

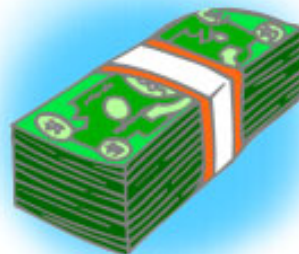
Equipment and Appliance Checklist



ARE YOU CONCERNED ABOUT YOUR ELECTRIC BILL?

If you are concerned about your electric bill, this “do it yourself” checklist will cover some major energy consuming devices and ways to better control your electrical usage.

Your home operates as a system and every segment needs to be analyzed in order to be efficient. This checklist mentions a number of issues that have a direct bearing on how efficiently you use electricity.



HEATING SYSTEMS

- When the house is occupied, the recommended temperature setting during the winter is 68°F.
- When the house is unoccupied, the ideal setback temperature varies depending on your heating system:
 1. Heat Pump with Electric Backup - the setback temperature should only be a few degrees below the occupied temperature setting. This should allow the heat pump to regain occupied setting without bringing on the backup electric heat. However, special heat pump programmable thermostats will allow you to lower the set back temperature even more without sacrificing efficiency.
 2. Fossil fuel or Electric Furnace (without a heat pump) - the unoccupied setback temperature should be in the range of 60-65°F.
- Leave the registers open and do not block registers with furniture (air flow is critical.)
- Change the furnace filter every 30-60 days.
- Close drapes at night and on cloudy days.
- Use bathroom and kitchen vents only when moisture and odors become a problem.
- Make sure all bathroom and kitchen vents are vented to the outdoors.
- Insulate hot and cold water pipes in unheated areas.
- Tape all the joints in the ductwork and insulate it in unconditioned areas.
- Have the heating system inspected and serviced every year.

- If you have any natural gas or propane in the house make sure your carbon monoxide (CO) detectors are operating and tested regularly.

COOLING SYSTEMS

- Set the thermostat at 78 degrees. Each degree higher saves approximately 6 percent on air conditioning costs.
- Don't turn the thermostat lower than the desired setting. The house will not cool off any faster and can overshoot the desired temperature - wasting energy.
- Keep the outdoor unit coils free of dirt, leaves and debris.
- Cut back plants and bushes that may restrict air flow to the outdoor unit.
- If the house is unoccupied during the day, you can save energy and money if you turn off your air conditioner and leave your house closed up. It may stay cool all day. If not, and you don't like coming home to a warm house, purchase a programmable thermostat to turn on the air conditioner in time to have the house cool when you arrive.
- Keep both primary and storm windows shut when closing up the house for the day or when running the air conditioner.
- Close your drapes on hot sunny days. If there is some way to shade your windows from the outside, this will keep out even more heat. Plan landscaping to allow winter sun in and block summer sun out.
- Make sure your clothes dryer is vented outdoors. You don't need the heat or humidity inside the house.
- Use bath and kitchen vents to exhaust heat and moisture.

- Turn off the gas furnace pilot light in the summer. This saves gas and heat. Ask a dealer how to turn off and relight pilot lights.
- Use fans whenever possible.
- Install a ceiling fan to create air movement. The air movement can keep you cool at a higher temperature, allowing you to avoid running your air conditioner, or letting you set the air conditioner at a higher temperature.
- Change the furnace filter every 30-60 days.
- Have the cooling system inspected and serviced yearly.

WATER HEATING

- Set the water heater temperature at 120°F if you don't have a dishwasher or if you have one with a booster heater. A dishwasher usually requires 140°F water.
- Install flow reducing shower heads.
- Drain a bucket of water out of your water heater at least once a year, or more often if you have hard water to flush out the sediment that can accumulate.
- Insulate your water heater, unless it's a newer insulated model.
- Insulate the first ten feet of hot and cold water pipes out of the water heater.
- Insulate pipes in unheated spaces.

REFRIGERATOR/FREEZER

- Set the refrigerator temperature at 34-37 degrees and the freezer temperature to 0-5 degrees.
- Vacuum the vents and coils twice a year. Dust makes them work harder to cool.
- Don't block air circulation around the refrigerator.
- Turn on the energy saver switch unless moisture begins to condense on the refrigerator.
- If you have a manual defrost model, don't let frost build up more than ¼ inch.
- Replace gaskets that don't seal tightly.
- The higher ambient air temperatures of a garage in the summer greatly increase the operating costs of the units.

LIGHTING

- Use lower wattage lamps in fixtures where you don't need as much light, such as hallways and bedrooms.
- Where possible, use one higher wattage lamp instead of several lower wattage lamps. However, don't use a higher wattage lamp than what the fixture will allow. A 100-watt lamp gives off 20% more light than two 60-watt lamps.
- Use florescent fixtures and lamps whenever possible. They use ¼ the energy of an incandescent lamp for the same amount of light, and last 10-13 times as long.

THE HIGH BILL TEST

If you are wondering what makes your meter really spin, the following is a simple procedure you can do to identify a possible problem area.

The test requires at least two people. First, turn on all the major electric consuming devices. Next, have someone stand by the meter and watch the dial or the clocks spin while the other shuts off all the electric consuming devices, one by one, that are fed off that meter.

There are a couple of things you are looking for:

1. Which appliance(s), when shut off, slows the meter down the most.
2. By watching the meter, you can observe if a motor is possibly short cycling (repeatedly turning off and on), which will cause increased kWh usage and decreased motor life.
3. If, to the best of your knowledge you have everything shut off and your meter dial or clock is still turning, you may have a grounding problem, a short or something running you are not aware.

Statistics show that if a meter is defective or has failed, they will almost always slow down. So if you are using more kWh than you expected, this procedure will show you which appliance(s) are problem candidates.

