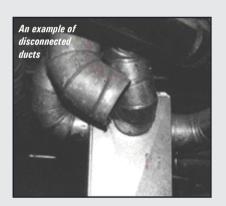
## Energy Efficiency: Don't "Duct" Your Responsibility

You'd think twice about putting a new engine into an old car, right? Unfortunately, many households don't take this same approach when it comes to their heating and cooling systems. They purchase new, high-efficiency heating and cooling equipment and then attach it to a clunker of a duct system. The equipment may heat and cool the home, but the system never performs at its full potential.

The fact is, many forced air duct systems are clunkers. They leak, are poorly-designed and inadequately insulated. This is a big problem since central air conditioners, heat pumps and forced air furnaces rely on these systems to circulate air throughout your home. Poorly-performing ducts can reduce your system's efficiency by up to 20%.



The U.S. Environmental Protection Agency's ENERGY STAR® program recommends that you have your duct system checked—either during an equipment replacement or a service call. Your contractor should be able to diagnose any problems and make needed repairs that can dramatically improve the energy efficiency of the complete system, increase your home's comfort and help improve the environment. By fixing your ducts you could save up to \$140 per year in energy costs.

Do you have a clunker of a duct system? Ask yourself these questions:

- Do your filters get dirty quickly? Are there dirt streaks showing at the corners and seams of duct connections?
- Do you have rooms that just don't get much air flow and never seem to feel comfortable?
- Do you have ducts in your attic or crawl space?

Any or all of these conditions may be attributable to poorly performing ducts. Your contractor should do the following to fix your ductwork:

- "Walk your ducts." Inspect the whole distribution system, including attic and crawl spaces. They should: measure air flow with diagnostic equipment, remove some registers and grills to make sure that everything is connected, and develop a plan to make upgrades.
- Seal all leaks and connections with mastic, metal tape, or an aerosol-based sealant. Don't use duct tape!
- Seal all registers and grills tightly to the ducts.
- Fully insulate ducts in unconditioned areas (R6 at a minimum).
- Determine if additional air returns dampers, or new zones are needed.
- Fix damaged ducts, straighten out flex ducts that are tangled.
- Conduct a combustion safety test after ducts are sealed to ensure that systems are venting properly.

For complete information on keeping your home comfortable yearround, get the ENERGY STAR Guide to Energy-Efficient Cooling and Heating at www.energystar.gov/homeimprovement or 1-888-STAR-YES (1-888-782-7937).