To Our Valued Customers,

In an effort to maintain the highest level of quality the factory is reviewing all submitted warranties. As such any warranty component falling within the criteria outlined below will be placed into pending status:

- Three of the same component failure during the life of the warranty
- Three major component failures (compressor, coil or heat exchanger) within the life of the warranty
- Two of the same component failing within six months

Note: Claims or components covered under an SI or YS letter (known issues) are not counted toward the totals listed above.

Additionally any unit with three or more claims during the life of the warranty can trigger a review. Based on the history of this unit the part you are retuning will fall within the criteria above. This means we cannot issue credit for a warranty part until after we receive a completed a critical readings sheet which is then submitted to the factory. Upon review they will either approve the claim, or make recommendations to prevent future failures. The goal is to insure the cause for muliple failures has been indentified and eliminated.

There are three pages attached. You only need to complete the page specific to the unit in question, based on the product types mentioned below:

- A/C, HP and residential packaged units
- Residential furnaces and Residential gas packaged units
- Commerical Equipment (packaged or split)

Note: *If the failed part is an electical component (such as transformer, control board, contactor, switch or relay) only the jobsite, equipment information and electrical sections need to be completed.*

Please note that forms submitted with missing data will delay part credits and credit cannot be issued for parts under warranty when the information requested is not supplied within 30 days. If you have any questions about these forms please contact your local Virginia Air Distributors Technical Service Manager.

Thank you.

Critical readings Sheet for Heat Pumps, A/C and ResPac Units

Section A – Jobsite Details

Contractor/Tech Name_____ **Phone**_____ **Date**_____

Consumer Name_____ **Address**_____

Section B – Equipment Details

Condenser Model #_____ **Serial #**_____

Blower Model #_____ **Serial #**_____

Indoor Coil Model #_____ **Serial #**_____

Metering Device (TXV Or Fixed Orifice) _____ **If Fixed Orifice, List Size**_____

Reason for Part Replacement_____

Section C – Refrigeration Details

Line Set Size, Total Length, and Rise/Drop_____

Suction Pressure_____ **Suction Temp**_____ **Suction Line Saturation Temp**_____ **Superheat**_____

Liquid Pressure_____ **Liquid Temp**_____ **Liquid Line Saturation Temp**_____ **Subcooling**_____

Discharge Pressure_____ **Discharge Temp**_____ **Discharge Sat Temp**____ **Discharge Superheat**_____

Section D – Air and Capacity Details

Outdoor DB_____ **Entering DB**_____ **Entering WB**_____ **Leaving DB**_____ **Leaving WB**_____

Indoor Total External Static Pressure_____ **Cooling Blower Speed**_____ **Heating Blower Speed**_____

Entering Enthalpy_____ **Leaving Enthalpy**_____ **Total Capacity in BTUs** ($\Delta E \times 4.5 \times CFM$)_____

Section E – Electrical Details

Compressor Volts (rated/actual)_____/_____ **Compressor Amps (rated/Actual)**_____/_____

Condenser Fan Volts (rated/actual)_____/_____ **Condenser Fan Amps (rated/Actual)**_____/_____

Transformer Size (KV)_____ **Transformer Volts (Primary/Secondary**_____/_____

Grounding Check: 120vac (Meter on AC volts) L1 to Common____ L1 to Ground____ Common to Ground____
240vac (Meter on AC volts) L1 to L2____ L1 to Common____ L2 to Common____ C to Ground___

Section F – Multiple Compressor Failure Data

Old Compressor Serial #_____ **New Compressor Serial #**_____

How much refrigerant recovered?_____ **Hard Start Kit (Y/N)**____ **Capacitor MFD/Volts**_____/_____

Voltage Drop Across Contactor_____ **Old Dryer Removed (Y/N)**_____ **New Dryer Installed(Y/N)**____

If burnout, describe cleanup process:_____

_____

Critical readings Sheet for Gas Furnaces & GasPacs

Section A – Jobsite Details & Equipment Details

Contractor/Tech Name_____ **Phone**_____ **Date**_____
Dist Name_____ **Contact/Phone**_____ **Case #**_____

Furnace Brand_____ **Model #**_____ **Serial #**_____

Condenser Brand_____ **Model #**_____ **Serial #**_____

Indoor Coil Brand_____ **Model #**_____ **Serial #**_____

Fuel- Nat Gas or Propane (N or P)____ **LoNox** (Y/N)____ **Elevation from Sea Level** (in feet)_____

Configuration: Upflow_____ **Downflow**_____ **Horizontal Left**_____ **Horizontal Right**_____

Section B – Venting Details

Vent Line Size_____ **Total Length**_____ **# of 90° els**_____ **# of 45° els**_____ **L or S Radius Els** (L or S)___

Intake L Size_____ **Total Length**_____ **# of 90° els**_____ **# of 45° els**_____ **L or S Radius Els** (L or S)___

Vent Line Termination Type: Roof_____ **Sidewall**_____ **Concentric**_____

Intake Termination Type: None (single pipe application)___ **Roof**_____ **Sidewall**_____ **Concentric**_____

Installation Envelope: Crawlspace___ **Attic**___ **Room/Closet**___ **Garage**___ **GasPac Unit**____

Section C – Heating Airflow Settings

If PSC motor – High Heat Blower Speed: **Low(red)**___ **Med(yellow)**___ **Med High(blue)**___ **High(black)**___
Low Heat Blower Speed: **Low(red)**___ **Med(yellow)**___ **Med High(blue)**___ **High(black)**___

If Constant Torque (X13) – High Heat Blower Selection: **1**___ **2**___ **3**___ **4**___ **5**___
Low Heat Blower Selection: **1**___ **2**___ **3**___ **4**___ **5**___

If Variable Speed ECM – Heat Tap Selection: **A**___ **B**____ **C**____ **D**____
If Modulating Furnace – ATR Selection: **NOM**____ **+10**____ **-10**____

Section D – Operational Values

Inlet Gas Pressure (static**)**_____ **Inlet Gas Pressure** (all appliances at high fire)_____ **Outdoor DB Temp**___
Manifold Gas Pressure (at high fire)_____ **Manifold Gas Pressure** (at low fire)_____

Return Air DB Temp_____ **Supply Air Temp** (high fire)_____ **Supply Air Temp** (low fire)_____
Temperature Rise (high fire)_____ **Temperature Rise** (low fire)_____

Return Static Pressure_____ **Supply Static Pressure**_____ **Total Static Pressure**_____

Section E – Electrical Details

Transformer Size (KV)_____ **Transformer Volts (Primary/Secondary**_____/_____

Blower Motor Amps (at high fire)_____ **Blower Motor Amps** (at low fire)_____

New Install or Retrofit (N or R)_____ **Furnace Grounding has been Verified (Y/N)**___

Commercial Critical Readings Sheet

Section A – Jobsite and Equipment Details

Model#_____ **Serial Number**_____ **Date**_____

Contractor Name_____ **Technician Name**_____ **Technician Phone**_____

Reason for Component Failure_____

Section B – Voltage & Amperage Readings

Outdoor Standing/Running Voltage L1-L2_____/_____ L1-L3_____/_____ L2-L3_____/_____

Indoor Standing/Running Voltage L1-L2_____/_____ L1-L3_____/_____ L2-L3_____/_____

Secondary Voltage_____ C to G Volts*****_____ C to Y1*****_____ C to Y2*****_____***With thermostat calling**

Compressor Rated Amps____ **Running Amps #1** L1___ L2___ L3___ **#2** L1___ L2___ L3___

#3 L1___ L2___ L3___ **#4** L1___ L2___ L3___

Condenser Fan Rated Amps_____ **Running Amps Fan** #1____ **Fan #2**____ **Fan #3**____ **Fan #4**____

Evap Motor: Nominal HP____ **Rated Amps**_____ **Running Amps** L1____ L2____ L3____

PE Motor: Nominal HP____ **Rated Amps**_____ **Running Amps** L1____ L2____ L3____

Section C – Airflow & Temperature Readings ***(After 15 minutes Runtime)***

Design CFM_____ **Dry coil Pressure Drop**_____ **Calculated CFM**_____

Outdoor DB Temp_____ **Return Air db Temp**_____ **Supply Air db Temp**_____

Return Air wb Temp_____ **Supply Air wb Temp**_____

Section D – Refrigeration System Values ***(After 15 minutes Runtime)***

System 1 **Suction Pressure**_____ **Suction Temperature**_____ **Superheat**_____

Discharge Pressure_____ **Discharge Temperature**_____ **Subcooling**_____

System 2 **Suction Pressure**_____ **Suction Temperature**_____ **Superheat**_____

Discharge Pressure_____ **Discharge Temperature**_____ **Subcooling**_____

Section E – Split System Refrigerant Line and Accessory Information

Suction Line Size_____ **Liquid Line Size**_____ **Number of Elbows**_____

Cond. above or below the Evap?___ **Vert. Line length**____ **Hoz. Line length**____ **Total**____

Have any other accessories been added (sight glass, strainer)?_____

Amount of Refrigerant added: **System1**_____ **System 2**_____

Section F – Gas Heat Information

Natural Gas or Propane (N or P)___ **Propane Kit Installed (Y/N)**_____ **Orifice Size**_____

Incoming Gas Pressure_____ **Manifold Pressure GV1**____ **Manifold Pressure GV2**____

Temperature Rise (at high-fire)_____ **Temperature Rise (at low-fire)**_____ ***(After 15 minutes runtime)***