

***XB200  
Comfort  
Control***



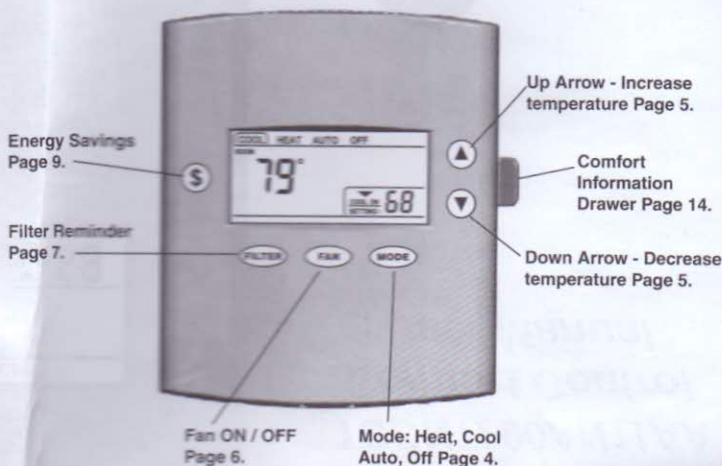
***TCONT200AN11AA  
Comfort Control  
User Manual***



**TRANE™**

## Table Of Contents

Page	
3	<b>Introduction</b>
4-10	<b>Keypad functions</b>
11-14	<b>Features</b>
15	<b>Factory settings</b>
16-17	<b>Comfort Control Setup</b>
18-19	<b>Troubleshooting</b>
20-21	<b>Warranty</b>




## Introduction

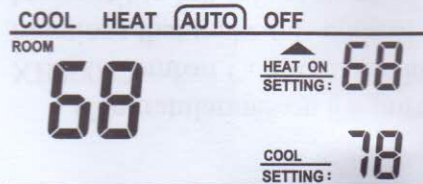
Congratulations on the purchase of your new Trane XB200 Comfort Control! Your XB200 Comfort Control combines the latest digital control technology with intuitive functions that make this control simple to understand and easy to operate. You'll enjoy lower utility bills at the touch of a button with the energy efficiency features built into your XB200 Comfort Control. Your comfort settings are automatically stored in the XB200 Comfort Control's memory eliminating the need for battery backup in the event of power loss. Simply follow the steps in this instruction manual and begin enjoying the benefits of your new Trane XB200 Comfort Control.

# Keypad Functions



## MODE

 - Pressing this key changes the system mode to Heat, Cool, Automatic or Off.

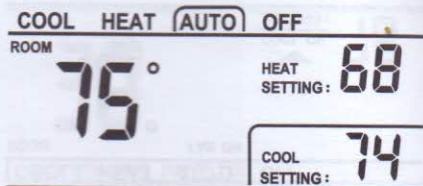
A border will appear around the mode on the display to show the system mode you've selected.



## UP / DOWN Arrow

  - Use these keys to raise or lower the Heat or Cool Setting.

- The first key press turns on the back lighting and a border around the setting to be adjusted without changing the setting.



- Pressing the Up or Down arrow again will raise or lower the setting that has the border around it.

- If you press and hold the Up or Down arrow, the temperature setting will advance rapidly.


- When the control is set to Auto mode, pressing the Mode key once changes the position of the border to heat or cool.

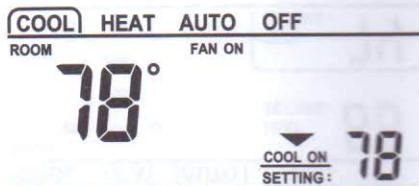


# Keypad Functions

(cont-)

## FAN

 - Pressing this key selects whether the indoor fan motor runs in automatic or continuous mode.




The FAN ON indicates that you have selected to operate the fan in continuous mode. Continuous fan mode during cooling operation may not be appropriate in humid climates. If the indoor air exceeds 60% relative humidity or simply feels uncomfortably humid, it is recommended that the fan only be used in the AUTO mode.

Pressing the Fan keypad button again returns the indoor fan mode of operation to automatic and FAN ON goes away.

Page - 6

Pub. No. 22-5204-05

## FILTER

 - Press this key to display how many days remain before time to replace or clean the filter. The "**FILTER**" indicator will flash on the display when the filter timers days remaining reaches zero.



- Press the "**FILTER**" key after cleaning or replacing the filter to turn off the filter indicator and reset the timer.

- IF the filter is serviced before the timer expires, press the "**FILTER**" key to display the "days remaining for filter". Press the Down arrow to change the remaining days to zero. Press the "**FILTER**" key twice to reset the timer.

Page - 7

Pub. No. 22-5204-05

# Keypad Functions (cont-)

Filter

## FILTER

Filter

- If you press and hold the filter keypad button for several seconds, the display changes to the Quick Setup option for the filter timer. Use the UP or DOWN arrow keypad buttons to change the timer setting if desired, 1 - 180 days.

**NOTE:** Setting to 0 will disable filter timer.

30

SETTING

FILTER

SET-UP

- Press the filter button again to return to normal display or just wait a few seconds and the display will return on its own.

Page - 8

Pub. No. 22-5204-05

## Energy Savings

\$

- Use this key to lower your systems energy consumption and save money at the same time! Pressing the Energy Savings keypad button changes the indoor temperature setting to a warmer temperature when the system is operating in the cooling mode and to a cooler indoor temperature setting when operating in the heating mode. Energy Savings will appear on the display.

COOL **HEAT** AUTO OFF

ROOM

70°

HEAT  
SETTING:

70

COOL **HEAT** AUTO OFF

ROOM

70°

HEAT  
SETTING:

62

ENERGY SAVNGS

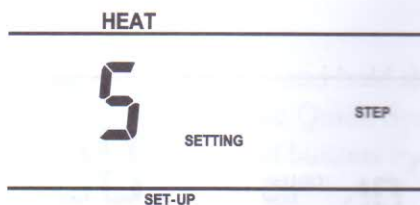
Example: Heating offset of 8 degrees.

\$

Page - 9

Pub. No. 22-5204-05

## Keypad Functions (cont-)



- Press and hold the Energy Savings keypad button to gain Quick Access to the Energy Savings setup screen.
- Use the UP or DOWN arrow keys to change the offset degrees setting.

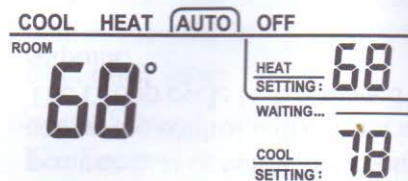
**NOTE:** Energy Savings offset degrees are selected separately for heating and cooling. Press the Mode keypad button while viewing this screen to access the Cooling or Heating offset degrees setting, then use the UP or DOWN arrow key to select the desired number of offset degrees.

- Press the Energy Savings keypad button again to return to normal display or just wait a few seconds and the display will return on its own.

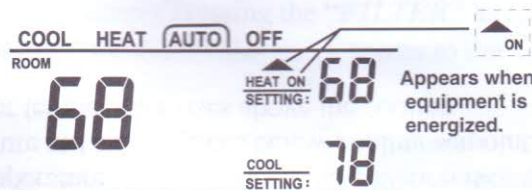
## Features

### Auto Changeover

When the system mode is set to Auto, the control automatically switches between heating and cooling modes to maintain the desired comfort level.



Adjusting to new setting



Appears when equipment is energized.

### Setpoint Deadband

The number of degrees separating Heating and Cooling setpoints. The amount of separation between mode setpoints is user defined between 2 and 10 degrees. When the control is set to Auto, and the cooling setpoint is changed to a cooler setting, the heating setpoint also changes to maintain the selected degrees separation. The same action occurs when the heating setpoint is changed to a warmer temperature.



## Features

(cont-)

Page - 12  
Pub. No. 22-5204-05

### *Backlit Display & Keys*

The liquid crystal display and keypad will illuminate whenever a keypad button is pressed to improve thermostat visibility. The back light stays on for 10 seconds after the last key press. The Up and Down arrows are continuously lit.

### *Cooling Droop*

Cooling Droop is an automatic function that cycles the compressor on to improve indoor comfort by removing moisture from the air. The Droop cycle is activated when space temperature is at or below the cooling sensible temperature setpoint. When this function is active, the control will control indoor temperature at 1 or 2 degrees below cooling setpoint. The Droop cycle is deactivated when the indoor temperature rises above the cooling setpoint.

### *Keypad Lock*

Locking the control keypad can help prevent unwanted tampering or changing the control settings by pressing the controls UP and DOWN arrow keypad buttons at the same time and holding for 2 seconds. The "KEYPAD LOCKED" icon will appear on the control's display. Repeating this combination unlocks the keypad.

### *Filter Reminder*

"FILTER" will automatically flash to remind the homeowner that its time to change the filter once the preset time has expired. Pressing the "FILTER" keypad button automatically resets the internal clock timer. Once the timer has been reset, the number of days remaining till the next filter change can easily be determined by simply pressing the "FILTER" keypad button. Pressing and holding the "FILTER" keypad button provides quick access to the filter timer setup.

### *Energy Savings*

The Energy Savings mode provides instant energy savings by offsetting the indoor setpoint to a cooler temperature setting for heating and a warmer temperature setting for cooling. The Energy Savings mode is activated by pressing the Energy Savings key "\$" on the control keypad. Pressing the Energy Savings key "\$" again deactivates the Energy Savings mode. Pressing and holding the Energy Savings key "\$" provides quick access to the offset degree setup for the current operating mode.

### *Default Factory Settings*

The control is shipped with a set of factory default settings. The factory default settings can be restored at any time using the control configuration menu. Please see Page 15 for a complete listing of factory shipped default settings.

Page - 13  
Pub. No. 22-5204-05

## Features

(cont-)

### *Service Indicator*

**"SERVICE"** automatically flashes when an internal fault or error has been detected by the control. See Table 2 on pages 18.

### *Wait Indicator*

**"WAITING"** will illuminate when the indoor setpoint is moved in the direction of calling for additional system capacity. **"WAITING"** indicates that the control is adjusting to the new settings.

### *Calibrate Indoor Temperature*

This option allows calibration (or deliberate miscalibration) of the room temperature sensor. The selection is the number of degrees added to actual temperature. The number can range between + 5 and - 5. Factory default is 0. This adjusted value will be used as actual temperature for both display and control action. For example, if 2 is selected, 72 degrees actual will read 74 degrees.

### *Comfort Information Drawer*

The drawer attached to the mounting base of the control is designed to provide a convenient location for the home owner to locate their local servicer. A standard business card can be folded and inserted into the slot on the drawer to remind the User whom to call when service is required.

Page - 14

Pub. No. 22-5204-05

## Factory Default Settings

### *User Defined Options and Factory Default Settings: (See Table 1, page 17)*

Temperature Display - Fahrenheit or Celsius (Default is Fahrenheit)

Auto or Manual Changeover - (Default is Auto)

Setpoint Deadband - 2 - 10 degrees (Default is 3 degrees)

Waiting Indicator - Enable or Disable (Default is Enable)

Cooling Droop - Off, 1, or 2 degrees (Default is 1 degree)

Energy Saving Cooling Setpoint Offset - 0 - 25 degrees (Default is 5 degrees)

Energy Saving Heating Setpoint Offset - 0 - 45 degrees (Default is 5 degrees)

Indoor Filter Timer Method - Calendar Days or Fan Run Time Days - (Default is Calendar Days)

Indoor Filter Timer Days - 1 - 180 days (Default is 30 days)

Calibrate Indoor Temperature - + / - 5 Degrees (Default is 0 degrees)

Page - 15

Pub. No. 22-5204-05



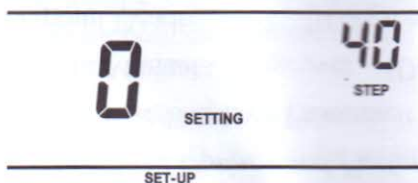
# User Setup Options

## Entering User Setup:

Press and hold the **MODE** and **FAN** keypad buttons at the same time.

### Keypad Navigation:

- Use the **MODE** or **FAN** buttons to navigate forward and backward through the Setup steps.
- Press **MODE** to advance forward to the next step.
- Press **FAN** to return to the previous step.
- Use the **UP** and **DOWN** arrow keypad buttons to select or change Setup options.



# User Setup Options (cont-)

Table 1

## Comfort Control Setup

Menu Item	Factory Setting	Setting (Choices) (Press UP or DOWN arrow)	Step (Press Mode or Fan)	Menu Item	Factory Setting	Setting (Choices) (Press UP or DOWN arrow)	Step (Press Mode or Fan)
Temperature Display	0	0 = Fahrenheit 1 = Celsius	40	Energy Savings - Heating Setpoint Offset	5	1 - 45 Degrees Fahrenheit 1 - 25 Degrees Celsius	46
Auto or Manual Changeover	1	0 = Manual 1 = Auto	41	Indoor Filter Timer Method	0	0 = Calendar Days 1 = Fan Run Time Days	47
Setpoint Deadband	3	2 - 10 Degrees	42	Indoor Filter Reminder - Days	30	1 - 180 Days 0 = Disable	48
Waiting Icon	1	0 = Disable 1 = Enable	43	Calibrate Indoor Temperature	0	Calibrated Room Temperature + / - 5 Degrees (1/2 degree increments)	49
Cooling Droop	1	0 = Off 1 = 1 Degree 2 = 2 Degrees	44	Exit Setup (Press Mode)	SA	SA = Save US = Default User Settings CA = Cancel	99 (Exit)
Energy Savings - Cooling Setpoint Offset	5	1 - 25 Degrees Fahrenheit 1 - 15 Degrees Celsius	45	Note: Pressing the Energy Savings Key (S) anytime during setup will advance to step 99. Step 99 - Make setting selection and then press MODE to exit. SAve = Save selections USer = Default user settings CAncel = Cancel Selections for current session and return to previous session selections.			

## Lock - Unlock Keypad:

Press and hold Up Arrow and Down Arrow at the same time.

("Keypad Locked" icon will display on LCD screen)

# Trouble -shooting

## Table 2

## Troubleshooting

Symptom	Possible Cause	Action
Display will not come on.	1. Blown fuse or tripped circuit breaker. 2. Furnace power switch OFF. 3. Furnace blower compartment door or panel loose or not properly installed.	1. Replace fuse or reset breaker. 2. Turn switch to ON. 3. Replace door panel in proper position to engage safety interlock or door switch.
Temperature display is incorrect.	Temperature display needs calibration.	Calibrate Sensor - User Setup Step 49.
Cannot set Heating setpoint above 80 degrees	Deadband between Heating and Cooling set to high	Decrease Deadband setting - User Setup Step 42.
"Service" Flashing on and off.	Control EEPROM write error.	Press any key and Check / Re-enter Setup Choices.
"Service" solid on and "--" in temperature display.	Indoor temperature sensor open or shorted	Replace Control
Temperature setting will not change. (Example: Cannot set heating higher or cooling lower).	1. Upper and/or lower temperature limits were reached. 2. "Keypad locked" is displayed on LCD.	1. Check the temperature setpoints: Heating limits are 40 - 85F. Cooling limits are 65 - 90F. 2. Unlock keypad - press Up+Down arrow together until icon disappears.

## Table 2

## Troubleshooting (Continued)

Symptom	Possible Cause	Action
Heating will not come on.	1. System Mode not set to Heat. 2. Minimum off time delay being enforced. "waiting displayed". 3. Loose connection to control or system. 4. Heating system requires service or control requires replacement.	1. Set Mode to heat and raise the setpoint above room temperature. 2. If heating does not come on within 5 minutes, Check Heating. 3. Check - Repair connections. 4. Repair system / Replace control.
Cooling will not come on.	1. System Mode not set to Cool. 2. Minimum off time delay being enforced. "waiting displayed". 3. Loose connection to control or system. 4. Cooling system requires service or control requires replacement.	1. Set Mode to cool and lower the setpoint below room temperature. 2. If cooling does not come on within 15 minutes, contact service. 3. Repair connections. 4. Repair system / Replace control.
Cool ON or Heat ON is displayed, but no warm or cool air is coming from the registers.	1. The heating equipment turns on the fan when the furnace has warmed up to a setpoint. 2. Heating or cooling equipment is not operating.	1. Wait one minute after seeing the ON icon and then check the registers. 2. Check Heating and Cooling system.
Control does not respond to keypad presses.	1. "Keypad locked" icon is displayed on LCD. 2. Keypad failure.	1. Unlock keypad - press Up+Down arrow together until "Keypad Locked" disappears. 2. Replace Control.
Fan does not operate properly in heat or cool mode.	1. Incorrect wiring. 2. Heating or cooling equipment inoperative.	1. Correct wiring. 2. Repair system.
Fan runs all the time.	1. Fan mode set to ON. 2. Shorted control wiring.	1. Set fan mode to AUTO. 2. Check / Repair wiring.



# Warranty

## Limited Warranty Low Voltage Room Comfort Controls (PARTS ONLY)

Subject to the terms and conditions of this limited warranty, Trane U.S., Inc. ("Company") extends a limited warranty against manufacturing defects for the product(s) identified in Table 1A attached hereto ("Products") that are installed in a residential application (personal, family or household purposes) under normal use and maintenance in the United States and Canada.

**This limited warranty applies to Products manufactured on or after August 1, 2011.**

In order to maximize the available benefits under this limited warranty, the Purchaser (as defined below) should read it in its entirety. All repairs of Product parts covered under this limited warranty must be made with authorized service parts and by a licensed HVAC service provider. Additionally, commercial applications are treated differently under this limited warranty as stated in Table 1A attached hereto. For purposes of this limited warranty, "commercial applications" shall mean any application other than for personal, family, or household use.

**TERM:** The limited warranty period for Products is as stated in Table 1A attached hereto. If the Purchaser properly registers the Products, the limited warranty period shall be extended as stated in Table 1A attached hereto. Regardless of registration, the Commencement Date for a limited warranty period shall be the date that the original installation is complete and all Product start-up procedures have been properly completed and verified by an installer's invoice. If the installation and start-up date cannot be verified by the installer's invoice, the Commencement Date shall be sixty (60) days after the factory manufacture date which is verified by the Product serial number. Where a Product is installed in a newly constructed home, the Commencement Date is the date the Purchaser purchased the residence from the builder. Proof of Product purchase, installation, and/or closing date of the residence may be required to confirm the Commencement Date.

The installation of Product replacement parts under this limited warranty shall not extend the original warranty period. The warranty period for any Product part replaced under this limited warranty is the applicable warranty period remaining under the original Product warranty.

**WHO IS COVERED:** This limited warranty is provided only to the original owner and his or her spouse ("Purchaser") of the residence where the Products are originally installed. This warranty is not transferable except according to terms stated on the applicable website identified below under Registration Requirements. Company has the right to request any and all proof of Product purchase or installation and/or closing date of the residence.

Page - 20

Pub. No. 22-5204-05

**WHAT COMPANY WILL DO:** Company may request proof of Product purchase and/or installation in order to provide Product parts under this limited warranty. As Company's only responsibility and Purchaser's only remedy under this limited warranty, Company will furnish a replacement part to the licensed HVAC service provider, without charge for the part only, to replace any Product part that fails due to a manufacturing defect under normal use and maintenance. The Purchaser must pay for any and all shipping and handling charges and other costs of warranty service for the replacement part. If a Product part is not available, Company will, at its option, provide a free suitable substitute part or provide a credit in the amount of the then factory selling price for a new suitable substitute part to be used by the Purchaser towards the retail purchase price of a new Company product. Any new Product purchase shall be at Purchaser's sole cost and expense including, but not limited to, all shipping, removal, and installation costs and expenses.

**REGISTRATION REQUIREMENTS:** All Products must be properly registered online by the Purchaser within sixty (60) days after the Commencement Date to receive the registered limited warranty terms. To register online, go to:

<http://www.trane.com/Residential/Trane/Owners/Warranty-Information> or  
<http://www.americanstandardair.com/servicesupport/pages/warranty.aspx>  
and click "Begin Online Registration." If a Purchaser does not register within this stated time period, the base limited warranty terms shall apply.

**ELIGIBILITY REQUIREMENTS:** The following items are required in order for the Products to be covered under this limited warranty:

- The Products must be in the same location where they were originally installed.
  - The Products must be properly installed, operated, and maintained by a licensed HVAC service provider in accordance with the Product specifications or installation, operation, and maintenance instructions provided by Company with each Product. Failure to conform to such specifications and/or instructions shall void this limited warranty. Company may request written documentation showing the proper preventative maintenance.
  - All Product parts replaced by Company under this limited warranty must be given to the servicing provider for return to Company.
- EXCLUSIONS:** The following are not covered by this limited warranty:
- Labor costs including, but not limited to, costs for diagnostic calls or the removal and reinstallation of Products and/or Product parts.
  - Shipping and freight expenses required to ship Product replacement parts.
  - Failures, defects, or damage (including, but not limited to, any loss of data or property) caused by (1) any third-party product, service, or system connected or used in conjunction with the Products; (2) any use that is not designed or intended for the Products; (3) modification, alteration, abuse, misuse, negligence, or accident; (4) improper storage, installation,

maintenance, or operation including, but not limited to, operation of electrical equipment at voltages other than the range specified on the Product nameplate; (5) any use in violation of written instructions or specifications provided by Company; (6) any acts of God including, but not limited to, fire, water, storms, lightning, or earthquakes; or any theft or riots; or (7) a corrosive atmosphere or contact with corrosive materials such as, but not limited to, chlorine, fluorine, salt, sulfur, recycled waste water, urine, fertilizers, rust, or other damaging substances or chemicals.

- Products purchased direct including, but not limited to, Internet or auction purchases and purchases made on an uninstalled basis.
- Increased utility usage costs.

### ADDITIONAL TERMS:

**THIS LIMITED WARRANTY AND LIABILITY SET FORTH HEREIN ARE IN LIEU OF ALL OTHER WARRANTIES AND LIABILITIES, WHETHER IN CONTRACT OR IN NEGLIGENCE, EXPRESS OR IMPLIED, IN LAW OR IN FACT. THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED TO THE DURATION OF THE APPLICABLE PRODUCT WARRANTY. COMPANY DOES NOT AUTHORIZE ANY PERSON TO CREATE FOR IT ANY OBLIGATION OR LIABILITY IN CONNECTION WITH THE PRODUCTS.**

**NOTWITHSTANDING ANYTHING IN THIS LIMITED WARRANTY TO THE CONTRARY, COMPANY SHALL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, INDIRECT, SPECIAL AND/OR PUNITIVE DAMAGES, WHETHER BASED ON CONTRACT, WARRANTY, TORT (INCLUDING, BUT NOT LIMITED TO, STRICT LIABILITY OR NEGLIGENCE), PATENT INFRINGEMENT, OR OTHERWISE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. COMPANY'S MAXIMUM LIABILITY HEREUNDER IS LIMITED TO THE ORIGINAL PURCHASE PRICE OF THE PRODUCTS.**

No action arising out of any claimed breach of this limited warranty may be brought by a Purchaser more than one (1) year after the cause of action has arisen. This limited warranty gives you specific legal rights, and you may also have other rights as otherwise permitted by law. If this Product is considered a consumer product, please be advised that some local laws do not allow limitations on incidental or consequential damages, how long a warranty lasts based on registration, or how long an implied warranty lasts, so that the above limitations may not fully apply. Refer to your local laws for your specific rights under this limited warranty.

Residential Systems

6200 Troup Highway, Tyler, TX 75707

Attn: Customer Relations

Or visit our website at [www.trane.com](http://www.trane.com) or [www.americanstandardair.com](http://www.americanstandardair.com)

Table 1A: Warranty Time Periods

**COVERAGE TERMS FOR RESIDENTIAL APPLICATIONS:** Pursuant to the Trane U.S., Inc. ("Company") limited warranty terms and conditions, the following Products are covered for the base time periods as stated below ("Base Limited Warranty period"). If registered, the Base Limited Warranty Periods for certain products will be extended as stated below ("Registered Limited Warranty Period").

**CONTROLS:** \*CONT200, \*CONT401, \*CONT402, \*CONT600 & \*CONT602

Base Limited Warranty Period: one (1) year

Registered Limited Warranty Period: five (5) years

**CONTROLS:** \*ZEMT500, \*CONT801, \*CONT802, \*CONT803, \*CONT901, \*ZONE950

Base Limited Warranty Period: five (5) years

Registered Limited Warranty Period: ten (10) years

**ZONING PRODUCTS:** \*ZONE950, \*ZONE940, \*ZONE930, \*ZONEPNLACS2Z, \*ZONEEXPACS2Z, \*ZSENSALS400, \*BAYSEN01ATEMPA, \*BAY24VRP, \*ZDAMPRO, \*ZDAMP5M, \*ZDAMP5M, \*ZDAMP5R

Base Limited Warranty Period: five (5) years

Registered Limited Warranty Period: ten (10) years

**HUMIDIFIERS:** \*HUMD200, \*HUMD300 & \*HUMD500

Base Limited Warranty Period: five (5) years

Registered Limited Warranty Period: ten (10) years

**ENERGY RECOVERY VENTILATOR (ERV):** \*ERV100, \*ERV200 & \*ERV300

Base Limited Warranty Period: five (5) years

Registered Limited Warranty Period: ten (10) years

**AIR CLEANERS:** TFD & AFD

Base Limited Warranty Period: five (5) years

Registered Limited Warranty Period: ten (10) years

**VARIABLE SPEED OIL FURNACE:** \*HV-V, \*LF-V, \*LR-V, \*DF-V

Base Limited Warranty Period: Parts- five (5) years, Heat Exchanger - twenty (20) years

Registered Limited Warranty Period: Parts - ten (10) years, Heat Exchanger - Lifetime

**NON-VARIABLE SPEED OIL FURNACE:** \*HV, \*LF, \*LR, \*DF

Base Limited Warranty Period: Parts- five (5) years, Heat Exchanger - twenty (20) years

Registered Limited Warranty Period: Parts - ten (10) years, Heat Exchanger - Lifetime

### SPECIFIC TERMS FOR COMMERCIAL APPLICATIONS:

Base Limited Warranty Period Applies for all controls, zoning products, humidifiers and ERV's

All Oil Furnaces: Parts - one (1) year, Heat Exchanger - twenty (20) years

(\*First letter may be A or T)

Page - 21

Pub. No. 22-5204-05