

May 2014 EnergyWiseSM Tip:
Spring Cleaning for Air Conditioners

Many escape the summertime heat by enjoying the “cool” their central air conditioning and heat pump systems provide. According to the Air Conditioning Contractors of America Association, the average system loses five percent (5%) efficiency a year, as it becomes dirty and requires maintenance. By making a small investment in effort and/or money, a simple cleaning can yield dividends in assured comfort and lower cooling bills. You will also help prolong the life of your system.

Most central air conditioner and air-source heat pump systems have two basic parts: an outdoor unit (often referred to as the condenser) that sits next to your home and an indoor unit that is part of your furnace and ductwork. Two (2) copper tubes connect an outdoor coil to an indoor coil located inside your furnace or air handler. For central air conditioners, one tube is covered with foam insulation. If you have a heat pump, both tubes will be insulated.

Start at the coil in the outdoor unit. The fan inside the unit draws air through the coil fins, and as a result, pulls dirt and debris with it. Dust, leaves, dead grass and paper can collect on and between the coil fins. Eventually, this blocks airflow and reduces your unit's efficiency.

First and most importantly, before starting any work, shut off power to your system! Having the unit switch on while cleaning is not only extremely dangerous, it could be fatal!

Next, trim any plants, grass or foliage at least two feet away from the outdoor unit. Then, remove the outer case with a screwdriver or nut driver and vacuum the fins with a soft-bristle brush attachment. Note that metal fins are delicate so avoid bending them.

Using a water hose with a spray nozzle, carefully flush away trapped dirt and debris from the coils by spraying from the inside out. This will prevent pushing dirt further into the coil. Take care so that the pressurized water does not bend the metal fins.

After rinsing, inspect the coil fins inside and out for any damage. If quite a few of the coil fins appear bent, they can be combed straight with a special "fin comb," available from an air conditioning supply store.

Allow the outdoor unit to completely dry before reassembling it. While waiting, you will want to go inside and check the furnace filter to see if it requires replacement. When opening the filter compartment, vacuum up any dust that has collected and replace the filter as appropriate.

Once everything is put back together as it should be, you are ready to turn the power to the system back “on” and operate as desired.

A more-thorough and convenient way to assure improved cooling efficiency would be to contact a professional HVAC technician to perform a tune-up. What does a tune-up service include?

- A comprehensive system inspection
- Cleaning all coils
- Lubricating moving mechanical parts
- Replacing air filter (if necessary)
- Checking coolant, fluid, and pressure levels
- Cleaning and draining condensate line
- Checking system wiring and thermostat controls

Professional tune-ups go into greater detail than what most homeowners can do to assure proper system operation. If it has been three (3) or more years since your system has had a professional cooling system tune-up, the Board of Public Works has a \$30.00 EnergyWiseSM incentive available to homeowners who have their cooling system tuned-up, regardless of what type or age of cooling system it is (air conditioner, air or water source heat pump). Simply have the Contractor complete the Cooling System Tune-up Incentive application, return to our office, and you will receive a \$30.00 credit on your monthly utility bill, after it has been processed by the Nebraska Public Power District.

The Board of Public Works and the Nebraska Public Power District want to help you make the most of the energy they provide you. That includes making the most efficient use of your cooling system this summer. For more ideas on how you can make your home EnergyWiseSM, contact the Board of Public Works or visit www.nppd.com.