

## **Recharging Optima Batteries**

The following is taken directly from a reply I got from Optima tech department regarding charging Optima batteries:

It is likely that your battery only needs to be charged. If your battery has been discharged below 10.5v, most chargers will not charge any battery unless you use a procedure different than what one would typically use.

Please read and try the following:

A deeply discharged Optima Battery (less than 10.5 volts) will not test or recharge properly if treated as a regular flooded battery or Gel battery. Most of the time a handheld electronic battery tester will provide inaccurate test results.

One of the best performance benefits to using an AGM battery is the fact that they have low internal resistance. Since this low internal resistance will allow AGM batteries to discharge to a lower voltage than conventional batteries, they can have compatibility issues with many of the older but common battery chargers. In addition, if any battery has rested in a discharged condition, sulfation has occurred and we need to convert this back into electrolyte. We need to "trick" the charger into thinking it is a recoverable battery. The solution is actually quite simple.

Before hooking up your traditional automatic battery charger to the AGM battery, take any automotive battery (anyone will do with decent voltage, 12V or above) and wire it in parallel (positive to positive, negative to negative) with the discharged AGM. Now hook up the charger to the conventional battery, set the charger at up to but no more than 10 amps. The charger will now "see" the resistance and voltage of the conventional battery and it will start providing a charge. Leave the two batteries hooked up for an hour or so. Check the AGM each hour to see when it reaches 10.5 volts or above and then you can remove the traditional battery. Continue charging the AGM until it reaches a full charge or until the automatic charger completes the charge process.

In most cases the AGM battery will be recovered. During the charging process if the AGM battery gets slightly warm that's OK. Hot to the touch is not OK and this method should be discontinued.

Ron