

# SAVE ON ELECTRICITY!

## Preventative Maintenance Agreements= Savings

Preventive maintenance agreements (PMAs) are agreements between you and your ACCA quality contractor for scheduled inspections and maintenance of your heating, ventilation, and air conditioning (HVAC) system. PMAs are generally scheduled semi-annually to maintain peak efficiency, prevent utility overpayment, and avert system failures through predictive maintenance that can help extend the life of your HVAC system. Sometimes PMAs are also referred to as "planned maintenance agreements," "start and checks," or "preventative service agreements." PMAs usually consist of fall and spring scheduled sessions for an ACCA service technician to go through your entire HVAC system preparing it for the upcoming season in a *proactive* approach *before* system failure and *prior* to overpaying your utility company.

### Energy Consumption

The HVAC system is most likely the single biggest use of energy in your home. In commercial applications where refrigeration is applied (combined with the HVAC systems), huge amounts of energy are used in the building. In fact, over 1/3<sup>rd</sup> of the energy used in the United States is used to heat and cool buildings.

According to the Consortium of Energy Efficiency (CEE) up to 50% more energy can be saved with proper installation, sizing, and maintenance of commercial central air conditioning and heat pumps. Although the CEE study did not measure residential systems, a compelling case can be made that proper maintenance can save homeowners up to 50% as well," according to Larry Taylor, President of Air Rite A/C Company, Inc., Fort Worth, Texas.

### Out of Sight, NOT Out of Mind

The old but true cliché "out of sight, out of mind" is often the reason for neglected maintenance guidelines for your HVAC system. HVAC systems are usually installed where they aren't seen, such as in a section of the basement, a closet, on rooftops, or in mechanical rooms, making them easy to ignore. The systems are simply taken for granted, until they fail. Decreased efficiency, utility overpayment, discomfort, loss of productivity, eventual premature replacement, and higher repair costs are the result.

Just because your HVAC system is out of sight, does not mean it can be neglected. Getting your HVAC system checked twice annually is just as important as changing the oil in your car every 3,000 miles!

### What should I expect my ACCA technician to do during a PMA visit?

- Check system functions, safety controls, and adjust the operating sequence where appropriate.
- Inspect electrical components and connections and repair/replace or tighten as required.
- Ensure proper airflow and change dirty air filters.
- Inspect pumps, lubricate, and check flow rates where appropriate.
- Clean and lubricate motors as required.
- Examine belts, adjust and align as required.
- Inspect, clean and balance blowers as required.

### Spring Visit (preparation for summer season):

- Clean inside coil, condensate pans, condensate traps, and condensate lines to prevent obstructions.
- Clean outside coil and straighten fins for efficient operation.
- Check refrigerant levels and if low, find the leak. (According to many equipment manufacturers, a 10% refrigerant loss will result in a 20% decrease in system efficiency!)

### Fall Visit (preparation for winter season):

- Clean the burner assembly.
- Remove soot from fireside of burner.
- Clean and check operation of humidifier.
- Visually or with remote camera, inspect heat exchanger for cracks.
- Adjust air/fuel ratio of burner and perform combustion analysis. *(Instrumentation used for combustion analysis is a means of fine-tuning a burner to achieve maximum fuel efficiency and "optimum firing.")*

Note: For heat pump applications, winter season inspections repeat a number of the summer procedures plus several additional checks. Maintaining semi-annual PMAs for heatpumps is also important.

### What's the bottom line for me?

- Savings: PMAs typically more than pay for themselves through higher efficiency, less utility overpayment, and contractor discounts. PMA customers typically receive a discount on all parts and services performed during the entire year.
- Peace of Mind: Predictive maintenance will mean fewer system failures and a longer life for your HVAC equipment.
- Priority Service: Should a system failure occur during the heat of the summer or the cold of the winter, customers with PMAs generally receive priority service.
- Continuity: Many ACCA contractors are often able to assign technicians to the specific customers. That way, you get to see and know the same service technician, and he or she becomes more familiar with you and your equipment.

ACCA is the nationwide nonprofit association of heating, ventilation, air condition, and refrigeration contracting businesses. For over 40 years, ACCA has provided education and research in support of efficient, safe and healthy heating and cooling systems. Learn more at [www.acca.org](http://www.acca.org).



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