

Re: charging a fully discharged car lead acid battery

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- *From:* Jim Adney <jadney@xxxxxxxxxxx>
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-

On Thu, 13 Oct 2005 03:04:11 GMT Veggie <nospam@xxxxxxxx> wrote:

>Jim Adney wrote:

>

>>If you want to reverse sulfation, you just have to set the voltage at
>>about 2.35 V per cell and wait for the ions to come back into
>>solution. If you're patient, it usually works.

>>

>Sorry for the dumb question, but how many cells are in a 12 volt car
>battery? Must be six at around 2 volts each. If this is right, then
>your advice is to set the charge voltage at 14.1 volts. If I recall
>right, the car's charging system runs at 13.8 volts so the 14.1 is right
>in that ballpark.

Right, it's six. Charging systems run at 14.1-14.4V. I'm guessing that the old 13.8V "standard" was actually what you could depend on at the load end. I gather that modern batteries use a slightly different chemistry (something about a bit of calcium added to the lead in the plates) which makes them able to tolerate slightly higher voltages without hydrolysis. I'm not really clear on this.

>>I rather regularly recover sulfated batterys and it generally takes
>>about a week. I had one which took 2.

>>

>There is all manner of hubbub about pulsed desulfators, etc. For the
>average person, taking a week or two with off the shelf equipment is
>much desired over special desulfators.

I agree completely. If you have time this is not at all difficult.

Keep in mind that for most applications, you don't have to completely reverse the sulphation, all you have to do is get the battery back to a state where it can be put back in service. Once back in service, normal usage will continue the restoration process.

-

Jim Adney jadney@xxxxxxxxxxx

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Madison, WI 53711 USA

• **References:**

◆ **[charging a fully discharged car lead acid battery](#)**

◇ From: Veggie

◆ **[Re: charging a fully discharged car lead acid battery](#)**

◇ From: dkuhajda@xxxxxxxx

◆ **[Re: charging a fully discharged car lead acid battery](#)**

◇ From: Dave Plowman (News)

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