

# Air conditioners are more efficient than ever

By: Chris Dorsi

**A**ir conditioners consume a lot of electricity, and are the largest summer utility expense for many families. Fortunately, recent design improvements have reduced the consumption of this hungry appliance. Two of the most important improvements are the two-stage compressor and multi-speed condenser fan.

During the hottest weather, you may need the full capacity of your air conditioner to keep your home comfortable. During this full-time operation, standard air conditioners run at their maximum efficiency. But during moderate weather, old-fashioned air conditioners will cycle on and off to keep from over-cooling your home. This stop-and-go operation is inherently inefficient, since a lot of energy is wasted during the start-up and shut-down part of each cycle.

Air-conditioning units with a two-stage compressor and a multi-speed outdoor condenser fan operate at lower capacity during moderate weather. This results in longer cycles and improved efficiency. It also allows your system to remove more humidity from the air. When the weather is

truly hot, they step up to full-speed operation to assure your comfort.

Variable-capacity air conditioners are all more efficient than older units, but they work in different ways:

- ◆ Some two-stage systems have two small compressors side-by-side. The first compressor operates alone during moderate weather. The second compressor kicks in only when needed during hot weather.
- ◆ The two-piston compressors run in one-piston mode during moderate weather and two-piston mode during hot weather.
- ◆ The multi-speed compressors actually turn at two different speeds to match the cooling load.

You can't avoid the heat of summer, but with a variable-capacity air conditioner, you can reduce the cost of cooling your home. You can learn more about air conditioners at the Energy Star® web site: <http://www.energystar.gov>

*—Chris Dorsi is a nationally recognized expert on energy-efficiency. For more free energy-saving tips, visit the Saturn Resource Management Web site at [www.srmi.biz](http://www.srmi.biz)*



*“...learn more about air conditioners at the Energy Star® web site: <http://www.energystar.gov>”*



## Services

- ◆ Beam Central Vacuum Systems
- ◆ Electric Grills
- ◆ First Call Emergency Response System
- ◆ Generators
- ◆ Home Heating Systems
- ◆ Incentives & Rebates
- ◆ Long Distance Services
- ◆ Security Lights
- ◆ Security Systems
- ◆ Water Heater Program
- ◆ Water Conditioners/ Softeners
- ◆ Electric Usage Audits
- ◆ New Home Consultations



**Please contact us for more information.**

**1-800-658-2243 or 547-3801**  
**[www.hawkeyerec.coop](http://www.hawkeyerec.coop)**