

The Monroe Igniter



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DARE TO COMPARE - PART II

Matt Schneider

A little over a year ago, I wrote an article in this newsletter titled “Dare To Compare” where I challenged all of you to take a long, hard look at Allied Air’s Concord product line. That article also made the case that as a sales professional, presenting a product different from that of your competitor’s creates the opportunity for you to maximize your sell price and your overall profitability.

That article was written specifically with Goodman in mind. Given the intel that I have from the field, the Goodman issue has gotten worse, not better. I spoke to a dealer in the Fox Valley last week that described their customers getting three and four proposals before making a buying decision and every quote but theirs were for Goodman equipment. To rub salt in their wounds, many of the quotes were for 95% efficient furnaces installed for around \$2,000. Ask yourselves how bids like that benefit our profession. I look at the proliferation of Goodman Wholesalers and Goodman Dealers and shake my head. The truth is that Goodman’s “flooding” of the market is hurting their market share, not helping it.

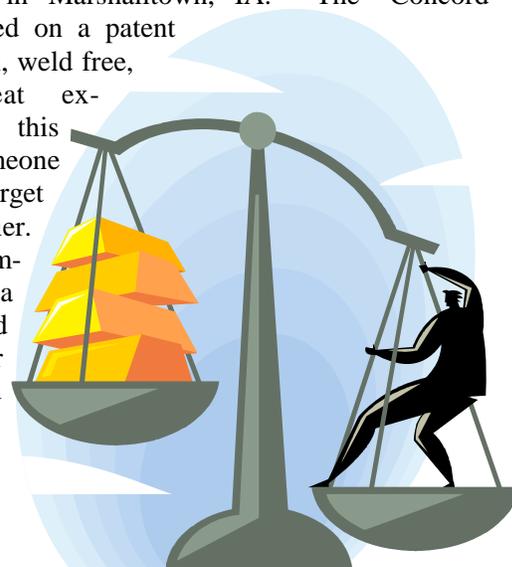
With the economy suffering and consumer confidence low, value tier products are becoming a larger market segment. As a contractor, there are two ways of approaching these changing market demands. Some of you are holding your ground and presenting your customers with only “premium” products. I don’t think that this is a bad approach, but make sure that you are aware that a certain percentage of your customers are now price shoppers and will be looking for “value”. If you are comfortable with this fact and feel that your business will not be negatively impacted, you may see your overall sales decrease while your profit margins stay high or even increase. When balanced properly, this approach can be a benefit to your business in terms of profitability.

The second approach is to embrace the “value” shopper. The best way to do this and still realize high profits is to partner with a value tier product that you know is of high quality, can be serviced easily without increased overhead and is priced competitively, yet has features that can be sold for a higher price. It is also imperative that it is not the

same product your competitors are offering. Products that are being offered by every dealer naturally become a commodity, insuring that price is the only differentiating factor in your customer’s decision making process. It was my experience, as a retail salesperson, that an easy selling story also helps. A seamless transition from the premium product to the value product makes the homeowner less stressed and more interested in your value offering as long as you can adequately explain what you are taking away in order to reach their price point.

It is our goal to introduce the Concord product line to every contractor that we have relationships with in 2012. I would challenge all of the exclusive Armstrong Air contractors to consider promoting Concord as their value tier alternative. It makes financial sense, both in direct cost and overhead cost. Our Territory Managers would love to sit down and formulate that selling story that will allow you to increase your total sales without sacrificing profits.

So let’s compare Concord products again. This time, not to a value tier product, such as Goodman, but one of the most widely recognized names in the HVAC industry. I will give you hints to the product that is the best comparison. Concord is a Lennox International Product. All of the Allied Air furnace products have now been moved to a manufacturing plant in Marshalltown, IA. The Concord platform is based on a patent pending, 11” tall, weld free, aluminized heat exchanger. Does this sound like someone we know? Forget about value tier. Make that comparison, create a selling story and recognize higher closing rates and profit margins.



EHX TECHNOLOGY - A DISTINCT ADVANTAGE

Matt Kobleska

A little over seven years ago Lennox Industries and Allied Air began a joint project to redesign their current product line. The key initiative was to shrink the size of their current product line (40" and 44" respectively) to reasonably accept modern a/c coils. These shorter furnaces needed to maintain their blower capacities, which did not allow height reduction in the blower cabinet. The height requirements needed to be subtracted from the heat exchanger. The designers of the furnace knew that existing technology would not allow for the reduction of the heat exchanger and still maintain the high temperature rise that Allied Air contractor's were used too, so they set forth to design something brand new, now termed EXH Technology. EHX Technology is a combination of many unique design components that when brought together inside of our furnace platform, provide Even Heat Exchange.

EHX Technology is based around the 11" tall, patent pending, weld-free, stainless steel (aluminized steel in the Concord product) primary heat exchanger with air channeling. The heat exchanger is divided into 11,000 Btu cells. These smaller, but more plentiful cells provide more heat exchanger surface area to exchange the heat. Most manufacturers use a 25,000 btu or 20,000 Btu per cell design. The lower the Btu's per cell, the lower the stress put on the metal. A direct result of this reduced stress is that Allied Air's heat exchangers can handle temperature rises up to 90 degrees. Would your customers see value in a furnace that can provide 160 degree supply air? Would they pay more for that comfort?

In addition to the burner sizes, EHX Technology also employs a unique cell design. The heat exchanger cells are slim and aerodynamic, much like an airplane wing, allowing for air to evenly flow over the cells. This ensures super quiet performance and even temperatures across the heat exchanger. Have you ever seen a round airplane wing? Using thermal imaging devices, our heat exchanger is the same temperature over every square inch of the heat exchanger, increasing reliability and life expectancy. We also employ air channeling on each side of the heat exchanger making sure that all of the air being delivered to the home comes in contact with the heat exchanger, keeping that temperature rise the highest in the industry. Some manufacturers choose to not channel the air, wasting airflow and providing lower supply temperatures.

You might ask yourself why Even Heat Exchange is beneficial. Ever wonder why tubular heat exchangers fail at the first bend and the most notorious manufacturer of tubular heat exchangers has a heat shield on the cabinet at this point? The reason for the failure and the shield is because this is the hottest point in the heat exchanger and due to the stretching of the tube, it is the thinnest metal. The heat shield was installed to protect the homeowner from accidentally burning themselves on the outside of the cabinet at this point if they brushed up against the furnace in the basement. Tubular heat exchangers also have very poor airflow over the cells. The bottom of the tube sees the majority of the airflow, while the top of the tube stays hot, stressing the metal. A byproduct of the lack of aerodynamic shape is the round tubes create turbulence and noise.

In summary, the heat exchangers in all of the Allied Air products (Armstrong Air, AirEase and Concord) with EHX Technology have been designed to be the longest lasting, most reliable heat exchangers in the industry. They provide your customers the highest temperature rise and quietest operation in the industry by utilizing a weld-free, engineered design with 11,000 Btu burners, aerodynamic shape and air channeling. We would love to talk to you more about EHX Technology and even more exciting – Quiet Combustion Technology.



SMART VALVES AND FAN TIMER CIRCUIT BOARDS

Kenneth Jung

Although “smart valve” technology is no longer the newest, hottest thing to hit the heating industry, and I am sure most of you consider smart valve systems to be in all reality, really “dumb” or a pain in the ... systems, the truth remains that there is an abundance of these systems out in the field.

At one point in time just about every manufacturer tried or used some type of “smart valve” system in their heating appliances. The first “smart valve system” was simply called “smart valve” or “smart valve 1.” This was all new technology that incorporated the pilot ignition, flame sensing and safety control monitoring all into one compact gas valve design.

As you know, “smart valve 1” was so successful that it didn’t take long before the new and improved “smart valve 1R (revised)” was released to upgrade and replace the “smart valve 1” systems.

A couple of years later, “smart valve II” or “smart valve II enhanced” systems were introduced to the industry. With “smart valve II” the gas valve had control over everything including the draft inducer. Where “smart valve 1 and 1R” energized the igniter of the pilot burner with 24vac and allowed the fan timer circuit board to energize the draft inducer on a call for heat, “smart valve II” technology incorporates line voltage power into the valve and powers a 120vac line voltage igniter and also controls the 120vac power to energize the draft inducer. Both “smart valve II” and “smart valve II enhanced” are identical in operation except for the amount of fault codes that are recorded and the way in which the fault codes are displayed by the blinking light on the valve. There also may be some color differences on the plastic covers. This was more based on the manufacturer’s specifications than anything else. So whether it’s blue, brown or beige, it doesn’t matter. The valves system functions are the same.

Trouble Shooting Tips on “Smart Valve II” Systems

First and foremost, look for a blinking “heartbeat” from the light on the top of the gas valve, a steady bright/dim pattern is normal and is an indication that all safety circuits and internal safety tests of the gas valve are functioning properly and that no faults have been detected. The light will continue to have a steady “heartbeat” whether the furnace is in stand-by mode or during a normal heating cycle. This is the quickest visual check that will tell you if the furnace is operating properly.

One thing to be aware of when trouble shooting “Smart Valve II” systems is that not all voltage readings are 24vac circuits. Part of “Smart Valve II” technology involves pulsing of the voltage back and forth through certain components or circuits. This results in voltage measurements between 12 to 16vac at certain controls.

For example: the furnace is idle with no call for heat. The pressure switch contacts should be in the open position. With both wires connected to the pressure switch, using a voltmeter, check the voltage across the switch terminals. You should get a reading of 12 to 16vac. Next, check voltage from each pressure switch terminal to cabinet ground. On one terminal you should read 12 to 16vac and the other terminal should give you a reading of 24 to 27vac. This is normal.

If at this point you have replaced two or three transformers, you can re-install the original one, it’s not the transformer.

If you are called out for a No-Heat call, the quickest and easiest troubleshooting advice for this type of system is to locate the “Data” terminal on the fan timer circuit board. This is a spade terminal that is located in the middle area of the fan timer circuit board. When power from the “R” terminal is applied to this “Data” terminal, the gas valve should immediately initiate a heating sequence of operations.

Assuming that no other flash/blinking of the light on the gas valve is present to indicate a true fault code, the normal ignition sequence should be that the inducer starts, the pressure switch contacts close, the igniter glows and the burners ignite. The only function that will not occur in this test mode is that the main blower will not be energized. Do not operate the unit for more than 15 or 20 seconds in this test mode to prevent the furnace from tripping out on limit.

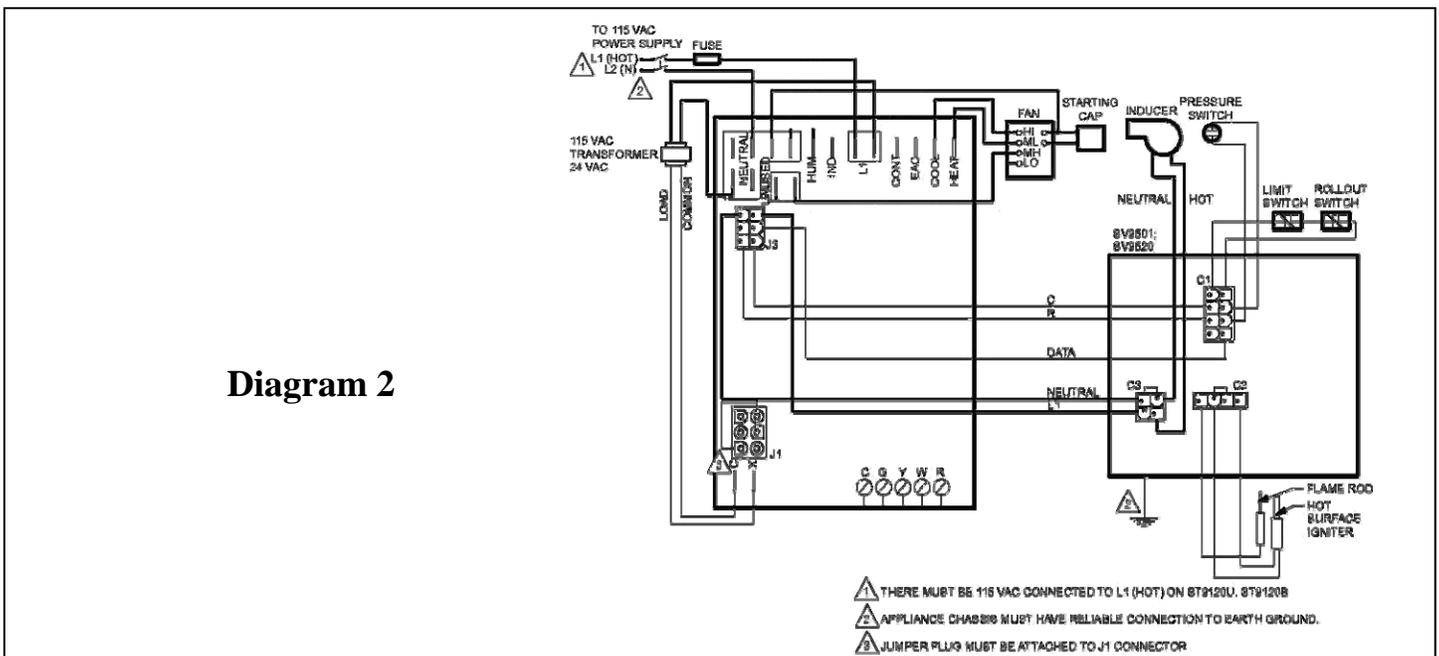
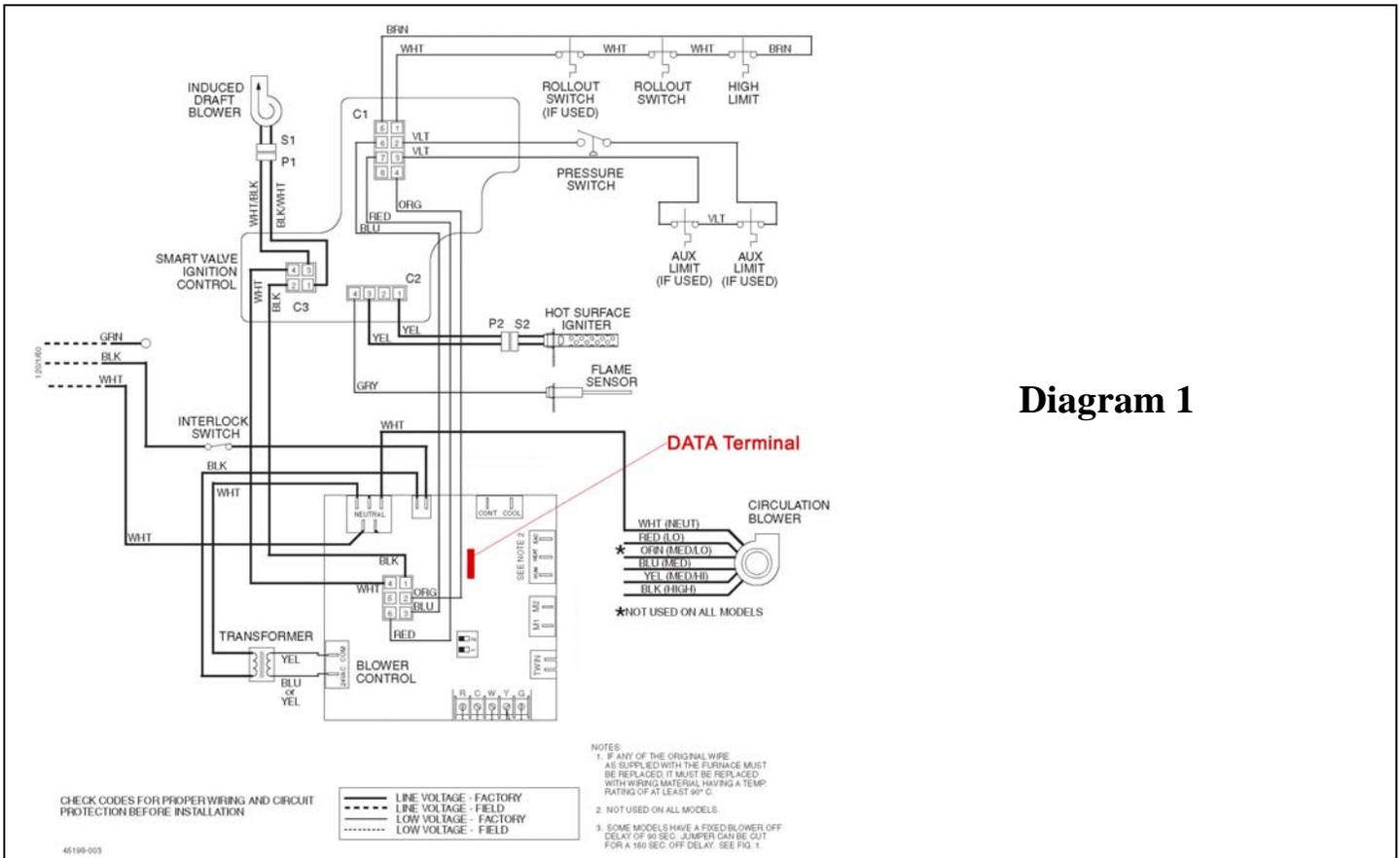
If the above listed sequence is normal, it would indicate that the gas valve and other related components are functioning properly and any cause for the No-Heat call would most likely be caused by the fan timer board. This should help to eliminate the guess work. (See Diagram 1 on page 3)

Now with the advent of the newer universal styles of fan timer circuit boards on the market, the circuit board manufacturer has chosen to eliminate the “Data” terminal from the fan timer circuit board design, but even without the

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data terminal the same test can be preformed. Instead of placing the jumper wire between “R” and “Data,” a jumper wire needs to be connected to the same “R” terminal, but the other end needs to connect to or be inserted into the orange wire of the “J3” 6 pin molex plug on the fan timer circuit board. This will create the same circuit to energize the gas valve as described above with the data terminal. (See Diagram 2)

Happy New Year and happy servicing...



GETTING TO KNOW YOU

Donna Inman

Let me introduce you to Terry Ralph who returned to the Monroe Equipment Team on December 5th. Terry was a Territory Manager for Monroe a number of years ago and has returned to do similar work in the Fox Valley area. He left previously to pursue a career on the contractor side of our business and served in a number of positions relating to management and sales while away. He has over 35 years in the HVAC industry including 20 years in the Natural Gas Utility Business. We are happy to have him back to help us develop new business in the western part of the state. Terry lives just west of Madison, in Sauk City, with his wife, Susan. He has four children – sons Jeremy, Keith Kyle and daughter Katia. Terry also has two grandsons.

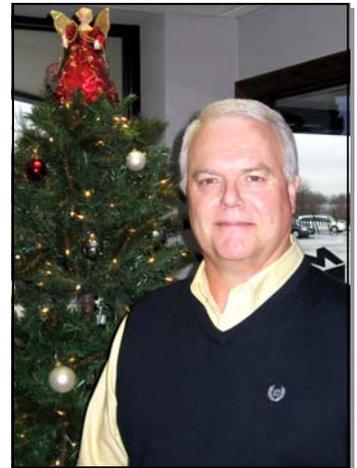
Terry loves to read and at times may have five books going at once. One read dating back 10 years that really changed his life was titled “What Matters Most” by Hyrum W. Smith. It showed you the power of living your values and taking control to do what is most meaningful to you. He stressed that it isn’t something that happens overnight but the rewards are worth it. Averaging in some years 30 to 35 books, Terry reads a lot about the sales profession, business leadership, the economy, the stock market and the Civil War.

Terry is the first person I know of that has a hobby that dates back to the 1800’s! I’ve seen re-enactments of Civil War times but he does long distance competitive shooting using black powder cartridge rifles which designs date back to the 1800’s. Since you can’t just go to the store for the cartridges, he makes his own! Here’s the kicker, he shoots at ranges of 1,000 yards and uses open sites (no scopes). He commented that it’s not unusual for bullets to climb 65 feet and drift 30 plus feet in windy conditions. Terry’s shooting hobby requires frequent travel to surrounding states and at times trips to Montana, South Dakota and Wyoming.

Terry served our country in the U.S. Coast Guard for four years in the late 60’s and early 70’s. His duties while in the military were search and rescue, legal, aid to navigation and procurement (recruiting).

Terry’s life experiences bring a diverse background of knowledge and Terry is willing to share some of this knowledge with you.

I say “welcome aboard, Terry” and westward ho with God speed!



At the close of 2011, we all want to take this opportunity to thank you for your business. We look forward to a prosperous New Year for all.

Our goal for 2012 is to improve all aspects of our service and gain more of your business. We want to be your #1 Supplier and will try our best to meet your needs.

*Happy New Year and
THANK YOU!*

Up Coming Events

JANUARY 2, 2012

Monroe Equipment CLOSED

JANUARY 17, 2012

Armstrong Air Dealer Marketing Meeting - Steven's Point

JANUARY 18, 2012

Armstrong Air Dealer Marketing Meeting - Brookfield

FEBRUARY 14-15, 2012

Armstrong Air Professional Selling Class - Part I

MARCH 13-14, 2012

Armstrong Air Professional Selling Class - Part II

The Monroe Igniter is a quarterly publication created exclusively for customers of Monroe Equipment, Inc.



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