

Generator Removal & Replacement

BACKGROUND

What do the generator outputs mean? Making analogies to water flowing in a garden hose, the voltage is similar to the pressure in the hose. The water pressure is there whether the water is flowing or not. The amperage is like the amount of water flowing. Generators supply us with 120v of electricity at various amounts of current at 60 Hz. Typical currents are 20, 30, or 50 amps.

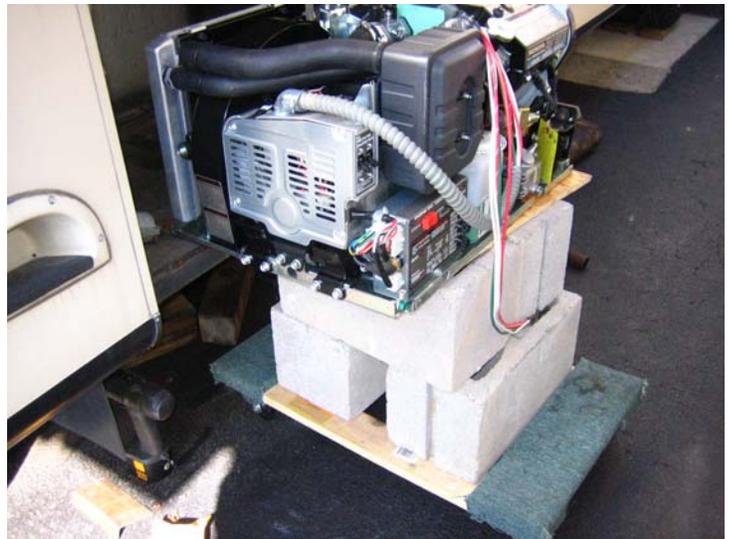
There are several commonly used manufacturers of these generators, the one shown is a Honda. Some are air cooled, some are water cooled, like this one. Which is better which is quieter, is beyond the scope of this discussion.

The generators are placed into a compartment, basically a sealed box. To properly cool them the cooling air must be routed from the inside to the outside of the compartment. This is one of the factors that makes the RV application special.



GETTING THE GENERATOR OUT

First be sure all AC power and batteries are disconnected. This model has 4 bolts that attach it to the bottom surface. Remove the mounting bolts, disconnect the fuel line. Mark and document where all electrical wires go, as needed. Disconnect the 12v wires, disconnect the AC lines. Remove any mufflers or related parts from the underside. The generator should slide out. This generator weighs 125 lbs, so we built up a support stand on wheels to move it around on.



This is another view that shows our support stand. The AC junction box can be seen in the background.



This is a view of the empty generator compartment. The openings in the floor are for cooling needs, service drain access, etc. Sound deadening material lines the compartment.



GENERATOR INSTALLATION

Replacing the generator is basically reversing the steps used to get it out.

THE OLD & THE NEW

Why did we take the generator out?

The old generator was 20 years old with 1600 hours of use on it. The age factor had effected the various gaskets and we had many oil leaks. Not severe, but enough to be annoying. It had been leaking for the last few years. Then it stopped producing power. The shop tested it and found that the stator was bad. That is the outer stationary coil of the generator, a major part and a major cost. In our case, the cost to repair all the leaking gaskets and replace the stator was nearly the same as the cost of a new one. We opted for the new one. It is surprising just how similar that they are, even after 20 years. We chose not to change brands due to the need to reinvent the mounting needs of a different brand. Also keeping the old provides a source of spare parts, if ever needed.

