VRLA (AGM/GEL) Battery Charging

The life of a AGM / GEL is directly affected by the charging and care given to the battery.
AGM & GEL type batteries have to be charged on a charger designed to charge AGM/GEL batteries, not a charger that is intended for wet cell batteries or leisure batteries.
Some chargers have a lower charging voltage of 14.4 volts, which was the voltage used on Sonnenschien batteries and are unsuitable for charging batteries sold Energy batteries as well as other manufacturers.
The correct specification for a suitable charger is:

1. Three stage.
2. 12 volt.
3. AGM/GEL charge cycle (IuIo).
4. 14.7 volts bulk charge voltage.
5. 13.8 volts float charge voltage.

Energy AGM batteries have maximum discharge level of up to 70%.
Energy Gel batteries have maximum discharge level of up to 80%.
They should not be total discharged as it is detrimental to the life of the battery, the shallower the discharges the long the battery will live.
When a battery is charged it must be left to complete the charge cycle, IE: NOT GIVEN A PART CHARGE. Because this leads to low capacity in the battery and causes over discharge, which damages the battery.
When the battery has completed the charge cycle (normally after 12 to 16 hours) the charger should be disconnected from the battery.If the battery is not used for 3 to 4 months a re-fresh charge should be given to keep the battery in top order.
The life of a charger is not infinite and dependent on the usage it should be renewed every 3 to 5 years.

Safety and Maintenance Guidelines Safety:

All batteries, Wet lead/acid, Gel, and AGM contain lead and sulfuric acid, which are both toxic.
Sulfuric acid is highly corrosive. In addition, when batteries are charged, they produce hydrogen gas, which is highly flammable and can cause explosion.

Proper handling is always important, or else the following can be the result:

***Explosion!** Improper charging and poor maintenance can cause low acid/electrolyte levels, causing high concentrations of hydrogen, which can cause an explosion. Although an explosion is Considerably less likely to happen with a gel/agm type battery.
***Fire!** Tools or jewelry that touch terminals together can cause sparks, smoke and even an Explosion.
***Corrosion!** Overfilled or overcharged wet lead/acid batteries can force out acid, which can Damage clothing, property and people.

Battery Charging:

To properly charge your Deep Cycle gel/agm battery, follow these procedures.
• **NEVER** use an automotive or wet type charger on a gel/agm battery.This will damage the plates and battery will not function correctly.
• Never run your battery completely flat
• Do not frequently charge your battery just to “top it off”

How often do I need to charge?

Active users: Charge daily.
Occasional users. Charge your battery before any outing and always after active use.

How should batteries be stored?

• Batteries should always be stored “ fully charged “

• Wet batteries hold their charge for up to 3 months
• Gel/Agm batteries hold their charge for up to 6 months

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