

**CITY OF SACRAMENTO**

**1231 I Street, Sacramento, CA 95814**

**Permit No: 0008846**

**Insp Area: 2**

**Site Address: 5626 DELCLIFF CR SAC**

Parcel No: 024-0450-040

Sub-Type: RES

Housing (Y/N): N

CONTRACTOR

CLARK & RUSH MECH  
4411 AUBURN  
SAC CA 95841

OWNER

JENSEN ARTHUR NEAL SR/PATRI  
5626 DELCLIFF CR  
SACRAMENTO CA 95822

ARCHITECT

**Nature of Work: HVAC CHANGE-OUT PACKAGE. MINOR ELECTRIC-REWIRE.**

**CONSTRUCTION LENDING AGENCY :** I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C).

Lender's Name \_\_\_\_\_ Lender's Address \_\_\_\_\_

**LICENSED CONTRACTORS DECLARATION:** I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with section 7000) of Division 3 of the Business and Professions Code and my license is in full force and effect.

License Class C20 License Number 608005 Date 8-2-00 Contractor Signature [Signature]

**OWNER-BUILDER DECLARATION:** I hereby affirm under penalty of perjury that I am exempt from the contractors License Law for the following reason (Sec. 7031.5, Business and Professions Code; any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 (commencing with Section 7000) of Division 8 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars (\$500.00):

\_\_\_\_ I, as a owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his/her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he/she did not build or improve for the purpose of sale.)

\_\_\_\_ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code). The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law.

\_\_\_\_ I am exempt under Sec. \_\_\_\_\_ B & PC for this reason: \_\_\_\_\_

Date \_\_\_\_\_ Owner Signature \_\_\_\_\_

**IN ISSUING THIS BUILDING PERMIT,** the applicant represents, and the city relies on the representation of the applicant, that the applicant verified all measurements and locations shown on the application or accompanying drawings and that the improvement to be constructed does not violate any law or private agreement relating to permissible or prohibited locations for such improvements. This building permit does not authorize any illegal location of any improvement or the violation of any private agreement relating to location of improvements.

I certify that I have read this application and state that all information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction and hereby authorize representative(s) of this city to enter upon the above mentioned property for inspection purposes.

Date 8-2-00 Applicant/Agent Signature [Signature]

**WORKER'S COMPENSATION DECLARATION:** I hereby affirm under penalty of perjury one of the following declarations:  
\_\_\_\_ I have and will maintain a certificate of consent to self-insure for workers' compensation as provided for by Section 3700 of the Labor Code, for the performance of work for which the permit is issued.

I have and will maintain workers' compensation insurance as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier LEGION INSURANCE **NEIGHBORHOODS, PLANNING AND DEVELOPMENT SERVICES** Number WC11200989 Exp Date 10/01/2000

(This section need not be completed if the permit is for \$100 or less) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

Date 8-2-00 Applicant Signature [Signature]

**WARNING: FAILURE TO SECURE WORKER'S COMPENSATION COVERAGE IS UNLAWFUL AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000) IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST AND ATTORNEY'S FEE.**

**THIS PERMIT SHALL EXPIRE BY LIMITATION IF WORK IS NOT COMMENCED WITHIN 180 DAYS.**

**⚠ WARNING**  
 Before performing service or maintenance operations on unit, turn off gas supply *then* unit main power switch. Electrical shock or explosion could cause serious injury or death.

**⚠ CAUTION**  
 Puron (R-410A) systems operate at higher pressures than standard R-22 systems. Do not use R-22 service equipment or components on Puron (R-410A) equipment. Ensure service equipment is rated for Puron (R-410A).

**GENERAL** -- The 48GP units (see Fig. 1) are fully self-contained, combination Category I gas heating/electric cooling units designed for outdoor installation. See Fig. 5 and 7 for unit dimensions. All unit sizes have discharge openings for both horizontal and downflow configurations, and are factory shipped with all downflow duct openings covered. Units may be installed either on a rooftop, cement slab, or directly on the ground (if permitted by local codes). See Figs. 4 and 5 for roof curb dimensions.

48GPN units are dedicated Low NOx units designed for California installations. These models meet the California maximum oxides of nitrogen (NOx) emissions requirement of 40 nanograms/joule or less, as shipped from the factory and **MUST** be installed in California Air Quality Management Districts where a Low NOx rule exists.

**RECEIVING AND INSTALLATION**

**Step 1—Check Equipment**

**IDENTIFY UNIT** — The unit model number and serial number are stamped on unit identification plate. Check this information against shipping papers and job data.

**INSPECT SHIPMENT** — Inspect for shipping damage while unit is still on shipping pallet. If unit appears to be damaged or is torn loose from its anchorage, have it examined by transportation inspectors before removal. Forward claim papers directly to transportation company. Manufacturer is not responsible for any damage incurred in transit.

Check all items against shipping list. Immediately notify the nearest Carrier Air Conditioning office if any item is missing.

To prevent loss or damage, leave all parts in original packages until installation.

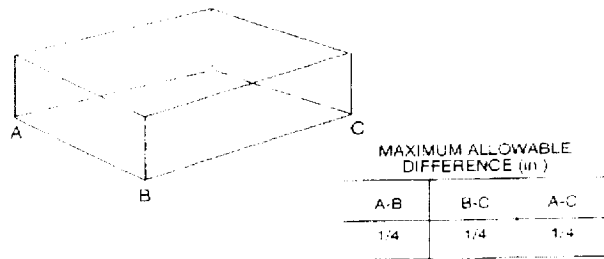
**Step 2—Provide Unit Support**

**ROOF CURB** — Install accessory roof curb in accordance with instructions shipped with curb. See Figs. 4 and 5 and Table 1 for roof curb dimensions. Install insulation, cant strips, roofing, and flashing. Ductwork must be attached to curb.

**IMPORTANT:** The gasketing of the unit to the roof curb is critical for a watertight seal. Install gasketing material supplied with the roof curb. Improperly applied gasketing can also result in air leaks and poor unit performance.

Curb should be level to within 1/4 inch. This is necessary for unit drain to function properly. Refer to accessory roof curb installation instructions for additional information as required (see Fig. 2).

**SLAB MOUNT** — Place the unit on a solid, level concrete pad that is a minimum of 4 in. thick with 2 in. above grade. The slab should be flush on the compressor end of the unit (to allow condensate drain installation) and should extend 2 in. on the three remaining sides of the unit. See Fig. 3. Do not secure the unit to the slab *except* when required by local codes.



**Fig. 2—Unit Leveling Tolerances**

C99065

**GROUND MOUNT** — The unit may be installed either on a slab or placed directly on the ground if local codes permit. Place the unit on level ground prepared with gravel for condensate discharge.

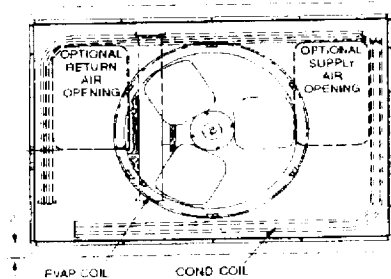
**Step 3—Field Fabricate Ductwork**

Secure all ducts to roof curb and building structure on vertical discharge units. *Do not connect ductwork to unit.* For horizontal applications, unit is provided with flanges on the horizontal openings. All ductwork should be secured to the flanges. Insulate and weatherproof all external ductwork, joints, and roof openings with counter flashing and mastic in accordance with applicable codes.

Ducts passing through an unconditioned space must be insulated and covered with a vapor barrier.

If a plenum return is used on a vertical unit, the return should be ducted through the roof deck to comply with applicable fire codes.

A minimum clearance is not required around ductwork. Cabinet return-air static shall not exceed -.25 in. wg.



**Fig. 3—Slab Mounting Details**

C99014

**Step 4—Provide Clearances**

The required minimum operating and service clearances are shown in Fig. 6 and 7. Adequate combustion, ventilation, and condenser air must be provided, in accordance with section 5.3, Air for Combustion and Ventilation, of the National Fuel Gas Code ANSI (American National Standards Institute) Z223.1 (in Canada, sections 7.2, 7.3 or 7.4 or Can/CGA [Canadian Gas Association] B149 Installation Codes), or applicable provisions of local building code.

**⚠ CAUTION**  
 Do not restrict condenser airflow. An air restriction at either the outdoor air inlet or the fan discharge can be detrimental to compressor life.

The condenser pulls air through the condenser coil and discharges it through the top cover. Be sure that the fan discharge does not

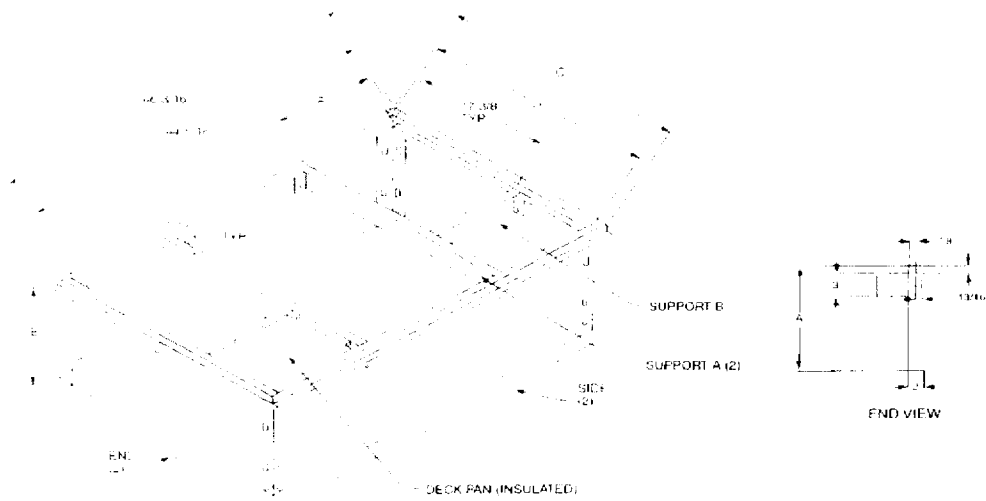


Fig. 4—Roof Curb Dimensions  
Top View

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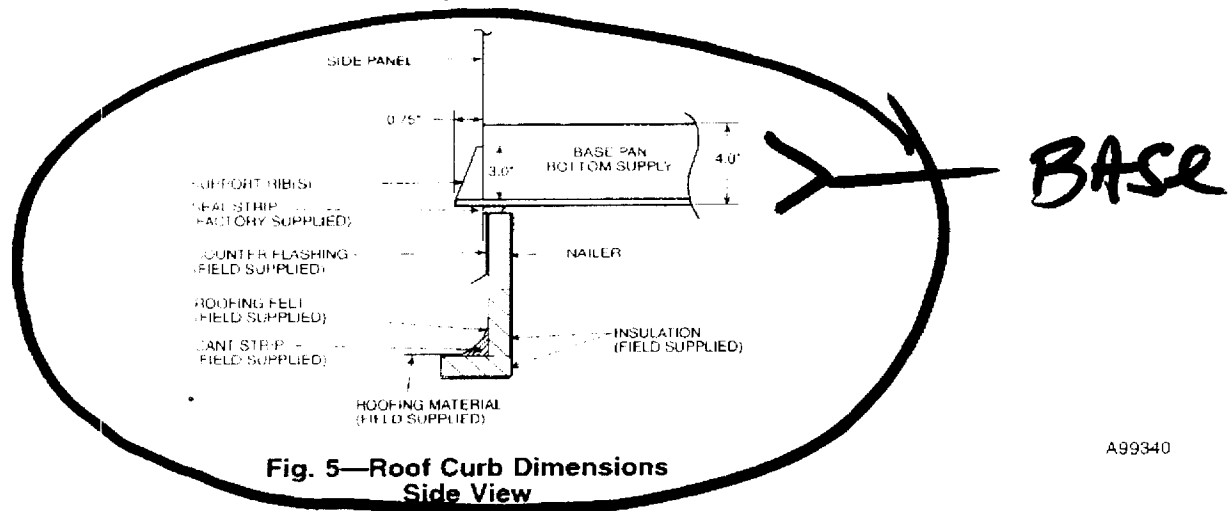


Fig. 5—Roof Curb Dimensions  
Side View

A99340

	UNIT SIZE	ODS ORDER NUMBER	A IN. [MM]	B IN. [MM]	C IN. [MM]	D IN. [MM]
ROOF CURB	48GP024-036	CPRFCURB006A00	8 [203]	11 27/32 [301]	30 5/8 [778]	28 3/4 [730]
		CPRFCURB007A00	14 [356]	11 27/32 [301]	30 5/8 [778]	28 3/4 [730]
	48GP042-060	CPRFCURB008A00	8 [203]	15 27/32 [402]	42 1/8 [1070]	40 1/4 [1022]
		CPRFCURB009A00	14 [356]	15 27/32 [402]	42 1/8 [1070]	40 1/4 [1022]

Notes

1. Roof curb must be set up for unit being installed.
2. Seal strip must be applied as required to unit being installed.
3. Dimensions in [ ] are in millimeters.
4. Roof curb is made of 16 gage steel.
5. Table lists only the dimensions per part number that have changed.
6. Attach ductwork to curb (flanges of duct rest on curb).
7. Insulated panels: 1 in. thick fiberglass; 1 lb. density.
8. Dimensions are in inches.

Table 1—Roof Curb Dimensions

recirculate to the condenser coil. Do not locate the unit in either a corner or under an overhead obstruction. The minimum clearance under a partial overhang (such as a normal house overhang) is 48 in. above the unit top. The maximum horizontal extension of a partial overhang must not exceed 48 inches.

Do not place the unit where water, ice, or snow from an overhang or roof will damage or flood the unit. Do not install the unit on carpeting, tile, or other combustible materials. The unit may be installed on good flooring or on Class A, B, or C roof covering material.

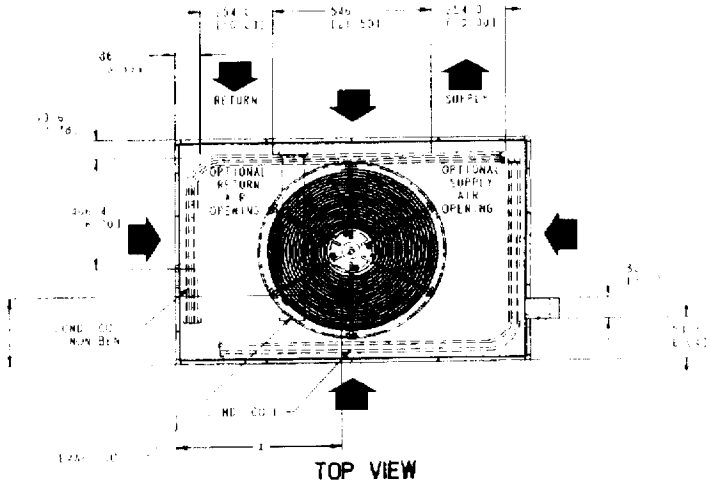
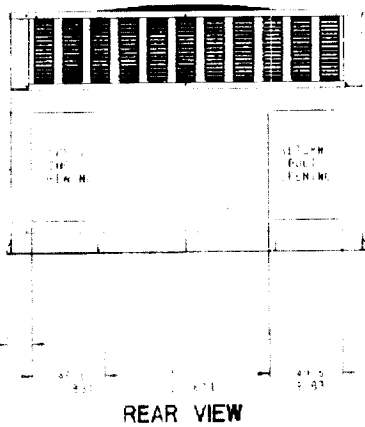
Step 5—Rig and Place Unit

Rigging and handling of this equipment can be hazardous for many reasons due to the installation location (roofs, elevated structures, etc.).

Only trained, qualified crane operators and ground support staff should handle and install this equipment.

When working with this equipment, observe precautions in the literature, on tags, stickers and labels attached to the equipment, and any other safety precautions that might apply.

Training for operations of the lifting equipment should include, but NOT be limited to the following:



**REQ'D CLEARANCES FOR OPERATION AND SERVICING, in. (mm)**

Evaporator coil access side	36 (914)
Power entry side (except for NEC requirements)	36 (914)
Unit top	48 (1219)
Side opposite ducts	36 (914)
Duct panel	12 (304.8)*

\*Minimum distances. If unit is placed less than 12 in. (304.8 mm) from wall system, then the system performance may be compromised

**LEGEND**

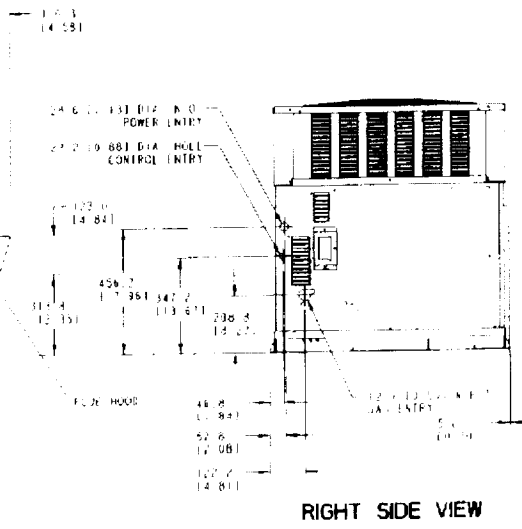
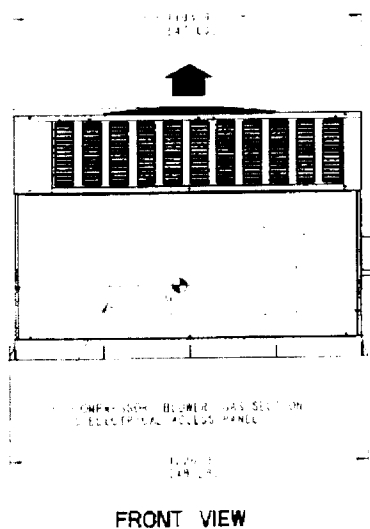
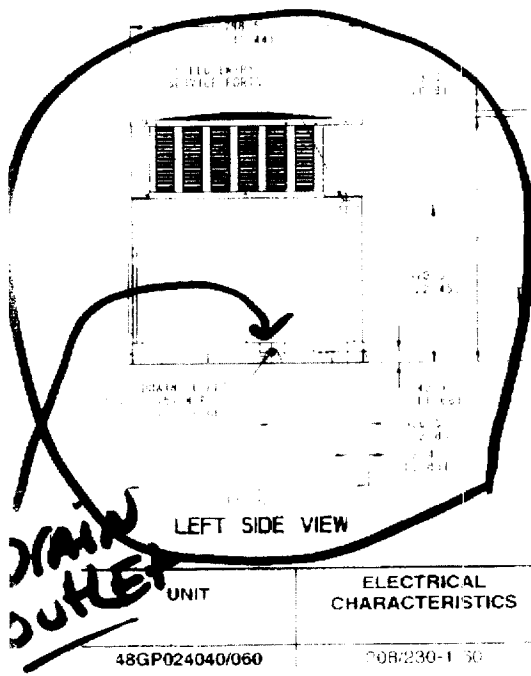
- CG - Center of Gravity
- COND - Condenser
- EVAP - Evaporator
- NEC - National Electrical Code
- REQ'D - Required
- Note: Dimensions are in in. (mm)

**REQ'D CLEARANCES TO COMBUSTIBLE MAT'L, in. (mm)**

Top of unit	14 (355.6)
Duct side of unit	14 (355.6)
Side opposite ducts	14 (355.6)
Bottom of unit	0.50 (12.7)
Flue panel	36 (914.4)

**NEC REQ'D CLEARANCES, in. (mm)**

Between units, power entry side	42 (1066.8)
Unit and ungrounded surfaces, power entry side	36 (914)
Unit and block or concrete walls and other grounded surfaces, control box side	42 (1066.8)



**DRAIN OUTLET**

C99017

UNIT	ELECTRICAL CHARACTERISTICS	UNIT WEIGHT		UNIT HEIGHT IN. [MM] "A"	CENTER OF GRAVITY IN. [MM]		
		lb	kg		X	Y	Z
48GP024040/060	208/230-1-60	290.0	131.5	37.02 [940.3]	22.0 [558.8]	14.5 [368.3]	16.0 [406.4]
48GP030040/060	208/230-1-60 208/230-3-60	315.0	142.0	39.02 [991.1]	22.0 [558.8]	15.3 [387.4]	17.6 [447.0]
48GP036060/090	208/230-1-60 208/230-3-60 460-3-60	321.0	145.0	36.02 [889.5]	22.0 [558.8]	15.3 [387.4]	16.5 [419.1]

Fig. 6—48GP024-036 Unit Dimensions

# Clarke & Rush

M E C H A N I C A L

★FY1088



Air Conditioning • Heating • Refrigeration  
4411 Auburn Blvd. • Sacramento, CA 95841-4108  
(916) 609-"COOL" (2665) • Fax (916) 609-2627 • www.clarke-rush.com  
License # 608005



## PROPOSAL AND PURCHASE AGREEMENT

To: MR + MRS Art Jensen  
Address: 5626 Deleville Cir  
Job Address: SAC CA 95822

Date: 6/30/00  
Phone: 424-4430  
PATTY Work: 331-7600  
Map: 317-44

We propose to furnish the necessary labor, material, tools and equipment to perform the following:

Remove original ground heat/Air unit using a large crane and haul away. Correct and rebuild supply and return plenums, and install a new Carrier 115,000 B.T.U. (80% A.F.U.E.) gas furnace and a 4 TON (12 SEER) A/C system "Purton" ~~486P0481153~~ (B) 486P0481153 Clarke + Rush supply all City permits. Power-VAC complete DIRT system and clean, seal, repair and seal. Also correct poor airflow in study (see owner) increase return air to pull more, and increase air flow from both floor vents. Also cut-in a second supply in master bedroom. All work will be done in less than 2 days!!  
Factory Carrier 20 year Heat Exchanger 10yr Compressor  
Factory Carrier 10 year Equipment parts Warranty  
Plus first year 2 service/tuneups  
Includes all State and Local taxes Contract Amount \$ 6306.00

Any additional work not listed above will be billed in addition to the quoted price. This proposal expires 30 days from the above date and may not be valid unless accepted during this period.

Terms: This amount will be due and payable upon completion unless other terms are arranged with our office. Payments not made when due shall bear interest at the rate of 1 1/2% per month, payable monthly from time amount became due

HEREBY ACKNOWLEDGE THAT I AM FAMILIAR WITH THE CONTENTS OF THIS AGREEMENT, BOTH FRONT AND BACK, AND I HEREBY ACKNOWLEDGE RECEIPT OF A COPY OF THIS CONTRACT. DO NOT SIGN THIS CONTRACT UNTIL YOU HAVE READ THE CONTENTS ON THE REVERSE SIDE.



Per Mark Thyme #609-2622 Estimator

Acceptance: The foregoing is accepted this 18th day of July 2000  
you the buyer, may cancel this transaction at any time prior to midnight of the third business day after the date of this transaction.

~~5935155108~~  
~~5665412001~~  
Signed Per [Signature]



# FAX COVER SHEET

DATE 9/28/00

FROM: MARK THYNE

TO Steve Gorman

**CLARKE AND RUSH MECHANICAL**

COMPANY City of SAC

**FAX # 916-609-2627**

FAX # 204-8370

**PHONE # 916-609-2665**

PHONE # 204-8451

NUMBER OF PAGES 6

**SUBJECT:** Inspection of ground HVAC unit located  
at 5626 Delcliff Cir SAC CA 95822

DEAR Steve,  
**REMARKS:** See: Provide unit support "ground mount"  
page #2 of installation instructions, also on page #3  
these Carrier ground package units have a built in  
base that is 4" thick and the unit sits  
on top of that. There is a cemented area  
from original install with granite gravel around  
it. No problem to correct concrete down -

Please review the front of the cement Thank x Mark Thyme  
\*\*\*If the reader is not the intended recipient, we request that you telephone  
us or mail this copy back to us at our address below. THANK YOU\*\*\*  
916-609-2622  
or  
cell #497-036



# 48GP, 48GPN Single Package Gas Heating/Electric Cooling Units With Puron® (R-410A) Refrigerant

Visit [www.carrier.com](http://www.carrier.com)

## Installation, Start-Up, and Operating Instructions 48GP, 48GPN Sizes 024-060

**NOTE:** Read the entire instruction manual before starting the installation.

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**NOTE TO INSTALLER** — Before the installation, READ THESE INSTRUCTIONS CAREFULLY AND COMPLETELY. Also, make sure the User's Manual and Replacement Guide are left with the unit after installation. The furnace is **NOT** to be used for temporary heating of buildings or structures under construction.

### SAFETY CONSIDERATIONS

Installation and servicing of air conditioning equipment can be hazardous due to system pressure and electrical components. Only trained and qualified personnel should install, repair, or service air conditioning equipment.

Trained personnel can perform basic maintenance functions of cleaning coils and filters. All other operations should be performed by trained service personnel. When working on air conditioning equipment, observe precautions in the literature, tags and labels attached to the unit, and other safety precautions that may apply. Follow all safety codes. Wear safety glasses and work gloves. Use jetching cloth for brazing operation. Have fire extinguisher available for all brazing operations.

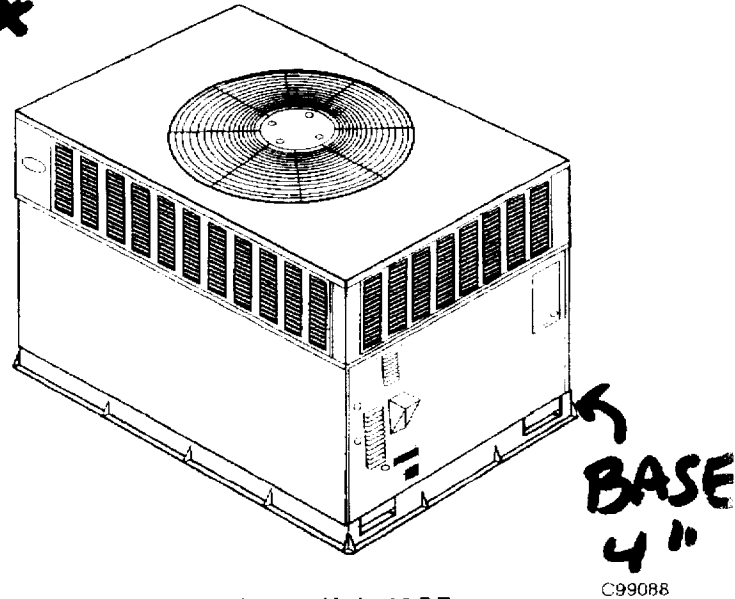


Fig. 1—Unit 48GP

### RULES FOR SAFE INSTALLATION AND OPERATION

#### ⚠ WARNING

Improper installation, adjustment, alteration, service, maintenance, or use can cause carbon monoxide poisoning, fire, or an explosion which can result in serious injury or unit damage. Consult a qualified installer, service agency, or gas supplier for information or assistance. The qualified installer or agency must use only factory authorized kits or accessories when modifying this product.

Understand the signal words —**DANGER, WARNING,** and **CAUTION.** DANGER identifies the most serious hazards which will result in severe serious injury or death. WARNING indicates a condition that could result in serious injury or death. CAUTION is used to identify unsafe practices which would result in minor or moderate injury or product and property damage.

The power supply (volts, phase, and hertz) must correspond to that specified on unit rating plate.

The electrical supply provided by the utility must be sufficient to handle load imposed by this unit.

This installation must conform with local building codes and with NEC (National Electrical Code) and NFPA 70, NFPA 54/ANSI Z223.1 latest revision, and NFPA (National Fuel Gas Code). Refer to provincial and local plumbing or waste water codes and other applicable local codes.

Approved for outdoor installation on wood flooring or on class A, B or C roof covering materials.

Manufacturer reserves the right to discontinue, or change at any time, specifications or designs without notice and without incurring obligations.