

Our motor home has been sitting idle for most of the winter. I went out last week to take a look at it and make sure there were no obvious problems. I started the generator to exercise it for a while. I sat there mesmerized by the quiet purring sound of the generator when suddenly the steady purr was interrupted by a surging sound. I quickly turned the appliances off that I had on and listened closely to the generator RPM's increasing and decreasing. Within a few seconds it smoothed back out to a nice, steady purr again.

When I worked at a RV dealership, every spring our service department was booked with appointments for generators that either wouldn't start, or if they did start they had that all too familiar surging sound. This was a result of letting the generator sit for periods of time without starting and exercising it. Lack of use is one of the biggest problems with generators. In gasoline generators the fuel breaks down and gums up causing hard starting and surging problems. This can happen in as short a period of time as one month.

I need to slow down; I'm getting too far ahead of myself. Running and exercising a generator is just one small aspect of owning and using a generator. Let's start from the beginning. RV generators are what truly make your RV fully self-contained. What a feature, instant electricity at the push of a button. We take electricity for granted in our homes because we don't have to do anything to get it, with the exception of paying our monthly electric bill. This is part of the problem with RV generators, we expect the electricity to be there when we need or want it just like in our house. The problem is this magical source of electricity requires a certain amount of care and maintenance from the owner.

Safety first! Always keep in mind when you use a generator there is carbon monoxide. You should always inspect the exhaust system on the generator set before using it. Do not operate a generator with a damaged exhaust system. If you're using a portable generator set make sure the exhaust is directed away from the camping area. Test your carbon monoxide detector for proper operation prior to using the generator. **Never** run a generator when you or anyone else is sleeping. Observe campground etiquette. Do not run your generator after quiet hours.

A generator that comes equipped on an RV gets its fuel supply from the same fuel tank the engine uses. When the fuel tank reaches a ¼ tank of fuel the generator will shut down to prevent you from possibly using all of the fuel without realizing it. The generator will either have an automatic transfer switch to sense whether you are using shore power or the generator, or you will need to plug the RV power cord into a generator receptacle to use the generator. It is perfectly okay to use the generator while you are traveling.

This is one of the reasons you have a generator in the first place. It is actually more fuel efficient to run the generator with the roof mounted air conditioner on, than to use the dash air.

Generators are rated in kilowatts (KW). One kilowatt equals 1,000 watts. So a 4 KW generator would be a 4,000-watt generator. RVs have either 30 amp or 50 amp electrical systems. If you have a 30 amp electrical system and you're plugged into a 30 amp, 120-volt electrical source you can basically use 3,600 watts before you exceed the RV's electrical system. $30 \text{ amps} \times 120\text{-volts} = 3,600 \text{ watts}$. This is why a large majority of RV's with 30 amp electrical systems come equipped with 4,000-watt generators. This of course is also why RVs with 50 amp electrical systems come equipped with larger generators.

RV generators are extremely dependable and in many cases will out last the RV if they are properly maintained and cared for. They do not require your constant attention, just some basic maintenance. The first thing you need to understand about maintaining your generator is that they **need** to be exercised on a regular basis. This applies to gas and diesel generators. I mentioned earlier that gasoline generators could have fuel related problems in as little as one month of sitting idle. This is one of the biggest problems, but it can easily be prevented if you get in a habit of exercising the generator on a monthly basis.

I used to think that I could avoid this by adding a fuel preservative to the fuel tank and then running the generator long enough to get the preservative through the generator set. You definitely should use a fuel preservative whenever the unit will be in storage, but there are many other reasons to start and exercise the generator on a regular basis. Moisture build up can cause damage to your generator. When you exercise your generator it heats up the generator windings and eliminates this moisture build up. This monthly exercise regime also lubricates all of the engine seals and components and helps to prevent carbon build up.

So, what exactly do I mean when I say exercise your generator? For a gasoline generator I mean that you start and run the generator with at least a 50 percent load for at least two hours every month. It is extremely important that you run it with this minimum rated load. Generators are designed to run with a load placed on them. Our motor home has a 4,000 watt generator so I can either turn the roof air conditioner on in the summer time, which is about 2,000 watts or I can use a couple of small portable electric heaters if it's cold out. It's always better to let your generator run for longer periods than it is for short periods. Check your generator owner's manual for load ratings specific to your unit.

Other maintenance intervals for generators are based on usage. Your generator set will have an hour meter so you can monitor the usage. Consult your owner's manual for maintenance intervals.

Changing the oil and filters on a regular scheduled basis and for seasonal changes is just as important for your generator as it is for your automobile. For extended storage requirements consult your generator owner's manual. If you have an Onan generator and you prefer to do some of your own generator maintenance here is an Onan tune-up checklist to follow>> <http://www.funroads.com/service/home.jhtml>

The bottom line is don't hesitate to use your generator and when you do use it put a load on it. A little exercise and preventive maintenance will keep you generator in top operating condition and provide many years of faithful service. For a complete preventive maintenance guide for your RV check out my "Preventive Maintenance Checks for Motor Homes" e-book at www.rveducation101.com

Happy Camping,

Mark

Mark Polk is the owner of RV Education 101, www.rveducation101.com RV Education 101 is a North Carolina based company that produces professional training videos, DVDs and e-books on how to use and maintain your RV. Mark also hosts the RV Savvy segments for RVTV which airs on the Outdoor Channel.