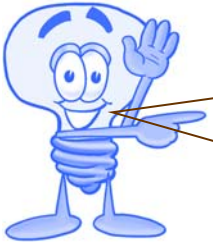


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@ YOUR Service



**WHEN I HEARD WATER HEATING ACCOUNTED FOR 20% OF MY ENERGY BILL, I STARTED LOOKING FOR WAYS TO KEEP IT RUNNING AT MAXIMUM EFFICIENCY.
READ ON!**

A water heater is like a trusty workhorse—steady, reliable and practically maintenance-free. But giving your water heater a little extra TLC can significantly reduce your energy costs. Water heating can account for up to 20 percent of your home's energy use—second only to space heating.

HOW WATER HEATERS WORK

When you turn on the hot water tap, heated water is drawn into your home's pipes from the top of your water heater. To replace the water being used, fresh cold water flows into the bottom of the tank, activating the heating elements.

Gas and electric storage water heaters operate the same way. However, gas heaters have a pilot light at the bottom to ignite the burner. They also have a flue running through the center of the tank to exhaust combustion gases. And while gas models have only a single burner, electric heaters have a lower and an upper heating element.

Both models feature a temperature/pressure release valve near the top of the tank. This valve will allow steam or hot water to escape safely, should a thermostat malfunction occur. It should be checked annually to ensure that it's working properly.

ENERGY-SAVING OPTIONS

There are four main strategies you can take to save water and heating energy:

1. THERMOSTAT CONTROL

Your tank is probably keeping your water hotter than necessary. Most heaters are set at 140 degrees F, and this high of a setting is only needed if you have a dishwasher without a booster heater. Turn the temperature down to 120 degrees F (midway between low and medium on a gas heater dial), and you'll cut your water heating costs by six to 10 percent. It's wise to mark the current setting with a permanent marker. That way if you need to adjust the temperature a bit higher, you can easily see where you started.

Electric heaters have both an upper and a lower thermostat you'll need to adjust. However, before removing the thermostat access panels, be sure to first turn the electricity off at the circuit breaker or fuse box.

When you're going to be away from home for several days, consider turning your gas water heater thermostat to the pilot setting. Electric heaters can be shut off at the electrical breaker box. It'll take only an hour to reheat once you return. If you have a gas model and shut the heater off, be sure to learn how to re-light the pilot light.

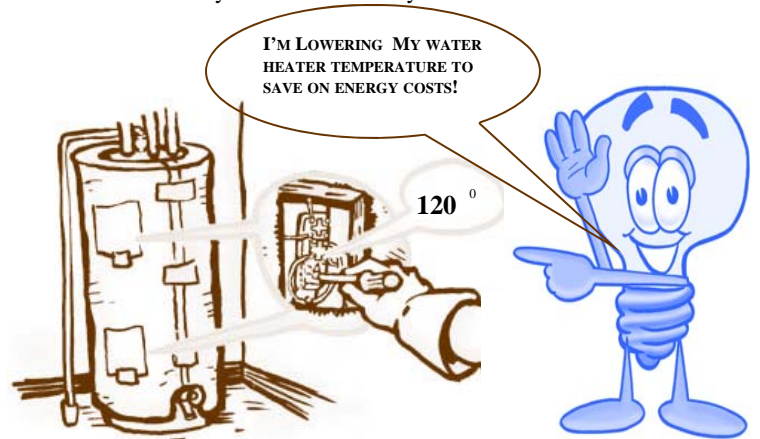
2. INSULATING WRAP

Wrapping the tank in a blanket of fiberglass insulation will reduce stand by heat loss by 25 to 45 percent. This means a savings of four to nine percent on your water heating bill. Water heater insulation kits are available for \$10 to \$20 at your local hardware store. They are easy to apply and will pay for themselves in less than a year. Be sure to carefully follow the directions. It's especially important to not cover exhaust vents and air intakes on gas models with insulation and to cut the insulation so you can access the thermostat panels on electric heaters. Never cover the pressure temperature relief valve. It's a good idea to put a strap near the top and near the bottom to further secure the insulation.

3. FLUSHING THE TANK

Over time, sediment and scale (dirt and mineral deposits form the water) build up inside your water tank. They reduce both heating elements efficiency and the overall capacity of the water heater. You can reduce this build-up by regularly flushing water from the tank.

The drain valve is located near the bottom of the tank. Open the valve and let the murky water drain into a bucket until it runs clear (usually after one or two gallons). If the valve hasn't been open in years, you may want to attach a garden hose to it the first time you drain, in case it's difficult to shut off. In some areas, depending on the hardness of the water, monthly flushing is recommended, and in others the tank need only be flushed once a year.



4. INSULATING YOUR HOT WATER PIPES

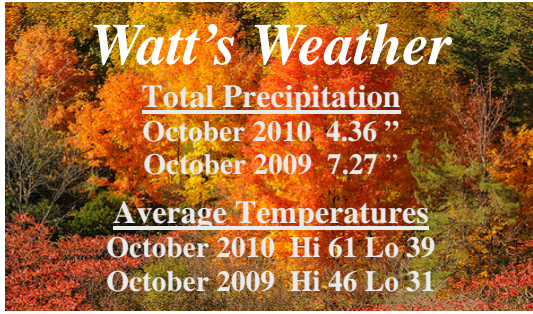
To save even more, consider insulation the first five feet of your hot and cold water pipes from the water heater. You can insulate your hot lines beyond five feet if they are accessible. Keep all pipe insulation at least three inches away from the hot exhaust pipe and draft hood on gas water heaters. Heat traps are one-way valves placed inside both the hot and cold water lines running into your water heater. They help to keep the hot water from rising out and the cold water from dropping in to your water heater when you're drawing water from a tap. By following these four simple steps, you can ensure that your water heater will operate efficiently.

Remember to follow your manufacturing manual for your hot water heater.



Happy Thanksgiving





Watt's Weather
Total Precipitation
 October 2010 4.36"
 October 2009 7.27"
Average Temperatures
 October 2010 Hi 61 Lo 39
 October 2009 Hi 46 Lo 31

Fee for Check Readings and Test/Change Meters

If a BPU customer requests BPU to check the reading of their electric and/or water meter, there will be a \$25 fee for this service if it is requested more than one time, by the customer, within a 12 month period.

In the event a BPU customer requests their electric and/or water meter to be tested and changed more than once in a three (3) year period, the customer will be charged a \$25 fee. If the meter test indicates that the meter is not accurate, the meter will be repaired or replaced, and the \$25 fee will be returned to the customer.

NOTICE: All electrical work performed in the City of Brainerd requires a "Request for Electrical Inspection" form to be filed, and work inspected by our inspector. Please call **825-3210** or **829-2193** for more information.

Business & Repair Office Hours
 7:00 a.m.—3:30 p.m.
Business: 829-8726
Repair: 829-2193
Emergency 24 hour service 365 days a year: 218-829-2193
 EMAIL@BPU.ORG WWW.BPU.ORG

BEFORE DIGGING: Call Gopher State One at **1-800-252-1166** for water and electric locations. All requests for locations must be made by calling the above toll free number at least **48 hours** before digging begins.



HeatShare
Some of your neighbors will be cold this winter
 YOU CAN MAKE A DIFFERENCE



Join your neighbors who care by giving to HeatShare.

HeatShare is a voluntary program administered by The Salvation Army. When you give you are helping warm the lives of the elderly, disabled, and others who have nowhere else to turn. It helps the needy survive our long winter by providing funds for heating bills and heating related repairs. HeatShare is a last resort for many who have no other resources available to see them through the winter.

Who is eligible for HeatShare?

- Seniors with low incomes and no alternate source of help.
- Disabled people whose physical capabilities limit their ability to maintain income to adequately cover energy bills.
- People who have had unexpected emergencies within the last 12 months and as a result cannot pay for household energy costs.
- People who meet income guidelines and have received or applied for all other possible public funds.

Who supports HeatShare?

You, neighbors, friends, people in big cities, people in small towns, and businesses all help by sending a tax deductible contribution with the form provided below.

HeatShare is one way a small amount can help in a big way.

COLD Warm HANDS Hearts.

YES! I want to contribute to HeatShare!

I am making a one-time contribution of: \$ _____

Name: _____ **Address:** _____

City/State/Zip: _____ **Account Number:** _____

Signature: _____

Please make check payable to HeatShare & enclose this form with your utility payment in the enclosed envelope.

Thank you for your generous tax deductible contribution!

