frenzy? Now there are 3 additional ways to connect with us:



Like us on: www.facebook.com/hawkerbatteries Follow us on: https://twitter.com/hawkerbatteries

Join us on: www.linkedin.com/pub/hawker-batteries/54/713/6aa

## Answer to question from last issue:

What type of testing equipment can I use to test my Hawker®? Most military maintenance shops have one or more of the four following types of testers...the voltmeter or multimeter, a duo-check, the load tester, and/or a battery conductance analyzer. While the voltmeter/multimeter is a good first check, it only identifies half the required info...voltage. However, it's possible to have proper voltage, but very low cold cranking amps (CCAs). The duo-check reports the specific gravity of the electrolyte mixture, but since Hawker® batteries are sealed, this tester can't be used. In order to properly load test a battery, it's recommended you use a tester that applies at least half the rated CCAs of the battery...for the Armasafe™ Plus it should apply 600 CCAs (however, US Army TB 9-6140-252-13 allows the use of a load tester with a load rating of 550 CCAs). Lastly, welcome to the 21st century, a <u>battery conductance</u> analyzer not only tests the voltage, but also provides a relatively accurate measure of the battery's CCAs...without having to mess with hazardous electrolyte or without draining the battery. Remember, though, in order to test a single battery, with either a voltmeter, load tester, or battery conductance analyzer, you MUST disconnect all parallel connections to isolate the battery...otherwise, you'll be testing more than one battery and may get a false reading!

## Training:

As military maintenance budgets shrink, and you're being asked to do more with less...many active duty, guard, and reserve units are contacting us to help increase battery life and

reduce premature disposal of batteries. <u>Been thinking the same thing?</u>

Wait no more, contact us by phone, on our website, or one of the social media sites and we'll work with you to schedule free Battery Maintenance and Recovery Training (BMRT).

estions? Visit us at...www.hawkeraplus.com Call us at...877.485.1472

Next Issue: How do I recover a deeply drained Hawker® battery?

