

Cleaning Electronic Air Filters

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When clean, electronic air filters are the most efficient furnace filters on the market - according to research at the Canada Mortgage and Housing Corporation. When dirty, they don't filter much at all. When in-between they can give off ozone.

If you're a lazy homeowner, they probably won't do much good for your household air quality. If you're willing to clean them properly once a month, they'll trap more pollutants than any other filter.

The small wires on the upstream side charge all the particles of pollution with an electro-static charge. This is then attracted to the opposite charged collector plates. Contrary to old recommendations, these units should not be cleaned in the dishwasher. The water movement is too violent and can bend the collector plates. Using any ordinary detergent tends to leave a thin white film that reduces their effectiveness. I know of only two really good electronic air cleaner solutions -- DAX and SIEGE. The latter did the best job because it brightened up the metal and rinsed off completely. For a while SIEGE was available to consumers from a small Winnipeg based company, but as the industry discovered that homeowners did not like regular maintenance jobs, most electronic air filters have been replaced with 4 inch disposable pleated filters. So with fewer electronic filters on the market, SIEGE went back to being a commercial product. Then the no smoking laws for bars and restaurants came into effect and the primary outlet for the SIEGE company dried up -- electronic smoke cleaning machines in public places. So they went out of business and SEIGE no longer exists.

DAX can still be found at SEARS and Home Hardware.

How do you clean electronic air filters? Here are the original detailed instructions from the guys at SIEGE.

WASHING PRE-FILTERS AND CELLS

- 1- Regular washing is necessary to ensure maximum efficiency from your air cleaner. A through washing once every month will be adequate for most installations. More frequent washing may be necessary for some homes where there is new carpeting, plaster dust, or excessive cigarette smoke, etc.
- 2- A) Switch the "operating control" switch to "OFF". Wait 15 seconds. Open the cell door to gain access to the cleaning cells and pre-filters.
- 2- B) Remove the pre-filters and cells. Avoid damaging the cell plates and ionizing wires. **WARNING:** Failure to exercise care can result in cut fingers because cell plates are very sharp so please be careful.
- 3- A) Place cells in a laundry or other large tub.
- 3- B) Mix SIEGE in a spray bottle. The concentrate should be diluted by mixing 8 parts water to 1 part of SIEGE.
- 3- C) Spray the cells and pre-filters making sure you get into all the little nooks and crannies. The cells should be good and running wet all over. Let the cleaner sit on the cells for a few minutes (Give it 5 minutes to do it's job!)
- 4- Caution: We do not recommend the use of any cleaners which may contain ammonia, bleach, or animal fats because they will damage and/or discolor your aluminum cells and pre-filters.

RINSING

- 1- Hold cells/pre-filters upright in a tub.
- 2- With a hose, rinse both sides of the cell until the water running off the cell runs clear.
- 3- Look in-between the fins of the cells to see if all the dirt has been removed. If the cells are not completely clean, then repeat the cleaning process.
- 4- If the ionizing wires have lint or pet hair wrapped around the ends, remove it carefully. If any ionizing wires are loose then they should be replaced.

DRYING ***** VERY IMPORTANT *****

- 1- Lean cells and pre-filters at an angle and allow them to dry for a minimum of 1 hour.
- 2- Replace the cells and pre-filters into the cabinet.
- 3- Leave the air cleaner power switch in the OFF position and allow the fan to run overnight to dry the cells completely. After about 12 hours of drying time the cells should be adequately dry. The unit can then be safely turned on.
- 4- Caution: Enough drying time must be allowed to avoid damage to the electronic parts of the unit. This cannot be stressed enough as the power supply can be destroyed in a matter of hours due to a cell which is not completely dry. If the cell is not completely dry the light on the unit may not come on, or the unit will "arc" or snap continuously. If these noises continue for more than a few seconds, then turn the unit off again and allow it to dry for a longer period of time. Continuous arcing or snapping can burn permanent holes in the plates, destroy the power supply, create unwanted ozone and be downright annoying. If your plates do this continuously, have them repaired or replaced.

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