



BUS CHAT



Generator or batteries for boondocking?

Post by: belfert

As some here know, I mostly use my bus for one 4,000 mile trip every September. We usually use the inverter at night when A/C is not needed. My issue is my battery bank is shot. I currently have six 100 amp hour AGM batteries. I can't even run everything for more than a few hours on our battery bank.

Is it worth replacing the battery bank for something like \$2,500 to \$3,000, or just run the generator all the time? I figure an extra 50 to 75 gallons of diesel per trip for that. Lithium batteries are probably out of the picture due to cost. Lithium batteries can also be destroyed by excess heat, or by charging at 32 degrees F or lower. It gets way below 32F in the winter although lithium batteries can be disconnected for the winter without issue unlike most AGM batteries.

Post by: windtrader

Many discount lithium batteries which is surprising amongst us pretty capable DIY crowd. For some reason, most are comfortable with mechanical and construction projects but seem less inclined to DIY a battery system.

You can do a very robust lithium battery and/or solar system for pennies on the dollar if you are willing to put the time in to researching good sources and known how to qualify raw and already assembled battery packs. Yes, there are operating considerations such as minimum charge temperatures. This is easily overcome by simply insulating the battery box and stuffing a low watt incandescent light to keep the pack within operating range. You could also use a run of

the mill small heating pad to the sea effect. Excessive heat? Well, again insulated battery and well-ventilated box stored in the bay will suffice in most cases. At worst case, put a small wall AC to keep within operating temperature range.

Remember, you are not building some puny battery but one that easily exceeds 10KW to 15KW, lots of power to run all your stuff as you need. For costs - sure you can pay \$1000 per KW for a plug-in battery like Battleborn or others. Why not DIY the same capacity for \$120 per KW. When I built mine a couple of years ago, typical pricing is \$100/KW; it's gone up some but not a crazy increase. Being totally off the grid and off a genny totally is an incredibly powerful and freeing feeling. Makes it just like living at home within reason. Keep all the lights on as you want, run the microwave anytime, etc.

Post by: belfert

I already have enough things to do without spending dozens of hours learning how to build my own lithium battery bank having to deal with balancing cells and all that. Heating batteries with a light bulb works great until the bulb burns out and you lose the entire bank. (Yes, I could put in a temperature monitor.) It would be a no brainer to use lithium batteries if I used my bus more than eight days per year. Aren't the really cheap lithium options done with used batteries from electric vehicles which may, or may not, be any good?

Post by: Utahclaimjumper

Why not go old school and install four lead acids for about 500 bucks, should last about six years with proper care.

Post by: buswarrior

Just run the generator. Lithium is not cost effective for the weekend camper yet. Any significant battery bank makes no sense for once-a-year use, when there is a robust generator present. Nobody that lives in the winter uses light bulbs for anything but light. Just about useless in Brian's locale. How many BTU in a lightbulb? Building your own lithium batteries is in the same tim-

