

VINCENT'S NEWS

The 'Van-Go' Gallery



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



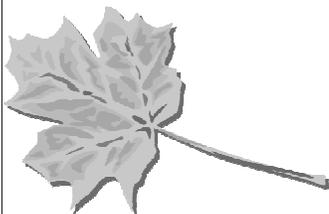
My wife Karen (right) and her sister Mary at an overlook of Linville Gorge at Wiseman's View in the Pisgah National Forest.

INSIDE THIS ISSUE:

<i>Through My Eyes</i>	1
<i>Bad Heat Exchangers P2</i>	1
<i>What People Are Saying</i>	2
<i>Word Search</i>	4
<i>Humor</i>	4

Did You Know...

...SEMCO Energy Gas customers are eligible for a \$450 rebate for upgrading to a 96%+ efficient furnace through the end of 2015? Funds are available on a first-come, first-served basis so hurry to take advantage of this.



OWNER'S CORNER

THROUGH MY EYES

What a beautiful country we are blessed with! The first week of September my wife Karen and I had the opportunity to take an extended Labor Day holiday. We drove down to Asheville, NC, and spent a few days with her sister Mary.

It was a different kind of experience, as Karen noted that it was the first extended road trip we had taken in years without

having kids along. Now that our children are adults and have their own lives I imagine this will be the new normal. Last year, with the June and December

weddings for our two sons, we did not take a vacation - imagine that with 2 weddings! And so this year - and with things a little

more 'normal' - we planned this getaway.

September 1 found us driving down Interstates

Continued Page 3

HOW A FURNACE HEAT EXCHANGER GOES BAD AND WHAT YOU CAN DO ABOUT IT - Part 2

Last month focused on heat exchanger basics and manufacturing differences. This month we'll look at the damage to the heat exchanger caused by condensation and the source of condensation.

When a furnace operates it creates more than just heat. You already know about the most notorious byproduct - poisonous carbon monoxide gas. Less known is that about 20% of furnace exhaust is water. And while water vapor is harmless by comparison to carbon monoxide to people it can be deadly for furnaces.

Initially, the water in the exhaust is a hot vapor, but as the furnace extracts heat from the exhaust some of the water cools and condenses inside the heat exchanger, the vent pipe and chimney. This is made worse by the fact that the condensate is acidic which causes rust and other damage to the heat exchanger to shorten its life.

Ironically, when furnaces were less energy efficient, damage caused by condensation was also less. This is because exhaust temperatures were hotter and less condensation

occurred. Instead of condensing inside the furnace and chimney the water vapor was exhausted into the atmosphere. The task of making a furnace more energy efficient is to extract more heat from the exhaust gasses. But unfortunately, cooler exhaust temperatures mean that water vapor condenses in the furnace or exhaust pipe instead of venting outside.

Condensation is such an important factor that furnaces are classified as either 'condensing' or 'non-
Continued Page 2

Heat Exchangers (Continued from Page 1)

condensing'. Typically all 90%+ efficient furnaces are classified as 'condensing' furnaces while 80% efficient and older style models are 'non-condensing' furnaces. This last designation is actually misnamed because all furnaces have condensation – it's just that 90% furnaces have to deal with considerably more condensation.

The most obvious clue is the difference in the exhaust venting material. 90%+ furnaces have exhaust vents made of PVC pipe – a material made for water and drain lines. 80% furnaces have metal exhaust pipes to the chimney. But if you have an 80% furnace and a masonry chimney, you probably had something called a 'chimney-liner' installed. The purpose of a chimney liner is to protect the chimney from condensation.

And here is where we get back

to the heat exchanger: where do you suppose that the condensation that collects in either the PVC exhaust vent or the chimney liner goes? The answer is back to the furnace and specifically to the heat exchanger.

If you have a 90%+ furnace, the PVC exhaust vent is pitched so the condensate flows back to the furnace. Otherwise – if it were pitched to the outside – icicles would form and eventually the pipe would freeze shut. On an 80% furnace, the condensate also travels back to the furnace. And in both cases the heat exchanger is the place where the condensate goes and can cause damage.

So what can you do? Condensation in furnaces is a fact that can't be changed and it does affect heat exchangers and other furnace components that it encounters. This is why

having one of our certified Carbon Monoxide & Combustion Analyst techs look at your furnace annually is important. First, to make certain the furnace is safe from damage that may have been caused – especially to the heat exchanger - and second to make certain that furnace combustion is correct. If your furnace is 'underfired' the exhaust gasses are cooler than they should be which can cause more condensation and accelerate the damage to the heat exchanger. If your furnace is 'overfired' there is a different problem – but we'll look at that next month in Part 3 of this series.

The bottom line is that it is important for you to have your furnace checked annually as our VHP Club members already know and have done for them. – Daniel Squires

"...Condensation in furnaces is a fact that can't be changed and it does affect heat exchangers and other furnace components that it encounters. This is why having one of our certified Carbon Monoxide & Combustion Analyst techs look at your furnace annually is important."

WHAT OUR CLIENTS ARE SAYING:

Awesome service and person. Very knowledgeable . Answered all my questions. Dave told me why it is a good idea to have the service for our furnace. We also have our AC on the plan. If you do not have the maintenance plan it is worth it's weight in gold. I would highly recommend Dave and Vincent's Heating.

Sheree—Fort Gratiot

THROUGH MY EYES (CONT. FROM PAGE 1)

75 and then 40 to Asheville. Being a life-long Michigan and Port Huron area resident, I love the water and I can't imagine not having large bodies of water nearby like Lake Huron and the St Clair River. But I've got to tell you, I love being in the mountains. The Blue Ridge Mountains are beautiful! As we drove through the heavily wooded mountain passes I marveled that early American settlers were able to make their way across the country. I am very appreciative of the great roads that we have available now.

My enjoyment of nature did not end when we got there. Karen's sister and brother-in-law are into hiking and we spent a couple of days hiking and sightseeing in the Pisgah National Forest in western North Carolina. It was a first for Karen and me and we were overwhelmed with the beauty of Pisgah's mile-high peaks, cascading

waterfalls and tree covered slopes. I'm glad that people were wise enough to set aside some of this amazing land - as well as the other national parks and forests - so everyone can enjoy God's handiwork in all of its unspoiled splendor.

On the other hand, I am also appreciative of our manmade wonders, such as our incredible national Interstate Road System. It is probably the greatest legacy of President Dwight Eisenhower who helped see the Federal-Aid Highway Act of 1956 through Congress. And although at the time - in the midst of the Cold War - its primary purpose was to facilitate troop movement across the U.S., the Interstate System has been a boon to all travel.

Other manmade wonders that I am appreciative of are those of my own industry - the modern furnace and air conditioner. And while my article beginning on Page 1 highlights some

physical challenges in furnace technology that need to be dealt with, I want to balance those observations with a positive perspective. I certainly wouldn't want to live in such a cold climate - as Michigan has for so many months - without a furnace. I've wondered many times how life could be possible here without the invention of the furnace - let alone indoor plumbing and hot showers! Plus, I'm sure glad I don't have to shovel coal and carry the ashes out as my father describes doing as a boy.

From my perspective, the bottom line is that just like we need to take care of nature to preserve it for future generations, we will also need to take care of our manmade inventions - like our furnace and air conditioner - to preserve them for our use. -

Daniel Squires

"...I've wondered many times how life could be possible here without the invention of the furnace - let alone indoor plumbing and hot showers!"

Vincent's Heating & Plumbing

2650 Oak St.
Port Huron, MI 48060

Phone: 810-985-7103
E-mail: sales@vhpinc.com
Website: www.vhpinc.com

National Forest Word Search

K Z I F I E S N R O X S S N O
 A O K A O Q I Y L D L K L R U
 R N O H N T W H I A W A T H A
 Y L A T A E S Y W R M L F L C
 T T T L E E L H R O G A C Z H
 T V L G Q N X E Q D C R V O I
 X A B U Z M A O H L E R O Z T
 G L O P R A Q I K E C E B K A
 P I L R A U A W D O I I B I Y
 A H A G S I P U E S Y S O V C

Pisgah
Tahoe
Eldorado
Gallatin
Helena
Hiawatha
Kootenai
Ouachita
Sequoia
Sierra

www.vhpinc.com

The Most Reasons to be Your Best Choice

SUBSCRIBE

If you know someone who would like to receive this newsletter, email their information to news@vhpinc.com or give us a call.

UNSUBSCRIBE

If you would like your name to be removed from our newsletter mailing list please email "stop" to news@vhpinc.com or give us a call.

Humor Section



Sherlock Holmes and Dr. Watson went on a camping trip. After a good meal, they lay down for the night and went to sleep. Some hours later, Holmes woke up and nudged his faithful friend. Holmes said: "Watson, look up and tell me what you see".

Watson said: "I see a fantastic panorama of countless stars".

Holmes: "And what does that tell you?"

Watson pondered for a moment: "Astronomically, it tells me that there are millions of galaxies and potentially billions of planets. Astrologically, I observe that Saturn is in Leo. Horologically, I deduce that the time is approximately a quarter past three. Theologically, I can see that God is all powerful and that we are small and insignificant. Meteorologically, I suspect that we will have a beautiful day tomorrow."

"Why? - What does it tell you, Holmes?"

Holmes was silent for a moment then spoke: "Someone has stolen our tent."