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Pillar To Post

Headline: To Your Health

Subhead: Central humidifiers, a blessing or a nuisance?

### **Humidifiers need maintenance**

A poorly-maintained humidifier could be affecting your health. While it's a simple maintenance item, our inspectors find that 90% of humidifiers are full of nasty-looking scum. This scum is primarily scale left over from the evaporation of water. The stagnant water may contain bacteria and fungus. While the problem sounds terrible, the solution is simple, maintain your humidifier.

Homeowners assume that the furnace technician maintains the humidifier during the standard annual servicing. Not only is this not likely the case, but many models need more than an annual cleaning. The humidifier is considered a user-serviceable appliance, but most homeowners either don't know how to service it or they forget to do it. I hate to admit it, but the following photograph is my humidifier.

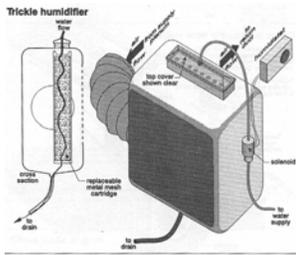


### **How they work**

There are two basic kinds of humidifiers, the drum type and the trickle type.

I have the drum-type in my home, shown above. This type most often suffers from lack of maintenance. The reason is, drum-type humidifiers require more frequent maintenance than the trickle type. The drum rotates in a tray full of water. The drum picks up water that evaporates into the air. Inherent to this design is stagnant water in the tray. To service these units, turn the humidistat to off, turn off the water supply to the humidifier, remove the drum and tray. Wash the tray and replace the sponge material on the drum. By the book, this should be done annually. In reality, it should be done more frequently, perhaps two or three times over the winter.

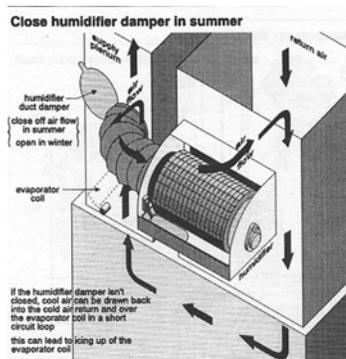
The trickle type is more expensive but it's a better design from a maintenance standpoint. Water trickles down an evaporation panel. Air blowing past and through the panel picks up the moisture.



The water that does not evaporate flows into the drain. The trickle type requires less maintenance because of the "self-cleaning" effect of the water flowing down the panel into the drain, and the fact that there is no stagnant water. Just replace the evaporator panel prior to the heating season.

### The humidifier damper

Here is another thing most people don't know about their humidifier. If you have air conditioning, you have a damper that you should close in the summer and open again for the heating season. The damper is either a knob directly on the humidifier that you turn to a summer or winter setting or, more likely, it is a piece of metal that you insert to cover over the duct opening. If you don't cover over this duct, you air conditioned air will be drawn back over the cooling coils and may cause the system to ice up.



## **The humidistat**

The humidistat is the little box above the central humidifier that regulates the humidity in your home. Once again, most people don't know how these operate. It's un-believable but the proper operating procedure for a humidifier is to re-set the humidistat on a daily basis! You should get up in the morning, check the paper for the night-time low temperature, cross reference this to the chart on the humidistat and set the humidistat to the suggested level. For example, if the night-time low is expected to be minus twelve degrees Celsius, the chart on my humidistat says we want a humidity setting of 30%. The theory behind this is, the colder it is outside, more likely you are to get condensation on your windows inside. Condensation is bad because of the mold, mildew and wood rot associated with chronic moisture. What most of us do is set the humidistat to a level where our windows aren't frosting up too much and we leave it like that for the winter. Another way of looking at it is, we never have the humidity set at an ideal level.

Some humidifier manufacturers have realized that this system just doesn't work and have developed automatic humidifiers (see [www.aprilair.com](http://www.aprilair.com) for more information). These have an outdoor temperature sensor that feeds back to the computer in the humidifier. The computer sets the humidity level automatically and continuously.