



# Zonline<sup>®</sup> Air Conditioners

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**Owner's Manual and  
Installation Instructions**

Heat/Cool Model 4100  
Heat Pump Model 6100

**Español**

For a Spanish version of this manual, visit our Website at [www.zonline.com/literature](http://www.zonline.com/literature).

Para consultar una version en español de este manual de instrucciones, visite nuestro sitio de internet [www.zonline.com/literature](http://www.zonline.com/literature).

**Français**

For a French version of this manual, visit our Website at [www.zonline.com/literature](http://www.zonline.com/literature).

Pour un version français de ce manuel d'utilisation, veuillez visiter notre site web à l'adresse [www.zonline.com/literature](http://www.zonline.com/literature).

Write the model and serial numbers here:

Model # \_\_\_\_\_

Serial # \_\_\_\_\_

Find these numbers on a label behind the room cabinet on the base pan.

## IMPORTANT SAFETY INFORMATION. READ ALL INSTRUCTIONS BEFORE USING.

### **⚠️ WARNING!**

For your safety, the information in this manual must be followed to minimize the risk of fire or explosion, electric shock, or to prevent property damage, personal injury, or loss of life.



### SAFETY PRECAUTIONS

- This Zoneline must be properly installed in accordance with the Installation Instructions before it is used. See the Installation Instructions in the back of this manual.
- Replace immediately all electric service cords that have become frayed or otherwise damaged. A damaged power supply cord must be replaced with a new power supply cord obtained from the manufacturer and not repaired. Do not use a cord that shows cracks or abrasion damage along its length or at either the plug or connector end.
- Unplug or disconnect the Zoneline at the fuse box or circuit breaker before making any repairs.

**NOTE:** We strongly recommend that any servicing be performed by a qualified individual.

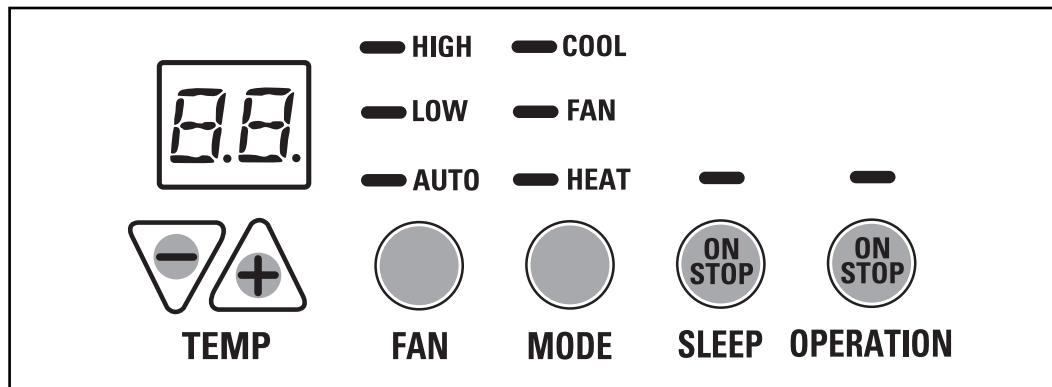
- These R410A air conditioning systems require contractors and technicians to use tools, equipment and safety standards approved for use with this refrigerant. **DO NOT use equipment certified for R22 refrigerant only.**

#### ***Replacing an existing unit?***

For details, see the Installation Instructions in this manual.



**READ AND FOLLOW THIS SAFETY INFORMATION CAREFULLY.  
SAVE THESE INSTRUCTIONS**



## TEMP CONTROL    FAN, MODE & SLEEP OPERATION

1

2



### Controls

#### 1 Temp Control

The temp control is used to maintain the room temperature. The compressor will cycle on and off to keep the room at the same level of comfort.

Press the ▲ pad to raise the temperature.

Press the ▼ pad to lower the temperature.

**NOTE:** The display shows the set temperature, not the room temperature.

#### 2 Sleep

Press to set the air conditioner to run for 8 hours before it automatically returns to the previous setting.

When in the cooling mode and the sleep timer is set, the set temperature will automatically increase 2°F after the second hour then 1°F each hour over the next two hours. Also, the fan speed will change to low. When in the heating mode, the set temperature will decrease in the same manner.

To cancel the sleep mode, press the **MODE** pad or the **SLEEP** pad a second time.

#### 2 Fan, Mode and Operation Control

**FAN**—Sets the fan operation for **HIGH**, **LOW** or **AUTO** speed. When set at **AUTO**, it automatically switches between **LOW** and **HIGH** as room temperature changes.

**MODE—COOL**—For cooling

**FAN**—For fan-only operation

**HEAT**—For heating

**OPERATION—ON/STOP**—Turns the unit on or off. Power remains connected to the Zoneline. The Freeze/Heat Sentinel features still function if active. See the *Freezer/Heat Sentinel* section on page 6.

**NOTE:** The temperature display will flash to indicate a possible unit malfunction. Set operation control to **STOP** and then restart the unit. If the flashing light reappears within 30 minutes, call for service.

#### Quick Heat Recovery

Activates each time the thermostat is switched from **STOP** or **COOL** mode to **HEAT** mode. Electric heaters are energized until the thermostat set point is reached. On heat pump models, the heat pump operation will resume at the next call for heat.

### About Your Heat Pump (6100 Series only)

Heat pumps can save money by removing heat from the outside air—even when the outside temperature is below freezing—and releasing that heat indoors.

To get the best performance from your heat pump, don't change the room thermostat very often. Raising the heat setting 2–3 degrees will cause the Zoneline to use its electric heating elements in order to reach the new temperature setting quickly.

There is a 3-minute minimum compressor run time at any setting to prevent short cycling.

The indoor fan motor starts before the compressor and stops after the compressor cycles off.

When the outdoor temperature is lower than 25°F, heat is provided by the electric heater in the air conditioner instead of by the heat pump.

The electric heating elements use much more electricity than heat pumps and cost more to operate.

## Other features of your Zonline.

### Ventilation Control

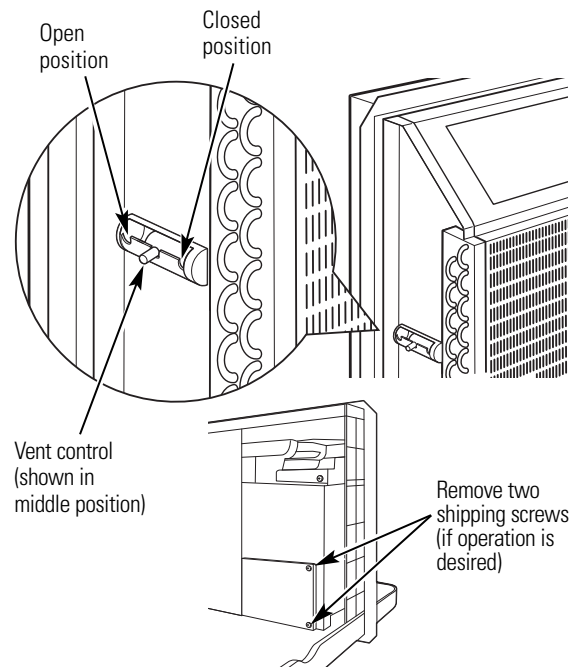
**NOTE:** Two shipping screws must be removed from the vent door before use. See the Installation Instructions in the back of this manual. If you do not plan to use the ventilation feature, leave these two screws in place.

The ventilation control lever is located at the middle left side of the Zonline unit, behind the room cabinet.

When set at the closed position, only the air inside the room is circulated and filtered.

When set at the open position, some outdoor air will be drawn into the room. This will reduce the heating or cooling efficiency.

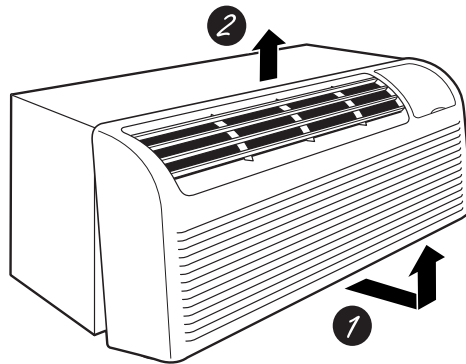
**Energy Tip:** Keep the vent control in the closed position. The room air will be filtered and circulated.



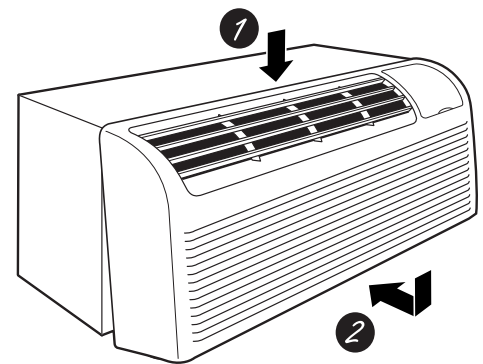
### To Remove the Room Cabinet

Additional controls are located behind the room cabinet.

**To remove:** Pull out at the bottom to release it from the tabs (1). Then lift up (2).

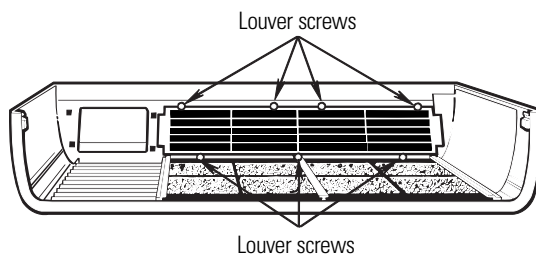


**To replace:** Place the tabs over the top rail (1). Push inward at the bottom until it snaps into place (2).

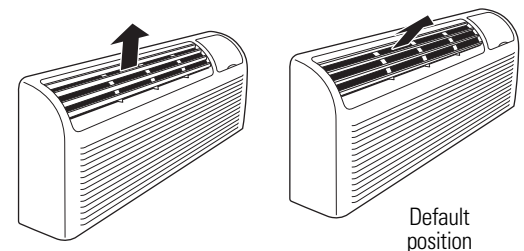


### Air Direction

To change the air direction, remove the room cabinet. Remove the 7 louver screws that hold the louver insert in place. Flip the louver insert 180°, replace the screws and the room cabinet.



Remove the room cabinet and flip the louver insert to change the air direction.

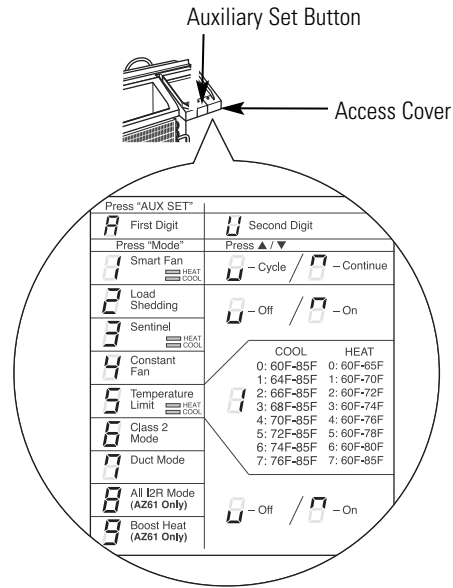


## Auxiliary Controls—Aux Set Button

The auxiliary set controls are located behind the room cabinet, below the control panel.

Remove the room cabinet. See the *To Remove the Room Cabinet* section.

The owner is responsible for ensuring the auxiliary controls are set to the desired function. There are 9 different modes that can be set using the auxiliary set button. To change modes, press **AUX SET** ("AU" appears on the display). Press the mode button on the control pad until the first digit in the display shows the number corresponding to the mode you are choosing and the correct HEAT/COOL LED is lit. Press the up or down arrow (shown in the second digit of the display) to make the mode setting selection where applicable. Press the **AUX SET** button to confirm the selection.

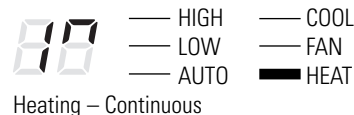
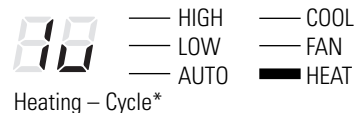
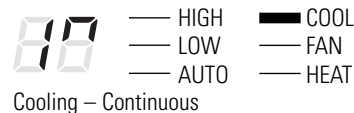
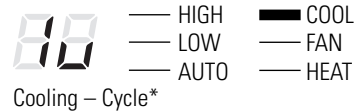


### MODE 1 Smart Fan—Cooling/Heating

The default setting for Mode 1 is as follows:  
Cooling: Continuous (ON)  
Heating: Cycle (OFF)

Press **MODE** until a 1 appears in the first digit of the display for **Smart Fan** cool mode. The **COOL** LED light on the main control will be on. To change to heat mode, press **MODE** again. The **HEAT** LED light on the main control will be lit. Press the down arrow to set the indoor fan to cycle on/off when the unit is heating or cooling "U." Press the up arrow to set the indoor fan to run continuously "U." This is shown in the second digit of the display. Press **AUX SET** to confirm your selection and exit **AUX SET** mode, or press **MODE** to continue setting other functions.

\*Note: In cyclic cooling mode, the indoor fan will activate occasionally to verify airtemperature in the room. In cyclic heating mode, the fan will continue to operate for 90seconds after the heating function has stopped in order to increase unit efficiency.



### MODE 2 Load Shedding (Central Desk Control)

The default setting for Mode 2 is OFF.

This feature is active only if the unit is connected to a CDC and the CDC has control. Press **MODE** until a 2 appears in the first digit of the display for **Load Shedding** mode. Press the down arrow for OFF "U" or the up arrow for ON "U." This is shown in the second digit of the display. When this mode is on, only the indoor fan can be turned ON or OFF with the unit controls. When this mode is off, all operation is disabled except Heat/Freeze Sentinel (Mode 3). Press **AUX SET** to confirm your selection and exit **AUX SET** mode, or press **MODE** to continue setting other functions.



## Auxiliary controls on your Zoneline.

### MODE 3 Freeze Sentinel/Heat Sentinel

In the default setting for Mode 3, **Heat Sentinel** is off, **Freeze Sentinel** is on.

Press **MODE** until a 3 appears in the first digit of the display for **Freeze Sentinel** mode. The **COOL** LED light on the main control will be on. Press **MODE** again to change to the **Heat Sentinel**. The **HEAT** LED light on the main control will be on. Press the down arrow for OFF "⏏" or the up arrow for ON "⏏." This is shown in the second digit of the display. Press **AUX SET** to confirm your selection and exit **AUX SET** mode, or press **MODE** to continue setting other functions.

When **Freeze Sentinel** is activated, it automatically provides heat without user interface. This helps to prevent plumbing damage by turning the heater and indoor fan ON at 41°F and OFF at 46°F.

When **Heat Sentinel** is activated, it automatically provides cooling without user interface. This helps to prevent an excessively hot room by turning the air conditioner ON at 85°F and OFF at 80°F.


**NOTE:** These functions are active whenever the unit is plugged in, even if the unit is in the STOP position.

 — HIGH — COOL  
— LOW — FAN  
— AUTO — HEAT

Freeze Sentinel OFF

 — HIGH — COOL  
— LOW — FAN  
— AUTO — HEAT

Freeze Sentinel ON

 — HIGH — COOL  
— LOW — FAN  
— AUTO — HEAT

Heat Sentinel OFF

 — HIGH — COOL  
— LOW — FAN  
— AUTO — HEAT

Heat Sentinel ON

### MODE 4 Constant ON Fan

The default setting for Mode 4 is OFF.

Press **MODE** until a 4 appears in the first digit of the display to set the fan to run continuously at high speed, even if the unit is in the STOP position. Press the down arrow for OFF "⏏" or the up arrow for ON "⏏." This is shown in the second digit of the display. Press **AUX SET** to confirm your selection and exit **AUX SET** mode, or press **MODE** to continue setting other functions.



Constant Fan OFF



Constant Fan ON

### MODE 5 Temperature Limiting

The default setting for Mode 5 is as follows:

Cool: 2 (66°F to 85°F)

Heat: 5 (60°F to 78°F)

Press **MODE** until a 5 appears in the first digit of the display for **Temperature Limiting** cool mode. The **COOL** LED light on the main control will be lit. To change to heat mode, press **MODE** again and the **HEAT** LED light on the main control will be lit. To set the temperature limits, press the up or down arrow keys. The second digit of the display will be between 0 and 7 depending on the limit you want to set. The chart shows the limits available. Press **AUX SET** to confirm your selection and exit **AUX SET** mode, or press **MODE** to continue setting other functions.

Temperature limits—Cool	Temperature limits—Heat
0 = 60°F to 85°F	0 = 60°F to 65°F
1 = 64°F to 85°F	1 = 60°F to 70°F
2 = 66°F to 85°F	2 = 60°F to 72°F
3 = 68°F to 85°F	3 = 60°F to 74°F
4 = 70°F to 85°F	4 = 60°F to 76°F
5 = 72°F to 85°F	5 = 60°F to 78°F
6 = 74°F to 85°F	6 = 60°F to 80°F
7 = 76°F to 85°F	7 = 60°F to 85°F

 — HIGH — COOL  
— LOW — FAN  
— AUTO — HEAT

Temperature Limiting Cool – Limit 2

 — HIGH — COOL  
— LOW — FAN  
— AUTO — HEAT

Temperature Limiting Heat – Limit 3

### MODE 6 Remote Thermostat – Class 2

The default setting for Mode 6 is OFF.

Setting this mode to ON will allow the unit to operate with a Class 2 Remote Control Wall Thermostat. Press **MODE** until a 6 appears in the first digit of the display for **Class 2** mode. Press the down arrow to turn the option OFF "⏏." Press the up arrow to turn this option ON "⏏." This is shown in the second digit of the display. Press **AUX SET** to confirm your selection and exit **AUX SET** mode, or press **MODE** to continue setting other functions.



Class 2 OFF



Class 2 ON

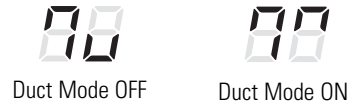


**MODE 7 Duct Mode**

The default setting for Mode 7 is OFF. This setting is used when the unit is installed using a duct adapter kit. If the unit is ducted, the Duct Mode needs to be set to ON. This increases the fan speed to ensure proper circulation.

Press **MODE** until a 7 appears in the first digit of the display. Press the up or down arrow keys to set this switch to OFF "⏏" or ON "⏏". This is shown in the second digit of the display. Press **AUX SET** to confirm your selection and exit **AUX SET** mode.

For Model AZ6100, press **MODE** to continue setting other functions. Pressing **MODE** on Model AZ4100 will return you to **AUX SET** mode and an "AU" will appear in the display.



**MODE 8 All-Electric Heat (AZ6100 only)**

The default setting for Mode 8 is OFF. This electric heat option functions only on the 6100 model. When this option is ON "⏏," heat pump operation is locked out, causing the unit to provide only electric resistance heat. To set **All-Electric Heat** option, press **MODE** until an 8 appears in the first digit of the display. Press the up or down arrow keys to set this switch to OFF "⏏" or ON "⏏." This is shown in the second digit of the display.

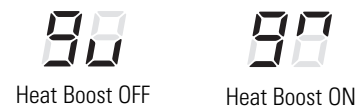
Press **AUX SET** to confirm your selection and exit **AUX SET** mode, or press **MODE** to continue setting other functions.



**MODE 9 Heat Boost (AZ6100 only)**

The default setting for Mode 9 is OFF. When **Heat Boost** is ON and outer temperatures are between 25°F and 46°F, heat pump only operation is locked out. This setting is used to provide supplementary heat to the heat pump operation by electric resistance heat in conditions where the heat pump-only operation is not sufficient to maintain a consistent, comfortable room temperature. **NOTE:** Temperature Boost option should not be used with remote thermostat operation. This will cause the unit to switch to resistance heat when the outdoor temperature is 46°F.

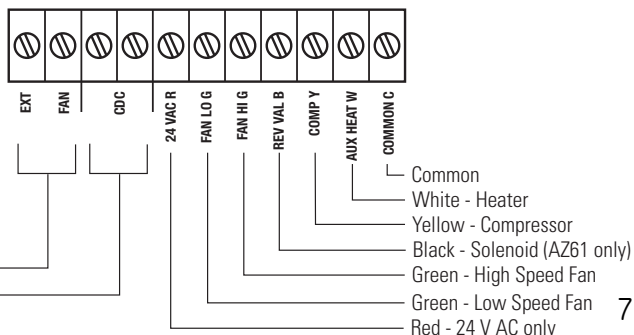
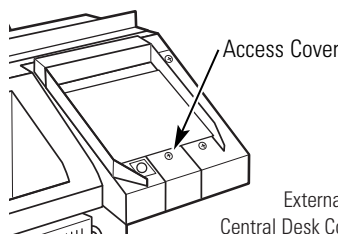
To set Heat Boost, press **MODE** until a 9 appears in the first digit of the display. Press the up or down arrow keys to set this switch to OFF "⏏" or ON "⏏." This is shown in the second digit of the display. Press **AUX SET** to confirm your selection and exit **AUX SET** mode.



**Auxiliary Controls—Terminal Connections**

The auxiliary controls are located behind the room cabinet beneath the access cover.

- 1 Turn off and unplug the unit.
- 2 Remove the room cabinet. See the *To Remove the Room Cabinet* section.
- 3 Remove the screw from the access cover.
- 4 To make wiring connections, insert the wires into the bottom of the terminals and tighten screws securely.
- 5 After all desired connections have been made, replace the access cover and room cabinet.



The owner is responsible for making all connections and setting the appropriate **AUX SET** mode.

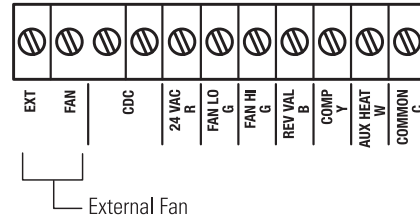
**CAUTION:**

Improper wiring may damage the Zoneline electronics. No common busing is permitted. Damage or erratic operation may result. A separate wire pair must be run from each separate controlling switch to each individual Zoneline.

## Auxiliary controls on your Zoneline.

### External Fan (Obtained locally)

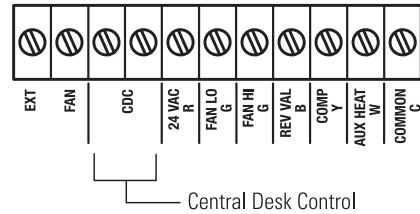
When connected, an auxiliary or external fan can be controlled with the indoor fan motor on the Zoneline. Connections provide 24 V AC to energize a remote relay, turning on the external fan.



### Central Desk Control


When connected, the unit can be turned ON or OFF with a switch located at the Central Control Panel. A separate wire pair must be run from each separate controlling switch to each individual Zoneline.

Refer to MODE 2 on page 5 for fan setting options.



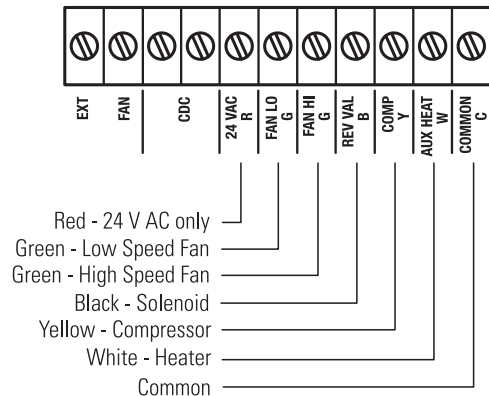
### Remote Thermostat

When connected to a remote thermostat, the indoor air temperature sensing is shifted from the unit to the remote thermostat. For this reason, the units will operate slightly differently when connected to a remote thermostat. The following chart shows the unit operation when connected to a remote thermostat.

**NOTE:** The Class 2 Mode setting (Mode 6) must be set to ON "  " for the unit to operate with a Class 2 Remote Wall Thermostat. (See the installation instructions supplied with the remote thermostat and Mode instructions on page 7.)



Class 2 Shown ON



**IMPORTANT:** The Zoneline thermostat connections provide 24 V AC only.

If using a digital/electronic wall thermostat, you must set it to the 24 V AC setting. See the Installation Instructions for the wall thermostat.

### **⚠ CAUTION:**

Damage to a wall thermostat or to the Zoneline electronics can result from improper connections. Special care must be used in connecting the wires. No line voltage connections should be made to any circuit. Isolate all wires in building from line voltage.

Feature	Heat Pump	Electric Heat
Indoor Frost Control	Yes	Yes
Freeze Sentinel	Yes	Yes
Auto Fan Speed	No	No
Electronic Temperature Limiting	No	No
Switch to Resistance Heat Based On Indoor Temperature	Determined by Remote Thermostat	N/A
Switch to Resistance Heat Based On Outdoor Temperature	Yes	N/A
Reverse Cycle Defrost	Yes	N/A
Simultaneous Resistance Heat with Heat Pump	No	N/A
Resistance Heat Lockout	Yes	N/A
"Smart Fan" Fan Cycle	Fan ON/AUTO Set On Remote Thermostat	Fan ON/AUTO Set On Remote Thermostat
Central Desk Control	Yes	Yes



# Care and cleaning.

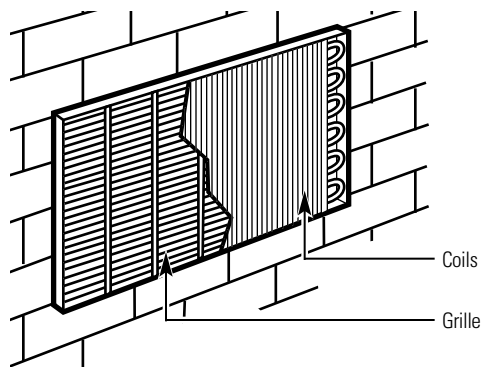
## Room Cabinet and Case

Turn the Zonline off and disconnect the power supply.

To clean, use water and a mild detergent. Do not use bleach or abrasives. Some commercial cleaners may damage the plastic parts.

## Outdoor Coils

The coils on the outdoor side of the Zonline should be checked regularly. If they are clogged with dirt or soot, they may be professionally steam cleaned. You will need to remove the unit from the wall sleeve to inspect the coils. The dirt buildup occurs on the fan side of the outdoor coil.



Clean the outside coils regularly.

## Base Pan

In some installations, dirt or other debris may be blown into the unit from the outside and settle in the base pan (the bottom of the unit).

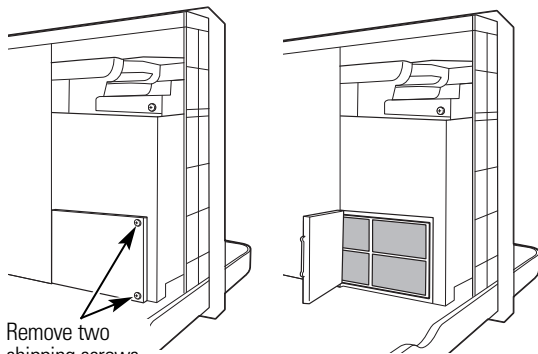
In some areas of the United States, a naturally occurring "gel-like" or "slime-like" substance may be seen in the base pan.

Check it periodically and clean, if necessary.

## Ventilation Filter

If the vent door is open, access requires the removal of the unit from the wall sleeve. Clean the vent filter twice a year or as required.

Turn the Zonline off and unplug before cleaning.



Remove two shipping screws (if operation is desired)

To clean the vent filter:

### IMPORTANT:

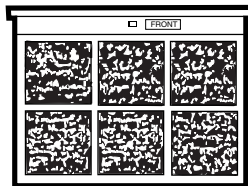
This filter is not removable. Trying to remove this filter will damage the unit.

- Use a vacuum to remove debris from the filter.
- Use a damp rag to wipe down the filter and surrounding area after vacuuming.

## Care and cleaning.

To maintain optimum performance, clean the filters at least every 30 days.

### Air Filters



Dirty filter—Needs cleaning

Clogged filter—Greatly reduces cooling, heating and airflow.

#### Turn the Zoneline off before cleaning.

The most important thing you can do to maintain the Zoneline is to clean the filter at least every 30 days. Clogged filters reduce cooling, heating and air flow.

#### Keeping these filters clean will:

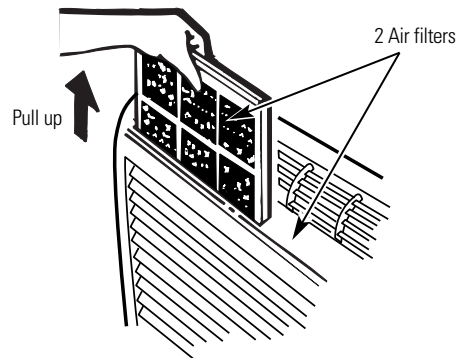
- Decrease cost of operation.
- Save energy.
- Prevent clogged heat exchanger coils.
- Reduce the risk of premature component failure.

#### To clean the air filters:

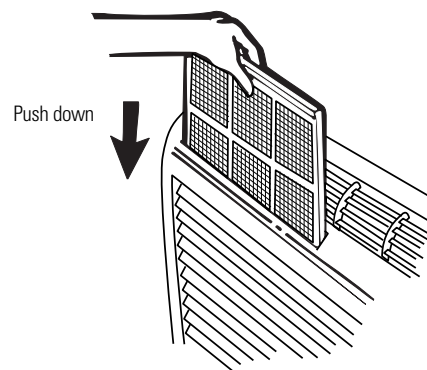
- Vacuum off the heavy soil.
- Run water through the filters from the back side.
- Dry thoroughly before replacing.

**NOTE:** The air filters are interchangeable and will fit in either the right or left side.

#### To remove the air filters:



#### To replace the air filters:



**⚠ CAUTION:** Do not operate the Zoneline without the filters in place. If a filter becomes torn or damaged, it should be replaced immediately.

Operating without the filters in place or with damaged filters will allow dirt and dust to reach the indoor coil and reduce the cooling, heating, airflow and efficiency of the unit.

Replacement filters are available from your salesperson, GE dealer, GE Service and Parts Center or authorized Customer Care® servicers.

# Installation Instructions

# Zonline Air Conditioners

Questions? Call 800.GE.CARES (800.432.2737) or Visit our Website at: [GEAppliances.com](http://GEAppliances.com)

## BEFORE YOU BEGIN

Read these instructions completely and carefully.

- **IMPORTANT** – Save these instructions for local inspector's use.
- **IMPORTANT** – Observe all governing codes and ordinances.
- **Note to Installer** – Be sure to leave these instructions with the owner.
- **Note to Owner** – Keep these instructions for future reference.
- Proper installation is the responsibility of the installer.
- Product failure due to improper installation is not covered under the Warranty.

## AIR CONDITIONER BREAK-IN PERIOD

**NOTE** – As with any mechanical device with moving parts, this unit will have a wear-in period. AFTER INSTALLATION, this unit should be operated for 48 hours to achieve optimum efficiency.

## TOOLS YOU WILL NEED



Phillips screwdriver

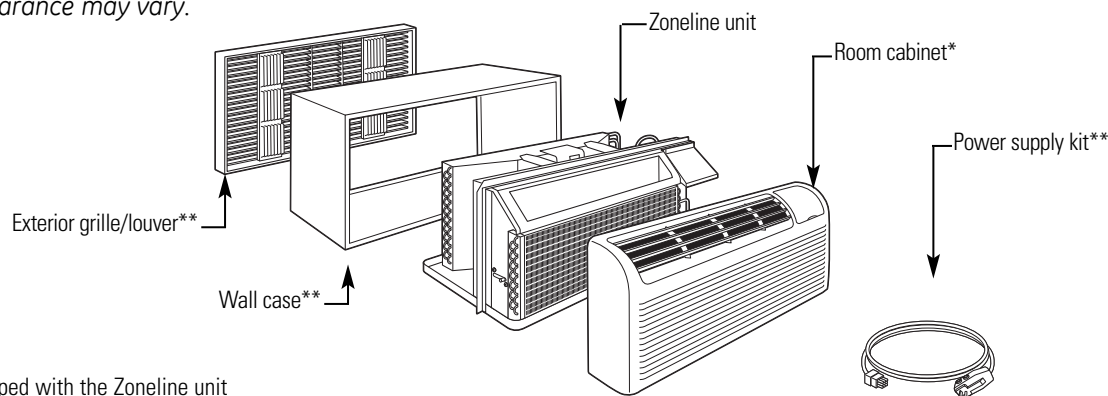
## IMPORTANT ELECTRICAL SAFETY—READ CAREFULLY

### ⚠ CAUTION:

- Follow the National Electrical Code (NEC) or local codes and ordinances.
- For personal safety, this Zonline must be properly grounded.
- Protective devices (fuses or circuit breakers) acceptable for Zonline installations are specified on the nameplate of each unit.
- Do not use an extension cord with this unit.
- Aluminum building wiring may present special problems—consult a qualified electrician.
- When the unit is in the OFF position, there is still voltage to the electrical controls.
- Disconnect the power to the unit before servicing by:
  - 1 Removing the power cord (if it has one) from the wall receptacle.OR
  - 2 Removing the branch circuit fuses or turning the circuit breakers off at the panel.

## ZONELINE COMPONENTS

Appearance may vary.

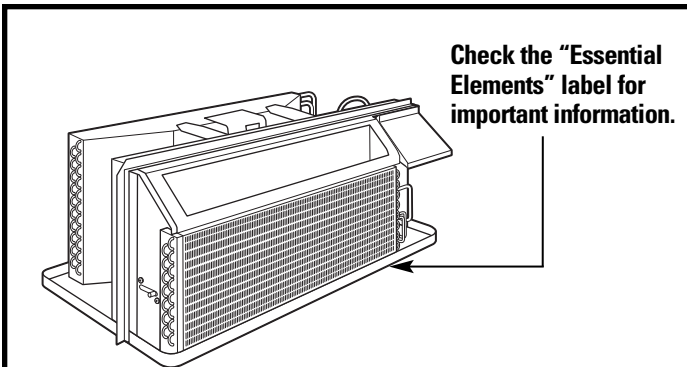


\* Shipped with the Zonline unit

\*\* Check the "Essential Elements" list on the unit located on front of the base pan

# Installation Instructions

## REPLACING AN EXISTING UNIT?



### Use the correct wall case

This unit is designed to be installed in a GE plastic or insulated metal wall case. This minimizes condensation from forming on the room side of the case.

If the current wall case is not insulated, you can reduce the possibility of condensation forming by installing insulation kit RAK901L, available where you purchased the unit.

**NOTE:** There are several extra holes in the unit side flanges for installation in wall cases other than GE. To avoid damaging the flange insulation, the installer should use an awl or other sharp tool to puncture the insulation in the appropriate holes before installing the attachment screws.

### Use the correct outdoor grille

You should use the outdoor grilles shown on the "Essential Elements" label on the base pan.

- If an existing grille is not replaced, capacity and efficiency will be reduced and the unit may fail to operate properly or fail prematurely. A deflector kit, RAK40, may be used with grilles that were not designed for your new GE Zonelines. The RAK40 contains air deflectors and gaskets that mount to the unit to direct the hot exhaust air away from the air intake to allow the unit to function properly. The grille must have a 65% minimum free area.
- Any vertical deflectors in the existing rear grille should be removed to decrease condenser air recirculation that can cause the unit to "short-cycle" and lead to premature component failure.

### Use the correct power cord

Local codes may require the use of arc fault or leakage current detection devices on 230/208-volt installations.

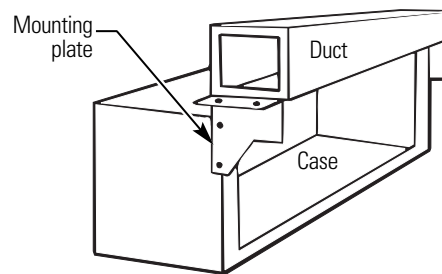
### Replacing a ducted unit

#### New ducted installation:

If this unit is to be installed in a new ducted application using a duct adapter kit, the kit must be installed before the unit is placed in the wall case. The installation instructions are packed with the kit.

#### Duct kits available:

RAK6052  
RAK601/602



#### Existing ducted installation:

Replacement of an existing ducted unit may require different components. Request this information from your sales representative.

- **Replacing 230/208 volt units:**  
See page 13.
- **Replacing 265 volt units:**  
See page 14.

When using a duct kit, you must always turn Mode 7 to ON "□□." See Mode instructions on page 7.



Duct Mode  
Shown ON

# Installation Instructions

## 230/208 VOLT ELECTRICAL CONNECTION OPTIONS

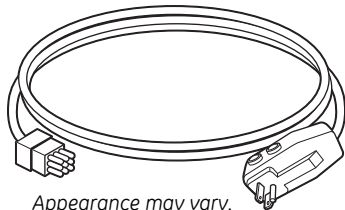
### HOW TO CONNECT

1. Remove the room cabinet.
2. Connect to electrical power.
3. Review the following steps for applicable supply voltages.
4. Reinstall the room cabinet.

Power cords may include an arc fault interruption or a leakage current detection interruption device. A test and reset button is provided on the plug case or the inline case. The device should be tested on a periodic basis by first pressing the TEST button and then the RESET button. If the TEST button does not trip or if the RESET button will not stay engaged, discontinue use of the Zoneline and contact a qualified service technician.

### POWER CORD CONNECTION

A power supply kit with LCDI must be used to supply power to the Zoneline unit. The appropriate kit is determined by the voltage, the means of electrical connection and the amperage of the branch circuit.



Appearance may vary.

Power supply kit

Connections of 208 or 230-volt circuits may be with a power supply kit or a junction box kit.

All wiring, including installation of the receptacle, must be in accordance with the NEC and local codes, ordinances and regulations. Codes require the use of an arc fault or leakage current detection device on the power cord except direct connect. Be sure to select the correct cord for your installation.



**Tandem**  
15 Amp.



**Perpendicular**  
20 Amp.



**Large Tandem**  
30 Amp.

230/208-volt receptacle configuration.

Branch Circuit and Unit Amperage Rating	Proper GE Power Cord with LCDI Device
15	RAK3153A
20	RAK3203A
30	RAK3303*

\*Not approved for use on 7000 BTU models.

### ELECTRICAL SUBBASE CONNECTION

230/208-volt models may be installed using one of the following electrical subbases:

Branch Circuit and Unit Amperage Rating	Proper GE Subbase Kit
15	RAK204D15P
20	RAK204D20P
30	RAK204D30P*

\*Not approved for use on 7000 BTU models.

Electrical subbases provide an enclosure for direct connection or enclosed receptacles. The subbase kit includes the power cord.

The instructions provided with the selected subbase kit must be carefully followed. It is the responsibility of the installer to ensure the connection of components is done in accordance with these instructions and all electrical codes.

### DIRECT CONNECTION

Order the following Kit for 230/208-volt direct connection as required:

Branch Circuit and Unit Amperage Rating	Power Supply Accessory	Power Supply Kit
15	RAK4002A	RAK4157
20	RAK4002A	RAK4207
30	RAK4002A	RAK4307*

\*Not approved for use on 7000 BTU models.

Skip to the "MAKE ELECTRICAL CONNECTION TO THE UNIT" section.

# Installation Instructions

## 265 VOLT ELECTRICAL CONNECTION OPTIONS

### **⚠ WARNING:**

Connection of this 265 V AC product to a branch circuit **MUST** be done by direct connection in accordance with the National Electrical Code. Plugging this unit into a building-mounted exposed receptacle is not permitted by code.

These models must be installed using the appropriate GE power supply kit for the branch circuit amperage and the electrical resistance heater wattage desired. Use the POWER CONNECTION CHART on page 16 to determine the correct kit required. One of the following installation methods (A or B) must be used.

### **A. FOR SUBBASE INSTALLATION**

Electrical subbase kits are available to provide a flexible enclosure for direct connection.

<i>Branch Circuit and Unit Amperage Rating</i>	<i>Proper GE Subbase Kit</i>	<i>Power Supply Kit</i>
15	RAK204E15	RAK5172
20	RAK204E20	RAK5202
30	RAK204E30	RAK5302*

\*Not approved for use on 7000 BTU models.

The instructions provided with the selected subbase kit must be carefully followed. It is the responsibility of the installer to ensure the connection of components is done in accordance with these instructions and all electrical codes.

### **B. FOR DIRECT CONNECT INSTALLATION**

If an electrical subbase is not used, direct connection to branch circuit wiring inside the provided junction box must be done in accordance with the following steps.

Order the following Kit for 265-volt direct connection as required:

<i>Branch Circuit and Unit Amperage Rating</i>	<i>Power Supply Kit</i>
15	RAK5157
20	RAK5207
30	RAK5307*

\*Not approved for use on 7000 BTU models.

Proceed to the "MAKE ELECTRICAL CONNECTION TO THE UNIT" section.

**NOTE:** Order Kit RAK4002CW to enable a quick disconnect inside the junction box.

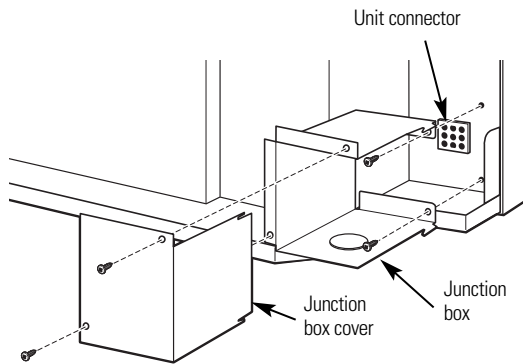


# Installation Instructions

## MAKE ELECTRICAL CONNECTION TO THE UNIT

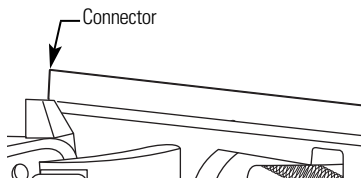
### 1 REMOVE JUNCTION BOX

1. Remove the junction box cover by removing the front two screws.
2. Remove the junction box by removing the top and bottom rear screws. Note how the tabs on the lower left side of the junction box serve to hold the side in place. This will help when the box is being reinstalled.



### 2 CONNECT THE CORDSET

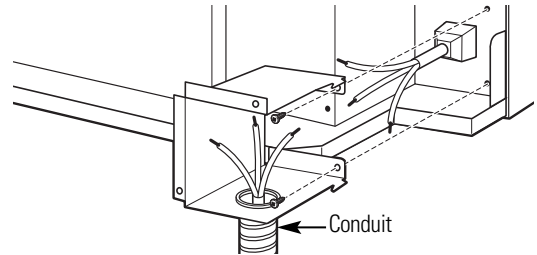
Plug the connector, provided in the Direct Connect Kit, fully into place in the unit mating connector. Be sure the locking tabs at the sides are engaged.



**NOTE:** Order Kit RAK4002CW to enable a quick disconnect inside the junction box.

### 3 ATTACH CONDUIT

1. Use the round knockout at the bottom of the junction box to attach conduit coming from the branch circuit. Remove the knockout, attach the conduit and bring wires into the junction box. Leave 6" of wire free at the end of the conduit to allow connections to be made.



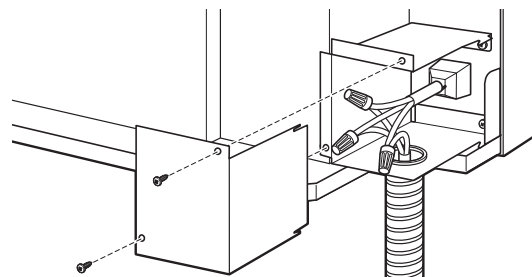
2. If a fuse and fuseholder are to be used, the knockout at the top of the box is for mounting a Buss fuseholder. Be sure the fuse and fuseholder are of the same rating as the branch circuit. Leadwires at the fuse can be either soldered in place or attached using UL-listed 1/4" female (receptacle) crimp connectors. Follow local codes.

### 4 REINSTALL JUNCTION BOX

- Reinstall the junction box by engaging the left tabs on the lower right face of the unit, aligning the screw holes at the top and bottom and driving the two screws until secure. Be sure that all wire leads are inside the box and not pinched between the box and the unit. The green insulated ground wire from the unit **MUST** be connected to the branch circuit ground wire. Make all wire connections by using appropriate UL-listed electrical connectors and techniques (black to black, white to white and green to green).

### 5 REINSTALL JUNCTION BOX COVER

1. Carefully tuck all wires and connections back inside the junction box. Be sure there are no loose connections or stray uninsulated wires exposed.
2. Place the junction box cover in place. Replace the two screws removed earlier and tighten securely.



# Installation Instructions

## POWER CONNECTION CHART

### Power Cord Connections

230/208 Volt Power Supply Kits with Current Leakage Detection Device	Wall Plug Configuration	Circuit Protective Device	Heater Wattage @ 230/208 Volts
RAK3153A RAK3203A RAK3303*	Tandem Perpendicular Large Tandem	15-Amp Time-Delay Fuse or Breaker 20-Amp Time-Delay Fuse or Breaker 30-Amp Time-Delay Fuse or Breaker	2.40/2.32 KW 3.30/3.20 KW 4.70/4.53 KW

### Direct Connections

230/208 Volt Power Supply Kits	Circuit Protective Device	Heater Wattage @ 230/208 Volts
RAK4157 RAK4207 RAK4307*	15-Amp Time-Delay Fuse or Breaker 20-Amp Time-Delay Fuse or Breaker 30-Amp Time-Delay Fuse or Breaker	2.40/2.32 KW 3.30/3.20 KW 4.70/4.53 KW
265 Volt Power Supply Kits	Circuit Protective Device	Heater Wattage @ 265 Volts
RAK5157 RAK5207 RAK5307*	15-Amp Time-Delay Fuse or Breaker 20-Amp Time-Delay Fuse or Breaker 30-Amp Time-Delay Fuse or Breaker	2.40 KW 3.40 KW 4.80 KW

\*Not approved for use on 7000 BTUH units.

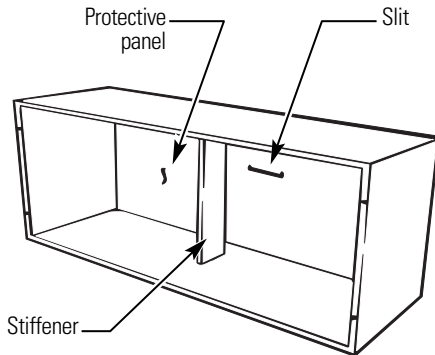
# Installation Instructions

## INSTALLING THE ZONELINE

### 1 INSTALL THE WALL CASE AND EXTERIOR GRILLE

The RAB71A series or RAB77A4 wall case must be properly installed per instructions packed with the case.

- Remove the corrugated stiffener and the outdoor protective panel. Use the slit in the outdoor panel as a handhold and push out.



- Install the exterior grille from the room side following instructions packed with the grille.

#### Insulated Wall Case

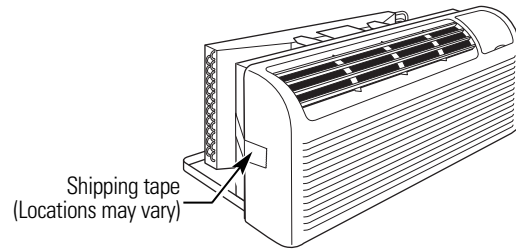
This unit is designed to be installed in a GE plastic or an insulated steel wall case. This minimizes condensation from forming on the room side of the case.

The RAB71A series wall cases are insulated. Insulation kit RAK901L is available for use with RAB77A4 or existing uninsulated wall cases when needed.

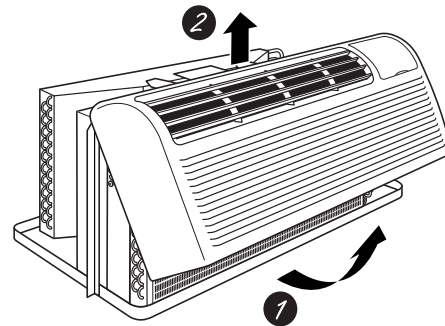
**NOTE:** For installation with a subbase or duct adapter, see the instructions packed with those kits.

### 2 PREPARE THE UNIT

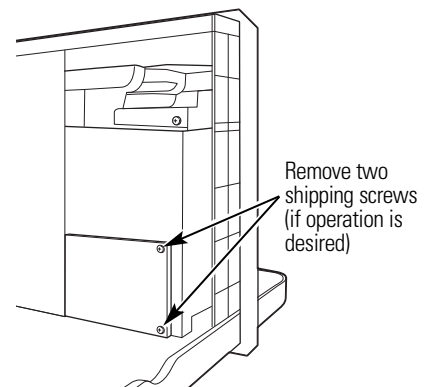
- Carefully remove shipping tape and foam shipping blocks from the room cabinet, compressor and vent door. There may be multiple blocks and pieces of shipping tape that need to be removed.



- Remove the room cabinet by pulling it out at the bottom to release it (1); then lift it up to clear the rail along the unit top (2).



- If vent door is to be operational, remove shipping screws from the front side of the vent door, if present.

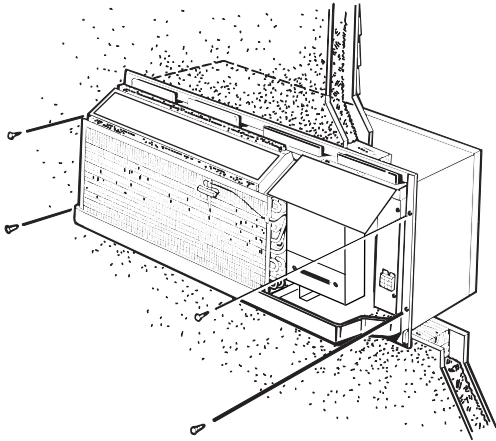


# Installation Instructions

## INSTALLING THE ZONELINE (cont.)

### 3 INSTALL THE UNIT INTO THE WALL CASE

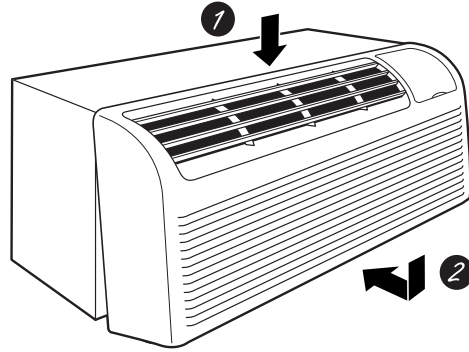
Slide the unit into the wall case and secure with four screws through the unit flange holes.



**NOTE:** There are several extra holes in the unit side flanges for installation in wall cases other than GE. To avoid damaging the flange insulation, the installer should use an awl or other sharp tool to puncture the insulation in the appropriate holes before installing the attachment screws.

### 4 REPLACE THE ROOM CABINET

Reinstall the room cabinet by hooking the top over the rail along the unit top (1), then pushing it in at the bottom (2).



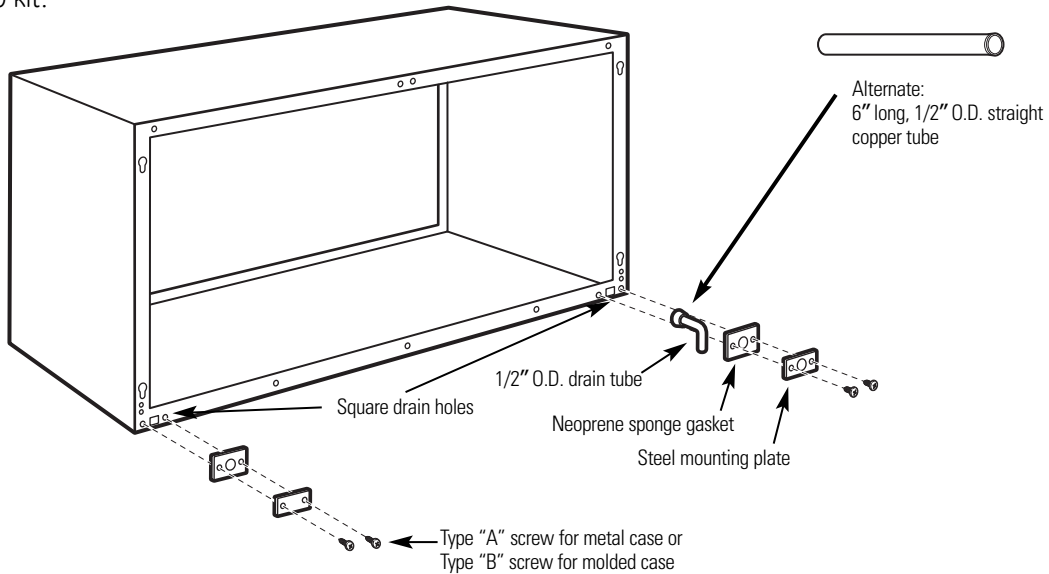
# Installation Instructions

## OPTIONAL—DRAIN KIT INSTALLATION

Dry Air 25 Series models are designed to improve dehumidification by 25%. Since more moisture will be removed from the air, there is a greater possibility that water will drip from the wall case than with a standard unit. To prevent this water from dripping onto external building walls, we recommend the use of RAD10 Drain Kit.

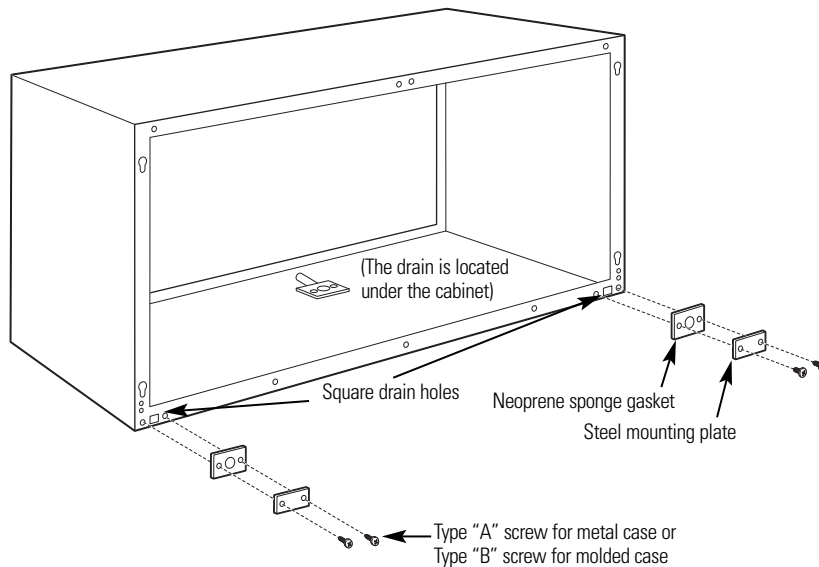
### External Drain

See the Installation Instructions in the RAD10 kit.



### Internal Drain

See the Installation Instructions in the RAD10 kit.



## Before you call for service...



*Troubleshooting Tips*  
Save time and money! Review the charts on the following pages first and you may not need to call for service.

Problem	Possible Causes	What To Do
<b>Zonline does not start</b>	The unit is unplugged.	<ul style="list-style-type: none"> <li>Make sure the Zonline plug is pushed completely into the outlet.</li> </ul>
	The power cord is not firmly attached.	<ul style="list-style-type: none"> <li>Remove the room cabinet and make sure that the yellow connector on the end of the power cord is firmly engaged.</li> </ul>
	The fuse is blown/circuit breaker is tripped.	<ul style="list-style-type: none"> <li>Check the house fuse/circuit breaker box and replace the fuse or reset the breaker.</li> </ul>
	The unit is waiting for the compressor overload protector to reset.	<ul style="list-style-type: none"> <li>This is normal. The Zonline will start again after it resets.</li> </ul>
	Power failure.	<ul style="list-style-type: none"> <li>If power failure occurs, set the mode control to <b>STOP</b>. When power is restored, set the mode control to the desired setting.</li> <li>There is a protective time delay (up to 3 minutes) to prevent tripping of the compressor overload. For this reason, the unit may not start normal heating or cooling for 3 minutes after it is turned back on.</li> </ul>
<b>Zonline does not cool or heat as it should</b>	The current interrupter device is tripped.	<ul style="list-style-type: none"> <li>Press the <b>RESET</b> button located on the power cord plug or the box near the plug.</li> <li>If the <b>RESET</b> button will not stay engaged, discontinue use of the Zonline and contact a qualified service technician.</li> </ul>
	Indoor airflow is restricted.	<ul style="list-style-type: none"> <li>Make sure there are no curtains, blinds or furniture blocking the front of the Zonline.</li> </ul>
	Outdoor airflow is restricted or recirculated.	<ul style="list-style-type: none"> <li>Make sure the rear grille is not restricted. This can cause the unit to cycle off due to the compressor overload protector.</li> <li>Outdoor grille must have a minimum of 65% free area. Non-GE grilles may be too restrictive for proper performance. Consult your salesperson for assistance.</li> </ul>
	The temp control may not be set properly.	<ul style="list-style-type: none"> <li>Turn the control to a lower or higher setting. <b>NOTE:</b> The temperature limiter may be limiting the temperature range.</li> </ul>
	The air filter is dirty.	<ul style="list-style-type: none"> <li>Clean the filter at least every 30 days. See the <i>Operating Instructions</i> section.</li> </ul>
	The room may have been hot or cold.	<ul style="list-style-type: none"> <li>When the Zonline is first turned on you need to allow time for the room to cool down or warm up.</li> </ul>
<b>Burning odor at the start of heating operation</b>	Outdoor air is entering the room.	<ul style="list-style-type: none"> <li>Set the vent control to the closed position.</li> </ul>
	Dust is on the surface of the heating element.	<ul style="list-style-type: none"> <li>This can cause a "burning" odor at the beginning of the heating operation. This odor should quickly fade.</li> </ul>



<b>Problem</b>	<b>Possible Causes</b>	<b>What To Do</b>
<b>The air is not always cool or hot during operation</b>	<b>The heat pump is not producing hot air.</b>	<ul style="list-style-type: none"> <li>This is normal. The heat pump will produce warm air but not as hot as air produced when the higher-cost electric heat is used.</li> </ul>
	<b>The Smart Fan Auxiliary Controls may be set to continuous fan.</b>	<ul style="list-style-type: none"> <li>This causes the fan to blow room temperature air even when the compressor or heater cycles off. The continuous air movement provides better overall temperature control in the cool mode. See <i>Smart Fan – Cooling/Heating</i> on page 5.</li> </ul>
<b>The air does not feel warm enough during heating operation</b>	<b>The heat pump alone produces air that feels cooler than desired.</b>	<ul style="list-style-type: none"> <li>Use the Electric Heat Option. This turns off the heat pump and warms with electric heat only. <b>NOTE:</b> Use of this option will result in increased energy consumption.</li> </ul>
<b>The unit is not blowing out air</b>	<b>The Smart Fan Auxiliary Controls may be set to cycle.</b>	<ul style="list-style-type: none"> <li>See <i>Smart Fan – Cooling/Heating</i> on page 5.</li> </ul>
<b>The electric heating feature does not work</b>	<b>The power cord is not firmly attached.</b>	<ul style="list-style-type: none"> <li>Remove the room cabinet and make sure that the yellow connector on the end of the power cord is firmly engaged.</li> </ul>
<b>Temperature display flashes</b>	<b>The compressor may have failed.</b>	<ul style="list-style-type: none"> <li>Set the operation control to <b>STOP</b> and then restart the unit. If the flashing light reappears within 30 minutes, call for service.</li> </ul>

Safety Instructions

Operating Instructions

Care and Cleaning

Troubleshooting Tips

Consumer Support

## Things that are normal.

### Normal Operating Sounds



You may hear a pinging noise caused by water being picked up and thrown against the condenser on rainy days or when the humidity is high. This design feature helps remove moisture and improve efficiency.

**CLICK**

You may hear relays click when the controls cycle on and off or are adjusted to change the room temperature.



Water will collect in the base pan during high humidity or on rainy days. The water may overflow and drip from the outdoor side of the unit.



The indoor fan runs continuously when the unit is operating in the cooling mode, unless the Smart Fan Auxiliary Control is set to cycle. This will cause the fan to cycle on and off with the compressor. You may also hear a fan noise stop and start.

There are times when the fan on the unit will run even when the unit is not heating or cooling. If the system is set up to be in continuous fan the indoor fan will run regardless if the unit may be cooling or heating. Other times the fan will run longer than the heating/cooling cycle or kick on occasionally. This is normal and is done to improve room comfort and balance.



You may notice a few minutes delay in starting if you try to restart the Zoneline too soon after turning it off or if you adjust the thermostat right after the compressor has shut off. This is due to a built-in restart protector for the compressor that causes a 3-minute delay.

**SILENCE**

During the defrost cycle, both indoor and outdoor fans stop and the compressor will operate in the cooling mode to remove frost from the outdoor coil. After defrost, the unit will restart in electric heat to quickly warm the room to the desired comfort level.

**COMPRESSOR PROTECTION**

To protect the compressor and prevent short cycling, the unit is designed to run for a minimum of 3 minutes after the compressor starts at any thermostat setting.

# Zonline Warranty.



All warranty service provided by our Factory Service Centers or an authorized Customer Care® technician. To schedule service, on-line, visit us at [GEAppliances.com](http://GEAppliances.com), or call 800.GE.CARES (800.432.2737). For service in Canada, contact Gordon Williams Corp. at 1.888.209.0999. Please have serial number and model number available when calling for service.

Staple your receipt here.  
Proof of the original purchase date is needed to obtain service under the warranty.

For The Period Of:	GE Will Replace:
<b>One Year</b> From the date of the original purchase	<b>Any part</b> of the Zonline which fails due to a defect in materials or workmanship. During this <b>limited one-year warranty</b> , GE will also provide, <b>free of charge</b> , all labor and related service to replace the defective part.
<b>Five Years</b> From the date of the original purchase	<b>Any part of the sealed refrigerating system</b> (the compressor, condenser, evaporator and all connecting tubing) which fails due to a defect in materials or workmanship. During this <b>four-year limited additional warranty</b> , GE will also provide, <b>free of charge</b> , all labor and related service to replace the defective part.
<b>Five Years</b> From the date of the original purchase	For the <b>second through the fifth year</b> from the date of original purchase, GE will replace <b>certain parts</b> that fail due to a defect in materials or workmanship. Parts covered are fan motors, switches, thermostats, heater, heater protectors, compressor overload, solenoids, circuit boards, auxiliary controls, thermistors, frost controls, ICR pump, capacitors, varistors and indoor blower bearing. During this <b>four-year limited additional warranty</b> , you will be responsible for any labor or on-site service costs.

## What GE Will Not Cover:

- Service trips to your site to teach you how to use the product.
- Failure of the product resulting from modifications to the product or due to unreasonable use, including failure to provide reasonable and necessary maintenance.
- Improper installation, delivery or maintenance.  
If you have an installation problem, or if the air conditioner is of improper cooling capacity for the intended use, contact your dealer or installer. You are responsible for providing adequate electrical connecting facilities.
- Failure or damage resulting from corrosion due to installation in a coastal environment, except for models treated with special factory-applied anti-corrosion protection as designated in the model number.
- In commercial locations, labor necessary to move the unit to a location where it is accessible for service by an individual technician.
- Damage to product caused by improper power supply voltage, accident, fire, floods or acts of God.
- Failure or damage resulting from corrosion due to installation in an environment containing corrosive chemicals.
- Incidental or consequential damage to personal property caused by possible defects with this air conditioner.
- Replacement of fuses or resetting of circuit breakers.
- Damage caused after delivery.
- Product not accessible to provide required service.

**EXCLUSION OF IMPLIED WARRANTIES**—Your sole and exclusive remedy is product repair as provided in this Limited Warranty. Any implied warranties, including the implied warranties of merchantability or fitness for a particular purpose, are limited to one year or the shortest period allowed by law.

This warranty is extended to the original purchaser and any succeeding owner for products purchased for use within the USA and Canada. If the product is located in an area where service by a GE Authorized Servicer is not available, you may be responsible for a trip charge or you may be required to bring the product to an Authorized GE Service location for service. In Alaska, the warranty excludes the cost of shipping or service calls to your site.

Some states or provinces do not allow the exclusion or limitation of incidental or consequential damages. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state or province to province. To know what your legal rights are, consult your local, state or provincial consumer affairs office or your state's Attorney General.

## Consumer Support.

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### GE Appliances Website

**GEAppliances.com**

Have a question or need assistance with your appliance? Try the GE Appliances Website 24 hours a day, any day of the year! For greater convenience and faster service, you can now download Owner's Manuals, order parts or even schedule service on-line.



### Schedule Service

**GEAppliances.com**

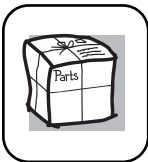
Expert GE repair service is only one step away from your door. Get on-line and schedule your service at your convenience any day of the year! Or call 800.GE.CARES (800.432.2737) during normal business hours.



### Real Life Design Studio

**GEAppliances.com**

GE supports the Universal Design concept—products, services and environments that can be used by people of all ages, sizes and capabilities. We recognize the need to design for a wide range of physical and mental abilities and impairments. For details of GE's Universal Design applications, including kitchen design ideas for people with disabilities, check out our Website today. For the hearing impaired, please call 800.TDD.GEAC (800.833.4322).



### Parts and Accessories

**GEAppliances.com**

Individuals qualified to service their own appliances can have parts or accessories sent directly to their homes (VISA, MasterCard and Discover cards are accepted). Order on-line today, 24 hours every day or by phone at 800.626.2002 during normal business hours.

**Instructions contained in this manual cover procedures to be performed by any user. Other servicing generally should be referred to qualified service personnel. Caution must be exercised, since improper servicing may cause unsafe operation.**



### Contact Us

**GEAppliances.com**

If you are not satisfied with the service you receive from GE, contact us on our Website with all the details including your phone number, or write to:

General Manager, Customer Relations  
GE Appliances, Appliance Park  
Louisville, KY 40225



### Register Your Appliance

**GEAppliances.com**

**Register your new appliance on-line—at your convenience!** Timely product registration will allow for enhanced communication and prompt service under the terms of your warranty, should the need arise. You may also mail in the pre-printed registration card included in the packing material.