

# Installation instructions for your new

# RAK4157, RAK4207, RAK4307 Power Supply Kit for Direct Connection

Before you begin – Read these instructions completely and carefully. IMPORTANT – OBSERVE ALL GOVERNING CODES AND ORDINANCES. Note to Installer – Be sure to leave these instructions with the Consumer. Note to Consumer – Keep these instructions with your Owner's Manual for future reference.

### TOOLS NEEDED

- Wire cutter
- Adjustable wrench
- Phillips head screwdriver

**A CAUTION:** Disconnect the electrical power supply before wiring connections.

#### FOR 230/208 VOLT DIRECT CONNECT APPLICATIONS ONLY

**IMPORTANT:** Some local electrical codes and customer requirements require PTAC/PTHP units to be direct connected to building wiring.

These models must be installed using the appropriate GE power supply kit for the branch circuit amperage and the electrical resistance heater wattage desired. See the POWER CONNECTION CHART to confirm the appropriate kit.

### **POWER CONNECTION CHART**

GE 230/280 Volt Power Supply Kit	Circuit Protective Device	Heater Wattage @ 230/208 Volts
RAK4157	15-Amp Time-Delay Fuse or Breaker	2.55 KW/2.09 KW
RAK4207	20-Amp Time-Delay Fuse or Breaker	3.45 KW/2.82 KW
RAK4307	30-Amp Time-Delay Fuse or Breaker	5.00 KW/4.10 KW

It is the responsibility of the installer to ensure the connection of components is done in accordance with electrical codes.

Direct connection to branch circuit wiring inside the provided junction box must be made by connecting as follows.

#### **IMPORTANT NOTES**

- This kit is for use with 230/208 Volt GE Zoneline units only.
- This unit must be properly grounded.
- The electrical rating marked on the installed Zoneline and power supply kit must be the same as the supply branch circuit.
- Aluminum building wiring may present special problems—consult a qualified electrician.
- All wiring, including installation of the receptacle, must be in accordance with the NEC and local codes, ordinances and regulations.
- This power supply kit provides for connection of 1/2" trade size electrical conduit and provision for connection to a wiring system in accordance with the National Electrical Code. ANSI/NFPA No. 70-1996 or latest edition.
- Use ONLY the wiring size recommended for single outlet branch circuit.
- Proper current protection is the responsibility of the owner.

Recommended branch circuit wire sizes*			
Nameplate maximum circuit breaker size	AWG wire size**		
15A	14		
20A	12		
30A	10		
AWG—American Wire Gauge * Single circuit breaker from main box			
** Based on conner wire single-			

\*\* Based on copper wire, single-insulated conductor at 60°C

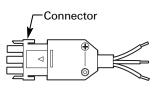
**NOTE:** Use copper conductors only.

# 2800 & 3800 SERIES – DIRECT ELECTRICAL CONNECTION

Order separately the RAK4002A Kit. This kit must be used in this application.

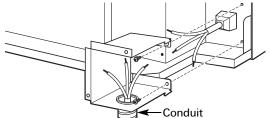
### 1. CONNECT THE CORDSET

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.



### 2. ATTACH CONDUIT

 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.



 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.

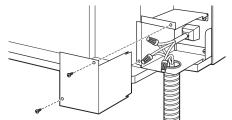
#### **3. INSTALL JUNCTION BOX**

• Install 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).

### 4. INSTALL JUNCTION BOX COVER

- 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.



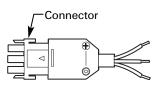
3. Replace the Zoneline front cabinet.

# 5800 SERIES – DIRECT ELECTRICAL CONNECTION

Order separately the RAK4002B Kit. This kit must be used in this application.

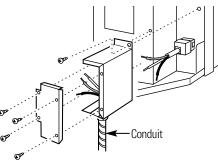
## 1. CONNECT THE CORDSET

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.



### 2. ATTACH CONDUIT

 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.



 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.

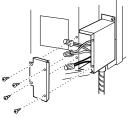
### 3. INSTALL JUNCTION BOX

• Install the junction box by engaging the tab at the lower rear, aligning the screw hole at the top and driving the one screw 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).

### 4. INSTALL JUNCTION BOX COVER

 Carefully tuck all wires and connections back inside the junction box. Be sure there are no loose connections or stray uninsulated wires exposed.



- Place the junction box cover in place. Replace the two screws removed earlier and tighten securely.
- **3.** Discard the unused portion of the plug and the cordset.
- 4. Replace the Zoneline front cabinet.

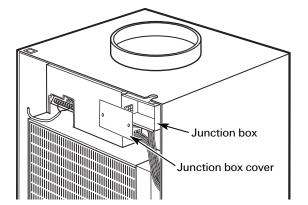
# 7500 SERIES – DIRECT ELECTRICAL CONNECTION

### 1. REMOVE THE FRONT PANEL

Remove the front case panel by removing the filter, taking out the 4 front screws, the upper 2 screws from the top of the panel and the shipping screws on each side, if present. (Discard the 2 side shipping screws, if present.)

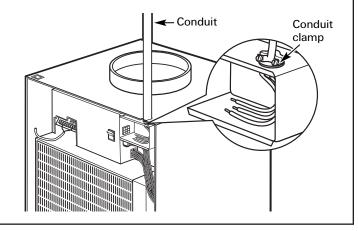
### 2. REMOVE JUNCTION BOX COVER

Remove the junction box cover by taking out the front 2 screws.



## 3. ATTACH CONDUIT

Use the round knockout hole at the top of the junction box to install conduit coming from the branch circuit. Install and clamp the conduit through the conduit clamp and bring wire leads into the junction box. Leave 8" of wire free from the end of the conduit.



#### 4. MAKE WIRE LEAD CONNECTIONS INSIDE THE JUNCTION BOX

- 1. Make all wire connections by using appropriate UL-listed electrical connectors and techniques.
- 2. Connect the white and black leads of the Zoneline power supply kit to the branch circuit Neutral and L1 leads. (The white lead of the power supply kit should be connected to neutral.) Connect the green lead of the power supply kit to the power supply and branch circuit ground.
- **3.** Be sure that all wire leads are inside the junction box and not pinched between the box and the unit. The green insulated ground wire from the Zoneline **MUST** be connected to the branch circuit ground wire.
- **4.** Plug the 9-pin connector into the 9-pin receptacle in the junction box.
- **5.** Replace the junction box cover by replacing the 2 screws removed earlier.
- **6.** Replace the case front panel by replacing the 4 front screws and the 2 top screws. Replace the filter.

