

Ample Power Company



David Smead's Personal Charge Regimen for Gel batteries

Here's how I charge my own gel batteries.

Having designed the first multi-step alternator regulator for my own use, and having added temperature compensation to it later, I naturally had to decide what was an appropriate charge regimen. This was particularly important when we imported some very expensive gel batteries from West Germany in 1985.

After studying the original engineering data for the batteries, and considering other battery technology, I decided that I would use an absorption voltage of 14.4 Volts at 77 F, (25 C). Further, I would use a float voltage of 13.5 to 13.6 Volts,

again at the referenced temperature.

Twenty five years later, and having seen many customers from 1987 still using the same gel batteries they installed then, I have not changed my charge regimen.

The gel batteries we use in our Cortez motorhome were made by East Penn Manufacturing. We realize that they claim that gassing will occur anytime the applied voltage is greater than 14.1 Volts at 68 F. We have never witnessed such gassing. Our own tests show that sustained application of much higher voltages are required to start venting through the seals.