GOODMAN TECHNICAL SERVICES

# GoodNews Tech Tips

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**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.

## 2014 TECHNICAL SERVICES MANAGERS' MEETING

by Clara Crowell

This year's Technical Services Managers' Meeting is going to be held March 24th and 25th in Nashville, TN at the Embassy Suites Nashville - Airport.

All independent and company-owned technical service and training managers are invited to attend.

Monday, March 24th will begin with a morning tour of the Fayetteville plant; Goodman will provide bus transportation to and from the Fayetteville plant.

The General Session will kick off Monday afternoon followed by a reception and dinner.

Tuesday, March 25th will be made up of four product-information sessions. Each product-information session will be one-hour-and-thirty-minutes long and will consist of a presentation followed by a question-and-answer session.

1. Furnace Information Session
2. Package Units/Split System Information Session
3. Light Commercial Information Session
4. Split-System Inverters Information Session

To register for the meeting, please contact Clara Crowell at (931) 438-5483 or clara.crowell@goodmanmfg.com.

# ARUF60D14AA AIR HANDLER CONDENSATE BLOW-OFF

## by Steve Perry

We have had reports of condensate blow-off with the ARUF60D14AA, ARPT60D14AA and AVPTC60D14AA units, when installed in the horizontal-left application. After investigation and testing, it has been determined that there is some air leakage on the coils around the triangle end-plates and the top plate, which is allowing the water blow-off. This is being addressed in production with redesigned triangular end-plate and top-plate insulation. Engineering is working on a field repair kit to resolve this field issue, which will consist of the following:

- Two blow-off brackets
- Insulation to be installed between the coil and coil top-plate.
- Return bend-covers for back of coil.

A service bulletin will be released the first part of 2014, when the field repair kits become available. Continue to report any water blow-off issues to technical services at 888-593-9988 or Stephen Perry at Stephen.perry@goodmanmfg.com.

# WHAT'S NEW WITH FURNACES

## by Al Lush

Furnace Cabinet Improvement

Improvements have been made to the furnace cabinets for Goodman's entire furnace product line. Cabinets for the high efficiency two-stage and modulating furnaces were sealed in February 2013, followed by the remaining high-efficiency models in May 2013. The 80% furnace cabinets were sealed in September 2013. These improvements provide a <2% air-leakage rate. The minor revision character of the model numbers were changed to reflect the units with this improvement.

New Control Board Part Numbers

We discovered that some modulating furnaces were not operating, and that they were displaying a "d0" error code when a field-replacement control board was installed. As a temporary measure, we shipped memory chips along with replacement control boards. We now have implemented a permanent solution. Software changes were made to the control board, and we have changed the part number of this control board to reflect this change. The part number has changed from PCBKF200(SF) to PCBKF201(S).

# PISTONS for GSX/ASX16 UNITS

## by Steve Perry

In December 2013, Goodman began shipping from the factory properly-sized piston kits with the Amana and Goodman ASX160**1F* and GSX160**1F* model lines. Pistons for the units that were in distributor inventory prior to December 2013 can be ordered from HLC. The piston charts that are located on the Goodman website and shipped with the units have been updated to reflect this change. The chart below shows the piston-size information and the piston-kit part numbers:

| Model | Indoor Unit | Indoor Piston Size | Piston Kit Part Number | Service Pack Quantities |
|---|---|---|---|---|
| ASX16 / GSX160181F* | All AHRI matches | 0.049 | B1789849 | 2 |
| ASX16 / GSX160241F* | All AHRI matches | 0.057 | B1789857 | 2 |
| ASX16 / GSX160301F* | All AHRI matches | 0.065 | B1789865 | 20 |
| ASX16 / GSX160361F* | All AHRI matches | 0.072 | B1789872 | 1 |
| ASX16 / GSX160421F* | All AHRI matches | 0.074 | B1789874 | 20 |
| ASX16 / GSX160481F* | All AHRI matches | 0.078 | B1789878 | 20 |
| ASX16 / GSX160601F* | All AHRI matches | 0.086 | B1789886 | 1 |
| ASX16 / GSX160611F* | All AHRI matches | 0.088 | B1789888 | 1 |

# CTK03AB COMMUNICATING THERMOSTAT SET-UP INFORMATION

## by Al Lush

We have recently released the CTK03AB communicating thermostat. There are some menu item changes in this new revision thermostat, which are explained below. The thermostat menu items are dependent on the type of system (e.g., dual fuel items will not appear if the thermostat does not detect a gas furnace installed with a heat pump). Provided below are the setup of the Aux Alarm Circuit and Humidification options.

1. Aux Circuit:

Two-stage furnaces manufactured with PCBKF103 / 4 control boards are equipped with an Auxiliary Alarm circuit that can be connected to a normally closed device, such as a float switch. If this option is used, it must be enabled in the thermostat. To navigate to this menu in the CTK03AB:

From the Home screen, select the following > MENU > COMFORTNET USER MENU > (enter four digit date code – if not known this can be found under Dealer Information menu on that thermostat which includes the thermostat model and date code) COMMUNICATING DEVICES > FURNACE > SETUP > AUXILIARY ALARM (must choose “on” if using this installation option).

2. Humidification:

From the Home screen, select the following > MENU > INSTALLER OPTIONS > enter four digit date code (if not known this can be found under Dealer Information menu on that thermostat which includes the thermostat model and date code) > VIEW / EDIT CURRENT SETUP > HUMIDIFICATION

> HUMIDIFIER TYPE (None, Steam, Bypass or Fan Powered)

# CTK03AB COMMUNICATING THERMOSTAT SET-UP INFORMATION CONTINUED

> MODES ALLOWING HUMIDIFICATION (Heat, Off) select “Heat” and “Off” if independent humidification is desired (what about other options if selecting heat and on???

> HUMIDIFIER CONTROL OPTIONS:

1) Humidify only when fan is on.

2) Humidify on demand – thermostat controls fan. (this option will provide 25% of maximum CFM during a call for humidification)

3) Humidify on demand – equipment controls fan (this choice will provide fan speed options of 25%, 50%, 75%, 100% of maximum CFM during a call for humidification – the option appears in the COMFORTNET USER MENU as described below).

Select “Done” and go back to Home screen

From the Home screen, select > MENU > HUMIDIFICATION (set to “auto” and select desired humid ity level)

From the Home screen select > MENU > COMFORTNET USER MENU > enter four digit date code (if not known this can be found under Dealer Information menu on that thermostat which in cludes the thermostat model and date code) > Furnace > Setup > Humidity > (Off, On, Ind) Select “Ind” for independent operation.

Select “Done”

This completes the setup of Aux Alarm and Humidification options in the CTK03AB thermostat.

# LIGHT COMMERCIAL PRODUCT ENHANCEMENTS

## by Tom Hicks

Since the introduction of the Daikin brand commercial products in July 2013, several improvements have been made to aid in the overall quality of the units.

All belt drive units are now using Browning belts and sheaves. Fixtures have also been added to the lines to assure the sheaves are lined up properly in the units. In addition, new belt tension frequency meters have been added to the lines to ensure proper belt tensioning.

All 7.5 – 12.5 ton units have seen some additional changes. Liquid line filter dryers are now secured to the condenser base-pan with metal strapping as opposed to the previous wire tie. Power blocks have also been added for ease of line voltage wiring.

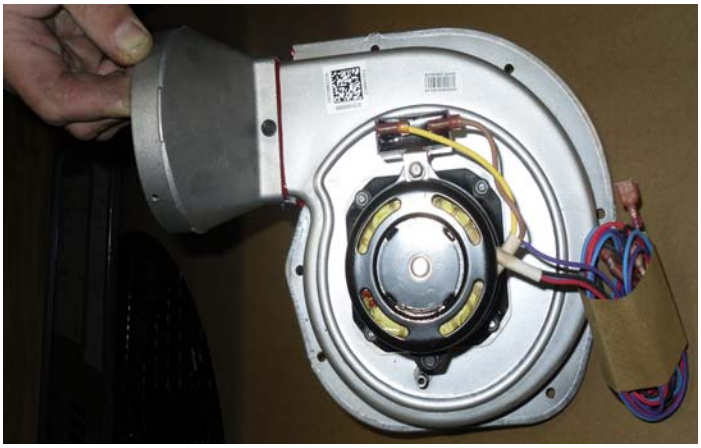
More improvements are on the way as we continue to receive feedback from the field which enables us to provide first-class quality products.

# A/GPG13 and A/GPG15 INDUCER BLOWER MOTOR CHANGES

## by Scott Fondren

Changes to the inducer blower motors for the A/GPG13 and A/GPG15 gas packs have raised questions regarding the ability to interchange the inducer blower motors with other systems. The design assemblies for the new inducer blower motors, 0131G00007 (part number for the A/GPG13 Revison AC induced blower motor) and 0131G00009 (part number for the A/GPG15 Revision AC induced blower motor), are **NOT** interchangeable with the 0131G00001S (part number for the A/GPG15 Revisions AA and AB induced blower motors), since the blower plate and mounting holes are different.

It is very important to get the full model and serial number for the system, to ensure the customer gets the correct parts.



Picture 1: 0131G00009
(New induced blower motor
for A/GPG15 Revision AC)

Picture 2: 0131G00001S –
(New induced blower motor
for A/GPG15 Revision AA and AB Revisions)

Please Note: The 0131G00001S (Picture 2) is still available for the AA and AB revision systems.

# In Memory of John Gilbert Hill

This issue of the GoodNews Tech Tips is dedicated in memory of John Gilbert Hill. John ("Gil" as his family called him) Hill was born October 20, 1950 in Baytown, Texas and passed away on Saturday, October 12, 2013 in Steamboat Springs, Colorado.

John was employed by Goodman Manufacturing for the past seven years and was also a Major with the Harris County Sheriff's Reserve Force in Houston, Texas. He volunteered for thirty-four years with the Sheriff's Reserve and recently had been assigned to the department's Marine Unit. His job with Goodman allowed him the opportunity to travel extensively throughout the United States teaching others about the installation and diagnostics of the company's air conditioning systems. Gil was passionate about teaching, traveling and volunteering and loved that he could combine what he loved with making a living.

His lifelong dream was to own a Harley Davidson which became a reality and hobby for Gil and his wife and afforded them the chance of a lifetime to explore the country on the backside of a Harley. He and Donna made numerous trips with friends and he was a member of the Christian Motorcycle Association. Gil was a loving and devoted husband, father, grandfather, brother, uncle and friend. He cherished his family and friends and was always there with a lending hand, quick wit, helpful advice and charming smile.

John will truly be missed by his family and all of us here at Goodman Manufacturing, along with all of the customers that he trained over the seven years that he worked as a trainer for Goodman.

Thank goodness for Goodman™.

Lasts and Lasts and Lasts™.

## Goodman Technical Services

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## Goodman - A Member of the Daikin Group

**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.**

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