

Dear Friends & Relatives, Sunday, June 5, 2005

This one is from Chuck. Donna has been doing a fine job of describing our travels and giving you websites in case you wish to know more about one of our destinations. My job is to supply more technical information. So this email deals with fixes, modifications, and improvements.

FIXES

Attached is a photo of the latches that we used to keep cupboards and drawers closed while traveling. We are happy to report that the solution works well. Should you want some of these slide latches, we bought them at: <http://www.thehardwarehut.com> We purchased 50 of them and they were about \$3 each. If you just need a couple, you can get them from Ace Hardware at about \$6 each.



The above is an overhead cabinet in the every day unlatched position. To travel, we just slide the latch to the left and it covers the tab attached to the door. The same idea can be used horizontally or vertically.

MODIFICATIONS

The picture below shows the addition of four extra house batteries on the left and the new solid state, pure sine wave inverter/charger in the middle, and the original four house batteries and two engine batteries on the right. The house batteries are six volt, 220 amp hour, true deep cycle, and can be had for about \$80 each. The inverter/charger (a combination unit--battery charger and DC to AC converter) has excellent three stage charging capability and 2000 watt AC capability. It is called a Prosine and made by Xantrex. It goes for about \$1800.



IMPROVEMENTS

The picture below shows four of our six 100 watt solar panels. There is one more in the middle of the roof and another on the far side. Most of the time all six panels are flat on the roof, but they can all be tilted 45 degrees to either side for use in the winter when the sun is low on the horizon.



Our goal was to be able to camp with no hookups and run the television, the microwave, and the forced air furnace all night in a cold climate and be able to completely recharge all batteries during the day. It appears that we have achieved this goal. Most solar panels have 36 cells and put out 18 volts of DC. Ours have 44 cells and thus, put out 22 volts. There are significant advantages to using the high voltage units: 1. Solar cells sitting in the sun can get very hot and as they warm up, their output voltage drops significantly. You need to end up with over 14 volts to charge your batteries and this is never a problem with these high voltage units. 2. With modern high tech charge controllers, the extra voltage can be converted to charging power. In some cases, i.e., low batteries, cool temperatures, and bright direct sun, up to 30 percent more power can be had. This technology can be obtained from AM Solar in Springfield, Oregon. www.amsolar.com.

JUST FOR FUN

The picture below shows our new motto which is being painted on the back of the coach by Jim Augustson of Weaverville, California, (530) 623-4512. Jim is an old friend and a remarkable artist. We gave him the motto and the location and he gave us work better than we imagined. We love it.



Below is Jim's finished work. It really describes this stage of our lives.



Well, that's not the end of the improvements and modifications. Next time we'll tell you about our transportation solutions.

Until next time, home is where you park it.

Cordially,

Chuck