



## Tips For Safe and Cost Effective Home Heating

Checking your furnace can lower operating costs, protect your family against fire hazards and carbon monoxide poisoning and prevent your furnace from quitting at an inopportune time – such as in the middle of a dark and snowy night.

### Furnace Maintenance Checklist

Follow these steps to help your heating system operate safely and efficiently all season long.

1. **Turn off the electricity to the furnace.** A clean filter means more efficient operation. If you haven't regularly cleaned or replaced the filter or filters, do it now and check it throughout the heating season. If you have a central air conditioning system that operates with the furnace blower, count on replacing the filter more often.
2. **Next, remove dust from the blower blades and motor body.** Oil the motor and check the fan belt by lightly pressing it. If it doesn't give about an inch, adjust it until it does. If it shows wear, replace it. To maximize efficiency, seal the filter opening with duct tape and make sure the blower cabinet door closes firmly.
3. **Vacuum the grills and gently clean the thermostat monthly.** At least once a year, remove all of the heating system's grills, including the cold air returns, and remove any obstruction from the ducts. Check ductwork for improper connections and tape the seams with duct tape if necessary.
4. **Perform a draft hood test for combustion air.** If the furnace doesn't get enough fresh air, combustion gases, including carbon monoxide, can spill out of the draft hood and into the house rather than being drawn up into the chimney. Here is how to test for combustion air:
  - **Close all exterior and bedroom doors.** Also close all of the windows and the dampers on any fireplaces or wood stoves.
  - **Open the interior door to the basement or furnace room.** Then open any interior doors standing between the furnace and the exhaust fans for the kitchen, bathrooms, clothes dryer and other vented appliances such as the water heater.
  - **Turn on the furnace.** Wait for a few minutes for the draft to stabilize, then hold a smoking kitchen match or incense stick two inches from the draft hood opening. If the smoke draws into the draft hood, the furnace is venting properly. If it blows away from the hood, combustion gases are spilling

into the house and you need to call a professional heating contractor immediately. Until the contractor fixes the problem, leave a furnace room window slightly open.

### **When To Call the Pros**

An oil furnace should be serviced and cleaned by a qualified technician every year, a gas furnace every two years. This service person will do more complicated tasks, such as:

- Check and adjust the thermostat's calibration
- Clean and adjust the burners
- Clean and adjust all the safety, pilot assembly and time controls
- Adjust the pressure regulator
- Inspect and clean the heat exchanger
- Lubricate all moving parts
- Check the flue pipe and diverter
- Replace the supply line filter in an oil furnace
- Check for gas leaks and carbon monoxide emissions
- Monitor the complete cycle for overall efficiency and
- Correct any problems.

### **Is It Time For a New Furnace?**

An old furnace, even in good condition, may use only 60 percent of the available heat to warm the house. That means 40 cents of every heating dollar goes out the chimney.

The best high-efficiency furnaces waste less than five cents of every heating dollar. The general rule of thumb is if your furnace is over 10 years old and needs \$600 or more in repairs, you probably want to replace it. However, if it is in good working condition, you probably want to live with it for a while longer unless you have a large house, lots of windows, high heating bills or a combination of all three.