

“Cool” Technology Takes Heat Out Of Summer Utility Bills

What’s Inside Your Home’s Air Conditioner Makes A Difference

by Tom Bettcher

(NAPSA)—For many homeowners, the sound of an aging air conditioner signals a seasonal pocketbook question: how to beat the heat without breaking a sweat over the electric bill?

If your air conditioner is more than 10 years old, it might be time to upgrade to a more energy-efficient system. A new, high-efficiency air conditioner can save homeowners up to 40 percent on their cooling bill compared to older systems, according to the U.S. Department of Energy.

This year, approximately four million homeowners are expected to replace their air conditioning systems. When it comes to air conditioning, the type of technology used “inside the box” makes a big difference in its energy efficiency, sound level, and its environmental friendliness. Here are three things to consider:

1. Know what’s inside. The most important component and biggest energy user in any air conditioner is the compressor—the “engine.” In central air conditioners, the compressor is located in the outdoor unit. For the best energy efficiency and quieter operation, homeowners should look for central air conditioning systems or heat pumps that use “scroll” compressor technology.

Scroll compressors are up to 15 percent more energy efficient and operate three times quieter compared to older reciprocating (piston-type) compressors. With only five moving parts compared to 10 moving parts found in traditional compressors, scroll compressors also are more reliable.

2. Consider new two-stage systems. Ever wonder why the “engine” of your home air conditioner only runs at full throttle to cool your house? Emerson Climate Technologies took on this engineering challenge and developed Copeland Scroll UltraTech, an innovative two-stage scroll com-

pressor that operates the air conditioner at an energy-saving two-thirds capacity approximately 80 percent of the time, running at “full throttle” only on the hottest days.

The benefit for homeowners is a more even indoor temperature, better humidity control, and improved energy efficiency. Several major air conditioner manufacturers are now using this technology in their new top-of-the-line systems.

3. Regulatory changes create choices. Air conditioning systems and heat pumps made in the United States today must meet a minimum rating of 10 SEER (seasonal energy efficiency ratio). That efficiency standard is set to be raised to 12 SEER, a 20 percent increase, in 2006. Thanks to scroll compressor technology, manufacturers already offer a wide range of high-efficiency air conditioning systems, rated from 12 SEER to as high as 19 SEER.

Homeowners also have a choice of systems using the R-22 refrigerant or R-410A, a chlorine-free refrigerant. R-22 has been linked to ozone depletion and the United States has agreed to phase out its use in new air conditioners starting in 2010. Major manufacturers have begun offering systems that use the environmentally friendly R-410A refrigerant. Scroll compressors designed for R-410A have been found to provide even greater energy efficiency, reliability and sound benefits than their R-22 cousins.

When it comes to buying an air conditioner, it pays to ask your contractor what’s the “cool” technology inside the system that will really make your home more comfortable, cut your utility bills and be better for the environment.

• *Tom Bettcher is executive vice president of Emerson Climate Technologies, a business of Emerson (NYSE:EMR). For more information about air conditioning technology, visit www.GoToEmerson.com.*