

Gas to Induction Cooktop Conversion Steps/Key Issues

After viewing a March 2021 monthly SOCAN meeting entitled “Natural Gas, the Fossil Fuel you came to love”, my wife, Erika and I decided to explore converting our gas cooktop to an electric induction unit. We were committed to shifting from gas to induction to shrink our footprint, reduce indoor and environmental pollution and address the aggravating cleanup needed for a black gas cooktop.

The following document describes our experiences in converting a thirty-inch gas cooktop with a downdraft in a granite top kitchen island to an electric induction unit.

- First, we researched induction cooktops to find an acceptable price range, preferred brand, potential retailers, and available rebates. Lowes and Home Depot were good online sources of information. Both run sales 3-4 times per year which can save up to 30%. We settled on a Frigidaire Gallery, based on customer evaluations, cooktop review guides, product options and best value.
- Next, we requested a quote from Welburn Electric to find electrical requirements and cost. Induction units need a 240-volt line from the breaker box to the cooktop. Identifying *electrical requirements is critical.* *The electrical work needed could equal or exceed the cost of the cooktop.*
- Prior to purchase, we checked measurements of the current cooktop against the dimensions of the Frigidaire Gallery to confirm it would fit. Our measurements looked suitable, but tight. During installation, Welburn discovered the downdraft blocked full access. Clear Shine Stone successfully enlarged the cutout to allow completion of the installation.
- We then researched how to seal the unused gas line. The choices were DIY or hire a plumber. I thought I could do it myself, but quickly learned calling SOS Plumbing was a far better decision. In addition, in late January of 2022 Stanford Woods Institute for the Environment released a report on the climate and health impacts of natural gas stoves. The study measured the release of methane and nitrogen oxides during combustion, ignition, extinguishment and while the appliance was off.

A key finding was that three-quarters of total emissions occurred while the unit was off, indicating that gas fittings and connections to the stove and in-home gas lines are responsible for most emissions. This finding highlighted the issue of indoor pollution, convinced us conversion was the proper decision, and that SOS Plumbing should cap the gas line to address any potential leaks.

- **Finally, we began the process of selecting cookware. We found stainless-steel cookware with inner layers of aluminum or copper (3 or 5 ply) for even heat dispersion to be the best choice. From here on it is all personal preference-options and costs vary widely. Selecting the number of vessels, type of material, coated versus uncoated, and determining an acceptable cost range is critical. We selected a Cuisinart MPC-12N set based on high customer satisfaction ratings, cookware experts' evaluations, superior performance, and excellent value.**

- **Our conversion experience, based on a granite surface with downdraft, shows installation and cookware costs will equal or exceed the induction cooktop unit cost prior to any rebates. Although conversion came at a considerable cost, we are quite pleased with the result. The unit performance, ease of clean up and the recent Stanford study substantiating our concerns regarding indoor pollution made the cost of conversion well worthwhile. We hope our experience will encourage and help guide others to convert to induction.**

David and Erika Bekermeier

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