

# TOP ENERGY-SAVING AND COMFORT TIPS

Homeowners sometimes find it hard to get excited about simply saving energy, but if you can combine energy conservation with comfort improvements, everyone is happy.

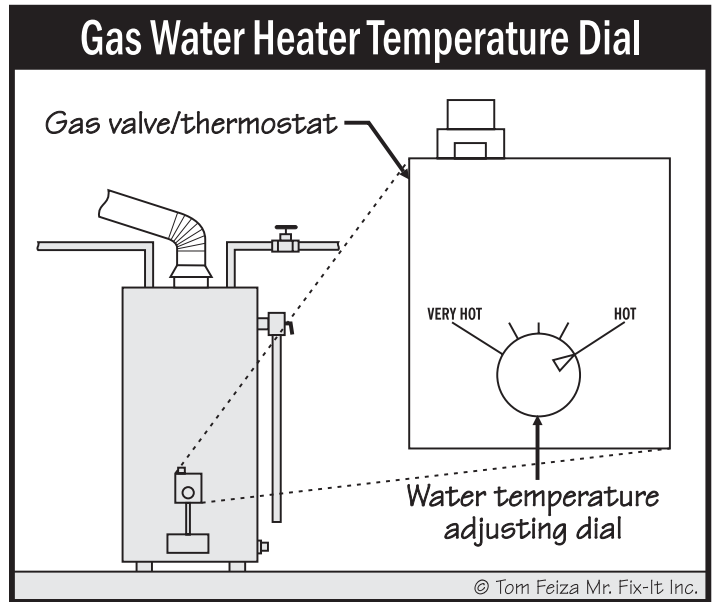
## 1. Insulate the Attic Trap Door

Insulating and weather stripping the trap door to the attic is one of the best energy-saving measures you can take. It costs little and will eliminate a large heat loss as well as potential attic moisture problems.

## 2. Lower the Water Heater Temperature

Lower the water heater temperature to the lowest setting you find comfortable, reducing the continuous heat loss from storing a tank of hot water. Water feels hot at 105 degrees, and at 115 degrees water can cause first-degree burns.

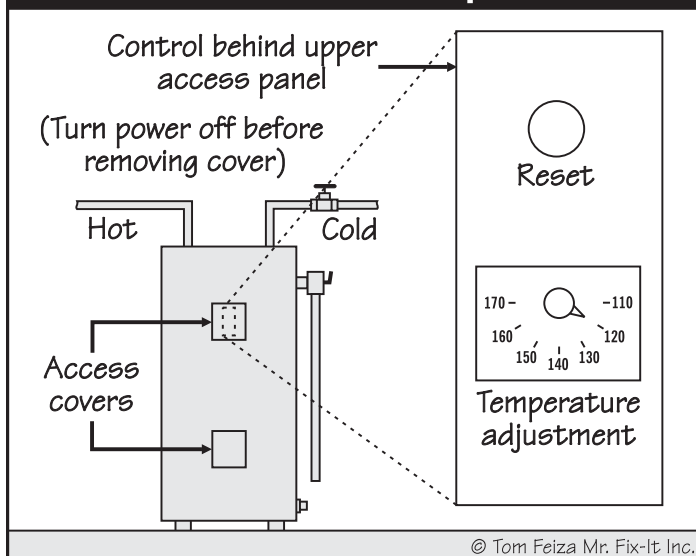
The dial on a gas water heater does not indicate the actual water temperature, so set the heater to the lowest or "warm" setting and check the temperature at the hot water faucet the next day.



W004

Electric water heaters may have a setting that indicates the actual temperature. Sometimes the dial is exposed on the side of the heater, but most often it is under the top cover. Be careful when you open the cover, since there may be some "hot" exposed wires beneath.

## Electric Water Heater Temperature Dial



W003

## 3. Set Your Thermostat Wisely

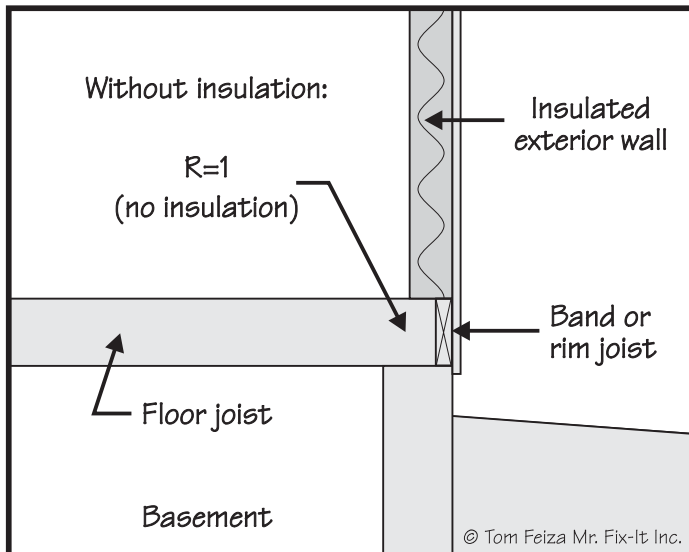
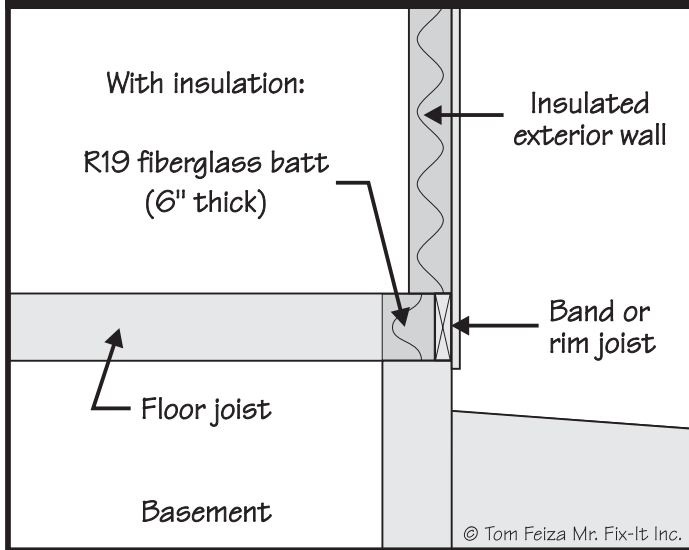
In the winter, lowering the heating system temperature by 1 degree can save you up to 3 percent on your heating bill. Try to live with the thermostat set at 68 degrees.

In the summer, try setting the thermostat at 78 degrees for cooling. During a period of hot weather, leave your air conditioning system on throughout. Don't turn it on and off from day to day. The air conditioner removes moisture from interior air, helping you feel comfortable.

## 4. Insulate the Band Joist

The band joist (sill plate) just above the basement wall, between the first-floor joists, may be allowing huge heat loss. On the outside, this area is near the ground and exposed to the weather. (Drawing S001)

## Band Joist Insulation



5001

From inside the basement on a sunny day, look for gaps or cracks in this area, and seal them with caulk or a foam sealant. Then insulate with 6"-thick unfaced fiberglass insulation. Buy insulation designed to fit between the spacing of the joists—normally between 16"-on-center joists. Cut it slightly larger than the opening so friction will hold it in place.

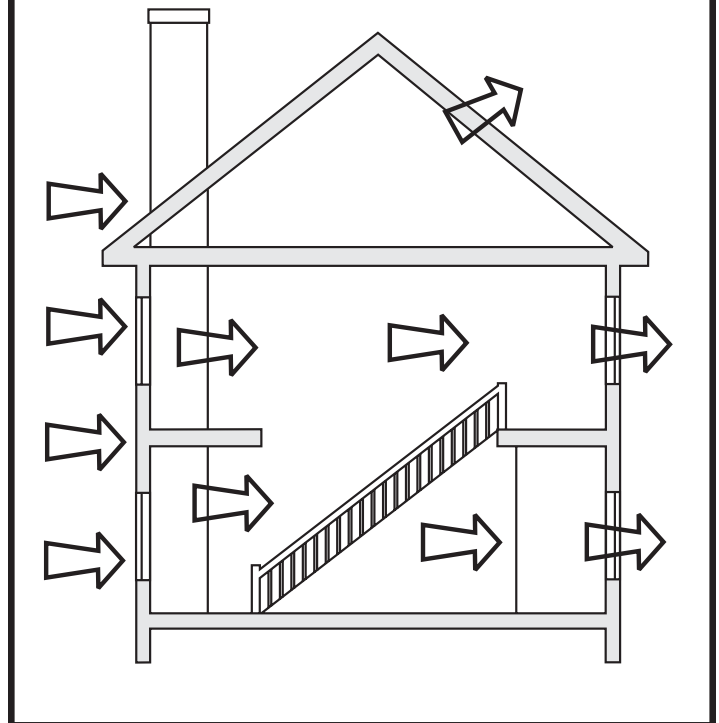
### 5. Weatherstrip and Caulk

Every year, check caulking and sealant around any penetration through your home's exterior. Check window and door caulking. You'll eliminate drafts and make your home more comfortable.

Visit a hardware store to find products for insulating your windows and doors: door sweeps, foam strips, rubber tapes, closed-cell foam tape—the list goes on.

## Wind Pushes Air Through a Home

© Tom Feiza Mr. Fix-It Inc.



M008

### 6. Use Sealers and Inside "Storms"

A drafty old window you don't plan on opening during the winter can be sealed with removable caulk and sealant. There's also a temporary indoor "storm window" you make by sealing clear plastic tape across the entire window.

### 7. Install a Low-Flow Showerhead

Low-flow showerheads have suffered a bad reputation for several years, but now many good options are available. A good one uses much less than 2.5 gallons per minute. And adding a flow control valve at the showerhead allows everyone to adjust the flow to his or her preference.

### 8. Install Lighting Controls

For walk-in closets or storage areas, replace the switch with a 15-minute timer. For exterior lights, use fixtures with a built-in photo-eye control so the light only operates after dark.

## 9. Stop All Water Leaks

Repair any leaking faucet to save energy and water, a precious resource. A small drip that fills a coffee cup in 10 minutes wastes about 3,280 gallons of water per year. This also wastes the energy required to pump the water, heat it, and treat it in the sewer or septic system.

## 10. Switch to Fluorescent Bulbs

Fluorescent bulbs are available to fit most lamps and fixtures. Color-corrected lamps give off warm light, close to the color of natural sunlight. Fluorescent bulbs typically lasts 10 times as long as standard incandescent bulbs and produce the same amount of light for one-quarter the cost.

## 11. Maintain Heating and Cooling Equipment

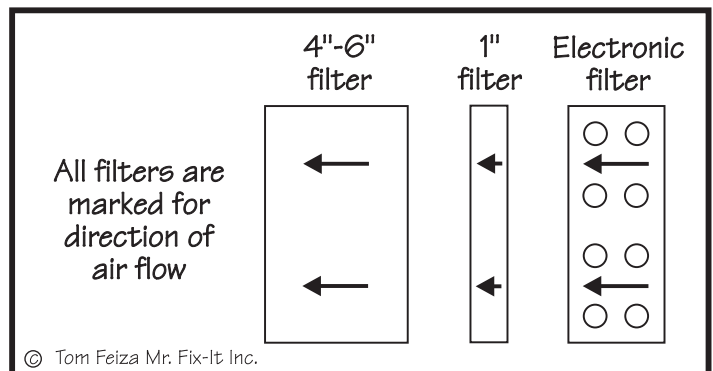
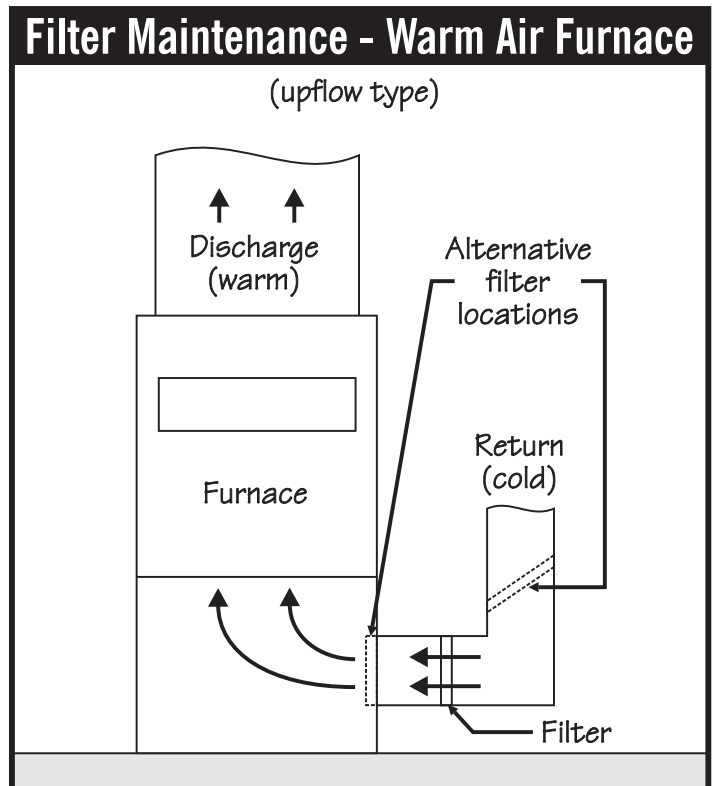
Basic maintenance of heating and cooling equipment can easily save you up to 5 % of your heat and cooling bill and will help avoid a potentially expensive outage and equipment damage. (Drawing H009)

What can you do? Read the specific recommendations in the instruction manuals for the equipment in your home. If you don't have the manuals, find a good home operating manual. You certainly can change filters and keep drain lines clear on heating and cooling equipment. For air conditioning, keep plants away from the outside unit and keep the coil clean outside. These simple steps can save lots of money.

Don't forget to schedule yearly professional service for your home's main heating and cooling equipment. Professionals can keep your equipment in top shape and can tune the equipment for energy efficiency. They will also help prevent any potential accidents from conditions like water leaks, carbon monoxide. When they provide the service, take the time to be there and have them explain what work is being done. Ask how you can do basic maintenance.

## 12. Seal Openings into the Attic

This is a tough problem. Many homes were built with poor sealing between the conditioned living space and the attic. This results in extensive air leaks and the loss of heat and moisture. There may even be moisture damage in the attic due to leaks around pipes, electrical wiring and vents routed through the ceilings. Stopping this type of problem requires a thorough inspection of the attic – perhaps a task best left to an insulation contractor or professional home inspector.



H009

## HOME TIPS

Written by Tom Feiza

See Tom's book  
How To Operate Your Home  
(ISBN 0-9674759-3-7)  
for great information  
on "operating" a home.

The book is available at  
[www.amazon.com](http://www.amazon.com) or through Tom at:  
[www.howtooperateyourhome.com](http://www.howtooperateyourhome.com)  
or [www.htoyh.com](http://www.htoyh.com)  
262-786-7878.



Tom Feiza, "Mr. Fix-It," Inc.