Vincent's Heating & Plumbing

August 2024

VINCENT'S NEWS The 'Van-Go' Gallery

OWNER'S CORNER



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Best Plumbing Company

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THROUGH MY EYES

It will come as no surprise to readers of this column that I am an avid bicyclist. And since I share this passion with my wife, Karen, bicycling has the added advantage of being something we enjoy doing together. As the weather permits, we ride almost daily. And since I work long hours running the business, hopping on our bikes for a 10 mile or so spin when I get home is a win-win-win for us: we get to do something we enjoy, we get to spend time as a couple catching up for the day, and we get physical exercise.

As a result, there's not a lot of



"Wherever you see a Vincent's Van Go' you know the job will be a work of art."



Here's Brendan Squires with a 30" walleye that he pulled out of Lake Esnagi on our June fishing trip that is described nearby.

time left for other hobbies. And so, while I enjoy fishing, I am an occasional fisherman at best. But every June I do carve out a week to *Continued Page 3*

ECM Blowers: A Key Factor in the Present and Future of Home Comfort & Efficiency

Last month we explored how ductwork problems can cause efficiency loss in your home's heating and cooling system. It's also important to consider how changes in blower technology have compensated for these issues in some cases while creating new problems in others.

Before 2019, most furnaces were built with traditional 'permanent split capacitor' (PSC) blower motors. These motors work very well where the HVAC ductwork is sized properly. However, when ductwork is undersized, airflow is restricted. In this situation blower motors can't work at full capacity to deliver the amount of air they are capable of. It's like a bicyclist pedaling up a steep hill – the amount of effort increases and the rate of speed decreases. This is what happens to airflow in poor ductwork. We call this condition '*high static pressure*'. And the amount of air delivered is decreased. In undersized ductwork, a PSC

Now That's Good News!

What Our Clients Say

Did you know..

...with VHP's Enhanced Service Plan that you are eligible for a 10% repair discount for covered products plus annual equipment maintenance visits?

Plus it costs \$50 less than the regular price of a maintenance visit!

ECM Blowers .. (Continued from Pg.1)

blower is a common choke point for efficiency.

<u>'Electronically Commutated</u> <u>Motor' (ECM) blowers</u>

In 2019, a federal mandate went into effect requiring that every furnace be made with energy saving ECM blower motor. While the reason was to reduce the demand for electricity, ECM motors also provide other benefits.

While PSC blowers slow down under high static pressure conditions caused by undersized ductwork, ECM blowers ramp up and push harder to overcome high static pressure. Back to the bicyclist pedaling up a steep hill analogy, an ECM motor is like having an E-Bike – the effort goes down and the speed goes up. This means that ECM enabled furnaces are able to deliver better efficiency even when ductwork isn't optimal.

ECM motors are also quieter and can last longer. Plus, they can save money in two ways:

1) ECM motors can deliver better airflow and still save

energy even if the ductwork is less than desirable.

2) They require less electricity to operate <u>under</u> <u>normal conditions</u> than older style blowers. The key phrase in that last point *is "under normal conditions."*

If ductwork is somewhat undersized, all of the above is true. But where static pressure is too high, an ECM blower will use more electricity. This results in higher electric bills and will put the motor at risk of premature failure.

The downside is that ECM motors are more expensive than the PSC motors they replaced. Also, in some cases a replacement motor may be a special order item depending on your furnace. Therefore, it's imperative you make certain your HVAC ductwork isn't a problem.

What can you do?

There are two important things to note:

1) ECM blowers are a good thing that, in most cases, can save you money.

In fact, there are now upgrades available so that if you have an older furnace, you can have access to the cost savings of ECM blowers without having to upgrade your furnace. These are especially recommended if you leave your fan on.

2) It's important to measure the airflow and static pressure of your HVAC system. Making ductwork corrections now before it causes a blower motor failure can help avoid a big future repair bill.

You'll be glad to know that we have this covered for you. We have invested in tools and analyzers that enable our techs to check this for you and make sure you are getting the reliability and performance you've paid for. If you have our Enhanced Service Plan we include these checks in our annual visits. If you don't we can still do this for you on a cooling checkup. See the nearby special report for details and a special offer.

- Brendan Squires



What Our Clients Are Saying..

"I had a new furnace and air conditioner installed in March. I am very happy with the installation. My gas bill is decreasing, and the ac unit is now matched better to the size of my house. The installers and follow-up people that were involved did a fantastic job. I would highly recommend them if you are looking at getting a new unit." - John Lee - Fort Gratiot

Through My Eyes (Continued from Pg.1)

go away for a fishing trip on Lake Esnagi in northern Ontario. This is something that I have done for the last dozen or so years. It started with my brother and business partner, David Squires. But recently we've expanded it and we each bring a son along.

Lake Esnagi is not an easy place to get to. It can only be accessed by a pontoon plane or an early morning train ride after a full day's drive. But the 27 miles of open water, the beautiful scenery and the large walleye and northern pike keep us going back year after year. We stay in a comfortable fishing lodge and fish from morning until night, going wherever we please on the lake in our two-person fishing boat.

The normal custom is to select a boat when we first arrive, which we will use the entire time we are there. This year, after the train ride and a short boat ride to the lodge, my son Brendan and I claimed an available boat by putting our fishing tackle in it. Then we went up to our cabin to get ready for the day. Apparently, we were gone too long because when we returned, our boat was gone, and our tackle was on the dock next to where it had been moored. Another guest had decided that they wanted the same boat and removed our stuff before heading off for a day of fishing. How rude! And if that wasn't bad enough, there were no unclaimed boats left for us to choose from!

The shock at this discovery began to be quickly displaced with darker emotions. How should I respond? Should I wait until the boat got back and get even by removing their stuff and taking the boat back? Would it result in an ugly scene? I didn't know what I should do but I knew that I didn't want anything like this to happen. I profess to be a follower of Christ and even though I might be justified in taking matters into my own hands I knew that none of these alternatives would please Him. Further, here I was in a wilderness paradise at the beginning of my trip and the last thing I wanted to do was to spoil it from the outset. So, I said a quick prayer and asked the Lord to work things out according to His purposes.

Almost immediately a man who saw my dilemma introduced himself as one of the lodge's fishing guides and invited us to join him in his boat. He would take us out for a day of fishing. And with no other options open, we took him up on his offer and we had one of our best fishing days out of all the many years we had been fishing there.

Earlier I had described myself as 'an occasional fisherman' and I readily admit that I'm not as skilled as might otherwise be. But that day I was able to rely on the experience and skill of our guide who knew all the tricks and the best spots to fish at. And we were able to work things out and used his secrets for the rest of our time there and had a great time of fishing.

That's the advantage of having an expert. Our goal is to provide a similarly high level of expertise to you and all of our customers that rely on us for your plumbing, heating and cooling needs. Every time that you need us we want you to be glad that you called us and have a great experience.

- Daniel Squires



Vincent's Heating & Plumbing is proud to install Amana equipment, made in the USA.

	Word Search - Weather																				
Vincent's Heating & Plumbing, Inc.	Е	D	U	0	L	С	U	в	Е	F	D	н	т	Q	I	J	U	G	R	v	Breeze Chill
2650 Oak St. Port Huron, MI 48060 Daniel Squires, President David Squires, Vice President Brendan Squires, Tech Advisor	L	Ν	0	Y	С	Z	Y	Е	L	F	R	I	т	Y	Ρ	L	R	Е	Е	×	Cloud
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Phone: 810-985-7103 E-mail: sales@vhpinc.com Website: www.vhpinc.com	G	0	Ρ	U	С	М	J	в	I	Ρ	К	F	Х	Ζ	н	S	S	S	U	J	Fog
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Vincent's News is published 11-months per year.	Υ	F	Ν	Е	в	А	С	Е	D	С	S	I	Y	Ν	Ν	U	S	М	т	в	Frost Hail
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Past issues are available in PDF format online in the Van Go Gallery at: <u>VHPinc.com/gallery</u>	R	I	I	s	R	F	к	Е	F	0	G	S	D	М	0	L	I	М	0	G	Mist Rain
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Humor Section																					

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It's hard to explain puns to kleptomaniacs. They always take things literally.

Is your refrigerator running? At this point I'll vote for it.

Now that's good news!

"And God is able to bless you abundantly, so that in all things at all times, having all that you need, you will abound in every good work."

2 Corinthians 9:8

Vincent's News Promotions through September 14, 2024



WHY IS PROPER AIRFLOW SO IMPORTANT?

WHAT IS FAN AIRFLOW?

A

The fan in a heating and cooling system is like a human heart The human heart is a powerful pump that circulates life-sustaining blood throughout the body via a complex network of vessels and arteries. In much the same way, the heating and cooling system uses a powerful fan to move comfort-sustaining conditioned air throughout the home via a complex network of air ducts.

When a human heart is functioning under normal blood pressure conditions, the body can enjoy good health. But, when blood pressure is too high or too low, the heart can be damaged, leading to poor health and even death.

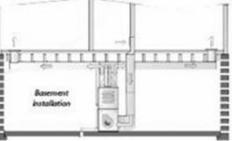
The same is true with your heating and cooling fan. When the fan operates at higher pressures than it's supposed to, it runs hotter (shortening motor life), uses more energy (increasing energy bills), and moves less conditioned air (decreasing comfort). Proper fan airflow makes sure that the right amount of air will be efficiently circulated to control indoor temperature, humidity, and air cleanliness.

Airflow is the "life blood" of your home's heating and cooling system Poor circulation in the human body reduces the amount of oxygen-rich blood delivered to vital organs. Without adequate levels of blood, your organs will begin shutting down. Poor circulation results from other health issues and it's important to treat the underlying causes, rather than just the symptoms.

Improper fan airflow reduces the amount of conditioned air delivered to each room in the house. Fan airflow is commonly affected by improper fan sizing, wrong fan speed selection, dirty blower wheels, clogged heat exchangers, restrictive air filters, improper air duct design, damaged air ducts, and more. It's important to properly diagnose and effectively treat the underlying

causes of poor fan airflow. Without proper airflow, your home will not be as safe, healthy, comfortable and energy efficient as it should be.





THE FIRST STEP TO KNOW IF YOUR HOME'S HVAC SYSTEM HAS HEALTHY AIRFLOW IS TO HAVE A STATIC PRESSURE TEST PERFORMED.

ASK FOR A STATIC PRESSURE TEST WHEN YOU CALL TO SCHEDULE A HEATING OR COOLING MAINTENANCE VISIT & WE'LL INCLUDE THE TEST FREE!

CALL (810) 985-7103

VINCENT'S HEATING & PLUMBING, INC

- SPECIAL REPORT FOR VHP CUSTOMERS -Is Your Air Conditioner - And Your Budget! - Ready For Higher 'Time of Day' Electric Rates?

Innovations in A/C maintenance technology help your system perform better, last longer and cost less to use.

Background: The **Michigan Public Service Commission** has authorized **utilities** to charge higher electric rates during peak cooling hours in the hot summer months. These higher rates will function to <u>'encourage' us to use less energy during the hours when the demand for electricity is the highest</u>.

When these 'Time of Day' rates are looked at in terms of **'supply and demand'**, the price for something always goes up when demand increases and supply stays the same or is decreased. **This makes economic sense**: demand for electricity peaks during the hottest hours of the day when air conditioners labor to keep our homes cool. <u>But what doesn't make sense</u> is that reliable sources of electricity - such as coal, natural gas and nuclear power plants - that could affordably keep pace with the increase in demand are either being torn down or are planned for eventual elimination <u>even as demand for electricity is continually increasing</u>. In this regard, these higher rates feel like a penalty.

<u>While you or I can't control this, you do have two options available to make sure you</u> <u>aren't overspending to cool your home with these higher 'Time of Day' electric rates</u>:

- 1) <u>Upgrade your current A/C system</u> to a **more efficient model** (preferably a heat pump <u>for greater savings plus federal tax credits that help offset the cost</u>)... or...
- 2) <u>Make certain your A/C system is performing as efficiently as possible</u> so you use less energy and keep your electric bill low - and that requires system maintenance.

Fortunately, innovations in air conditioning maintenance are now available to optimize your current A/C system performance. Not only can it help you save energy costs, but it can also help your cooling system deliver more comfort and last longer.

Introducing VHP's New, Cutting-Edge 'MeasureQuick' Technology.

When I became aware of 'Time of Day rates, I started looking for a solution to enable us to help our customers with these higher electric costs. A lot of clients depend on Vincent's Heating & Plumbing to keep their air conditioners performing well every year, and <u>I determined to find a way to improve our service</u>. **And I found it.**

'MeasureQuick' - or 'mQ' - is to <u>the science of air conditioning service</u> and maintenance - <u>that a computer analysis is to your car</u>. Equipped with 'mQ' our



Here is a condenser with five mQ probes attached to measure the suction line & liquid line pressures and temperatures and also the discharge air temp. HVAC techs are able to provide a high-tech computer analysis for air conditioners that is the equivalent to what auto mechanics use to service modern cars.

Here's how mQ works: our technician attaches diagnostic probes to your A/C system at <u>10 points of</u> <u>contact</u>. With this, he knows everything that is going on with your system at a glance. Also, the data is processed through an algorithm that lets our tech know what is going on with your system and what adjustments are needed. Further, as the adjustments are made, our tech is able to see the impact of these corrections and how they affect your system.

Without mQ, an A/C tech <u>has to take</u> and <u>keep</u> <u>track of 10 separate measurements</u> and <u>correlate them</u> all to be able to determine how your system is functioning. And even then, because some of the measurements are made inside the house while others are outside the house, there is a time lag between capturing all the information. It's all a very time-consuming process and it has to be repeated if the impact of any adjustments made to the system are to be known.

In contrast, mQ saves time and is

more precise because once the instruments are attached to the system, all the information is instantly available with no time lag between the various readings. Further, this data is



Here is Nathan inside the house with more mQ probes attached to the furnace ductwork looking at a live MeasureQuick analysis on his iPad.

captured in a snapshot that is kept in Cloud storage for future reference. This eliminates the need for the tech to transcribe it and possibly make a mistake. Here are some of the benefits our techs provide by using MeasureQuick:

- An instant comprehensive snapshot of your A/C system's health.
- A roadmap for what needs to be done to improve your A/C performance.
- Small issues are detected before they become major issues. Because of the accuracy of our measurements, your technician can identify small issues that normally would not be seen until catastrophic failure of the air conditioner has occurred.
 Further, these issues could also increase your electric bills.
- **System Efficiency is accurately measured**. The efficiency of an A/C unit is determined in a laboratory, not under real world conditions. Normally, it takes specialized training to measure the actual efficiency of an air conditioner. With mQ we are able to



check the 'real-world' performance and see if your system measures up to its advertised efficiency. Then we can make needed adjustments to improve efficiency.

• Your system can deliver improved comfort and last longer when it is performing as it should.

Putting this cutting-edge technology into the hands of our technicians required a sizeable investment in equipment and training, but it was worth it to allow us to continue to deliver the high service that you rely on us for. - Daniel Squires, VHP

Are You Ready To Optimize Your A/C To Cope With Higher Time of Day Rates?

<u>Give us a call at 810-985-7103</u> to <u>set up your air conditioning maintenance</u>. Our tech will perform the MeasureQuick analysis and recommended adjustments plus clean the A/C condenser. The normal price for our Performance Optimization & Cleaning (with mQ) is \$199.20. Here are two promotions to choose from:

PERFORMANCE OPTIMIZATION & CLEANING (w/mQ) PROMOTIONS

- ONE YEAR OPTION SAVE \$20.20 Off Regular Price of \$199.20 INVESTMENT \$179.00
- <u>TWO YEAR OPTION</u> <u>SAVE \$49.80 This Year</u> + <u>\$49.80 Next Year</u> <u>INVESTMENT \$298.80</u> *
 with <u>The Enhanced Service Plan Bundle</u>. This option comes with 2 years of A/C maintenance
 this year & next year plus all the other Enhanced Service Plan benefits including:
- Exclusive Access to Extended Service Hours including Sundays & Holidays
- Priority Service access to service during normal working hours
- **Discounts** 10% Off Repair Services for Covered Equipment,& maintenance items (filters, etc.)
- Annual Check Up (Maintenance Visit) \$199.20 value no extra charge with ESP plan. ...and more!
 - * Investment: The Enhanced Service Plan for A/C is **\$149.40** per year (or *\$12.45 monthly*) Plus Performance Optimization & Cleaning only **\$149.40** after \$49.80 savings
 - Your Total for Enhanced Service Plan Bundle is **\$298.80** or \$149.80 now plus \$12.45 monthly

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