





Zoneline[®]

Owner's Manual

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GE Answer Center[®]
800.626.2000

GE Appliances

Welcome

Welcome to the GE family. We're proud of our quality products and we believe in dependable service. You'll see it in this easy-to-use manual and you'll hear it in the friendly voices of our customer service department.

Best of all, you'll experience these values each time you enjoy the comfort of your Zoneline. That's important, because your new Zoneline will be part of your family for a long time.

Start Here!

*Before using
your
Zoneline*

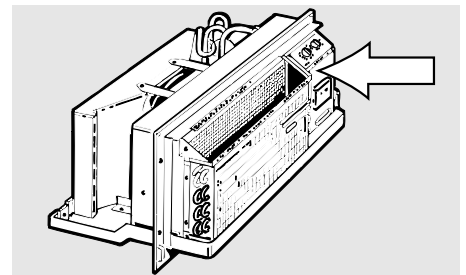
Staple your receipt to the inside back cover of this manual. You will need it to obtain service under warranty.

Write down the model and serial numbers here. They are on a label behind the room cabinet.

Model number

Serial number

Date of purchase



Need Help?

*Help us
help you*

800.626.2000

Before you call for service, there are a few things you can do to help us serve you better.

Read this manual. It contains instructions to help you use and maintain your Zoneline properly.

Save time and money. Check the section titled "If Something Goes Wrong" before calling. This section was designed to solve common problems that might occur.

If you do need service, you can relax knowing help is only a phone call away. Toll-free customer service numbers are included in the back of this manual. Or call the GE Answer Center[®] at 800.626.2000, 24 hours a day, 7 days a week.

Important Safety Information

Read all safety information before using

- This Zoneline must be properly installed in accordance with the Installation Instructions before it is used.
- Repair or replace immediately all electric service cords that have become frayed or otherwise damaged.

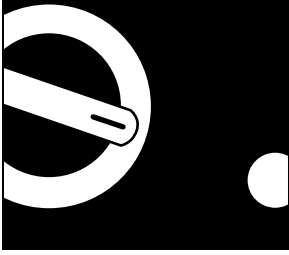
- Unplug or disconnect the Zoneline at the fuse box or circuit breaker before making any repairs.

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

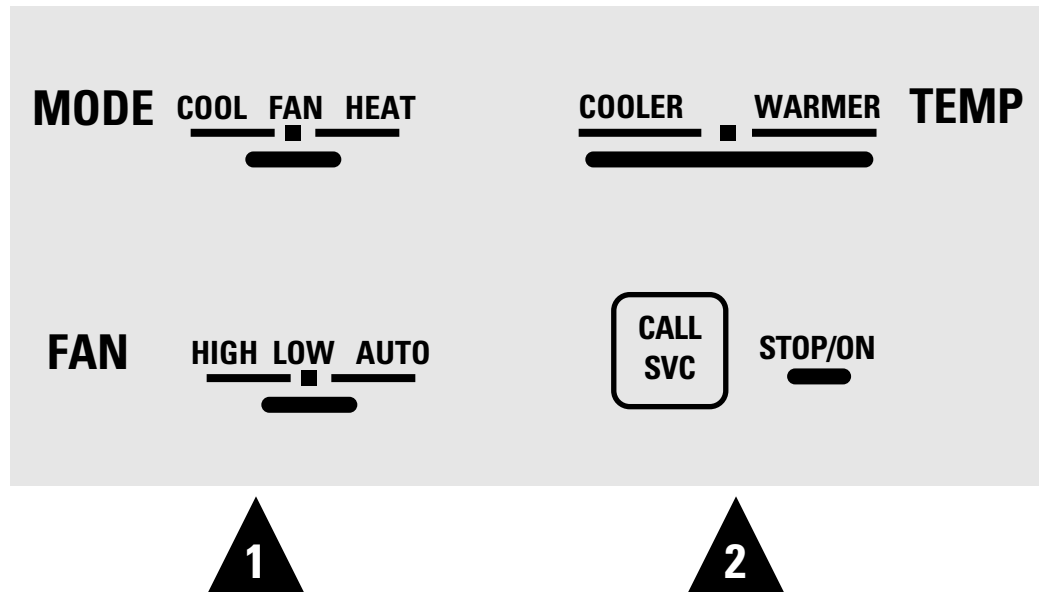


SAVE THESE INSTRUCTIONS

Operating Instructions



The
controls
on your
Zoneline



1 Mode Control

COOL—For cooling

HEAT—For heating

FAN—For fan-only operation

The fan controls cooling or heating with **HIGH** or **LOW** fan speed operation. When set at **AUTO**, it automatically switches between low and high to adjust for room temperature changes.

2 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.

COOLER—For cooler temperatures

WARMER—For warmer temperatures

STOP/ON—Stops heating, cooling and fan operation. Power remains connected to the Zoneline and the Freeze Sentinel still functions.

The **CALL SVC** (call service) indicator will light if the compressor fails to start. If the control is set at **COOL**, the compressor stops and the fan operates alone. If set at **HEAT**, it continues in the **HEAT** setting. Call for service as soon as possible.

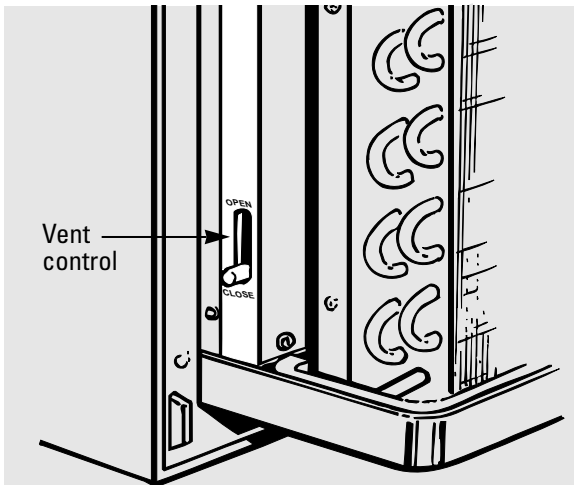
Energy Tips



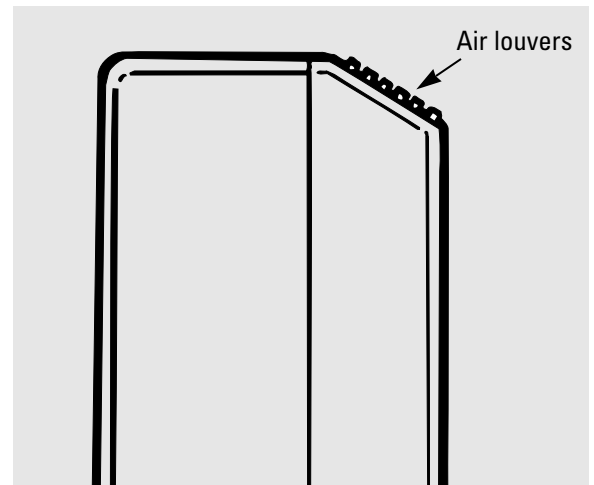
Keep the vent control at **CLOSE**. The air will be filtered and circulated.

Set the **FAN** at **AUTO**. It switches between low and high to adjust for room temperature changes.

Adjust the air louvers straight out to get the most hot or cool air into the room.



3



4

3 Ventilation Control

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

When set at **CLOSE**, only the air inside the room is circulated and filtered.

When set at **OPEN**, some outdoor air will be drawn into the room. This will reduce the heating or cooling effect.

4 Air Direction

Adjust the air louvers by moving them with your fingers. To get the most hot or cool air into the room, set the louvers straight out.



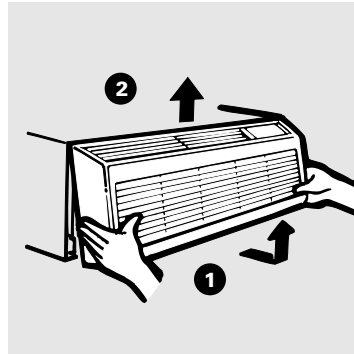
Operating Instructions

Other Zoneline features

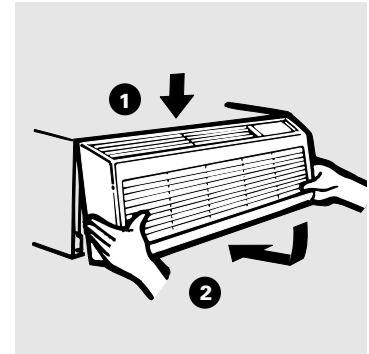
To Remove the Room Cabinet

Additional controls are located behind the room cabinet.

To remove: Pull out to release it from the tabs. Then lift up.



To replace: Place the tabs over the top rail. Push inward until it snaps into place.

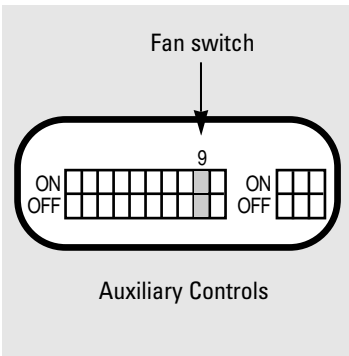


Fan Switch

The fan switch 9 is located behind the room cabinet.

This switch is set at continuous fan (down) at the factory to provide continuous fan operation in cool or heat modes. Leaving the switch in the continuous fan setting allows continuous circulation of room air and will result in a more balanced temperature throughout the room.

If you want the fan to cycle on and off with the compressor or with the heater, move the switch to cycle fan (up).



Down—Continuous Fan
Up—Cycle Fan



Freeze Sentinel

The Freeze Sentinel feature automatically turns on the resistance heater and fan if the room temperature (sensed at the unit) drops to approximately 45°F. It will turn the heater off when the temperature reaches about 50°F.

The Freeze Sentinel helps prevent plumbing damage in the room due to sub-freezing temperatures.

The Freeze Sentinel is active as long as power to the unit has not been interrupted.



Operating Instructions

Care & Cleaning

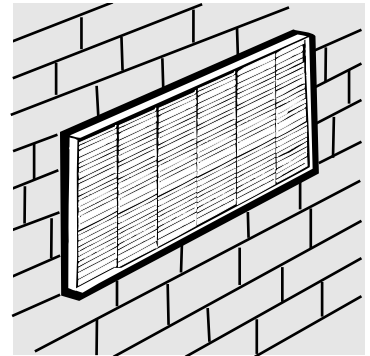
Room Cabinet and Case

Turn the Zoneline off and remove the plug from the wall outlet before cleaning.

To clean, use water and a mild detergent. Do not use bleach or abrasives.

Outdoor Coils

The coils on the outdoor side of the Zoneline should be checked regularly. If they are clogged with dirt or soot they may be professionally steam cleaned, a service available through your GE service outlet.



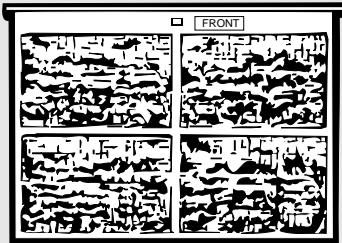
Base Pan

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).

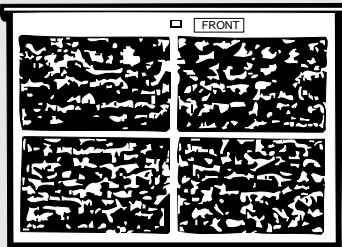
Check it periodically and clean it out, if necessary.



Air Filters



30 days – needs cleaning



60 days – cooling, heating and airflow are greatly reduced.

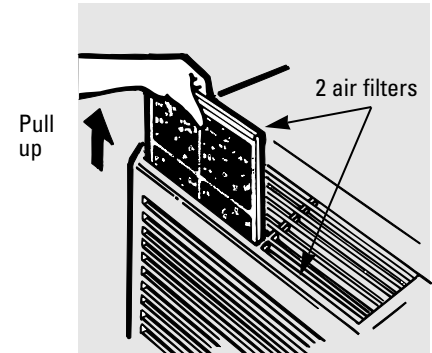
Turn the Zoneline off before cleaning.

The Zoneline air filters should be cleaned 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 costly compressor problems.

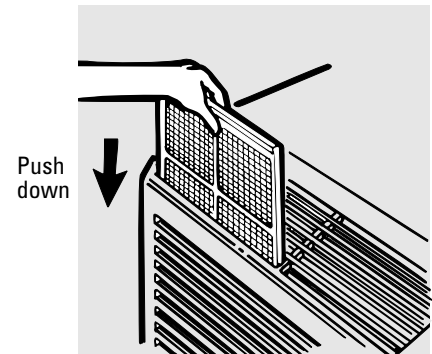
To remove the air filters:



To clean the air filters:

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

To replace the air filters:



NOTE:

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 efficiency of the unit.

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



Installation Instructions

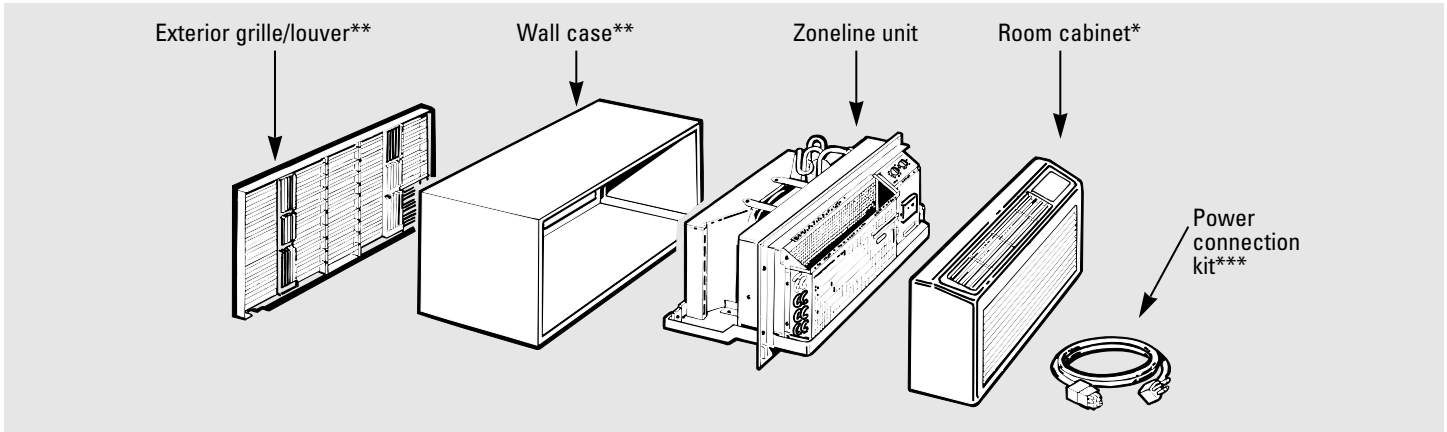
Important electrical safety—read carefully

Important Notes

- **Installer:**
Leave these instructions with the appliance.
 - **Owner:**
Keep these instructions for future use.
 - Follow National Electrical Code (NEC) or local codes and ordinances.
 - For personal safety, this Zoneline must be properly grounded.
 - NEC requires units controlled by NEC Class 2 low voltage remote controls to be permanently connected.
 - Protective devices (fuses or circuit breakers) acceptable for Zoneline installations are specified on the nameplate of each unit.
 - 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.
- ⚠ CAUTION:**
- ***Before starting the installation, the power to the direct connect wiring should be off.***
 - ***Do not use an extension cord with this unit.***
 - ***Aluminum house wiring may present special problems—consult a qualified electrician.***



Parts Required



*Shipped with the Zoneline unit

**Check essential elements list on unit

***Line cord connection shown only as an example

Tools Needed

- Phillips screwdriver
- Flat-blade screwdriver

Power Connection



Tandem,
15 Amp.



Perpendicular
20 Amp.



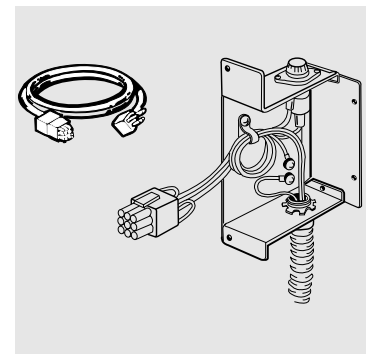
Large Tandem
30 Amp.

Electrical wiring wall outlets
230/208 volt.

A power connection kit 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.

Connections of 208 or 230 volt circuits may be with a line cord kit or a permanent connection kit. Connections of 265 volt circuits must be with a permanent connection kit. NEC requires permanent connection for installations over 250 volts.

All wiring, including installation of the receptacle, must be in accordance with the National Electrical Code and local codes, ordinances and regulations.





Installation Instructions

Power Connection Chart

230/208 Volt Line Cord Kits	Wall Plug Configuration	Circuit Protective Device	Heater Wattage @ 230/208 Volts
RAK315	Tandem	15 Amp TD fuse or breaker	2.55/2.09 KW
RAK320	Perpendicular	20 Amp TD fuse or breaker	3.45/2.82 KW
RAK330*	Large Tandem	30 Amp fuse or breaker	5.00/4.10 KW

230/208 Volt Permanent Connection Kits	Circuit Protective Device	Heater Wattage @ 230/208 Volts
----------------------------------------	---------------------------	--------------------------------

RAK415/415L	15 Amp TD fuse or breaker	2.55/2.09 KW
RAK420/420L	20 Amp TD fuse or breaker	3.45/2.82 KW
RAK430/430L*	30 Amp TD fuse or breaker	5.00/4.10 KW

Kits ending in "L" have flexible conduit to reach from the kit to the knockout hole (above right side inspection plate) in the RAK203 Sub-Base.

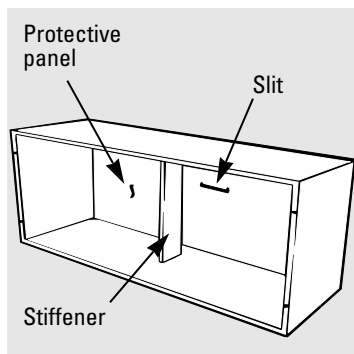
265 Volt Permanent Connection Kits	Circuit Protective Device	Heater Wattage @ 265 Volts
------------------------------------	---------------------------	----------------------------

RAK515/515LF	15 Amp TD fuse	1.70 KW
RAK517/517LF	15 Amp TD fuse	3.00 KW
RAK520/520LF	20 Amp TD fuse	3.70 KW
RAK530/530LF*	30 Amp TD fuse	5.00 KW

Kits ending in "LF" have flexible conduit to reach from the kit to the knockout hole (above right side inspection plate) in the RAK203 Sub-Base and have an Integral Fuse.

*Not recommended for use on 6000 BTUH units. (If this connection kit is used it will provide a maximum heat of 3.45 KW at 230 volts and 3.7 KW at 265 volts.)

Install the Wall Case and Exterior Grille



- 1 The RAB71 or RAB77 wall case must be properly installed per instructions packed with the case.
- 2 Remove the corrugated stiffener and the outdoor protective panel. Use the slit in the outdoor panel as a handhold and push out.
- 3 Install the exterior grille from the room side following instructions packed with the grille.

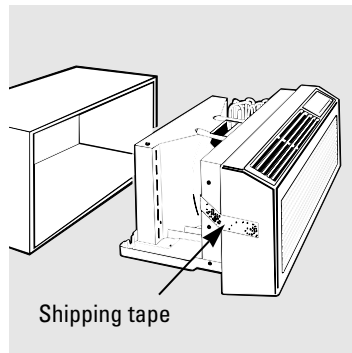
Insulated Wall Case

In some climates/applications when the wall case projects into the room, the use of an insulated wall case will minimize moisture condensed on the wall case surfaces. The RAB71 wall case is insulated. Insulation kit RAK901L is available for use with RAB77 or existing uninsulated wall cases when needed.

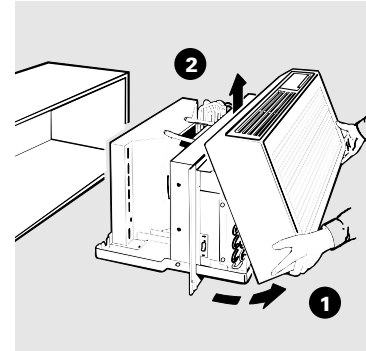


Remove Shipping Tape and Room Cabinet

1 Remove shipping tape, if there is any, from the room cabinet and vent door.



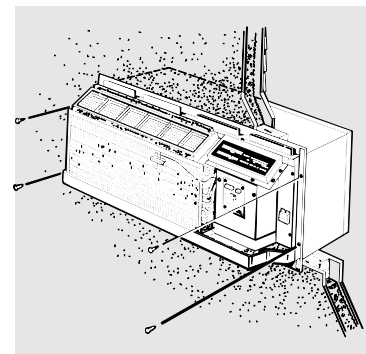
2 Remove the room cabinet by pulling it out at the bottom to release it, then lift it up to clear the rail along the unit top.



Install the Unit into the Wall Case

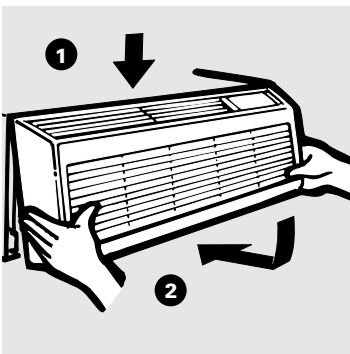
Slide the unit into the wall case and secure with four screws through the unit flange holes.

If an insulated wall case is needed, see Install the Wall Case and Exterior Grille section on the previous page.



Replace the Room Cabinet

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

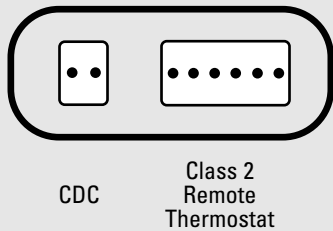
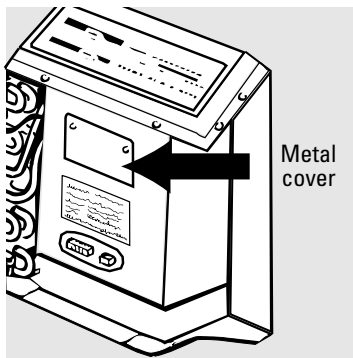




Installation Instructions

Low Voltage Connectors & Auxiliary Controls

Low Voltage Connectors



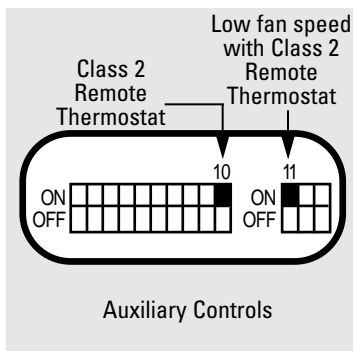
Remove the room cabinet. CDC and remote control connectors, with installation instructions, are packed in a bag behind the metal cover.

To access the connectors, remove the metal cover and save the screws that hold the cover to the unit. The connection points for the Central Desk Control (CDC) and the Class 2 Remote Thermostat are also behind the metal cover.

IMPORTANT:

After the wire connections are completed, replace the cover to prevent damage to the unit or personal injury.

Remote Control/ Wall Thermostat



The Zoneline can be controlled by using the controls on the unit or by a wall thermostat.

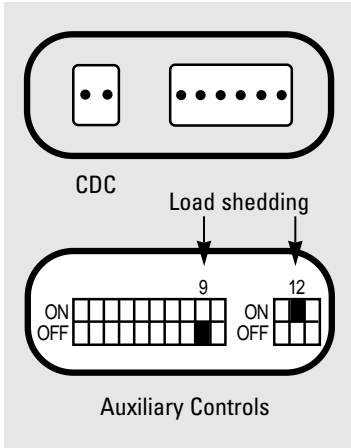
To switch to a wall thermostat control, move switch 10 to the **ON** (up) position and connect the unit to a 4-wire Class 2 Remote Thermostat (GE Model RAK163A or equivalent), following the instructions packed with the low voltage connectors.

For some applications, it may be desirable to operate on low fan speed. Moving the auxiliary switch 11 to the **ON** (up) position will provide low fan speed in both heating and cooling modes.

No external voltage should be applied to the unit through the Remote Thermostat terminals.



Central Desk Control



The Zoneline can be connected to a switch at the front desk that allows you to turn the unit on or off without going to each unit.

When the front desk switch is open the Zoneline is on. Turn the switch to closed to turn it off.

For load shedding, the CDC auxiliary switch 9 must be in the **OFF** (down) position and auxiliary switch 12 must be in the **ON** (up) position. This provides fan operation while the compressor or heater is turned off.

Note:

The Freeze Sentinel remains active to help protect against low temperature damage even though the unit may be off at the central control location.

Recommended wire size for Central Desk Control installation

Wire Size # AWG	Maximum Allowable Length
#24	400 ft.
#22	600 ft.
#20	900 ft.
#18	1500 ft.
#16	2000 ft.

Follow the recommended wire sizing in the table. Two wires must be used from each CDC switch to each individual unit.

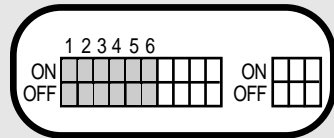
Good wiring practices (e.g. twisted pairs, separation from power circuits) must be followed to minimize induced voltages which may harm the control system. **DO NOT** use a common buss in the CDC wiring.

A 24-volt transformer is contained within the unit and no external voltage should be applied to the unit through the CDC terminals. These terminals may also be used as an interface for other systems used to control the unit, such as infrared detectors, key-activated systems, etc.



Installation Instructions

Temperature Limiting



Auxiliary Controls

Temperature limiting can reduce energy costs by limiting the lowest temperature that can be set on cooling and the highest temperature that can be set on heating. Temperature limiting is controlled by setting the first six auxiliary switches.

The first three are used to select cooling range limits and the next three are used to select heating range limits.

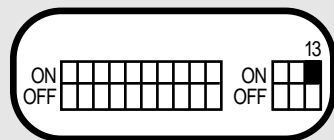
COOLING LIMITS

Limit Switch Up	Temp Range F.
NONE	62 to 85
1	64 to 85
1 & 2	67 to 85
2	69 to 85
2 & 3	71 to 85
1 & 2 & 3	73 to 85
1 & 3	75 to 85
3	77 to 85

HEATING LIMITS

Limit Switch Up	Temp Range F.
NONE	60 to 85
4	60 to 80
4 & 5	60 to 76
5	60 to 74
5 & 6	60 to 73
4 & 5 & 6	60 to 71
4 & 6	60 to 69
6	60 to 67

Diagnosis Switch

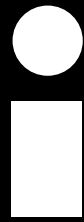


Auxiliary Controls

The Zoneline has a diagnosis feature. When switch 13 is moved to the **ON** (up) position, the unit will go through an operations check of all components which takes about two minutes. This diagnostic tool is intended for use by a qualified technician.

Helpful Information

Things that are normal



Noise	Explanation
PING! The word 'PING!' in a bold, sans-serif font with three short, slanted lines underneath it.	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" The word '"CLICK"' in a bold, sans-serif font with a thermometer icon below it.	You may hear relays click when the controls cycle on and off or are adjusted to change the room temperature.
DRIP The word 'DRIP' in a bold, sans-serif font with a single water droplet icon below it.	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.
WHIR! The word 'WHIR!' in a bold, sans-serif font with a four-bladed fan icon below it.	The indoor fan runs continuously when the unit is operating in the cooling mode, unless the fan switch behind the room cabinet is set at cycle fan (up). This will cause the fan to cycle on and off with the compressor.



If Something Goes Wrong

Before you call for service

Problem	Possible Causes	What to Do
Zoneline Doesn't Start	The unit is unplugged	<ul style="list-style-type: none">• Make sure the Zoneline plug is pushed completely into the outlet.
	The fuse is blown/circuit breaker is tripped	<ul style="list-style-type: none">• Check the house fuse/circuit breaker box and replace fuse or reset the breaker.
	The unit is waiting for the compressor overload protector to reset	<ul style="list-style-type: none">• This is normal. The Zoneline will start again after it resets.
Zoneline Does Not Cool or Heat as it Should	Airflow is restricted	<ul style="list-style-type: none">• Make sure there are no curtains, blinds or furniture blocking the front of the Zoneline.
	The temp control may not be set high or low enough	<ul style="list-style-type: none">• Turn the control to a lower or higher number. NOTE: The temperature limiter may be limiting the temperature range.
	The air filter is dirty	<ul style="list-style-type: none">• Clean the filter at least every 30 days.
	The room may have been hot or cold	<ul style="list-style-type: none">• When the Zoneline is first turned on you need to allow time for the room to cool down or warm up.
	Air is escaping	<ul style="list-style-type: none">• Check for open furnace floor registers and cold air returns.• Set the vent control in the CLOSE position.



<i>Problem</i>	<i>Possible Causes</i>	<i>What to Do</i>
<i>Burning Odor at the Start of Heating Operation</i>	Dust is on the surface of the heating element	<ul style="list-style-type: none">• This can cause a “burning” odor at the beginning of the heating operation. This odor should quickly fade.
<i>CALL SVC Indicator Light</i>	The compressor may have failed	<ul style="list-style-type: none">• Move the control to <i>STOP</i> and then restart the unit. If the light reappears within 30 minutes, call for service as soon as possible.
<i>The Air is Not Always Cool or Hot during Operation</i>	The fan switch may be set at continuous fan (down)	<ul style="list-style-type: none">• 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.

GE Service Numbers



We'll be there!

GE Answer Center®

800.626.2000

Whatever your question about any GE major appliance, GE Answer Center® information service is available to help. Your call—and your question—will be answered promptly and courteously.

And you can call any time. GE Answer Center® service is open 24 hours a day, 7 days a week.

In-Home Repair Service

**800-GE-CARES
(800-432-2737)**

A GE consumer service professional will provide expert repair service, scheduled at a time that's convenient for you. Many GE Consumer Service company-operated locations offer you service today or tomorrow, or at your convenience (7:00 a.m. to 7:00 p.m. weekdays, 9:00 a.m. to 2:00 p.m. Saturdays).

Our factory-trained technicians know your appliance inside and out—so most repairs can be handled in just one visit.

For Customers With Special Needs

800.626.2000

Upon request, GE will provide Braille controls for a variety of GE appliances, and a brochure to assist in planning a barrier-free kitchen for persons with limited mobility. To obtain these items, free of charge, call 800.626.2000.

Consumers with impaired hearing or speech who have access to a TDD or a conventional teletypewriter may call 800-TDD-GEAC (800-833-4322) to request information or service.



Service Contracts

800-626-2224

You can have the secure feeling that GE Consumer Service will still be there after your warranty expires. Purchase a GE contract while your warranty is still in effect and you'll receive a substantial discount. With a multiple-year contract, you're assured of future service at today's prices.

Parts and Accessories

800-626-2002

Individuals qualified to service their own appliances can have parts or accessories sent directly to their home. The GE parts system provides access to over 47,000 parts...and all GE Genuine Renewal Parts are fully warranted. VISA, MasterCard and Discover cards are accepted.

Care and cleaning 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.

Further Service

We're proud of our service and want you to be pleased. If for some reason you are not happy with the service you receive, here are three steps to follow for further help.

First, contact the people who serviced your appliance. Explain why you are not pleased. In most cases, this will solve the problem.

Next, if you are still not pleased, write all the details—including your phone number—to:

Manager, Consumer Relations
GE Appliances, Appliance Park
Louisville, KY 40225

Finally, if your problem is still not resolved, write:

Major Appliance Consumer
Action Program
20 North Wacker Drive
Chicago, IL 60606

AIR CONDITIONER WARRANTY

Staple sales slip or cancelled check here. Proof of original purchase date is needed to obtain service under warranty.

What is Covered

FULL ONE-YEAR WARRANTY

For one year from date of original purchase, we will provide, free of charge, parts and on-site service labor to repair or replace *any part of the room air conditioner* that fails because of a manufacturing defect.

FULL FIVE-YEAR WARRANTY

For five years from the date of original purchase, we will provide, free of charge, parts and on-site service labor to repair or replace *any part of the sealed refrigerating system* (the compressor, condenser, evaporator and all connecting tubing) that fails because of a manufacturing defect.

LIMITED 2ND THROUGH 5TH YEAR PARTS WARRANTY

This limited 2nd through 5th year parts warranty applies only to units purchased after January 1, 1995. For the second through the fifth year from date of original purchase, General Electric will provide, free of charge, parts that fail as a result of a manufacturing defect. Parts covered are fan motors, switches, thermostat, heater, heater protectors, compressor overload, solenoids, circuit boards,

auxiliary controls, thermistors, Freeze Sentinel, frost controls, ICR pump, capacitors, varistors, and indoor blower bearing. This is a limited parts only warranty, and does not include labor or transportation to and from the service shop.

This warranty is extended to the original purchaser and any succeeding owner for products purchased for use in the 48 mainland states, Hawaii and Washington, D.C. In Alaska the warranty is the same except that it is LIMITED because you must pay to ship the product to the service shop or for the service technician's travel costs to your home.

All warranty service will be provided by our Factory Service Centers or by our authorized Customer Care® servicers during normal working hours.

Should your appliance need service, during warranty period or beyond, call 800-GE-CARES (800-432-2737).

What is Not Covered

- Service trips to to teach you how to use the product.

Read your Owner's Manual. If you then have any questions about operating the product, please contact your dealer or our Consumer Affairs office at the address below, or call, toll free:

GE Answer Center®
800.626.2000

consumer information service

- Improper installation.

If you have an installation problem, or if the air conditioner is of improper cooling or heating capacity for the intended use, contact your dealer or installer. You are responsible for providing adequate electrical connecting facilities.

- Replacement of fuses or resetting of circuit breakers.
- In commercial locations, labor necessary to move the unit to a location where it is accessible for service by an individual technician.
- Failure of the product resulting from modifications to the product or due to unreasonable use including failure to provide reasonable and necessary maintenance.
- Failure due to corrosion on models not corrosion-protected.
- Damage to product caused by improper power supply voltage, accident, fire, floods or acts of God.

WARRANTOR IS NOT RESPONSIBLE FOR CONSEQUENTIAL DAMAGES.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion 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. To know what your legal rights are in your state, consult your local or state consumer affairs office or your state's Attorney General.

Warrantor: General Electric Company

If further help is needed concerning this warranty, write:

Manager—Consumer Affairs, GE Appliances, Louisville, KY 40225