## **HOW TO PREVENT FUEL VARNISHING IN YOUR RV GENERATOR**



It may seem strange that not using a product causes it to fail faster. With RV generators, though, that's exactly the case. If you store your RV over the winter or don't operate it often enough to refuel the gas tank every month, your generator could develop a condition called fuel varnishing, and that can affect its performance.

Fuel varnishing is a gummy residue that clogs the generator, carburetor and fuel pump. It is caused by the deterioration of fuel that sits in the engine too long. And it happens in a surprisingly short period of time. Depending on fuel quality and storage conditions, gasoline can deteriorate in as little as 30 days. As long as you refuel frequently with fresh gasoline and exercise the unit regularly, fuel varnishing is less likely to occur. But if you leave the same gasoline in the tank for several months, you're very likely to experience fuel varnishing problems.

Fuel varnishing affects many engines but it's more noticeable in generators because the engines are smaller. Even the slightest decrease in efficiency has a big impact on performance. A generator with varnish buildup may start but will run as if it needs a tune up. The generator will surge, accelerating and decelerating, but will rarely settle at a stable operating speed. In many gasoline powered units, engine speed directly affects generator voltage output and frequency. As speed increases/decreases, so does the voltage and frequency.

The only ways to prevent fuel varnishing are to treat the contents of the tank supplying fuel to the generator with a fuel preservative and to exercise the set. Cummins Power Generation has developed a fuel preservative and stabilizer, OnaFresh&tm;, specifically formulated for Cummins Onan generators. This preservative should be added to the fuel, especially on infrequently used RVs. Emptying the tank won't prevent fuel varnishing because a small amount of fuel always remains in the generator carburetor. If you plan to leave the tank empty, add a special mixture of fuel and a preservative before you run the tank dry so the residual fuel contains the preservative.

Once varnishing has occurred, using a preservative won't correct the problem. You need to add a fuel cleaner, and manually scrub the varnish from the fuel system parts. Cummins Power Generation offers Premium Fuel System Cleaner for use with Cummins Onan generators.

By understanding how to properly care for your RV generator and protect against fuel varnishing, you'll enjoy better performance and longer, service-free operation. Premium Fuel System Cleaner and OnaFresh, along with other Green Label Parts&tm; maintenance products can be found at your local Cummins Onan Authorized RV Service and Parts Dealer.