GOODMAN TECHNICAL SERVICES

# GoodNews Tech Tips

VOLUME 1, ISSUE 1 NOVEMBER 2010

INSIDE THIS ISSUE:


| | |
|---|---|
| 2-Stage Furnace Combustion Blower Improvements | 1 |
| Furnace Pressure Switch Changes | 2 |
| TXV Kit Changes | 2 |
| Technical Training Programs | 3 |


I'd like to introduce this first edition of a new quarterly newsletter from Technical Services named GoodNews Tech Tips. This publication is intended to provide product information, changes and other tidbits not normally found in our Service Bulletins or Product Marketing Newsletters. We will be providing information on our technical training offerings and how to access this information as well as 3rd parties we have partnered with to provide training to you the customer and your customers as well as technical tips submitted by our internal staff and as submitted by industry experts like you that can benefit us all.

We have a tremendous level of knowledge and expertise out there in distributor-land and I'd like to invite you to provide tips, articles or even links to good articles you have found on the internet that we can pass along in this publication. By sharing our knowledge it makes us all better. Thank you and I hope you enjoy our new quarterly newsletter.

Rich Whittington
Mgr Technical Services

## 2-Stage Furnace Combustion Blower Improvements

Later this year a new combustion motor will make its debut on Goodman® & Amana® brand GMVC95 & AMVC95 two-stage furnaces. This combustion blower assembly is the result of quality improvements aimed at making this new combustion blower more robust at higher supply voltages and longer run cycles than its predecessor. We currently expect this new combustion blower assembly to hit production in December.

2-Stage Furnace Combustion Blower

**NATE Certification**

**Goodman encourages and supports HVAC contractors who earn NATE Certification. The NATE badge is a symbol recognized by an ever-increasing number of homeowners as the official mark of technician excellence.**

# NOVEMBER 2010

## SPECIAL POINTS OF INTEREST:

- **Debut of new two-stage combustion blower assembly.**
- **Phase-in of new furnace pressure switch.**
- **Release of new TX2N4A expansion valve kit.**
- **Technical training program ins and outs.**

Goodman® Air Conditioning & Heating

# Furnace Pressure Switch Changes

Furnace Pressure Switch

Currently there are several 90% model furnaces using a front-cover pressure switch with a setting of -0.6" wc (Part # 20197310). The process is underway for production phase-in of new switches with a -0.1"wc setting (Part#20197308).

The purpose of the front-cover pressure switch is to break the electrical circuit to the gas valve if water does not drain properly from the secondary heat exchanger by way of the furnace front cover drain holes.

This quality improvement will help to prevent those nuisance front cover pressure failures when the trap is dry and make the pressure switch more forgiving in high altitude applications.

This information is also being provided to the field in the form of Service Bulletin.

# TXV Kit Changes

The TX2N4 expansion valve kits have in some applications usually on the high SEER models been found to not provide proper superheat or sub cooling when installed on evaporator coils matched with 2 ton condensing and heat pump units.

TXV Kits

Therefore a new TXV kit **(TX2N4A)** has been developed to be used with the 1.5 and 2 ton outdoor units and should go into production on or about November 15th. A Service Bulletin will be released shortly with complete details. The existing TX2N4 kits should be used for coils matched with 1.5 ton outdoor units only. Any TX2N4 kits that are matched with 2 ton outdoor units that are not performing properly, should be replaced with the new **TX2N4A** kit when they become available or with the current TX3N4 kit.

There have also been some instances of TXV valves not metering properly and this issue is usually caused by the check valve being stuck open. *If sticking check valves are encountered in the field: It has generally been found that increasing the head pressure on condensing unit by disabling the condenser fan, or reversing the RV valve on a heat pump several times will free the check valve.* Typically, once that is done, the valve works properly, but in some instances the valve has been found to stick again. The sticking comes from dirt or debris that gets between the check valve and the valve body causing the check to stick open. Once freed, the refrigerant acts to clean up the debris and should be caught in the filter drier and after that it usually works properly. Obviously though, if there is too much debris, then it can stick again. The recommendation is to try to free the check valve first but if it sticks again then the valve should be replaced.



Goodman
Air Conditioning & Heating

Goodman
Air Conditioning & Heating

**Thank goodness for Goodman™.**


## Goodman Technical Services

1810 Wilson Parkway
Fayetteville, TN 37334
Tel: 1-888-593-9988
Fax: 1-713-316-5541
E-mail:
HACServicerSupport@goodmanmfg.com


Amana Heating & Air Conditioning

**Last and Last and Last™.**

**We've become one of the largest manufacturers of residential and light commercial air conditioning, heating, and indoor air quality products and systems by focusing on just one thing-building the most reliable and refreshingly affordable indoor comfort products in the market.**

**The complete line if Goodman brand products are built on the principle of founder Harold Goodman, a former air conditioning contractor.**

**Harold's goal was to manufacture air conditioning and heating equipment that:**

- **Provides industry leading product warranties**
- **Offers greater reliability and longer-lasting performance than competing products**
- **Is designed for quick., trouble-free installations**
- **Makes reliable cooling and heating as affordable as possible.**

**Building our products to Harold's standards, and protecting those products with some of the best limited warranties in the industry, has helped to make the Goodman brand widely recognized as a leading brand in the residential and light commercial heating, ventilation and air conditioning industry today.**

**We're on the web!**

**www.goodmanmfg.com**

# Technical Training Programs

As HVAC equipment continues to become more technically advanced, there can be no question about the need for continuing training in the HVAC/R field. The question becomes, where do technicians need to go to get the proper education for their chosen field.

There are many avenues to gain additional knowledge in this industry. Certainly for those that have little or no training in the field, there are the numerous local tech schools as well as junior colleges that can create the beginnings of a well rounded technician. Those that have been in the field for a time can benefit from the numerous agencies out there that are offering updated information on things such as air distribution, charging, and changes in types of refrigerant to name a few.

However when the time comes to become better informed about the products that a technician installs and services, it becomes necessary for the manufacturer to step in and offer the training required to insure the best possible installation and servicing practices for our customers.

To that end, Goodman Technical Services Training Department offers a complete line of classes to help the field technician be successful. These classes include Condensers, Heat Pumps, Furnaces, Package Units, Commercial Units, Compressors, and Motors, as well as Proper Charging Techniques, Air Distribution Troubleshooting and R-410A. As new products are introduced, training is made available to install and service these products. These can be found today under the Dealer Tool Kit/Service Tools on the Goodman website. Here you will find a long list of PowerPoint presentations available for download for you to use for your customer training or to advance your personal knowledge. Please take advantage of what we have to offer.

In future issues, training services both internal and external to Goodman will be examined. For more information regarding availability of training at your location as well as to make suggestions on additional training options, please feel free to contact Mark Stokes at: (mark.stokes@goodmanmfg.com) or John Hill at: (john.hill@goodmanmfg.com), Goodman Technical Trainers.

Goodman
Air Conditioning & Heating