



# EVENTS

Volume II

## ***Power Venters prove to be versatile problem solvers for Michigan Contractor***

***'Tjernlund venters have saved my bacon so many times'***

When contractor Martin (Marty) Harvey gets into a difficult water heater or boiler venting installation, he will often use a Tjernlund



Owner Marty Harvey (l) and son Jeff handle the field servicing for A&F Water Heaters and Spa, Inc. A&F uses an average of 30 Tjernlund power venters a year.

power venter to get him out. Harvey's company, Troy, Michigan-based A&F Water Heater and Spa, Inc., installs and services all major brands of water heaters, hydronic boilers, pool heaters, steamers and spas for hotels, restaurants, apartments, car washes, high rises and homes.

"My goal is to have safe installations and satisfied customers. "Tjernlund's power venters have saved my bacon so many times because they enable me to vent through a side wall or use a smaller vent pipe. In most cases, there's

Continued on Page 2

by Tom Tjernlund,  
Vice President



## ***From Tom's Desk***

Two years ago we began the transition to a "lean manufacturing" process. The objective was to decrease non-value added steps so that we can keep our costs down and our pricing competitive. This program, which has proven its value for many manufacturing companies,

involves major changes in production processes as well as personnel reorientation.

We've made major strides toward our goals. However, during this last season we also made the mistake of thinking we were further ahead in implementing the changeover than we actually were. The result: Long lead times developed in the pre-season and even though we desperately tried we could not catch up with demand.

We are currently implementing changes required to keep stocking order lead time at 5 to 10 days during the upcoming 2006/2007 season. Inventory levels of components, sub-assemblies and finished product will be substantially increased. Keen oversight of production processes and personnel education will continue as well as efforts to add value to our product while controlling costs.

We are committed to having stable lead times and to work towards a quicker order flow through our factory. As always, thanks for your continued business.

**We pledge to serve you better in 2006.**

## **In-Line Draft Inducers: The standard for fixing draft problems**

For more than 50 years, Tjernlund In-Line Draft Inducers have been the preferred "go to" solution for heating contractors dealing with backdrafting problems as well as long horizontal vent connectors. Yet, surveys show that many recent additions to the ranks of field technicians are unaware of In-Line Inducers while others are under the misconception that they

Continued on Page 2

**A&F continued from front page**

no other alternative to these fans in accomplishing the job," said Harvey.

Harvey, who has been installing equipment for 25 years, estimates he uses approximately 30 Tjernlund power venters a year to solve a variety of problems.

He has used power venters to overcome mechanical rooms with difficult drafting situations. "We want to guarantee flue gases exit

the building safely. With Tjernlund fans, you can interlock the equipment so if the fan is not working or there is some other draft problem, it won't allow the main gas valve to open."

It isn't unusual for Harvey to tackle the installation of a 400,000 BTU pool boiler located in the basement of a building that doesn't have a chimney. "We'll solve the problem by using one of Tjernlund's side wall venting kits."

Harvey recalled projects where

he installed power venters to deal with existing boiler replacements with small diameter vents. "Installing the inducer fans enabled us to use the smaller vent pipe and complete those systems without having to sell somebody thousands of dollars of additional vent work."

Tjernlund is the only brand of venter Harvey has used. "They've been the greatest! They work so well there's no point in changing or looking elsewhere," he said.

**In-Line Inducers continued from front page**

are not compatible with today's fan-assisted heating equipment.

Draft Inducers are mechanical fans installed between the heater's flue outlet and chimney termination. They ensure proper draft when restrictive heat exchangers, poor chimneys or negative pressures in buildings prevent proper exhaust of combustion gases.

As long as the heater in question is rated for category I (negative pressure) venting a draft inducer can be used to "boost" the draft. If the heater does not have a built in draft diverter or draft hood, a barometric draft control should be installed between the flue outlet and the draft inducer. This is the case with fan assisted burners.

Typical applications of In-Line Draft Inducers include boilers, furnaces, water heaters, modular boiler systems, multiple heaters, bakery ovens and factory processes.

Other problems solved by In-Line Inducers include undersized chimneys, long horizontal vent connectors that don't meet codes, downdrafts and cold equipment starts.

Additionally, Inducers are often used when replacing heating equipment where existing flues are too big or too small to provide adequate draft.

Tjernlund inducers are available in six sizes with

capacities ranging from 40,000 to over 5,000,000 Btu's/hr. They can be installed in vent pipe diameters from 3 to 24 inches. Our Vari-Draft control permits adjustment to individual job requirements.

National codes dictate that draft inducers must be interlocked with the heaters that they serve. We

make this easy with our UC1 Universal Interlock Control and PS1505 Fan Proving Switch. The UC1 interlocks any 24 or 115 VAC burner control circuit with any of our inducers. Millivolt gas valves require the addition of the model WHKE. Multiple heaters can be served by a single draft inducer by adding the MAC1E or MAC4E multiple heater interlock controls.



**Tjernlund  
In-Line Draft  
Inducers**



**In-line Draft Inducers are easily installed  
inside vent pipe.**

**Typical sequence of operation:**

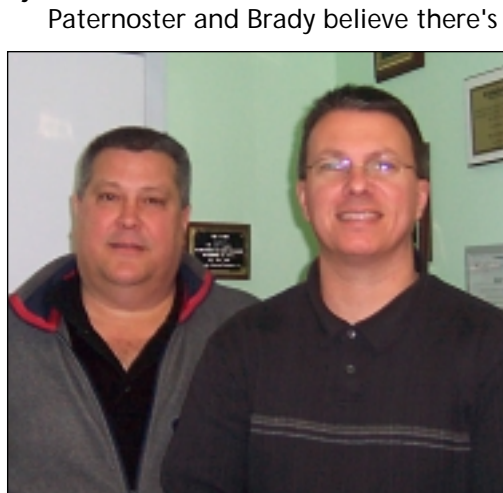
1. Call for heat
2. The UC1 intercepts the call signal and activates the draft inducer.
3. The PS1505 fan proving switch senses the negative pressure within the inducer housing and closes the UC1 safety circuit.
4. The UC1 safety circuit relay closes returning the intercepted call signal to the heater so that the normal burner cycle can occur.

The UC1 Control features adjustable pre and post-purge. LED indicators confirm proper operation and display any fault codes that may be present.

Additional information on Tjernlund In-Line Draft Inducers can be found on Tjernlund's web site at [www.tjernlund.com](http://www.tjernlund.com).

# NJ-metro NY agency enjoys representing family businesses like Tjernlund

M.A.P. Sales is a family owned-and-operated HVACR and plumbing rep agency located in Hillsboro, New Jersey. Founder Mark Paternoster and his brother-in-law, Steve Brady, have covered the northern New Jersey and metro New York City territory for Tjernlund since 1990 and are one of our top producing agencies.



Brother's-in-law Mark Paternoster (l) and Steve Brady value highly Tjernlund's quality products, friendly employees and outstanding technical support.

Paternoster and Brady believe there's a big advantage to represent a family run business like Tjernlund. "An owner doesn't have to deal with a board of directors in making decisions that could affect the success of our business as well as his," said Paternoster.

Beyond quick, decisive decision making, Paternoster and Brady give Tjernlund high marks for quality products, employees and technical support.

They consider consistency a Tjernlund hallmark. Tjernlund

produces products that are virtually trouble free. Technical data developed by Tjernlund sets the industry's standard; In fact, "their performance curves, selection tables and methods of calculating venting for furnace and boiler applications have become the resource for almost everybody, including the competition."

According to Paternoster, Tjernlund's regularly timed promotions and pricing helps distributors better manage their business. Paternoster and Brady praised everyone they work with at Tjernlund for their knowledge and being "the nicest people in the industry."

"Representing Tjernlund has given us more visibility in the metro New York area which has led to additional product lines for us. Manufacturers have come to us because they know we rep a company that is straightforward and always 'above board' It's also not uncommon in this industry for companies trying to fill a territory to contact a non-competing manufacturer and say who is your agency and are you satisfied," Brady said.

According to Tim Dwyer, Tjernlund's Distributor Products Sales Manager, M.A.P. has been successful because Paternoster and Brady complement each other's strengths. What's more, "they both are willing to make the face-to-face contacts with every customer on a regular basis. They don't sit around waiting for the phone to ring."

Paternoster and Brady firmly believe that long, successful relationships between manufacturer and rep agencies are built on strong commitments to stick by each other during thick and thin. The long association of M.A.P. Sales and Tjernlund is solid proof.

## FAQ

**Q** Why is the same draft inducer rated differently on different size vent pipes?

**A** Most of our in-line draft inducers are rated for a range of four sizes of vent pipe. Two key factors affect the performance of an in-line draft inducer. Pressure drop and blower wheel efficiency. Pressure drop increases as the vent pipes get smaller, reducing performance. Blower wheel efficiency decreases in both the smaller and larger vent pipe sizes but is optimized in the middle.

**Q** If I am using a single power venter to interlock a furnace/boiler and a residential gas water heater what accessory controls do I need?

**A** All of our power venters include a UC1 universal interlock control and a fan proving switch. This is all that is typically required to interlock the furnace or boiler. If you are installing one of our in-line draft inducers you will need to purchase a UC1 and PS1505 fan proving switch since they are not packaged with our inducers. In either case you will need a MAC1E and a WHKE to interlock the residential gas water heater.

**Q** I have a job with several heaters that share a common vent manifold. The heater farthest from the chimney has spillage problems. Can I add a draft inducer to that heater only?

**A** Anytime a draft inducer is used it must be installed after all vent connections served by the common vent manifold and sized to handle the total BTU/hr. input. Another option is to remove the problem heater from the common manifold and separately side wall vent it.

You are invited to send us questions via email at:  
[fanmail@tjfans.com](mailto:fanmail@tjfans.com).

If your question is published, you will receive a gift.



Tjernlund Products  
1601 Ninth Street  
White Bear Lake, MN 55110

## Web Site Features

### Remodeled Tjernlund site easier to navigate

#### *Visitors find more information in less time*

Whether you're a distributor or contractor, there's a plethora of valuable information related to draft, combustion air and other venting subjects available on Tjernlund's web site at [www.tjernlund.com](http://www.tjernlund.com). The site is



designed to get you useful information as efficiently as possible. On the home page, products are broken into two categories; Distributor Stocked Products and Engineer Specified Systems. There's also a site map containing links directly to all products. Each product category includes a features and benefits overview with links to product specific literature, specifications, submittals, wiring diagrams and installation instructions. The document library is another easy method for finding the information that you are looking for. Put [www.tjernlund.com](http://www.tjernlund.com) in your favorites to always have our most up-to-date information one click away.

### New, FREE resource CD is packed with draft, combustion air & ventilation information plus valuable sales aids

Tjernlund recently made available a free Resource CD containing a wealth of information and tools for wholesalers and contractors.

Included are copies of brochures, spec sheets, wiring diagrams, installation instructions, parts cross references, product photos, PowerPoint presentations and

combustion air videos. The CD is available free and can be ordered on [tjernlund.com](http://tjernlund.com). Click on (Document Library, Literature and Display Materials request form), by email [fanmail@tjfans.com](mailto:fanmail@tjfans.com) or phone 800-255-4208.



### Contractor registration on web site now available

#### *Register and get updated draft, combustion air and ventilation information from Tjernlund*

We have established a new section on our web site whereby contractors who install Tjernlund products can register to receive the latest news from Tjernlund. We are planning to include information relative to new and upgraded products, technical tips, sales and educational material of value to contractors.

To register, simply go to [tjernlund.com](http://tjernlund.com) and click on the contractor button. You'll be asked to enter such facts as your company name, address, phone number, email address and what type of heating equipment you install... gas or oil, forced air, or hydronic.