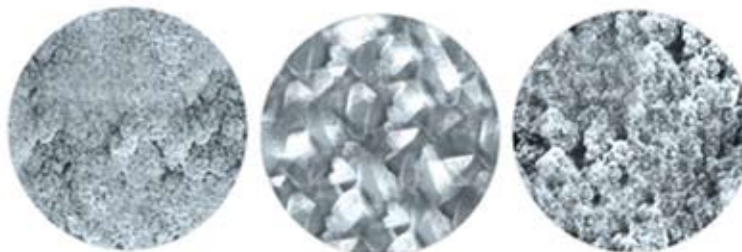


What is Sulfation (sul-fay-shun) and How Does It Affect Batteries?

When batteries are improperly maintained (over-under charged or left uncharged for extended periods) small crystals of sulfuric acid from the battery's electrolyte (liquid or paste) form on the battery's charge plates. They act as a resistor (barrier) preventing the battery from ever again accepting a full charge, no matter how long a charging source may be connected. Once this occurs, the cranking power of the battery is severely reduced, as well as its life. Aviation batteries are affected the most because they have been designed for maximum performance in the smallest-lightest case possible.

VDC Electronics has developed simple, but highly effective circuitry, able to safely dissolve sulfation, restoring much, if not all, of the lost power, providing the battery's cells are not shorted or structurally damaged. This U.S. Patented approach is believed to be the most effective method for eliminating even the oldest hardened sulfate. By generating safe, wide-band, random frequency electronic pulses, we are able to cover the full range of sulfate crystals sizes, in the shortest possible time. Depending on the amount of sulfate and its age, complete de-sulfation can occur within several days to several weeks. De-sulfation takes place automatically, while the battery is being bulk or maintenance level charged.

Note: Both BatteryMINDER models (12-V or 24-V) provide "full-time" de-sulfation. We guarantee to safely eliminate all sulfate from any non-commercial aviation battery meeting the criteria clearly stated in our Instruction Manuals.



1. Close up of new battery.

2. After 6 months of misuse.

3. After 3 months of using BatteryMINDER.

588X microscopic enlargements of a battery's lead plate. (L to R)