# OUTDOOR SPLIT-SYSTEM AIR CONDITIONING

MODELS: 13 SEER - CCGD SERIES

**2 TO 5 TONS** 





### LIST OF SECTIONS

GENERAL       1         SAFETY       1         UNIT INSTALLATION       2	INSTRUCTING THE OWNER
LIST OF	FIGURES
Typical Installation         2           Minimum Suction Line Form         3           Excess Tube         3           Installation of Vapor Line         4           Quick Connect Refrigerant Line         4	Outdoor Unit Control Box
LICTOF	TADLEC

### LIST OF TABLES

### **SECTION I: GENERAL**

These outdoor condensing units are designed to be connected to a matching UPG indoor coil. They are equipped with a filter-drier located in the liquid line.

Units with quick-connect coupling connections are factory charged with refrigerant to be matched with the appropriate pre-charged line set, and UPG indoor coil.

The outdoor unit is designed to be placed near the perimeter of the home, typically alongside or at the back of the home, remote from the indoor coil. The outdoor unit has been factory run-tested and all components of the system are ready for easy, immediate installation.

### **SECTION II: SAFETY**



This is a safety alert symbol. When you see this symbol on labels or in manuals, be alert to the potential for personal injury.

Understand and pay particular attention to the signal words DANGER, WARNING, or CAUTION.

**DANGER** indicates an **ImmInently** hazardous situation, which, if not avoided, will result in death or serious injury.

WARNING indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.

**CAUTION** indicates a potentially hazardous situation, which, if not avoided may result in minor or moderate injury. It is also used to alert against unsafe practices and hazards involving only property damage

### **AWARNING**

Improper installation may create a condition where the operation of the product could cause personal injury or property damage. Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual for assistance or for additional information, consult a qualified contractor, installer or service agency.

## **A** CAUTION

This product must be installed in strict compliance with the enclosed installation instructions and any applicable local, state, and national codes including, but not limited to building, electrical, and mechanical codes.

### INSPECTION

As soon as a unit is received, it should be inspected for possible damage during transit. If damage is evident, the extent of the damage should be noted on the carrier's delivery receipt. A separate request for inspection by the carrier's agent should be made in writing. See Local Distributor for more information.

### LIMITATIONS

The unit should be installed in accordance with all National, State and Local Safety Codes and the limitations listed below:

- Limitations for the indoor unit, coil, and appropriate accessories must also be observed.
- The outdoor unit must not be installed with any duct work in the air stream. The outdoor fan is the propeller type and is not designed to operate against any additional external static pressure.
- The maximum and minimum conditions for operation must be observed to assure a system that will give maximum performance with minimum service.

**TABLE 1: Application Limitations** 

Ambient Air Temperature on Outdoor Coll		Air Temperature on Indoor Coli	
Min. DB	Max. DB	Min. WB	Max. WB
50 °F	115 °F	57 °F	72 °F

 The unit should not be operated at outdoor temperatures below 50° F without an approved low ambient operation accessory kit installed

### SECTION III: UNIT INSTALLATION

### LOCATION

Before starting the installation, select and check the suitability of the location for both the indoor and outdoor unit. Observe all limitations and clearance requirements.

The outdoor unit must have sufficient clearance for air entrance to the condenser coil, air discharge, and service access. See Figure 1.

NOTE: For multiple unit installations, units must be spaced a minimum of 18 inches apart (coil face to coil face).

If the unit is to be installed on a hot sun exposed roof or a black-topped ground area, the unit should be raised sufficiently above the roof or ground to avoid taking the accumulated layer of hot air into the outdoor unit.

Provide an adequate structural support.

### ADD-ON REPLACEMENT/RETROFIT

The following steps should be performed in order to insure proper system operation and performance.

- Change-out the indoor coil, if required, to an approved indoor coil/ condensing unit combination with the appropriate metering device.
- 2. If the outdoor unit is being replaced due to a compressor burnout, then installation of a 100% activated alumina suction-line filter drier in the suction-line is required, in addition to the factory installed liquid-line drier. Operate the system for 10 hours. Monitor the suction drier pressure drop. If the pressure drop exceeds 3 psig, replace both the suction-line and liquid-line driers. After a total of 10 hours run time where the suction-line pressure drop has not exceeded 3 psig, replace the liquid line drier, and remove the suction-line drier. Never leave a suction-line drier in the system longer than 50 hours of run time.

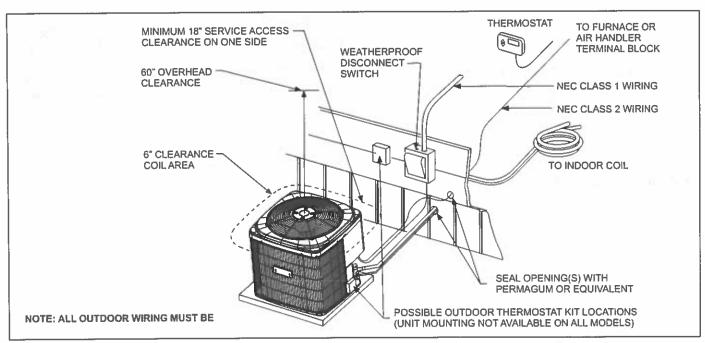


FIGURE 1: Typical Installation

### **GROUND INSTALLATION**

The unit should be installed on a solid base that is 2" above grade and will not shift or settle, causing strain on the refrigerant lines and possible leaks. Maintain the clearances shown in Figure 1 and install the unit in a level position. The base pad should not come in contact with the foundation or side of the structure because sound may be transmitted to the residence.

The length of the refrigerant tubing between the outdoor unit and indoor coll should be as short as possible to avoid capacity and efficiency losses. Excessive spacing of the outdoor unit from the home can result in the refrigerant lines being restricted by trampling or being punctured by lawn mowers. Locate the outdoor unit away from bedroom windows or other rooms where sound might be objectionable.

Adverse effects of snow or sleet accumulating on the outdoor coil can be eliminated by placing the outdoor unit where the prevailing wind does not blow across the unit. Trees, shrubs, corners of buildings, and fences standing off from the coil can reduce capacity loss due to wind chill effect.

Provide ample clearance from shrubs to allow adequate air to pass across the outdoor coil without leaves or branches being pulled into the coil

### **ROOF INSTALLATION**

When installing units on a roof, the structure must be capable of supporting the total weight of the unit, including a pad, lintels, rails, etc., which should be used to minimize the transmission of sound or vibration into the conditioned space.

### LIQUID LINE FILTER-DRIER

The air conditioning unit's copper spun filter/dryer is located on the liquid line.

NOTE: Replacements for the liquid line drier <u>must be exactly the same</u> <u>as marked</u> on the original factory drier. See Source 1 for O.E.M. replacement driers.



Failure to do so or using a substitute drier or a granular type may result in damage to the equipment.

### **PIPING CONNECTIONS**

The outdoor condensing unit must be connected to the indoor evaporator coil using field supplied refrigerant grade (ACR) copper tubing that is internally clean and dry. Units should be installed only with the tubing sizes for approved system combinations as specified in tabular data sheet. The charge given is applicable for total tubing lengths up to 15 feet. See Application Data Part Number 036-61920-000 for installing tubing of longer lengths and elevation differences.

NOTE: Using a larger than specified line size could result in oil return problems. Using too small a line will result in loss of capacity and other problems caused by insufficient refrigerant flow, Slope horizontal vapor lines at least 1" every 20 feet toward the outdoor unit to facilitate proper oil return.

### REFRIGERANT LINE

**IMPORTANT:** Do not remove protective caps from couplings until precharged lines are routed and ready for final connection. Protective caps prevent dirt from entering couplings and contaminating system when connected together.

- Check size and length of pre-charged refrigerant lines before installing.
  - a. Check the size of the pre-charged refrigerant lines to insure that they are correct for the model being installed.
  - Check the final routing of the tubing, and insure tubing will be of adequate length, with allowance for connection at the coil and outdoor unit.

- 2. Copper tubing will work-harden.
  - The pre-charged tubing should be handled carefully.
  - b. Do not bend or work the tubing any more than necessary. (The larger size tubing 3/4" for example, will work-harden rapidly as it is formed. As the tubing becomes harder, it is more susceptible to kinking and damage).

### Forming Copper.

 No attempt should be made to bend the suction line in a shorter radius than 12". See Figure 2.

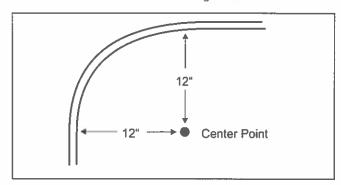


FIGURE 2: Minimum Suction Line Form

- 4. How to dispose of excess tubing.
  - Tubing may be longer than required. Coil excess tubing nearer the indoor coil rather than the outdoor unit.
  - b. Excess tubing must be coiled horizontally so the flow of refrigerant is from top to bottom of the coil and toward the outdoor unit. Another method is to form a horizontal "U" large enough to take care of excess. See Figure 3.

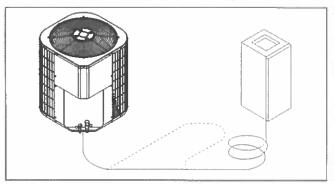


FIGURE 3: Excess Tube

- Slope tubing toward outdoor unit.
  - a. When the coil is above the outdoor unit, the suction line should be sloped with a fall of a least 1/4" per feet toward the outdoor unit.
  - When the outdoor unit is above the coil, the tubing should be sloped downward along lateral distance to the bottom, or from the vertical riser.
- Insulation of suction line.
  - Standard suction lines come pre-insulated from the factory with 3/8" closed cell insulation, adequate for average installations.

NOTE: In regions of extreme temperatures and humidity, additional insulation may be required to prevent excessive condensation and serious loss of capacity.

- Do not insulate liquid and suction lines together.
- Liquid lines should not be insulated.
- Liquid lines should not be in bare contact with suction line.
   See Figure 4.

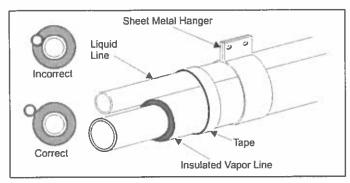


FIGURE 4: Installation of Vapor Line

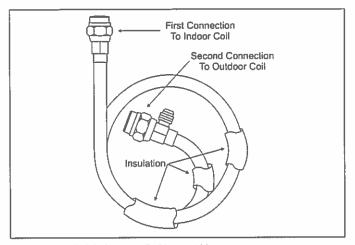


FIGURE 5: Quick Connect Refrigerant Line

## **AWARNING**

Liquid refrigerant under pressure. Liquid refrigerant can cause severe frostbite. To avoid possible loss of sight and/or frostbite use eye protection (safety glasses or safety face shield). Wearing leather gloves will offer protection to hands.

- Install refrigerant lines to indoor coil first. (The couplings without Schrader valves are to be connected to the indoor coil. See Figure 5.
  - Form the tubing so it is properly aligned with the connections on the coil.
  - b. Remove plugs and caps from connections.
  - c. Check that the rubber seals in connection ends are intact.
  - d. Be sure surfaces are clean.
  - Lubricate the rubber seals with clean refrigerant oil and make connections.
  - f. Thread couplings together by hand to be sure they are not cross threaded. Tighten coupling so diaphragms are touching. (Do not puncture diaphragms at this time).
- Install refrigerant line to outdoor unit. (The couplings with Schrader valves are to be connected to the outdoor unit.
  - Form the tubing so it is properly aligned with the connections on the outdoor unit. Insure the Schrader valves are accessible.

- b. Remove plugs and caps from connections.
- c. Check that the rubber seals in connection ends are intact.
- d. Be sure surfaces are clean.
- Lubricate the rubber seals with clean refrigerant oil and make connections.
- Thread couplings together by hand to be sure they are not cross threaded. Tighten coupling so diaphragms are touching. (Do not puncture diaphragms at this time).

### Tightening couplings.

- Tighten indoor coil couplings with wrenches; using wrench on stationary fitting of coupling and liquid line fitting at coil while nut is being tightened. See Figure 6. Tighten the nut until the coupling bottoms out.
- Then tighten an additional 1/6 turn to complete the knife edge seal.
- c. Tighten outdoor unit couplings, with wrenches using a wrench on the stationary fitting of the coupling while nut is being tightened. Tighten the nut until the coupling bottoms out.
- Then tighten an additional 1/6 turn to complete the knife edge seal.

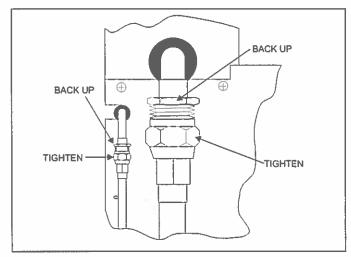


FIGURE 6: Ouick Connect Coupling

- 10. Check for leaks.
  - After the line set connections have been made they should be checked for leaks.
  - If the valves were kept clean and lubricated per instruction no leaks should be found.
  - Use leak detect solution or soap solution for leak testing. An electronic leak detector is recommended.

### **A** CAUTION

IT IS UNLAWFUL TO KNOWINGLY VENT, RELEASE OR DIS-CHARGE REFRIGERANT INTO THE OPEN AIR DURING REPAIR, SERVICE, MAINTENANCE OR THE FINAL DISPOSAL OF THIS UNIT.

WHEN THE SYSTEM IS FUNCTIONING PROPERLY AND THE OWNER HAS BEEN FULLY INSTRUCTED, SECURE THE OWNER'S APPROVAL.

## SECTION IV: ELECTRICAL CONNECTIONS GENERAL INFORMATION & GROUNDING

Check the electrical supply to be sure that it meets the values specified on the unit nameplate and wiring label.

Power wiring, control (low voltage) wiring, disconnect switches and over current protection must be supplied by the installer. Wire size should be sized per NEC requirements.

## **A** CAUTION

All field wiring must <u>USE COPPER CONDUCTORS ONLY</u> and be in accordance with Local, National, Fire, Safety & Electrical Codes. This unit must be grounded with a separate ground wire in accordance with the above codes.

The complete connection diagram and schematic wiring label is located on the inside surface of the unit service access panel.

### **FIELD CONNECTIONS POWER WIRING**

- Install the proper size weatherproof disconnect switch outdoors and within sight of the unit.
- Remove the screws at the top and sides of the corner cover. Slide corner cover down and remove from unit.
- 3. Run power wiring from the disconnect switch to the unit.
- Route wires from disconnect through power wiring opening provided and into the unit control box as shown in Figure 7.
- Install the proper size time-delay fuses or circuit breaker, and make the power supply connections.

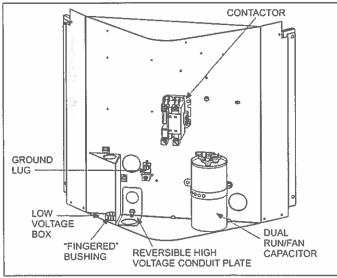


FIGURE 7: Outdoor Unit Control Box

### **FIELD CONNECTIONS CONTROL WIRING**

- Route low voltage wiring into bottom of control box as shown in Figure 7. Make low voltage wiring connections inside the low voltage box per Figures 8 & 9.
- The complete connection diagram and schematic wiring label is located on the inside surface of the unit service access panel.
- 3. Replace the comer cover removed in Step 2.
- All field wiring to be in accordance with national electrical codes (NEC) and/or local-city codes.

NOTE: A Start Assist Kit is available and recommended for long line set applications or in areas of known low voltage problems.

- Mount the thermostat about 5 ft. above the floor, where it will be exposed to normal room air circulation. Do not place it on an outside wall or where it is exposed to the radiant effect from exposed glass or appliances, drafts from outside doors or supply air grilles.
- Route the 24-volt control wiring (NEC Class 2) from the outdoor unit to the indoor unit and thermostat.

NOTE: To eliminate erratic operation, seal the hole in the wall at the thermostat with permagum or equivalent to prevent air drafts affecting the operation of in the thermostat.

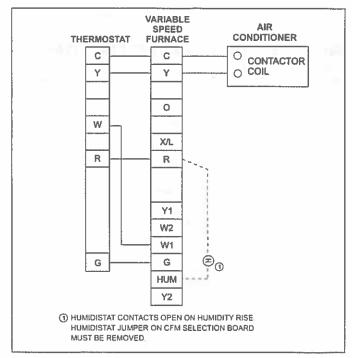


FIGURE 8: Typical Furnace Thermostat Wiring

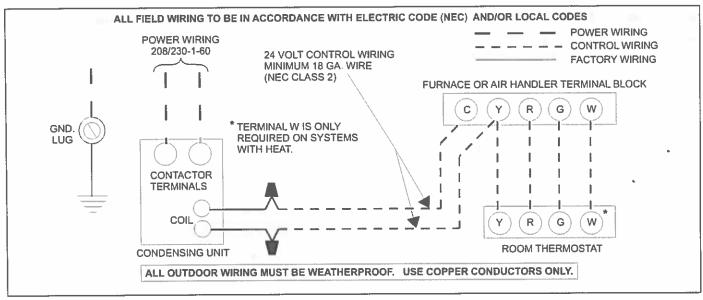


FIGURE 9: Typical Field Wiring (Air Handler / Electrical Heat)

### **SECTION V: INSTRUCTING THE OWNER**

Assist owner with processing warranty cards. Review Owners Guide and provide a copy to the owner and guidance on proper operation and maintenance. Instruct the owner or the operator how to start, stop and adjust temperature setting.

When applicable, instruct the owner that the compressor is equipped with a crankcase heater to prevent the migration of refrigerant to the compressor during the "OFF" cycle. The heater is energized only when the unit is not running. If the main switch is disconnected for long periods, do not attempt to start the unit until 8 hours after the switch has been connected. This will allow sufficient time for all liquid refrigerant to be driven out of the compressor.

The installer should also instruct the owner on proper operation and maintenance of all other system components.

### SECTION VI: MAINTENANCE

- Dirt should not be allowed to accumulate on the outdoor coils or other parts in the air circuit. Clean as often as necessary to keep the unit clean. Use a brush, vacuum cleaner attachment, or other suitable means.
- The outdoor fan motor is permanently lubricated and does not require periodic oiling.
- If the coil needs to be cleaned, it should be washed with Calgon Coilclean (mix one part Coilclean to seven parts water). Allow solution to remain on coil for 30 minutes before rinsing with clean water. Solution should not be permitted to come in contact with painted surfaces.
- Refer to the furnace or air handler instructions for filter and blower motor maintenance.
- The indoor coil drain pan should be inspected and cleaned regularly to prevent odors and assure proper drainage.

# USER'S INFORMATION MANUAL

OUTDOOR SPLIT-SYSTEM AIR CONDITIONER

MODELS: CCGD SERIES 2 TO 5 TONS





### **TABLE OF CONTENTS**

CONTACT INFORMATION FOR USA	COOLING CONSERVATION	.2
CONTACT INFORMATION FOR CANADA 1	CARE OF SYSTEM	.2
HOW YOUR AIR CONDITIONER WORKS	COIL CARE	.2
SYSTEM OPERATION1	FILTER CARE	.2
SETTING THE THERMOSTAT	OUTDOOR UNIT FINISH	.3
Fan Operation Selection2	CLEARANCES	.3
MANUAL CHANGE-OVER THERMOSTAT	POWER INTERRUPTION	.3
ELECTRONIC THERMOSTAT	SERVICE CALLS	.3
TO MAXIMIZE OPERATING EFFICIENCY	PARTS INFORMATION	.3
HEATING CONSERVATION	LIMITED WARRANTY	.4

#### CONTACT INFORMATION FOR USA **CONTACT INFORMATION FOR CANADA** Go to website at www.york.com click on "contact", then click on Contact us by mail: Manufacturer: DISTRIBUTED BY: "contact form" and follow the instructions. **Johnson Controls Unitary Products StyleCrest** Contact us by mail: 801 W. 37th Street **Johnson Controls Unitary Products Building #7 Consumer Relations** Wichita, Ks 67219 5005 York Drive Norman, OK 73069

This high efficiency air conditioning system has been precision engineered, manufactured of high quality materials, and passed many rigorous tests and inspections to ensure years of satisfactory service. That's why you can rely on efficient, trouble-free operation.

Your system is fully automatic. Set the thermostat and forget it, And it's automatically protected from damage by voltage fluctuations or excessive heating or cooling demands.

Your split system air conditioner consists of two units - one installed outdoors and one installed indoors. The indoor unit may be installed in a basement, attic, or crawl space.

### **HOW YOUR AIR CONDITIONER WORKS**

If your hand is wet and you blow on it, it feels cool because some of the moisture is evaporating and becoming a vapor. This process requires heat. The heat is being taken from your hand, so your hand feels cool.

That's what happens with an air conditioner. During the cooling cycle, your system will remove heat and humidity from your home and will transfer this heat to the outdoor air.

### SYSTEM OPERATION

Your thermostat puts full control of the comfort level in your home at your fingertips. DO NOT switch your thermostat rapidly "On" and "Off" or between "Heat" to "Cool" This could damage your equipment. Always allow at least 5 minutes between changes.

### **SETTING THE THERMOSTAT**

Although thermostats may vary widely in appearance, they are all designed to perform the same basic function: to control the operation of your air conditioning or heat pump system. Regardless of size or shape, each thermostat will feature a temperature indicator; a dial, arm, or push button for selection of the desired temperature; a fan switch to choose the indoor fan operation; and a comfort switch for you to select the system mode of operation.

Only approved thermostats have been tested and are fully compatible with this equipment. Please be aware that many different thermostats operate on batteries or "power stealing" principals. These types of thermostats can not be supported as trouble free when used with this product.

A complete operating instruction is provided by the manufacturer for each thermostat. Familiarize yourself with its proper operation to obtain the maximum comfort with minimum energy consumption.

If your system has been designed to allow both cooling and heating operation, you may have either a manual change-over type, or a programmable electronic type thermostat.

Manual change-over simply means that the comfort switch must be manually positioned every time you wish to switch from the cooling to heating or heating to cooling modes of operation.

The computerized electronic thermostat is actually a sophisticated electronic version of a manual change-over type. This thermostat includes features which allow "set-back" temperature variations for periods of sleep, or while you are away during the day, and means energy savings for you. The thermostat also features a digital clock.

## **A** CAUTION

The main power to the system must be kept "ON" at all times to prevent damage to the outdoor unit compressor. If necessary, the thermostat control switch should be used to turn the system "OFF". Should the main power be disconnected or interrupted for 8 hours or longer, DO NOT attempt to start the system for 8 hours after the power has been restored to the outdoor unit.

### Fan Operation Selection

A multi-position fan switch allows you to choose the type of fan operation of the indoor fan.

**AUTO** - With the thermostat fan switch set to "AUTO", the fan will run intermittently as required for either heating or cooling. This position will provide the lowest operating cost.

ON - If the fan switch is set to "ON", the indoor fan will not shut off. However, the system will still operate as required by room temperatures. This provides continuous air filtering and more even temperature distribution throughout the house, which is especially useful in houses with basements.

Usually during spring and fall, when neither heating nor cooling is required, you may want to run only the fan to ventilate, circulate, and filter the air in your home or building. Set the comfort control switch to "OFF" and the fan switch to "ON". Be sure to return the switches to their original positions for normal operation.

### **MANUAL CHANGE-OVER THERMOSTAT**

COOLING YOUR HOME: With the comfort control switch in the "COOL" position, the system will operate as follows: When the indoor temperature rises above the level indicated by the temperature adjustment setting, the system will start. The outdoor unit will operate and the indoor fan will circulate cool, filtered air. When the room temperature is lowered to the setting selected, the system will shut off.

**HEATING YOUR HOME:** If your system includes a heating unit and the comfort control switch is in the "HEAT" position, the system will operate as follows: When the indoor temperature drops below the level indicated by the temperature adjustment setting, the system will start. The heating system will operate and the indoor fan will circulate warm, filtered air. When the room temperature rises to the setting selected, the system will shut off.

Whether heating or cooling, the fan will continue to operate if the fan switch was set in the "ON or Intelligent" position. The "AUTO" setting on the fan switch will allow the fan to shut off when your system does.

### **ELECTRONIC THERMOSTAT**

The computerized electronic thermostat, when programmed, will function automatically to operate the system as follows: When the indoor temperature rises above the higher (COOL) setting, the outdoor unit will operate and the indoor fan will circulate cool, filtered air. When the room temperature is lowered to the selected level, the system will shut off. When the indoor temperature drops below the lower (HEAT) setting, the heating system will operate, and the indoor fan will circulate the warm, filtered air. When the indoor temperature rises to the selected setting, the system will shut off. The indoor fan will either shut off or run continuously, depending upon your choice of fan switch setting.

## TO MAXIMIZE OPERATING EFFICIENCY HEATING CONSERVATION

For the most efficient operation, keep storm windows and doors closed all year long. They not only help insulate against heat and cold, but they also keep out dirt, pollen, and noise.

Closing drapes at night, keeping fireplace dampers closed when not in use, and running exhaust fans only when necessary will help you to retain the air you have already paid to heat.

Keep lamps, televisions, or other heat producing sources away from the thermostat. The thermostat will sense this extra heat and will not be able to maintain the inside temperature to the desired comfort level.

### **COOLING CONSERVATION**

To comfortably cool your home, your air conditioner must remove both heat and humidity. Don't turn your system off even though you will be away all day. On a hot day, your system may have to operate between 8 to 12 hours to reduce the temperature in your home to a normal comfort level.

Keep windows closed after sundown. While the outdoor temperature at night may be lower than indoors, the air is generally loaded with moisture which is soaked up by furniture, carpets, and fabrics. This moisture must be removed when you restart your system.

The hotter the outside temperature, the greater the load on your system. Therefore do not be alarmed when your system continues to run after the sun has set on a hot day. Heat is stored in your outside walls during the day and will continue to flow into your home for several hours after sunset.

Use your kitchen exhaust fan when cooking. One surface burner on "HIGH" requires one ton of cooling. Turn on your bathroom exhaust fan while showering to remove humidity. However, exhaust fans should not be run excessively. It would decrease efficiency by removing conditioned air.

You can also help your system in the summer by closing drapes or blinds and by lowering awnings on windows that get direct sunlight.

### **CARE OF SYSTEM**

**IMPORTANT:** The owner/user should not attempt to disassemble the equipment nor perform periodic maintenance unless they are experienced and qualified to do so.

A periodic inspection, cleaning, lubrication, and adjustment of your out-door unit is available from your dealer. Be sure to ask him about this service

For those who prefer to do-it-yourself, follow the instructions below to care for your system.

### **COIL CARE**

Keep the outdoor unit free of loose snow, foliage, grass clippings, leaves, paper, and any other material which could restrict the proper air flow in and out of the unit. The coil may be vacuumed to remove any debris from between the fins. However, don't knock ice off the outdoor unit's coil surface following an ice or severe snowstorm. The blows could mash the coil fins shut (blocking air passage), or break the refrigerant tubing allowing the refrigerant to escape.

If the coil becomes excessively dirty, turn the main disconnect switch to "OFF" and wash the coil with your garden hose. Avoid getting water into the fan motor and control box. Flush dirt from base pan after cleaning the coil.

### **FILTER CARE**

Inspect the air filter(s) at least once a month. If they are dirty, wash reusable filters with a mild detergent per manufacturer's recommendations. Replace disposable filters with new filters.

Install the clean filters with "air flow" arrow in the same direction as the air flow in your duct. Filters should be clean to assure maximum efficiency and adequate air circulation. Drapes, furniture or other obstructions blocking your supply and return air grilles will also decrease efficiency.

### **OUTDOOR UNIT FINISH**

If you wish to maintain the finish of the outdoor unit, it can be polished with car wax. It is recommended the unit be cleaned with soap and water prior to waxing.

TROUBLESHOOTING GUIDE			
PROBLEM	CHECK	ACTION TO TAKE	FAULT CODE
No Heat	Thermostat for proper settings.	Set thermostat to proper setting.	27.2
or or	Circuit breakers and fuses.	Reset circuit breakers - Replace blown fuses.	***
Cooling	3. Check outdoor unit for dirty coil (Cooling).	Clean coil, see "COIL CARE" section.	2
	Indoor unit for dirty filter (Heating).	Clean or replace, see "FILTER CARE" section.	2
Wet on Floor or in Furnace	Condensate drain and "P" trap	Remove blockage, usually mold or fungus.	*

### **CLEARANCES**

The minimum clearances shown below must be maintained should any patio or yard improvements be done around the outdoor unit.

- Top 60"
- Sides 12"
- Access 24"

### **POWER INTERRUPTION**

When ice, snow, wind storms, etc. disrupt electrical power supply to your house, proceed as follows:

- 1. Switch thermostat to OFF position.
- Do not switch to cooling or auto until electrical power has been reestablished for 8 hours if the power was off more than 8 hours.

### SERVICE CALLS

There are a few instances where you can avoid unnecessary service calls. (See Troubleshooting Guide above). Some models provide fault codes. The flashing light on the system thermostat is capable of providing you with time and money saving information. The fault code numbers listed can be handled by taking the corrective action indicated. Call qualified service person if displaying fault code numbers not listed.

### **PARTS INFORMATION**

Replacement parts are available from local contractor/dealers or the nearest distribution center.

# Limited Warranty

## **Manufactured Housing Quick Connect Air Conditioners**

UPG warrants this product to be free from defects in factory workmanship and material under normal use and service and will replace parts that prove to have such defects according to the terms outlined below.

Model	Compressor	Parts Coverage	Labor and Trip Coverage*
CCGD	5 years	1 years	1 years

<sup>\*</sup>Thermostat labor coverage for 30 days only, no trip allowance.

The warranty period for any replacement compressor or part provided here under shall not extend beyond the warranty period stated above. The compressor warranty is on a parts only basis the third through lifth year no labor, freight or other service charges are allowed.

The warranty period will begin on the purchase date of the residence when the product is installed as original equipment, or the installation date when installed in a residence previously purchased by the consumer. Return the Warranty Registration Card to UPG promptly after product installation or purchase for your benefit and protection. The warranty period will begin upon product shipment from UPG in the absence of a recorded Warranty Registration Card.

This warranty applies to the original consumer/purchaser and any subsequent purchaser. The warranty does not apply if the air conditioner is removed from the original residence, or if the residence has been moved from the original location where the air conditioner was placed in service.

This warranty applies only to products installed: (1) in the United States of America or Canada; (2) in accordance with UPG recommendations and specifications outlined in the Installation Manual provided with the product, (3) in accordance with all national, state/provincial, and local codes; and (4) in the original

### **Exclusions**

- 1. Shipping/freight, or material charges.
- 2. Damages resulting from transportation, mishandling, improper application, installation or servicing.
- 3. Damages resulting from accident, abuse, fire, flood, or other acts of nature.
- 4. Use of the product in a corrosive atmosphere.
- 5. Alteration, tampering, defacing or removing the product serial number will serve to void the warranty.
- Damages resulting from inadequacy or interruption of electrical service, improper energy supply, blown fuses, improper wiring external to the unit or other like damages.
- 7. Damages resulting from the use of components not approved by UPG.
- 8. This warranty does not cover consequential damages, incidental damages or incidental expenses including damages to property.
- 9. Damages caused by failure to perform normal or routine maintenance as set out in the operation and service instructions.
- 10. Cleaning, replacement of filters, or any other routine maintenance as set out in the User's Information, Maintenance and Service Manual.
- 11. Replacement or cleaning of nozzles or orifices.
- 12. Fuses either internal or external to the product.
- 13. Excessive fuel or electricity consumption.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. SOME STATES DO NOT ALLOW THE DISCLAIMER OF IMPLIED WARRANTY, SO THAT THE ABOVE DISCLAIMER MAY NOT APPLY TO YOU.

SOME STATES ALLOW ONLY A PARTIAL LIMITATION ON IMPLIED WARRANTIES, OR LIMIT THE DURATION OF IMPLIED WARRANTIES TO THE DURATION OF THE EXPRESS WARRANTY. IN SUCH STATES, THE DURATION OF IMPLIED WARRANTIES IS HEREBY EXPRESSLY LIMITED TO THE DURATION OF THE EXPRESS WARRANTY ON THE FACE HEREOF. IN NO EVENT, WHETHER AS A RESULT OF BREACH OF WARRANTY OR CONTRACT TORT (INCLUDING NEGLIGENCE) STRICT LIABILITY OR OTHERWISE, SHALL UPG BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOSS OF USE OF THE EQUIPMENT OR ASSOCIATED EQUIPMENT, LOST REVENUES OR PROFITS, COST OF SUBSTITUTE EQUIPMENT. THIS WARRANTY DOES NOT COVER CONSEQUENTIAL DAMAGES. THE ABOVE LIMITATIONS SHALL INURE TO THE BENEFIT OF UPG SUPPLIERS AND SUBCONTRACTORS. THE ABOVE LIMITATION ON CONSEQUENTIAL DAMAGES SHALL NOT APPLY TO INJURIES TO PERSONS IN THE CASE OF CONSUMER GOODS.

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, OR FOR STRICT LIABILITY IN TORT, SO THAT THE ABOVE EXCLUSIONS AND LIMITATIONS MAY NOT APPLY TO YOU. UPG DOES NOT ASSUME, OR AUTHORIZE ANY PERSON TO ASSUME FOR UPG ANY LIABILITY FOR THE SALE OF THIS PRODUCT. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

### TO OBTAIN WARRANTY SERVICE

Consult the Authorized Service Center list packed with the furnace installed in the manufactured home or contact your installing or servicing dealer.

Or, look in the Yellow Pages of the telephone book under Mobile Hornes-or Manufactured Housing-Repair and Service for the name and telephone number of the nearest authorized manufactured housing service center. If local authorized service cannot be obtained, or you are unable to contact your installing dealer, contact the authorized distributor in your area. If there is no distributor in your area, and you cannot obtain proper service under the terms of the warranty, please write: Unitary Products Group (UPG) Customer Relations Department, PO Box 19014, Wichita, KS 67204-9014.

Subject to change without notice, Printed in U.S.A. Copyright © 2009 by Johnson Controls, Inc. All rights reserved.