## **Preventive Maintenance**

### **Preventive Maintenance = \$avings!**

Take care of your HVAC system, and it will take care of you.

Preventive Maintenance Agreements (PMAs) are agreements between you and your Air Conditioning Contractors of America (ACCA) quality contractor for scheduled inspections and maintenance of your heating, ventilation, and air conditioning (HVAC) system.

PMAs are generally scheduled for the spring and fall to maintain peak efficiency, help keep utility bills lower, extend the life of your HVAC system, and avert failures. Sometimes PMAs are referred to as "planned maintenance agreements," "start and checks," or "preventive service agreements." Most agreements offered by ACCA contractors cover an inspection of the entire HVAC system and routine maintenance (such as replacing or cleaning filters).

### **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 a third of the energy used in the United States is used to heat and cool buildings.

According to the Consortium for 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.

### **Out of Sight, NOT Out of Mind**

The cliche "out of sight, out of mind" is often the reason for neglected maintenance on 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, premature replacement, and higher repair costs are the result.

Getting your HVAC system checked twice annually is just as important as changing the oil in your car every 3,000 miles!

# What should you expect your ACCA member service 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. -Pipes
- 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 and fix it. (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.
- Inspect the heat exchanger for cracks.
- Adjust air-to-fuel ratio of burner and perform combustion analysis.

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

### What's your bottom line?

Savings: PMAs typically more than pay for themselves through higher efficiency, lower utility bills, 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 assign technicians to 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.

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