# **Service Instructions**



## PACKAGE TERMINAL AIR CONDITIONER/HEAT PUMP ACCESSORIES MANUAL

Standard and Remote Applications with LED Control with R-410A



This manual is to be used by qualified, professionally trained HVAC technicians only. Goodman does not assume any responsibility for property damage or personal injury due to improper service procedures or services performed by an unqualified person.

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## INDEX

IMPORTANT INFORMATION MAINTENANCE & CLEANING SUPPLIES PURCHASED KITS THAT MAY BE USED	3 4
WITH AMANA <sup>®</sup> BRAND UNITS	4
PRODUCTION IDENTIFICATION	5
FRONT REMOVAL	6
ACCESSORIES	1
Circuit Breaker Kit	7
Condensate Drain Kit	9
Condenser Baffle Kit 1	11
Condensate Disposal Pump 1	2
Curtain Guard 1	6
Duct Kits	
Desk Duct 1	8
Main Duct 2	21
Extended Duct 2	21
Terminal Duct 2	26
Escutcheon - Remote 2	27
Filter Kit 2	28
Fuse Holder Kit 2	<u>2</u> 9
Generic Radio Kit 3	32
Hard Wire Kit 3	36
Hard Wired Motion Sensor Kit	38

Hydronic Heat	41
Hydronic Steam & Water Valves	45
Steam & Water Plumbing	47
Hydronic Transformer	53
Leveling Legs	54
Low Voltage Wire Harness	55
Outdoor Grilles	57
Standard	57
Architectural	58
Power Disconnect Switch	59
Power Door Kit	61
Remote Temperature Sensor	65
Security Key Lock	67
Subbase	68
Subbase Extension Cover	71
Wall Sleeve	72
Wall Sleeve Adapter	75
Wall Sleeve (Extended)	77
Wireless RF (Radio Frequency) Controls	80
CONFIGURATION SETTINGS	91



## IMPORTANT INFORMATION

Pride and workmanship go into every product to provide our customers with quality products. It is possible, however, that during its lifetime a product may require service. Products should be serviced only by a gualified service technician who is familiar with the safety procedures required in the repair and who is equipped with the proper tools, parts, testing instruments and the appropriate service manual. REVIEW ALL SERVICE INFORMA-TION IN THE APPROPRIATE SERVICE MANUAL BEFORE BEGINNING REPAIRS.

## IMPORTANT NOTICES FOR CONSUMERS AND SERVICERS



WARNING

**HIGH VOLTAGE** DISCONNECT ALL POWER BEFORE SERVICING OR INSTALLING THESE KITS. MULTIPLE POWER SOURCES MAY BE PRESENT. FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH. THE UNIT'S OFF SWITCH DOES NOT DISCONNECT ALL POWER TO THE UNIT.



GOODMAN WILL NOT BE RESPONSIBLE FOR ANY INJURY OR PROPERTY DAMAGE ARISING FROM IMPROPER SERVICE OR SERVICE PROCEDURES. IF YOU INSTALL OR PERFORM SERVICE ON THESE UNITS, YOU ASSUME RESPONSIBILITY FOR ANY PERSONAL INJURY OR PROPERTY DAMAGE WHICH MAY RESULT. MANY JURISDICTIONS REQUIRE A LICENSE TO INSTALL OR SERVICE HEATING AND AIR CONDITIONING EQUIPMENT.



ONLY INDIVIDUALS MEETING (AT A MINIMUM) THE REQUIRE-MENTS OF AN "ENTRY LEVEL TECHNICIAN" AS SPECIFIED BY THE **AIR-CONDITIONING, HEATING AND REFRIGERATION INSTITUTE** (AHRI) MAY USE THIS INFORMATION. ATTEMPTING TO INSTALL OR REPAIR THIS UNITS WITHOUT SUCH BACKGROUND MAY RESULT IN PRODUCT DAMAGE, PERSONAL INJURY OR DEATH.

## WARNING

THIS AIR CONDITIONER IS NOT MEANT TO PROVIDE UNATTENDED COOLING OR LIFE SUPPORT FOR PERSONS OR ANIMALS WHO ARE UNABLE TO REACT TO THE FAILURE OF THIS PRODUCT.

THE FAILURE OF AN UNATTENDED AIR CONDITION-ER MAY RESULT IN EXTREME HEAT IN THE COND-ITIONED SPACE CAUSING OVERHEATING OR DEATH OF PERSONS OR ANIMALS.

PRECAUTIONS MUST BE TAKEN TO WARN OF OR **GUARD AGAINST SUCH AN OCCURENCE.** 

## 

HIGH VOLTAGE



DISCONNECT ALL POWER BEFORE SERVICING. MULTIPLE POWER SOURCES MAY BE PRESENT. FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE. PERSONAL INJURY OR DEATH. DO NOT SERVICE THIS UNIT WITHOUT FIRST SHUTTING OFF POWER TO THE UNIT FROM THE CIRCUIT BREAKER AND/OR REMOVING THE UNIT CORD SET PLUG FROM THE WALL OUTLET. LINE VOLTAGE WILL BE PRESENT AT THE CONTROL BOARD, TERMINALS L1 AND L2 WHENEVER POWER IS APPLIED TO THE UNIT REGARDLESS OF THE MASTER SWITCH POSITION.

### WHEN ORDERING PARTS

All product model and serial nameplates carry an additional number called the manufacturing number. It is possible to have one or more like products with the same model number, but that a portion of the parts would not be interchangeable.

The manufacturing number has been added to the product to assist the service department in identifying any given product.

It is extremely important when looking up service repair parts in the parts list, or when requesting service information, that the manufacturing, model and serial numbers be used to properly identify the product.

To locate an authorized servicer, please consult your telephone book or the dealer from whom you purchased this product. For further assistance, please contact:

**CONSUMER INFORMATION LINE -**AMANA® BRAND PRODUCTS TOLL FREE 1-877-376-0214 (U.S. only) email us at: customerservice@goodmanmfg.com fax us at: (713) 856-1821 (Not a technical assistance line for dealers.)

Outside the U.S., call 1-713-861-2500. (Not a technical assistance line for dealers.) Your telephone company will bill you for the call.

## PTAC MAINTENANCE & CLEANING SUPPLIES

## 

<u>ONLY</u> INDIVIDUALS MEETING (AT A MINIMUM) THE REQUIREMENTS OF AN "ENTRY LEVEL TECHNICIAN' AS SPECIFIED BY THE AIR-CONDITIOING, HEATING, AND REFRIGERATION INSTITUTE (AHRI) MAY USE THIS INFORMATION. ATTEMPTING TO INSTALL OR REPAIR THIS UNIT WITHOUT SUCH BACKGROUND MAY RESULT IN PRODUCT DAMAGE, PERSONAL INJURY OR DEATH.

For optimum performance of your PTAC unit, it is extremely important to clean and maintain the unit's exterior as well as to clean the inlet air filters once a month (or more often if operated in dusty or dirty locations or conditions) to properly maintain your PTAC unit.

Proper filter cleaning instructions are found in this manual, IO-723\* and service manual RS4200004\*. Please refer to them when cleaning or replacing the filters or performing any maintenance.

The products below are recommended by Goodman for use on Amana<sup>®</sup> brand PTAC units. For more information or to obtain the maintenance and cleaning supplies, please contact your Amana<sup>®</sup> brand sales representative.

### Time Release Condensate Drain Pads

HYD-CS50	Time-release pads - 12-pack
HYD-CS50BB	Time-release pads - 50-pack
HYD-CS50B	Time-release pads - 120-pack

Coil Cleaners - Non Corrosive Formulation

HYD-HEC01	Coil cleaner concentrate - 4 gallons
HYD-ZC02	Coil Cleaner aerosol foam - 12 cans

# PURCHASED KITS THAT MAY BE USED WITH AMANA® BRAND PTAC UNITS

Although not available for purchase from Goodman, the following kits may be purchased and used with the Amana® Brand PTAC units.

- 1. Front Desk
- 2. Load Shed
- *3. Emergency Hydronic*
- 4. Transfer Fan
- 5. Wired Rented Mode
- 6. Inactivity EMS



## FRONT REMOVAL

### FRONT REMOVAL

1. Grasp the cabinet front as shown.



2. Pull the bottom of the cabinet front away from the chassis until the retaining clips disengage.



3. Lift the cabinet front off the chassis. Reverse this procedure to reinstall the cabinet front.

DESCRIPTION - CBK3\*\*\*

Circuit Breaker Kits	Voltage	Amp
CBK315C	230/208v	15A
CBK320C	230/208v	20A
CBK325C	230/208v	25A
CBK330C	230/208v	30A

The circuit breaker kit provides POWER ON/OFF and current overprotection function at the unit. The circuit breaker kit contains the appropriate circuit breaker, replacement access cover for the high voltage section of the subbase, mounting bracket and clips, and required hardware. Select circuit breaker kits according to unit amperage.



WARNING HIGH VOLTAGE DISCONNECT ALL POWER BEFORE SERVICING OR INSTALLING THESE KITS. MULTIPLE POWER SOURCES MAY BE PRESENT. FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.



NATIONAL CODES. TYPE AND LOCATION OF FUSED DISCONNECT SWITCH(ES) MUST COMPLY WITH ALL APPLICABLE CODES. FAILURE TO FOLLOW THESE CODES COULD RESULT IN OVERHEATING AND EQUIPMENT FAILURE.

## CIRCUIT BREAKER KIT

### 

USE ONLY COPPER CONDUCTORS FOR ELECTRICAL CONNECTIONS. THE USE OF OTHER TYPES OF CONDUCTORS MAY RESULT IN GALVANIC CORROSION, RESULTANT EQUIPMENT FAILURE, OVERHEATING OR FIRE.

### INSTALLATION

1. Check circuit breaker for manufacturers name. Select mounting holes in mounting bracket to match part as indicated in the following figure (GE and Westinghouse use outer holes). Secure one of the two small mounting clips to the mounting bracket. Do not fully tighten the mounting screw at this time.



- Position the circuit breaker on the mounting bracket so that the locking tabs on the small clip (installed in Step 1) hold the circuit breaker on the mounting bracket.
- 3. Install the second small clip on the mounting bracket, locking the circuit breaker on the mounting bracket. Tighten both mounting screws securely.
- 4. Disconnect electrical power to the unit (if already wired).
- 5. Remove access cover from subbase.
- 6. Position the entire circuit breaker assembly in the subbase as shown in Figure 2. Using the two screws provided, secure the assembly to the subbase back wall in the subbase high voltage section. The large compression connections should be on the left ("ON" to the left, "OFF" to the right).
- Connect the line voltage to the large compression terminals (left of breaker). Connect subbase wiring to the smaller compression connections (right of breaker). If a ground lug is provided, ground the lug to the unit.
- 8. Install the circuit breaker guard and the replacement access cover for the high voltage section. Install the assembly over the circuit breaker handle using the two screws removed from the original access cover.





### DESCRIPTION - DK900D

This kit is used to control condensate from the unit. Condensate water drains from the chassis into the sleeve during normal heat pump operation and during times of high humidity when the unit is in cooling operation. The drain kit allows the condensate from the outdoor and indoor coils to be routed to a suitable area. It can be installed for either outdoor or indoor use. For outdoor use, the condensate can be drained from either the right- or left-hand side of the wall sleeve. Local codes will determine the proper condensate disposal. For indoor use, the drain components must be installed on the bottom of the wall sleeve and connected to a drain system inside the building.

**NOTE:** This drain kit serves only as a link between the unit and field-supplied condensate drain system. Installing the kit without connecting it to a drainage system will result in inadequate condensate removal, possible leakage and corrosion.

ALGAECIDE: Some algaecide products may cause damage to the unit basepan or coils and should not be used. Contact your sales representative when considering the use of a commercial algaecide.

### INSTALLATION FOR OUTDOOR USE

The drain components for outdoor use must be installed before the wall sleeve condenser grille.

- 1. Remove the rear enclosure panel and the sleeve stiffener. These items can be removed from the inside of the building.
- Insert the 1/2" drain fitting in the opening of gasket A and plate B. Secure this assembly into the holes located on the rear of the wall sleeve using two of the Phillips mounting screws provided.

## CONDENSATE DRAIN KIT





### Figure 2

3. Place the remaining gasket A on the back of blank-off plate C and secure the assembly to the left rear of wall sleeve with the remaining Phillips mounting screws provided.



Figure 3

### If unit chassis installed right away

Install the grille to wall sleeve with hardware provided. See grille installation instructions.

### If unit chassis is not installed right away

Replace the rear enclosure panel in the wall sleeve to protect the inside of the building from weather damage.

## CONDENSATE DRAIN KIT



- The components of the wall sleeve drain kit for indoor use are shown in the detail of the figure above. These components must be installed prior to the installation of the wall sleeve.
- Locate an area on the wall sleeve that will be inside the room when the sleeve is installed. If a subbase is installed, locate the kit a minimum of 3 1/2" from the front flange of the wall sleeve. This clearance will provide adequate clearance for the subbase.
- 2. Cutout the template in Figure 5. Using this template, locate and drill the drain kit holes as close to the outside wall as possible.
- Using detail A in Figure 4 as a guide, assemble the gasket (E), drain fitting plate (D), and 1/2" drain fitting together. Install the assembly into the drilled holes and secure using the two slotted mounting screws included in the kit. Be sure drain tube is not restricted.

**NOTE:** If the drain fitting is not connected to an indoor drainage system immediately after the wall sleeve is installed; plug the hole with cork (not included) to prevent indoor water damage in case it rains

 Install a 1/2" ID tube or hose (not included) on the drain fitting and interconnect it to the drain system inside of the building. Ensure that there are no kinks or traps in tube or hose. Kinks or traps can cause improper drainage. 5. Install the two blank-off plates C and gaskets A on the outdoor portion of the wall sleeve as shown in Figure 4. These components can be installed after the sleeve is secured in the wall opening just prior to the installation of the condenser grille and chassis.



Figure 5

### DESCRIPTION - DGK1B

The condenser baffle kit is required when replacing an existing package terminal unit and the original outdoor grille is not made by the same manufacturer. These baffles are required to deflect discharge air away from the inlet, preventing recirculation of hot condenser air.

This kit is intended to be used with outdoor grilles having horizontal louvers. If the outdoor grille has vertical louvers, contact the manufacturer of the package terminal unit.

**NOTE:** This kit is *not* to be used when the outdoor grille is provided by the original manufacturer of the package terminal unit.

## 

TO PREVENT DAMAGE TO THE UNIT DUE TO RESTRICTED AIR FLOW, REMOVE ANY BAFFLES OR DEFLECTORS OF ANY KIND FROM THE OUTDOOR GRILLE.

### INSTALLATION

1. Locate the baffles on the condenser coil flange as shown. Position the louvers to direct the air toward the center as the air leaves the coil.



## CONDENSER BAFFLE KIT

2. Using the screws and shoulder washers provided, secure the grille to the condenser flange. NOTE: Be sure to install the gasket between the grille and the flange as shown.



### DESCRIPTION - CDP302E

The internal condensate pump serves as an effective means for disposing of condensate generated during heat pump operation by transferring it to the indoor coil. The warm coil surface and the warm room air help in evaporation of the condensate while adding humidity to the room. As with any equipment of this type, the addition of this kit will decrease the sensible heating capacity of the unit. This kit is not intended for use in seacoast or corrosive environments.

**IMPORTANT NOTE:** Under extreme high humidity conditions, the internal condensate pump may not be able to dispose of all the condensate produced, and condensate would then drip from the outside of the wall sleeve. If this condensation is unacceptable, then a drain system (including factory approved drain kit for the wall sleeve) should be installed.

### 

HIGH VOLTAGE DISCONNECT ALL POWER BEFORE SERVICING OR INSTALLING THIS UNIT. MULTIPLE POWER SOURCES MAY BE PRESENT. FAILURE TO DO SO MAY CAUSE PROPERTY

DAMAGE, PERSONAL INJURY OR DEATH.

- 1. Remove front by rotating bottom outward and then lifting up and out from chassis.
- 2. Unplug and remove the PTAC chassis from the wall sleeve. Move the chassis where the front and back of the chassis can be easily accessed.
- 3. Remove motor cover by unscrewing three (3) screws.
- 4. Remove the discharge screen by unscrewing two screws holding the screen to the blower cut off. Set screen aside (Figure 1).





## CONDENSATE DISPOSAL PUMP

5. Lift the cut off panel by unscrewing three (3) screws holding the cut off panel to the (indoor) evaporator coil and lift upward (Figure 2).



### Figure 2

6. Push out the 1/2 inch diameter knockout on the back wall of the partition panel. Insert the short leg of the condensate tube The condensate tube should protrude through the partition panel by 1-3/4 inches. Adjust the condensate tube so the tube lays flat and center on the coil (Figures 3).



### Figure 3

- 7. Orient the condensate tube on the coil so when the cut off panel is lowered, the condensate tube fits snugly into the raised embossment of the cut off panel. To arrest the movement of the condensate tube above the coil, use the supplied wire tie to tie the tube to the coil's top return bend.
- 8. Make sure the holes in the condensate tube are *facing downward* toward the evaporator coil.
- Lower the cut off panel over the condensate tube and screw the blower panel to the chassis with the existing screws. Replace the discharge screen and screw the screen to the cut off panel with the existing screws.
- 10. Reattach the motor cover onto the unit.

- 11. Remove the protective adhesive backing from the plastic U clips and mount the U clips to the plastic condenser shroud and partition panel in approximately the position shown (Figure 5).
- 12. Using the overflow tube holder and the overflow tube, hold the tube with the metal holder and screw the holder to the partition panel with the provided 1/2 inch #8 screw (Figures 4). Make sure the overflow tube passes through the two (2) U clips attached to the partition panel (Figure 5).
- 13. Open the two (2) metal tube clamps (provided). Place the overflow tube and the condensate pump cord into the clamp. Screw the tube clamps into the dimples on the partition panel. Close the clamps.



Figure 4



Figure 5

14. Place the pump bracket onto the top of the pump and screw the pump bracket to the pump with the provided two (2) 1/2 inch #8 screws so that the bracket is secure against the pump (Figure 6).

## CONDENSATE DISPOSAL PUMP



Figure 6

15. Orient the pump in the back left corner of the basepan and screw the pump bracket to the basepan with the provided two 1/2 inch #8 screws (Figure 7).



Figure 7

16. Place one of the hose clamps over one end of the 18 inch vinyl hose. Place the same end over the barbed discharge tube of the pump assembly. Place a hose clamp on the other end of the 18 inch hose. Place this same end over the shorter leg of the overflow tube and secure the hose with the hose clamp (Figure 8).



## CONDENSATE DISPOSAL PUMP



### Figure 9

### Figure 8

- 17. Place a hose clamp over one end of the 11 inch long hose. Push this same end over the longer leg of the overflow tube and secure with the hose clamp. Place another hose clamp over the other end of the 11 inch hose. Push this same end over the condensate tube protruding out from the back of the partition panel and secure with the hose clamp (Figure 8).
- 18. Route the condensate pump cord through the U clips on the condenser shroud and partition panel and then through the tube clamp and the hole in the panel where the compressor wires are routed through the panel.

#### NOTES:

Attach the pump cord to the tube restrictor with the wire tie (provided). This will keep the pump cord away from the condenser fan blade.

The permagum may have to be removed to feed the wires through the panel, make sure wires have no slack and replace the permagum back into place to prevent air leaks (Figures 8 and 9).

The provided drain plug button must be installed in the base pan.

- 19. To gain access inside the control panel, remove the control cover and touch pad (2 screws). Remove the side screw holding the panel in position. Tilt the control panel forward, being careful not to pinch any wires (Figure 10).
- 20. Lift the control panel up so the control panel is free of its hinges. Orient the control panel so there is easy access for mounting components to the control panel (Figures 10 and 11).



Figure 10



Figure 11

- 21. Using two #8 screws that are provided, screw the transformer to the control panel in the transformer mounting holes provided in the panel (Figure 11).
- 22. Mount the relay in one of the three relay mounting holes in the control panel making sure that the threaded stud is in the smaller hole and the metal tab is in the adjacent larger hole. Screw the provided nut onto the threaded stud from the opposite side of the control panel (Figure 11).
- 23.A. Disconnect the WH wire going from the transformer to the EM fan motor.
  - B. Disconnect the VT wire going from the control board to HPS (high pressure switch) and the BK wire going to at the CM fan motor from the control board.
  - C. Disconnect the wire going from the control board to the reversing valve.
  - D. Connect the RD (CP) to the original transformer (where WH was connected).
  - E. Connect the VT (CP) to the compressor terminal of the control board (where VT was connected).
  - F. Connect the YL (CP) to the reversing valve terminal of the control board.
  - G. Connect the VT wire from the HPS and the BK CM wire to the piggyback terminal of VT (CP) at the compressor terminal of the control board.
  - H. Connect the reversing valve lead wire removed in Step D to the piggyback terminal of YL (CP) at the reversing valve terminal of the control board.
  - I. Connect the WH wire from the EM fan motor to the piggy back terminal of RD (CP) on the secondary of the new transformer.
  - J. Make sure the OR (CP) wire is connected from the #6 terminal of the relay to 120 volt terminal of the trans-

CONDENSATE DISPOSAL PUMP

former.

- K. For 208 volt applications, move the RD (CP) wire terminal (going from the condensate relay to the secondary transformer) from the 240 volt terminal of the transformer to the 208 volt terminal of the transformer.
- 24. Install the basepan drain plug into the basepan drain hole by pushing it up into the drain hole from the bottom of the basepan. This will defeat the thermostatic controlled drain valve. The basepan drain is located left of the outside coil (as viewed from the back of the unit).
- NOTE: When using a condensate removal pump, extra care must be taken to keep the basepan clean and free of algae or fungus. Failure to do so may result in the failure of the condensate removal system.

### DESCRIPTION - PTCB10E

The PTAC PTCB10E Kit is a curtain guard kit that redirects the airflow of the PTAC unit to provide added comfort. Each kit contains 10 guards. Before installing this kit, ensure that the correct kit has been ordered and received for your unit.

**IMPORTANT NOTE:** This kit is designed for models with R-410A and should **NEVER** be used on R-22 models.

Below are two ways to determine if your unit requires PTCB10E kit:

 Check the underside of the guard next to the side tab for specific guard/unit compatibility statement. See Figure 1 for location of this statement:

"Install on unit with serial number greater than 1001\*\*\*\*\*"

 If your unit's model number contains an "E" as the 7th digit (i.e. PTH153E25RXXX), PTCB10E is the correct kit to use.

**ONLY** models with the letter "**E**" for the 7th digit should use this kit. If your unit's model number contains **ANY OTHER LETTER** for the 7th digit, **DO NOT USE THIS KIT**. The correct curtain guard kit for these units is PTCB10B.

### NOTE: Use of the incorrect part may cause the guard to break and it will not be replaced by Goodman. If you are in doubt about which kit is needed, please contact your sales representative.

**IMPORTANT NOTE:** Do <u>NOT</u> remove curtain guard until front is removed from unit. Trying to uninstall the curtain guard before removing the cabinet front may cause the curtain guard to break.

 Position the curtain guard over the cabinet front (tab side down) so the left and right side tabs on the guard line up with the 2nd horizontal louver on each side of the cabinet front. Make sure the 2 middle tabs on the curtain guard are positioned over the 2nd and 4th vertical louvers on the cabinet front. Gently snap the left side of the curtain guard onto the 2nd horizontal louver of the cabinet front and then gently snap the tab on the right side of the cabinet front into place. See Figure 1. DO NOT FORCE CURTAIN GUARD INTO PLACE. Check here to verify curtain guard and unit's compatibility.

CURTAIN GUARD



#### Figure 1

 After tabs are secure on the left and right side horizontal louvers, gently slide the two middle tabs along the bottom of the 2nd & 4th vertical louvers and snap in place. DO NOT FORCE CURTAIN GUARD INTO PLACE. When installed, the tabs should point towards the outside of the unit. See Figure 2.



Figure 2

See Figures 3, 4 and 5 for views of correctly installed curtain guard.

## **CURTAIN GUARD**

Side tabs attached on 2nd horizontal louver



### DO <u>NOT</u>

- ATTACH CURTAIN GUARD TO SLEEVE.
- ATTACH GUARD TO THE FRONT WITH SCREWS OR GLUE. GUARD SNAPS INTO PLACE.
- SIT, BEND, PULL OR FORCE THE CURTAIN GUARD.
- 3. To remove the curtain guard, remove cabinet front from the chassis. Rotate the cabinet front so the back of the cabinet is facing you. Depress the tabs of the curtain guard while gently pulling the guard away from the front.



Figure 3





Figure 5



CABINET FRONT MUST BE REMOVED FROM THE CABINET CHASSIS BEFORE REMOVING THE CURTAIN GUARD. FAILURE TO DO SO MAY CAUSE THE CURTAIN GUARD TO BREAK.

## DUCT KITS

DESK DUCT KIT

### DESCRIPTION - DDK01E

Redirects air to discharge vertically next to wall.

The kit consists of a duct to redirect the discharge air towards the rear of the unit and then vertically from the unit.



The following installation instructions are for a typical installation. All dimensions must align for the system to operate properly. Please contact your PTAC salesperson for additional assistance and explanation prior to ordering materials or cutting openings.



### Duct Kit DDK01E

\*Custom Deep Wall Sleeves Available. Contact your sales representative for details.



### Installation Dimensions

\*\*Desktop, desk filler or shelf and knee wall are field-supplied surfaces. Dimensions are critical for proper fit.





DISCONNECT ALL POWER BEFORE SERVICING OR INSTALLING THIS KIT. MULTIPLE POWER SOURCES MAY BE PRESENT. FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

**TRANSITION DUCT KIT - PTK01E** 

**HIGH VOLTAGE!** 

### PRE-ASSEMBLY [TRANSITION/FRONT]

1. If the cabinet front is secured with a screw, remove the screw. See Figure 1.



### Figure 1

2. Remove cabinet front from chassis by pulling the bottom of the cabinet front away from the chassis until the retaining clips disengage. Lift the cabinet off the chassis.

**NOTE:** To facilitate filter removal after transition is installed, reverse the filters in front so that the filter grip is to the outside, as seen in Figure 1.

- 3. Disengage discharge grille from cabinet front by removing four screws from under the front.
- 4. Place transition in air discharge opening of cabinet front (Figure 2).



# 5. Using a 1/8" drill bit, pre-drill the holes in front (as shown in Figure 3) using the actual transition as a template. Fasten with three screws. DO NOT OVER-TIGHTEN.



Figure 3

6. <u>AFTER</u> installing screws in Figure 3, using a 1/8" drill bit, pre-drill holes as shown in Figure 4. Fasten with the remaining 3 screws. DO NOT OVERTIGHTEN.



Figure 4

### SIDE BRACKET INSTALLATION

 Unplug and remove chassis from wall sleeve. Drill two 1/8" holes on left and right sides of wall sleeve in proper locations on both ends of wall sleeve (Figure 5).

Figure 2

## DUCT KITS

## DUCT KITS



### (Wall Sleeve) Hole Dimension and Placement Figure 5

**NOTE:** If there is not enough clearance between sleeve and partition wall to drill the holes, layout and drill the holes from inside the sleeve.

- 2. Install chassis back into wall sleeve.
- 3. Install transition/front assembly on to chassis. Make sure top of cabinet front catches metal flange on chassis.

### DESK FILLER, DESK TOP OR SHELF OPENING

From top assembly discharge duct opening, locate and size an opening in the field-supplied desk filler or shelf or desktop per diagram on the right. The surface opening must align with the discharge duct.

NOTE: The discharge air duct can be installed into and through a desktop filler or shelf or desktop. Installation into any of these surfaces should not change the opening dimensions. These dimensions are critical for proper installation.



Desktop, Desk Filler, or Shelf Opening

### Figure 6

4. Attach underside mounting brackets to top assembly.



Top Assembly Mounting Brackets (attaches to underside of desk)\*\*

Figure 7

5. Place top assembly in desktop, desk filler or knee wall opening and secure to the underside of desk.



### Top Assembly to Desktop, Desk Filler or Knee Wall Attachment

### Figure 8

6. Install wall sleeve mounting brackets as shown in Figure 9, using holes added in step 1.



Wall Sleeve Mounting Brackets Installation

#### Figure 9

7. Slide front desk assembly into top assembly and set on wall sleeve mounting brackets and fasten with screws.

### DISCHARGE GRILLE INSTALLATION

**NOTE:** Grille is not supplied with this kit. A grille is required for this application. Use of a non-approved discharge grille will void PTAC warranty.

The approved discharge grille must be purchased from the PTAC manufacturer. Contact your sales representative for details.

Set grille into desktop, desk filler or shelf opening from top side of duct (Figure 10).



\*\*Desktop, desk filler (or knee wall) are field-supplied surfaces.

Figure 10

### MAIN DUCT KIT - MDK01E

### Kit Contents

The kit consists of a main duct for the room of origin and an extension duct to reach the adjoining room, and terminal duct. **NOTE:** All required hardware is provided within kit.



Main Duct Kit - MDK01E



Extension Duct Kit - EDK02B



Terminal Duct Kit - TDK02B

## DUCT KITS





### MDK01E INSTALLATION INSTRUCTIONS

## DUCT KITS

HIGH VOLTAGE!

## 



DISCONNECT ALL POWER BEFORE SERVICING OR INSTALLING THIS KIT. MULTIPLE POWER SOURCES MAY BE PRESENT. FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

Disconnect power source before removing the chassis.

### PRE-ASSEMBLY [TRANSITION/FRONT]

1. If the cabinet front is secured with a screw, remove the screw. See Figure 1.



### Figure 1

2. Remove cabinet front from chassis by pulling the bottom of the cabinet front away from the chassis until the retaining clips disengage. Lift the cabinet off the chassis.

**NOTE:** To facilitate filter removal after transition is installed, reverse the filters in front so that the filter grip is to the outside, as seen in Figure 1.

- 3. Disengage discharge grille from cabinet front by removing four screws from under the front.
- 4. Place transition in air discharge opening of cabinet front (Figure 2).



5. Using a 1/8" drill bit, pre-drill the holes in front (as shown in Figure 3) using the actual transition as a template. Fasten with three screws. DO NOT OVER-TIGHTEN.



### Figure 3

6. <u>AFTER</u> installing screws in Figure 3, using a 1/8" drill bit, pre-drill holes as shown in Figure 4. Fasten with the remaining 3 screws. DO NOT OVERTIGHTEN.



Figure 4

### Wall Sleeve) Hole Dimension and Placement

- Unplug and remove chassis from wall sleeve. Drill two 1/8" holes on left and right sides of wall sleeve in proper locations (see template on page 2).
- 2. Install chassis back into wall sleeve.
- Install transition/front assembly on to chassis. Make sure top of cabinet front catches metal flange on chassis.



### Wall Sleeve Hole Placement Figure 5

**NOTE:** If there is not enough clearance between sleeve and partition wall to drill the holes, layout and drill the holes from inside the sleeve.

### **MDKASSEMBLY**

Determine if the duct is to be extended to the right of the unit (where controls are located) or to the left of the unit (opposite the controls). Figure 6.

For left side extensions remove the main duct end cap and reinstall on the right end of the duct. Using the four painted sheet metal screws, secure the two mounting brackets to the main duct.

Two mounting slots are provided in each bracket. To mount extension on right side, adjust bracket so the screws are in left side of bracket slots; for mounting extension on the left, adjust brackets so the screws are in right side of slots.

On right side extensions shift the brackets to the right. For left side extensions shift the brackets to the left.



### Mounting Brackets installation

Figure 6

### **AIR BAFFLE INSTALLATION INSTRUCTIONS**

1. Determine amount of air desired at main duct and at extension duct. Using the table provided, select the appropriate baffle.

	DIMENSIONS	AIRF	LOW
DAFFLE	DIMENSIONS	MAIN DUCT	EXT. DUCT
Small	3 11/16" x 31 3/4"	80%	20%
Large	4 5/16" x 31 3/4"	65%	35%

### Table 1

- 2. Place baffle on grille support brackets on main duct. Ensure the two extruded holes of the baffle are on top of the front bracket holes.
- 3. Install discharge air grille on top of the air baffle. Secure the grille to the duct with pal nuts (provided) by reaching through the opening in the bottom of the duct. See figure 7.

## DUCT KITS

## DUCT KITS



### Air Grille Installation

#### Figure 7

4. Place main duct assembly on the transition. Secure the brackets to the wall sleeve with four #10 hex head screws. Figure 8. *Do not apply pressure on top of duct during this installation!* 



### MDK Installation Onto Transition Assembly Figure 8

**NOTE:** With the installation of the main duct, the clearance to open the control door and view the settings will be limited. The control door cover will not fully open and will not stay open by itself. It is suggested that a remote wired or wireless thermostat be used for convenience, if desired.

5. Install two Phillips head screws into the top flange of the main supply duct at extension duct connection. Do not tighten screws. Leave space for one thickness of the duct sheet metal between screw head and main duct flange. Figure 9.



Main Supply Duct Top Flange Figure 9

**IMPORTANT NOTE:** Total length of duct extension assembly, including field supplied duct between main and extension duct, should not exceed 15 effective feet (according to ASHRAE standards). For additional dimensions, refer to *Main Duct and Duct Extension Dimensions* illustration.

- 6. In the room where the main duct kit is attached to the chassis, cut a hole in the wall at the same height from the floor that the main duct is located. Cut the hole 1/8" larger than the width and height (10" x 5") dimensions of the extension duct.
- 7. Measure from the end of the main duct where the extension duct will be connected to the hole in the wall. If necessary cut the extension duct to a length where the cut end protrudes into the wall's inner space and one inch from the adjoining room's wall surface.
- 8. Insert the extension duct into the opening in the wall. Install the extension duct by placing the slotted flange over the two screws in the main duct. Using two #8 round Phillips head screws, mount bottom of extension duct to mounting bracket through the bracket slot (*see Main Supply Duct Top Flange illustration*).

NOTE: The EDK02B can be cut into two sections and used with two MDK01Es if the needed length does not exceed 21-1/4".



Figure 10

### **TERMINAL DUCT - TDK02B**

## IMPORTANT NOTE: ANY FIELD-SUPPLIED GRILLE, <u>MUST</u> HAVE FIXED LOUVERS THAT CANNOT BE CLOSED.

The sheet metal collar of the terminal duct kit must be mounted in the wall of the adjoining room opposite the room where the main duct kit is attached to the PTAC chassis.

 Cut a hole in the wall of the adjoining room such that the hole is centered on the extension duct that is currently in the wall of the opposite room. Figure 11. See wall hole dimensions illustration for sheet metal collar. Figure 12.



Wall Hole Dimension



2. Insert the sheet metal collar into the wall so that the flanges will mount flush to the wall after the collar is pushed all the way into the wall. While pushing the collar into the wall make sure the extension duct is inside the collar. Use four #8 screws to attach metal collar to wall.







3. Center the metal grille over the sheet metal collar and use two #8 screws (provided) to attach the grille to the metal collar . Figure 13.



Metal Grille Figure 13

DESCRIPTION - REK10(A/B)

REK10A	Escutcheon plates only (10)
REK10B	Excutcheon plates & low voltage wires

This kit provides an attractive escutcheon, allowing the touchpad membrane to be covered when a wired wall thermostat is used to control the unit.



### Standard Escutcheon



Remote Escutcheon

### INSTALLATION INSTRUCTIONS

1. Grasp the cabinet front as shown.

## **ESCUTCHEON - REMOTE**



2. Pull the bottom of the cabinet front away from the chassis until the retaining clips disengage.



- 3. Lift the cabinet front off the chassis.
- 4. Install the escutcheon by inserting the tabs at the top of the escutcheon into the retaining holes and laying the escutcheon flat on the control panel.
- 5. Replace the front by reversing steps 1 through 4.

### **DESCRIPTION - FK10E FILTER KITS**

### Intake Air Filter

To properly maintain the operational performance of your PTAC unit, it is extremely important that the inlet air filters be cleaned once per month or more often if operated in dusty or dirty locations or conditions. The two intake air filters are constructed of durable polypropylene. The "air intake" air filters can be easily inserted into the cabinet front using the cabinet filter guides. Before cleaning the intake filters, turn the unit off by setting the mode switch to the OFF position. Filters should be cleaned as required.

The following procedure is used to remove the 2 intake filters:

- 1. Grasp each filter by its molded handles, located on the front edge of the front, directly below the discharge grill.
- 2. Pull each filter straight up and remove.
- 3. Clean filters with vacuum or with running water.

Reverse this procedure to reinstall the filter.

NOTE: Available accessory filter kit:

•FK10E Standard air intake filters 20 per pack, enough for 10 units

Filters are permanent and cleanable. Contact your PTAC sales person for details.





## FII TER KIT

## FUSE HOLDER KIT







### DESCRIPTION

Fuse Hold Kits	Voltage	Amp
FHK215E	115v	15A
FHK315E	230/208v	15A
FHK320E	230/208v	20A
FHK330E	230/208v	30A

Cartridge-style fuses can be installed in the fuse holder for use in the subbase or chassis. Available in 15, 20 and 30 amp (included on 265-volt unit).





USE ONLY COPPER CONDUCTORS FOR ELECTRICAL CONNECTIONS. THE USE OF OTHER TYPES OF CONDUCTORS MAY RESULT IN GALVANIC CORROSION, RESULTANT EQUIPMENT FAILURE, OVERHEATING OR FIRE.



TO AVOID THE POSSIBLITY OF PROPERTY DAMAGE, PERSONAL INJURY OR DEATH, THE INSTALLER MUST USE PROPER POLARIZATION. SEE SPECIFIC INSTRUCTIONS.



### Holder Kit Installation without Subbase

This optional fuse holder kit can be installed directly in the chassis or in the optional subbase.

Fuse holder kits are available in 230/208 and 115 volt ratings.

The installation and servicing of the equipment referred to in this booklet should be performed by qualified, experienced technicians.

- 1. Remove front by rotating bottom outward and then lifting up and out from chassis.
- 2. Remove the three screws holding the control panel and control cover in place. Lift the cover up to gain access to the ribbon connector. Unplug the ribbon connector from the control board and remove cover completely.



3. As viewed from the front, remove both knockouts for 230/208 volts or one knockout for 115 volt.

## FUSE HOLDER KIT

## ACCESSORIES

4. Insert fuse holder(s) from the front. The fuse holder(s) should be oriented so the quick-connect tabs are to-ward the center of the unit. Attach fuse holder(s) using the screws and nuts provided.



### 208/230 Volts Only

- 5. Remove both power cord leads, one lead from the capacitor and one from the electronic board.
- 6. Install one power cord lead on the center terminal of one fuse holder.



- 7. Install the remaining power cord lead on the center terminal of the second fuse holder.
- 8. Connect the BK wire from the side terminal of one fuse holder to the L2 terminal on the electronic board.
- 9. Connect the RD wire from the side terminal of the other fuse holder to the common (C) terminal on the capacitor.

10. Tilt control panel back to original location, being careful not to pinch any wires. Plug the ribbon connector back onto the control board. Align the control panel with the cover and screw panels into place with original screws.

### 115 Volts Only

- 5. Remove non-ribbed power cord lead from the electronic board.
- 6. Install power cord lead on the center terminal of one fuse holder



- 7. Connect the BK wire from the side terminal of the fuse holder to the L2 terminal on the electronic board.
- 8. Tilt control panel back to original location, being careful not to pinch any wires. Plug the ribbon connector back onto the control board. Align the control panel with the cover and screw panels into place with original screws.

### Fuse Holder Kit Installation with Subbase

### 208/230 Volts Only

1. Remove both knockouts on subbase (left side).

![](_page_29_Picture_21.jpeg)

2. Install the fuse holders using screws provided. The side connector tab on the fuse holder(s) should be towards the left.

![](_page_30_Picture_2.jpeg)

- Connect a stripped BK wire to the center of the quickconnect tab of the fuse holders. Wire nut the other end of this wire to the black field connection wire (L2).
- 4. Connect the other stripped BK wire to the quick-connect tab on the side of the same fuse holder. Wire nut the other end to black subbase wire leading to receptacle.
- 5. Connect a stripped RD wire to the center quick-connect tab of the second fuse holder. Wire nut the other end to the red field connection wire (L1).

![](_page_30_Figure_6.jpeg)

7. Connect the other stripped RD wire to the quick-connect tab on the side of the second fuse holder. Wire nut other end to red subbase wire which leads to receptacle.

### 115 Volts Only

- 1. Remove one knockout on subbase.
- 2. Install fuse holder using screws provided. The side connector tab on the fuse holder should be towards the left.

FUSE HOLDER KIT

 Connect a stripped BK wire to the center of the quickconnect tab of the fuse holder. Wire nut the other end of this wire to the black field connection wire (L2).

![](_page_30_Figure_12.jpeg)

 Connect the other stripped BK-9 wire to the quickconnect tab on the side of the same fuse holder. Wire nut the other end to black subbase wire leading to receptacle.

### All Connections

Insert time delay fuse(s) into the fuse holder(s). Size all fuses by the "Maximum Overcurrent Protection" shown on the nameplate. Also refer to the serial plate on the unit.

#### Spare fuses may be purchased from the parts department.

![](_page_31_Picture_1.jpeg)

### DESCRIPTION - GT01E

- This kit is intended to be installed on PTAC units that <u>DO NOT</u> have the Amana<sup>®</sup> brand touch pad DigiSmart<sup>™</sup> control. For Amana<sup>®</sup> brand units with touch pad controls, use DT01A kit.
- If thermostat devices are to be wired for power, field installed wiring will need to be run from thermostat location to unit location.
- If wireless platform DP01A, DP01E or DL01E are being used, then room numbers <u>MUST BE CONFIGURED</u>. Room numbers will have to be configured through an internet interface. Record the MAC address for each GT01E installed with corresponding room number for use later. (A worksheet is provided at the end of these instructions.) Contact your GT01E sales representative or call DigiSmart support at 877-792-6262 for instructions to configure room numbers.

If the PTAC unit or antenna is ever moved from its original location, the MAC address list must be updated to reflect the unit or antenna's new location.

• All units must have GT01E antenna for wireless devices to communicate properly.

Sequence of installation:

- 1) Mount the peripheral back plate
  - 2) Install the antenna
  - 3) Verify operation of the door sensor
  - 4) Bind peripherals
  - 5) Reattach peripherals to their mounted backplates
  - 6) Install optional security screws
- Installation and videos are available on our website at <u>www.amana-ptac.com</u>.
- Use only one DD01E Passive Infrared Motion Sensor (PIR) door switch combination device and/or one DS01E to one PTAC unit.

A GT01E antenna must be installed on the PTAC to allow operation of either the DS01\* remote RF thermostat or a DD01\* combination PIR motion sensor and door switch.

## GT01E GENERIC RADIO KIT

![](_page_31_Picture_19.jpeg)

### PREPARATION

If the existing PTAC is not an Amana $^{\rm \otimes}$  brand, contact the sales representative of the GT01E kit for installation instructions.

There are three types of installations:

- Type I. Installation of the GT01E with a DS01\* and/ or DD01\* (battery powered or with wired power). Follow Steps 1 - 12; then proceed to Step 15.
- Type II. Installation of the GT01E with a thermostat other than a DS01\*. Follow Steps 1 - 13; then proceed to Step 15.
- Type III. Installation of the GT01E only (no thermostat or occupancy sensor to be used). Follow Steps 1 - 10; then proceed to Step 14 - 15.

From the three listed above, be sure you use the correct installation instructions for the application that you are using.

### Common instructions for all three types of installations:

- 1. Disconnect power to the unit by unplugging the power cord at the wall outlet or subbase, or disconnect power at the fuse box or circuit breaker.
- 2. If the polymer PTAC front is screwed to the chassis, remove the 1/4" screw (or screws).
- 3. Remove polymer PTAC front from chassis by tilting the bottom of the front forward, lifting slightly up and forward.
- 4. Plug the 8-wire harness on the terminal strip labeled "To PTAC" on the circuit board exposed on the back of the antenna enclosure.
- 5. Plug the 4-wire sensor harness on the terminal strip labeled "Thermistor".
- If a wired thermostat is used to control the PTAC, plug the 7-wire harness on the terminal strip labeled "To Wired TStat".
- 7. Route all harness wires through the opening in the bottom of the antenna housing.
- 8. Mount the antenna as high up on the control panel as possible and as far to the right as possible in a location that will not interfere with the reinstallation of the polymer PTAC front.

**NOTE**: The Amana<sup>®</sup> brand logo should be in the lower right hand corner.

Mark holes for the location of the screws. Remove the antenna housing and drill two 1/8" holes where marked. Install the antenna with the two screws as shown in the following figure, being careful not to pinch the wires.

![](_page_32_Picture_3.jpeg)

### **GT01E** Mounting

- 9. Plug black sensor probe onto the front of the evaporator coil beside the existing sensor. <u>DO NOT REMOVE</u> <u>EXISTING SENSOR.</u>
- 10. Install the yellow sensor probe in the discharge supply air with the P-clip provided. Be careful not to allow the lead wire to become entangled in the blower wheel, heater, or other parts.

Instructions for unit that will be controlled by a wired or wireless thermostat, proceed with next step <u>(TYPES 1 & 2</u> <u>INSTALLATION</u>). If controlled by unit control, skip to Step 14.

- 11. If the existing Amana<sup>®</sup> brand PTAC has a 14-pin low voltage terminal strip on the control board, plug the 8-wire harness onto the PTAC control. *See page 5.* 
  - A. Wire nut the two green wires together from each end of the 8-wire harness.
  - B. Wire nut the red wire from the PTAC end to the red and gray/red wires from the antenna end of the 8-wire harness.
  - C. DO NOT CONNECT THE ORANGE WIRES.
- 12. If the existing Amana<sup>®</sup> brand PTAC has a terminal block with 9 screws:
  - A. Cut all wires going to the 14-pin terminal housing at the housing on the 8-wire harness *(see page 5)* and strip the ends of the wires to go under the screw terminals.

## GT01E GENERIC RADIO KIT

Place on wire as follows:

Black Wire	to	C Terminal
Red Wire	to	R Terminal
Gray/Red Wire	to	R Terminal
Green Wire	to	GTerminal
Green/Yellow Wire	to	GTerminal
White Wire	to	W2 Terminal
Yellow Wire	to	Y/W1 Terminal
Blue Wire	to	<b>B</b> Terminal

DO NOT CONNECT THE ORANGE WIRES.

## If the PTAC is controlled by an existing <u>wired</u> thermostat <u>(INSTALLATION TYPE 2 ONLY)</u>:

13. Connect the thermostat wires from the thermostat to the 7-wire harness (*see page 5*) as follows:

Black Wire on Harness	to	"C"	24v Common on T-Stat
Red Wire on Harness	to	"R"	24v Hot on T-Stat
Green Wire on Harness	to	G	Fan Low*
White Wire on Harness	to	W2	2nd Stage Aux. Heat
Yellow Wire on Harness	to	Υ	Compressor
Blue Wire on Harness	to	В	Reversing Valve**
Green/Yellow Wire on Harness	to	G	High Fan High Speed*

\*If the thermostat has only one fan speed (G Terminal), connect G to Green for low speed operation only or Green/Yellow for high speed operation only.

\*\*If the thermostat has an "O" terminal but no "B" terminal, connect the blue wire to "O" and change the 1st switch on the dip switch block on the antenna board from "OFF" to "ON".

If the unit is not a heat pump and the thermostat does not have a "B" terminal or cannot be wired to a "B" terminal, wire as follows:

Black Wire on Harness	to	"C"	24v Common on T-Stat
Red Wire on Harness	to	"R"	24v Hot on T-Stat
Green Wire on Harness	to	G	Fan Low*
White Wire on Harness	to	W1	2nd Stage Aux. Heat
Yellow Wire on Harness	to	Y	Compressor
Green/Yellow Wire on Harness	to	G	High Fan High Speed*

A. If the unit is not a heat pump, set dip switch 2 on the back of the GT01E to the ON position.

If the existing PTAC will continue to be controlled by the unit controls, but will be shut off in unrented states by the front desk property management system <u>(INSTALLATION</u> <u>TYPE 3 ONLY)</u>:

14. Wire as follows. *See page 35.* Otherwise, skip to the next step.

## GT01E GENERIC RADIO KIT

- A. Cut the green wire with the yellow stripe halfway between the two housings of the 8-wire harness.
- B. Strip the green wire with the yellow stripe on the end going to the GT01E.
- C. Cut the green/yellow wire off at the terminal housing on the 14-pin housing.
- D. Cut the blue, white, green, and yellow wires off from both ends of the 8-wire harness.
- E. Wire as follows if unit control board has 14-pin low voltage terminal strip:
  - Leave the black wire connected.
  - Connect the red wires from each terminal housing together.
  - Connect red/gray wire on the 8-pin housing to either orange wire on the 14-pin housing.
  - Connect the green wire from the 8-pin housing to remaining orange wire on the 14-pin housing.
- F. Wire as follows if unit has a screw terminal low voltage strip:
  - Cut the remaining wire off the 14-pin housing and discard 14-pin housing.
  - Connect the black wire from the 8-pin housing to the unit's terminal "C".
  - Connect the red wire from the 8-pin housing to the unit's terminal "R".
  - Connect the green wire from the 8-pin housing to the unit's terminal FD1 or FD "-".
  - Connect the red/gray wire from the 8-pin housing to the unit's terminal FD2 or FD "+".

### (INSTALLATION TYPES 1, 2, & 3)

### 15. Restore power to the PTAC unit.

For mounting instructions for the thermostat and motion sensor, refer to the instructions shipped with those devices.

## **Binding of RF Devices**

## 

Do not have two groups of people binding units in the property at the same time. Radio Frequency (RF) goes through walls and up to  $400^{\circ}$ .

The wireless devices (DS01E and or DD01E <u>must</u> be bound to the PTAC GT01E control for proper in-room communication.

*NOTE:* Both the DS01E and the DD01E must be bound to the PTAC unit during the same "learn" operation.

If you need to rebind one device - then you <u>must</u> rebind both devices during the same learn mode event.

- 1. Press and hold the BIND LEARN button on the bottom of the antenna until the antenna LED gives 3 fast flashes and then release.
- 2. Press and then immediately release the white tactile button on the back of the DS01\* thermostat. Skip if there is no thermostat.
- 3. Press and then immediately release the white tactile button on the back of the DD01\* motion sensor. Skip if there is no motion sensor.
- 4. Test the thermostat to confirm binding. Repeat binding if thermostat does not communicate. Per the device's installation instructions, slide the top of the thermostat down onto the wall plate and then snap into place.
- 5. Snap motion sensor onto motion sensor mounting plate per the device's installation instructions.

# *NOTE: If a wireless device is replaced or added, all devices (including those previously bound) will need to be bound/re-bound to the unit. See directions above.*

6. Reinstall the polymer PTAC front.

![](_page_33_Picture_33.jpeg)

This equipment is authorized for use under the United States Federal Communication Commission Rules and Regulations, Code of Federal Regulations Chapter 47 part 15 and must be installed in accordance with the instructions provided in this document. Failure to install or operate this equipment as instructed in this document could void the user's authority to operate the equipment. This equipment contains no user serviceable parts. Any modification or repairs to the internal components or to the antenna configuration of the equipment without the express written consent of Everex Communications, Inc., could void the user's authority to operate the equipment.

**NOTE:** To comply with FCC RF exposure requirements in section 1.1307, a minimum separation distance of 20cm (8 inches) is required between the equipment and all persons.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment of and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## GT01E GENERIC RADIO KIT

![](_page_34_Figure_2.jpeg)

THERMOSTAT CONNECTION TERMINALS FOR 7-WIRE HARNESS

	GREEN/YELLOW STRIPE
	BLUE
	YELLOW
╽╶┾═┊[	WHITE
	GREEN
<u>ן</u> באך ו	RED
╽╶┾═┈[	BLACK
│ <u>─<u></u>└<u>─</u> <sup>™</sup> ि</u>	7-WIRE HARNESS

![](_page_34_Figure_5.jpeg)

![](_page_35_Picture_2.jpeg)

### DESCRIPTION - PTPWHWK4

PTQC3A	230/208v
PTQC4A	265v (Quick Connect)

HARD WIRE JUNCTION BOX (DIRECT WIRE SUB-BASE)

Used to permanently wire to the chassis when a standard subbase and power cord are not utilized.

The hard wire junction box kit is used to direct wire the unit when it is not desirable to use the standard unit subbase or the unit power cord. The junction box provides a protected enclosure for electrical connections as required by some electrical codes.

The hard wire junction box is intended to be mounted on the floor or the adjacent wall.

The junction box is furnished with approximately 2-1/2 feet of 1/2 inch flexible steel conduit and a metal box for securing the conduit to the unit cabinet at the incoming power opening.

An optional 230/208V or 265V power switch assembly is available for use with the hardwire junction box or subbase. The switch provides a POWER ON/OFF function at the unit as required by some electrical codes. A replacement junction box cover plate is provided with each switch kit. For additional information, refer to the Power Switch Installation Instructions.

## JUNCTION BOX KIT INSTALLATION AND WIRING PROCEDURE

The installation and servicing of this equipment should be performed by qualified, experienced technicians.

Electrical connections at the unit must be made after the unit chassis is installed in the wall sleeve.

The installer must determine and supply the mounting components for attaching the junction box to the wall or floor.

### 

TO AVOID THE POSSIBILITY OF PROPERTY DAMAGE, PERSONAL INJURY OR DEATH, THE INSTALLER MUST USE PROPER POLARIZATION. SEE THE FOLLOWING INSTRUCTIONS FOR CORRECT POLARIZATION.

## **CAUTION**

USE COPPER CONDUCTORS ONLY FOR ELECTRICAL CONNECTIONS. THE USE OF OTHER TYPES OF CONDUCTORS MAY RESULT IN GAL-VANIC CORROSION, OVERHEATING AND RESUL-TANT EQUIPMENT FAILURE.

## 

ALL WIRING MUST COMPLY WITH APPLICABLE LOCAL AND NATIONAL CODES. TYPE AND LOCATION OF FUSED DISCONNECT SWITCH(ES) MUST COMPLY WITH ALL APPLICABLE CODES. FAILURE TO FOLLOW THESE CODES COULD RESULT IN OVERHEATING AND EQUIPMENT FAILURE.

- 1. Remove the cover plate from the junction box.
- 2. Mount the junction box to the wall or floor within 28 inches of the lower right corner of the wall sleeve.

![](_page_35_Figure_23.jpeg)

### Mounting Hard Wire Junction Box Kit

- 3. If a disconnect switch is to be used, make electrical connections to it and mount the switch in the junction box. Refer to the "Power Switch" Installation Instructions.
- 4. Remove control panel assembly by removing the two screws holding control panel in place. Rotate panel forward.
- 5. Disconnect the power cord leads from all electrical connections including the ground wire.
- 6. Remove the power cord clamp and the power cord from the unit.
- 7. For 230/208-volt units, remove and discard the white lead from the wire assembly. For 265-volt units, remove and discard the red lead from the wire assembly.
- 8. Remove the retaining ring from the threaded portion of the straight conduit clamp. Insert the three wires into the metal box through one of the two openings in the box. Replace the hole cover grommet into the unused hole to prevent objects from entering the box.
- 9. Replace the retaining ring back on the conduit clamp inside the metal box and tighten the ring securely.
- 10. Insert the three wires extending from the metal box into the incoming power opening on the unit so that approximately 20 inches of the wires protrude through the opening.
- 11. Attach the metal box to the chassis with the two screws provided.
- 12. Insert the wire tie into the 3/16 inch diameter hole located just above the incoming power opening. Tie all wires together securely with the wire ties.



#### Metal Box Location



### 208/230 VOLT UNITS

- 1. Remove and discard the white lead from the wire assembly.
- 2. Connect the black lead to the line 2 terminal on the control board.
- 3. Connect the red lead to the common ( C ) terminal on the capacitor.
- 4. Connect the ground wire to the partition panel where the ground wire on the power cord was located. Use the supplied green ground screw.
- 5. Connect the red lead in the wire assembly at the junction box to the red lead of the field power source.
- 6. Connect the black lead in the wire assembly at the junction box to the black lead of the field power source.
- 7. Connect the ground wire of the field power source to the ground wire of the wire assembly at the junction box.
- 8. Install the junction box cover plate.
- 9. Reinstall the control panel assembly.

#### 265 VOLT UNITS

- 1. Remove and discard the red lead from the wire assembly.
- 2. Connect the black lead to the center terminal of the fuse holder.
- 3. Connect the white lead to the common (C) terminal on the capacitor.
- 4. Connect the ground wire to the partition panel where the ground wire on the power cord was located. Use the supplied green ground screw.
- 5. Connect the white lead of the wire assembly at the junction box to the white lead of the field power source.
- 6. Connect the black lead of the wire assembly at the junction box to the black lead of the field power source.
- 7. Connect the ground wire of the field power supply to the ground wire of the wire assembly at the junction box.
- 8. Install the junction box cover plate.
- 9. Reinstall the control panel assembly.

HARD WIRE KIT

**Electrical Wiring Routing** 

#### DESCRIPTION - WEM\*01\*

WEMR01W	Hard wired, white, recess mount door switch w/motion sensor
WEMS01B	Hard wired, brown, surface mount door switch w/motion sensor
WEMS01W	Hard wired, white, surface mount door switch w/motion sensor

# (For use with Digital LED PTAC with 18-pin low voltage connector)

NOTE: SENSOR WILL NOT OPERATE PROPERLY WITH A WIRED THERMOSTAT! USE ONLY ONE PASSIVE INFRARED MOTION SEN-SOR (PIR) AND ONLY ONE DOOR SWITCH FOR EACH LED PTAC UNIT.

Includes PIR occupancy sensor power from the DigiSmart control and door switch; cannot be used with a remote wired thermostat.



*Lens on bottom must be pointing down for proper alignment.* 

#### MOTION SENSOR INSTALLATION

1. Place the motion sensor approximately 7 feet 6 inches above the floor. Mount the sensor so that it has a clear line of sight to traffic area.

NOTE: Avoid installing the sensor where it can be affected direct or reflected sunlight. Ensure the sensor is facing away from windows or heating/cooling devices.

Motion sensor can be mounted in a corner, if desired. Contact manufacturer for details.

### HARD WIRED MOTION SENSOR KIT

- 2. Connect four (4) wires from motion sensor to the PTAC unit per wiring diagram using the provided splices.
- 3. Mount motion sensor to wall using enclosed double backed tape or for a more *robust* mounting, mount the motion sensor using the two (2) wall anchors and screws provided.
  - Drill holes 1 5/8" apart vertically to match with back of motion sensor.
  - Press wall anchors into place.
  - Install screws.
  - Hook motion sensor over screws.

For new construction, a single gang bracket (switch box) may be placed behind the motion sensor mounting location and wire routed through a cable wall plate with a 3/8 cable hole.

#### DOOR SWITCH INSTALLATION

#### Surface Mount Door Switch

- Select mounting location for the door switch contacts on the knob side of the door (opposite side of hinge on jamb). NOTE: The wired set of contacts should be located on the door trim where wires can be concealed. The wireless (magnet) side of contacts should be on the door directly across from wired sensor and within 1/2 inch of wired sensor when door is closed.
- 2. Remove paper backing and mount the door switch sensor onto door and trim.

For a more *robust* mounting, mount the door switch sensor using the provided screws. Use a 3/32" drill bit for mounting hole.

#### **Recess Mount Door Switch**

- 1. Select door switch sensor location in the jamb on the side opposite the hinges.
- 2. Drill 3/8" hole through jamb, and a 3/8" hole 5/8" deep in the door directly opposite.
- 3. Pull wires through hole in jamb and press sensor into place.
- 4. Press magnet (wireless portion) into door hole.



### HARD WIRED MOTION SENSOR KIT

#### WIRING

Connect wires as shown using 14 to 22 AWG wire size (field supplied). Observe proper polarity. None of these devices require batteries. Observe local codes as applicable for running low voltage wiring.

PTAC Wired EMS Wiring Diagram



#### NOTES

- 1. Wire nuts are enclosed to make connections from field wiring to the six (6) wires on the PTAC 18-pin terminal block.
- 2. Connections at motion sensor are to be made behind the sensor using the enclosed splices. Ensure wire connections are secure before mounting sensor.
- 3. Connections at door switch can be made with enclosed butt splices.
- 4. Plug 18-pin connector onto PTAC low voltage terminal behind front and below controls.

### HARD WIRED MOTION SENSOR KIT

#### CONFIGURATION SETTINGS FOR MOTION SENSOR KIT

The PTAC control will need to be configured to activate energy management routine using wired devices.

	Feature Code
Select wired occupancy set back routine feature code	C6 to option code 1 selection
Activate motion sensor	C7 to option code 0

Complete configuration settings section is located at the back of this manual.



Typical Room Layouts

# HYDRONIC HEAT

### DESCRIPTION

HWK03E	Hot water hydronics
HVK03E	Steam hydronics

The PTAC Hydronic Kit is an enclosure kit that provides complete coverage of all PTAC plumbing and coils while still allowing access to controls. The kit can only be installed where there is a central boiler for heating the water. It does not affect unit heating and cooling operations. The hydronic kit chassis slides out for service without removing any hydronic plumbing. The electrical connections are plugin type to assist in kit installation.

**NOTE:** Heat pump models will operate on heat pump function down to the switch over temperature before operating on hydronic heat.



#### FREEZE PROTECTION

For PTAC Hydronic Coil freeze protection on hot water systems, the hydronic system should use an antifreeze solution. However, the addition of antifreeze will reduce the capacity of the hydronic coil and affect system sizing. The higher the antifreeze concentration, the greater the capacity reduction. Therefore, for optimum unit performance, only use an antifreeze concentration that will protect to the lowest ambient temperature expected. A 20% solution will protect to approximately 15°F. A 50% solution protect to -35°F.

# Use an antifreeze that is formulated for hydronic use. DO <u>NOT</u> USE AUTOMOTIVE OR PETROLEUM BASED PRODUCTS.

TOOLS REQUIRED

- 1/4 Inch Electric Drill
- 1/8 Inch Diameter Drill Bit
- Center Punch and Hammer
- 6 Foot Rule
- **Combination Square**
- 1/4 Inch Nut Driver or Socket
- 5/16 Inch Nut Driver or Socket
- Torch, Solder, Flux, etc.

#### JOB PREPARATION

Before installing the hydronic kit, determine the following:

- Whether a 2-way or 3-way normally open or normally closed valve is required.
- If an end switch is required to control the circulating pump. (Information relating to U.L. approved valves and current loads is shown on the kit label and is repeated in the following figure).

CAUTION: VC	UCLITAGE RATING O	F VALVE IS 24VAC	AND DOES NOT CORRESPONE	то	
THIS KIT MAY BE FOLLOWING ELE	USED WITH ONE	OF THE /ALVES:	NOTE: WHEN HYDRONI EMPLOYED, THE FOLLO OPERATE CONCUR	C HEAT KIT WING LOA RRENTLY:	' IS DS
ERIE MANUFACTURING CO.	HOT WATER 654C0507EA01 654C0507EA01 654C0509EA01 654C0529EA01 VT2212G14A02A VT2212G24A02A VT3213G14A02A	<u>STEAM</u> 654C0407EA01 654C0427EA01 VS2212G14A02A VS2212G24A02A	UNIT VOLTAGE RATING FAN MOTOR AMPS MOTORIZED VALVE, WATTS	230/208 .6 6.5	265 .6 6.5
BARBER-COLMAN	VA-1403-201 VA-1403-301 VA-3403-201	VA-9224-201 VA-9214-201	MAX. WATER TEMPERATURE MAX. WATER PRESSURE MAX. STEAM PRESSURE	200° F 200 PSIG 5.0 PSIG	
HONEYWELL	V8043A V8043B V8044A	V8043J			

Also, ensure that the following steps are completed and a hydronic model chassis is installed before installation.

# NOTE: The hydronic chassis MUST have a model number in which the 10th, 11th, 12th or 13th digit is H.

1. Wall sleeve is installed and completely sealed.

It must extend at least 3" and no more than 3-1/8" past the finished interior wall in order to properly install the hydronic kit.

- 2. All plumbing stub-outs are completed.
- 3. Unit chassis is uncrated, uninstalled, and not yet connected to an electrical source.

#### INSTALLATION

The installation and servicing of the equipment referred to in this booklet should be performed by qualified, experienced technicians.

Be sure to engage the services of a qualified water treatment specialist to determine what water treatment, if any, is needed. The manufacturer will not assume responsibility for equipment failures resulting from untreated or improperly treated water.

### HYDRONIC HEAT



F

This Installation kit includes:

Item Qty		Description		
A	1	Transition		
В	1	Hydronic Skirt		
С	1	Hydronic Top Assy		
D	1	Hydronic Front Assy		
E	2	Support Brackets		
F	1	Bag Assembly containing:		
		Installation Instructions,		
		Gasket foam,		
		8 - 3/8" #8 screws		
		2 - 1/2" #8 screws		
		4 - 1/2" #10 screws		
		1 #10 machine screw		

- 1 snap bushing
- 1 valve harness
- 4 wire nuts
- 1. Drill two 1/8" diameter holes on both sides of wall sleeve as shown (Figure 1).

**NOTE:** If there is not enough room to drill holes from the side then drill holes from inside the wall sleeve.





- 2. Remove the hydronic kit from its packaging. Recycle the cardboard packaging material.
- 3. Mount the two support brackets to the bottom of the hydronic top (Figure 2) with four (4) 3/8-inch #8 supplied screws.

On HVK03E Hydronic Steam Kits, do not use 1/4 inch head, 3/8 inch long, #8 screws to attach the left support bracket to the hydronic top. Use the provided two 5/16 inch painted head, 1/4 inch long, #8 screws in place of these longer screws. (Figure 3)

**NOTE:** Failure to use the 1/4 inch long screws instead of the 3/8 inch long screws may result in leaks of the hydronic steam coil.



Figure 2

### HYDRONIC HEAT

Move the brackets to the left so that screws are located in right side of slot and tighten screws (Figure 3).





4. Mount the transition to the chassis with two 1/2-inch #8 supplied screws (Figure 4).



Figure 4

5. Position the hydronic top with support brackets to the wall sleeve and fasten the support brackets to the drilled holes in the wall sleeve with four 1/2-inch #10 supplied screws. (Figure 5)





- 6. Place the chassis back into the wall sleeve and secure chassis to wall sleeve.
- 7. Measure the actual distance "D" (Figure G) from the bottom of the chassis basepan to the finished floor to determine how far to extend the skirt below the metal front. If the distance is less than two inches, trim the skirt per Figure 7 so that it will not interfere with the gasket or block the inlet air on the front. In Figure 7, "Y" dimension equals 2" minus actual "D" dimension.



Figure 6



Figure 7





- 8. Mount the skirt to the metal front with the four remaining 3/8" #8 supplied screws (Figure 9).
- NOTE: Skirt is attached to front of top piece during shipping.





 Remove the six screws from the top of the hydronic top. Lift the hydronic top straight up and set aside along with the six screws (Figure 10).

### HYDRONIC HEAT



Figure 10

10. Position the wires from the freeze thermostat found on the left side of the hydronic top so the wires slide through the slot opening in the hydronic top.

Place all wires into the supplied snap bushing (Figure 11.



Figure 11

11. Snap the grommet into the hydronic top and pull the wires forward to take out the slack in the wires (Figure 12).



Figure 12

#### 12. Route the freeze thermostat wires through the U-clip on the hydronic top assembly and down in front of the control panel. Snap the plastic male pin connector into the plastic female pin connector located on the outside front surface of the control panel (Figure 13).



#### Figure 13

#### HYDRONIC STEAM & WATER VALVES

13. Determine whether a 2-way or 3-way normally open or normally closed valve is required. Also determine if an end switch is required to control the circulating pump. Information relating to U.L. approved valves and current loads is shown on the label on the kit. In addition, water and steam valve model numbers are listed in the following table.

#### Water Valve

Model	Description	Position	End Switch
VW2WNCA	2-way	Normally Closed	Yes
VW2WNOA	2-way	Normally Open	Yes
VW3WNCB	3-way	Normally Closed	Yes

#### Steam Valve

Model	Description	Position	End Switch
VS2WNOA	2-way	5/16"	Yes

NOTE: WHEN HYDRONIC HEAT IS USED. DISREGARD THE MINIMUM CIRCUIT AMPACITY AND MAXIMUM					
FUSE SIZE SHOWN ON THE AUXILIARY NAMEPLATE FOR FIELD INSTALLED HEATERS. USE VALVES					
SHOWN ON THE MASTER UN	NT NAMEPLATE.				
CAUTION: VOL	TAGE RATING OF	VALVE IS 24VAC	AND DOES NOT CORRESPON	ND TO	
	VOLTAGE R	ATING ON THE UN	NIT NAMEPLATE.		
THO 1/17 141/ DE 1			NOTE: WHEN HYDRON	C HEAT KIT	IS
THIS KIT MAY BE U	JSED WITH ONE		EMPLOYED, THE FOLLO	WING LOA	DS
FOLLOWING ELEC	TRIC CONTROL V	ALVES:	OPERATE CONCUR	RRENTLY:	
	HOT WATER	STEAM			
ERIE MANUFACTURING CO.	654C0507EA01	654C0407EA01	UNIT VOLTAGE RATING	230/208	265
	654C0527EA01	654C0427EA01	FAN MOTOR AMPS	.6	.6
	654C0509EA01		MOTORIZED VALVE, WATTS	6.5	6.5
	654C0529EA01				
	VA 1402 201	1/4 0224 201		2008 E	
BARBER-COLIVIAN	VA-1403-201	VA-9224-201	MAX. WATER TEMPERATORE	200 F	
	VA-1403-301	VA-9214-201	MAX. WATER PRESSURE	200 PSIG	
	VA-3403-201		MAX. STEAM PRESSURE	5.0 PSIG	
HONEYWELL	V8043A				
1	V8043B	V8043J			
	V8044A				

# HYDRONIC HEAT

14. If the black valve motor leads are not accessible from the valve housing, remove the valve cover. Connect the supplied valve wire harness leads to the two valve motor leads (not the end switch leads) using the supplied wire nuts (Figure 14). The fiber washer and strain relief supplied with the valve harness must be located in the valve motor enclosure after assembly. Replace the valve cover.



Connect YL for Normally Open Valves. Connect BL for Normally Closed Valves

Figure 14

15. Using the two remaining wire nuts, connect the wires from the chassis wire harness to valve harness.

Connect one of the BK wires from the valve to BK wire from the chassis.

For *normally open* valves, connect the YL chassis harness wire to the second BK wire from the valve.

For *normally closed* valves, connect the BL chassis harness wire to the second BK wire from the valve.

16. Cut either the YL or BL wire that is not being used at the plastic male connector on the control panel.

#### TWO-WAY VALVE INSTALLATION

When installing two-way valves, the flow direction is from end "B" as shown in Figure 15.

Prior to soldering the normally closed two-way valve, open the ports by slowly moving the manual operating lever to the retaining notch until lever is secured by valve spring. The lever will reset to the automatic position the first time the valve is energized.

#### THREE-WAY VALVE INSTALLATION

When installing three-way diverting valves, end "B" is the supply to coil and end "A" is the bypass end. The inlet port is unmarked. Port markings "A" and "B" are located on the bottom of the valve body (Figure 15).



\* Connect YL for Normally Open Valves. Connect BL for Normally Closed Valves

Figure 15

**NOTE:** For Erie Model VT32\* (poptop), the three-way valve is only configured as N.C. to "B" port. For N.O. configuration to the coil, simply turn the valve around.

Prior to soldering the normally closed 3-way valve, open both ports by slowly moving manual operating lever to retaining notch until lever is secured by valve spring.

Flow valve and tubing is to be installed so that it does not restrict removal of the chassis from the sleeve for service.

#### SOLDERING THE VALVES

Solder the flow valve and other necessary components in line with the plumbing rising from the floor or wall. Do not place the components inside the hydronic top assembly (Figure 16).





### HYDRONIC HEAT

### STEAM AND WATER PLUMBING

### HWK03E - HOT WATER KIT

#### HVK03E - STEAM KIT

- 1. The plumbing can enter from the left and/or right side of the unit through the slots and holes that are supplied in the hydronic top assembly. (See Steam and Water Plumbing Dimensions figures.)
- 2. Hydronic water kits (HWK03E may have water entering either the left or right side of the coil. Hydronic steam kits (HVK03E) can only have entering steam on the right side of the coil. (See Steam and Water Plumbing Dimensions figures.)
- 3. Make sure all piping is plumbed to the coil and system has been bled of air. Using the existing six screws and hydronic top from Step 13, place the top cover over the coil deck assembly. Make sure the back flange of the top cover fits inside the small vertical flange in the back of the coil assembly. (Figure 17.)



Figure 17

**NOTE:** A manual bleed valve is supplied with both the Hydronic Water and Hydronic Steam Kits (HWK03E and HVK03E). It is recommended that an automatic bleed valve for Hydronic Steam Kits (HVK03E) be installed. This will eliminate frequent access to the manual bleed valve for purging air from the steam system.

### HYDRONIC HEAT

#### FINAL KIT INSTALLATION STEPS

- 1. Place the hydronic front on the top assembly so the flanges of the front fit tightly into the flanges of the top assembly.
- 2. Ensure the inlet air filter is located inside of the inlet grille and held in position with the four brackets (one on each side and two on the bottom). The inlet grille can be hinged open by unlatching the two top levers on the grille.
- 3. To service the unit, remove the front. Remove the four sheet metal screws that secure the unit to the wall sleeve from each of the side seal mounting brackets. If a subbase is used, remove the right side cover panel from the subbase and disconnect the power cord. The chassis may be removed for service.

**NOTE:** To prevent water hammering, the use of approved motorized values and good piping practices is strongly recommended. Opening and closing motorized values very slowly will help prevent water hammering.

# *Complete configuration settings section is located at the back of this manual.*

If the unit is being controlled by a wired wall thermostat, the control will have to be configured to work with a wired thermostat. See code C1.

# HYDRONIC HEAT

### **Steam Plumbing Dimensions**



# HYDRONIC HEAT

### Hot Water Plumbing Dimensions



Finished Floor

# PTAC HYDRONIC KIT SPECIFICATIONS

#### HEATING CAPACITY

	Hydronic Heat Kit Application Data									
	Heating Capacity (Btuh)- Hot Water									
	Pres	sure		7000 BT	UH Units		9000,	12000 & 1	5000 BTUH	Units
Gal.	Dr	ор								
per	(ps	sig)	200° F	. EWT	180° F	EWT	200° F	. EWT	180° F	.EWT
Min.	0	2-Way	Fan S	speed	Fan S	Speed	Fan S	Speed	Fans	speed
	Coil	Valve	Hi	Lo	HI	Lo	Hi	Lo	Hi	Lo
1.00	0.93	0.16	18200	16500	14900	13600	20600	19000	16900	15600
1.13	1.03	0.20	18600	16900	15200	13900	21 100	19500	17300	16000
1.25	1.14	0.25	19000	17300	15500	14200	21500	19900	17600	16300
1.38	1.26	0.30	19400	17600	15900	11500	21900	20300	18000	16600
1.50	1.40	0.36	19700	18000	16200	14700	22300	20700	18300	16900
1.63	1.55	0.43	20000	18200	16400	15000	22700	20900	18600	17200
1.75	1.71	0.49	20300	18400	16600	15100	22900	21200	18800	17400
1.88	1.89	0.57	20500	18600	16800	15300	23200	21500	19000	17600
2.00	2.10	0.64	20600	18800	16900	15400	23400	21600	19200	17700
2.13	2.32	0.73	20800	18900	17100	15600	23600	21800	19400	17900
2.25	2.57	0.81	** 21000	191 00	17200	15700	23800	22000	19500	18000
2.38	2.84	0.91	21100	19200	17300	15800	23900	22100	19600	18100
2.50	3.14	1.00	21200	19200	17300	15800	24000	22200	19700	18200
2.63	3.48	1.11	21200	19300	17300	15800	** 24000	22200	19700	18200
2.75	3.85	1.21	21200	19300	17400	15900	24000	22200	19700	18200

Based on AHRI Rating Conditions of 70°F Entering Air Temp., 200°F Entering Water Temp and 180°F

Leaving Water Temp. Max. Water Temp. 200°F. Max. Water Pressure - 200 Psig.

Numbers above are based on systems without antifreeze.

Hydronic Heat Kit Application Data						
Heating Capacity (Btuh) - Steam						
Steam	team 7000 BTUH Units 9000 to 15000 BTUH Units					
(psig)	Fan Speed		Fan Speed			
	Hi	Low	Hi	Low		
2	** 22,600	20,500	** 25,400	23,100		
3	23,000	20,900	25,900	23,500		
4	23,200	21,100	26,100	23,800		

Maximum steam pressure 5 psig

\*\*Based on AHRI rating conditions of 70° F entering air temp. and 2 psig steam pressure

Water Valve Inle	et / Outlet [	Dimensions
Model	Inlet	Outlet

Moder	miet	Outlet
VW2WNCA	5/16"	5/16"
VW2WNOA	5/16"	5/16"
VW3WNCB	5/16"	5/16"

#### Steam Valve Inlet / Outlet Dimensions

Model	Inlet	Outlet
VS2WNOA	5/16"	5/16"

### HYDRONIC HEAT

#### WATER VALVE PRESSURE DROP

2-Way Valve ERIE Models: 654C* VT/S22*	
Water	Pressure Drop
GPM	(psig)
1.00	0.16
1.13	0.20
1.25	0.25
1.38	0.30
1.50	0.36
1.63	0.43
1.75	0.49
1.88	0.57
2.00	0.64
2.13	0.73
2.25	0.81
2.38	0.91
2.50	1.00
2.63	1.11
2.75	1.21
01/ 0.5	

3-Way Valve Bypass ERIE Models: 654C\* Pressure Drop Water GPM (psig) 1.00 0.11 1.13 0.14 1.25 0.17 0.21 1.38 1.50 0.25 0.30 1.63 1.75 0.34 1.88 0.39 2.00 0.44 2.13 0.50 2.25 0.56 2.38 0.63 2.50 0.69 2.63 0.77 2.75 0.84

3-Way Valve Service ERIE Models: 654C*		
Water	Pressure Drop	
GPM	(psig)	
1.00	0.04	
1.13	0.05	
1.25	0.06	
1.38	0.08	
1.50	0.09	
1.63	0.11	
1.75	0.12	
1.88	0.14	
2.00	0.16	
2.13	0.18	
2.25	0.20	
2.38	0.23	
2.50	0.25	
2.63	0.28	
2.75	0.30	
CV=5.0		

3-Way Valve Bypass and Service ERIE Models: VT32*		
Water	Pressure Drop	
GPM	(psig)	
1.00	0.06	
1.13	0.08	
1.25	0.10	
1.38	0.12	
1.50	0.14	
1.63	0.17	
1.75	0.19	
1.88	0.22	
2.00	0.25	
2.13	0.28	
2.25	0.32	
2.38	0.35	
2.50	0.39	
2.63	0.43	
2.75	0.47	

CV=2.5

CV=3.0

CV=4.0



Pd = Pressure Drop (psig)

### DIMENSIONS OF COMPLETE INSTALLATION



### HYDRONIC TRANSFORMER

DESCRIPTION

НТКЗА	230V
HTK4A	265V

The hydronic transformer kit must be installed into a standard PTAC chassis to make the chassis operate electrically with the HWK03E and HVK03E hydronic kits. This kit is not required on hydronic chassis (model number with "H" in the last 4 digits). Do not use this kit with heat pump chassis consult your Amana<sup>®</sup> brand sales representative for information.

### 

HIGH VOLTAGE

DISCONNECT ALL POWER BEFORE SERVICING OR INSTALLING THIS KIT.

MULTIPLE POWER SOURCES MAY BE PRESENT. FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

1. Grasp the cabinet front as shown.



2. Pull the bottom of the cabinet front away from the chassis until the retaining clips disengage.



- 3. Lift the cabinet front off the chassis. (Reverse this procedure to reinstall the cabinet front.)
- 4. To gain access inside the control panel, remove the two mounting screws, one on each side of control board cover. Lift the cover up to gain access to the ribbon connector. Unplug ribbon connector from control board and remove cover completely. Remove the side screw holding the panel in position, and tilt control panel forward, being careful not to pinch any wires (Figure 1).



#### Figure 1

- 3. Lift the control panel up so the control panel is free of its hinges. Orient the control panel so there is easy access for mounting components to the control panel.
- 4. Using the two #8 screws that are provided, screw the transformer to the control panel in the transformer mounting holes provided in the panel.
- 5. Mount the relay in one of the three pairs of relay mounting holes in the control panel making sure that the threaded stud is in the smaller hole and the metal tab is in the larger hole. Screw the provided nut onto the threaded stud from the opposite side of the control panel.



- 6. Remove the cross shaped knockout from the control panel. Insert the female wire connector into the cross shaped hole from the side of the control panel where the transformer and relay are mounted.
- NOTE: If the cross knockout is not located in the control panel, disconnect the terminals of the wire harness from the relay and transformer. Route the wires through the power cord opening in the basepan until about 6 to 8 inches of the harness protrudes from the opening. Reconnect the harness wire terminals to the relay and transformer as follows:

Wire YL to Relay 1 terminal

Wires BU, BU to Relay 3 terminal

Wire RD to Relay 5 terminal

Wire BK to one Transformer 24V terminal

Wire BK to other Transformer 24V terminal

7. (1) If the unit has an electric heater, remove the BR heater wires from the control board and push these wires through the mid partition panel so that the wires will not be loose in the control panel area.

(2) If the unit has a 2 stage electric heater, disconnect the BR and VT heater wires from the control board. Remove the heater relay and wires from chassis and discard. Push the heater wires (BR) through the mid partition panel so the wires will not be loose in the control panel area.

### HYDRONIC TRANSFORMER

- 8. Connect the PK wires from the relay to the heater terminal next to the Line 1 terminal and to the heater terminal next to the Line 2 terminal respectively, on the control board.
- 9. (1) Remove the RD and Line 2 power cord (BK for 265 volt units) wires from the control board. Connect the GY wires from the transformer to the Line 1 and Line 2 terminals, respectively. On the control board, reconnect the RD and Line 2 power cord (BK for 265 volt units) wires to the piggy back terminals of the GY wires on the control board, respectively.

(2) If the unit already has a power vent or power door kit installed in the chassis, remove the WH wire from the Line 1 terminal on the control board and connect the WH wire to the GY wire at the transformer.

- 10. Install the control panel back onto its hinges. Close the control panel being careful not to pinch any wires. Reinstall the control panel cover and screw control panel back into place.
- 11. See hydronic installation instructions to finish installing hydronic heat kit.

### LEVELING LEGS

### DESCRIPTION - LL2B

Leveling legs are designed to provide extra front support and leveling of the wall sleeve. Two leg assemblies are required per unit and are provided in each kit. Four screws are also provided with each kit for attachment to the wall sleeve. See Figure 1. The leveling legs must be installed **before** the chassis is installed, but after the wall sleeve is in place. Holes must be drilled in each side of the wall sleeve, below the duct package hole, for attachment to the wall sleeve.



To install the leveling leg assembly:

- 1. Drill two 1/8-inch holes in each side of the wall sleeve, as shown in Figure 2, using the leveling leg assembly as a template. Locations near the front of the sleeve provide more support.
- 2. Adjust the leveling legs to the approximate height needed (minimum 3 inches) and install them on either side of the wall sleeve, using the screws provided. Bottom of wall sleeve can be anywhere from three (3) to five (5) inches above the screw base. Caulk around screws to prevent water leaks.
- 3. Level the sleeve horizontally from side-to-side. Provide a slight slope (one-quarter bubble in the sight glass) toward the outside. Check the level again after the unit has been installed. Adjust the legs as needed.



#### DESCRIPTION - PWHK01C

The PTAC Wire Harness kit provides connection from the 14-pin or 18-pin terminal strip on the PTAC control board to the following board features:

Door Switch\*

Motion Sensor\*

Emergency Hydronic Heat\*\*

Load Shedding\*\*

Front Desk Control\*\*

Transfer Fan (relay must be manufacturerapproved and have a DC low voltage coil)

#### **Remote Thermostat**

(must be manufacturer-approved)

### LOW VOLTAGE WIRE HARNESS

The kit includes a 14-pin and an 18-pin female housing with 18 jumper wires and wire nuts. The installation and servicing of this equipment should be performed by qualified, experienced technicians.

\*Contact your sales person for proper manufacturer-approved devices and wiring instructions.

\*\*If other than a "dry switch" is used in connecting these features, consult manufacturer before proceeding.





Disconnect electrical power source before wiring the unit. Failure to do so may result in injury or death from electrical shock. The unit "OFF" switch does not disconnect all power to the unit.



- 1. Disconnect power and remove the front panel per unit installation instructions.
- 2. Remove 18-pin female housing from control board.\*\*

Using the following table and either Figure 1 or 2 as guides, (Figure 1 for boards with knobs; Figure 2 for boards with touchpads) choose the feature desired and insert the proper jumper wire into the appropriate slot on the housing. Ensure the jumper wires are oriented as shown in Figure 3.

Re-install the 14-pin or 18-pin housing. Ensure housing faces the direction shown in either Figure 1 or 2. Take care to ensure the plastic housing and metal pins are aligned correctly; otherwise, the unit will not function properly.

**NOTE:** Only load wires intended for installation. Extra wires can be used to connect other PTAC boards. One PWHK01C kit can be used for multiple boards.

3. Connect the kit wiring to the field wiring using the wire nuts provided. Route the kit wiring as shown in Figure 4. Do not run wires through basepan or wall sleeve.

### LOW VOLTAGE WIRE HARNESS

- 4. With the unit in the OFF position, reconnect the power and ensure the master switch is in the ON position.
- 5. Reinstall the front cover per unit installation instructions. Check the unit for proper operation.







### STANDARD LOUVERED GRILLE

SGK01B	Unpainted aluminum
SGK01TB	Painted to match sleeves

**NOTE:** A baffle kit <u>must not</u> be used with a standard louvered grille on any PTAC installation.

Before installing the grille, remove the cardboard stiffener and rear enclosure panel from the wall sleeve. These items can be removed from inside of the building. The sleeve stiffener must be taken out before the rear sleeve enclosure panel can be removed from the sleeve.

#### **Sleeve Stiffener Removal**

Fold the two outside flaps "A" in and downward to remove (Figure 1).







#### **Rear Enclosure Removal**

Remove the rear enclosure by folding the front ends of the top and bottom towards the center. Grasp the top and bottom flanges as shown in Figure 2 and pull out diagonally from one side of the sleeve.

### **OUTDOOR GRILLES**



Figure 2

#### **Standard Louvered Grille Installation Instructions**



Figure 3

- 1. Position the grille so that all four flanges are in the up position.
- 2. Insert the six grommets provided so the square end protrudes through the grille in the opposite direction from the flanges.
- 3. Manipulate the grille out through the rear sleeve opening using the plastic handle (not shown) provided.
- 4. Align the guide pins located in the lower right- and lefthand corners of the grille (Figure 3) with the corresponding holes in the rear of the wall sleeve.
- 5. Secure the grille by threading each of the six screws into the plastic grommets.
- 6. Remove the plastic handle (not shown) from the center of the grille prior to installing the chassis into the sleeve.



BE SURE TO KEE A FIRM GRIP ON THE PLASTIC HANDLE AND GRILLE TO PREVENT IT FROM DROPPING AND/OR CAUSING POSSIBLE INJURY OR PROPERTY DAMAGE.

### ARCHITECTURAL LOUVERED GRILLE -AGK01\*B(ALUMINUM) & PGK01\*B PLASTIC

#### Available Color Options

AGK 01 CB	Anodized Aluminum (Silver)
AGK 01 DB	Dark Bronze/Brown
AGK01TB	Stonewood Beige
AGK01WB	Amana <sup>®</sup> Brand White
AGK01SB	Custom Colors
PGK01DB	Dark Bronze/Brown
PGK01TB	Stonewood Beige
PGK01WB	Amana <sup>®</sup> Brand White

**NOTE:** Some PTACs may include factory-installed baffles on the outdoor coil. Remove these baffles before installing the architectural grille.

- 1. Remove the cardboard sleeve stiffener and the rear enclosure of the sleeve as described on page 1.
- 2. Install the four threaded studs (B, Figure 4) into the threaded openings on the inside face of the grille.
- 3. Manipulate the grille out through the rear sleeve opening using the plastic handle provided.



BE SURE TO KEE A FIRM GRIP ON THE PLASTIC HANDLE AND GRILLE TO PREVENT IT FROM DROPPING AND/OR CAUSING POSSIBLE INJURY OR PROPERTY DAMAGE.

### **OUTDOOR GRILLES**

- 4. Attach the grille to the sleeve by aligning and inserting the threaded studs in the corresponding holes.
- 5. Secure the grille to the sleeve with washers C and hex nuts D provided with the kit.
- 6. Remove the plastic handle after installation is completed.



Figure 4



Figure 5 - AGK



Figure 6 - AGK - EXTERIOR VIEW



### Power Switch Kit Components

(Cover Plate Not Shown)

#### DESCRIPTION

PSWK03A	230/208v
PSHW04A	265v

#### 230/208 and 265 Volt Power Switch Assemblies

An optional 230/208V or 265V power switch assembly kit can be installed in a full-length subbase or in the junction box of the Hard Wire Junction Box kit. The switch provides a POWER ON/OFF function as required by some electrical codes. A replacement junction box cover plate is provided with each switch.

### 

### **HIGH VOLTAGE**



SERVICING OR INSTALLING THE SUB-BASE. MULTIPLE POWER SOURCES MAY BE PRESENT. FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

**DISCONNECT ALL POWER BEFORE** 

THE UNIT'S OFF SWITCH DOES NOT DISCONNECT ALL POWER TO THE UNIT.

# POWER DISCONNECT SWITCH

### 

TO AVOID THE POSSIBILITY OF PROPERTY DAMAGE, PERSONAL INJURY OR DEATH, THE INSTALLER MUST USE PROPER POLARIZATION. SEE SPECIFIC INSTRUCTIONS.

### 

USE COPPER CONDUCTORS ONLY FOR ELECTRICAL CONNECTIONS. THE USE OF OTHER TYPES OF CONDUCTORS MAY RESULT IN GAL-VANIC CORROSION, OVERHEATING AND RESUL-TANT EQUIPMENT FAILURE.

### 

ALL WIRING MUST COMPLY WITH APPLICABLE LOCAL AND NATIONAL CODES. TYPE AND LOCATION OF FUSED DISCONNECT SWITCH(ES) MUST COMPLY WITH ALL APPLICABLE CODES. FAILURE TO FOLLOW THESE CODES COULD RESULT IN OVERHEATING AND EQUIPMENT FAILURE.

#### POWER SWITCH INSTALLATION FOR JUNCTION BOX

**NOTE:** Refer to Hard Wire Assembly Kit Instructions for mounting junction box. If the junction box is mounted vertically, the switch must be installed so that the ON position is up.

#### 230/208V Installation

- 1. Remove and discard the white lead of the hard wire assembly.
- 2. Connect the black lead of the hardwire assembly to one terminal of the disconnect.



- 3. Connect the red lead of the hardwire assembly to the switch terminal opposite the terminal where the black lead was assembled in step 2.
- 4. Remove the knockout from the desired power entry point on the junction box and route field supplied power wires into the junction box.
- 5. Connect the red and black leads of the field power supply to the two unused terminals on the power switch.
- 6. Connect the ground wire of the field power supply to the bare ground wire assembly.
- 7. Mount the switch on the tabs in the junction box and install the switch cover plate provided with the power switch kit.

#### 265V INSTALLATION

- 1. Remove and discard the red lead of the wire assembly
- 2. Connect the black lead of the hard wire assembly to one terminal of the disconnect.
- 3. Remove the knockout from the desired power entry point on the junction box and run field supplied power wires into the junction box.
- 4. Connect the black lead of the power supply to the remaining disconnect switch terminal.
- 5. Connect the ground wire of the field power supply to the bare ground wire assembly.
- 6. Connect the white lead of the wire assembly to the Neutral lead of the power supply.
- 7. Mount the switch on the tabs in the junction box and install the switch cover plate provided with the power switch.

#### POWER SWITCH INSTALLATION FOR SUBBASE

- 1. Remove the left and right subbase cover panels by removing screws holding them in place. Retain the screws.
- 2. Remove the rectangular knockout located in the center of the recessed area on left cover panel.
- 3. Install the switch using the two bolts and nuts provided so that the "ON" position of the switch is on the right. Install ground lead (provided) between switch mounting tab and mounting plate.

#### 230/208V WIRING PROCEDURE

- 4. Route the RED wire from the receptacle through the barrier in the subbase using the hole provided.
- 5. Insert the RED wire from the receptacle into the upper right hole in the rear of the switch and tighten the screw.
- 6. Route the BLACK wire from the receptacle through the barrier in the subbase using the hole provided.
- 7. Insert the BLACK wire from the receptacle into the lower right hole in the rear of the switch and tighten the screw. Insert the BLACK power wire (field wiring) into the lower left hole in the switch and tighten the screw.

# POWER DISCONNECT SWITCH

- 8. Attach the ground field wire by connecting the green wire on the disconnect to the ground terminal (screw) on the back wall of the subbase high voltage section.
- 9. Replace the cover panels (with the switch installed) to the subbase using the screws removed in step 1.

#### 265V WIRING PROCEDURE

- 4. Insert the BLACK wire from the receptacle into the lower right hole in the rear of the switch and tighten the screw. Insert the BLACK power wire (field wiring) into the lower left hole in the switch and tighten the screw.
- 5. Connect the WHITE wire from the receptacle to the WHITE power wire (field wiring) with the wire nut provided.
- 6. Attach the ground field wire by connecting the green wire on the disconnect to the ground terminal screw on the back wall of the subbase high voltage section.
- 7. Replace the cover panels (with the switch installed) on the subbase using the screws removed in step 1.





### POWER DOOR KIT

DESCRIPTION

PDK2E	115v
PDK3E	230/208v
PDK4E	265V

Power Door Kit automatically opens and closes the vent door depending on fan operation - opens when indoor fan is operating, closes when fan is not operating.



Motor shown exploded

#### PREPARATION



- 1. Disconnect power to the unit by unplugging the power cord at the wall outlet or subbase, or disconnect power at the fuse box or circuit breaker.
- 2. If the cabinet front is screwed to the chassis, remove the 1/4" screw.
- 3. Remove cabinet front from chassis by tilting the bottom of the front forward, lifting slightly up and forward.
- 4. Remove the PTAC chassis from the wallsleeve. Position the chassis so the back can be easily accessed.



Figure 1

### POWER DOOR KIT INSTALLATION

1. Remove the shipping screw (if installed) from the vent door.



#### Figure 2

- 2. Open the vent door with the vent door lever located on the left side of the chassis. (Figure 2).
- 3. Remove the cable clamp from the vent door cable by removing the screw holding the clamp to the bracket and discard the clamp.
- 4. Disconnect the cable from the vent door by partially closing the vent door and slightly bending the end of the cable while pulling the Z-shaped end out of the hole in the top of the door (Figure 3).

### POWER DOOR KIT

### ACCESSORIES



Figure 3 5. Remove 2 door brackets (Figure 4).



Figure 4

- 6. Remove the vent door from the slots in the partition panel by lifting the vent door up and carefully pull the door hinges out of the slots. Set door aside.
- 7. Attach the strike plate to the top of the vent door using the two #8 screws provided (Figure 5).



- 8. Attach the "L" shaped bracket to the partition panel (Figure 6).
- 9. Reattach the vent door to the partition panel by inserting the vent door's metal tabs into the panel slots (Figure 6).
- 10. Attach one end of the spring to the hole in the bracket on the partition panel. Attach the other end of the spring to the hole located in the bracket which is fastened to the vent door (Figure 6).



#### Figure 6

11. Mount the door motor housing with two #8 screws to the provided holes in the partition panel. Ensure the cross pin in the door shaft is rotated around so that it touches the rubber bumper underneath the door motor housing (Figure 7).

Figure 5



#### Figure 7

- 12. With the vent door lever in the closed position, place the end of the cable into the hole located in the door motor housing. This will position the cable away from moving parts (Figure 8).
- 13. Attach the provided p-clamp to the partition panel (Figure 8). There is a dimple at the hole location to mark where a 1/8" hole will need to be drilled to mount the clamp.



### POWER DOOR KIT

**NOTE:** The permagum may have to be removed to feed the wires through the partition panel. When finished routing wires through the panel, make sure wires have no slack and replace the permagum back into place to prevent air leaks. (Figure 9).





#### WIRING INSTRUCTIONS

 To gain access inside the control panel, remove the two mounting screws, one on each side of control board cover. Lift the cover up to gain access to the ribbon connector. Unplug ribbon connector from control board and remove cover completely. Remove the side screw holding the panel in position, and tilt control panel forward, being careful not to pinch any wires (Figure 10).



#### Figure 8

14. Route the door motor wires through the p-clamp, and then through the wire clip with the motor wires, and then through the hole in the partition panel where the compressor wires are routed through the panel.

#### Figure 10

2. Lift the control panel up so the control panel is free of its hinges. Orient the control panel so there is easy access for mounting components to the control panel (Figure 11).



#### Figure 11

- 3. Using the two #8 screws that are provided, screw the transformer to the control panel in the transformer mounting holes provided in the panel.
- 4. Mount the relay in one of the three relay mounting holes in the control panel making sure that the threaded stud is in the smaller hole and the metal tab is in the adjacent hole. Screw the provided nut onto the threaded stud from the opposite side of the control panel.
- 5. Remove the knockout for the vent switch (Figure 12) located in the control panel and snap the vent switch in the knockout hole with the terminals inside the control panel compartment. The numbers on the switch should be facing toward the control board. Place the supplied label just above the switch.



6. Using the two provided #8 screws, attach the terminal strip to the partition panel inside the control panel com-



partment (Figure 13).

#### Figure 13

- 7. Once the wires are routed into the control panel compartment, attach the door motor terminals to the 24 volt side of the new transformer (see wiring diagrams).
- 8. Take BK and RD indoor fan motor wires from the control board (high and low fan terminals) and place on the terminal strip, each on a different set of terminals (Figure 13).
- 9. Take BROWN wire from the #3 terminal of the relay and place on the control board FAN LOW terminal. Take the ORANGE wire from the #8 terminal of the relay and place on the piggyback terminal of BROWN wire.
- 10. Take the PINK wire from the #4 terminal of the relay and place on the control board FAN HIGH terminal.
- 11. Please refer to the schematics for proper electrical wiring if the chassis has any of the following kits previously installed:

Power Door Kit Hydronic Heat Kit Hydronic Valves

Figure 12

### REMOTE TEMPERATURE SENSOR

#### DESCRIPTION - RTS03

The PTAC Remote Temperature Sensor provides accurate room temperature sensing from a central location. This unique accessory allows the control functions to remain at the unit.

The installation and servicing of the equipment referred to in these instructions must be performed by qualified, experienced technicians.

#### REMOTE TEMPERATURE SENSOR LOCATION

For best performance results, place the remote temperature sensor approximately 5 feet above the floor on an inside wall in an area with good air circulation. Mount the sensor so that it senses the temperature of the room where the occupants will be spending most of their time.

*Do not* install the sensor where it can be affected by the following:

- Dead spots behind doors, in corners or under cabinets
- Hot or cold drafts from air ducts
- Radiant heat from the sun, appliances, or fireplaces
- Concealed pipes and chimneys
- Surfaces affected by a cold or heat source on side opposite the sensor

#### SENSOR INSTALLATION

- 1. Install shielded or nonshielded two wire twisted cable from the PTAC to the sensor location. Maximum distance is 50 ft.
- 2. Pull the decorative cover off the sensor base.
- 3. From the rear of the base, push the end of the remote sensor through the center of the plastic plate. Make sure the sensor extends approximately 1/4 inch into the housing.
- 4. Position the sensor base on the wall, in the desired location, and mark two mounting holes as shown in the sensor base mounting illustration.
- Pull two sensor wires through the opening in the sensor base and secure the sensor base to the wall using wall anchors, if required. Drill size for the wall anchors is 3/ 16 inch; drill size for the wire leads is 1/2 inch. Be careful not to let the wires fall into the wall opening.
- 6. Using twisted wire cable, connect the leads of the remote sensor to the cable. Wire nuts are provided to secure the connection. *The wires can be connected with either polarity.*
- 7. Push cable sensor leads through the hole in the wall. Seal the hole in the wall around the cable to eliminate any draft that might affect the sensor.
- 8. Secure sensor base to wall with screws provided. Do not use hex head screws. Snap cover onto remote sensor base.





#### Sensor Base Mounting

#### WIRING THE SENSOR





To prevent property damage, personal injury or death due to electric shock, do not run any thermostat wiring in a conduit with electrical power wiring.

1. Disconnect power to the unit.

- 2. Remove the PTAC cabinet front to expose the control panel area.
- 3. Remove indoor ambient thermistor (IAT).



4. Cut off end of thermistor, separate leads 1" back from cut and strip 1/2" of insulation from each lead.



5. Wire nut the stripped leads to the two sensor wires running from terminals 2 and 3 on the remote temperature sensor base .

# REMOTE TEMPERATURE SENSOR

6. Place the mode switch in the "OFF" position. Reestablish power to the unit. The remote temperature will automatically activate.

**NOTE:** Ensure the mode switch is in the OFF position before electrical power is applied to the unit. If the mode switch is not in the OFF position when electrical power is applied to the unit, the random restart feature will activate causing a two to four minute start-up delay.



**Control Panel** 



Wiring Schematic for Remote Temperature Sensor

#### DESCRIPTION - KLO3E

THE UNIT.

The Key Lock kit prevents tampering of the controls used to set temperatures and heating or cooling functions.



MAY BE PRESENT. FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH. THE UNIT'S OFF SWITCH DOES NOT DISCONNECT ALL POWER TO



UNDERWRITERS LABORATORIES INC.® LISTED. FOR INSTITU-TIONAL USE ONLY WHERE SUPERVISORY MONITORING IS AVAILABLE. ANY OTHER USE MAY INCREASE THE RISK OF PERSONAL INJURY OR PROPERTY DAMAGE.



#### Keylock Assembly

Grasp the cabinet front and pull the bottom of the cabinet away from the chassis until the retaining clips disengage. See Figure 1.

**NOTE:** If front is secured with a screw, remove front mounting screw, then follow removal procedure.

### SECURITY KEY LOCK



Figure 1

2. Gently disengage the original control door from the door slots on the top of the front cover, and discard door. See Figure 2.





3. Insert the key lock door assembly in the housing slots.



Figure 3 4. Re-attach cabinet front to chassis.

# SUBBASE

#### DESCRIPTION

PTSB000E	Non-electrical
PTSB215E	115 volt - 20 15 amp
PTSB320E	230/208 volt - 15 & 20 amp
PTSB330E	230/208 volt - 30 amp
PTSB420E	265 volt - 15 & 20 amp
PTSB430E	265 volt - 30 amp

The subbase may be installed on the wall sleeve before or after installing the wall sleeve. The subbase is prewired. Electrical connections can be made on the left side after the access cover is removed. A grounding screw is provided.

**NOTE:** The wall sleeve must be installed a minimum of 3¼ inches or maximum of 5 inches above a finished floor and a minimum of 2¾ inches from a finished wall.

### 

HIGH VOLTAGE

DISCONNECT ALL POWER BEFORE SERVICING, INSTALLING OR CONNECTING THE SUBBASSE OR ANY EQUIPMENT OR CHANGING ANY EXISTING WIRING. MULTIPLE POWER SOURCES MAY BE PRESENT. FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

THE UNIT'S OFF SWITCH DOES NOT ALWAYS DISCONNECT ALL POWER TO THE UNIT.

**IMPORTANT NOTE:** To avoid equipment damage, use copper conductors only.

**NOTE:** The installation and servicing of this equipment must be performed by qualified, experienced technicians only.

1. Remove parts B and C from the subbase and join together using two metal screws provided. This assembly now becomes the right front cover (Part Z) of the subbase.



- 2. Position subbase under the front of the wall sleeve.
- 3. Align the back edge of the flange on cover A to front of the wall sleeve flange.

**NOTE:** A properly installed subbase will extend 1-1/2 inches to the front of the wall sleeve. Do not mount flush to the front of the wall sleeve.

- 4. Drill four 1/8 inch holes in wall sleeve to line up with holes in subbase. Mount subbase to wall sleeve with four sheet metal screws provided with kit.
- 5. Remove the left front cover from the subbase.
- 6. Position skirting on each side of wall sleeve to prevent the entry of foreign materials. Trim skirting to desired length. Attach skirting with four sheet metal screws provided with kit.
- 7. Wire subbase for appropriate voltage. **NOTE:** The proper subbase must be ordered to obtain the correct electrical receptacle.

- 8. After wiring is complete, moun subbase with provided screws.
- 9. When installing optional acces refer to each installation instruc

#### PART/LOCATION IDENTIFICATION

A Left Front Cover B Right Front Panel C Front Cord Panel D Wall Sleeve Hole Location E Skirting Hole Location Z Right Front Cover Assembly

-- Leveling Legs (Not Shown)









### Wiring Diagram



**NEMA Plug Configurations** 

### DESCRIPTION - SBEC10\*

The subbase extension cover is used when existing PTSB330BA1, PTSB330B, PTSB330C, or PTSB330D subbases are already installed on the wall sleeve, and the subbase needs to be converted to a PTSB330E type subbase to allow additional room to install the new LCDI power cord.

The Subbase Extension Cover kit must be installed in order to maintain proper clearances for the power cord on all 230v 30 amp PTAC chassis manufactured after August 1, 2004.

### INSTALLATION

 Remove the right hand subbase cover from the existing subbase by removing the two screws holding the cover in place. Save these screws for later use. (Figure 1)

# SUBBASE EXTENSION COVER

- 2. Unplug and remove the old PTAC chassis from the wall sleeve.
- 3. Install the new PTAC chassis into the wallsleeve and plug the PTAC power cord into the subbase power receptacle.
- 4. Place the supplied subbase extension cover on the subbase in the same location that the old right hand cover was removed. Secure the subbase extension cover to the subbase using the screws removed in Step 1. (Figure 2)



Figure 2

#### DESCRIPTION

WS900D	Standard PTAC sleeve
WS900SC	Seacoast triple protected
WS900-INTERNAL	Internal drain connected for window-wall installations (DK900D sold separately)

#### FOR CUSTOM COLORED SLEEVES, CONTACT YOUR PTAC SALE REPRESENTATIVE.



The wall sleeve must be installed before the air conditioner or heat pump chassis can be set in place. Read the instructions thoroughly before proceeding.

#### Pre-installation Considerations

Before proceeding with the sleeve installation, ensure the following guidelines for locating the wall opening and sleeve are met:

• The wall opening must be the correct size. See the figures below for wall sleeve Dimensions and minimum wall opening size.



Wall Sleeve Dimensions



WALL SLEEVE

Allow Front Clearance (See Table 1)

#### Minimum Unit Clearances

- The wall sleeve will need to be installed with minimum clearances to the floor and adjacent walls. Minimum projections of the sleeve into and out of the room will also have to be met. See Minimum Unit Clearances and Minimum Interior and Exterior Projections Figures as well as Minimum Clearances and Projections table for details.
- If installed in a concrete or masonry wall, a lintel must be provided in the wall opening for support. **Do not use the wall sleeve as a lintel**. See Framing with Lintel Figure for a typical lintel construction.



#### Framing with Lintel

- When installed in the opening, the wall sleeve must be horizontally level from side to side and pitched (one quarter bubble in the sight glass) to the outside. DO NOT INSTALL LEVEL (FRONT TO BACK) OR SLOPE THE WALL SLEEVE TOWARD THE ROOM.
- The installer must determine and supply the mounting bolts and/or screws to attach the wall sleeve to the sides of the wall opening. Make sure the wall opening is adequate for strong support.
- The installer must provide adequate sealing and insulation around the sleeve after it is installed (air and water tight). See Block and Brick Veneer Installation Figure for one of many types of constructions.


#### Block and Brick Veneer Installation



**Minimum Interior and Exterior Projections** 

MINIMUM CLEARANCES AND PROJECTIONS						
Quiting	Minimum Clearances				Minimum Projection	
Option	Α		В		С	
	in.	mm	in.	mm	in.	mm
Wall Sleeve Only	3	75	0	0	0	0
Subbase Kit	3	75	3 1/4	85	2 3/4	70
Leveling Legs Kit	3	75	3	75	2	50
Duct Kit	3	75	0	0	1 3/8	35
Drain Kit	3	75	0 <sup>1</sup>	0 <sup>1</sup>	0	0
Hard Wire Kit	3	75	1 1/4	30	0	0
Hydronic Heat Kit "A" Series	9	230	0 to 3 1/4 <sup>3</sup>	0 to 85 <sup>3</sup>	32	752
Hydronic Heat Kit "J" Series	6	150	0	0	2 1/2	65

# WALL SLEEVE

- <sup>1</sup> If inside mounted then B = 1 1/2 inches (40 mm).
- <sup>2</sup> To achieve a flush fit between the hydronic front and the finished wall, Dimension "C" must be between 3" and 3 1/8". If this dimension is more than 3 1/8" there will be a gap between the front and the wall. This gap could permit occupant access to hydronic lines or other dangerous parts.
- <sup>3</sup> This dimension can be from 0" to 3-1/4", but cannot exceed 3-1/4". If this dimension exceeds 3-1/4", the skirt around the front will not reach the floor.
- For installations in walls deeper than 13-1/2 inches, special care is necessary to prevent problems with rain water, condensate drainage and intake/discharge air. Under these circumstances, careful job site analysis and precautions are required. You must consult with your Sales Representative and receive approval before attempting such installations.
- If used, a 230/208 volt wall receptacle must be located within 58 inches of the lower right sleeve corner. Extension cords must not be used with the unit. See the note on Wall Sleeve Dimensions Figure.



#### Minimum Wall Opening Dimensions

When 230/208 volt units are to be installed, the power supply may be either cord connected or permanent wiring. Permanent wiring may be done through the accessory hard wire junction box, or the accessory subbase.

When 265 volt units are to be installed, the power supply must be permanent wiring. Permanent wiring may be done through the accessory hard wire junction box, or the accessory subbase. An exposed cord connection on 265 volt units is not permitted.

The subbase accessory includes leveling legs. If added wall sleeve support is required and the subbase is not to be used as an accessory, leveling leg kit may be installed.

#### Drain Kit

An indoor/outdoor drain kit is available as an accessory item. When a drain kit is to be installed, do so before installing the wall sleeve in the wall. See the drain kit for actual installation instructions.

# *Subbase, Leveling Legs, Main Duct, and Hydronic Heat Kits*

Installation of these kits requires drilling of mounting holes on both sides of the wall sleeve. The minimum required clearance distance between the wall sleeve and wall is shown in Minimum Clearances and Projections Table. If the distance between wall sleeve and wall will be at or near the minimum clearance distance, mount these kits on the sleeve before installing the sleeve in the wall. The kit installation instructions are included with the accessory kits.



#### Wall Sleeve Dimensions

#### Outside Enclosure Panel Removal

The sleeve stiffener must be taken out before the enclosure panel can be removed from the sleeve.

The enclosure panel can be removed by folding the four flaps up and downward and manipulating the front ends of the top plus bottom towards the center. The entire panel can be pulled out diagonally from one side.

Install the wall sleeve condenser air grille by using the screws and holes provided.

#### Installation (WS900B or WS900D)

After the wall opening is checked and approved for location, size, and clearances, complete the following to install the wall sleeve. NOTE: Check with Amana<sup>®</sup> Brand Technical Service when a chassis is installed in any wall sleeve not supplied by Goodman.

- 1. Remove the outside enclosure panel from the wall sleeve.
- 2. Slide the wall sleeve into the wall opening. Do not distort the cabinet shape to fit the wall opening. The unit chassis must fit snugly and uniformly into the wall sleeve.
- 3. Locate the sleeve within the range of minimum projections, as shown in Minimum Wall Opening Dimensions and Minimum Interior and Exterior Projections Figures, so both sides are at least the minimum projection from the wall.
- 4. Check the level of the wall sleeve. For proper drainage, the sleeve should be level from side to side and onequarter bubble in the sight glass sloping to the outside.
- Two holes will need to be drilled in both sides of the wall sleeve for mounting into the wall. Drill holes of proper size and in the proper location so the screws will engage into strong supporting members of the wall. <u>DO</u> <u>NOT DRILL THROUGH BOTTOM OF SLEEVE</u>. The following figure shows possible fastening methods.



#### Attaching Wall Sleeve to Opening

- 6. Check the level of the wall sleeve and adjust if necessary.
- 7. Caulk or seal around the outside of the entire sleeve.
- 8. If the unit chassis will not be installed immediately, replace the enclosure panel on the outside opening of the sleeve. This will prevent weather damage to the building interior.
- 9. Recycle or dispose of packaging materials per local codes.

## WALL SLEEVE ADAPTER

#### DESCRIPTION

SEZA0501A	Friedrich
SECM1101A	ClimateMaster

Adapter kit that allows Amana<sup>®</sup> brand PTAC models to fit into existing Friedrich and ClimateMaster wall sleeves.

The following tools and equipment are needed to install this kit:

- Tight Fitting Gloves
- Cordless Nut Driver with 1/4" and 5/16" sockets

### INSTALLATION KIT PARTS

The Installation kit contains the following parts. Make sure all parts are included before beginning. If parts are missing contact the dealer where the kit was purchased.

**NOTE:** Parts are listed in the order in which they are used, and are illustrated in Figure 1.

ltem	Description	Quantity
А	Bracket Adapter	1
В	Tinnerman Speed Nuts	6
С	Screw, #8 x 1", 1/4 hex	7





### Installation Kit Parts

BEFORE YOU BEGIN:

Proper installation of the Friedrich/ClimateMaster sleeve adapter kit helps ensure trouble-free operation. Improper installation can result in problems ranging from noisy operation to property or equipment damage. Proper installation requires mechanical experience and aptitude.

## 

INSTALLATION AND REPAIR FOR THIS UNIT SHOULD BE PERFORMED ONLY BY INDIVIDUALS MEETING THE REQUIREMENTS OF AN "ENTRY LEVEL TECHNICIAN" AS SPECIFIED BY THE AIR-CONDITIONING, HEATING, AND REFRIGERATION INSTITUTE (AHRI). ATTEMPTING TO INSTALL OR REPAIR THIS UNIT WITHOUT SUCH BACKGROUND MAY RESULT IN PRODUCT DAMAGE, PERSONAL INJURY OR DEATH.

- Carefully read <u>all</u> of the installation instructions before installing. Make sure each step or procedure is understood and any special considerations are taken into account before starting installation.
- Assemble all tools, hardware, and supplies needed to complete the installation. Some items may need to be purchased locally. Make sure everything needed to install the kit and air conditioner is on hand before starting.

To avoid risk of personal injury, property damage due to air conditioner weight and exposed sharp edges, read and follow the cautions below:





MAKE SURE AIR CONDITIONERS DOES NOT FALL DURING THE INSTALLATION.

## WALL SLEEVE ADAPTER

BRACKET ADAPTER KIT INSTALLATION



This kit is to be installed on an existing wall sleeve.

1. Remove Bracket Adapter from box. Place the supplied Tinnerman speed nuts to the bracket adapter.



Wall Sleeve Self-Drilling Screws (7 typ.)



**Bracket Adapter Installation** 

5. Install Amana<sup>®</sup> brand PTAC air conditioning unit per unit installation instructions.



Figure 2

**Tinnerman Speed Nut Installation** 

- 2. Remove screws securing air conditioner to wall sleeve. Set aside.
- 3. Remove competitor's air conditioner unit that is to be replaced from wall sleeve.
- 4. Align adapter to sleeve. Ensure all four exterior surfaces are flush. Using the seven supplied #8 x 1", 1/4 self-drilling screws, secure the back of the bracket adapter to existing wall sleeve.



DESCRIPTION - WS9\*\*D1

Extra Deep Sleeves:

WS9xxD1	Extra deep 16.0" to 24.0" - 1.0" increments
WS928D1	Extra deep 28.0"
WS930D1	Extra deep 30.0"
WS936D1	Extra deep 36.0"

These sleeves designed for thicker wall installations or special room configurations.

# Install before the air conditioner or heat pump chassis is set in place.

When 230/208 volt units are to be installed, the power supply may be either cord connected or permanent wiring. Permanent wiring may be done through the accessory hard wire junction box, or the accessory subbase.

When 265 volt units are to be installed, the permanent wiring must be used for the power supply. Permanent wiring can be done through the accessory hard wire junction box, or the accessory subbase. An exposed cord connection on 265 volt units is not permitted.

The subbase accessory includes leveling legs. If added wall sleeve support is required and the subbase is not to be used, an accessory leveling leg kit may be installed.



#### Drain Kit

An indoor/outdoor drain kit is available as an accessory item. When a drain kit is to be installed, do so before installing the wall sleeve in the wall. See the drain kit for actual installation instructions. For improved drainage, install indoor drain kit as close to wall as possible.

# Subbase, Leveling Legs, Main Duct, and Hydronic Heat Kits

Installation of these kits requires drilling of mounting holes on both sides of the wall sleeve. The minimum required clearance distance between the wall sleeve and wall is shown in Table 1. If the distance between wall sleeve and wall will

# WALL SLEEVE (EXTENDED)

be at or near the minimum clearance distance, mount these kits on the sleeve before installing the sleeve in the wall. The kit installation instructions are included with the accessory kits.







Allow Front Clearance (see Table 1)





Figure 3 - Minimum Wall Opening Dimensions

# WALL SLEEVE (EXTENDED)

MINIMUM CLEARANCES AND PROJECTIONS						
	MINIMUM CLEARANCES				MINIMUM PROJECTION	
OPTION	A (Figure 2)		B (Figure 3)		C (Figure 4)	
	Inches	mm	Inches	mm	Inches	mm
Wall Sleeve Only	3	75	0	0	0	0
Subbase Kit	3	75	3 1/4	85	2 3/4	75
Leveling Legs Kit	3	75	3	75	2	50
Duct Kit	3	75	0	0	2 3/8	35
Hydronic Heat Kit	9	230	0 to 3 1/4 <sup>3</sup>	0 to 85 <sup>3</sup>	3 <sup>2</sup>	75 <sup>2</sup>
Drain Kit	3	75	01	0 <sup>1</sup>	0	0
Hardwire Kit	3	75	1 1/4	30	0	0

<sup>1</sup> If inside mounted then  $B = 1 \frac{1}{2}$  inches (40 mm)

<sup>2</sup> To achieve a flush fit between the hydronic front and the finished wall, Dimension "C" must be between 3" and 3 1/8". If this dimension is more than 3 1/8" there will be a gap between the front and the wall. This gap could permit occupant access to hydronic lines or other dangerous parts.

<sup>3</sup> This dimension can be from 0" to 3-1/4", but cannot exceed 3-1/4". If this dimension exceeds 3-1/4", the skirt around the front will not reach the floor.







#### PRE-INSTALLATION CONSIDERATIONS

Before proceeding with the sleeve installation, ensure the following guidelines for locating the wall opening and sleeve are met.

- The wall opening must be the correct size. See Figure 1 for wall sleeve dimensions and Figure 3 for minimum wall opening size.
- The wall sleeve needs to be installed with minimum clearances to the floor and adjacent walls. Minimum projections of the sleeve into and out of the room will also have to be met. See Figures 2 and 4 as well as Table 1 for details.
- If installed in a concrete or masonry wall, a lintel must be provided in the wall opening for support. Do not use the wall sleeve as a lintel. See Figure 5 for a typical lintel construction.
- When installed in the opening, the wall sleeve must be horizontally level from side to side and pitched (one quarter bubble in the sight glass) to the outside. DO NOT SLOPE THE WALL SLEEVE TOWARD THE ROOM.

- The installer must determine and supply the mounting bolts and/or screws to attach the wall sleeve to the sides of the wall opening. Make sure the wall opening is adequate for strong support.
- The installer must provide adequate sealing and insulation around the sleeve after it is installed. See Figure 6 for one of many types of constructions.
- If used, a 208/230-volt wall receptacle must be located within 58 inches of the lower right sleeve corner. Extension cords must not be used with the unit. See the note on Figure 1.

**Note:** Additional extension kits are not allowed beyond the 24" wall sleeve depth.

#### **Outdoor Enclosure Panel Removal**

The sleeve stiffener must be taken out before the enclosure panel can be removed from the sleeve.

- 1. Remove the zig-zag folded cardboard sleeve stiffener (Figure 7).
- 2. Grasping the top and bottom flanges of the rear closure panel as shown in Figure 8, pull the entire panel out diagonally from one side.

Install the wall sleeve condenser air grille by using the screws and holes provided. (See the Installation Instructions provided for the grille kits.)



Figure 5 - Framing with Lintel



Figure 6 - Block and Brick Veneer Installation



Figure 7- Sleeve Stiffener Removal

## WALL SLEEVE (EXTENDED)



Figure 8 - Panel Removal

After the wall opening is checked and approved for location, size, and clearances, complete the following to install the wall sleeve.

- 1. Slide the wall sleeve into the wall opening. Do not distort the cabinet shape to fit the wall opening; the unit chassis must fit snugly and uniformly into the wall sleeve.
- 2. Locate the sleeve within the range of minimum projections, as shown in Figures 3 and 4, so both sides are at least the minimum projection from the wall.
- Check the level of the wall sleeve. For proper drainage, the sleeve should be level from side to side and one-quarter bubble in the sight glass sloping to the outside.
- 4. Two holes will need to be drilled in both sides of the wall sleeve for mounting into the wall. Drill holes of proper size and in the proper location so the screws will engage into strong supporting members of the wall. DO NOT DRILL THROUGH BOTTOM OF SLEEVE. Figure 9 shows possible fastening methods.



#### Figure 9 - Wall Sleeve Attachment to Opening

- 5. Check the level of the wall sleeve and adjust if necessary.
- 6. Caulk or seal around the outside of the entire sleeve.
- 7. If chassis is not immediately installed, reinstall the outdoor enclosure panel.
- 8. Recycle or dispose of packaging materials per local codes.



THERMOSTAT (WALL MOUNTED) - DS01E



## MOTION & DOOR SENSOR - DD01E



### UNIT RADIO - DT01A

The following installation instructions are for a typical installation. Please contact your PTAC salesperson for additional assistance and explanation prior to ordering materials or cutting openings.

#### BEFORE BEGINNING INSTALLATION,

#### PLEASE READ IMPORTANT NOTES BELOW:

- If devices are to be powered, field installed wiring will need to be run from thermostat location to unit location and from door sensor location to PTAC location and from wired magnet to sensor location.
- If wireless platform DP01, DP01E or DL01E are being utilized, then room numbers <u>MUST BE CONFIGURED</u> in the control board prior to binding wireless devices.
- All units must have DT01A antenna for wireless devices to communicate properly.

Sequence of installation:

- 1) Mount the peripherals
  - 2) Verify operation of the door sensor

- 3) Program room numbers
- 4) Bind peripherals
- 5) Reattach peripherals to their mounted backplates
- 6) Install optional security screws
- Installation and videos are available on our website at <u>www.amana-ptac.com</u>.
- Use only one DD01E Passive Infrared Motion Sensor (PIR) door switch combination device and/or one DS01E to one DigiSmart<sup>™</sup> PTAC unit.

### ANTENNA INSTALLATION FOR DT01\* KIT

A DT01\* antenna must be installed on the digital PTAC to allow operation of either the DS01\* remote RF thermostat or a DD01\* combination PIR motion sensor and door switch.



### PREPARATION

- 1. Disconnect power to the unit by unplugging the power cord at the wall outlet or subbase, or disconnect power at the fuse box or circuit breaker.
- 2. If the cabinet front is screwed to the chassis, remove the 1/4" screw (or screws) . See following figure.



3. Remove cabinet front from chassis by tilting the bottom of the front forward, lifting slightly up and forward.

4. Mount the antenna as high up on the control panel as possible and as far to the right as possible in a location that will not interfere with the reinstallation of the PTAC polymer room front. Mark holes for screw location. Remove antenna housing and drill two 1/8" holes where marked. Some units may have the holes already predrilled in the correct location.



DT01\* Mounting

- 5. Remove antenna cable and route cable through opening in bottom of antenna housing.
- 6. Mount antenna housing with two screws as shown in figure. (NOTE: The Amana<sup>®</sup> brand logo should be in the lower right hand corner).
- 7. Plug wire harness from antenna into connector on the control board to the right of the master switch, being careful not to bend and/or break the wires when you connect the cable to the PTAC. Gently push the connector into place by pushing on the edge of the connector with your thumb nails. *Avoid pushing directly on the wires.*
- 8. Restore power to the PTAC unit.
- 9. Reinstall the polymer room cover.

**NOTE:** The LED must be oriented at the **top** of the antenna housing (the Amana<sup>®</sup> brand logo will be on the lower right) for proper unit operation.

#### THERMOSTAT INSTALLATION FOR DS01E KIT

**NOTE:** A DT01\* must be installed on the digital PTAC unit for the DS01\* to be operable.

Skip these steps if not installing.

 Select thermostat mounting location about five feet above the floor, on an inside wall, out of direct sunlight, away from sources of radiant heat (lamps, fireplaces, heating and air conditioning equipment, etc.), away from windows or door to the outside, and avoid areas with poor air circulation. If the PIR in the thermostat is to be used with a DD01\* device as a 2nd motion sensor, point the thermostat towards the area where you are requiring additional motion sensing. Ensure location is out of the path of foot traffic where a person might accidentally bump into the thermostats and damage the device.

- 2. Remove thermostat from mounting plate by pulling apart at the bottom of the thermostat about 1", and slide thermostat up to release from the top of the mounting plate.
- 3. Place thermostat mounting plate against the wall at desired location and mark placement of mounting holes. Make sure the UP arrow is pointing up on the mounting plate.
- 4. If mounting in drywall, tap plastic anchors into wall. For other surfaces, drill a 3/16" hole.
- 5. Screw mounting plate to the wall. <u>DO NOT SNAP THER-</u> <u>MOSTAT INTO PLACE UNTIL AFTER BINDING PROCESS.</u> *See Binding Instructions.*
- Install four (4) AA batteries (included) into the back of the thermostat. Terminals are marked "+" and "-" for polarity.

**NOTE**: Do not install thermostat on wall plate until all configuration settings and binding processes have been completed.

#### WIRED POWER OPTION

- 1. If the option for wired power is used, the two thermostat wires (20 gauge minimum field supplied) can be connected to the thermostat.
- 2. Route wires through the opening in the mounting plate.
- 3. Loosen set screws on wired terminal and insert wires into the opening. Tighten set screws.
- 4. Connect wires at PTAC unit to terminal pins C and R. The wire harness kit PWHK01C is required for this connection.



BATTERY CONNECTION

**NOTE:** For battery connection the 2 jumpers must be positioned as shown above, with jumpers on the center & left pins.



#### POWERED CONNECTION

**NOTE:** For powered connection, the 2 jumpers must be positioned as shown above, with jumpers on the center & right pins.

### MOUNTING SENSOR/DOOR MAGNET INSTALLATION FOR DD01E KIT

DDO1E must be mounted on the top door frame as close to the door as possible in the horizontal position.

A DT01E must be installed in the PTAC unit for the DD01E to be operable.

#### Skip these steps if not installing.

- 1. Remove motion sensor from mounting plate by pulling apart.
- 2. Mount the back plate on the door trim directly above the door using the enclosed screws. (Position so the UP arrow is pointing up.) Mount the DD01E as low as possible on the door frame to be as close to the moving part of the door as possible without interfering with the door opening or closing. Choose a location for mounting the back plate that will provide good coverage of the PIR for motion into the room. Make sure that the DD01E will not interfere with the normal opening and closing of the door.

DO NOT SNAP MOTION SENSOR IN PLACE UNTIL AFTER BINDING PROCESS.

See Binding Instructions.



#### **DD01E Mounting**

3. Install two (2) AA batteries (included) into the back of the thermostat. Terminals are marked "+" and "-" for polarity. *Do NOT put batteries into the device until AFTER the magnet location is selected to test.* 

# WIRED MAGNET AND POWERED DOOR SENSOR OPTION

In cases where there is no top door frame, the sensor will need to be mounted on the wall next to the door. In these cases a wired magnet (a field supplied single pole single throw wired magnet) can be recessed or surface mounted and wired to the door sensor. The magnet will be a recessed style magnet with wired switch. The wires for the sensor (20 gauge field supplied) in the magnet will need to be run during construction. Two wires will be run from the door sensor location to the PTAC unit; the remaining two wires will be run from the magnet location to the sensor location. The door sensor has four (4) terminal locations for wired power and/or wired magnets. The two (2) terminals closest to the binding button are for wired power and the top two (2) terminals are for wired magnet.

Run the magnet wires through the opening in the center of the door sensor wall plate.

#### CONNECTING MAGNET

Using a pocket size straight blade screw driver push down on the terminal button to open the socket, insert wire into socket and release the terminal button. Insert one wire into each of the two (2) terminals. See image below for wire locations.

#### POWER CONNECTION

If using the wired powered option for the door sensor, using a pocket size straight blade screw driver, push down on the terminal button to open the socket. Insert wire into socket and release the terminal button. Insert one wire into each of the two (2) terminals. See following for wire locations. Connect the power wires from the door sensor to the PTAC on terminals C & R. The wire harness kit PWHK01C is required for this connection.

# WIRELESS RF (RADIO FREQUENCY) CONTROLS

Viewed from the back with the power block in upper right corner.

ACCESSORIES





Note: For battery connection, the jumper must be placed as shown above



Note: For 24v powered connection, the jumper must be placed as shown above

#### DOOR MAGNET INSTALLATION

NOTE: MAGNET BUCKETS ARE SHIPPED FROM THE FACTORY WITH THE MAGNETS IN POSITION A. THE POSITION MAY CHANGE BASED ON THE DOOR AND DOOR FRAME ALIGNMENT.

Mount the door magnet holder on the front of the door where it will be as close as possible to the bottom of the motion sensor but no more then 1/8" from the bottom center of the motion sensor (DD01E) when the door is closed.

Select the correct slot in the magnet holder (there are three slots) to obtain 15/16" from back of sensor mounting plate to the center of the magnet. (If you can easily slide a business card between the magnet and the DD01E sensor, unit is properly placed vertically.) *See image below for magnet and sensor alignment.* 

Screw in place with the 2 screws provided. Open and close the door to make sure that the magnet holder and motion sensor will not interfere with normal opening and closing of the door. *See image below and on following page.* 



Do NOT install batteries until you are ready to test the magnet location with DD01E.



Select one of the three slots that places the magnet 15/16" from the sensor mounting plate on the door frame. *See following examples.* The door frame and door usually will not align. Place holder on the door and select the slot that places the magnet as close as possible to the 15/16" depth from the back of the DD01E mounting plate.



ABOVE SHOWS MAGNET 15/16" FROM THE SENSOR MOUNTING PLATE IN DIFFERENT SLOT POSITIONS

NOTE: Two (2) 1/4" spacers are provided in this kit for instances where the door is recessed behind the door trim. See Construction style 4 above.

There is a line on the bottom of the DD01E to assist in aligning the magnet in the proper bucket location.

Above graphics are for example only. <u>Always</u> measure and place the magnet in the proper slot to obtain the 15/16" needed between the magnet and the sensor mounting plate on the door frame.



**IMPORTANT NOTE:** When properly installed, the center line mark on the bottom of the DD01E will line up with the center of the line of the magnet holder containing the magnet. Choose magnet position A, B, or C to align the magnet 15/16" from the back of the DD01E.

DOOR SENSOR OPERATION VERIFICATION

NOTE: Do NOT attempt to bind a DD01E unless proper operation has been validated.

To verify that door sensor is installed properly:

- 1. Install batteries into DD01E and snap sensor onto wall plate.
- 2. Close the door. Green light in lens should illuminate. Open door and green light will turn off. *Repeat this step several times to ensure door sensor is operating correctly.*

Procedure must be accomplished within one minute. If not accomplished within one minute, remove batteries and repeat Steps 1 & 2.

#### Configuration Settings

The PTAC control will automatically self-configure to work with the wall thermostat (DS01E Kit) if installed and bound. The PTAC control will automatically self-configure to activate pre-configured energy management routine when the DD01E is installed and bound to the PTAC. Additionally, the setback times and setback temperatures can be changed using the configuration settings. If you are using DP01\* Front Desk Platform, the PTAC control will need to be configured to identify its room number placement.

#### STANDARD AND DS01E CONFIGURATION

Complete configuration settings section is located at the back of this manual.

## WIRELESS RF (RADIO FREQUENCY) CONTROLS

DPO1A, DP01E OR DL01E

ACCESSORIES

ENTERING ROOM NUMBER (SKIP IF NOT USING DP01\* FRONT DESK PLATFORM)

	FEATURE CODE	DEFAULT OPTION CODE
PTAC control set for a 4-digit room number.	٤4	
Last 2 digits are selected after feature code listed is reached.	65	
EXAMPLE: For Room "201", select "02": C4 = 02. Select "01": C5 = 01.	(4= <u>0</u> 2 (5=0 1	
If a room contains more than one unit (a suite), a suffix must also be entered to identify which unit is in the main room and which unit(s) are in bedroom(s). Master unit MUST ALWAYS have a 01 suffix and slaves a suffix or 02, 03, etc.		
EXAMPLE: For the bedroom unit closest to the main room (example: in room 224), r5=01.	r5=01	
If a property identifies rooms by an alpha character (such as WINGS), a prefix must also be entered to identify room numbers (example: A-115). r =4 then select the room # prefix.	۲۲	

Complete configuration settings section is located at the back of this manual.

#### **Binding of RF Devices**



**IMPORTANT NOTE:** If wireless platform DP01\*, DP01E or DL01E are being utilized, then room numbers MUST BE CONFIG-URED in the control board prior to binding wireless devices.

## DO NOT ATTEMPT TO BIND MORE THAN ONE ROOM AT A TIME AT THE SAME PROPERTY!!! RF TRANSMITS THROUGH WALLS.

The wireless devices (DS01E and or DD01E <u>must</u> be bound to the PTAC DT01E control for proper in-room communication. Ensure the unit is powered but in the OFF position.

*NOTE:* Both the DS01E and the DD01E must be bound to the PTAC unit during the same "learn" operation.

If you need to rebind one device - then you <u>must</u> rebind both devices during the same learn mode event.

#### All must be bound at one time.

- 1. Press and hold OFF button on the PTAC until L appears.
- 2. Press and then immediately release the white tactile button on the back of the DS01\* thermostat. L should now be displayed on the PTAC LED display. If L does not show on the display in 1-2 seconds, then press and release the white button a second time. Skip this step if there is no thermostat.
- Press and then immediately release the white tactile button on the back of the DD01\* motion sensor. L ⊆ or L = should now be displayed on the PTAC LED display.

If  $\lfloor \neg$  or  $\lfloor \neg$  does not show on the display in 1-2 seconds, then press and release the white button a second time. NOTE: If both a DD01\* and a DS01\* are being bound, then the display will show  $\lfloor \neg$ .

Skip if there is no motion sensor.

- 4. Press "OFF" on the PTAC touchpad to exit the binding sequence.
- 5. Slide top of the thermostat down onto the wall plate and then snap into place.

6. Provided optional security screws may be used in lower corners of the thermostat.



- 7. Snap motion sensor onto motion sensor mounting plate.
- 8. Provided optional security screws may be installed on right and left side of the sensor.
- 9. If you wish to change from the factory default settings, configure the device or devices that were bound. See the next section for configuration choices.

*NOTE: If a wireless device is replaced or added, all devices (including those previously bound) will need to be bound/re-bound to the unit. See directions above.* 

*Complete configuration settings section is located at the back of this manual.* 

## WIRELESS RF (RADIO FREQUENCY) CONTROLS

### SETBACK TEMPS - DD01E

**ACCESSORIES** 

The DD01<sup>\*</sup> and the Digi*Smart*<sup>™</sup> control can be programmed for 3 different times to activate temperature setbacks. The current factory default temperature setbacks in release are: 2° from set point in 30 minutes, 3° in one (1) hour, and 6° in three (3) hours. For each time, you can select a setback temperature. The amount of setback is the amount of degrees the control will operate from guest's setting in degrees F. If a change to the factory default temperature settings is desired, use the following instructions.

# USE OF SETBACK TEMPERATURES

DO NOT USE MOTION SENSING SETBACK TEMPERATURES IN ROOMS WHERE INCAPACITATED PERSONS OR ANIMALS ARE UNABLE TO CHANGE THE CONTROL SETTING.

AN UNATTENDED AIR CONDITIONER WITH EXTREME SETBACKS MAY RESULT IN UNDESIRABLE OR UNHEALTHY TEMPERATURE IN THE CONDITIONED SPACE, CAUSING UNDER HEATING, UNDER COOLING OR DEATH OF PERSONS OR ANIMALS.

	FEATURE CODE	DEFAULT OPTION CODE
First unoccupied set back temperature. Cooling example: 72° (guest set point) + 2° (Setback temperature) = 74° (operational set point).	Ъ	2
First unoccupied setback time. The first unoccupied setback time is the time between when the control determines that the room is not occupied and when the control sets the operating set point temperature back. The increments are in hours (.1 = 6 mins., .5 = 30 mins., 1 = 1 hour, etc.).	85	. 5
Second unoccupied setback temperature. Cooling example: $72^{\circ}$ (guest set point) + $4^{\circ}$ (Setback temperature) = $76^{\circ}$ (operational set point).	69	3
Second unoccupied setback time. Example: Operating set point would be 76° instead of 72°, one hour (1.0 hour) after guest leaves room.	4A	1
Third unoccupied setback temperature.	db	6
Third unoccupied setback time.		3

Complete configuration settings section is located at the back of this manual.

#### Suggested Wireless Thermostat Locations in Typical Room Layouts

Select thermostat mounting location about five feet above the floor, on an inside wall, out of direct sunlight, away from sources of radiant heat (lamps, fireplaces, heating and air conditioning equipment, etc.), away from windows or door to the outside, and avoid areas with poor air circulation. Ensure location is out of the path of foot traffic where a person might accidentally bump into the thermostats and damage the device.

NOTE: Due to the motion sensor inside the thermostat, do not point towards a window.



## 

This equipment is authorized for use under the United States Federal Communication Commission Rules and Regulations, Code of Federal Regulations Chapter 47 part 15 and must be installed in accordance with the instructions provided in this document. Failure to install or operate this equipment as instructed in this document could void the user's authority to operate the equipment. This equipment contains no user serviceable parts. Any modification or repairs to the internal components or to the antenna configuration of the equipment without the express written consent of Everex Communications, Inc., could void the user's authority to operate the equipment.

**NOTE:** To comply with FCC RF exposure requirements in section 1.1307, a minimum separation distance of 20cm (8 inches) is required between the equipment and all persons.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

# CONFIGURATION SETTINGS

### CONFIGURATION SETTINGS FOR R410A E SERIES MODEL BOARDS

The control can be configured to operate a wide range of options. The options listed below with the \* are the factory default settings. If these are acceptable, then the unit does not require any additional configuration and is fully operable. To configure the unit, first select the configuration feature code setting and then an option code to change from the factory default setting.

NOTE: When first entering the configuration mode, if you see " - - " then you have version 2.5 or higher. You can verify the software version by starting with the unit in the OFF position, and while holding down the "+" and "-" buttons , double click the COOL button and then release and push the FAN button within one second. The unit display will scroll through all of the thermister temperatures and the last item displayed will be CS (current software) and you will see 25 for v2.5.

> \*Other software versions may have different factory setback defaults. *Contact your PTAC representative to determine factory default settings.*

To enter configuration feature mode:

1. **Press** and **hold** the up and down **r** arrow keys at the

same time and **press** the **OFF** key twice within

a two (2) second time frame. The display will indicate

- -., and then release the  $\fbox$  key and press the  $\fbox$ 

key one time. The display will then alternate between C1

and **0**.

To select a different configuration feature code, press the

HEAT MEAT key until the desired configuration comes

up. To scroll to a previously viewed configuration codes

press the COOL COOL key.

Once you have scrolled to the correct feature, then to select the **option code** for your desired configuration,

press either the up or down key

the options of the selected feature code.

## To exit configuration mode:

- Press the OFF key. Configuration feature mode will also exit if no keys are pressed for a period of two (2) minutes.
- NOTE: If the unit will be controlled by a wireless thermostat (Goodman DS01E using DT01A antenna on the unit), the board may have to be configured to allow the wireless thermostat to operate the unit.

Enter Configuration Mode, select feature code  $\Box$ 



tion  $\mathbf{r} \mathbf{c}$  (rE) by pressing the down  $\sqrt[n]{}$  arrow.

NOTE: If the unit is being controlled by a wired wall thermostat, the board will have to be configured to allow the thermostat to operate the unit. To configure for a wired wall thermostat,

> Enter Configuration Mode, select Feature Code [](C1) by pressing the heat button and option [] (L5) by pressing the (down)  $\sqrt{}$  arrow.

# TO SET THE PTAC CONTROL FOR A 4-DIGIT ROOM NUMBER WIRED THERMOSTAT.

1. The PTAC control can be set for a 4-digit room number. To select the first two digits (floor), press the

 $\operatorname{HEAT}\left[\operatorname{HEAT}\right]$  key until  $\operatorname{LH}$  appears, then press the



up down arrows to select the first two digits.

2. To select the last two digits of the room number,

press the HEAT  $\parallel HEAT \parallel$  key until  $\mathbb{C}S$  appears, then



press the up and down v arrows to select the last 2 digits of the room number.

For example for Room "201", press the HEAT

key until [4 appears, then press the up\_\_\_down ar-

rows to select "02":  $\Box = \Box \Box$ .

Next to select the last two digits of the room number,

press the HEAT HEAT key until CS appears, then

press the up and down arrows to select "01":  $\Box$ 

3. If a room contains more than one unit (a suite), a suffix must also be entered to identify which unit is in the main room and which unit(s) are in bedroom(s). Master unit ALWAYS MUST have a 01 suffix and slaves a suffix or 02, 03, etc. To select the room # suffix, while

still in configuration mode, press the HEAT

key until  $r^{\mathsf{S}}$  appears. Then press the up and down

arrows to select the room # suffix. Example: For

the unit serving the main living area in room 224, press

the HEAT HEAT key until Sappears, then press

the up and down  $\overline{}$  arrow keys to select  $\overline{}$  ( $\Gamma$  =

**OO** appears in the display). Since **OO** is the factory default setting for configuration code -S, it may not be necessary to configure the suffix for the main room. For the bedroom unit closest to the main room in room

224, press the up and down arrow keys to select

01 **OI** (rS=OI appears in the display) Press the

key to exit configuration mode.

 If a property identifies rooms by an alpha character (such as WINGS), a prefix must also be entered to identify room numbers (example: A-115). To select the room # prefix, while still in configuration mode, press

the HEAT HEAT key until Appears. Then press

the up and down arrows to select the room # pre-

fix. Contact the manufacturer to have the prefix show as the correct letter on the platform.

## CONFIGURATION SETTINGS FOR SETBACK TEMPS - DD01E

NOTE: When first entering the configuration mode, if you see " - - " then you have version 2.5 or higher. You can verify the software version by starting with the unit in the OFF position, and while holding down the "+" and "-" buttons, double click the COOL button and then release and push the FAN button within one second. The unit display will scroll through all of the thermister temperatures and the last item displayed will be CS (current software) and you will see 25 for v2.5.

\*Other software versions may have different factory setback defaults. *Contact your PTAC representative to determine factory default settings.* 

# WARNING

USE OF SETBACK TEMPERATURES DO NOT USE MOTION SENSING SETBACK TEMPERATURES IN ROOMS WHERE INCAPACITATED PERSONS OR ANIMALS ARE UNABLE TO CHANGE THE CONTROL SETTING. AN UNATTENDED AIR CONDITIONER WITH EXTREME SETBACKS MAY RESULT IN UNDESIRABLE OR UNHEALTHY TEMPERATURE IN THE CONDITIONED SPACE, CAUSING UNDER HEATING, UNDER COOLING OR DEATH OF PERSONS OR ANIMALS.

To scroll to a previously viewed feature codes, press the



Once you have scrolled to the  $d^{-1}$  feature, press ei-

ther the up or down arrow  $\checkmark$  to scroll to the de-

sired first unoccupied setback temperature. Cooling example:  $72^{\circ}$  (guest set point) +  $2^{\circ}$  (Setback temperature) =  $74^{\circ}$  (operational set point).

key to scroll to 🗒 first unoccu-5. Press HEAT || HEAT

pied setback time. The first unoccupied setback time is the time between when the control determines that the room is not occupied and when the control sets the operating set point temperature back. The increments are in hours (.1 = 6 mins., .5 = 30 mins., 1 = 1

hour, etc.). Press either the up or down arrow

to the desired first unoccupied setback time. c

6. To select second unoccupied setback temperature,

key until d comes up. Press press the HEAT HEAT

either the up or down arrow to the desired sec-

ond unoccupied setback temperature.

Cooling example: 72° (guest set point) + 4° (Setback temperature) = 76° (operational set point).

key to scroll to d second unoc-7. Press HEAT cupied setback time. Press either the up or down ar-

to the desired second unoccupied setback row

time. Example: Operating set point would be 76° instead of 72°, one hour (1.0 hour) after guest leaves room.

8. Press **HEAT** HEAT || key to scroll to D third unoccupied setback temperature. Press either the up or

to the desired third unoccupied setdown arrow

back temperature.

key to scroll to L. third unoccu-9. Press HEAT HEAT pied setback time. Press either the up or down arrow

to the desired third unoccupied setback time.

10. To exit configuration mode:

Press the OFF OFF key. NOTE: Configuration feature mode will also automatically exit if no keys are pressed for a period of two (2) minutes.

- The changes made in configuration mode are now in effect.
- NOTE: Additional codes are present and may be accessed within this menu. Contact the manufacturer for additional information.

## CONFIGURATION SETTINGS FOR MOTION SENSOR KIT

The PTAC control will need to be configured to activate energy management routine using wired devices.

1. To enter configuration feature mode:

Press and continue to hold the up and down arrow keys and quickly press the OFF wey twice within a two (2) second time frame. The display will alternate between displaying the feature code C1 and the option code **0** (factory default setting). The lower right dot on the display will flash.

- 2. To select wired occupancy set back routine feature code, press the HEAT MEAT key until the desired C6 comes up. To scroll to a previously viewed configuration codes press the COOL [COOL] key.
- Once you have scrolled to the correct feature, then to 3. activate wired occupancy routine, press either the up

to scroll to option code 1 selecor down key

tion.

4. To activate the motion sensor, press the HEAT [HEAT] key until C7 comes up. Once you have scrolled to the correct feature, then to select option code 0 (code for open with motion), press either the up or down

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key to scroll through the options for the selected
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feature code.

5. To exit configuration mode:

Press the OFF wey. Configuration feature mode will also exit if no keys are pressed for a period of two (2) minutes.

Additional codes are present and may be accessed within this menu. Contact the manufacturer for additional information.

### CONFIGURATION SETTINGS FOR DPO1A, DP01E OR DL01F

ENTERING ROOM NUMBER (SKIP IF NOT USING DP01\* FRONT DESK PLATFORM)

1. The PTAC control can be set for a 4-digit room number. To select the first two digits (floor), press the

key until [4] appears, then press the HEAT HEAT



down arrows to select the first two digits.

2. To select the last two digits of the room number,

press the HEAT HEAT key until CS appears, then

press the up and down variable arrows to select the last 2 digits of the room number.

For example for Room "201", press the HEAT

key until CH appears, then press the up

rows to select "02":  $\Box = \Box \Box$ .

Next to select the last two digits of the room number,

press the HEAT HEAT key until CS appears, then

press the up and down arrows to select "01": CS

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= 0 I.
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3. If a room contains more than one unit (a suite), a suffix must also be entered to identify which unit is in the main room and which unit(s) are in bedroom(s). Master unit ALWAYS MUST have a 01 suffix and slaves a suffix or 02, 03, etc. To select the room # suffix, while

still in configuration mode, press the HEAT

key until  $r^{c}$  appears. Then press the up and down

arrows to select the room # suffix. Example: For

the unit serving the main living area in room 224, press

the HEAT HEAT key u

key until 🖒 appears, then press

the up and down  $\overset{\textcircled{}}{\frown}$  arrow keys to select  $\textcircled{}{\bigcirc}$  =

00 appears in the display). Since 00 is the factory default setting for configuration code  $r_{5}$ , it may not be necessary to configure the suffix for the main room.

For the bedroom unit closest to the main room in room

224, press the up and down arrow keys to select

01 0 (**-5**=**0** appears in the display) Press the  $\bigcirc$  key to exit configuration mode.

 If a property identifies rooms by an alpha character (such as WINGS), a prefix must also be entered to identify room numbers (example: A-115). To select the room # prefix, while still in configuration mode, press

the HEAT HEAT key until **F** appears. Then press

the up and down arrows to select the room # pre-

fix. Contact the manufacturer to have the prefix show as the correct letter on the platform.

## CONFIGURATION SETTINGS

Configuration Code	Description Option Code		Description	
C1	Interface	0*	Chassis Membrane*	
		rE	Wireless Remote	
		L5	Wired Thermostat	
C2	Fan Operation	bP	Button present	
		bA*	7-Button, reverts to Cyclic	
		А	Always run fan (even in Off)	
		bC	7-Button, revets to Continuous	
C3	Reverse Cycle Operation	С	Cooler Only	
		H*	Heat Pump*	
		0	Sevice No Operation "Eo"	
C4	Room I.D. Digit 1 & 2	00* - 99	00* - 99	
C5	Room I.D. Digit 3 & 4	00* - 99	00* - 99	
C6	Wired or Wireless Occupancy	0*	Off*	
		1	On	
		18	18 Hour Automatic Entry	
C8	Temp. Limiting Cool	60* - 72	60* - 72	
С9	Temp. Limiting Heat	68 - 90, 80*	68 - 90, 80*	
Cd	English / Metric Temp	F*	Fahrenheit Scale*	
		С	Celsius Scale	
d6	Sensorless Un-Occ. Time	1 - 32, 18*	1 - 32, 18*	
d7	1st Un-Occ. Set Back Temp.	1 - 16, 2*	1 - 16, 2*	
d8	1st Un-Occ. Set Back Time	.1, .5*, 1 - 24	.1 ,.5 ,1 - 24, .5*	
d9	2nd Un-Occ. Set Back Temp.	1 - 16, 3*	1 - 16, 3*	
dA	2nd Un-Occ. Set Back Time	.1, .5, 1* - 24	(d8) - 24, 1*	
db	3rd Un-Occ. Set Back Temp.	1 - 16, 6*	1 - 16, 6*	
dC	3rd Un-Occ. Set Back Time	.1, .5, 1 - 24, 3*	(dA) - 24, 3*	
dF	Jace Group Code	00* - 99	00* - 99	
r4	Room Prefix	00* - 99	00* - 99	
r5	Room Suffix	00* - 99	00* - 99	

See manufacturer for additional configuration options.

\*Indicates factory default