Heat Pump Guide

Sometimes, you have to spend money, to save in the long run. If you're looking for comfort, efficiency and savings from your heating and cooling system, you can't beat today's high efficiency heat pumps.

A heat pump offers superior performance – and savings – compared with both a gas furnace and an electric furnace. Natural gas prices have skyrocketed in recent years.

And compared with an electric furnace, heat pumps offer far greater advantages. Because a heat pump operates much more efficiently, a homeowner can cut the cost of operating their furnace in half by upgrading from an electric furnace to a heat pump.

For a manufactured home, the slightly higher up front cost for a heat pump compared with an electric furnace can provide substantial savings year after year.

Here's why a heat pump is one of the most trouble-free, low-cost systems available today.

How it works

A heat pump provides both heating and cooling. It's called a heat pump because it pumps heat out of your house in the summer, and pumps heat into your house during the winter.

Because air does not lose all heat content even when temperatures fall, a heat pump can extract warmth from the outside air during the winter and transfer it into your home.

In summer, the process goes in reverse. The heat pump pulls hot air from inside your home, and moves it outside.

Trouble shooting

The few problems that homeowners have with heat pumps can usually be traced to existing problems, including leaking ductwork, dirty furnace filters and dirty coils. These problems are often easy to find and fix.

All duct joints that have separated or leaking seams should be repaired. A substance called mastic should be applied with a paintbrush to every seam on metal ducts or apply foil tape to seams to make sure that conditioned air is not leaking. Do not use what is commonly referred to as "duct tape" because this material will quickly dry out and will not stick to ductwork.

Dirty coils also can seriously reduce operating efficiency. The coils look similar to the metal fins on your car radiator. Cleaning the coils usually involves hiring a licensed service technician to turn off the power at the disconnect or breaker, spraying on a coil cleaner (soapy water is usually adequate) and then using a hose to spray off the cleaner with a gentle stream of water. Never use a pressure washer or intense rinse as this will bend the fins of the coil, damaging your unit. If the HVAC technician does the job right, your unit will be free of the dirt and dust that cause it to work extra hard.

Regularly changing the filter is important. Dirt

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or dust can easily accumulate on a coil and reduce the effectiveness of a heat pump.

System controls

Improper use of a thermostat can lead to high bills when operating a heat pump. It's usually best to leave the thermostat alone, rather than continually adjusting it. That can cause the supplemental heaters in the system to cycle on and can significantly increase operating costs. If a homeowner wants to setback heating or cooling, programmable thermostats specially designed for use with heat pumps are recommended.

The emergency heat option should only be used in rare cases such as when the compressor isn't working properly. Using the emergency heat is expensive. Some systems have a light on the thermostat that indicates when the emergency heat is operating to help avoid accidentally leaving it on.

Conclusion

A high efficiency heat pump is a great investment. You'll enjoy great savings and many years of efficient comfort in your home.