

# PACKAGED TERMINAL AIR CONDITIONER (PTAC) / PACKAGED TERMINAL HEAT PUMP (PTHP) AND ACCESSORY INSTALLATION INSTRUCTIONS

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# PTAC/PTHP AND ACCESSORY SAFETY

#### Your safety and the safety of others are very important.

We have provided many important safety messages in this manual and on your appliance. Always read and obey all safety messages.



This is the safety alert symbol.

This symbol alerts you to potential hazards that can kill or hurt you and others.

All safety messages will follow the safety alert symbol and either the word "DANGER" or "WARNING." These words mean:

# **ADANGER**

# AWARNING

You can be killed or seriously injured if you don't immediately follow instructions.

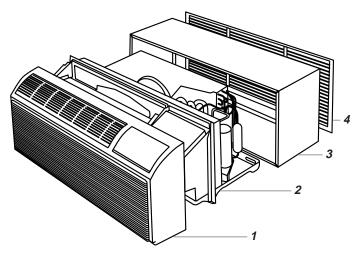
You can be killed or seriously injured if you don't follow instructions.

All safety messages will tell you what the potential hazard is, tell you how to reduce the chance of injury, and tell you what can happen if the instructions are not followed.

# PLANNING THE INSTALLATION

## **Typical Unit Components**

NOTE: The wall sleeve and outdoor grille are not provided.



- 1. Front cover
- 2. Chassis
- 3. Wall sleeve (not provided)
- 4. Outdoor grille (Louver) (not provided)

# Required Parts, Accessories and Options

Part Number	Description	
4396585	Wall sleeve - G-90 zinc coated steel is prepared in an 11-step process, then electrostatically coated with a polyester finish and cured in an oven for exceptional durability. The wall sleeve is insulated for thermal efficiency. 16 in. high x 42 in. wide x $13\%$ in. deep (40.6 cm x $106.7$ cm x $35$ cm) .	
4396586	Standard grille - standard, stamped aluminum, anodized to resist chalking and oxidation.	
4396591	Architectural Louvers - consist of heavy-gauge aluminum alloy:  Clear, extruded aluminum	
4396595	■ Dark bronze acrylic enamel	
4396587	Drain kit - attaches to the bottom of the wall sleeve for internal draining of condensate or to the rear wall sleeve flange for external draining. Recommended on all PTAC/PTHPs to remove excess condensate. Packaged in quantities of 10.	
4396594	Wall sleeve extension - 4 in. (10.2 cm) deep anodized aluminum extension that attaches to the outside of the wall sleeve when the wall is thicker than:	
	<ul> <li>13 in. (33 cm) if no accessories are attached to the wall sleeve</li> <li>12¾ in. (32.4 cm) if a lateral duct is used</li> </ul>	
	■ 11¾ in. (29.8 cm) if a subbase is used	
4396592	Subbase - provides unit support for walls less than 6 in. (15.2 cm) thick or for any wall structurally unable to support the chassis weight. Includes leveling legs, side filler panels and mounting brackets for electrical accessories. Accepts power disconnect switch and conduit kit.	
4396597	Conduit kit with junction box - makes field wiring connections for direct wired 265 volt PTAC/PTHPs. Kit includes a means of quick disconnect for easy removal of the chassis. It can be used with or without a subbase.	
4396590	Desk control kit - allows the PTAC/PTHP to be turned on or off from a remote central station via a 24 volt interface. All kits are field installed.	
4396593	Remote wall thermostat - wall mounted remote thermostat.	

MODE FAN

Part Number	Description	
4396598	Disconnect switch - installed in the subbase and provides a means for disconnecting power to the PTAC/PTHP.	
4396583	Wall sleeve adapter - G-90 zinc coated steel, 2.4 in. (6.1 cm) sleeve extension attached to the room side of the sleeve to allow for the installation of a 13¾ in. (35 cm) PTAC/PTHP into an 11½ in. (29.2 cm) wall sleeve.	
4396600	Lateral duct adapter - attaches to the PTAC/PTHP and provides a transition to direct up to 35% of the total airflow to a secondary room, either left or right of the PTAC/PTHP. Kit includes duct plenum with discharge grille and internal baffle, adapter and end cap.	
4396601	Lateral duct extension - 3 ft. (91.4 cm) insulated plenum that attaches to the left or right side of the duct adapter. The extension can be cut to length by the installer. Maximum allowable straight extension is 15 ft. (4.6 m).	
ATXFT0	Replacement filters - These are original equipment return air filters. They are reusable and can be cleaned by vacuuming, washing, or blowing out, and are sold in convenient 10 packs (2 filters per chassis).	
4396602	Front cover side mount kit - modifies the method of attaching the front cover when the PTAC/PTHP is mounted close to or against the floor.	

# INSTALLATION REQUIREMENTS

These instructions are intended as a general guide only and do not supersede any national or local codes in any way. Compliance with all local, state, or national codes pertaining to this type of equipment should be determined prior to installation.

Read this entire instruction manual before starting the installation.

All models are designed for through the wall installation only.

**IMPORTANT:** The installation of field wiring must conform to the requirements of the National Electrical Code, ANSI/NFPA NO. 70-(latest edition) in the United States, and any state laws and local ordinances (including plumbing or wastewater codes). In Canada, the installation of field wiring must conform to the requirements of the Canadian Electrical Code, PART I, CSA STANDARD C22.1-1993 or current edition. Local authorities having jurisdiction should be consulted before installation is made. Such applicable regulations or requirements take precedence over the general instructions in this manual.

#### **Tools and Parts**

Check that you have everything necessary for correct installation. Proper installation is your responsibility. Read and follow the instructions provided with any tools listed here.

#### **Tools Needed:**

- Sheet metal cutting tool
- Tape measure
- Phillips screwdriver
- Flat-blade screwdriver
- Level
- Drill
- Center punch

- ½ in. nut driver
- 5/16 in. nut driver
- 5/32 in. drill bit
- 3/16 in. drill bit
- 5/16 in. drill bit
- 1/12 in. drill bit

#### **Parts Needed:**

- Flashing
- Silicone sealant
- NEC Class 2, 24 volt thermostat wire

# **Location Requirements**

- This PTAC/PTHP is intended to be installed through an exterior wall of the building where the wall is 6 in. (15.2 cm) to 13 in. (33 cm) thick. For locations where the wall is a different thickness, see "Required Parts, Accessories, and Options."
- This PTAC/PTHP is intended to be installed using a wall sleeve in a wall opening.
- This PTAC/PTHP may be installed flush with the floor or at different heights above the floor. See "Required Parts, Accessories, and Options."
- The location shall accommodate the drainage of condensate.
   Condensate drainage options include drainage to the exterior of the building, to the interior of the building or to the wall interior.
- The location shall accommodate the correct electrical provisions based on the connection method (cord connected up to 230 volt, direct wired for 265 volt). See "Required Parts, Accessories, and Options."

**IMPORTANT:** The instructions indicate the order of installation of each part or accessory at the point where the component should be installed. If that accessory or part is not required or is already installed, then proceed to the next step.

#### **Accessory Kits**

#### Wall installation

- Drain kit attaches to the bottom of the wall sleeve for internal draining of condensate or to the rear wall sleeve flange for external draining. Recommended on all PTAC/PTHPs to remove excess condensate. Packaged in quantities of 10.
- Wall sleeve extension retrofit kit is a 2.4 in. (6.1 cm) sleeve extension attached to the room side of the sleeve to allow for the installation of a 13¾ in. (35 cm) PTAC/PTHP into an 11½ in. (29.2 cm) wall sleeve.
- Front cover side mount kit modifies the method of attaching the front cover.
- Subbase kit Includes leveling legs, side filler panels and mounting brackets for electrical accessories. Accepts power disconnect switch and conduit kit.

**IMPORTANT:** Subbase kit provides PTAC/PTHP support for walls less than 6 in. (15.2 cm) thick or for any wall structurally unable to support the chassis weight.

- Standard grille (louver) is stamped aluminum, anodized to resist chalking and oxidation. It consists of heavy-gauge aluminum alloy in the following finishes: clear, extruded aluminum and dark bronze acrylic enamel.
- Architectural louver is a replacement for the standard louver. It consists of heavy-gauge aluminum alloy in the following finishes: clear, extruded aluminum and dark bronze acrylic enamel.
- Lateral duct adapter kit attaches to the PTAC/PTHP and provides a transition to direct up to 35% of the total airflow to a secondary room, either left or right of the PTAC/PTHP. Kit includes duct plenum with discharge grille and internal baffle, adapter and end cap.
- Lateral duct extension is a 3 ft (91.4 cm) insulated plenum that attaches to the left or right side of the duct adapter. The extension can be cut to length by the installer. Maximum allowable straight extension is 15 ft (4.6 m).

The PTAC/PTHP is intended for mounting through an exterior wall. If the wall is thicker than 13 in. (33 cm), an extension to the wall sleeve must be used. The PTAC/PTHP should be installed level or pitched slightly to the outside. The exterior of the sleeve must be caulked at the building interface.

#### **Electrical**

The PTAC/PTHP will have field wiring configurations based upon the specific installation. Additional wiring options include:

 Disconnect switch kit installed in the subbase provides a means for disconnecting power to the PTAC/PTHP.

NOTE: See "Subbase Kit" previous.

- Desk control kit allows the PTAC/PTHP to be turned on or off from a remote central station via a 24 volt interface.
- Conduit kit with junction box makes the field wiring connections for direct wired 265 volt models and includes a means of quick disconnect for easy removal of the chassis. It can be used with or without the subbase.

NOTE: See "Subbase Kit" previous.

- Digital remote thermostat is a wall mounted remote thermostat.
- A time delay fuse is provided with 265 volt PTAC/PTHPs.

# **Electrical Requirements**

# AWARNING



#### **Electrical Shock Hazard**

Plug into a grounded 3 prong outlet.

Do not remove ground prong.

Do not use an adapter.

Do not use an extension cord.

Failure to follow these instructions can result in death, fire, or electrical shock.

**IMPORTANT:** Connect PTAC/PTHP to a single-outlet circuit only.

#### 230/208 Volt PTAC/PTHP

All 230/208 volt PTAC/PTHPs are equipped with power cords.

230/208 volt PTAC/PTHP	250 volt Receptacles and Overcurrent Protection		
AMPS	15	20	30
RECEPTACLE		•	
NEMA Type	6-15R	6-20R	6-30R

The field-supplied outlet must match plug on service cord and be within reach of service cord.

#### 265 Volt PTAC/PTHP

All 265 volt PTAC/PTHPs are equipped with pigtail leads for field wiring.

#### **IMPORTANT:**

- Use copper conductors only.
- Wire sizes are per NEC.
- Use on individual branch circuit only.
- Use overcurrent protection indicated on PTAC/PTHP's rating plate.
- PTAC/PTHP must be grounded to branch circuit.
- Check local codes.

# AWARNING



**Electrical Shock Hazard** 

**Electrically ground PTAC/PTHP.** 

Connect ground wire to green pigtail lead.

Use copper wire for supply connection.

Correct wire gauge is shown in the chart below.

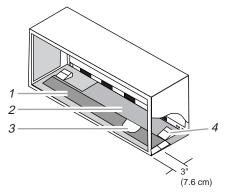
Failure to follow these instructions can result in death or electrical shock.

Rating Plate Ampacity	AWG
Less than 15	14
16 - 20	12
21 - 30	10

# DRAIN KIT INSTALLATION INSTRUCTIONS

## **Location Requirements**

- Unpack and dispose of packaging materials.
- The drain kit accessory contains 10 complete drain kits.
- Locate the drain kit in the primary area for best drainage. Maintain at least ½ in. (1.27 cm) distance from the embossed area. If the primary area cannot be used, locate the drain kit in the secondary area and cut away the foam insulation to allow access to the drain. Do not locate the drain kit within 3 in. (7.6 cm) of the indoor side of the sleeve.



- 1. Secondary area
- 2. Primary area no foam insulation
- If the drain must be located in the secondary area, the foam insulation must be cut away and removed to allow access to the drain.
- 4. Embossed area

#### **NOTES:**

Determine whether the drain will be located on the exterior of the wall, internally in the wall cavity or internally in the room.

#### Internal drain

- Drain kit located inside the room will allow condensate to drain to a field drain located inside the room.
- Drain kit located inside the wall cavity will allow condensate to drain to a field drain located inside the wall cavity.

#### **External drain**

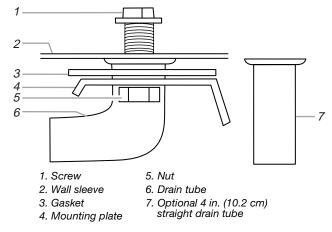
- Drain kit located outside will allow condensate to drain to a field drain located outside or to drain away from the wall sleeve.
- When using an external drain system, select the drain hole on the back of the wall sleeve which best meets your drainage situation.
- The cover plate and external drain tube assembly may be placed on either side of the wall sleeve.

### **Internal Drain Installation**

(Located inside the wall cavity or in the interior of the room)

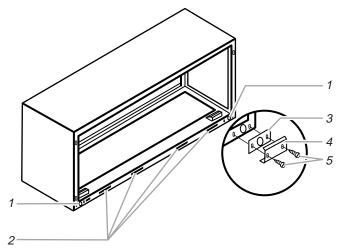
**NOTE:** If installing an internal drain, install drain kit on the wall sleeve before the wall sleeve is installed.

- 1. Using the mounting plate from the drain kit as a template, mark and drill two 3/16 in. mounting holes and a 1/2 in. drain hole at the location chosen above.
- Remove the backing from the gasket and mount it on the flat side of the mounting plate. Insert the drain tube through the hole in the gasket and mounting plate so the tube flange will be against the wall sleeve.



- 3. Position the assembly beneath the drilled holes and secure it with #10 24 x ½ in. machine screws and locknuts (provided). Seal the tops of the screws with silicone sealant.
- 4. Connect the drain tube to the drain system in the building. IMPORTANT: Follow all local building codes when making this connection.
- 5. Attach the 2 cover plates and gaskets over the drain holes at the rear of the wall sleeve with #10 sheet metal screws (provided).

**NOTE:** Check that the 4 overflow slots at the rear of the wall sleeve are not blocked.



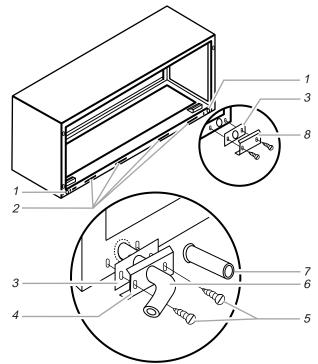
- Drain holes
- Overflow slots
   Gasket
- 4. Cover plate
- 5. #10 sheet metal screws

## **External Drain Installation**

(located on the exterior of the wall)

- 1. Peel the backing tape from the gaskets and mount them on the curved side of one cover plate and one mounting plate.
- 2. Place the drain tube through the gasket and the mounting plate with the flange toward the wall sleeve.
- 3. Using 2 #10 x ½ in. sheet metal screws (provided), attach the drain tube assembly to one of the 2 drain holes at the rear of the wall sleeve.

Position the large flange at the bottom of the sleeve facing toward the sleeve, and partially tighten the screws. Rotate the drain tube to a horizontal position to allow for the wall sleeve to be installed into the wall. Once the wall sleeve is installed, position the drain tube to the desired angle. Before tightening the screws, check to be sure the tube's position will allow the wall sleeve to fit through the wall. Tighten screws.



- 1. Drain holes
- 5. #10 x 1/2 in. sheet metal screws
- 2. Overflow slots
- 6. ½ in. O.D. tube
- 3. Foam gasket
- 7. Optional 4 in. (10.2 cm) straight drain tube
- 4. Mounting plate
- 8. Cover plate (no center hole)
- **4.** Using 2 #10 x ½ in. sheet metal screws (provided), attach the cover plate to the remaining drain hole. Check that the large flange on the plate is positioned at the bottom of the sleeve.

**NOTE:** Check that the 4 overflow slots at the rear of the wall sleeve are not blocked.

5. Discard any unused kit parts.

# WALL SLEEVE INSTALLATION INSTRUCTIONS

## Wall Sleeve Requirements

**IMPORTANT:** The wall sleeve is designed for walls that are 13 in. (33 cm) in depth or less. For deeper walls, an accessory wall sleeve extension is required.

- Provide a support lintel if the wall sleeve is installed in a concrete or masonry wall.
- An accessory drain kit is required for the elimination of PTAC/ PTHP condensate.
- When installing a drain kit, it is recommended that the installation of the drain kit be completed before installing the wall sleeve. See "Required Parts, Accessories and Options" and "Drain Kit Installation Instructions."
- Unpack and dispose of packaging materials.

**NOTE:** Do not remove weatherboard and center support from wall sleeve until ready to install chassis and outdoor grille.

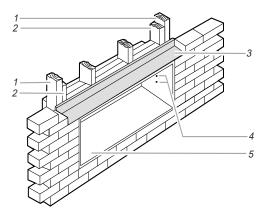
#### **IMPORTANT:**

- If additional support for the wall sleeve is required, or the wall sleeve projects more than 8 in. (20.3 cm) into the room, an accessory subbase must be used. See "Subbase Installation Instructions."
- If a hole is to be cut into an existing wall to install the sleeve, disconnect power to all wires within the wall.

#### **Wall Opening Requirements**

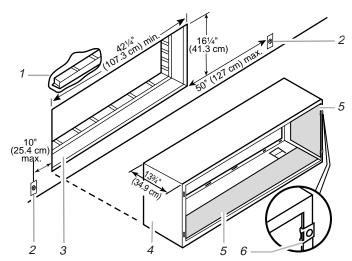
Refer to the following illustration for proper dimensions and location of wall opening and the placement of the electrical outlet.

#### Wall opening with lintel



- 1. Main studs
- 4. Mounting screw holes
- 2. Jack studs
- 5. No holes in bottom of wall
- 3. Lintel sleeve unless drain kit is used

#### Typical wall sleeve installation

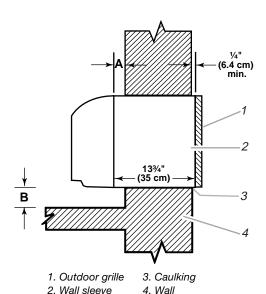


- 1. Lintel to support masonry walls
- 2. Electrical outlet
- 3. Wall opening
- 4. Wall sleeve
- 5. Insulation
- 6. Smooth side of screw clip facing into room

**NOTE:** Construct wall opening to comply with all applicable building codes.

## **Wall Sleeve Installation**

 From the inside of the building, position the wall sleeve in the opening and push it through the wall so it protrudes at least ¼ in. (6.4 mm) on the outside.



Dimension*	A Allow for wall finishing	B Allow for floor finishing	
	(Minimum)	Min.	Max.
No Accessories	1/2"	1/4"	
	(12.7 mm)	(6.4 mm)	
With Subbase	13/4"	31/2"	5"
	(4.5 cm)	(8.9 cm)	(12.7 cm)
With Lateral Duct	3/4"	1/4"	
	(1.9 cm)	(6.4 mm)	

\*If more than one accessory is to be installed, use the maximum dimension. If the wall thickness is more than 13¾" (35 cm) - (A + ¼" [6.4 mm]), a sleeve extension is required. If wall thickness is less than 6 in. (15.2 cm), a subbase is required. See "Required Parts, Accessories and Options."

**IMPORTANT:** Do not allow any tilt toward the inside of the building. This could result in condensate dripping into the inside of the room.

- Position the wall sleeve so that it is level or tilts slightly toward the outside of the building to facilitate condensate drainage. Level wall sleeve side to side.
  - **NOTE:** Do not drill any holes in the bottom of the wall sleeve, unless required by the installation of the drain kit.
- 3. Drill two 3/16 in. holes through each side of the sleeve, drilling only through the wall sleeve and not into the wall. Locate one hole approximately 4 in. (10.2 cm) from the top and another hole 4 in. (10.2 cm) from the bottom of the sleeve where it will attach to the wall.
- 4. If the wall construction is wood, screw the 4 #10 x 1 in. wood screws (provided) through the holes in the sides of the wall sleeve. If the wall construction is not wood, obtain and use #10 or larger fasteners suitable for the particular type of wall construction.
  - **IMPORTANT:** When sealing the sleeve on the outside of the building, do not let the sealant block the 2 condensate drain holes or the 4 overflow slots at the bottom flange of the sleeve.
- 5. Apply silicone sealant around the wall sleeve where it projects through the inside and outside wall surfaces.
- 6. Apply silicone sealant to the screw heads.
- 7. If the chassis and outdoor grille are to be installed later, leave the weatherboard and center support in place. Otherwise, remove them and proceed with installing the outdoor grille. After installing the outdoor grille, replace the weatherboard and center support.

**NOTE:** Do not dispose of the weatherboard and center support until the chassis installation is complete.

# WALL SLEEVE EXTENSION INSTALLATION INSTRUCTIONS

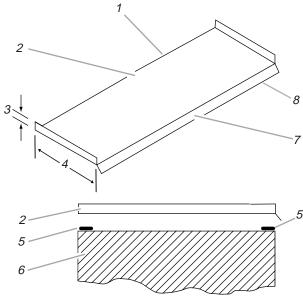
# **Location Requirements**

- The PTAC/PTHP is intended for mounting through an exterior wall. If the wall is thicker than 13 in. (33 cm), an extension to the wall sleeve must be used. The PTAC/PTHP should be installed level or pitched slightly to the outside. The exterior of the sleeve must be caulked at the building interface.
- Unpack and dispose of packaging materials.

**NOTE:** Do not remove weatherboard and center support from wall sleeve until ready to install chassis and outdoor grille.

### Wall Sleeve Extension Installation

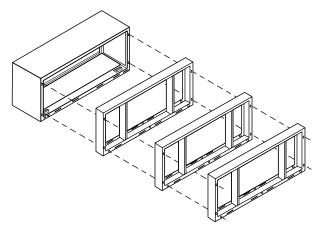
1. Construct and install flashing into wall cutout, as shown.



- 1. Front edge
- 2. Flashing
- 3. 2 in. (5.03 cm) minimum
- 4. Depth of wall
- 5. Silicone sealant around perimeter
- 6. Wall
- 7. Drip edge must extend below wall opening
- 8. Outside edge

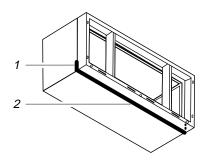
- Run a bead of silicone sealant along the perimeter of the flashing.
- **3.** Attach wall sleeve extension to the wall sleeve using 4 sheet metal screws (provided).

**NOTE:** Do not overtighten the screws. The wall sleeve extension is aluminum, and overtightening will strip out the holes.



Wall sleeve extensions - maximum of 3 may be used.

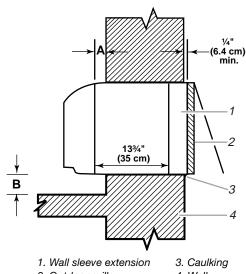
4. Run a bead of silicone sealant along the bottom mating surfaces of the wall sleeve and the wall sleeve extension. Run this bead at least 3 in. (7.6 cm) up the side seams.



- 1. Seal up this edge at least 3 in. (7.6 cm) on both sides.
- 2. Seal this entire surface.

**IMPORTANT:** If using a wall sleeve extension and internal drain kit, after installing the flashing, run a bead of silicone sealant between the flashing and the wall sleeve and extension assembly where the hole was drilled for the drain tube.

5. From the inside of the building, position the wall sleeve in the opening and push it through the wall so it protrudes at least 1/4 in. (6.4 mm) on the outside.



2. Outdoor grille	

٥.	Caulking
4.	Wall

Dimension*	A Allow for wall finishing	B Allow for floor finishing	
	(Minimum)	Min.	Max.
No Accessories	½" (12.7 mm)	½" (6.4 mm)	
With Subbase	1¾" (4.5 cm)	3½" (8.9 cm)	5" (12.7 cm)
With Lateral Duct	<sup>3</sup> / <sub>4</sub> " (1.9 cm)	½" (6.4 mm)	

\*If more than one accessory is to be installed, use the maximum dimension. If the wall thickness is more than  $13\frac{3}{4}$ " (35 cm) - (A +  $\frac{1}{4}$ " [6.4 mm]), a sleeve extension is required. If wall thickness is less than 6 in. (15.2 cm), a subbase is required. See "Required Parts, Accessories and Options."

IMPORTANT: Do not allow any tilt toward the inside of the building. This could result in condensate dripping into the inside of the room.

6. Position the wall sleeve so that it is level or tilts slightly toward the outside of the building to facilitate condensate drainage. Level wall sleeve side to side.

NOTE: Do not drill any holes in the bottom of the wall sleeve. unless required by the installation of the drain kit.

- 7. Drill two 3/16 in. holes through each side of the sleeve, drilling only through the wall sleeve and not into the wall. Locate one hole approximately 4 in. (10.2 cm) from the top and another hole 4 in. (10.2 cm) from the bottom of the sleeve where it will attach to the wall.
- 8. If the wall construction is wood, screw the 4 #10 x 1 in. wood screws (provided) through the holes in the sides of the wall sleeve. If the wall construction is not wood, obtain and use #10 or larger fasteners suitable for the particular type of wall construction.

IMPORTANT: When sealing the sleeve on the outside of the building, do not let the sealant block the 2 condensate drain holes or the 4 overflow slots at the bottom flange of the sleeve.

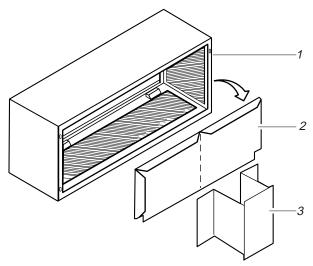
- 9. Apply silicone sealant around the wall sleeve where it projects through the inside and outside wall surfaces.
- 10. Apply silicone sealant to the screw heads.
- 11. If the chassis and outdoor grille are to be installed later, leave the weatherboard and center support in place. Otherwise, remove them and proceed with installing the outdoor grille. After installing the outdoor grille, replace the weatherboard and center support.

NOTE: Do not dispose of the weatherboard and center support until the chassis installation is complete.

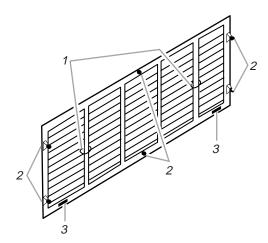
# STANDARD GRILLE INSTALLATION INSTRUCTIONS

NOTE: Unpack and dispose of packaging materials.

 Remove the center support and weatherboard, if still installed in the wall sleeve.

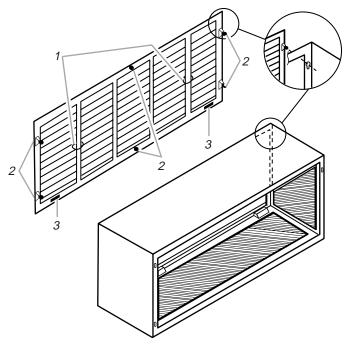


- 1. Wall sleeve
- 2. Weatherboard
- 3. Center support
- Insert 6 plastic grommets into the outdoor grille openings from the outside of the grille.



- 1. Plastic handles
- 2. Plastic grommets
- 3. Condensate drain knockouts
- 3. Insert 2 #8 x % in. sheet metal screws (provided) in the top 2 outside edge plastic grommets. Tighten the screws halfway into the grommets.

4. Grasp the grille by the attached plastic handles. Position it with the condensate drain knockouts facing down. From the inside of the building, maneuver the grille through the wall sleeve and pull toward you until the screw heads are inserted into the keyhole slots at the top of the wall sleeve. Tighten the 2 screws.

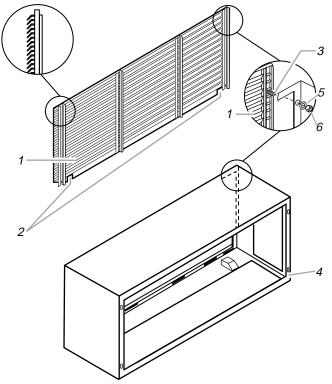


- 1. Plastic handles
- 2. Plastic grommets
- 3. Condensate drain knockouts
- Insert the remaining screws into the remaining holes and into the grommets and tighten all screws.

# ARCHITECTURAL LOUVER INSTALLATION INSTRUCTIONS

NOTE: Unpack and dispose of packaging materials.

- Remove the center support and weatherboard, if still installed in the wall sleeve.
- 2. Screw a threaded metal stud into each of the holes at the 4 corners of the louver.
- 3. Grasp the louver at the vertical supports. Position it with the condensate drain knockouts facing down. From the inside of the building, maneuver the louver through the wall sleeve. Pull it toward you until the threaded studs are inserted into the 4 holes of the wall sleeve.



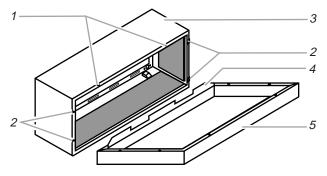
- 1. Architectural louver
- 2. Condensate drain knockouts
- 3. Threaded stud
- 4. Interior side of wall sleeve
- 5. Washer
- 6. Nut
- **4.** While holding the louver with one hand, place the washer and start the nut on one of the studs. Tighten the nut.
- 5. Repeat with the remaining 3 studs.

# WALL SLEEVE ADAPTER KIT INSTALLATION INSTRUCTIONS

- Unpack and dispose of packaging materials.
- This kit retrofits the 11½ in. (29.2 cm) deep wall sleeve to accept a replacement PTAC/PTHP requiring a 13¾ in. (35 cm) deep sleeve.

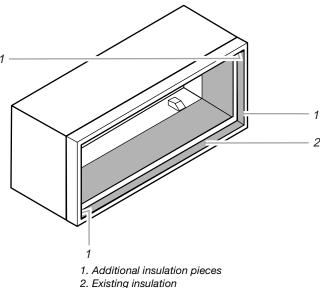
#### **Wall Sleeve Adapter Orientation**

1. Install 2 screw clips over the holes on the top flange of the wall sleeve with the flat side facing outward.



- 1. Install screw clips.
- 4. Angle flange
- 2. Existing screw clips
- 5. Wall sleeve adapter
- 3. Wall sleeve
- Insert the angle flange of the wall sleeve adapter over the bottom flange of the existing sleeve. Align the top of the adapter with the top surface of the existing wall sleeve.

- 3. Fasten the adapter to the wall sleeve with 6 #10 x ½ in. screws (provided), driving the screws from the inside of the wall sleeve adapter into the screw clips mounted on the face of the wall sleeve. The angle flange assists in properly aligning the 2 parts.
- 4. Remove the protective paper from the foam insulation pieces. Install the 2 short foam pieces on the short, inside walls of the adapter. Install the long foam piece on the top, inside wall of the adapter.



#### 2. Existing insulation

# CHASSIS INSTALLATION

## Unpacking

## **A WARNING**

Excessive Weight Hazard

Use two or more people to move and install PTAC/PTHP.

Failure to do so can result in back or other injury.

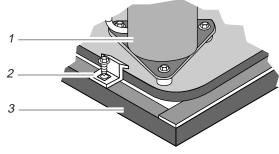
#### **NOTES:**

- Check to be sure wall sleeve, wall sleeve extension (if used), wall sleeve adapter (if used), rear grille, and drain kit are properly installed before chassis installation.
- Locate PTAC/PTHP near the location it will be installed.

**IMPORTANT:** Copper refrigerant tubes are not handles. Product damage will occur if tubes are used to lift or move the chassis.

1. Remove banding and carton.

2. Remove the 2 chassis shipping brackets from the ends of the shipping pallet.



- 1. Compressor
- 2. Chassis shipping bracket
- 3. Shipping pallet
- Remove the front cover, which is contained in a protective plastic bag, from chassis.
- 4. Dispose of all shipping and packaging material.

### **Install Chassis**

## **AWARNING**



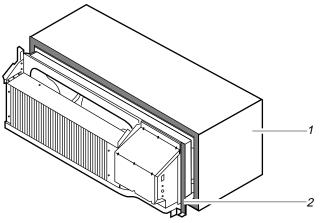
**Electrical Shock Hazard** 

Disconnect power before servicing.

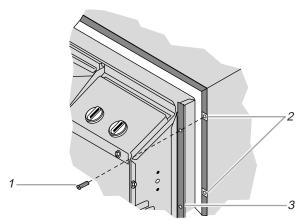
Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

- 1. Disconnect power.
- Center the chassis in the installed sleeve and carefully push the chassis until the chassis flange and gasket contact the sleeve flange.



- 1. Wall sleeve
- 2. Chassis flange and gasket
- Locate the 4 #10 x 1 in. chassis mounting screws (provided). Tighten the screws into the wall sleeve screw clips.



- 1. Chassis mounting screw
- 2. Screw clips
- 3. Chassis flange

4. Install the front cover by placing the top of the front cover onto the metal flange at the top of the chassis. Rotate the front cover into place. Insert the thumbscrews (provided) into the slots located at the bottom back corners of the front cover. Tighten to secure the cover.

**NOTE:** If the unit has been placed in such a way that there is no room to insert the thumbscrews from the bottom, a side mounting kit may be used. See "Required Parts, Accessories and Options."

#### Make Electrical Connection

**IMPORTANT:** The installation of field wiring must conform to the requirements of the National Electrical Code, ANSI/NFPA NO. 70-(latest edition) in the United States, and any state laws and local ordinances (including plumbing or wastewater codes). In Canada, field wiring must conform to the Canadian electrical code PART I, CSA STANDARD C22.1-1993 or current edition. Local authorities having jurisdiction should be consulted before installation is made. Such applicable regulations or requirements take precedence over the general instructions in this manual.

#### **Cord Connected Models**

# AWARNING



**Electrical Shock Hazard** 

Plug into a grounded 3 prong outlet.

Do not remove ground prong.

Do not use an adapter.

Do not use an extension cord.

Failure to follow these instructions can result in death, fire, or electrical shock.

- 1. Plug into a grounded 3 prong outlet.
- 2. Reconnect power.

#### **Direct Wired Models**

## AWARNING



**Electrical Shock Hazard** 

Disconnect power before servicing.

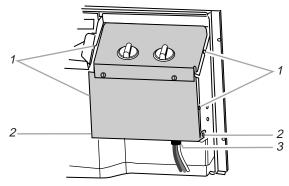
Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

- Field wiring connections for direct-wired models can be done in one of 2 ways:
- Using field-supplied conduit and wires
- Using the Conduit with Junction Box Kit accessory. See "Required Parts, Accessories and Options."

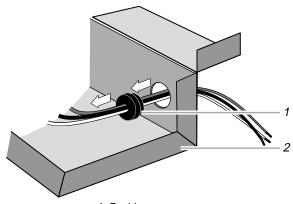
#### **Field Wiring Connections**

- 1. Disconnect power.
- **2.** Remove the PTAC/PTHP front cover using the thumbscrews.
- 3. Route the incoming power supply through suitable conduit to the PTAC/PTHP control box.
- 4. Remove the 4 screws holding the control box.



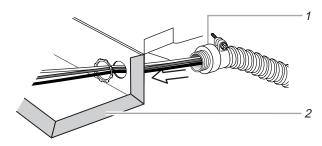
- 1. Remove these screws.
- 2. Do not remove these screws.
- 3. Bushing

5. Pivot the control box down, pull the chassis pigtail wires into the control box, and remove the bushing from the hole. The field-supplied wires will be routed through this hole.



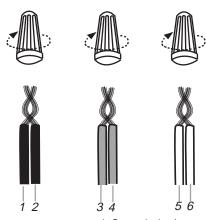
1. Bushing

- 2. Control box
- Install field-supplied conduit into the same hole as the original bushing for the chassis pigtail wires on the control box.



1. Field-supplied conduit

- 2. Control box
- 7. Connect the chassis pigtail wires to the incoming power supply wires using the UL listed wire nuts (provided). Connect the black wire to the incoming L1 (black) wire. Connect the white wire to the incoming neutral (white) wire. Connect the green wire to the incoming ground (green or bare) wire.



- 1. Black wire
- 2. Incoming L1 wire (black wire)
- 3. Green wire
- 4. Ground wire (green or bare wire)
- 5. White wire
- 6. Neutral wire (white wire)
- 8. Reattach the PTAC/PTHP control panel using the 4 screws removed earlier.
- Reattach the PTAC/PTHP front cover using the thumbscrews removed earlier.
- 10. Reconnect power.

# CONDUIT KIT/JUNCTION BOX INSTALLATION INSTRUCTIONS

### **Tools and Parts**

#### Tools needed

■ Flat-blade screwdriver

#### Parts supplied

- Wire harness
- Flexible conduit
- Junction box
- Junction box cover
- Bushing
- Straight connector
- Right angle connector
- Wire nuts

## **Location Requirements**

■ Unpack and dispose of packaging materials.

 Power supply wires must be located within 30 in. (76.2 cm) of conduit exit from chassis.

## AWARNING



**Electrical Shock Hazard** 

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

# **AWARNING**



**Electrical Shock Hazard** 

**Electrically ground PTAC/PTHP.** 

Connect ground wire to green pigtail lead.

Use copper wire for supply connection.

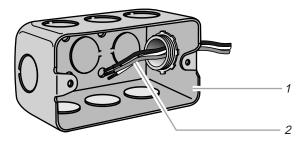
Correct wire gauge is shown in the chart below.

Failure to follow these instructions can result in death or electrical shock.

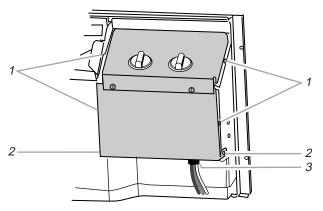
Rating Plate Ampacity	AWG
Less than 15	14
16 - 20	12
21 - 30	10

1. Disconnect power.

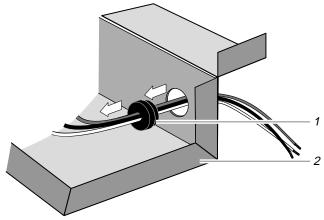
2. Skip this step if incoming power supply is in subbase. Determine the location of the power supply. Position the junction box in such a way that the power supply wires can be routed into the junction box. Install the junction box on the wall using 4 screws (provided) or other fasteners designed for the wall.



- 1. Junction box
- 2. Power supply wires
- 3. Remove the PTAC/PTHP front cover using the thumbscrews.
- 4. Remove the 4 screws holding the control box, as shown.

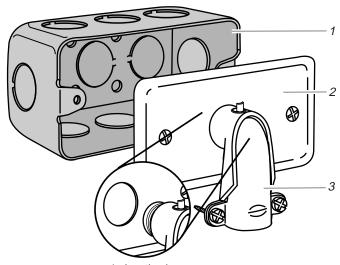


- 1. Remove these screws.
- 2. Do not remove these screws.
- 3. Bushing
- 5. Pivot the control box down, pull the chassis pigtail wires into the control box and remove the bushing from the hole. The field supply wires will be routed through this hole.

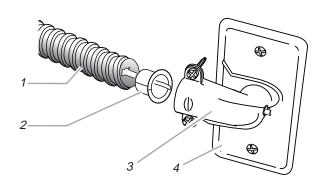


- 1. Bushing
- 2. Control box

Remove the knockout from the junction box cover and install the right-angle connector on the junction box cover, as shown.

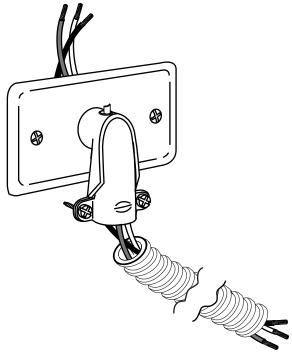


- 1. Junction box
- 2. Junction box cover
- 3. Right-angle connector
- Insert one bushing (provided) into one end of the flexible conduit.

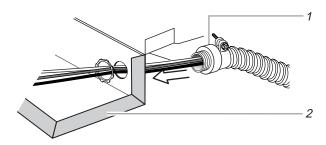


- 1. Flexible conduit
- 2. Bushing
- 3. Right-angle connector
- 4. Junction box cover

8. Leave the right-angle connector off of the flexible conduit. Feed the long wires of the provided harness through the right-angle connector in the junction box cover and into the conduit end with the bushing and out of the straightconnector end of the conduit.

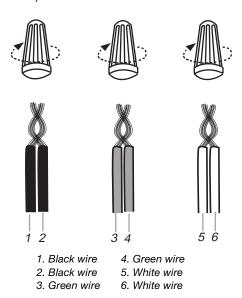


- 9. Insert the second bushing (provided) into the other end of the flexible conduit.
- 10. Insert one conduit end into the right-angle connector and the other end into the straight connector. Tighten the screws. Be sure that the flexible conduit and the connectors are secured together.
- 11. Install the straight-connector end of the conduit into the same location as the original bushing for the chassis pigtail wires on the control box.

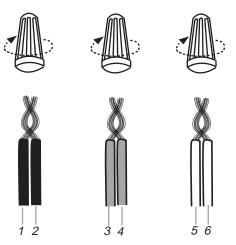


- 1. Straight connector
- 2. Control box

- **12.** If incoming power supply is in subbase, proceed to the subbase instructions.
- 13. Connect conduit wires (black to black, green to green, white to white) to the chassis pigtail wires using the UL listed wire nuts (provided).



- **14.** Route the flexible conduit from the bottom of the control box to the junction box.
- 15. Connect conduit wires (black to incoming L1, green to ground wire, white to neutral) to the chassis pigtail wires using the UL listed wire nuts (provided).



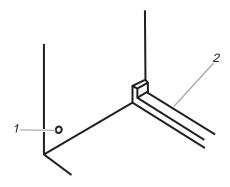
- 1. Black wire
- 2. Incoming L1 wire (black wire)
- 3. Green wire
- 4. Ground wire (green wire)
- 5. White wire
- 6. Neutral wire (white wire)
- **16.** Insert the wires neatly into the junction box and install the junction box cover using 2 screws.
- **17.** Reattach the PTAC/PTHP control panel using the 4 screws removed earlier.
- **18.** Reattach the PTAC/PTHP front cover using the thumbscrews removed earlier.
- 19. Reconnect power.

# FRONT COVER SIDE MOUNT KIT INSTALLATION INSTRUCTIONS

NOTE: Unpack and dispose of packaging materials.

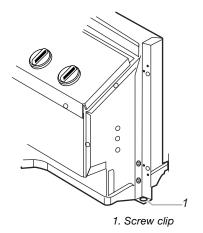
#### Kit Installation

- 1. Remove front cover.
- 2. Locate the indent on the inside lower back corners of the front cover and drill a 5/16 in. hole in the indent on each side.

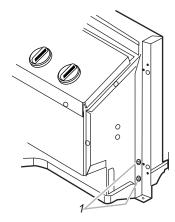


1. Indent - inside view

- 2. Front of front cover
- Remove the screw clip from the bottom of each side bracket. Save it for reinstallation.

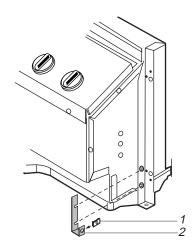


Loosen the 2 screws on the bottom of each side bracket.NOTE: Do not remove these screws.



1. Side-bracket screws-loosen; do not remove

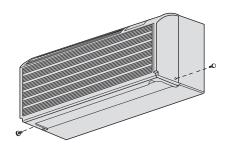
- 5. Slide the appropriate mounting bracket onto the side-bracket screws and tighten the screws.
- **6.** Install the screw clip onto the mounting bracket with the smooth side facing the outside. Repeat on the other bracket.



1. Screw clip

2. Mounting bracket

- 7. Install the front cover by placing the top of the front cover onto the metal flange at the top of the chassis. Rotate the front cover into place.
- 8. Thread the thumbscrews through the drilled holes in the front cover into the screw clips to secure the front cover to the chassis



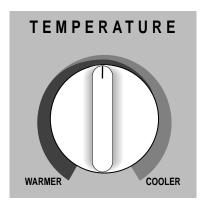
# **CONTROLS**

**NOTE:** For remote wall thermostat controlled models, see "Remote Wall Thermostat Installation Instructions."

#### **Temperature Control**

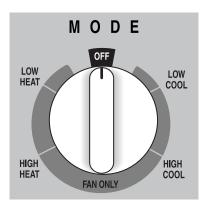
Turn the temperature control knob to a mid setting. Adjust the performance of the PTAC/PTHP by turning the temperature control knob clockwise (until it stops) for maximum cooling and counterclockwise (until it stops) for maximum heating. Experiment to find the setting that suits you best.

**NOTE:** Cooling will not begin if the room temperature is below 60°F (15.6°C). Heating will not begin if the room temperature is above 90°F (32.2°C).



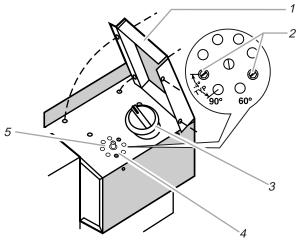
#### **Fan Control**

Set the fan control to the desired setting.



Low Cool High Cool	Use this setting for sleeping comfort. Use this setting for maximum cooling.
Low Heat High Heat	Use this setting for sleeping comfort. Use this setting for maximum heating.
Fan Only	Use this setting for circulating air without heating or cooling.

# LIMITING TEMPERATURE RANGE



- 1. Control panel
- 2. Adjustment limiting screws
- 3. Fan control
- 4. Temperature control
- 5. Thermostat mounting panel

The adjustment limiting screws under the temperature control knob can be relocated to change the maximum heat and cool set points.

- 1. Remove the front cover.
- 2. Turn the temperature control knob to the midpoint of the dial.
- Remove the 4 screws holding the control panel. Lift up the control panel.
- 4. Remove temperature control knob.
- 5. Locate the 2 adjustment limiting screws in the thermostat mounting panel.

#### NOTES:

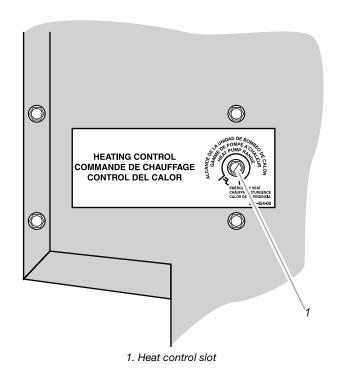
- These screws are factory installed for a maximum temperature set point range of 60° to 90°F (16° to 32°C).
- Each hole in the plate represents approximately a 4°F (2°C) change from the adjacent hole.
- **6.** To adjust the temperature range, move the adjustment limiting screws to the desired location.
- 7. Replace the knob when the desired range has been set.
- **8.** Replace the control panel using the 4 screws removed earlier.
- 9. Replace the front cover.

# HEAT PUMP CHANGEOVER AND EMERGENCY HEAT CONTROL ADJUSTMENT

## Heat pumps and emergency heat operation

Heat pump equipped models use backup electric resistance heating coils. At extremely low, outdoor ambient temperatures, the heat pump is automatically disabled and the PTHP operates solely on electric resistance heat.

#### **Heat Control Adjustment**



The heating control is located behind the front cover on the right side panel of the chassis. Its function is to allow you to set the outdoor temperature range in which the heat pump operates. This control switches the unit heating supply mode between the heat pump and electric resistance heat based on the outdoor ambient temperature. These changeover temperatures are based on the settings of the control. The factory setting is at the one o'clock position.

To adjust the heat control:

Insert a flat-blade screwdriver into the slot as shown.

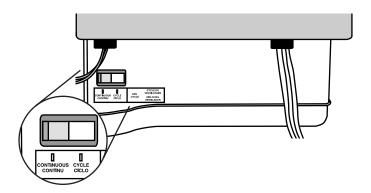
- 1. To increase the changeover set point, turn counterclockwise.
- 2. To decrease the changeover set point, turn clockwise.

#### **Emergency Heat Only**

In the event of a compressor malfunction in the heat pump mode, turn the screw to the extreme counterclockwise emergency heat position. Heating will be supplied using electric resistance heat only.

**NOTE:** In the emergency heat position, the compressor is disconnected for both heat pump and cooling operations. Service is required to restore full function of the PTHP. Return the control to its original position after repairs have been made.

# FAN CYCLE SWITCH



On standard models with unit-mounted controls, the fan cycle switch is located behind the front cover. It is designed to operate the fan either continuously or intermittently. When the switch is in the CONTINUOUS position, the fan will run continuously at the selected speed when the unit is turned on. With the fan cycle switch in the CYCLE position, the fan will run only when the compressor or heating elements cycle on.

**NOTE:** It is recommended that this switch be set in the continuous position for maximum comfort and temperature control.

#### Adjusting the Fan Cycle Switch

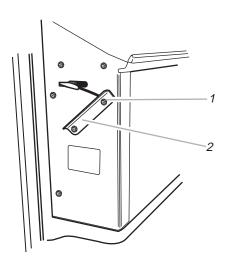
- 1. Remove the front cover.
- 2. Select CONTINUOUS or CYCLE.
- 3. Reattach the front cover.

**NOTE:** On remote thermostat models, the fan cycle or continuous control is on the wall thermostat.

# **OUTSIDE AIR VENT CONTROL**

The vent control lever is located behind the front cover on the left side of the unit. The unit is shipped with the vent control lever in the closed position and a locking screw in place. The screw must be removed to operate the lever. When the lever is Open (back toward the wall), outside air is mixed with indoor air. When the lever is Closed (forward toward the room interior), no outside air is admitted into the room and room air is recirculated through the unit.

**NOTE:** The vent should remain closed for peak operating efficiency.

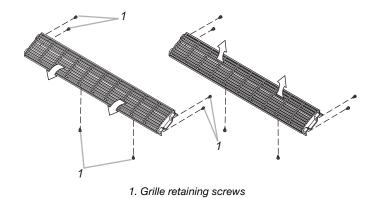


- 1. Outside air vent control retaining screw
- 2. Outside air vent in closed position

#### **Operating the Outside Air Vent Control**

- 1. Remove the front cover.
- 2. Remove the outside air vent control retaining screw.
- **3.** Move the outside air vent control forward (Closed) or back (Open).
- 4. Replace the outside air vent control retaining screw.
- 5. Reattach the front cover.

# AIR DISCHARGE GRILLE



The indoor air discharge grille can be positioned to direct the air either straight up or at an angle into the room.

#### **Changing the Airflow Direction**

- 1. Remove the front cover.
- 2. Locate and remove the 6 grille retaining screws, as shown.
- 3. Turn the grille 180° and refasten the grille to the front cover.
- 4. Reattach the front cover.

# REMOTE WALL THERMOSTAT INSTALLATION INSTRUCTIONS

## **Installation Requirements**

- Unpack and dispose of packaging materials.
- This thermostat is a wall mounted, low-voltage thermostat that maintains room temperature by controlling the operation of the PTAC/PTHP. Batteries are not required—temperature and mode settings are preserved with the power off.
- This is not a 2-stage heat pump thermostat with emergency heat selection. The PTAC/PTHP turns on the electric heat automatically based on the outdoor coil temperature, which is influenced by the outdoor temperature and humidity conditions.
- Chassis must be installed before installing remote thermostat.

**IMPORTANT:** Improper wiring or installation may cause the thermostat not to function. Wiring must conform to local and national electrical codes.

#### **Wall Thermostat Terminal Designation:**

Terminal Letter	Operation	Contact Made
Υ	Cooling	During call for cooling.
W	Heating	During call for heating.
G	Fan	Continuous if the slider is in the "Fan" position; otherwise, on call for cooling or heating.
C (common)	Common Terminal	Constant
R	24 V to the thermostat	Constant (directly from the transformer)
B (Heat Pump units Only)	Reversing Valve	Made continuously when the mode switch is in heating.

### **Location Requirements**

For best performance, thermostat should be mounted:

- Approximately 5 ft (152.4 cm) from floor.
- Close to or in the room with the PTAC/PTHP, preferably on an inside partitioning wall.
- On a section of wall without pipes or duct work.

For best performance, do not mount thermostat:

- Close to a window, on an outside wall, or next to a door leading to the outside.
- Exposed to direct light and heat from a lamp, the sun, a fireplace, or other heat source. This may cause a false reading.
- Close to or in direct airflow from the PTAC/PTHP.
- In areas with poor air circulation (behind a door or in an alcove).

#### **Install the Remote Wall Thermostat**

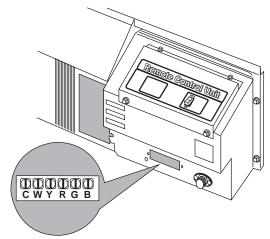
#### **Replacing Existing Thermostat**

- Disconnect power to avoid product damage during removal of existing thermostat.
- Disconnect wires from existing thermostat, one at a time. Do not allow wires to fall back into the wall.
- As each wire is disconnected, record wire color and terminal marking.
- 4. Remove existing thermostat from wall.
- 5. See "Installing New Thermostat."

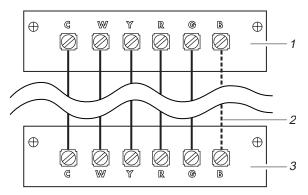
**IMPORTANT:** Mercury is a hazardous waste and must be disposed of properly. Contact the Thermostat Recycling Corporation at **www.nema.org/trc** for further information, or contact your local waste management authorities.

#### **Installing New Thermostat**

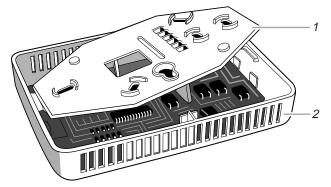
- Disconnect power to avoid product damage during installation of new thermostat.
- 2. Remove the PTAC/PTHP front cover.
- 3. Locate the terminal strip on the front of the control box.



 Connect the field supplied 5 or 6 conductor, NEC Class 2, 24 volt thermostat wire to the terminals in accordance with the wiring diagram.



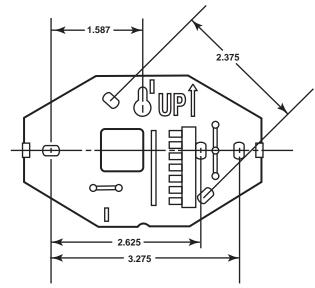
- 1. Typical PTAC/PTHP unit
- 2. Used for PTHP only
- 3. Wall thermostat
- 5. Route the 24 volt thermostat wire alongside the conduit or service cord to the location chosen for the thermostat.
- **6.** Separate the front housing and back plate of the thermostat.



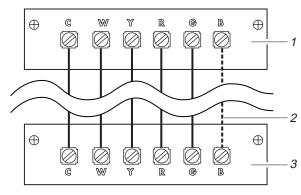
- 1. Back plate
- 2. Front housing

- 7. Route thermostat wires through hole in back plate. Level back plate against wall (for aesthetic value only thermostat need not be leveled for proper operation) and mark wall through any 2 of the 6 available mounting holes.
- 8. Drill two 3/16 in. mounting holes in wall where marked.

  Optional Mounting Method: Mounting holes on thermostat are designed to fit on a horizontally mounted junction box.



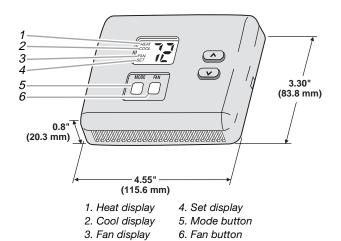
- Secure back plate to wall with 2 anchors and screws (provided) making sure all wires extend through hole in back plate.
- Connect wires to proper terminals of the thermostat connector block.



- 1. Typical PTAC/PTHP unit
- 2. Used for PTHP only
- 3. Wall thermostat
- 11. Push any excess wire back into wall. Excess wire inside the thermostat housing can interfere with proper airflow across the temperature sensor. Seal hole in wall to prevent air leaks. Air leaks can affect operation.
- 12. Install thermostat housing on back plate.
- 13. Reattach the PTAC/PTHP front cover.

#### 14. Reconnect power.

**NOTE:** On power up, the LCD readout will display oP momentarily, then the room temperature.



## **Check Fan Operation**

#### **Fan Operation**

- To start fan operation, press FAN button on thermostat until "FAN" is displayed.
- To stop fan operation, press FAN button on thermostat until "FAN" is no longer displayed.

## **Check Thermostat Operation**

#### **Heating Operation**

- Press and release MODE button on thermostat until HEAT is displayed.
- Press ▲ button until LCD readout reads 10 degrees above displayed room temperature. Heating system should begin to operate within 5 minutes.

#### Cooling Operation

- Press and release MODE button on thermostat until COOL is displayed.
- 2. Press ▼ button until LCD readout reads 10 degrees below displayed room temperature. Cooling system should begin to operate within 5 minutes.

## **Thermostat Operation**

#### **Temperature Display**

The thermostat will display room temperature until the  $\triangle$  or  $\nabla$  buttons are pressed. The word SET appears when these buttons are pressed, and the current set point is displayed. If no buttons are pressed for 5 seconds, the display will change back to show room temperature.

#### Mode button on Thermostat

Press the MODE button on the thermostat to turn the PTAC/ PTHP off or to select heating or cooling operation.

#### Fan button on Thermostat

The PTAC/PTHP fan will automatically cycle with the heating and cooling operation and will remain off when the PTAC/PTHP is off. Press the FAN button on the thermostat until "FAN" is displayed to cause the fan to run continuously, even when the heating and cooling operations are off.

#### Fan Speed switch on PTAC/PTHP control panel

The Fan Speed switch on PTAC/PTHP control panel selects between low and high fan speed and is independent of the wall thermostat.



#### **Delay Timer**

A 5-minute time delay is built into the thermostat immediately upon power up, and any time the compressor turns off. The compressor will not turn on until the delay timer has expired. Pressing **\( \Delta\)** and FAN buttons simultaneously will override the delay timer for 1 cycle.

#### **Cycle Timer**

In normal heating and cooling operation, the thermostat will not allow more than 4 cycles per hour (or 1 cycle every 15 minutes). Both the Y and W outputs have a 15-minute timer that starts counting down when the output is turned on, (e.g., if Y output is turned on for 9 minutes and then satisfies, it cannot turn back on for another 6 minutes regardless of demand). Pressing  $\triangle$  and FAN buttons simultaneously or changing the set point will override the timer for 1 cycle.

#### **Minimum on Timer**

Once the PTAC/PTHP has turned on, it will remain on for a minimum of 3 minutes regardless of demand. The PTAC/PTHP can turn off in less than 3 minutes if mode or set point change.

#### **Error Messages**

E4	Internal memory failure. Replace thermostat.
(two dashes)	Cannot read room temperature. Replace thermostat.

# DISCONNECT SWITCH INSTALLATION INSTRUCTIONS

#### **Parts Required**

■ 12 AWG green wire

## **Location Requirements**

- Unpack and dispose of packaging materials.
- The installation of field wiring must conform to the requirements of the National Electrical Code, ANSI/NFPA NO. 70-(latest edition) in the United States, and any state laws and local ordinances (including plumbing or wastewater codes). In Canada, field wiring must conform to the Canadian electrical code PART I, CSA STANDARD C22.1-1993 or current edition. Local authorities having jurisdiction should be consulted before installation is made. Such applicable regulations or requirements take precedence over the general instructions in this manual.
- This kit is intended only for use with the subbase. The switch must be installed in the subbase before the subbase is installed.

## **Disconnect Switch Installation**

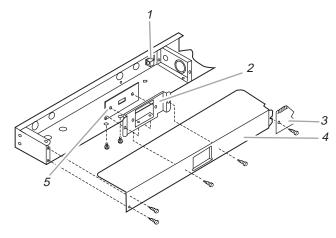
## AWARNING



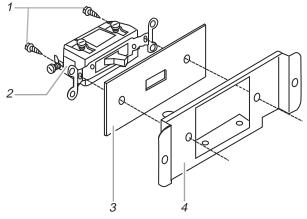
Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

- 1. Disconnect power.
- 2. Remove subbase access cover and front cover.

3. Remove the 2 screws holding the disconnect switch cover and remove it from the subbase.

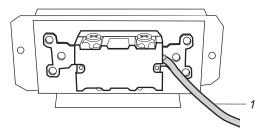


- 1. Ground lug
- 2. Disconnect switch cover
- 4. Subbase front cover5. Switch plate
- 3. Subbase access cover
- Remove the rectangular knockout in the disconnect switch cover.
- 5. Remove and dispose of the 2 machine screws from the disconnect switch.
- **6.** Place the switch plate over the switch and attach the entire assembly to the disconnect switch cover using 2 sheet metal screws (provided).



- 1. Sheet metal screws
- 2. Disconnect switch
- 3. Switch plate
- 4. Disconnect switch cover

- 7. Reattach disconnect switch cover assembly to subbase.
- 8. Attach a 12 A.W.G. ground wire to the ground terminal on the disconnect switch and to the ground lug in the subbase. Power supply wires will be connected during subbase installation.
- 9. Replace all covers.



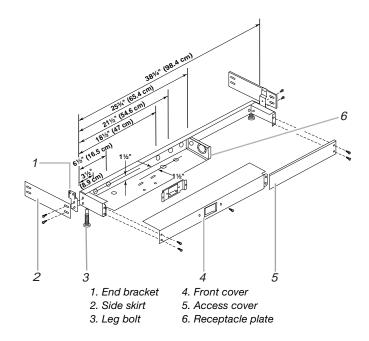
1. Ground wire to subbase ground lug

# SUBBASE KIT INSTALLATION INSTRUCTIONS

# **Installation Requirements**

- Unpack and dispose of packaging materials.
- If your wall thickness is less than 6 in. (15.2 cm), the subbase kit is required.
- If wiring through the subbase, connections must be made behind the front cover. See "Make Electrical Connections."

#### **Subbase Assembly**



### **Subbase Kit Installation**

# **AWARNING**



**Electrical Shock Hazard** 

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

## AWARNING



**Electrical Shock Hazard** 

**Electrically ground PTAC/PTHP.** 

Connect ground wire to ground lug.

Use copper wire for supply connection.

Correct wire gauge is shown in the chart below.

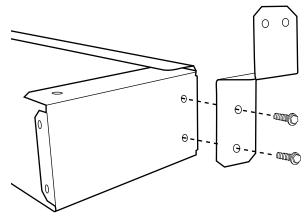
Failure to follow these instructions can result in death or electrical shock.

Rating Plate Ampacity	AWG
Less than 15	14
16 - 20	12
21 - 30	10

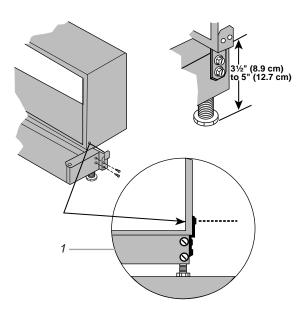
**IMPORTANT:** The installation of field wiring must conform to the requirements of the National Electrical Code, ANSI/NFPA NO. 70-(latest edition) in the United States, and any state laws and local ordinances (including plumbing or wastewater codes). In Canada, field wiring must conform to the Canadian electrical code PART I, CSA STANDARD C22.1-1993 or current edition. Local authorities having jurisdiction should be consulted before installation is made. Such applicable regulations or requirements take precedence over the general instructions in this manual.

- 1. Disconnect power.
- 2. Remove the chassis from the wall sleeve (if installed).

3. Attach the end brackets to the subbase with 4 - #10 x ½ in. screws (provided).



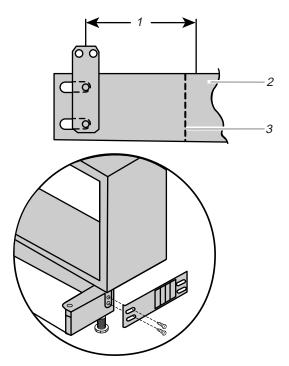
- 4. Position the subbase under the wall sleeve.
- 5. Turn the leg bolts (5 in. maximum) until the subbase is tight against the wall sleeve.
- **6.** Using the end brackets as a template, align, center punch and drill two 5/32 in. holes (each side) in the wall sleeve.



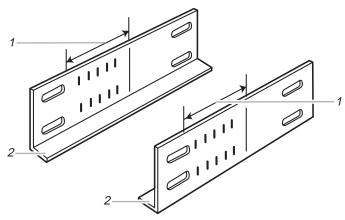
1. Align, center punch and drill two 5/2 in. holes in wall sleeve.

- Remove the 4 screws attaching the end brackets to the subbase and remove the end brackets. Leave the subbase in place.
- 8. With the subbase in place under the wall sleeve, measure from the center of the end bracket mounting holes in the subbase to the wall. Record this measurement.

**IMPORTANT:** The next steps require you to make permanent modifications to the decorative side skirts. The modifications are for left and right sides, and the skirts will not be interchangeable after modification.



- 1. Distance from center of holes in subbase to wall
- 2. Side skirt
- 3. Make cut on closest inside scored line to measurement.
- Transfer the measurement recorded in Step 8 to each of the side skirts.



- 1. Measurement recorded in Step 8
- 2. Side skirts

**NOTE:** Round the measurement down to the closest score mark when transferring the measurement. Example: If measurement was 7 in. (17.8 cm), use the score mark that is at 6% in.

- 10. Cut the skirts along the scored marks.
- Reattach the end brackets and side skirts to the subbase.
   Adjust the side skirts until they touch the wall. Tighten the screws.
- 12. Attach the end brackets to the wall sleeve with 4 #10 x ½ in. screws (provided).
- 13. Adjust the leg bolts as needed to level the wall sleeve.

# **Make Electrical Connections**

**NOTE:** If the subbase is to be used only for structural support of the PTAC/PTHP, you do not need to read this section on making electrical connections.

## AWARNING



**Electrical Shock Hazard** 

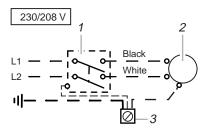
Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

#### 230/208 volt power supply

 In 230/208 volt applications, a field-supplied NEC approved receptacle can be installed in the subbase along with the optional disconnect switch accessory.



\_\_ \_ Field Supplied Wiring

- 1. Disconnect switch (if used)
- 2. Field-supplied NEC approved receptacle
- 3. Ground lug in subbase

# 230/208 volt installation with field-supplied NEC approved receptacle

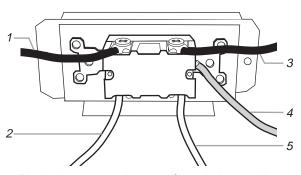
#### Parts needed

- NEC approved receptacle
- Green wire
- 1. Disconnect power.
- Route incoming power supply wires into the subbase behind the front cover.
- Connect the incoming L1 black wire to the L1 side of the receptacle.
- Connect the incoming L2 white or red wire to the L2 side of the receptacle.
- Connect the incoming green or bare ground wire to the subbase ground lug.
- **6.** Connect a field-supplied green wire between the receptacle and the subbase ground lug.
- Reinstall the chassis into the wall sleeve, and plug power cord into receptacle.

- 8. Reattach the PTAC/PTHP front cover using the thumbscrews removed earlier.
- 9. Replace all subbase covers.
- 10. Reconnect power.

# 230/208 volt installation with field-supplied NEC approved receptacle and disconnect switch accessory Parts needed

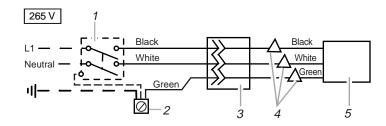
- NEC approved receptacle
- Black, white or red, and green wires
- 1. Disconnect power.
- Route incoming power supply wires into the subbase behind the front cover.
- 3. Connect the incoming L1 black wire and the incoming L2 white or red wire to one side of the disconnect switch. Connect a field-supplied black wire and field-supplied white or red wire to the other side of the disconnect switch. These 2 wires must be long enough to reach the receptacle.

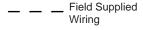


- 1. Black wire to receptacle
- 2. White or red wire to receptacle
- 3. Incoming L1 black power supply
- 4. Ground wire to subbase ground lug
- 5. Incoming L2 white or red power supply
- Connect the field-supplied black wire from the disconnect switch to the L1 side of the receptacle.
- 5. Connect the field-supplied white or red wire from the disconnect switch to the L2 side of the receptacle.
- **6.** Connect the incoming green or bare ground wire to the subbase ground lug.
- **7.** Connect a field-supplied green wire between the receptacle and the subbase ground lug.
- Reinstall the chassis into the wall sleeve, and plug power cord into receptacle.
- **9.** Reattach the PTAC/PTHP front cover using the thumbscrews removed earlier.
- 10. Replace all subbase covers.
- 11. Reconnect power.

#### 265 volt power supply

 In 265 volt applications, field-supplied conduit and wires or the conduit and junction box accessory can be installed in the subbase along with the optional disconnect switch accessory.



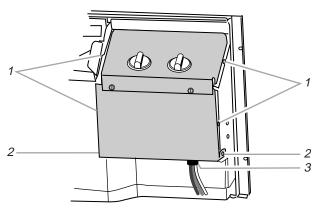


- 1. Disconnect switch (if used)
- 4. Wire nuts
- 2. Ground lug in subbase
- 5. Unit control box
- 3. Quick disconnect connector (if used)

**NOTE:** The quick disconnect connector is part of the conduit kit accessory.

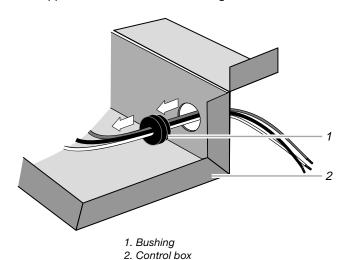
# 265 volt installation with field-supplied conduit and wires Parts needed

- Black, white and green wires
- UL listed wire nuts
- Conduit to reach between chassis control box and subbase
- 1. Disconnect power.
- Route incoming power supply wires into the subbase behind the front cover.
- **3.** Route the field-supplied black, white and green wires through the field-supplied conduit.
- Attach one conduit connector to the receptacle plate in the subbase.
- 5. Connect the incoming L1 black wire to the field-supplied black wire in the conduit using field-supplied UL listed wire
- Connect the incoming neutral white wire to the field-supplied white wire in the conduit using field-supplied UL listed wire nuts.
- 7. Connect the incoming green or bare ground wire and the field-supplied green wire to the subbase ground lug.
- 8. Reinstall the chassis into the wall sleeve.
- 9. Route the field-supplied conduit with wires from the subbase to the PTAC/PTHP control box.
- 10. Remove the 4 screws holding the control box.

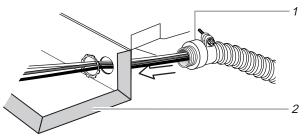


- 1. Remove these screws.
- 2. Do not remove these screws.
- 3. Bushing

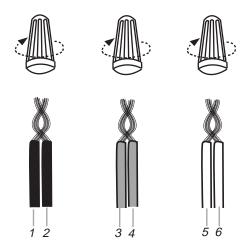
**11.** Pivot the control box down, pull the chassis pigtail wires into the control box, and remove the bushing from the hole. The field-supplied wires will be routed through this hole.



**12.** Install field-supplied conduit into the same hole as the original bushing for the chassis pigtail wires on the control box.



- 1. Straight connector
- 2. Control box
- 13. Connect the chassis pigtail wires to the field-supplied conduit wires using field-supplied UL listed wire nuts. Connect the black wire to the incoming L1 (black) wire. Connect the white wire to the incoming neutral (white) wire. Connect the green wire to the ground wire attached to the subbase ground lug.



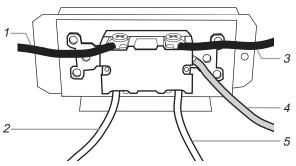
- 1. Black wire
- 2. Incoming L1 wire (black wire)
- 3. Green wire
- 4. Ground wire (green wire)
- 5. White wire
- 6. Neutral wire (white wire)
- Reattach the PTAC/PTHP control panel using the 4 screws removed earlier.

- **15.** Reattach the PTAC/PTHP front cover using the thumbscrews removed earlier.
- 16. Replace all subbase covers.
- 17. Reconnect power.

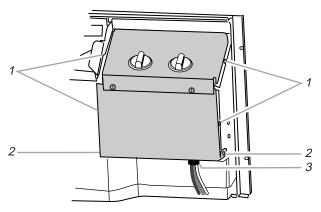
# 265 volt installation with field-supplied conduit and wires and disconnect switch accessory

#### Parts needed

- Black, white and green wires
- UL listed wire nuts
- Conduit to reach between chassis control box and subbase
- 1. Disconnect power.
- Route incoming power supply wires into the subbase behind the front cover.
- **3.** Route the field-supplied black, white and green wires through the field-supplied conduit.
- Attach one conduit connector to the receptacle plate in the subbase
- 5. Connect the incoming L1 black wire and incoming neutral white wire to one side of the disconnect switch. Connect the field-supplied black wire and field-supplied white wire from the conduit to the other side of the disconnect switch.

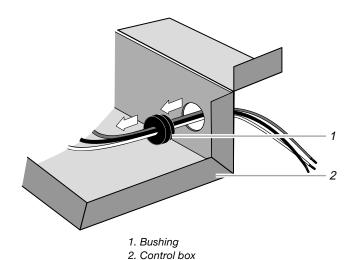


- 1. Black wire to PTAC/PTHP
- 2. White wire to PTAC/PTHP
- 3. Incoming L1 black power supply
- 4. Ground wire to subbase ground lug
- Incoming neutral white power supply
- Connect the incoming green or bare ground wire and the field-supplied green wire from the conduit to the subbase ground lug.
- 7. Reinstall the chassis into the wall sleeve.
- **8.** Route the field-supplied conduit with wires from the subbase to the PTAC/PTHP control box.
- 9. Remove the 4 screws holding the control box.

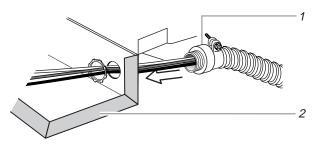


- 1. Remove these screws.
- 2. Do not remove these screws.
- 3. Bushing

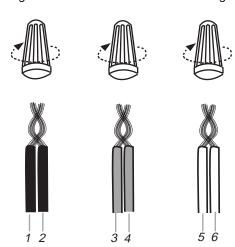
10. Pivot the control box down, pull the chassis pigtail wires into the control box, and remove the bushing from the hole. The field-supplied wires will be routed through this hole.



11. Install field-supplied conduit into the same hole as the original bushing for the chassis pigtail wires on the control box.



- 1. Straight connector
- 2. Control box
- 12. Connect the chassis pigtail wires to the field-supplied conduit wires using field-supplied UL listed wire nuts. Connect the black wire to the incoming L1 (black) wire. Connect the white wire to the incoming neutral (white) wire. Connect the green wire to the ground wire attached to the subbase ground lug.



- 1. Black wire
- 2. Incoming L1 wire (black wire)
- 3. Green wire
- 4. Ground wire (green wire)
- 5. White wire
- 6. Neutral wire (white wire)
- Reattach the PTAC/PTHP control panel using the 4 screws removed earlier.

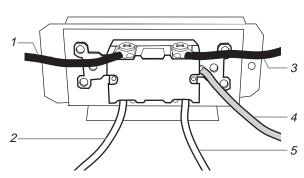
- **14.** Reattach the PTAC/PTHP front cover using the thumbscrews removed earlier.
- 15. Replace all subbase covers.
- 16. Reconnect power.

# 265 volt installation with conduit kit with junction box accessory

- 1. Disconnect power.
- Route incoming power supply wires into the subbase behind the front cover.
- Install the conduit kit with junction box accessory to the PTAC/PTHP chassis following the instructions for that accessory.
- 4. Reinstall the chassis into the wall sleeve.
- 5. Route the conduit into the subbase.
- **6.** Attach the right-angle conduit connector to the receptacle plate in the subbase.
- Connect the incoming L1 black wire to the black wire in the conduit using UL listed wire nuts (provided).
- **8.** Connect the incoming neutral white wire to the the white wire in the conduit using UL listed wire nuts (provided).
- **9.** Connect the incoming green or bare ground wire and green wire in the conduit to the subbase ground lug.
- Reattach the PTAC/PTHP front cover using the thumbscrews removed earlier.
- 11. Replace all subbase covers.
- 12. Reconnect power.

# 265 volt installation with conduit kit with junction box accessory and disconnect switch accessory

- **1.** Disconnect power.
- Route incoming power supply wires into the subbase behind the front cover.
- Install the conduit kit with junction box accessory to the PTAC/PTHP chassis following the instructions for that accessory.
- 4. Reinstall the chassis into the wall sleeve.
- 5. Route the conduit into the subbase.
- **6.** Attach the right-angle conduit connector to the receptacle plate in the subbase.
- Connect the incoming L1 black wire and incoming neutral
  white wire to one side of the disconnect switch. Connect the
  black wire and white wire from the conduit accessory to the
  other side of the disconnect switch.



- 1. Black wire to conduit accessory
- 2. White wire to conduit accessory
- 3. Incoming L1 black power supply
- Ground wire to subbase ground lug
- 5. Incoming neutral white power supply

- 8. Connect the incoming green or bare ground wire and green wire in the conduit accessory to the subbase ground lug.
- Reattach the PTAC/PTHP front cover using the thumbscrews removed earlier.
- 10. Replace all subbase covers.
- 11. Reconnect power.

# DESK CONTROL KIT INSTALLATION INSTRUCTIONS

- Unpack and dispose of packaging materials.
- The installation of this kit enables the PTAC/PTHP to be turned on or off from a remote location.

#### Install the Desk Control Kit



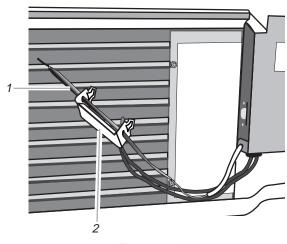
**Electrical Shock Hazard** 

Disconnect power before servicing.

Replace all parts and panels before operating.

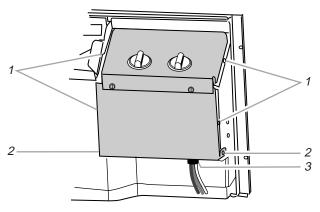
Failure to do so can result in death or electrical shock.

- 1. Disconnect power.
- 2. Remove the front cover.
- 3. Remove the thermostat bulb from the coil face by removing the clip.

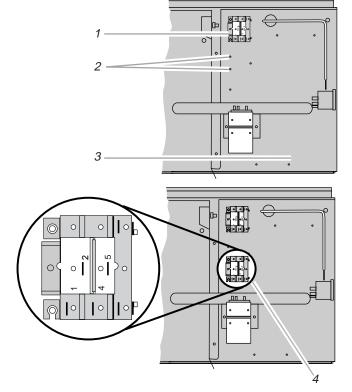


- 1. Thermostat bulb
- 2. Clip

4. Remove the 4 screws and rotate the control panel open.



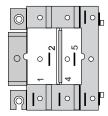
- 1. Remove these screws.
- 2. Do not remove these screws.
- 3. Bushing
- Mount the desk control relay on the control box back wall with 2 screws (provided).



- 1. Existing relay (heat pump models only)
- Use these holes to mount desk control relay.
- Control box back wall (other electrical components not shown for clarity)
- 4. Desk control relay installed

## **Make Electrical Connections** 230/208 Volt Power Supply

- Each desk control relay requires approximately 10 VA of
- Terminal numbers are marked on the desk control relay.

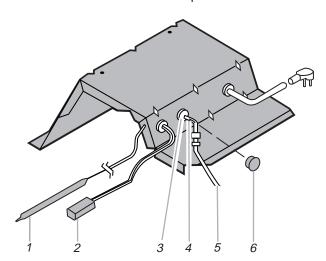


Desk control relay

- If PTAC/PTHP is 265 volt, see "Make Electrical Connections 265 Volt Power Supply.'
- Determine whether PTAC/PTHP is equipped with standard or remote thermostat controls, and see the appropriate section.

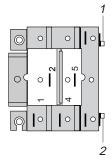
#### Standard Controls (no remote wall thermostat installed)

- 1. Disconnect power.
- 2. Remove the ribbed power cord lead from the L2 terminal on the unit switch, and connect it to terminal #2 on the desk control relav.
- 3. Connect the black wire, included with the desk control kit, to the L2 terminal on the unit switch and to terminal #1 on the desk control relay.
- 4. Remove the smooth power cord lead from the L1 terminal on the unit switch, and connect it to terminal #5 on the desk control relav.
- 5. Connect the white wire, included with the desk control kit, to the L1 terminal on the unit switch and terminal #4 on the desk control relay.
- 6. Remove and discard the hole plug in the bottom of the control box next to the heat anticipator wires.



- 1. Thermostat bulb
- 2. Heat anticipator
- 3. Strain relief bushing
- 4. 24 volt wire harness (supplied)
- 5. 24 volt wires (field supplied) to front desk
- 6. Hole plug

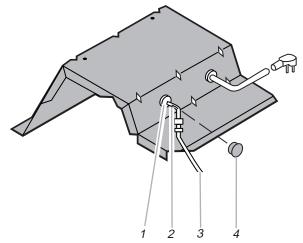
7. Run the harness wire ends with the quick connectors through the hole and connect them to the coil terminals of the desk control relay coil.



- 1. White wire
- 2. Black wire
- 8. Snap the strain relief bushing (provided) over the wire harness and insert it into the hole in the control box. Be sure that there is enough wire slack inside the control box to rotate the control box fully opened.

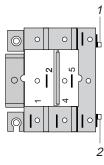
#### Remote Thermostat Control (on some models) (remote wall thermostat installed)

- 1. Disconnect power.
- 2. Remove the ribbed power cord lead from the 230 volt terminal on the unit transformer, and connect it to terminal #2 on the desk control relay.
- 3. Connect the black wire, included with the desk control kit, to the 230 volt terminal on the unit transformer and terminal #1 on the desk control relay.
- 4. Remove the smooth power cord lead from the COM terminal on the unit transformer, and connect it to terminal #5 on the desk control relav.
- 5. Connect the white wire, included with the desk control kit, to the COM terminal on the unit transformer and terminal #4 on the desk control relav.
- 6. Remove and discard the hole plug in the bottom of the control box.



- 1. Strain relief bushing
- 2. 24 volt wire harness (supplied)
- 3. 24 volt wires (field supplied) to front desk
- 4. Hole plug

Run the harness wire ends with the quick connectors through the hole and connect them to the coil terminals of the desk control relay coil.



- 1. White wire
- 2. Black wire
- 8. Snap the strain relief bushing (provided) over the wire harness and insert it into the hole in the control box. Be sure that there is enough wire slack inside the control box to rotate the control box fully opened.

#### Complete 230/208 Volt Installation

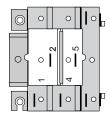
- Rotate the box back to its original position and reinstall the 4 screws. Make sure that all the wires are connected inside the control box.
- Run the wires from the front desk and connect them to the relay coil harness. Use the supplied wire nuts on this connection. These wires connect to the front desk control switch.

**IMPORTANT:** The installation of field wiring must conform to the requirements of the National Electrical Code, ANSI/NFPA NO. 70-(latest edition) in the United States, and any state laws and local ordinances (including plumbing or wastewater codes). In Canada, field wiring must conform to the Canadian electrical code PART I, CSA STANDARD C22.1-1993 or current edition. Local authorities having jurisdiction should be consulted before installation is made. Such applicable regulations or requirements take precedence over the general instructions in this manual.

- Reinstall the thermostat bulb and heat anticipator on the coil face
- 4. Reinstall the plastic front.
- 5. Reconnect power.

## Make Electrical Connections 265 Volt Power Supply

- Each desk control relay requires approximately 10 VA of power.
- Terminal numbers are marked on the desk control relay.

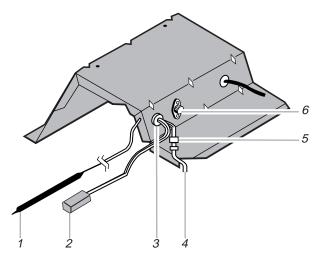


Desk control relav

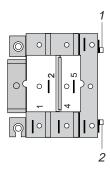
- If PTAC/PTHP is 230/208 volt, see "Make Electrical Connections 230/208 Volt Power Supply."
- Determine whether PTAC/PTHP is equipped with standard or remote thermostat controls, and see the appropriate section.

#### Standard Controls (no remote wall thermostat installed)

- 1. Disconnect power.
- Remove the white wire from the L2 terminal on the unit switch, and connect it to the terminal #2 on the desk control relay.
- 3. Connect the white wire, included with the desk control kit, to the L2 terminal on the unit switch and terminal #1 on the desk control relay.
- Remove the fused, black wire from the unit L1 terminal on the unit switch, and connect it to terminal #5 on the desk control relay.
- Connect the black wire, included with the desk control kit, to the L1 terminal on the unit switch and terminal #4 on the desk control relay.
- Remove the strain relief bushing holding the heat anticipator wires.



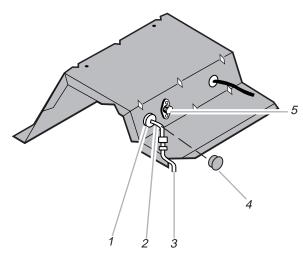
- 1. Thermostat bulb
- 4. 24 volt wire harness (supplied)
- 2. Heat anticipator
- 5. 24 volt wires (field supplied) to front desk
- 3. Strain relief bushing 6. Hole plug
- Run the harness wire ends with the quick connectors of the supplied 24 volt wire through this hole, and connect them to the coil terminals of the desk control relay coil.



- 1. White wire
- 2. Black wire
- Replace the strain relief bushing. This bushing now holds the relay coil harness as well as the existing heat anticipator wires.

# Remote Thermostat Control (on some models) (remote wall thermostat installed)

- 1. Disconnect power.
- Remove the fused, black wire from the 277 volt terminal on the unit transformer, and connect it to terminal #2 on the desk control relay.
- 3. Connect the black wire, included with the desk control kit, to the 277 volt terminal on the unit transformer and terminal #1 on the desk control relay.
- Remove the white wire from the COM terminal on the unit transformer, and connect it to the terminal #5 on the desk control relay.
- Connect the white wire, included with the desk control kit, to the COM terminal on the unit transformer and the terminal #4 on the desk control relay.
- Remove and discard the hole plug in the bottom of the control box next to the fuse holder.

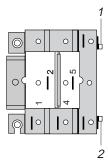


Strain relief bushing
 24 volt wire harness

(supplied)

- 3. 24 volt wires (field supplied) to front desk
- 4. Hole plug
- 5. Fuse holder

Run the harness wire ends with the quick connectors of the supplied 24 volt wire through this hole, and connect them to the coil terminals of the desk control relay coil.



- 1. White wire
- 2. Black wire
- Replace the strain relief bushing. This bushing now holds the relay coil harness as well as the existing heat anticipator wires.

#### **Complete 265 Volt Installation**

- Rotate the box back to its original position and reinstall the 4 screws. Make sure that all the wires are connected inside the control box.
- Run the wires from the front desk and connect them to the relay coil harness. Use the supplied wire nuts on this connection. These wires connect to the front desk control switch.

IMPORTANT: The installation of field wiring must conform to the requirements of the National Electrical Code, ANSI/NFPA NO. 70-(latest edition) in the United States, and any state laws and local ordinances (including plumbing or wastewater codes). In Canada, field wiring must conform to the Canadian electrical code PART I, CSA STANDARD C22.1-1993 or current edition. Local authorities having jurisdiction should be consulted before installation is made. Such applicable regulations or requirements take precedence over the general instructions in this manual.

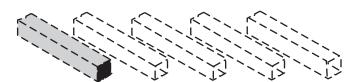
- Reinstall the thermostat bulb and heat anticipator on the coil face.
- 4. Reinstall the plastic front.
- 5. Reconnect power.

# LATERAL DUCT ADAPTER/ LATERAL DUCT EXTENSION KIT INSTALLATION INSTRUCTIONS

## **Location Requirements**

- Duct extensions come in 3-ft lengths. They can be combined for a total straight maximum extension length of 15 ft (4.6 m), or they can be cut to any desired length.
- The duct extension attaches to the air plenum and directs air in the right or left direction from the PTAC/PTHP.
- Determine the location of the duct and air termination.
- Determine the location of the secondary discharge grille.

■ The wall sleeve must project at least ¾ in. (1.9 cm) out from the wall surface.



# AWARNING



**Electrical Shock Hazard** 

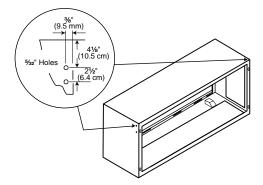
Disconnect power before servicing.

Replace all parts and panels before operating.

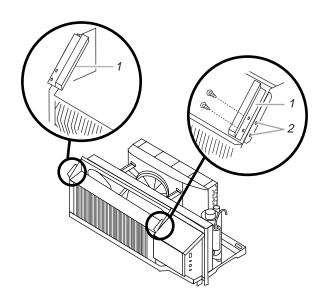
Failure to do so can result in death or electrical shock.

#### **Install Lateral Duct Adapter**

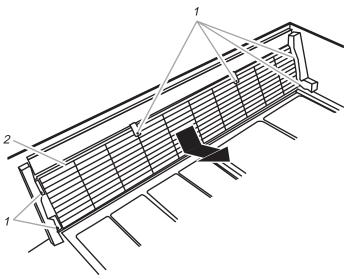
- 1. Disconnect power.
- 2. Remove front cover.
- 3. Remove the chassis from the wall sleeve (if installed).
- **4.** Locate and mark 4 mounting holes in the wall sleeve to attach the mounting brackets for the lateral duct adapter.
- **5.** Center punch and drill four 5/32 in. holes in the wall sleeve.



6. Use the seal plates on the chassis as templates. Align the bottom edge of the seal plate against the slanted edge of the deck, and align the side with the outer edge of the cutoff flange. Mark the location of the holes, center punch and drill two 5/32 in. holes through the flanges on each side.

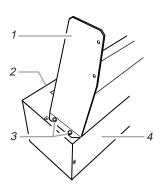


- 1. Seal plate
- 2. Holes in cutoff flanges
- 7. Using 4 unpainted screws, screw the left and right seal plates to the cutoff flanges.
- **8.** Remove the discharge grille by removing the 6 screws from underneath the plastic front.

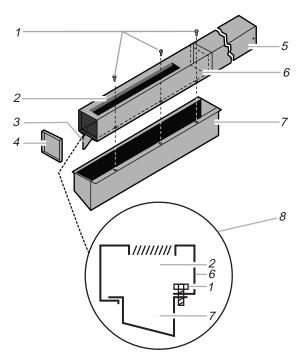


- 1. Remove these screws.
- 2. Discharge grille remove and discard.
- 9. Discard the grille.
- 10. Install the chassis in the sleeve, and reattach the plastic front.
- **11.** Determine whether the duct extension will be routed to the left or right side of the duct adapter.
- **12.** Attach 1 duct extension to the duct adapter using 3 painted screws. Make certain that the labels are on the same side.

**13.** Attach the left and right mounting brackets using 4 unpainted screws.

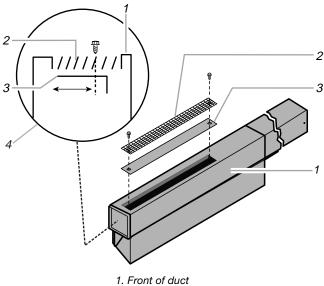


- 5 2 4
- Left mounting bracket
   Front of duct adapter
- 4. Back of duct adapter
- 2. Front of duct adapter
- 5. Right mounting bracket
- 3. Unpainted screws
- **14.** Remove the duct adapter discharge grille. Discard plastic wrapping.
- **15.** Install the plenum into the duct adapter and attach it with 3 unpainted screws.



- 1. Unpainted screws
  - ed screws 5. Duct extension
- 2. Duct adapter
- 6. Front of duct adapter
- 3. Mounting bracket
- 7. Plenum
- 4. End cap
- 8. Assembled end view
- **16.** Attach the end cap to the open end of the duct adapter using 3 painted screws.
- 17. Install air deflector and discharge grille using 2 painted screws. The air deflector installs between the duct adapter and grille, with the flanged edge down and toward the front of the duct adapter.

**NOTE:** To increase airflow out of side register, position the deflector plate toward the front of the duct adapter. To decrease airflow to the side register, position the deflector plate to the rear of the duct adapter.



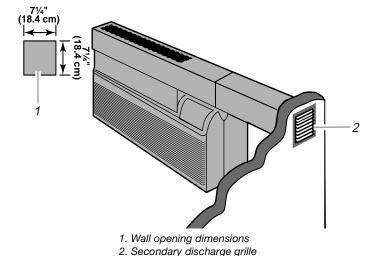
- adapter
- 2. Discharge grille
- 3. Air deflector
- 4. End view

#### Complete Installation

- Attach additional duct extensions using 4 painted screws each.
- 2. Cut the opening in the wall to 71/4 in. (18.4 cm) high x 71/4 in. (18.4 cm) wide.

The top of the duct will be approximately 25% in. (65.7 cm) from the bottom of the sleeve. The rear of the extension will be approximately flush with the front of the sleeve. Always measure your assembly to be sure, as installation tolerances may change overall dimensions.

- Cut the duct extension to length so that it is flush with the wall in the other room.
- **4.** Slide the assembly through the hole in the wall, and attach the entire assembly to the unit with 4 painted screws through the mounting brackets.
- 5. Attach the secondary discharge grille to the interior wall with 4 grille screws (provided).



6. Reconnect power.

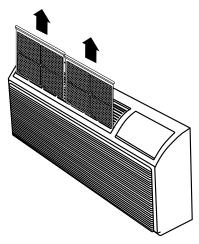
# PTAC/PTHP CARE

Your new PTAC/PTHP is designed to give you dependable service. This section tells you how to clean and care for your PTAC/PTHP properly.

## Cleaning the Air Filters

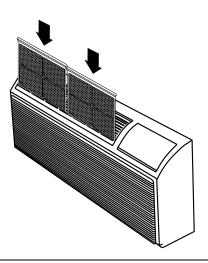
The air filters are removable for easy cleaning. Clean filters help remove dust, lint, and other particles from the air and are important for best cooling or heating and operating efficiency. Check the filters every month to see whether cleaning is needed. Do not operate the PTAC/PTHP without the filters in place.

1. Remove air filters by sliding filters up and out of front cover.



- 2. Shake off loose debris into trash receptacle.
- Use a vacuum cleaner to clean air filters. If air filters are very dirty, wash in warm water with a mild detergent. Do not wash air filters in the dishwasher or use any chemical cleaners. Air dry filters completely before replacing to ensure maximum efficiency.

4. Replace air filters by sliding filters down into the front cover.



## **Cleaning the Front Cover**

- Remove air filters and clean separately. See "Cleaning the air filters."
- 2. Remove the 2 thumb screws from the bottom of the front cover and remove the front cover.
- Clean the front cover with warm water and a mild soap or detergent. Use a soft cloth.
- 4. Rinse front cover and dry thoroughly with a soft, dry cloth.
- 5. Reattach front cover.
- 6. Replace filters.

# **Performing Maintenance**

## AWARNING



**Electrical Shock Hazard** 

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

## **A WARNING**

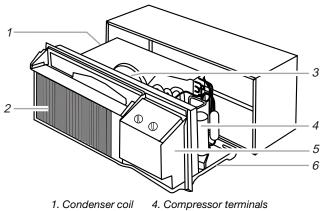
**Excessive Weight Hazard** 

Use two or more people to move and install PTAC/PTHP. Failure to do so can result in back or other injury.

Your PTAC/PTHP needs maintenance to help ensure steady, top performance throughout the year.

- 1. Disconnect power.
- 2. Remove front cover. See "Cleaning the front cover."

3. Remove the chassis from the wall sleeve.



- 2. Evaporator coil
- 5. Control box
- 3. Fan motor
- 6. Base pan
- 4. To avoid product damage, cover the fan motor, control box, and compressor terminals and make sure no water or other liquids get inside any of these parts.
- 5. Carefully clean and hose out base pan, condenser coil and evaporator coil. Clean at least once a year or more often if the condenser and evaporator coils and base pan collect dirt, sand, leaves, insects, or algae. Also, clean if you detect an odor coming from the air conditioner.
- **6.** After cleaning the air conditioner, remove any coverings used to protect electrical components.
- 7. Replace PTAC/PTHP into wall sleeve.
- 8. Replace front cover.
- 9. Replace air filter.
- **10.** Wait 24 hours before starting the PTAC/PTHP again. This allows time for all areas to dry out.

# TROUBLESHOOTING

If the PTAC/PTHP is not working satisfactorily, follow these basic troubleshooting suggestions.

Being familiar with the sequence of operation on Standard Controlled Operating Units or the operation of the Remote Thermostat Controlled Units is important. The following questions and answers may help to identify performance problems.

#### **Environmental Effects - Cooling Mode**

- Is the PTAC/PTHP sized to the room size area and the cooling load demand? Room width x length x 3.5 equals an approximation of the number of BTU's required for the area. Other factors can affect the number of BTU's required for an area, such as, the number of electrical devices, solar gains, etc. Consider these factors when sizing the PTAC/PTHP for your application.
- Is the outdoor temperature 60°F (15.6°C) or below? The PTAC/PTHP is designed for proper cooling operation at outdoor temperatures above 60°F (15.6°C).
- Is the indoor temperature 80°F (26.7°C) or above? Ambient indoor temperatures of 80°F (26.7°C) or above will take a longer period of run time to cool down the area. Long run times may indicate that the PTAC/PTHP is undersized.
- Is indoor humidity high? This condition will cause the PTAC/ PTHP to operate longer to remove humidity before noticing any cooling effect.
- Has the cooling load been increased by additional devices such as computer equipment or has the room area been increased where the PTAC/PTHP is located? If conditions have changed, the PTAC/PTHP may not be able to cool and condition as effectively as previously planned.

#### **Environmental Effects - Heating Mode**

- Is the PTAC/PTHP properly sized to the room area and heat load demand? Multiplying the width x length x 3.5 provides an approximation of the number of BTU's required for the area. Other factors can affect the number of BTU's required for an area, such as, the number of electrical devices, solar gains, etc. Consider these factors when sizing the PTAC/PTHP for your application.
- Is the outdoor temperature 70°F (21.1°C) or above? The PTAC/PTHP is designed for proper cooling operation at outdoor temperatures below 70°F (21.1°C).
- Is the indoor temperature 60°F (15.6°C) or below? Ambient indoor temperatures of 60°F (15.6°C) or below will take a longer period of run time to heat the area. Long run times may indicate that the PTAC/PTHP is undersized.
- Has the room area been increased where the PTAC/PTHP is located? If the area where the PTAC/PTHP is located has been increased, the PTAC/PTHP may not provide adequate heat.

#### **Insufficient Maintenance and Inspection**

Installation errors are the most common cause of poor performance. Please follow the installation instructions carefully.

# ASSISTANCE OR SERVICE

Before calling for assistance or service, please check "Troubleshooting." It may save you the cost of a service call. If you still need help, follow the instructions below.

When calling, please know the purchase date and the complete model and serial number of your appliance. This information will help us to better respond to your request.

#### If you need replacement parts

If you need to order replacement parts, we recommend that you use only factory specified replacement parts. Factory specified replacement parts will fit right and work right because they are made with the same precision used to build every new WHIRLPOOL® appliance.

To locate factory specified replacement parts in your area, call our Customer Interaction Center telephone number or your nearest Whirlpool designated service center.

#### In the U.S.A.

Call the Whirlpool Customer Interaction Center toll free: 1-800-253-1301.

#### Our consultants provide assistance with:

- Features and specifications on our full line of appliances.
- Installation information.
- Use and maintenance procedures.
- Accessory and repair parts sales.
- Specialized customer assistance (Spanish speaking, hearing impaired, limited vision, etc.).
- Referrals to local dealers, repair parts distributors, and service companies. Whirlpool designated service technicians are trained to fulfill the product warranty and provide afterwarranty service, anywhere in the United States.

To locate the Whirlpool designated service company in your area, you can also look in your telephone directory Yellow Pages.

#### For further assistance

If you need further assistance, you can write to Whirlpool Corporation with any questions or concerns at:

Whirlpool Brand Home Appliances Customer Interaction Center 553 Benson Road Benton Harbor, MI 49022-2692

Please include a daytime phone number in your correspondence.

### In Canada

For product related questions, please call the Whirlpool Canada Inc. Customer Interaction Center toll free:

#### 1-800-461-5681

Monday to Friday 8:00 a.m. - 6:00 p.m. (EST). Saturday 8:30 a.m. - 4:30 p.m. (EST).

#### Our consultants provide assistance with:

- Features and specifications on our full line of appliances.
- Referrals to local dealers.

For parts, accessories and service in Canada

Call **1-800-807-6777.** Whirlpool Canada Inc. designated service technicians are trained to fulfill the product warranty and provide after-warranty service, anywhere in Canada.

#### For further assistance

If you need further assistance, you can write to Whirlpool Canada Inc. with any questions or concerns at:

Customer Interaction Center Whirlpool Canada Inc. 1901 Minnesota Court Mississauga, Ontario L5N 3A7

Please include a daytime phone number in your correspondence.

# WHIRLPOOL® PACKAGED TERMINAL AIR CONDITIONER (PTAC) AND PACKAGED TERMINAL HEAT PUMP (PTHP) WARRANTY

#### ONE YEAR FULL WARRANTY

For one year from the date of installation, if this PTAC/PTHP fails when operated and maintained according to instructions attached to or furnished with the product, Whirlpool Corporation will pay for replacement parts and repair labor to correct defects in materials or workmanship. Service must be provided by a Whirlpool designated service company.

#### **FIVE YEAR FULL WARRANTY**

For five years from the date of purchase, if this PTAC/PTHP fails when operated and maintained according to instructions attached to or funished with the product, Whirlpool Corporation will pay for replacement parts and repair labor to correct defects in materials or workmanship in the sealed refrigeration system, including the compressor, evaporator, condenser, reversing valve and connecting tubing. Service must be provided by a Whirlpool designated service company.

#### SECOND THROUGH FIFTH YEAR LIMITED WARRANTY

For the second through fifth year from the date of purchase, if this PTAC/PTHP fails when operated and maintained according to instructions attached to or furnished with the product, Whirlpool Corporation will pay for replacement parts to correct defects in materials or workmanship in the electrical or air flow systems including the fan motor, capacitor, fan, blower wheel, switches, thermostat, relays, frost controls, heat control, heater, heater protectors, compressor overload, solenoids, auxiliary controls, and transformer. This is a limited parts-only warranty and does not include labor or transportation to and from the service shop. Service must be provided by a Whirlpool designated service company.

#### Whirlpool Corporation will not pay for:

- 1. Service calls to correct the installation of your PTAC/PTHP, instruct you how to use your PTAC/PTHP, to replace fuses or correct wiring or reset circuit breakers, or to clean or replace owner accessible air filters.
- 2. Damage resulting from accident, alteration, misuse, abuse, fire, floods, acts of God, improper installation not in accordance with local electrical and plumbing codes, or use of products not approved by Whirlpool Corporation or Whirlpool Canada Inc.
- 3. Replacement parts or repair labor costs for units operated outside the United States or Canada.
- 4. Pickup and delivery, or any transportation and reinstallation charges that may be required.
- 5. The removal and reinstallation of your PTAC/PTHP.
- 6. Repairs to parts or systems resulting from unauthorized modifications made to the PTAC/PTHP.

# WHIRLPOOL CORPORATION AND WHIRLPOOL CANADA INC. SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages, so this exclusion or limitation may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state or province to province.

Outside the United States and Canada, a different warranty may apply. For details, please contact your Whirlpool authorized dealer.

If you need service, first see "Troubleshooting" section of the Installation/Operation Manual. After checking "Troubleshooting," additional help can be found by checking the "Assistance or Service" section, or by calling the Whirlpool Corporation. Customer Interaction Center at **1-800-253-1301** (toll-free), from anywhere in the United States. In Canada, please call **1-800-807-6777**.

Keep this warranty and your sales slip together for future reference. You must provide proof of purchase or installation date for in-warranty service.

Write down the following information about your PTAC/PTHP to better help you obtain assistance or service if you ever need it. You will need to know your complete model number and serial number.

Dealer name
Address
Phone number
Model number
Serial number
Purchase date

4/03