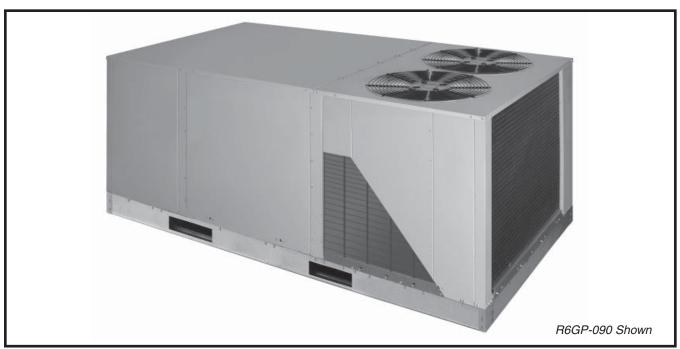
Installation Instructions

Single Package Gas Heating/Electric Cooling Rooftop Units



A WARNING:

FIRE OR EXPLOSION HAZARD

- Failure to follow safety warnings exactly could result in serious injury or property damage.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.
- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

WHAT TO DO IF YOU SMELL GAS

- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Leave the building immediately.
- Immediately call your gas supplier from a neighbors phone. Follow the gas suppliers instructions.
- If you cannot reach your gas supplier, call the fire department.

DO NOT DESTROY. PLEASE READ CAREFULLY AND KEEP IN A SAFE PLACE FOR FUTURE REFERENCE.

ATTENTION INSTALLERS:

It is your responsibility to know this product better than your customer. This includes being able to install the product according to strict safety guidelines and instructing the customer on how to operate and maintain the equipment for the life of the product. Safety should always be the deciding factor when installing this product and using common sense plays an important role as well. Pay attention to all safety warnings and any other special notes highlighted in the manual. Improper installation of the unit or failure to follow safety warnings could result in serious injury, death, or property damage. These instructions are primarily intended to assist qualified individuals experienced in the proper installation of this appliance. Some local codes require licensed installation/service personnel for this type of equipment. After completing the installation, return these instructions to the customer's package for future reference.

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SAFETY INFORMATION

Safety markings are used frequently throughout this manual to designate a degree or level of seriousness and should not be ignored. **WARNING** indicates a potentially hazardous situation that if not avoided, could result in personal injury or death. **CAUTION** indicates a potentially hazardous situation that if not avoided, may result in minor or moderate injury or property damage.

! WARNING:

PROPOSITION 65 WARNING: This product contains fiberglass wool, a product known to the state of California to cause cancer. Disturbing the insulation of this product during installation, maintenance, or repair will expose you to fiberglass wool.

- Breathing this material may cause respiratory irritations or may cause lung cancer.
- Fiberglass wool may also cause eye irritation, skin sensitization, or other allergic responses in susceptible individuals.
- Always wear goggles, disposable gloves, long sleeved shirt, and appropriate breathing protection when working near this insulation. If contact with skin occurs, wash immediately with soap and water. In case of contact with eyes, flush immediately with water for at least 15 minutes. Contact a physician if needed.

! WARNING:

Improper installation, service, adjustment, or maintenance may cause explosion, fire, electrical shock or other hazardous conditions which may result in personal injury or property damage. Unless otherwise noted in these instructions, only factory authorized kits or accessories may be used with this product.

WARNING:

Do not place combustible material on or against the unit cabinet. Do not place combustible materials, including gasoline and any other flammable vapors and liquids, in the vicinity of the unit.

MARNING:

The safety information listed below must be followed during the installation, service, and operation of this unit. Failure to follow safety recommendations could result in possible damage to the equipment, serious personal injury or death.

- This equipment contains liquid and gaseous refrigerant under high pressure. Installation or servicing should only be performed by qualified trained personnel thoroughly familiar with this type equipment.
- All electrical wiring must be completed in accordance with local, state and national codes and regulations and with the National Electric Code (ANSI/NFPA 70) or in Canada the Canadian Electric Code Part 1 CSA C.22.1.
- Use only with the type of gas approved for this unit.
 Refer to the unit rating plate.
- Install this unit only in a location and position as specified on page 8.
- Provide adequate combustion and ventilation air to the unit as specified on page 6.
- Provide adequate clearances around the air vent intake terminal as specified in on page 6.
- Combustion products must be discharged outdoors.
 Connect this unit to an approved vent system only, as specified on page 6.
- Never test for gas leaks with an open flame. Use a commercially available soap solution to check all connections (See page 10).
- Consult Table 16 (page 42), and the rating plate for the proper circulating air flow and temperature rise. It is important that the duct system be designed to provide the correct flow rates and external pressure rise. An improperly designed duct system can result in nuisance shutdowns, and comfort or noise issues.
- Follow all precautions in the literature, on tags and on labels provided with the unit and/or approved field installed kits. The type of hazard and severity are described on each label or tag.
- This unit is designed only for outdoor installations and should be located with consideration of minimizing the length of the supply and return ducts. Consideration should also be given to the accessibility of fuel, electric power, service access, noise, and shade.

REQUIREMENTS and CODES

This unit must be installed in accordance with these instructions, all applicable local building codes and the current revision of the National Fuel Gas Code (NFPA54/ANSI Z223.1) or the Natural Gas and Propane Installation Code, CAN/CGA B149.1.

Additional codes listed below are for reference purposes only and do not necessarily have jurisdiction over local or state codes. Local codes and regulations take precedence over any recommendations contained in these instructions. Always consult with local authorities before installing any gas appliance.

Combustion and Ventilation Air

- US: National Fuel Gas Code (NFGC), Airfor Combustion and Ventilation
- CANADA: Natural Gas and Propane Installation Codes (NSCNGPIC), Venting Systems and Air Supply for **Appliances**

Duct Systems

· US and CANADA: Air Conditioning Contractors Association (ACCA) Manual Q, Sheet Metal and Air Conditioning Contractors National Association (SMACNA), or American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE) Fundamentals Handbook

Electrical Connections

- US: National Electrical Code (NEC) ANSI/NFPA 70
- CANADA: Canadian Electrical Code CSA C22.1

Gas Piping and Gas Pipe Pressure Testing

- · US: NFGC and National Plumbing Codes
- CANADA: NSCNGPIC

General Installation

- US: Current edition of the NFGC and the NFPA 90B. For copies, contact the National Fire Protection Association Inc., Batterymarch Park, Quincy, MA 02269; or American Gas Association, 400 N. Capitol, N.W., Washington DC 20001 or www.NFPA.org.
- CANADA: NSCNGPIC. For a copy, contact Standard Sales, CSA International, 178 Rexdale Boulevard, Etobicoke (Toronto), Ontario, M9W 1R3 Canada

Safety

- US: (NFGC) NFPA 54–1999/ANSI Z223.1 and the Installation Standards, Warm Air Heating and Air Conditioning Systems ANSI/NFPA 90B.
- CANADA: CAN/CGA-B149.1-and .2-M00 National Standard of Canada. (NSCNGPIC)

GENERAL INFORMATION

N WARNING:

Improper installation, service, adjustment, or maintenance may cause explosion, fire, electrical shock or other hazardous conditions which may result in personal injury or property damage. Unless otherwise noted in these instructions, only factory authorized kits or accessories may be used with this product.

R6GP Series Single Package Gas Heating/Electric Cooling units are designed for outdoor rooftop or ground level slab installations. The units are shipped ready for downflow duct connections and are easily converted for horizontal duct connections with an optional accessory kit. See the unit Technical Sales Literature for factory and field installed accessory information and part numbers. This information can also be found online at www.nordyne.com.

Air Ducts

- Air Ducts must be installed in accordance with the National Fire Protection Association "Standards for Installation of Air Conditioning and Ventilation Systems" (NFPA 90A). The ductwork should be appropriately sized to the capacity of the heating unit to ensure its proper airflow rating.
- Installation of combination heating/cooling units must also conform with current C.S.A. Standard B52 "Mechanical Refrigeration Code."

Air Filter Requirements



N WARNING:

Never operate the unit without a filter in place. Dust and lint could accumulate on internal parts, resulting in loss of efficiency, equipment damage and possible fire.

All return air must pass through the filters before entering the unit. It is important that all filters be kept clean and replaced frequently to ensure proper operation of unit. Dirty or clogged filters will reduce the efficiency of the unit and result in unit shutdowns. Air filter pressure drop must not exceed 0.08 inches WC. When replacing the air filters, a suitable air filter must be installed ahead of the evaporator coil of the return air system. Refer to page 17 for recommended filter sizes.

Clearances to Combustible Materials

- The R6GP series gas/electric unit is suitable for installation on combustible flooring or class A, B, or C roofing materials.
- A clearance of at least 36 inches from the blower access panel and from the louvered control access panel is the required clearance to combustibles. Please refer to Figure 6 (page 8) for all requirements. Where accessibility to combustibles clearances are greater than minimum clearances, accessibility clearances must take preference.
- Sufficient clearance for unobstructed airflow through the louvered control access panel and through the outdoor coil must be maintained in order to achieve rated performance.

Combustion Air Quality

! WARNING:

Combustion air must not be drawn from a contaminated atmosphere. Excessive exposure to contaminated combustion air will result in safety and performance related problems.

To maximize heat exchanger life, the combustion air must be free of chemicals that can form corrosive acidic compounds in the combustion gases. The recommended source of combustion air is to use clean air from outside. DO NOT place any chemicals with flammable or caustic vapors or these other corrosive chemicals near the vent termination:

- Gasoline/Kerosene
- · Permanent wave solutions
- · Chlorinated waxes and cleaners
- Chlorine based swimming pool chemicals
- Water softening chemicals
- · De-icing salts or chemicals
- Carbon tetrachloride
- Halogen type refrigerants
- · Cleaning solvents
- · Cements, glues, paint removers, varnishes, etc.
- · Hydrochloric acid
- · Masonry acid washing materials
- Plumbing Stack

Condensate Drain

The method for disposing of condensate varies according to local codes. Consult your local code or authority having jurisdiction.

Condensate is drained from the unit through a 3/4" (19mm) PVC pipe located on the front side of the unit (Figure 1). For proper drainage, install a 3" (8cm) Min. trap between the drain line and an open vent of the same size. Avoid areas where condensate drainage may cause problems.

The condensate drain line must be J-trapped using field supplied parts and may be combined with other drain lines when routed to the drain.

When connecting rigid drain line, hold any fittings with a wrench to prevent twisting. **Do not overtighten!**

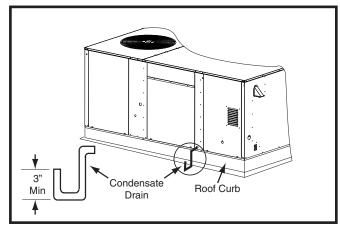


Figure 1. Condensate Drain

Equipment Check

All units have been securely packaged at the point of shipment. After unpacking the unit, carefully inspect for apparent and concealed damage. Claims for damage should be filed with the carrier by the consignee.

Equipment Application

Before beginning the installation, verify the unit voltage requirements and that the model is correct for the job. The unit model number is printed on the data label. This unit is **NOT** to be used for temporary heating of buildings or structures under construction.

Heating Load

This unit should be sized to provide the design heating load requirement. Heating load estimates can be made using approved methods available from Air Conditioning Contractors of America (Manual J); American Society of Heating, Refrigerating, and Air Conditioning Engineers; or other approved engineering methods. For installations above 2,000 ft., the unit should have a sea level input rating large enough that it will meet the heating load after deration for altitude.

Thermostat

A two-stage cooling/ heating 24VAC thermostat should be used with these units, and installed according to the instructions supplied by the thermostat manufacturer. The thermostat should not be installed on an outside wall or any other location where its operation may be adversely affected by radiant heat sources such as sunlight, lighting fixtures, or fireplaces and convective heat from warm/cold air registers or electrical appliances.

WARNING:

This unit is intended for outdoor installation only. Do not vent the unit through a conventional venting system.

This unit has been equipped with an integral venting system and designed to operate only with this venting system. No additional venting shall be used. **This unit must be vented to the outdoors**.

! WARNING:

The vent cover assembly must be installed to assure proper operation of the unit.

A vent cover assembly has been supplied with the unit and can be found secured to the gas controls within the burner area of this unit.

Figure 2 displays the proper installation of the vent cover assembly over the vent outlet of the corner panel. The fasteners used to secure the vent cover assembly have been included on the unit end panel.

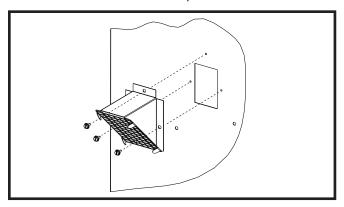


Figure 2. Vent Cover Assembly

The list below summarizes the location requirements for the venting system termination:

- The location of the vent termination must be consistent with the National Fuel Gas Code (ANSI Z223.1) or CAN/CGA-B149 Installation Codes.
- Must be located at least four (4) feet horizontally from any electric meters, gas meters, regulators, and relief equipment.
- Must be located at least 3 feet above any forced air inlet located within 10 feet of unit.
- Must be located at least 4 feet below, 4 feet horizontally from, or 1 foot above any door, window, or gravity air inlet into any building.
- Must be located at least 1 foot above grade and installed in such a manner as to prevent snow accumulation from obstructing the vent termination.
- The vent termination must not be located above any public walkways.

- Ensure that the exhaust gases will not impinge on windows or building surfaces, which may be compromised or damaged by condensation.
- Do not install the unit in a location where exhaust from the vent termination will be directed into windows, stairwells, under decks, or other recessed areas.

COMBUSTION AIR REQUIREMENTS

! WARNING:

Installation using methods other than those described in the following sections must comply with the National Fuel Gas Code and all applicable local codes.

Provisions must be made during the installation of this unit that provide an adequate supply of air for combustion.

- Instructions for determining the adequacy of an installation can be found in the current revision of the NFGC (ANSI Z223.1 / NFPA54). Consult local codes for special requirements. These requirements are for US installations as found in the NFGC.
- The requirements in Canada (B149.1) are structured differently. Consult with B149.1 and local code officials for Canadian installations.
- Additional reference information for US and Canadian installations can be found in the Combustion and Ventilation Air section on page 4.

Air openings in the door of the unit, warm air registers, and return air grilles must never be restricted. If the unit does not receive an adequate supply of air for combustion, the flame roll-out control located above the burners will open, turning off the gas supply to the burners. This safety device is a manually reset switch. IMPORTANT NOTE: DO NOT install jumper wires across this control to defeat its function or reset the control without identifying and correcting the fault condition.

If this control must be replaced, use only factory authorized replacement parts specified in the Replacement Parts List provided online.

! CAUTION:

Appliances that force air from the building to the outdoors can create negative pressures inside, resulting in improper operation or unsafe conditions. It is imperative that sufficient air exchange with the outdoors is provided to prevent depressurization.

Additional information about how to test for negative pressure problems can be found in the National Fuel Gas Code.

UNIT INSTALLATION

Packaging Removal

- 1. Remove top crate brackets and wooden cap assembly from top of unit (Figure 3).
- 2. Remove lower crate brackets, 4 side skids, and 2 end skids from each side of unit. **NOTE: DO NOT remove base rails from unit.**
- 3. Rigunit and raise up approximately 4 feet off the ground. (Also see Rigging and Hoisting section).
- 4. Remove crate brackets (Figure 4) securing long and short bottom boards to underside of unit. **NOTE: Some screws are located in fork slots.**
- Remove long and short bottom boards from beneath unit.
- 6. Inspect unit thoroughly for shipping damage.
- 7. Carefully lower and position unit to it's permanent location.

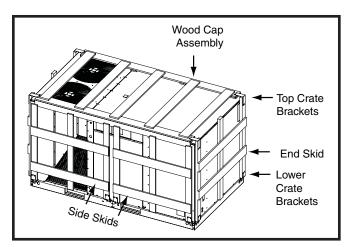


Figure 3. Side View

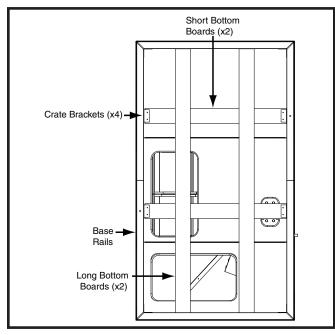


Figure 4. Bottom View

Rigging and Hoisting

/I

WARNING:

To avoid the risk of property damage, personal injury, or death, it is the rigger's responsibility to ensure that whatever means are used to hoist the unit are safe and adequate:

- The lifting equipment must be adequate for the load. Refer to Table 4 (page 27) for unit weights.
- The unit must be lifted from the holes in the base rails using cables or chains. Refer to Figure 5 for example setup.
- Spreader bars are required to protect the unit and ensure even loading (See Figure 5).
- Keep the unit in an upright position at all times.
 The rigging must be located outside the units center of gravity. Refer to Figures 12-14 (pages 22-27) for locating the center of gravity.
- All panels must be secured in place during rigging and hoisting.

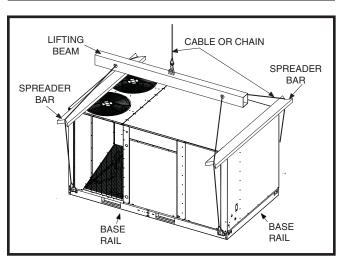


Figure 5. Rigging and Hoisting

Minimum Clearance Requirements

R6GP units are certified as combination heating and cooling equipment for outdoor installation only. Figure 6 displays the minimum clearances to combustible materials for both Downflow and Horizontal discharge.

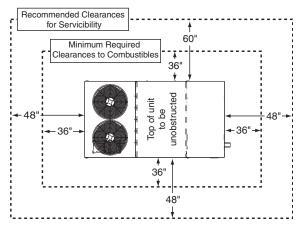


Figure 6. Unit Clearance Requirements

R6GP units may be installed on non-combustible surfaces when used with bottom supply and return air ducts.

Units may be installed on wood flooring or on Class A, B, or C roof covering material as long as the following requirements are met:

- If using side supply with return air ducts, the horizontal discharge kit must be installed prior to unit installation.
- If using bottom discharge with return air ducts a roof curb must be installed prior to unit installation. See Rigging and Hoisting section on page 8 for setting of the unit.

Rooftop Mounting

Rooftop installations must be located according to local building codes or ordinances and these requirements:

- The roof must be capable of handling the weight of the unit. For unit weights, see Table 4 (page 27). Reinforce the roof if necessary.
- The appropriate accessory roof curb (Figure 7) must be installed prior to unit installation. The roof curb must be square and level to ensure proper condensate drainage. Please follow all instructions provided with the kit.

! WARNING:

Never drill or punch holes in unit base when installing downflow units. Leakage may occur if bottom pan is punctured.

- On bottom discharge applications, the supply and return air ducts must be attached to the roof curb duct supports, not the unit. Install all ductwork before setting unit on curb or frame.
- Frame support must be constructed using noncombustible materials. Full perimeter support is

- required under the unit. Supports must be made of steel or weather resistant wooden materials. The unit must be square and level to ensure proper condensate drainage.
- The frame must be high enough to ensure prevention of any moisture from entering the unit. Recommended height to unit base is 8" (20cm) for both Downflow and Horizontal installations.
- Secure roof curb or frame to roof using acceptable mechanical methods per local codes.

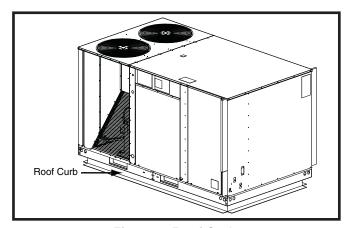


Figure 7. Roof Curb

Ground Level

Ground level installations must be located according to local building codes or ordinances and these requirements:

- Clearances must be in accordance with those shown in Figure 6.
- A concrete mounting pad (Figure 8) must be provided and separate from the building foundation. The pad must be level to ensure proper condensate disposal and strong enough to support the unit's weight. The slab height must be a minimum of 3" (8cm) above grade and with adequate drainage.
- Units require horizontal supply and return kit for horizontal installations.
- Ductwork should be attached directly to flanges on panels supplied in horizontal duct conversion kits.

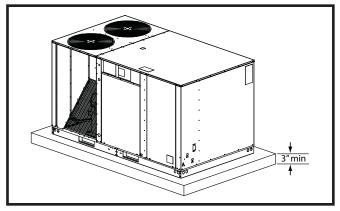


Figure 8. Concrete Mounting Pad

! WARNING:

Do not allow combustion products to enter the return air ductwork or the circulating air supply. Failure to prevent the circulation of combustion products into the occupied space can create potentially hazardous conditions including carbon monoxide poisoning that could result in personal injury or death.

All return ductwork must be secured to the unit with sheet metal screws. All joints must be taped and adequately sealed. When return air is provided through the bottom of the unit, the joint between the unit and the return air plenum must be air tight.

The roof curb or framing must provide sound physical support of the unit with no gaps, cracks, or sagging between the unit and the curb or frame.

Return air and circulating air ductwork must not be connected to any other heat producing device such as a fireplace insert, stove, etc. This may result in fire, explosion, property damage, personal injury, or death from carbon monoxide poisoning.

This unit is designed only for use with a supply and return duct. Any exterior ducts, joints, or openings in the building roof or walls must be weatherized with conventional flashing and sealing compounds. Air ducts should be installed in accordance with all applicable local codes and the standards of the National Fire Protection Association "Standard for Installation of Air Conditioning Systems" (NFPA 90A).

Design the ductwork according to methods described by the Air Conditioning Contractors of America (ACCA) Manual Q.

It is recommended that the outlet duct be equipped with a removable access panel. This opening should be accessible when the unit is installed in service and shall be of a size such that the smoke or reflected light may be observed inside the casing to indicate the presence of leaks in the heat exchanger. The cover for the opening shall be attached in such a manner as to prevent leaks.

If outside air is used as return air for ventilation or to improve indoor air quality, the system must be designed so that the return air to the unit is not less than 50° F (10° C) during heating operation. If a combination of indoor and outdoor air is used, the ducts and damper system must

be designed so that the return air supply to the unit is equal to the return air supply under normal, indoor return air applications.

Additional reference information for US and Canadian installations can be found in the Duct Systems section on page 4.

Unconditioned Spaces

All ductwork passing through unconditioned space must be properly insulated to prevent condensation and minimize duct losses. Use insulation with an outer vapor barrier. Refer to local codes for insulation material requirements.

Acoustical Ductwork

Certain installations may require acoustical lining inside the supply ductwork. Acoustical insulation must be in accordance with the current revision of the Sheet Metal and Air Conditioning Contractors National Association (SMACNA) application standard for duct liners. Duct lining must be UL classified batts or blankets with a fire hazard classification of FHC-25/50 or less.

Fiber ductwork may be used in place of internal duct liners if the fiber ductwork is in accordance with the current revision of the SMACNA construction standard on fibrous glass ducts.

Fibrous ductwork and internal acoustical lining must be NFPA Class 1 air ducts when tested per UL Standard 181 for Class 1 ducts.

Downflow to Horizontal Conversion

The unit is shipped ready for downflow duct connections. If horizontal ducts are required, the unit must be converted according to the directions in the conversion kit for both the supply and return ducts.

GAS SUPPLY AND PIPING

All gas piping must be installed in compliance with local codes and utility regulations. In the absence of local codes the gas line installation must comply with the latest edition of the National Fuel Gas Code ANSI Z223.1 or CAN/CGA B149 Installation Codes.

Additional reference information for US and Canadian installations can be found in the Gas Piping and Gas Pipe Pressure Testing section on page 4.

IMPORTANT NOTES:

- DO NOT run gas piping in orthrough air ducts, chimneys, gas vents, elevator shafts, etc.
- Compounds used on threaded ends of gas piping must be resistant to the actions of liquefied petroleum gases.
- The main gas valve and main power disconnect to the unit must be properly labeled by the installer in case emergency shutdown is required.
- A drip leg must be installed in the pipe run to the unit. (Figure 9).
- An 1/8 inch NPT plugged tap must be installed in the gas line immediately upstream of the gas supply connection to the furnace for use when measuring the gas supply pressure. The plug should be readily accessible for service use.

Some local regulations require the installation of a manual main shut-off valve and ground joint union external to the unit. The shut-off valve should be readily accessible for service and/or emergency use. Consult the local utility or gas supplier for additional requirements regarding placement of the manual main gas shut-off.

Table 14 (page 42), lists gas pipe capacities for standard pipe sizes as a function of length in typical applications based on nominal pressure drop in the line.

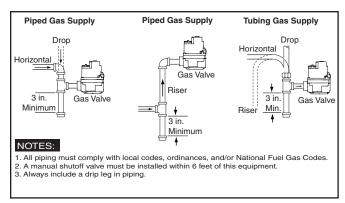


Figure 9. Typical Gas Service Connection.

This unit only has right side gas entry. When connecting the gas, provide clearance between the gas supply line and the entry hole in the unit's casing to avoid unwanted noise and/or damage to the unit. A typical gas service hookup is shown in Figure 9.

This unit is shipped from the factory for natural gas operation at sea level elevation and is equipped with a #36 orifice at each burner.

Leak Check

! WARNING:

FIRE OR EXPLOSION HAZARD

Never test for gas leaks with an open flame. Check all connections using a commercially available soap solution. A fire or explosion may result causing property damage, personal injury or loss of life. Failure to follow the safety warnings exactly could result in serious injury, death or property damage.

After the gas piping to the unit is complete, all connections must be tested for gas leaks. This includes pipe connections at the main gas valve, emergency shutoff valve and other gas connectors. The soap and water solution can be applied on each joint or union using a small paintbrush. If any bubbling is observed, the connection is not sealed adequately and must be retightened. Repeat the tightening and soap check process until bubbling ceases.

IMPORTANT NOTES:

- If pressure testing the gas supply lines at pressures greater than 1/2 psig (14 inches WC), the unit must be disconnected from the gas supply piping system to prevent damage to the gas valve.
- If the test pressure is less than or equal to 1/2 psig (14 inches WC), the unit must be isolated from the gas supply line by closing the manual shut-off valve.

High Altitude Deration

High altitude application with this unit depends on the installation altitude and the heating value of the gas. At high altitudes, the heating value of natural gas is always lower than the heating value at sea level.

All installations of this equipment must be made in accordance with the National Fuel Gas Code or with local jurisdiction codes. For installations at exactly 2,000 feet in altitude or under, the installer does not need to derate the heat exchanger performance. For any installation that exceeds 2,000 feet, please see the following instructions and example:

WARNING:

The reduction of input rating necessary for high altitude installation may only be accomplished with factory supplied orifices. Do not attempt to drill out orifices in the field. Improperly drilled orifices may cause fire, explosion, carbon monoxide poisoning, personal injury or death.

- If installing this unit above 2,000 feet, the input rate must be reduced 4% per 1,000 feet of altitude (Example: 12% at 3,000 feet, 16% at 4,000 feet, etc). Always round up to the next highest value of 1,000. So an installation at 3,120 feet is derated by 16% due to rounding up to 4,000.NOTE: This deration is necessary to compensate for low atmospheric pressure at high altitudes. Generally this will require obtaining the gas heating value from the local gas utility and replacing the burner orifices.
- Table 15 (page 42) lists the correct orifice size to use at different altitudes. See Installation Example 1 to determine the unit rating and orifice size.
- After changing the orifices, it is required that you measure the gas input rate by clocking the gas meter and using the local gas heating value. See section on Verifying and Adjusting the Firing Rate on page 15.
 IMPORTANT NOTE: Observe the action of the burners to make sure there is no yellowing, lifting or flashback of the flame.

Conversion to LP/Propane

WARNING:

The furnace was shipped from the factory equipped to operate on natural gas. Conversion to LP/propane gas must be performed by qualified service personnel using a factory supplied conversion kit. Failure to use the proper conversion kit can cause fire, explosion, property damage, carbon monoxide poisoning, personal injury, or death.

If installing the unit above 2,000 ft., refer to Table 15 to determine the correct orifice size. When conversion is complete, verify the input rate is correct as listed in the tables. Approved conversion kit must be used. **Please follow the instructions provided with each kit**.

INSTALLATION EXAMPLE:

Elevation:	3,890 feet
Type of Gas:	Natural
Unit Model:	R6GP-090C200C

At 4,000 feet, the unit needs to be derated by 4% for each 1,000 feet of elevation. This equates to 16% or less than the sea level rating of 200,000 Btu/h.

1. Determine unit input rating:

 $[200k \times (100-16)\%] = 168,000 \text{ Btuh.}$ The required heating rate for 3,890 feet is 168,000 Btu/h.

2. Determine orifice size:

From Table 15 (page 42), find the Unit Model Number. Follow across the natural gas row and stop at the 2,000-4,000 elevation column. For this example, the orifice size displayed is #38. Install one #38 orifice in every burner and check firing rate. The firing rate in this example must not exceed 168,000 Btu/h.

ELECTRICAL WIRING

! WARNING:

To avoid the risk of electrical shock, personal injury, or death, disconnect all electrical power to the unit before performing any maintenance or service.

- Electrical connections must be in compliance with all applicable local codes and ordinances, and with the current revision of the National Electric Code (ANSI/NFPA 70).
- For Canadian installations the electrical connections and grounding shall comply with the current Canadian Electrical Code (CSA C22.1 and/or local codes).
- Additional reference information for US and Canadian installations can be found in the Electrical Connections section on page 4.

Pre-Electrical Checklist:

- $\sqrt{\ }$ Verify that the voltage, frequency, and phase of the supply source match the specifications on the unit rating plate.
- Verify that the service provided by the utility is sufficient to handle the additional load imposed by this equipment. See Table 13 (page 36) or the unit wiring label for proper high and low voltage wiring.
- √ Verify factory wiring is in accordance with the unit wiring diagram. Inspect for loose connections.
- √ For 3 phase units always check the phase balance (page 12).

Line Voltage

It is recommended that the line voltage to the unit be supplied from a dedicated branch circuit containing the correct fuse or circuit breaker for the unit.

IMPORTANT NOTE: An electrical disconnect must be installed readily accessible from and located within sight of the unit. (See unit data label for proper incoming field wiring). Any other wiring methods must be acceptable to authority having jurisdiction.

The power supply for the unit must be in accordance with the unit wiring diagram, and the unit rating plate. Connect the line-voltage leads to the corresponding terminals on the terminal block inside the control compartment. Use only copper wire for the line voltage power supply to this unit. Use proper code agency listed conduit and connector for connecting the supply wires.



Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

Units are shipped from the factory wired for 230 or 460 volt operation. On 208-230V units being placed into 208 volt operation, remove the lead from the transformer terminal marked 240V and connect it to the terminal marked 208V.

Overcurrent protection must be provided at the branch circuit distribution panel and sized as shown on the unit rating label and according to the National Electric Code and applicable local codes. **NOTE:** See the unit rating plate for maximum circuit ampacity and maximum overcurrent protection limits.

Grounding

/N WARNING:

The unit cabinet must have an uninterrupted or unbroken electrical ground to minimize personal injury if an electrical fault should occur. Do not use gas piping as an electrical ground!

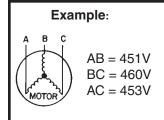
This unit must be electrically grounded in accordance with local codes or, in the absence of local codes, with the National Electrical Code (ANSI/NFPA 70) or the CSA C22.1 Electrical Code. Use the grounding lug provided in the control box for grounding the unit.

Unbalanced 3-Phase Supply Voltage

Voltage unbalance occurs when the voltages of all phases of a 3-phase power supply are no longer equal. This unbalance reduces motor efficiency and performance. Some underlying causes of voltage unbalance may include: Lack of symmetry in transmission lines, large single-phase loads, and unbalanced or overloaded transformers. A motor should never be operated when a phase imbalance in supply is greater than 2%.

Perform the following steps to determine the percentage of voltage imbalance:

 Measure the line voltages of your 3-phase power supply where it enters the building and at a location that will only be dedicated to the unit installation. (at the units circuit protection or disconnect).



2. Determine the average voltage in the power supply.

In this example, the measured line voltages were 451, 460, and 453. The average would be 454 volts (451 + 460 + 453 = 1,364 / 3 = 454).

3. Determine the maximum deviation:

Example:

From the values given in step 1, the BC voltage (460V) is the greatest difference in value from the average:

$$460 - 454 = \boxed{6}$$

← Highest Value $454 - 451 = 3$
 $454 - 453 = 1$

 Determine percent of voltage imbalance by using the results from steps 2 & 3 in the following equation.

% Voltage Imbalance = 100 x max voltage deviation from average voltage average voltage

The amount of phase imbalance (1.32%) is satisfactory since the amount is lower than the maximum allowable 2%. Please contact your local electric utility company if your voltage imbalance is more than 2%.

Blower Speed

The blower speed is preset at the factory but must be verified at each installation. For optimum system performance and comfort, it may be necessary to change the factory set speed. Refer to Blower Performance Data (Tables 5 - 12, pages 28 - 35) for proper operating range. Always ensure drive belt is secure and tensioned properly. Also inspect variable pitch sheaves for proper tightness of the set screws

! CAUTION:

To avoid personal injury or property damage, make certain that the motor leads do not make contact with any uninsulated metal components of the unit.

To change the blower speed:

- Disconnect all electrical power to the unit and remove the blower access panel.
- 2. Loosen the motor tension bars to allow removal of the blower belt from the motor sheave.
- 3. Loosen top set screw on motor sheave and turn clockwise to close (increases blower speed), or counterclockwise to open (decreases blower speed).
- 4. Replace belt on pulleys and position motor mounting plate to correct position for proper belt tension.
- 5. Tighten tension bar bolts.

Thermostat

A two-stage heating/cooling thermostat is required for R6GP series units. Select a thermostat which operates in conjunction with the installed accessories. See Figure 10 for proper wire gauge and their recommended lengths for typical thermostat connections.

The thermostat should be mounted about five feet above the floor on an inside wall.

IMPORTANT NOTE: DO NOT install the thermostat on an outside wall or any other location where its operation may be adversely affected by radiant heat from fireplaces, sunlight, or lighting fixtures, and convective heat from warm air registers or electrical appliances. Refer to the thermostat manufacturer's instruction sheet for detailed mounting and installation information.

Heat Anticipator

Verify if the thermostat being used for the installation has a heat anticipator setting. This function allows the thermostat to anticipate the space heating rate and time the burner to shutoff accordingly. Always refer to the thermostat manufacturers instructions for the correct settings.

T-Stat Gau			nded T-Stat Wire t. (Unit to T-Stat)
18 (За.		0 - 60
16 (За.	6	1 - 130
Field Supplied	Wiring l	Jse Solid Class	II Copper Wire
Indoor Thermostat Sub-Base	(Y1)		Unit Low Voltage Terminal

Figure 10. Typical Connections - 2 Stage Heat/Cool T-Stat

STARTUP AND ADJUSTMENTS

Pre-Start Check List

- √ Verify unit is properly supported.
- $\sqrt{}$ Verify unit is level for proper condensate drainage.
- √ Verify all clearance requirements are met. Airflow to and from the outdoor coil must be unrestricted.
- Verify the ductwork is adequately sealed to prevent air leakage. Insulate if necessary.
- Verify the line voltage power leads are securely connected and the unit is properly grounded.
- Verify low voltage wires are securely connected to the correct leads in the low voltage area of the control box.
- √ Verify gas line pressure. For natural gas, the line pressure must not exceed 10.0 inches WC (0.36 psig), or be less than 5.5 inches WC (0.20 psig). For LP gas, the line pressure must not exceed 14 inches WC (0.51 psig) and must not be less than 11.0 inches WC (0.40 psig).
- √ Verify the flame roll-out control is closed. IMPORTANT NOTE: This safety device is a manually reset switch. If necessary, press the red button to reset the control. DO NOT install a jumper wire across the control to defeat its function. If the control reopens upon start-up, DO NOT reset the control without identifying and correcting the fault condition which caused the control to trip.
- √ Verify the gas line has been purged and all connections are adequately sealed. To check for gas leakage, see Leak Check section on page 10.
- Verify the indoor blower is properly set for the installation.
- $\sqrt{}$ Verify the outdoor fan turns freely.

- √ Verify the power supply branch circuit overcurrent 5. Allow the unit to run for several minutes. Set the protection is properly sized.
- Verify all exterior panels have been reinstalled and securely fastened.
- $\sqrt{}$ Verify the thermostat is wired correctly and preset for initial operation. Set the thermostat system switch to OFF and the fan switch to AUTO.

Startup Procedures

N WARNING:

This unit is equipped with crankcase heaters. Allow 24 hrs for heating of the refrigerant compressor crankcase prior to start up and anytime the power has been removed for more than 12 hrs. Failure to comply may result in damage or cause premature failure of the system.

- Check all electrical wiring for loose connections and tighten as required.
- Check unit for return air filters and condensate trap.
- Close all electrical disconnects to energize the system.

Air Circulation

- 1. Set thermostat system switch to OFF and the fan switch to ON.
- 2. Verify the blower motor runs continuously. Check for air delivery at the register(s). Ensure that there are no obstructions at the registers or in the ductwork.
- 3. Set thermostat fan switch to AUTO and verify the blower shuts down immediately.

NOTE: If blower is turning opposite of arrow direction, shut off main power to the unit and switch any two field wires at the disconnect. DO NOT alter unit wiring.

System Cooling

- 1. Set the thermostat system switch to COOL and the fan switch to AUTO.
- 2. Lower the thermostat temperature switch below room temperature and observe that the blower, both compressors and fans) energize.
- 3. Verify blower is turning in direction indicated by arrow and air discharged at the register is cooler than room temperature.
- 4. Verify HI and LO refrigerant pressures.

NOTE: If refrigerant pressures are abnormal and blower is rotating in the opposite direction of the arrow, shut off main power to the unit and switch any two field wires at the disconnect. Ensure proper rotation of the blower. DO NOT alter unit wiring. Listen for any unusual noises. Locate the source and correct as needed.

temperature selector above room temperature and verify that the fan, blower, and compressors cycle off with the thermostat.

System Heating

- 1. Set the thermostat to the lowest setting.
- 2. Follow the startup procedures on this page or the operating instruction label inside the louvered control access panel.
- 3. Set the thermostat above room temperature and verify the Operating Sequence (page 16).
- 4. Verify that the compressor and outdoor fan motor are not energized.
- 5. Run the unit and after approximately five minutes, set the thermostat below room temperature. Verify the shutdown sequence (see Operating Sequence).

Verifying and Adjusting Temperature Rise

Verify the temperature rise through the unit is within the range specified on the unit data label. Temperature rises outside the specified range could result in premature heat exchanger failure.

- 1. Place thermometers in the return and supply air stream as close to the unit as possible. The thermometer on the supply air side must be shielded against direct radiation from the heat exchanger to avoid false readings.
- 2. Adjust all registers and duct dampers to the desired position. Run the unit for 10 to 15 minutes before taking any temperature readings. The temperature rise is the difference between the supply and return air temperatures.

NOTE: For typical duct systems, the temperature rise will fall within the range specified on the data label (with the blower speed at the factory recommended setting) shown in Table 16, page 42. If the measured temperature rise falls outside the specified range, it may be necessary to change the blower speed. Lowering the blower speed increases the temperature rise and a higher speed decreases the temperature rise.

The unit is equipped with a belt driven blower and variable pitch motor sheave. The selection of a sheave setting should be based on the desired CFM and the duct system parameters. Refer to the ACCA's Manual Q for a complete description of how to determine these parameters and Manual N for determination of the commercial load requirements. The blower performance data can be found in Tables 5 - 12 (pages 28 - 35).

For 71/2 and 10 ton units, the integrated control is designed to start the circulating air blower 45 seconds after the gas valve opens and designed to turn the blower motor off 150 seconds after the gas valve is closed.

For 6 ton units, the integrated control is designed to start the circulating air blower 40 seconds after the gas valve opens and turn the blower motor off 150 seconds after the gas valve is closed

/ WARNING:

Uninsulated live components are exposed when the louvered control access panel is removed.

- 1. Remove the louvered control access panel to ensure there is power to the unit.
- 2. Set the thermostat above room temperature and observe the ignition sequence. The burner flame should carry over immediately between all burners and should extend from each burner without lifting off, curling, or floating. The flames should be blue, without yellow tips.
- 3. After verifying flame characteristics, set the thermostat below room temperature and verify that the burner flame extinguishes completely.

Verifying Operation of Over-Temperature Limit Control

To verify operation of the over-temperature limit control, make sure the louvered control access panel is in place and that there is power to the unit.

- 1. Block the return airflow to the unit by installing a closeoff plate in place of or upstream of the filter.
- 2. Set the thermostat above room temperature and verify the unit operates with the correct sequence of operation (see Operating Sequence).

NOTE: The over-temperature limit control should function to turn off the gas valve within approximately four minutes (exact time depends on the efficiency of the close-off when blocking the return air). The circulating air and combustion blowers should continue to run when the over-temperature limit control switch opens.

3. Remove the close-off plate immediately after the overtemperature limit control opens. If the unit operates for more than four minutes with no return air, set the thermostat below room temperature, shut off power to the unit, and replace the over-temperature limit control.

Verifying and Adjusting Firing Rate

The firing rate must be verified for each installation to prevent over-firing of the unit.

CAUTION:

Do not re-drill the burner orifices. If the orifice size must be changed, use only new orifices.

IMPORTANT NOTE: The firing rate must not exceed the rate shown on the unit data label. At altitudes above 2,000 ft., it must not exceed that on the data label less 4% for each 1,000 ft.

Follow the steps below to determine the unit firing rate:

- For installations at 2,000 feet and less, the firing rate is the same as shown on the unit rating label.
- For installations above 2,000 feet, compute the correct firing rate as shown in the installation example on page 11.
- 1. Obtain the gas heating value from the gas supplier (HHV).
- 2. Shut off all other gas fired appliances.
- 3. Start the unit in heating mode and allow it to run for at least three minutes.
- 4. Measure the time (in seconds) required for the gas meter to complete one revolution.
- 5. Convert the time per revolution to cubic feet of gas per hour using Table 17 (page 43).
- 6. Multiply the gas flow rate in cubic feet per hour by the heating value of the gas in Btu per cubic foot to obtain the firing rate in Btu per hour. See Example:

Example:

- Time for 1 revolution of a gas meter with a 1 cubic foot dial = 40 seconds.
- From Table 17 read 90 cubic feet gas per hour.
- Local heating value of the gas (obtained from gas supplier) = 1,040 Btu per cubic foot.
- Input rate = $1,040 \times 90 = 93,600 \text{ Btuh.}$
- 7. Adjustments to the firing rate can be made by adjusting the gas manifold pressure. See the High Altitude Deration section (page 10) for additional information of firing rate at elevations above 2000 ft.

The manifold pressure must be set to the appropriate value for your installation. Refer to Table 15 (page 42) for the correct orifice size and manifold pressure setting required for your particular installation. To adjust the manifold pressure, remove the regulator cap and turn the adjusting screw clockwise to increase pressure or counterclockwise to reduce pressure. Replace the regulator cap after adjustments are complete.

OPERATING SEQUENCE

The operating sequences for the heating, cooling, and fan modes are described below. Refer to the wiring diagrams (Figures 15 - 19, pages 37 - 41).

Cooling Mode:

- On a call for cooling the thermostat closes, applying 24 VAC to "Y1", "G", and "Y2" if Stage 2 cooling is calling.
- "G" applies 24VAC to the main circulating blower circuit.
- 3. "Y1" and "Y2" apply 24VAC through all safety switches before energizing their respective contactors.
- 4. When the thermostat is satisfied the contactors are de-energized.
- 5. The circulating blower motor de-energizes immediately.

Heating Mode for 200 & 235 kBtuh Heat Exchangers:

- On a call for heat, the thermostat closes, applying 24 VAC to the "W1" terminal (and "W2" terminal if Stage 2 heat is required). NOTE: There is a three minute time delay before Stage 2 heat is energized.
- The integrated control monitors the safety circuit at all times. If either the roll-out switch or the over-temperature limit controls open, the gas valve will not energize. The main blower continues to operate until the overtemperature limits close, the flame roll-out switch is manually reset, or the thermostat is satisfied.
- The integrated control checks all safety switches at the beginning of each heating cycle. If closed, the combustion blower performs a 15 second pre-purge.
- 4. The integrated control will then supply power to the direct spark ignitor and immediately energizes the gas valve.
- 5. The flame must be proven through the flame sensor in 7 seconds to hold the gas valve open. The integrated control will monitor the gas flame with the flame sensor for the entire time the gas valve is open. If for any reason the gas flame drops out, the gas valve will immediately close. After 30 second purge, the integrated control will try to ignite two more times.
- The main air blower will start and continue to run 45 seconds after the gas valve opens.
- When the thermostat is satisfied, the integrated control is de-energized. The gas valve and combustion blower de-energize immediately while the main air blower continues to run through the blower off delay of 150 seconds.
- 8. If the unit fails to prove flame after three ignition attempts, it will go into a soft lockout. The unit will re-attempt the start-up procedure every hour until the thermostat is satisfied or 24 VAC power is removed from the unit for a minimum period of 5 seconds.

Heating Mode for 100 & 166 kBtuh Heat Exchangers:

- On a call for heat, the thermostat closes, applying 24 VAC to the W1 terminal (and W2 terminal if Stage 2 heat is required).
- The integrated control monitors the safety circuit at all times. If either the roll-out switch or the over-temperature limit controls open, the gas valve will not energize. The main blower continues to operate until the overtemperature limits close, the flame roll-out switch is manually reset, or the thermostat is satisfied.
- The integrated control checks all safety switches at the beginning of each heating cycle. If closed, the combustion blower performs a 10 second pre-purge.
- 4. The integrated control will then supply power to the direct spark ignitor and immediately energizes the gas valve. NOTE: Burner operation begins in high fire mode with both Stage 1 and Stage 2 gas valve energized, independent of the thermostat call for Stage 2 heat. If after 30 seconds of operation with no call for Stage 2 heat, the integrated control will resume heating operation in low fire mode of operation and Stage 2 gas valve is de-energized.
- 5. The flame must be proven through the flame sensor in 10 seconds to hold the gas valve open. The integrated control will monitor the gas flame with the flame sensor for the entire time the gas valve is open. If for any reason the gas flame drops out, the gas valve will immediately close. After 30 second purge, the integrated control will try to ignite fourteen more times.
- 6. The main air blower will start and continue to run 40 seconds after the gas valve opens.
- 7. When the thermostat is satisfied, the integrated control is de-energized. The gas valve and combustion blower de-energize immediately while the main air blower continues to run through the blower off delay of approximately 150 seconds.
- 8. If the unit fails to prove flame after fifteen ignition attempts, it will go into a soft lockout. The unit will re-attempt the start-up procedure every hour until the thermostat is satisfied or 24 VAC power is removed from the unit for a minimum period of 5 seconds.

NOTE: See Table 2 (page 17) or Figure 15 (page 37) for a complete list of heating operation fault codes.

Blower Mode:

- On a call for fan operation, the thermostat applies 24 VAC directly to the blower contactor.
- 2. The circulating blower is energized immediately.

TROUBLESHOOTING

If the unit does not operate properly in the cooling mode, check the following:

- · The thermostat is operating properly.
- · Electrical power to the unit is turned on.
- All safety switches are closed.
- The service doors are in place.
- Transformer circuit breaker is reset.

If the unit does not operate properly in the heating mode, check the following:

- The thermostat is operating properly.
- Electrical power to the unit is turned on.
- · All safety switches are closed.
- The gas is on and shut-off valve is open.
- The service doors are in place.
- The flame roll-out control is closed.
- Refer to the diagnostic codes in Tables 1 or 2, or the wiring diagrams (Figures 15 19, pages 37 41).
- Transformer circuit breaker is reset.

STATUS LIGHT (RED)	FAULT CONDITION
Continuous ON	Internal Control Failure
2 Flashes	Flame Sense Problem
3 Flashes	Ignition Lockout

Table 1. Diagnostic Codes For 7 1/2 & 10 Ton Units

STATUS LIGHT (Red LED)	FAULT CONDITION
Continuous ON	Operation Normal
Continuous ON	<u> </u>
2 Flashes	Pressure/centrifugal switch open with inducer on
3 Flashes	Pressure/centrifugal switch closed with inducer off
4 Flashes	Lockout from too many failed ignition tries
5 Flashes	Lockout from too many flame losses
6 Flashes	High temperature switch open
7 Flashes	Rollout switch open
8 Flashes	Flame present with gas off
9 Flashes	Exceeded max limit trips (5) in one call for heat
10 Flashes	Gas valve fault

Table 2. Diagnostic Codes For 6 Ton Units

UNIT MAINTENANCE

NOTE: These maintenance instructions are primarily intended to assist qualified technicians experienced in the proper maintenance and operation of this appliance.

To achieve optimum performance from the air conditioner and minimize equipment failure, it is recommended that periodic maintenance be performed on this unit. The ability to properly perform maintenance on this equipment requires certain mechanical skills and tools. Please consult your dealer for maintenance information and availability of maintenance contracts.

CAUTION:

Use care when removing parts from this unit. Personal injury can result from sharp metal edges present in all equipment of sheet metal construction.

At a minimum, routine maintenance should include the following items:

Condensate Drain and Outdoor Coil

Inspect the condensate drain and outdoor coil at the beginning of each cooling season. Remove any debris. Clean the outdoor coil and hail guard louvers (optional) as necessary using a mild detergent and water. Rinse thoroughly with water.

Air Filters

! WARNING:

Never operate the unit without filters in place. Dust and lint in the return air can build up on internal components, resulting in loss of efficiency, equipment damage, and possible fire.

It is recommended that the air filters be inspected and cleaned or replaced every three to four weeks using filters of like size and kind. Table 3 lists the correct filter sizes and quantities for each unit.

IMPORTANT NOTE: R6GP units are equipped with 2" pleated disposable filters. Filter rack is adjustable for 1" <u>permanent</u> type filters. DO NOT use 1" <u>disposable</u> filters.

UNIT	FACTORY FILTER SIZE	QTY
R6GP-072*-(100/166)C	16x20x2	4
R6GP-090*-200C	16x20x2	4
R6GP-120*-235C	16x25x2	4

Table 3. Filter Sizes and Quantities

Blower Compartment

Build up of dirt and lint on the blower and motor can create excessive loads on the motor resulting in higher than normal operating temperatures and possible shortened service life. It is recommended that the blower compartment be cleaned monthly during heating and cooling seasons to remove any dirt and lint that may have accumulated in the compartment or on the blower and motor. Inspect the blower drive belt for cracks, excessive wear and proper tension after cleaning the compartment.

Heat Exchanger and Burner Maintenance

The unit should operate for many years without excessive scale buildup in the heat exchanger, however, the heat exchanger, the vent system, and the burners should be inspected and cleaned (if required) by a qualified technician annually to ensure continued safe operation. Particular attention must be given to identify deterioration from corrosion or other sources.

! WARNING:

Holes in the heat exchanger can cause products of combustion to enter the structure. Replace the heat exchanger if leaks are found. Failure to prevent products of combustion from being circulated into the occupied space can create potentially hazardous conditions including carbon monoxide poisoning that could result in personal injury or death.

Cleaning of Burners

It is recommended that the burners be inspected and cleaned periodically (if required) by a qualified technician annually to ensure continued safe operation. Particular attention must be given to identify deterioration from corrosion or other sources. If the burners must be cleaned, follow the steps below.

- 1. Shut off the gas supply to the unit either at the meter or at a manual valve in the supply piping.
- 2. Turn off all power to the unit and set the thermostat to the lowest temperature setting.
- 3. Remove the louvered access panel from the unit.
- 4. Turn the gas control knob to the "OFF" position.

! CAUTION:

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation.

- Disconnect the wires from the gas valve, ignitor, and flame sensor.
- 6. Using two wrenches, separate the ground-joint union in the gas supply piping at the unit.
- 7. Remove the piping between the gas valve and the ground-joint union (if necessary).

- 8. Remove four screws securing the burner assembly to the unit.
- Carefully remove the burner assembly from the unit. DO NOT DAMAGETHE IGNITOR WHILE REMOVING THE BURNER ASSEMBLY.
- Inspect the burners for accumulated dust or debris.
 If necessary, carefully clean them with a soft wire brush and/or the nozzle of a vacuum cleaner. DO NOT DAMAGETHE IGNITOR OR FLAME SENSOR WHILE CLEANING THE BURNER.
- Replace all the parts in reverse order from which they were removed.
- 12. Follow the lighting instructions found on the right side door to return the unit to operation. Verify proper operation after servicing.

Cleaning of Heat Exchanger

If the heat exchanger must be cleaned due to soot or scale build up, follow the steps below.

- 1. Shut off the gas supply to the unit either at the meter or at the manual valve in the gas supply piping.
- 2. Turn off all power to the unit and set the thermostat to the lowest temperature setting.

! CAUTION:

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation.

- 3. Disconnect the wires from the gas valve, ignitor, and flame sensor.
- 4. Using two wrenches, separate the ground-joint union in the gas supply piping at the unit.
- 5. Remove the piping between the gas valve and the ground-joint union, if necessary.
- Remove the four screws securing the burner assembly to the unit.
- Carefully remove the burner assembly from the unit. DO NOT DAMAGE THE IGNITOR OR FLAME SENSOR WHILE REMOVING THE BURNER ASSEMBLY.
- 8. Remove three nuts securing the combustion blower to the collector pan.
- Remove the complete combustion blower from the unit
- Remove the screws securing the collector box cover to the unit and remove cover plate.
- 11. Remove the screws securing the balance plate to the collector box and the balance plate.
- Remove the turbulator from each heat exchanger tube.
- 13. Attach a round wire brush to a length of high grade stainless steel cable, such as drain cleanout cable. Attach the other end of the spring cable to a variable speed reversible drill. Slowly insert and rotate the cable into the top portion of the heat exchanger. Operate

the drill alternating between forward and reverse, working the cable in and out several times to obtain sufficient cleaning. Repeat this sequence for each heat exchanger tube.

- 14. Remove all loosened debris from the heat exchanger tubes using a vacuum cleaner.
- 15. Using a light, check the condition of the upper and lower sections of the heat exchanger tube.
- 16. Inspect the burners and if necessary, clean them carefully with a soft wire brush and/or the nozzle of a vacuum cleaner. DO NOT DAMAGETHE IGNITOR OR FLAME SENSOR WHILE CLEANING THE BURNER.
- 17. Replace all the parts in reverse order from which they were removed. **NOTE:** If screws or other hardware are corroded, replace only with corrosion resistant stainless steel hardware of similar design.
- 18. Follow the operating instructions found on the right side door and the User's Information Manual to return the unit to operation.

Vent Cover Assembly

Inspect and clean the screen of the vent cover assembly at the beginning of each heating and cooling seasons.

Electrical

! WARNING:

This unit may have more than one electrical supply. To avoid risk of electrical shock, personal injury, or death, disconnect all electrical power to the unit before performing any maintenance or service.

Inspect the electrical connections for tightness at the beginning of each heating and cooling season. Service as necessary.

! CAUTION:

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation.

Motor Lubrication

The motors for the circulating air blower, outdoor fan, and combustion blower are pre-lubricated at the factory. No further oiling is required for the life of this product.

! WARNING:

Lubrication of the motors in this unit is not required. Do not lubricate any motor in this product.

Refrigerant Charging

The R6 Series packaged gas/electric units are fully charged at the factory and when installed accordingly, no charging is required. The refrigerant charge can be checked and adjusted through the service ports provided on the units. Use only gauge lines which have a "Schrader" depression device present to actuate the valve. Refer to Figures 20 - 22 (pages 44 - 45)

Refrigerant charging must be done by qualified personnel familiar with safe and environmentally responsible refrigerant handling procedures. See Unit Rating Plate for the proper type and amount of refrigerant.

! WARNING:

If repairs make it necessary for evacuation and charging, it should only be done by qualified, trained personnel thoroughly familiar with this equipment. Some local codes require licensed installation/service personnel to service this type of equipment. Under no circumstances should the owner attempt to install and/or service this equipment.

Failure to comply with this warning could result in property damage, personal injury, or death.

COMPONENT FUNCTIONS

The descriptions below are various functional components that affect the operation and shutting down of this unit. Some of these components and their locations are shown in Figure 11 (page 21).

If any component on this unit must be replaced, use only factory authorized replacement parts specified in the Replacement Parts List provided online.

Centrifugal Switch

The centrifugal switch acts to verify that the inducer motor is running. Combustion gases are drawn through the heat exchanger tubes and vented through the vent system.

Flame Roll-Out Control

The flame roll-out control acts to verify that the burner flame is being drawn into the heat exchanger tubes. If the burner flame is not being drawn into the heat exchanger tubes, the roll-out control will open within several seconds. The combustion blower will continue to operate if the flame roll-out control opens until it is manually reset.

Flame Sensor

The flame sensor acts to prove that flame has carried over from the ignitor to the right-most burner. If no flame is sensed, the unit will be shut down automatically and attempt two additional ignition trials before going into lockout. Recovery from lockout requires a manual reset by either resetting the thermostat or removing 24 volts for a period of 5 seconds. If the thermostat is still calling for heat after one hour the control will automatically reset and attempt to ignite the burner again.

Gas Valve

The gas valve controls the flow of gas to the burners in both low and high fire. When the valve is energized, it automatically opens and regulates the gas pressure to the manifold.

High Pressure Switch

This factory installed switch is designed to de-energize the unit when excessive pressure occurs due to abnormal conditions. Under normal conditions, the switch is closed. If the discharge pressure rises above 650 psig, then the switch will open and de-energize the outdoor unit. The switch is a manually reset type and will remain open until the button on top of the switch is depressed.

Indoor Coil, Freeze Protection Thermostats

The freeze protection switches are designed to protect the indoor coils from ice and frost accumulations in the event of a loss of airflow by preventing the liquid refrigerant from reaching the compressors. During normal operation, the switches are closed and will open if the coil temperature reaches 28° F (-2° C). The switches will close if the coil temperature reaches 57° F (12° C).

Low Pressure Switch

This factory installed switch is designed to protect the compressor from a loss of charge. Under normal conditions, the switch is closed. If the suction pressure falls below 5 psig, then the switch will open and de-energize the outdoor unit. The switch will close again once the suction pressure increases above 20 psig.

Over-Temperature Limit Control

The over-temperature limit control acts to prevent the air temperature leaving the unit from exceeding the maximum outlet air temperature. If the limit opens, the blower limit relay will energize. The circulating air blower and combustion blower will continue to operate if the over-temperature limit control opens.

FIGURES AND TABLES

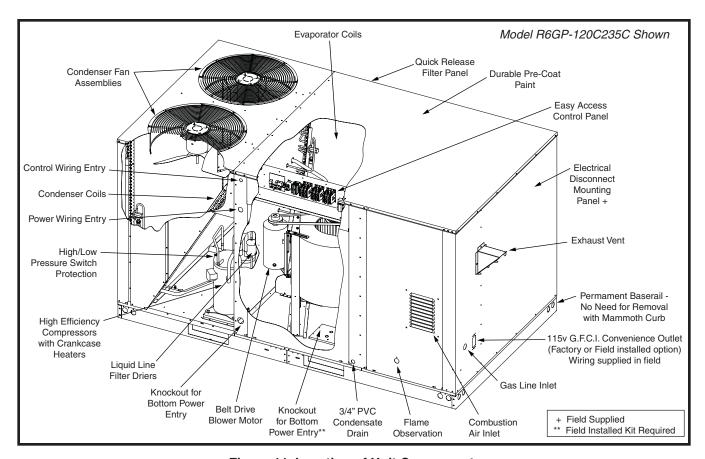
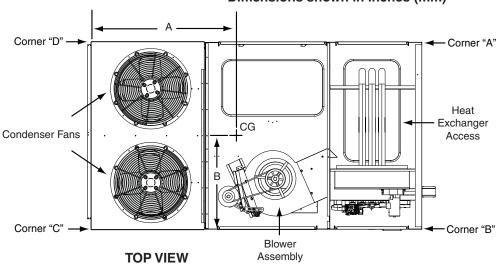
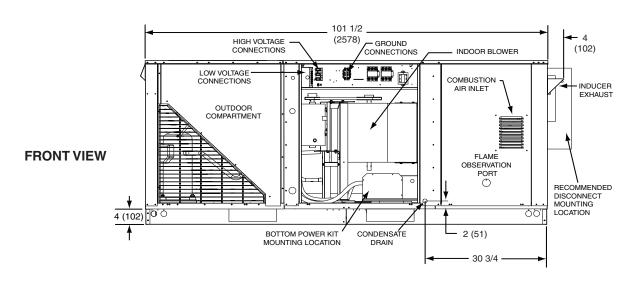


Figure 11. Location of Unit Components

PHYSICAL DIMENSIONS Dimensions shown in inches (mm)





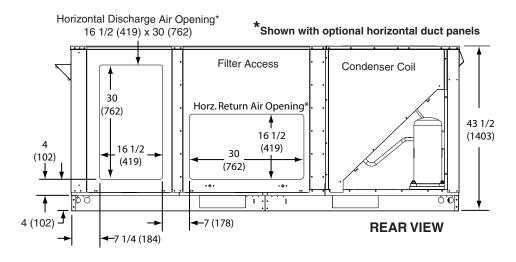
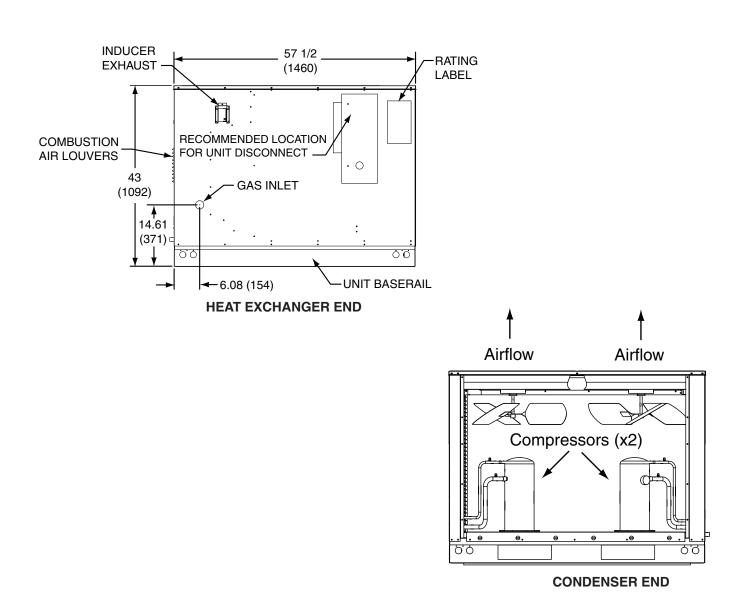


Figure 12. R6GP-072 Series



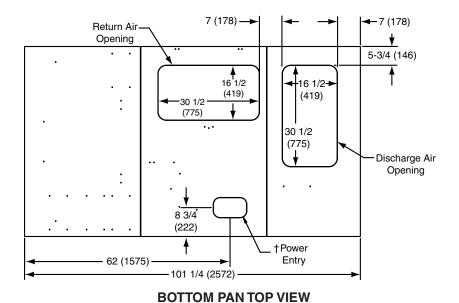
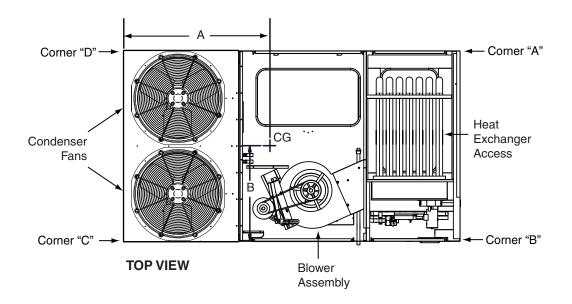
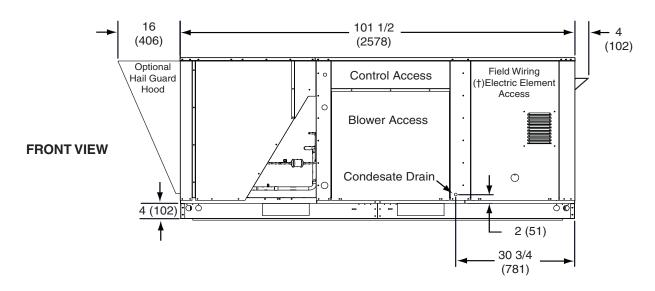


Figure 12. R6GP-072 Series - Continued





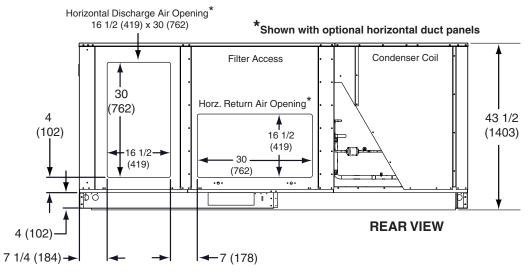
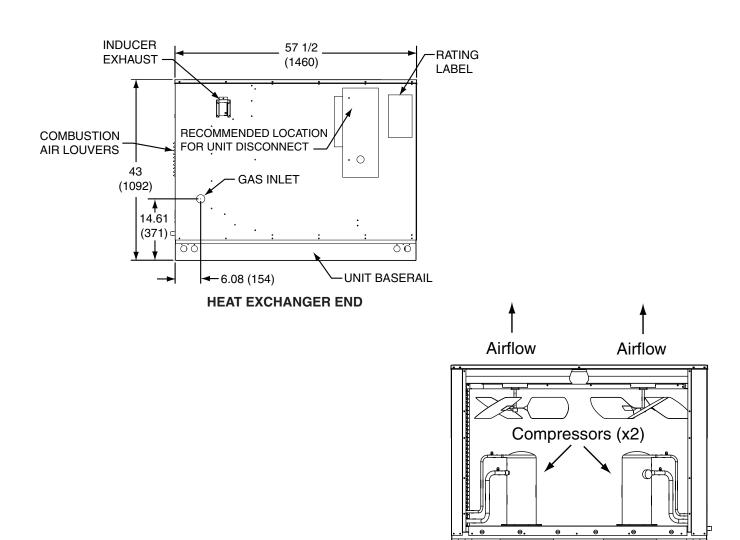


Figure 13. R6GP-090 Series



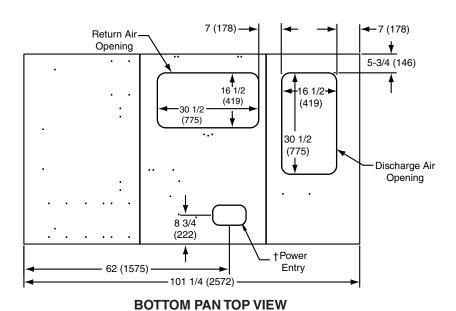
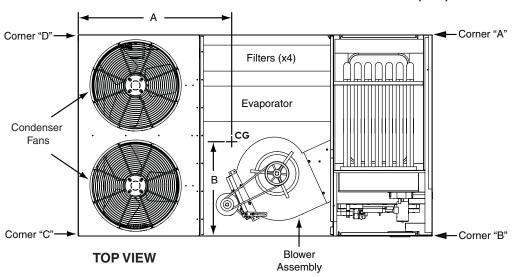
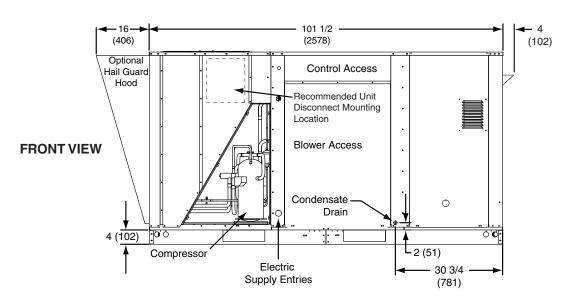


Figure 13. R6GP-090 Series - Continued

CONDENSER END

Dimensions shown in inches (mm)





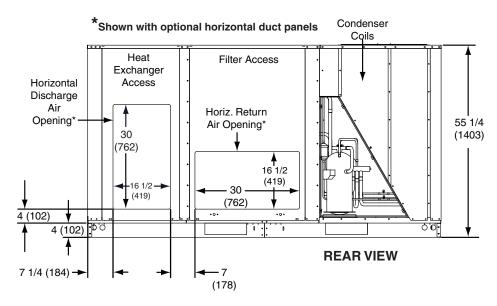
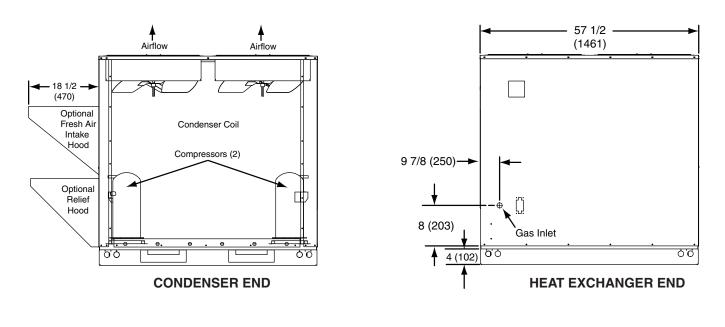


Figure 14. R6GP-120 Series



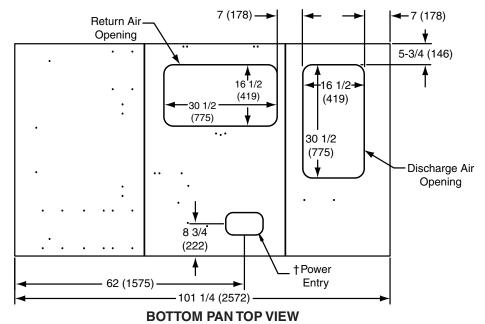


Figure 14 R6GP-120 Series - Continued

	I Imit W		Ship	ping	Center o	f Gravity			С	orner	Weight	s			Unit H	leight*
Model No.	Unit W	eigni ‡	Wei	ght	Inches	s (mm)	-	A	E	3	(;)	Horizontal	Vertical
Woder No.	Lbs.	Kg.	Lbs.	Kg	A	В	Lbs.	Kg.	Lbs.	Kg.	Lbs.	Kg.	Lbs.	Kg.	Duct Applications	Duct Applications
R6GP-072*-100C	934	425	1069	486	48 (1219)	25 5/8 (651)	197	89	245	111	273	124	219	100	43 1/2 (1105)	38 1/4 (972)
R6GP-072*-166C	959	436	1094	497	49 (1245)	25 5/8 (651)	206	94	257	117	275	125	221	100	43 1/2 (1105)	38 1/4 (972)
R6GP-090*-200C	983	446	1118	507	55 3/8 (1407)	28 (711)	262	119	275	125	229	104	218	99	43 1/2 (1105)	38 1/4 (972)
R6GP-120*-235C	1301	590	1441	654	49 (1245)	30 (762)	300	136	328	149	351	159	322	146	55-1/4 (1409)	51 (1295)

^{*} Baserails are not intended to be removed. Information provided is total unit height for horizontal duct applications or height dimension added to selected roof curb height for vertical duct applications.

TABLE 4. Center of Gravity and Unit Shipping Weights

Unit weight without packaging or field installed accessories.

BLOWER PERFORMANCE DATA

						_						
	Kw		1.02	0.85	0.79	0.68						
6.0	RPM		096	940	806	895						
	CFM		2417	2220	2111	1796						
	Kw			0.97	0.86	0.76	0.68					
8.0	RPM			936	912	888	998					
	CFM			2528	2301	2074	1913					
	Kw				96.0	98.0	92.0	99.0	0.55			
0.7	RPM				806	884	862	839	908			Ī
	CFM				2582	2399	2177	1955	1756			Ī
	Kw					0.97	98.0	92.0	0.63	0.54		
9.0	RPM					880	858	835	801	982		
	CFM					2680	2488	2295	2105	1860		
	Kw						0.95	98.0	0.75	9.65	0.56	Ī
0.5	RPM						854	831	808	784	750	Ī
	CFM						2727	2582	2381	2180	1982	Ī
	Kw								0.84	0.72	0.63	0.57
0.4	RPM								804	780	746	726
	CFM								2608	2453	2293	2110
	Kw									62.0	0.72	0.65
0.3	RPM									775	749	722
	CFM									2680	2528	2375
	Kw										0.78	0.72
0.2	RPM										745	719
	CFM										2728	2588
ave is		pesol	ı Open	Open	s Open	s Open	s Open	s Open	s Open	s Open	s Open	
She		Fully C	1/2 Turn	1 Turn	1.5 Turns				3.5 Turns	4.0 Turns	4.5 Turns	*5 Turns Open
Model						(1HP)	Standard Drive					
	Minder Sheave 0.2 0.3 0.4 0.5 0.6 0.7 0.8	Shearet Position CFM RPM Kw CFM RPM RPM <td>Shearet Position CFM Kw CFM RPM RPM</td> <td>Shearet Shearet Position CFM RPM Kw <</td> <td>Shearet Position CFM RPM Kw CFM<!--</td--><td>Shearet Shearet Bostion CFM RPM Kw <t< td=""><td>Moutoning Position Position 1 CFM FPA CFM CFM FPA CFM CF</td><td>Motion Position CFM KPM KW CFM RPM KW CFM</td></t<><td>Wheat Position CFM RPM Kw CFM<td>Position Position Position Fact of the Mark of the</td><td>Position CFM RPM KW CFM</td><td>Position CFM RPM KW CFM</td></td></td></td>	Shearet Position CFM Kw CFM RPM RPM	Shearet Shearet Position CFM RPM Kw <	Shearet Position CFM RPM Kw CFM </td <td>Shearet Shearet Bostion CFM RPM Kw <t< td=""><td>Moutoning Position Position 1 CFM FPA CFM CFM FPA CFM CF</td><td>Motion Position CFM KPM KW CFM RPM KW CFM</td></t<><td>Wheat Position CFM RPM Kw CFM<td>Position Position Position Fact of the Mark of the</td><td>Position CFM RPM KW CFM</td><td>Position CFM RPM KW CFM</td></td></td>	Shearet Shearet Bostion CFM RPM Kw CFM RPM KW <t< td=""><td>Moutoning Position Position 1 CFM FPA CFM CFM FPA CFM CF</td><td>Motion Position CFM KPM KW CFM RPM KW CFM</td></t<> <td>Wheat Position CFM RPM Kw CFM<td>Position Position Position Fact of the Mark of the</td><td>Position CFM RPM KW CFM</td><td>Position CFM RPM KW CFM</td></td>	Moutoning Position Position 1 CFM FPA CFM CFM FPA CFM CF	Motion Position CFM KPM KW CFM RPM KW CFM	Wheat Position CFM RPM Kw CFM <td>Position Position Position Fact of the Mark of the</td> <td>Position CFM RPM KW CFM</td> <td>Position CFM RPM KW CFM</td>	Position Position Position Fact of the Mark of the	Position CFM RPM KW CFM	Position CFM RPM KW CFM

											External	Static P	External Static Pressures (Inches Water Column)	(Inches	Water Co	lumn)									
Model	Motor Sheave		6.0			1.0	Г		1:1			1.2			1.3	Г		1.4			1.50			1.60	
		СЕМ	RPM	Kw	СЕМ	RPM	Kw	СЕМ	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw
	Fully Closed																								
	1/2 Turn Open																								
	1 Turn Open																			2450	1154	4.38	2532	1159	1.34
	1.5 Turns Open																2512	1125	1.38	2266	1129	1.23			
(1.5 HP)	2.0 Turns Open										2743	1089	1.48	2475	1094	1.28	2176	1099	1.16						
Static	2.5 Turns Open										2529	1065	1.27	2231	1069	1.13	2046	1074	1.08						
Ž Ž	3.0 Turns Open							2535	1035	1.23	2225	1039	1.06	2042	1043	1.01									
	3.5 Turns Open				2607	1008	1.23	2332	1012	1.1	2004	1016	76:0												
	4.0 Turns Open	2619	626	1.14	2312	984	1.06	2010	988	0.88															
	4.5 Turns Open	2336	951	96.0	2043	926	0.88																		
	*5 Turns Open	2096	924	98.0																					
	* Denotes Factory sheave setting.	sheaves	setting.											Low Stati	ic Drive C	onsists o	f: 1 Hp Mc	otor; 1VP	40 Motor	Sheave; /	Low Static Drive Consists of: 1 Hp Motor; 1VP40 Motor Sheave, AK66 Blower Pulley & A-44 belt	ver Pulley	/ & A-44 k	elt	

Med Static Drive Consists of: 1.5 Hp Motor; 1VP44 Motor Sheave; AK 59 Blower Pulley & A-43 belt

All performance curve data collected at 230V.

See Accessory Performance Data table for additional static pressure information.

Boldface type indicates factory recommended blower operating range. Values include losses for air filters, unit casing, and dry evaporator coll.

NOTES:

Table 5. R6GP-072C - 100 Series - Downflow Configuration

28

OFFINAL FAMILY SALES CFM RPM KW CFM RPM RPM RPM RPM RPM	-	_										Externa	Static P	External Static Pressures (Inches Water Column)	(Inches	Nater Co	lumn)									
CFM KM CFM RPM KW CFM RPM RPM RPM RPM RPM RPM RPM RPM	Sheave			0.2			0.3			0.4			0.5			9.0			0.7			8.0			6.0	
4 4		.]	CFIM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	СЕМ	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	\vdash	RPM	Kw	CFM	RPM	Kw
Table Tabl	Fully Closed	pes																								
4 4	1/2 Turn Open	Open																						2414	929	1.04
Mark	1 Turn Open	Open																			2545	931	1.02	2306	936	0.92
4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 5 6 7 6 6 7 6 6 7	1.5 Turns Open	s Open																2563	903	1.00	2353) 206	0.91	2046	912	62.0
2786 3787 3789 850 0.97 2462 853 0.87 2165 850 0.77 2462 853 0.78 2165 850 0.77 2596 850 0.77 2596 852 0.77 2026 800 0.77 2026 800 0.77 2026 800 0.74 2026 0.77 2026 800 0.74 2026 800 0.74 2026 0.77 2026 800 0.64 77 78 0.78 78 0.78 78	2.0 Turns Open	s Open													2626	877	66.0	2349		0.87	2100	833 (0.78			
258 328 829 0.76 2018 833 278 328 829 0.86 2298 829 0.76 2018 833 278 328 </td <td>2.5 Turns Open</td> <td>s Open</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2729</td> <td>850</td> <td>0.97</td> <td>2462</td> <td>853</td> <td>0.87</td> <td>2165</td> <td>_</td> <td>0.77</td> <td>1862</td> <td>828 (</td> <td>89.0</td> <td></td> <td></td> <td></td>	2.5 Turns Open	s Open										2729	850	0.97	2462	853	0.87	2165	_	0.77	1862	828 (89.0			
2785 742 7263 756 0.08 2426 799 0.77 2026 800 2785 742 742 772 772 0.68 1957 775 2785 742 0.78 0.74 2261 772 0.68 1957 775 2618 742 0.68 1995 746 0.60 0.60 77 0.68 1995 746 0.60 77 0.60 0.60 77	3.0 Turns Open	s Open										2590	826	0.85	2298	829	92.0	2018	_	89.0						
2785 742 0.79 2584 745 0.78 0.74 769 0.74 2261 772 0.68 1957 775 2815 742 0.79 2558 745 0.69 745 0.69 746 0.69 746 0.60 0.60 746 0.60 740 0.60 740 0.60 740 0.60 0.60 740 0.60 0.60 0.60 0.60 <td< td=""><td>3.5 Turns Open</td><td>s Open</td><td></td><td></td><td></td><td></td><td></td><td></td><td>2663</td><td>795</td><td>0.85</td><td>2426</td><td>199</td><td>0.77</td><td>2026</td><td>800</td><td>0.64</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	3.5 Turns Open	s Open							2663	795	0.85	2426	199	0.77	2026	800	0.64									
2785 742 0.79 2558 745 0.72 2289 745 0.68 1995 746 2615 720 0.69 2377 723 0.64 2085 727 0.56 1802 730	4.0 Turns Open	s Open				2738	992	0.81	2514	692	0.74	2261	772	99.0	1957	775	0.58									
2615 720 0.69 2377 723 0.64 2085 727 0.56 1802 730	4.5 Turns Open	s Open	2785	742	0.79	2558	745	0.72	2289	745	99.0	1995	746	09:0												
	*5 Turns Open	S Open	2615	720	69.0	2377	723	0.64	2085	727	0.56	1802	730	0.46												

											External	Static Pi	External Static Pressures (Inches Water Column)	(Inches \	Vater Col	(nmn									
Model	Sheave		6.0			1.0			1.1			1.2			1.3			1.4			1.50			1.60	
	rosinon	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	СЕМ	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw
	Fully Closed																			Г	Г	Т	Г	Т	
	1/2 Turn Open																								
	1 Turn Open																			2569	1149	1.51	2307	1154	1.37
	1.5 Turns Open																2580	1122	1.46	2323	1125	1.33			
(1.5 HP)	2.0 Turns Open													2601	1094	1.36	2357	1099	1.25	2129	1104	1.16			
Static	2.5 Turns Open										2575	1062	1.31	2356	1066	1018	2126	1071	1.12						
춫	3.0 Turns Open							2562	1037	1.21	2328	1041	1.10	2048	1045	96:0									
	3.5 Turns Open				2577	1006	1.17	2361	1006	1.07	2085	1011	0.95												
	4.0 Turns Open	2618	975	1.12	2367	086	66:0	2085	983	0.93															
	4.5 Turns Open	2403	948	96:0	2073	952	0.88																		
	*5 Turns Open	2188	920	0.84	1865	924	0.70																		
	* Denotes Factory sheave setting.	sheave :	setting.											Low Stati	c Drive C	onsists of	: 1 Hp Mo	tor; 1VP4	Low Static Drive Consists of: 1 Hp Motor; 1VP40 Motor Sheave; AK66 Blower Pulley & A-44 belt	Sheave; A	K66 Blow	ver Pulley	/ & A-44 I	pelt	

Low Static Drive Consists of: 1 Hp Motor; 1VP40 Motor Sheave; AK66 Blower Pulley & A-44 belt

Med Static Drive Consists of: 1.5 Hp Motor; 1VP44 Motor Sheave; AK 59 Blower Pulley & A-43 belt

All performance curve data collected at 230V.

Values include losses for air filters, unit casing, and dry evaporator coil.

NOTES:

Boldface type indicates factory recommended blower operating range.

See Accessory Performance Data table for additional static pressure information.

		Kw		1.01	0.88	0.79							
	6.0	RPM		964	941	919							
		CFM		2449	2216	2004							
		Kw			1.01	0.89	0.77	0.68					
	8.0	RPM			937	915	892	898					
		СЕМ			2525	2323	2120	1920					
		Kw				1.01	98.0	0.78	0.70				
	0.7	RPM				606	887	864	840				
		CFM				2625	2395	2220	2044				
(umnlo		Kw					1.04	06:0	0.77	0.67	0.57		
Water Co	9.0	RPM					881	860	838	811	784		
(Inches		CFM					2769	2544	2318	2107	1895		
External Static Pressures (Inches Water Column)		Kw							0.87	0.78	99.0	0.59	
Static F	0.5	RPM							834	808	782	756	
Externa		СЕМ							2647	2437	2227	2016	
		Kw								0.87	62.0	89.0	0.57
	0.4	RPM								804	777	753	728
		CFM								2708	2537	2335	2132
		Kw										92.0	99.0
	0.3	ВРМ										751	725
		CFM										2613	2437
		Kw											0.74
	0.2	RPM											722
		CFM											2674
	Sheave	I Carron	Fully Closed	1/2 Turn Open	1 Turn Open	1.5 Turns Open	2.0 Turns Open	2.5 Turns Open	3.0 Turns Open	3.5 Turns Open	4.0 Turns Open	4.5 Turns Open	*5 Turns Open
	Model						(1HP)	Standard					

											External	External Static Pressures (Inches Water Column)	ressures	(Inches	Water Cc	lumn)									
Model	Sheave		6.0			1.0			1:1	Г		1.2			1.3			1.4			1.50			1.60	
	Losidor	CFM	RPM	Kw	CFM	RPM	Kw	CFIM	RPM	Kw	CFM	RPM	Kw	СЕМ	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	СЕМ	RPM	Kw
	Fully Closed																								
	1/2 Tum Open																						2502	1186	1.52
	1 Turn Open																			2443	1157	1.42	2344	1161	1.35
	1.5 Turns Open																2591	1124	1.41	2365	1128	1.39			
(1.5 HP)	2.0 Turns Open													2546	1098	1.35	2280	1102	1.25	2164	1108	1.18			
Static	2.5 Turns Open										2589	1066	1.32	2321	1072	1.21	2157	1078	1.10						
춫	3.0 Turns Open							2632	1037	1.25	2281	1041	1.12	2095	1046	1.07									
	3.5 Turns Open				2684	1009	1.22	2351	1013	1.07	2143	1019	86:0												
	4.0 Turns Open	2736	981	1.22	2443	982	1.01	2070	886	68.0															
	4.5 Turns Open	2468	953	1.04	2151	926	0.88																		
	*5 Turns Open	2200	925	0.85																					
	***************************************	9	9																						

Boldface type indicates factory recommended blower operating range.

NOTES:

Values include losses for air filters, unit casing, and dry evaporator coil.

See Accessory Performance Data table for additional static pressure information.

Med Static Drive Consists of: 1.5 Hp Motor; 1VP44 Motor Sheave; AK 59 Blower Pulley & A-43 belt

All performance curve data collected at 230V.

CFM RPM KW CFM RPM RPM RPM RPM												External	Static Pr	External Static Pressures (Inches Water Column)	(Inches V	/ater Col	nmn)									
HPM Kw GFM HPM KW <t< td=""><td>Sheave Docition</td><td></td><td></td><td>0.2</td><td></td><td></td><td>0.3</td><td></td><td></td><td>0.4</td><td></td><td></td><td>0.5</td><td></td><td></td><td>9.0</td><td></td><td></td><td>0.7</td><td></td><td></td><td>8.0</td><td></td><td></td><td>6.0</td><td></td></t<>	Sheave Docition			0.2			0.3			0.4			0.5			9.0			0.7			8.0			6.0	
Mathematical Color Mathema			CFM	RPM	Kw	CFM	RPM	Kw	СЕМ	RPM	Kw	CFM	RPM	Kw	—	RPM	Kw	CFM	RPM	Kw	_	RPM	_	CFM	RPM	Kw
Maria Mari	Fully Closed														П							П				
4 4	1/2 Turn Open																									
4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 5 4 4 4 4 5 4 4 4 4 5 4 4 4 4 5 4 6 4 4 4 6 7 6 6 7	1 Turn Open																				2572	_		2303	942	0.95
4 4 4 4 4 4 4 4 5 4 4 5 4 4 5 4 4 6 7	1.5 Turns Open	_																2668	912		2386	_		2097	920	0.83
4 4	2.0 Turns Open	_													2745	884		2474	888		2200	_	62.0			
4 4 4 4 4 4 4 5 6 6 6 6 6 6 6 6 6 6 7 6 6 7 6 7	2.5 Turns Open	_													2569			2285	865	08.0	1988	—	02.0			
7.28 7.24 8.07 0.86 2457 811 0.78 2169 813 7.28 7.2 25.2 781 0.75 2259 785 0.67 1946 786 7.28 0.74 2620 75 2366 75 0.68 2060 760 760 786 786 7.28 0.74 2469 731 0.66 2203 732 0.60 760 760 750 78 7	3.0 Turns Open	_										2655	837	68.0	2392	\vdash		2095	842	69.0						
728 0.74 2489 781 0.75 2259 785 0.67 1946 786 728 0.74 2489 731 0.68 757 0.68 2060 760 0.59 7	3.5 Turns Open								2704	807	0.86	2457	811	0.78	2169	_	69.0									
728 0.74 2469 731 0.66 2203 732 0.68 2060 760	4.0 Turns Open								2529	781	0.75	2259	785	0.67	1946		09:0									
728 0.74 2469 731 0.66 2203 732	4.5 Turns Open					2620	755	0.75	2366	757	99.0	2060	092	0.59												
	*5 Turns Open		2703	728	0.74	2469	731	99.0	2203	732	09:0															

	:										External	External Static Pressures (Inches Water Column)	ressures	(Inches V	Vater Col	nmn)									Г
Model	Motor Sheave		6.0			1.0			Ξ			1.2	Г		1.3	Т		4.1			1.50	H		1.60	
		CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	СЕМ	RPM	Kw	CFM	ВРМ	Kw	CFM	RPM	Kw	CFM F	RPM	Kw	CFM	RPM	Kw
	Fully Closed																								
	1/2 Turn Open																					.,	2713	1187	1.66
	1 Turn Open																			. 9023	1159 1	1.54	2426	1166	1.43
	1.5 Turns Open																. 9692	1131	1.54	2473	1137	1.36	. 2525	1143	1.27
(2 HP)	2.0 Turns Open													2722	1103	1.44	2454	1105	1.31	2351	1107	1.23			
Static	2.5 Turns Open										2708	1073	1.41	2446	1077	1.26	2204	1082	1.11						
ž	3.0 Turns Open							2714	1042	1.31	2456	1047	1.21	2170	1051	1.08									
	3.5 Turns Open				2732	1013	1.28	2470	1017	1.14	2214	1021	1.02												
	4.0 Turns Open	2755	981	1.18	2511	987	1.09	2225	991	86.0															
	4.5 Turns Open	2510	926	1.04	2240	096	0.95																		
	*5 Turns Open	2265	930	06:0	1968	933	0.81																		
	* Denotes Factory sheave setting.	sheave	etting.											Low Stati	3 Drive Co	onsists of:	1 Hp Mo	tor; 1VP4	0 Motor 5	Sheave; A	Low Static Drive Consists of: 1 Hp Motor; 1VP40 Motor Sheave; AK66 Blower Pulley & A-44 belt	rer Pulley	& A-44 b	elt	

Med Static Drive Consists of: 2 Hp Motor; 1VP44 Motor Sheave; AK 54 Blower Pulley & A-43 belt Boldface type indicates factory recommended blower operating range.

All performance curve data collected at 230V.

See Accessory Performance Data table for additional static pressure information.

Values include losses for air filters, unit casing, and dry evaporator coil.

NOTES:

Table 8. R6GP-072C - 166 Series - Horizontal Configuration

0.9	I Kw	1.74	1.54			Ψ,										ا≲ا	5		တ၂							
Ö	ا≲ا	1114	⊢	1059 1.34	1032 1.26	1005 1.17									1.60	RPM Kw	1330 2.57	1277 2.15	1249 1.96							-
- 1	CFM RPM	3203 11	3025 1087	2865 10	-	-			_			Н			1.0	CFM RF	3433 13	3026 12	2804 12				_			-
ျ	-	32			0 2701	3 2537	2										34			0						
_	W Kw		0 1.70	7 1.47	0 1.30	2 1.13	5 1.05		_		_	Н		П	0	W Kw	Н	4 2.32	5 2.06	5 1.80					_	-
0.8	M RPM		0801	9 1057	1 1030	2 1002	6 975								1.50	M RPM	Н	2 1274	6 1245	0 1215						-
			326					10																		L
	_			-	_	Н	드	-						П		ш		_	_	$\overline{}$	-					
0.7	_			-	-	ш	ш	-							1.40	_			_							L
	CFM			3280		2914		2577						П		CFM		3348								L
	Κw				1.55	1.37	1.24	1.1	1.00	0.89				(u		Κw			_	-	-	1.72				L
9.0	RPM				1021	966	696	942	914	886				Colum	1.3	_			-	-	_	1151				
	CFM				3306	3161	2997	2833	2628	2422				Water		CFM			3298	3113	2917	2721				
	Κw					1.48	1.35	1.22	1.08	0.93	0.81			nches		Κw				2.16	1.98	1.79	1.62	1.45		
0.5	RPM					995	968	940	912	883	854			ıres (lı	1.2	RPM				1207	1178	1148	1117	1086		
	CFM					3320	3177	3033	2863	2692	2500			Press		CFM				3294	3096	2898	2677	2456		Ī
	Kw						1.46	1.31	1.18	1.06	0.91	0.76		Static		Κw				2.32	2.07	1.82	1.67	1.51	1.38	Ī
4.0	RPM						965	938	606	880	850	820		ternal	1.1	RPM	Ī			1205	1176	1146	1116	1085	1063	Ī
	_						3388	3203	3056	2908	2741	2574		Ě		_	Ī			3431				_	_	-
	Κw										=	-														1
0.3	3PM							935	206	-	849	Н		П	_	ш						_				
	-							3343	3208	3073	5926	2779				-						-	-	_	_	
7								()		_	90.						Π					(7		\equiv	.62	
2.0	ш								-	_	_	П		П	6.0	_	Ī						_			
		Н							-	_		_					Н									1
									3	_	.21												3	_	.70	
-	ш									-		-			.8	_								-	156 1	1
	FMR			_	Н	Н			_	_		_				FMR	Н						_)26 10	
	Ω		u		eu	eu	en	en	en		3 2			Н		ĺΰ			en	en	en	eu	en	_	oen 30	ľ
heave	sition	Slosed	rn Ope	Open	rns Op	urns O	rns Op		Notor	heave	sition	Slosed	Open	rns Op	rns Op	rns Op	rns Op	rns Op	rns Op	urns O	ľ					
์ เ	۲	Fully (1/2 Tu	1 Turn	1.5 Tu	2.0 Tu	2.5 Tu	3.0 Tu	3.5 Tu	4.0 Tu	*4.5 Ti	5.0 Tu		[ซี	۲	Fully (1 Turn	1.5 Tu	2.0 Tu	2.5 Tu	3.0 Tu	3.5 Tu	4.0 Tu	*4.5 Ti	
odel					HD.	, wo	tatic	rive	¥ ¥						odel					HB)	edium Patio	rive -	<u> </u>			-
	0.1 0.2 0.3 0.4 0.5 0.6	Sheave 0.1 0.2 0.3 0.4 0.5 0.6 0.7 Position CFM RPM Kw CFM	Sheave 0.1 0.2 0.3 0.4 0.5 0.6 0.7 Position CFM RPM Kw CFM RPM KW	Sheave 0.1 0.2 0.3 0.4 0.5 0.6 0.7 Position 0.5 0.6 0.7 Position 0.5 0.5 0.6 0.7 PM Kw CFM RPM KW C	Sheave O.1 O.2 O.3 O.4 O.5 O.5<	Sheave O.1 O.2 O.3 O.4 O.5 O.5<	Sheave O.1 O.2 O.3 O.4 O.5 O.5<	Sheave O.1 O.2 O.3 O.4 O.5 O.5<	Sheave O.1 O.2 O.2<	Sheave O.1 O.2 O.2 O.2 O.2 O.2 O.5 O.5<	Sheave O.1 O.2 O.2 O.2 O.5 O.5<	Sheave O.1 O.2 O.2<	Sheave O.1 O.2 O.2 O.2 O.2 O.2 O.5 O.5<	Sheave O.1 O.2 O.2 O.3 O.4 O.5 O.5 O.5 O.7 Position Fully Closed CFM RPM Kw CFM RPM Kw <td< td=""><td>Sheave CFM RPM Kw CFM RPM RPM RPM</td><td>Sheave CFM RPM Kw CFM</td><td>Sheave O.1 O.2 O.3 O.4 O.5 O.5 O.7 CFMI RPM Kw CFMI RPM</td><td>Sheave O.3 O.3 O.4 O.5 O.5<</td><td> Sheave</td><td> Sheave</td><td>Sheave O.1 O.2 O.2 O.3 O.4 O.5 O.6 O.7 CFM RPM Kw CFM RPM</td><td>Sheave 0.1 0.2 0.3 0.4 0.5 0.6 0.7 CFM RPM KW CFM RPM RPM RPM RPM RPM</td><td> Sheave</td><td>Sheave OFTIME Desired OFTIME DESIRED<</td><td> Sheeke O.1 Position O.2 O.3 O.4 O.5 O.4 O.5 O.</td><td>Sheave 0,1 0,2 0,3 0,3 0,4 0,5 0,5 0,6 0,7 Postion Fully Closed Feet Name CFM RPM Kw CFM RPM RPM RPM RPM</td></td<>	Sheave CFM RPM Kw CFM RPM RPM RPM	Sheave CFM RPM Kw CFM	Sheave O.1 O.2 O.3 O.4 O.5 O.5 O.7 CFMI RPM Kw CFMI RPM	Sheave O.3 O.3 O.4 O.5 O.5<	Sheave	Sheave	Sheave O.1 O.2 O.2 O.3 O.4 O.5 O.6 O.7 CFM RPM Kw CFM RPM	Sheave 0.1 0.2 0.3 0.4 0.5 0.6 0.7 CFM RPM KW CFM RPM RPM RPM RPM RPM	Sheave	Sheave OFTIME Desired OFTIME DESIRED<	Sheeke O.1 Position O.2 O.3 O.4 O.5 O.4 O.5 O.	Sheave 0,1 0,2 0,3 0,3 0,4 0,5 0,5 0,6 0,7 Postion Fully Closed Feet Name CFM RPM Kw CFM RPM RPM RPM RPM

Boldface type indicates factory recommended blower operating range.

Values include losses for air filters, unit casing, and dry evaporator coil.

See Accessory Performance Data table for additional static pressure information.

NOTES:

Low Static Drive Consists of: 2 Hp Motor; 1VP40 Motor Sheave; AK59 Blower Pulley & A-43 belt Med Static Drive Consists of: 3 Hp Motor; 1VP44 Motor Sheave; AK 54 Blower Pulley & A-42 belt High Static Drive Consists of: 3 Hp Motor; 1VP50 Motor Sheave; AK 56 Blower Pulley & A-43 belt

										۳	xterna	Static	External Static Pressures (Inches Water Column)	res (Ir	ches V	Vater C	(umnlo									
Model	Motor Sheave		0.1	Н	0.2	2		0.3		Ц	0.4			0.5			9.0	Н	0.7	7	Н	0.8			0.9	П
		CFM R	RPM Kw	w CFM	M RPM	M Kw	유	M RPM	I Kw	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	CFM RF	RPM K	Kw CFM	MRPM	/ Kw	CFM	RPM	Kw
	Fully Closed			H													H	Н			Н			3532	1078	1.80
	1/2 Turn Open																				3508	1054	1.70	3341	1058	1.60
	1 Turn Open																	3	3541 10	1025 1.	1.70 337	3376 1030	0 1.60	3193	1035	1.50
(0 HB)	1.5 Turns Open															3535	995 1	1.60 3	3323 86	999 1.	1.50 3162	1002	1.40	2958	1008	1.30
Low	2.0 Turns Open												3552	896	1.50	3358	969 1	1.40	3164 97	972 1.3	1.30 2947	17 974	1.20	2723	086	1.10
Static	2.5 Turns Open									3559	986	1.45	3381	939	1.35	3186	943 1	1.25 2	2976 94	946 1.	1.15 2745	15 948	1.08			
Drive	3.0 Turns Open									3391	910	1.30	3210	914	1.20	3013	917 1	1.10 2	2787 92	920 1.0	1.00 2543	13 922	9.97			
₹	3.5 Turns Open						3423	3 881	1.25	3228	884	1.15	3036	887	1.08	2822	889 1	1.00	2577 89	892 0.3	06.0					
	4.0 Turns Open			3422	22 852	1.20	0 3268	854	1.10	3065	857	1.00	2862	860	0.95	2630	861 0	06.0								
	*4.5 Turns Open	3470	819 1.13	3 3276	76 821	1.10	310	13 824	1.04	2891	827	0.91	2665	831	0.84			Н			Н	Н	Ц			
	5.0 Turns Open 3334	_	788 1.00	3129	29 790	0 1.00	0 293	7 794	0.97	2717	797	0.83														
100	Motor Sheave		9.0	_	0.0	6		-			Ξ:			1.2			1.3	_	- <u>`</u>	1.40		1.50			1.60	Г
Model	Position	CFM	RPM Kw	w CFM	M RPM	M Kw	F	M RPM	W Kw	CFM	RPM	Κw	CFM	RPM	Kw	CFM F	RPM	Kw	CFM RF	RPM K	Kw CFM	M RPM	/ Kw	CFM	RPM	Kw
	Fully Closed		-	-	L	L											H	H	-	H	H	L	L	L	L	Г
	1 Turn Open																	H								
	1.5 Turns Open																				3520	20 1238	8 2.40	3317	1242	2.25
(3 HP)	2.0 Turns Open																	ω,	3502 12	1207 2.	2.20 3281	1212	2 2.10	3063	1216	2.00
Medium	2.5 Turns Open															3435 1	1172 2	2.10	3196 11	1179 1.9	1.95 2969	9 1184	1.85	2776	1189	1.75
Drive	3.0 Turns Open												3423	1140	2.00	3223 1	1144 1	1.80	2889 11	1150 1.7	1.70 2657	57 1155	5 1.60			
	3.5 Turns Open						354	1102	2 2.00	3347	1108	1.90	3149	1112	1.75	2950 1	1118 1	1.60	2668 11	1126 1.4	1.40					
	4.0 Turns Open			34	3492 1066	66 1.90	3333	1074	1.80	3107	1080	1.70	2875	1084	1.50											
	*4.5 Turns Open	3310	1019 1.75		3185 1028	28 1.65	5 3020	0 1039	1.55	2808	1046	1.45	2583	1053	1.30											
	5.0 Turns Open	2993	979 1.50	50 2878	78 990	1.40	270	1004	1.30	2508	1012	1.20						H								
0000	Motor Sheave		1.2		1.3	3		1.4			1.5			1.6			1.7		1.	1.80	_	1.90	(2.00	
ano de	Position	CFM	RPM Kw	w CFM	M RPM	M Kw	딩	M RPM	Kw	CFM	RPM	Κw	CFM	RPM	Kw	CFM F	RPM	Kw C	CFM RF	RPM K	Kw CFM	M RPM	/ Kw	CFM	RPM	Κw
	Fully Closed																	H			Н					
	1 Turn Open																									
	1.5 Turns Open																							3543	1364	2.87
(3 HP)	2.0 Turns Open																							3447	1350	2.65
High	2.5 Turns Open																	3	3538 13	1313 2.0	2.69 3383	33 1319	9 2.55	3181	1325	2.36
Drive	3.0 Turns Open															3458 1	1282 2	2.54 3	3273 12	1289 2.	2.39 3123	3 1296	5 2.24	2915	1299	2.07
ž	3.5 Turns Open									3545	1247	2.53	3391	1254	2.37	3215 1	1260 2	2.28	3016 12	1265 1.9	1.92 2840	1272	1.74			
	4.0 Turns Open						3491	1220	2.41	3316	1226	2.27	3145	1232	2.14	2971 1	1237 2	2.01 2	2758 12	1241 1.4	1.44					
	*4.5 Turns Open			34.	3495 1190	90 2.30	333	1196	3 2.17	3137	1202	2.07	2941	1208	1.90	2736 1	1214 1	1.74			_					
	5.0 Turns Open 3524 1160 2.16	3524 1	160 2.1	16 33	3344 1167	67 2.08	318	1171	1.93		2958 1178 1.86	1.86	2736 1183	1183	1.66			-	$\ $		-	_				

Table 10. R6GP-090C Series / 230V - Horizontal Configuration

Low Static Drive Consists of: 2 Hp Motor; 1VP40 Motor Sheave; AK59 Blower Pulley & A-43 belt Med Static Drive Consists of: 3 Hp Motor; 1VP44 Motor Sheave; AK 54 Blower Pulley & A-42 belt High Static Drive Consists of: 3 Hp Motor; 1VP50 Motor Sheave; AK 56 Blower Pulley & A-43 belt High Static Drive Consists of: 3 Hp Motor; 1VP50 Motor Sheave; AK 56 Blower Pulley & A-43 belt

Boldface type indicates factory recommended blower operating range. Values include losses for air filters, unit casing, and dry evaporator coil. See Accessory Performance Data table for additional static pressure information.

NOTES:

* Denotes Factory sheave setting.

							Ext	ernal S	tatic Pr	essure	s (Inch	es Wate	r Colu	mn)					
Model	Motor Sheave Position		0.1			0.2			0.3			0.4			0.5			0.6	
		CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw
	1 Turn Open																		
	1.5 Turns Open																		
	2.0 Turns Open																4522	858	2.03
(2 HP) Low	2.5 Turns Open													4552	827	1.92	4370	833	1.82
Static	3.0 Turns Open										4502	780	1.70	4387	799	1.70	4217	808	1.60
Drive Kit	3.5 Turns Open										4438	773	1.70	4282	785	1.60	4080	792	1.50
	*4.0 Turns Open							4593	761	1.70	4373	766	1.70	4176	771	1.50	3943	775	1.40
	4.5 Turns Open				4361	716	1.45	4220	726	1.40	4035	735	1.40	3850	743	1.25	3625	750	1.20
	5.0 Turns Open	4083	658	1.20	3978	678	1.20	3846	691	1.10	3697	704	1.10	3523	714	1.00	3306	724	1.00

							Ext	ernal S	tatic Pr	essure	s (Inch	es Wate	er Colu	mn)					
Model	Motor Sheave Position		0.7			0.8			0.9			1.0			1.1			1.2	
		CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw
	Fully Closed																4009	942	2.17
	1/2 Turn Open										4336	922	2.20	4100	927	6.05	3851	932	1.90
	1 Turn Open				4592	901	2.20	4392	905	2.10	4154	908	2.00	3911	913	1.80	3668	917	1.70
	1.5 Turns Open	4580	881	2.15	4376	883	2.00	4167	888	1.90	3922	891	1.80	3673	896	1.65	3410	900	1.50
(2 HP) Low	2.0 Turns Open	4357	862	1.90	4159	865	1.80	3942	870	1.70	3689	874	1.60	3434	879	1.50			
Static	2.5 Turns Open	4188	839	1.75	3988	844	1.65	3759	848	1.55	3490	853	1.40						
Drive Kit	3.0 Turns Open	4019	815	1.60	3816	823	1.50	3575	826	1.40	3291	831	1.20						
	3.5 Turns Open	3863	798	1.45	3611	804	1.35	3338	807	1.25									
	4.0 Turns Open	3707	780	1.30	3406	785	1.20												
	4.5 Turns Open	3360	756	1.14															
	5.0 Turns Open																		

							Ext	ernal S	tatic Pr	essure	s (Inch	es Wate	er Colu	mn)					
Model	Motor Sheave Position		0.9			1.0			1.1			1.2			1.3			1.4	
		CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw
	2.5 Turns Open																		
(3 HD)	3.0 Turns Open																		
(3 HP) High Static	3.5 Turns Open																4611	1039	2.95
Drive	4.0 Turns Open													4630	1018	2.90	4394	1020	2.70
Kit	4.5 Turns Open										4673	998	2.75	4429	1000	2.65	4191	1003	2.50
	5.0 Turns Open							4672	975	2.65	4466	979	2.50	4227	982	2.4	3988	985	2.30

							Ext	ernal S	tatic Pr	essure	s (Inch	es Wate	r Colu	mn)					
Model	Motor Sheave Position	Г	1.5			1.6			1.7			1.8			1.9			2.0	
		CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw
	1 Turn Open																		
	1.5 Turns Open																4252	1130	3.10
	2.0 Turns Open													4278	1111	3.10	4016	1115	2.90
(3 HP)	2.5 Turns Open							4480	1087	3.10	4244	1089	2.90	4011	1093	2.80	3455	1097	2.50
`High´ Static	3.0 Turns Open	4613	1058	3.10	4379	1061	2.90	4233	1070	2.80	3996	1072	2.60	3744	1075	2.50			
Drive Kit	3.5 Turns Open	4391	1041	2.85	4181	1046	2.70	3976	1053	2.55	3683	1056	2.40						
	4.0 Turns Open	4168	1023	2.60	3982	1031	2.50	3718	1036	2.30	3370	1039	2.20						
	4.5 Turns Open	3714	1006	2.38	3257	1012	2.25												
	5.0 Turns Open	3260	989	2.15															

^{*} Denotes Factory sheave setting.

Low Static Drive Consists of: 2 Hp Motor; 1VP40 Motor Sheave; BK 75 Blower Pulley & B-49 belt

High Static Drive Consists of: 3 Hp Motor; 1VP50 Motor Sheave; BK 75 Blower Pulley & B-51 belt

NOTES: Boldface type indicates factory recommended blower operating range.

Values include losses for air filters, unit casing, and dry evaporator coil.

See Accessory Performance Data table for additional static pressure information.

Table 11. R6GP-120C Series / 230V - Downflow Configuration

							Ext	ernal Sta	tic Pre	ssure	s (Inch	es Wat	er Col	umn)					
Model	Motor Sheave Position		0.1			0.2			0.3			0.4			0.5			0.6	
	Fosition	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw
	1.5 Turns Open																		
	2.0 Turns Open																4622	855	2.16
(2 HP)	2.5 Turns Open													4686	833	2.09	4482	837	1.98
Low Static	3.0 Turns Open													4560	814	1.90	4342	818	1.80
Drive	3.5 Turns Open										4582	791	1.84	4383	794	1.76	4171	798	1.64
Kit	4.0 Turns Open							4632	767	1.77	4422	771	1.68	4206	774	1.61	4000	777	1.48
	4.5 Turns Open				4624	739	1.69	4424	745	1.60	4201	748	1.51	3979	753	1.43	3763	755	1.32
	5.0 Turns Open	4586	709	1.59	4407	715	1.50	4215	722	1.43	3979	724	1.34	3751	731	1.25	3526	732	1.16

							Ext	ernal Sta	itic Pre	ssure	s (Inch	es Wat	er Co	umn)					
Model	Motor Sheave Position		0.7			0.8			0.9			1.0			1.1			1.2	
	1 dollari	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw
	Fully Closed																3965	939	2.19
	1/2 Turn Open													4105	924	2.20	3869	927	2.04
	1 Turn Open				4417	881	2.20	4260	891	2.12	4072	897	2.01	3979	916	1.98	3702	921	1.82
(O LID)	1.5 Turns Open	4499	866	2.18	4329	872	2.08	4144	879	1.99	3939	884	1.87	3748	898	1.78	3462	903	1.63
(2 HP) Low	2.0 Turns Open	4441	860	2.07	4241	862	1.96	4027	867	1.85	3806	870	1.73	3516	879	1.58			
Static	2.5 Turns Open	4287	841	1.89	4076	844	1.78	3849	848	1.68	3598	851	1.54						
Drive Kit	3.0 Turns Open	4132	821	1.70	3910	825	1.60	3670	828	1.50	3389	832	1.34						
KIL	3.5 Turns Open	3947	801	1.56	3702	805	1.45	3412	808	1.34									
	4.0 Turns Open	3761	780	1.42	3494	784	1.30												
	4.5 Turns Open	3521	759	1.25															
	5.0 Turns Open																		

Model	Motor Sheave Position	External Static Pressures (Inches Water Column)																	
		0.9		1.0			1.1			1.2			1.3			1.4			
		CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw
	2.5 Turns Open																		
(3 HP)	3.0 Turns Open																4569	1022	2.92
High Static	3.5 Turns Open													4535	998	2.79	4318	1001	2.66
Drive	4.0 Turns Open										4492	973	2.61	4305	976	2.52	4066	980	2.39
Kit	4.5 Turns Open	4432	904	2.45	4293	913	2.39	4134	923	2.30	3978	933	2.21	3814	943	2.15	3608	952	2.05
	5.0 Turns Open	3817	848	1.92	3714	861	1.88	3576	876	1.85	3464	893	1.81	3323	910	1.78			

Model	Motor Sheave Position		External Static Pressures (Inches Water Column)																
		1.5			1.6			1.7			1.8			11.9			2.0		
		CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw	CFM	RPM	Kw
	1.5 Turns Open																		
(3 HP) High	2.0 Turns Open													4345	1116	3.20	4115	1118	3.01
	2.5 Turns Open													4127	1098	2.96	3866	1101	2.76
	3.0 Turns Open							4422	1071	3.03	4177	1075	2.89	3908	1079	2.72	3616	1083	2.51
Static Drive	3.5 Turns Open				4368	1050	2.89	4120	1053	2.74	3875	1056	2.58	3296	1063	2.31			
Kit	4.0 Turns Open	4308	1027	2.76	4084	1030	2.61	3817	1034	2.44	3573	1037	2.27						
	4.5 Turns Open	4054	1006	2.49	3797	1009	2.34	3493	1014	2.17									
	5.0 Turns Open	3799	984	2.22	3510	988	2.07												

Low Static Drive Consists of: 2 Hp Motor; 1VP40 Motor Sheave; BK 75 Blower Pulley & B-49 belt

 $High\ Static\ Drive\ Consists\ of:\ 3\ Hp\ Motor;\ 1\ VP50\ Motor\ Sheave;\ BK\ 75\ Blower\ Pulley\ \&\ B-51\ belt$

NOTES: Boldface type indicates factory recommended blower operating range.

Values include losses for air filters, unit casing, and dry evaporator coil.

See Accessory Performance Data table for additional static pressure information.

Table 12. R6GP-120C Series / 230V - Horizontal Configuration

ELECTRICAL INFORMATION

	Model Number	Nominal Electric	Voltage	e Range	Compr	essors (2	2) ea.	Outdoor motors (2) ea.	Indoor Motor	Single Circuit			
	(R6GP-)	Supply	Min	Max	RLA	LRA	Qty.	FLA	FLA	MCA	МОР		
	072C-100C	208-230/60/3	187	253	19	123	1	1.5	3.2	30.0	45		
	072D-100C	460/60/3	414	506	9.7	62	1	0.8	1.5	16.0	20		
	072C-166C	208-230/60/3	187	253	19	123	1	1.5	3.2	30.0	45		
Factory	072D-166C	460/60/3	414	506	9.7	62	1	0.8	1.5	16.0	20		
Drive Data:	090C-200C	208-230/60/3	187	253	13.1	83.1	2	2.3	6.2	40.3	50		
	090D-200C	460/60/3	414	506	6.1	41	2	1.2	2.9	19.0	25		
	120C-235C	208-230/60/3	187	253	17.8	110	2	2.3	6.2	50.9	60		
	120D-235C	460/60/3	414	506	8.6	52	2	1.2	2.9	24.7	30		
	072C-100C	208-230/60/3	187	253	19	123	1	1.5	4.4	31.2	50		
	072D-100C	460/60/3	414	506	9.7	62	1	0.8	2.1	15.8	25		
Medium	072C-166C*	208-230/60/3	187	253	19	123	1	1.5	5.8	32.6	50		
Static Drive	072D-166C*	460/60/3	414	506	9.7	62	1	0.8	2.8	16.5	25		
	090C-200C	208-230/60/3	187	253	13.1	83.1	2	2.3	9.1	43.2	50		
	090D-200C	460/60/3	414	506	6.1	41	2	1.2	4.4	20.5	25		
	090C-200C	208-230/60/3	187	253	13.1	83.1	2	2.3	9.1	43.2	50		
High	090D-200C	460/60/3	414	506	6.1	41	2	1.2	4.4	20.5	25		
Static Drive	120C-235C	208-230/60/3	187	253	17.8	110	2	2.3	9.1	53.8	60		
	120D-235C	460/60/3	414	506	8.6	52	2	1.2	4.4	26.2	30		
				N	otes:								
	Load Amps				MCA = Minimum Circuit Ampacity								
	ted Load Amps				MOP = Maximum Over-Current Protection								
LRA = Loc	ked Rotor Am	ps											
		-072*-166C (Me zontal conversio		tic Drive) ı	eflect the	applicati	on of th	ne 2 HP mo	tor require	d when u	sed in		
For downf	low application	s, the 1 1/2 HP	motor is a	adequate.	The value	s shown	for the	R6GP-072*	-100C are	the sam	е.		

Table 13. Electrical Data

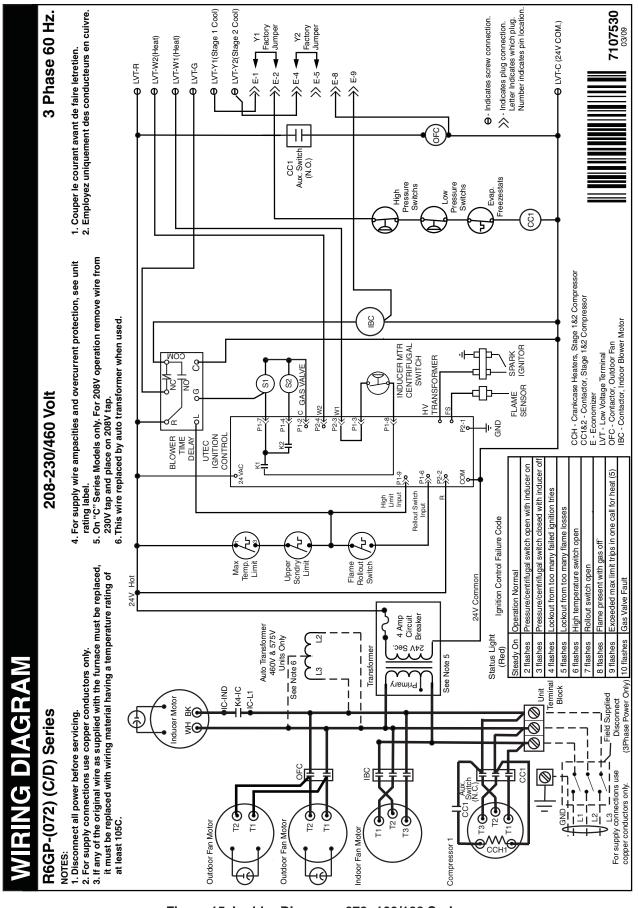


Figure 15. Ladder Diagram - 072 -100/166 Series

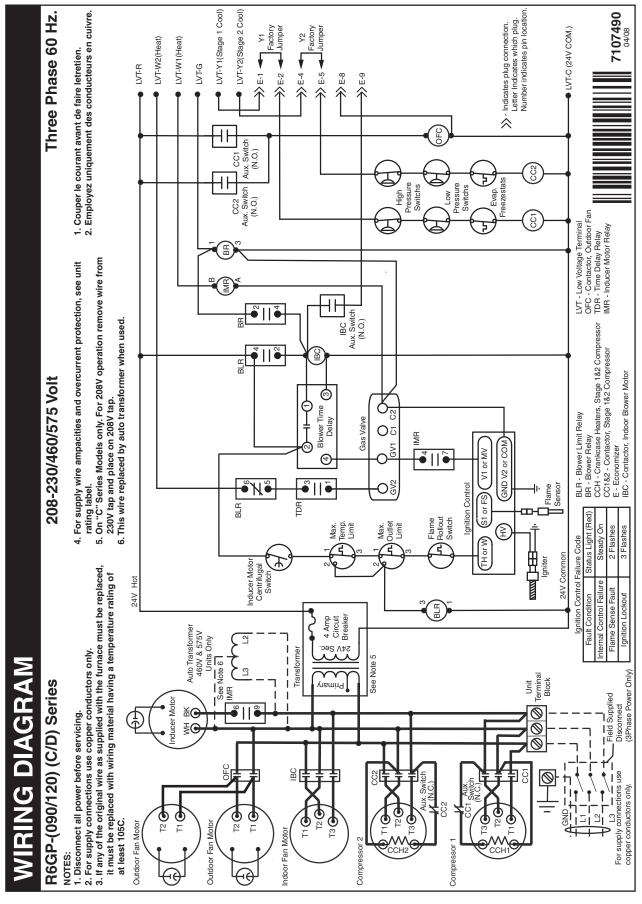


Figure 16. Ladder Diagram - 090/120 Series

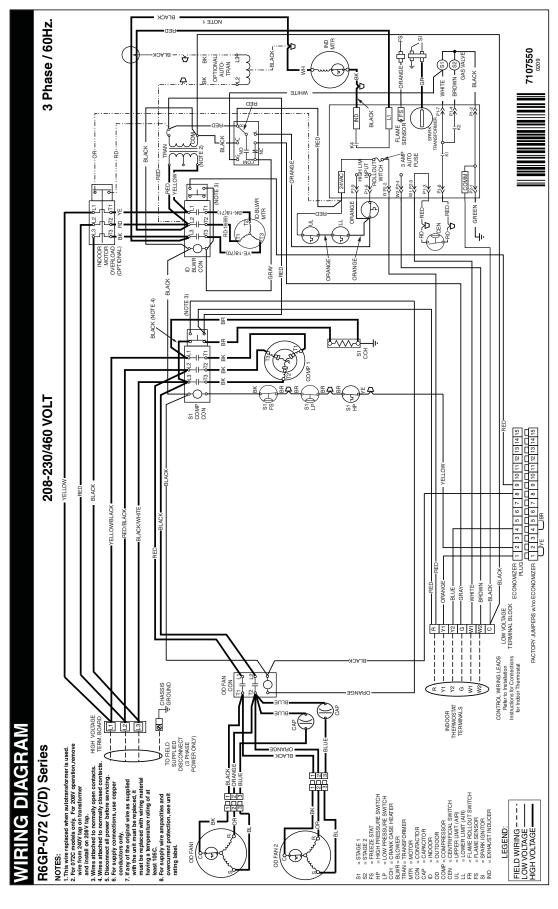


Figure 17. Wiring Diagram - 072 Series

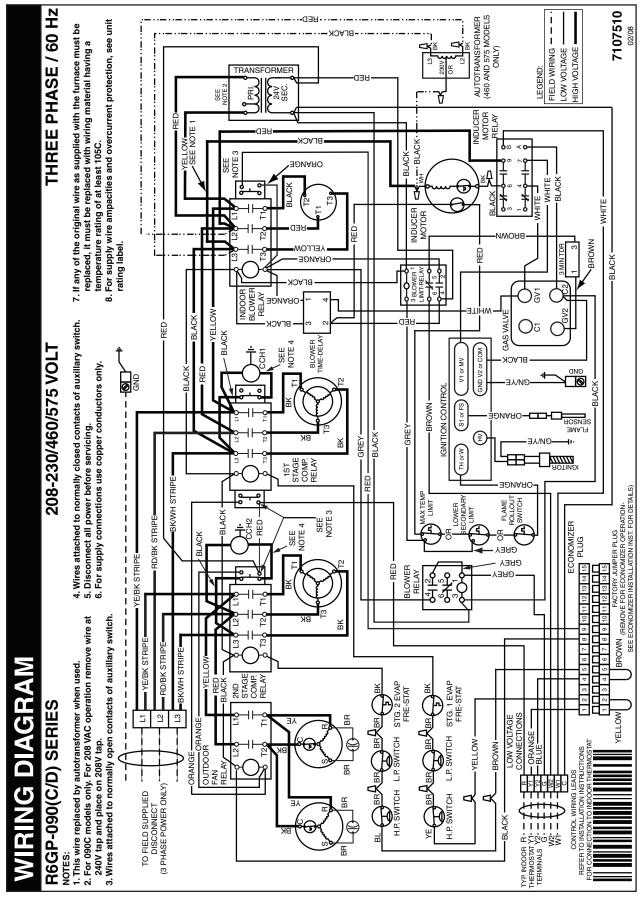


Figure 18. Wiring Diagram - 090 Series

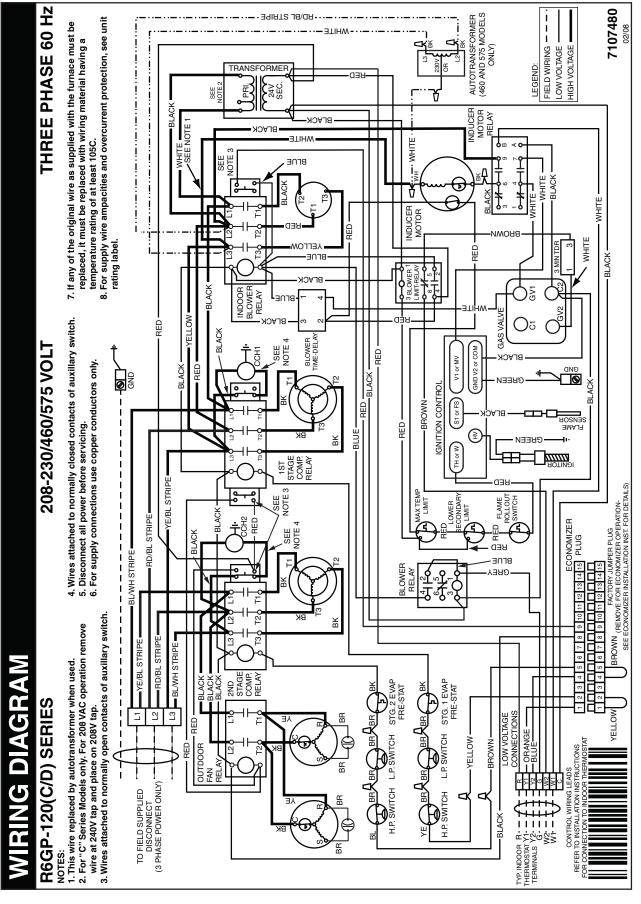


Figure 19. Wiring Diagram - 120 Series

GAS INFORMATION

CAPACITY OF BLACK IRON GAS PIPE (CU. FT. PER HOUR) FOR NATURAL GAS (SPECIFIC GRAVITY - 0.60)								
NOMINAL BLACK IRON PIPE	NOMINAL BLACK IRON PIPE LENGTH OF PIPE RUN (FT)							
DIAMETER (IN.)	10	10 20 30 40 50 60 70 80						
1/2	130	90	75	65	55	50	45	40
3/4	280	190	150	130	115	105	95	90
1	520	350	285	245	215	195	180	170
1 1/4	1050	730	590	500	440	400	370	350
1 1/2	1600	1100	890	760	670	610		

NOTES

The cubic feet per hour listed in the table above must be greater than the cubic feet per hour of gas flow required by the furnace. To determine the cubic feet per hour of gas flow required by the furnace, divide the input rate of the furnace by the heating value (from gas supplier) of the gas:

Cubic Feet Per Hour Required = Input To Furnace (Btu/hr)
Heating Value of Gas (Btu/Cu. Ft.)

Table 14. Black Iron Gas Pipe Capacities

				ALTITUDE ABOVE SEA LEVEL					
				0 to 2,000 FT	2,001 to 4,000 FT	4,001 to 6,000 FT	6,001 to 8,000 FT	8,001 to 10,000 FT	
UNIT MODEL NUMBER	GAS TYPE	HEATING INPUT (BTU/HR)	NUMBER OF BURNERS			ORIFICE SIZE			
R6GP-072*-100C	Natural	100,000	3	36	38	40	41	43	
Propane	Propane	85,000	3	53	54	54	55	55	
R6GP-072*-166C	Natural	166,000	-	36	38	40	41	43	
R6GP-072 -166C	Propane	141,000	5	53	54	54	55	55	
DCCD 000* 000C	Natural	200,000		36	38	40	41	43	
R6GP-090*-200C	Propane	175,000	6	51	52	52	52	53	
DCCD 400* 005C	Natural	235,000	7	36	38	40	41	43	
R6GP-120*-235C	Propane	205,000	7	51	52	52	52	53	
* Refer to Instruction	* Refer to Instructions for High Altitude Deration (pages 11 - 12) to determine heat exchanger capacity at increased elevations.								

Table 15. Orifice or Drill Size for Natural and Propane (LP) Gases

MODEL	GAS TYPE	HEATING INPUT	HEATING OUTPUT	HEATING RISE RANGE (°F)	CFM RANGE						
					1,950	2,100	2,250	2,400	2,550	2,700	SCFM
D6CD 070* 100C	Natural	100,000	80,000	15 - 45	38	35	33	31	29	27	DICE (°E*
R6GP-072*-100C	Propane	85,000	68,000	15 - 45	32	30	28	26	25	23	RISE (°F)*
					1,950	2,100	2,250	2,400	2,550	2,700	SCFM
R6GP-072*-166C	Natural	166,000	133,000	25 65	63	59	55	51	48	46	RISE (°F)*
NOGP-072 -100C	Propane	141,000	112,800	35 - 65	54	50	46	44	41	39	NISE (F)
					2,425	2,625	2,800	3,000	3,188	3,375	SCFM
R6GP-090*-200C	Natural	200,000	157,000	20 60	60	55	52	48	46	43	DICE (°E*
R6GP-090 -200C	Propane	175,000	137,000	30 - 60	52	48	45	42	40	38	RISE (°F)*
					3,250	3,500	3,750	4,000	4,250	4,500	SCFM
DCCD 100* 005C	Natural	235,000	185,000	25 - 55	54	50	46	44	41	39	DICE (°E*
R6GP-120*-235C	Propane	205,000	164,000		47	43	40	38	36	34	RISE (°F)*
* At elevations of 2,	000 feet or l	ess.									

Table 16. Heating Rise/Range

		GASI	LOW RATE	(CUBIC	FEET PER HOUR)			
TIME FOR		ET PER REV			TIME FOR CUBIC FEET PER REVO			
ONE REVOLUTION		F GAS METE			ONE REVOLUTION	OF GAS METER		
(SECONDS)	1	5	10		(SECONDS)	1	5	10
10	360	1800	3600		66	55	273	545
12	300	1500	3000		68	53	265	529
14	257	1286	2571		70	51	257	514
16	225	1125	2250		72	50	250	500
18	200	1000	2000		74	49	243	486
20	180	900	1800		76	47	237	474
22	164	818	1636		78	46	231	462
24	150	750	1500		80	45	225	450
26	138	692	1385		82	44	220	439
28	129	643	1286		84	43	214	429
30	120	600	1200		86	42	209	419
32	113	563	1125		88	41	205	409
34	106	529	1059		90	40	200	400
36	100	500	1000		92	39	196	391
38	95	474	947		94	38	191	383
40	90	450	900		96	38	188	375
42	86	429	857		98	37	184	367
44	82	409	818		100	36	180	360
46	78	391	783		102	35	176	353
48	75	375	750		104	35	173	346
50	72	360	720		106	34	170	340
52	69	346	692		108	33	167	333
54	67	333	667		110	33	164	327
56	64	321	643		112	32	161	321
58	62	310	621		114	32	158	316
60	60	300	600		116	31	155	310
62	58	290	581		118	31	153	305
64	56	281	563		120	30	150	300

Table 17. Gas Flow Rates

R6 CHARGING CHARTS Application notes on the use of Charging Charts:

This equipments cooling systems contain refrigerant under high pressure, always use safe practices when servicing the unit. Always review the factory literature and safety warnings prior to servicing.

All R6GP-072/090/120 units are shipped from the factory with the proper amount and type of refrigerant. Always inspect the unit rating label to determine the units information prior to working on the system. Do not mix different refrigerants or charge the unit with a refrigerant not listed on the unit rating label.

The charging charts below are valid for a variety of indoor, return air conditions and are most highly influenced by the outdoor ambient temperature, outdoor fan operation and the unit operating voltage. Before referencing the charts below, always ensure that all compressor circuits are energized and have stable operation. As can be seen in the charging charts, the ideal system sub-cooling can vary over the range of operation. Always reference the charts to determine the ideal amount of sub-cooling for a given liquid pressure. Units charged to other values will not perform at the rated unit efficiency (EER).

To inspect a systems operation, using quality instruments, match the measured liquid temperature to the units chart. The measured liquid pressure reading should be within 3% of the value shown for most installations. For two stage systems, the charts are valid for both compressor stages.

Do not utilize the charts for two stage systems operating only under a single stage call for cooling.

Do not utilize the charts in systems that do not have all the outdoor fans energized, or have the fans cycling under a low-ambient control. Refer to the low-ambient kit instructions for more information, if applicable.

For systems that are operating with more then a 5% deviation, inspect the unit for leaks. Always use safe and environmentally sound methods for refrigerant handling. When repairing system leakages, always utilize a nitrogen (inert) gas to protect the refrigerant system and pressure check the repair before re-charging. Always replace the filter-dryers when performing any repair to the refrigeration system. After completing the repairs, evacuate the system to 350-500 microns and weight in the refrigerant to the amount specified on the unit rating label.

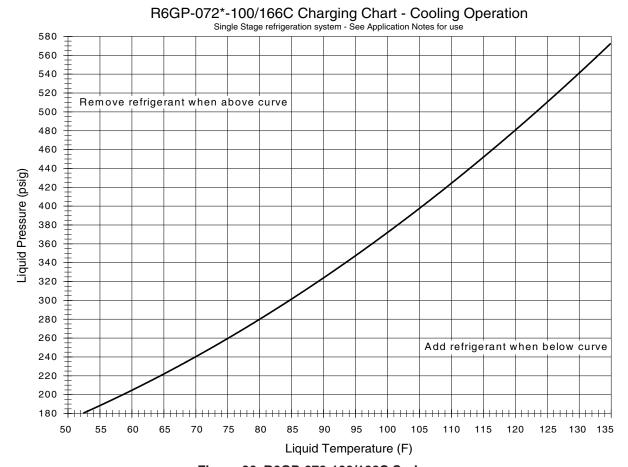


Figure 20. R6GP-072-100/166C Series

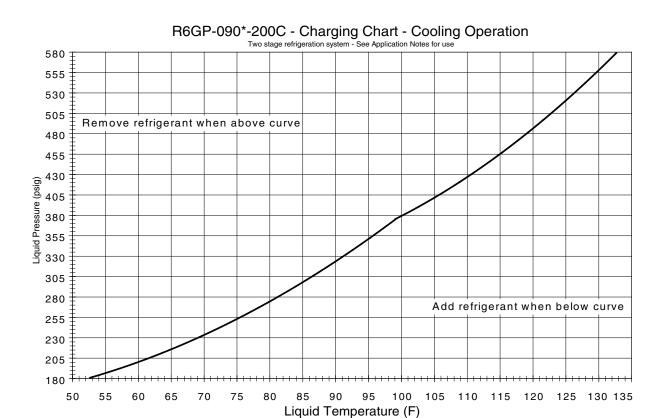


Figure 21. R6GP-090-200C Series

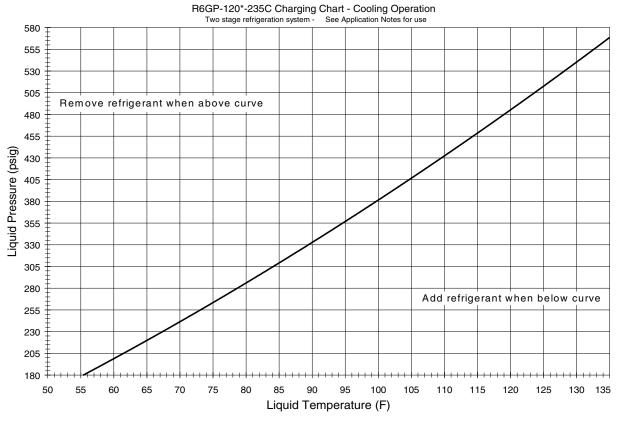


Figure 22. R6GP-120-235C

R6 GAS VALVE LABELS

FOR YOUR SAFETY READ **BEFORE OPERATING**

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury, or loss of life.

- A. This appliance does not have a pilot. It is equipped with an ignition device which automatically lights the burner. Do not try to light the burner by hand.
- B. BEFORE OPERATING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor. WHAT TO DO IF YOU SMELL GAS
- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or move by hand, do not try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been

POUR VOTRE SÉCURITÉ. À LIRE AVANT L'EMPLOI

ATTENTION! L'inobservation de ces instructions peut entraîner un incendie ou une explosion pouvant causer des dammages à votre propriété à votre personne, ou la mort.

- A. Cet appareil ménager n'a pas de veilleuse. Il est doté d'un système d'allumage automatique. Ne pas essayer d'allumer le brûleur manuellement.
- B. AVANT L'USAGE. Attention à une possible odeur de gaz surtout au niveau du plancher où les gaz les plus lourds ont la tendance de se concentrer.

EN CAS D'ODEUR DE GAZ.

- Ne mettre en marche aucun appareil électrique.
- Ne toucher à aucun commutateur électrique, ne pas employer le téléphone.
- Quitter le bâtiment immédiatement et avertir la compagnie du gaz en utili sant le téléphone d'un voisin.
- A défaut de la compagnie du gaz, avertir le service des pompiers.
- C. Enfoncer ou faire tourner le robinet à gaz à la main seulement. Ne jamais utiliser d'outils. S'il n'est pas possible de faire tourner ou d'enfoncer le robinet à la main, ne pas essayer de le réparer. Faire appel à un spécialiste. Forcer ou tenter de réparer le robinet pourrait être à l'origine d'une explosion ou d'un incendie.
- D. Il est déconseillé d'utiliser cet appareil en contact prolongé avec l'eau. Faire inspecter ou remplacer toute commande par un technicien qualifié si un des systèmes de contrôle du gaz s'est trouvé sous l'eau.

OPERATING INSTRUCTIONS

- 1. STOP! Read the safety information above on this label.
- 2. Set the thermostat to the lowest setting.
- 3. Turn off all electrical power to the appliance.
- 4. The appliance's ignition device automatically lights the burner. Do not try to light burner by hand.
- 5. Remove the control access door/panel (upper door if two-door model).
- 6. Move the gas control knob clockwise
 to "OFF". (See Figure 1)
- 7. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in above information. If you don't smell gas, go to the next KNOB (ROBINET) step.
- 8. Move the gas control knob counterclockwise

 to "ON". (See Figure 1)
- 9. Replace the control access door/panel (upper door if two-door model).
- 10. Turn on all electrical
 - Figure 1 power to the appliance.
- 11. Turn the thermostat to a desired setting. 12. If the appliance will not operate, follow the
- instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.

MODE D'EMPLOI

- 1. ATTENTION! Lire d'abord la liste des mesures de sécurité ci-dessus.
- 2. Mettre le thermostat à la position minimale.
- 3. Couper le courant électrique qui mène à l'appareil.
- 4. Cet appareil ménager étant doté d'un système d'allumage automatique, ne pas essayer d'allumer le brûleur manuellement.
- 5. Retirer le panneau/volet d'accès de commande (panneau supérieur s'il s'agit d'un modèle à deux panneaux).
- 6. Faire tourner le robinet à gaz dans le sens des aiguilles d'une montre 🍙 pour l'amener sur la position OFF (Arrêt) (Voir Figure 1).
- 7. Attendre cinq (5) minutes pour s'assurer de la dissipation du gaz.
 - En cas d'odeur, ARRÊTER LE PROCÉDÉ. Suivre les instructions ci-dessus (Section B). En l'absence de toute odeur de gaz, avancer à l'étape suivante.
- 8. Faire tourner le robinet à gaz dans le sens inverse des aiguilles d'une montre no pour l'amener sur la position ON (Marche) (Voir Figure 1).
- 9. Remettre le panneau/volet d'accès de commande en place (panneau supérieur s'il s'agit d'un modèle à deux panneaux).
- 10. Rebrancher l'appareil sur le réseau électrique.
- 11. Ajuster le thermostat à la position désirée.12. Si l'appareil ne fonctionne pas, suivre les "Directives d'arrêt" cidessous et appeler le technicien de service.

TO TURN OFF GAS TO APPLIANCE

- 1. Set the thermostat to the lowest setting.
- 2. Turn off all electrical power to the appliance if service is to be performed.
- 3. Remove the control access door/panel (upper door if two-door model).
- 4. Move the gas control knob clockwise
 to "OFF". Do not use force. (See Figure 1)
- 5. Replace the control access door/panel (upper door if two-door model).

DIRECTIVES D'ARRÊT

- 1. Mettre le thermostat à la position minimale.
- 2. Débrancher l'appareil en prévision de la réparation.
- 3. Retirer le panneau/volet d'accès de commande (panneau supérieur s'il s'agit d'un modèle à deux panneaux).
- 4. Faire tourner le robinet à gaz dans le sens des aiguilles d'une montre pour l'amener sur la position OFF (Arrêt) Ne pas forcer (Voir Figure 1).
- 5. Remettre le panneau/volet d'accès de commande en place (panneau supérieur s'il s'agit d'un modèle à deux panneaux).

7106750 (Replaces 710329A) (03/07)

Figure 23. Gas Valve Label for 6 Ton Units

FOR YOUR SAFETY READ BEFORE OPERATING

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury, or loss of life.

- A. This appliance does not have a pilot. It is equipped with an ignition device which automatically lights the burner. Do <u>not</u> try to light the burner by hand.
- B. BEFORE OPERATING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor. WHAT TO DO IF YOU SMELL GAS
- · Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or move by hand, do not try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

POUR VOTRE SÉCURITÉ. À LIRE AVANT L'EMPLOI

ATTENTION! L'inobservation de ces instructions peut entraîner un incendie ou une explosion pouvant causer des dammages à votre propriété à votre personne, ou la mort.

- A. Cet appareil ménager n'a pas de veilleuse. Il est doté d'un système d'allumage automatique. Ne pas essayer d'allumer le brûleur manuellement.
- B. AVANT L'USAGE. Attention à une possible odeur de gaz surtout au niveau du plancher où les gaz les plus lourds ont la tendance de se concentrer.

EN CAS D'ODEUR DE GAZ.

- Ne mettre en marche aucun appareil électrique.
- Ne toucher à aucun commutateur électrique, ne pas employer le téléphone.
- Quitter le bâtiment immédiatement et avertir la compagnie du gaz en utili sant le téléphone d'un voisin.
- A défaut de la compagnie du gaz, avertir le service des pompiers.
- C. Enfoncer ou faire tourner le robinet à gaz à la main seulement. Ne jamais utiliser d'outils. S'il n'est pas possible de faire tourner ou d'enfoncer le robinet à la main, ne pas essayer de le réparer. Faire appel à un spécialiste. Forcer ou tenter de réparer le robinet pourrait être à l'origine d'une explosion ou d'un incendie.
- D. Il est déconseillé d'utiliser cet appareil en contact prolongé avec l'eau. Faire inspecter ou remplacer toute commande par un technicien qualifié si un des systèmes de contrôle du gaz s'est trouvé sous l'eau.

OPERATING INSTRUCTIONS

- 1. **STOP!** Read the safety information above on this label.
- 2. Set the thermostat to the lowest setting.
- 3. Turn off all electrical power to the appliance.
- 4. The appliance's ignition device automatically lights the burner. Do not try to light burner by hand.5. Remove the control access door/panel (upper door if
- two-door model).

 6. Move the gas control switch to the "OFF" position. (See
- Move the gas control switch to the "OFF" position. (See Figure 1)
- 7. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in above information. If you SWITCH don't smell gas, go to (INTERRUPTEUR)

the next step.

8. Move the gas control switch to the "ON"

position. (See Figure 1)
9. Replace the control access door/panel (upper door if two-door model).

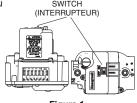


Figure 1

- 10. Turn on all electrical power to the appliance.
- 11. Turn the thermostat to a desired setting.
- If the appliance will not operate, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.

MODE D'EMPLOI

- ATTENTION! Lire d'abord la liste des mesures de sécurité ci-dessus.
- 2. Mettre le thermostat à la position minimale.
- 3. Couper le courant électrique qui mène à l'appareil.
- Cet appareil ménager étant doté d'un système d'allumage automatique, ne pas essayer d'allumer le brûleur manuellement.
- Retirer le panneau/volet d'accès de commande (panneau supérieur s'il s'agit d'un modèle à deux panneaux).
- Réglez l'interrupteur de commande du gaz à la position "OFF". (voir Figure 1).
- 7. Attendre cinq (5) minutes pour s'assurer de la dissipation du gaz.
- En cas d'odeur, ARRÊTER LE PROCÉDÉ. Suivre les instructions ci-dessus (Section B). En l'absence de toute odeur de gaz, avancer à l'étape suivante.
- 8. Réglez l'interrupteur de commande du gaz à la position "ON". (voir Figure 1).
- Remettre le panneau/volet d'accès de commande en place (panneau supérieur s'il s'agit d'un modèle à deux panneaux).
- 10. Rebrancher l'appareil sur le réseau électrique.
- 11. Ajuster le thermostat à la position désirée.
- 12. Si l'appareil ne fonctionne pas, suivre les "Directives d'arrêt" cidessous et appeler le technicien de service.

TO TURN OFF GAS TO APPLIANCE

- 1. Set the thermostat to the lowest setting.
- Turn off all electrical power to the appliance if service is to be performed.
- Remove the control access door/panel (upper door if two-door model).
- Move the gas control switch to the "OFF" position. Do not use force. (See Figure 1)
- Replace the control access door/panel (upper door if two-door model).

DIRECTIVES D'ARRÊT

- 1. Mettre le thermostat à la position minimale.
- 2. Débrancher l'appareil en prévision de la réparation.
- Retirer le panneau/volet d'accès de commande (panneau supérieur s'il s'agit d'un modèle à deux panneaux).
- 4. Réglez l'interrupteur de commande du gaz à la position "OFF". Ne forcez pas. (voir Figure 1).
- Remettre le panneau/volet d'accès de commande en place (panneau supérieur s'il s'agit d'un modèle à deux panneaux).

710674-0 (Replaces 7104030) (03/07)

INSTALLATION/PERFORMANCE CHECK LIST

INSTALLATION ADDRESS:					
CITY	STATE				
UNIT MODEL #					
UNIT SERIAL #					

Unit Installed Minimum clearances per Figure 6 (page 9)?	YES	NO
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ELECTRICAL SYSTEM:						
Electrical connections tight?	YES	NO				
Line voltage polarity correct?	NO					
Rated Voltage:		VOLTS				
L1-L2 Volts:		VOLTS				
L1-L3 Volts:		VOLTS				
L2-L3 Volts:		VOLTS				
Avg. Volts:		VOLTS				
Max. deviation of voltage from avg. volts:		VOLTS				
% Volt imbalance:		VOLTS				
Blower Motor HP:		VOLTS				
Has the thermostat been calibrated?	YES	NO				
Is the thermostat level?	YES	NO				
Is the heat anticipator setting correct?	YES	NO				

VENTING SYSTEM:						
Is the vent hood installed?	YES	NO				
Is vent hood free from restrictions	YES	NO				
Filter(s) secured in place?	YES	NO				
Filter(s) clean?	YES	NO				







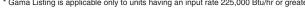


^{*} Gama Listing is applicable only to units having an input rate 225,000 Btu/hr or greater

INSTALLER NAME:	
CITY	STATE

GAS SYSTEM:						
Gas Type: (circle one)	Natural Gas	Propane				
Gas pipe connections leak-tested?	NO					
Gas Line Pressure:		(in - W.C.)				
Is there adequate fresh air supply for combustion and ventilation?	YES	NO				
Installation Altitude:		(FT.)				
Deration Percentage:		(%)				
Furnace Input:		(Btuh)				
Supply Air Temperature:		(° F)				
Return Air Temperature:		(° F)				
Temperature Rise:		(° F)				
During Furnace C	Operation:					
Low fire manifold pressure:		(in - W.C.)				
High fire manifold pressure:		(in - W.C.)				

REFRIGERATION SYSTEM:						
Was unit given 24 hr warm up period for crankcase heaters?	YES	NO				
Stage-1 Liquid Pressure (high side) _						
Stage-1 Liquid Temperature						
Stage-1 Suction Pressure (low side) _						
Stage-2 Liquid Pressure (high side) _						
Stage-2 Liquid Temperature						
Stage-2 Suction Pressure (low side) _						
Has the owner's information been reviewed with the customer?	YES	NO				
Has the Literature Package been left with the unit?	YES	NO				





708880A(Replaces 7088800)

