

*Out with the Old, In with the New:*

## REPLACING THE LP WITH AN INDUCTION COOKTOP

Nearly every motorhome produced before 2008 came with a propane-based cooktop. The benefit was that the inhabitants could feed themselves in a dire emergency by actually cooking their own food over an open flame; an art that began in prehistoric times and has seen little improvement until the 20th century. Of course, methods of moving one's domicile from place to place has been around almost as long as cooking with little change until the same century.

Then came the 20th century: Cars, airplanes, electric stoves, travel trailers, motorhomes, and the development of two new methods of cooking food. The first great development was that of the microwave oven. Microwave ovens, use high-energy radio waves to heat food quickly and efficiently in a fraction of the time needed with a conventional stove. The second great development which came thirty-five years later was induction cooking. It uses electromagnetism to turn cooking pans into cookers (creating heat energy inside the pan itself, instead of firing it in from outside). This method cooks food more quickly and safely with less energy without heating up the environment (the interior of the motorhome).

Everyone knows about microwaves these days, but induction cookers are much less well understood. Though demonstrations have been provided at numerous major rallies (such as FMCA events), many owners have not made the conversion. I know we ignored the sales pitches from in-booth demonstrations until two years ago. That's when we decided to become full-timers and do something about the gas stove. My wife and I both didn't enjoy cooking by gas in a confined space.

After purchasing our Newmar Dutch Star (used) in 2014 and selling our home, our first destination was the

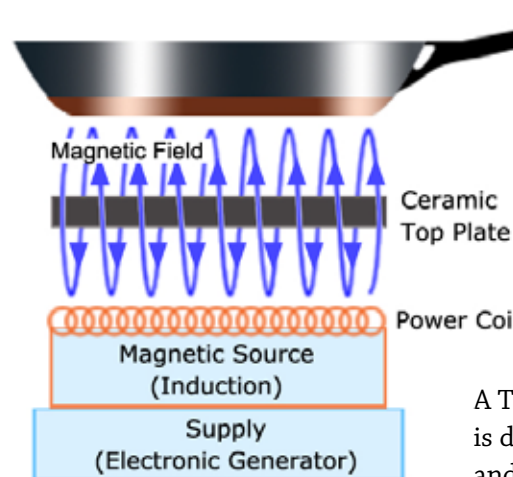
Newmar Rally in Escanaba, Michigan. It was there that Martha and I took the time to see what induction cooking was all about at the TechnoRV booth. We walked away with a portable cooktop (similar to what is pictured above) and the griddle that came with it. After that day, the gas stove was never used in our coach, ever.



### *What to do with a piece of junk?*

After cooking on the single-burner, portable unit for several months, I figured it was time to see what other owner had done about the situation. After all, carrying something around that isn't being used is a waste of resources. After checking out a few forums and seeing how the all-electric coaches were equipped, it became obvious that replacing the three-burner cooktop with a two-burner induction system was the way to go. Though there are many brands (knock-offs) of the portable cook plates available, there are only a few types suitable for a motorhome that is equipped with 50-amp service. Of the two brands

available, I chose the True Induction brand. I will point out that the 50-amp limitation means staying with a unit designed for 120-volt service to match the capability inherent in a motorhome. The home models assume a minimum of 100-amps for the house which means that a 240-volt system can be used. This is not suitable for use in an RV of any type.



A True Induction model was ordered. The unit is designed for a "counter inset" installation and fits the width and height dimensions of the gas unit. The gas unit is deeper so that means some space will need to be filled after replacing it with the induction model.

### *Let the work begin*

Removing the old LP cooktop wasn't much of a problem especially since we didn't have a gas oven. There are a

few screws that hold the cooktop in place. They can be accessed by removing the drawer immediately below the cooktop. Before removing it I, of course, turned off the gas supply in preparation for the removal. After removal, I capped the gas line that feeds the burners with proper accessories I purchased at Home Depot. I then moved the lines toward the back of the cabinet and tucked them under the back of the counter.

Our cooktop was made to be covered by a folding section matching the Corian so the counter could be extended when it wasn't in use. The cover was easily removed since it is held in place by a spring-loaded latch at the rear. I didn't dispose of the folding cover since it would be used to cut pieces to go across the front of the cavity, on each side (the replacement cooktop is about 7/8-inch narrower), and across the rear.

Since it is easily cut using a good table saw, used the sculpted front edge from the folding cover. It was secured in place using a board cut the width of the gap left by the removal of the gas unit. I used some beige sealant to fill the space on the left and right sides (see the photo above, lower portion).

My wife and I decided it would be a good idea to make a spice rack with the Corian material to fill the space at the rear. The rack measures 4.5 inches deep and 3.5 inches tall and runs the entire width of the cooktop (see the photo above, upper portion).

I made a shallow drawer for in the additional space gained. It can hold flatware and/or cooking utensils. To get a drawer front I looked online for a source that supplied a match. Instead of a pull, however, I'll attach a towel bar to which will serve as a replacement to the safety bar attached to the old unit (see the top photo on this page).

### ***Cooking the induction way***

The advantages of induction cooking include faster heating times which reduces the wait time for the pans to come to temperature, less use of energy because it reduces heat being diverted to the rest of the coach, no gas odor, and a safer cooking experience because there are no open flames or heated coils. In addition, the glass-ceramic surface is easy to clean even if there are spills.

Added to this is the advantage of the smart system developed for the True Induction unit. Since it runs from a standard 120-volt line at 1,800 watts, it can draw a full 15 amps. However, it is designed for load balancing between the two burners. The maximum power of an individual burner level is at setting 10. But, when operating both burners their combined total is level

10, meaning that when operating the two burners at the same time they'll self-adjust levels accordingly. When you increase the power of one side, the power output of the other side will reduce automatically. To feed the new cooktop with electricity I tapped into a basement line that had little load.

Not only do we get to enjoy the marvels of induction cooking but we also have some new

cookware since induction cooking utilizes magnetic-based technology to excite the molecules of the metal contained in ferrous (meaning magnetic) cookware. By the way, lots of brands exist but we purchased a set by NuWave.

*ABOUT THE AUTHOR – Byron Songer is the VP Publications for Diesel RV Club and the editor of this newsletter. He and his wife have enjoyed motorhoming since 2007. Byron retired from teaching at the college level and is now a KOA work camper by summer and Disney castmember during Florida's snowbird season in the Magic Kingdom.*

