INSTALLATION INSTRUCTIONS FOR 95% 4 POSITION CONDENSING SINGLE STAGE GAS FURNACES WITH CONSTANT-TORQUE AIR CIRCULATING BLOWER



RECOGNIZE THIS SYMBOL AS AN INDICATION OF IMPORTANT SAFETY INFORMATION!

WARNING

IF THE INFORMATION IN THESE INSTRUCTIONS IS NOT FOLLOWED EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

WARNING

THESE INSTRUCTIONS ARE INTENDED AS AN AID TO QUALIFIED SERVICE PERSONNEL FOR PROPER INSTALLATION, ADJUSTMENT AND OPERATION OF THIS UNIT. READ THESE INSTRUCTIONS THOROUGHLY BEFORE ATTEMPTING INSTALLATION OR OPERATION. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN IMPROPER INSTALLATION, ADJUSTMENT, SERVICE OR MAINTENANCE, POSSIBLY RESULTING IN FIRE, ELECTRICAL SHOCK, CARBON MONOXIDE POISONING, EXPLOSION, PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

WARNING

CARBON-MONOXIDE POISONING HAZARD FAILURE TO FOLLOW INSTRUCTIONS COULD RESULT IN SEVERE PERSONAL INJURY OR DEATH DUE TO CARBON-MONOXIDE POISONING, IF COMBUSTION PRODUCTS INFILTRATE INTO THE BUILDING.

CHECK THAT ALL OPENINGS IN THE OUTSIDE WALL AROUND THE VENT (AND AIR INTAKE) PIPE(S) ARE SEALED TO PREVENT INFILTRATION OF COMBUSTION PRODUCTS INTO THE BUILDING.

CHECK THAT FURNACE VENT (AND AIR INTAKE) TERMINAL(S) ARE NOT OBSTRUCTED IN ANY WAY DURING ALL SEASONS.

WARNING

- Do not store or use gasoline or other flammable vapors and liquids, or other combustible materials 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.
- 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.
- Do not return to your home until authorized by the gas supplier or fire department.
- DO NOT RELY ON SMELL ALONE TO DETECT LEAKS. DUE TO VARIOUS FACTORS, YOU MAY NOT BE ABLE TO SMELL FUEL GASES.
- U.L. and/or C.S.A. recognized fuel gas and CO (carbon monoxide) detectors are recommended in all applications, and their installation should be in accordance with the manufacturer's recommendations and/or local laws, rules, regulations, or customs.
- Improper installation, adjustment, alteration, service or maintenance can cause injury
 property damage or death. Refer to this manual. Installation and service must be
 performed by a qualified installer, service agency or the gas supplier. In the
 commonwealth of Massachusetts, installation must be performed by a licensed plumber
 or gas fitter for appropriate fuel.

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

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General Information

GENERAL INFORMATION

NOTE: A heat loss calculation should be performed to properly determine the required furnace BTU size for the structure. Also, the duct must be properly designed and installed for proper airflow. Existing ductwork must be inspected for proper size and to make sure that it is properly sealed. Proper airflow is necessary for both user comfort and equipment performance.

Before opening the furnace carton, verify that the data tags on the carton specify the furnace model number that was ordered from the distributor and are correct for the installation. If not, return the unit without opening the carton. If the model number is correct, open the carton and verify that the furnace rating label specifies the same furnace model number that is specified on the carton label. If the model numbers do not match, return the furnace to the distributor.

IMPORTANT: Proper application, installation and maintenance of this furnace and system is a must if consumers are

to receive the full benefits for which they have paid. This 95% single stage series furnace is design-certified by CSA for use with natural and propane gases as follows:

- As non-direct vent central forced air furnaces taking combustion air from the installation area or using air ducted from the outside.
- 2. As direct vent central forced air furnaces with all combustion air supplied directly to the furnace burners through a special air intake system outlined in these instructions.Install this furnace in accordance with the American National Standard Z223.1 – latest edition entitled "National Fuel Gas Code" (NFPA54) or, for Canada, CSA B149.1; Canadian Gas and Propane Installation Code and requirements or codes of the local utilities or other authorities having jurisdiction. This is available from the following:

National Fire Protection Association, Inc. Batterymarch Park Quincy, MA 02269

CSA-INTERNATIONAL

GENERAL INFORMATION (cont.)

5060 Spectrum Way Mississauga, Ontario Canada L4W5N6 Online: www.csa.ca

In Canada installations must comply with CSA B149.1.

Install units in Canada in accordance with CSA-B149, local installation codes and authorities having jurisdiction. CSA-B149.1 is available from:

CSA INTERNATIONAL 5060 Spectrum Way Mississauga, Ontario Canada L4W 5N6

online: www.csa.ca

NOTICE: Any equipment immersed in water (including by flooding) must be replaced. Equipment and products immersed in water will have operation adversely affected thereby voiding the warranty.

RECEIVING

Immediately upon receipt, all cartons and contents should be inspected for transit damage. Units with damaged cartons should be opened immediately. If damage is found, it should be noted on the delivery papers, and a damage claim filed with the last carrier.

- After unit has been delivered to job site, remove carton taking care not to damage unit.
- Check the unit rating plate to be sure equipment matches job specifications.
- Read the entire instructions before starting the installation.
- Install the unit in such a way as to allow necessary access for service.
- Always remove the solid metal base pan from the top of the furnace. The base pan is installed in this location for shipping purposes only and should never remain in the as-shipped location after installation.
- Install the unit with a 1/4" to 1/2" forward slope (toward front) to ensure proper drainage.
- Install the unit in accordance with any local code which may apply and the national codes. Latest editions are available from: "National Fire Protection Association, Inc., Batterymarch Park, Quincy, MA 02269." These

publications are:

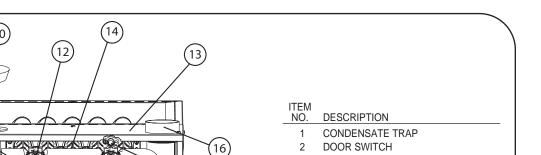
- ANSI/NFPA No. 70-(Latest Edition) National Electrical Code.
- NFPA90A Installation of Air Conditioning and Ventilating Systems.
- NFPA90B Installation of warm air heating and air conditioning systems.
- In Canada CSA 22.2 Canadian Electrical Code.
- In Canada CSA B149.1; Canadian Natural Gas and Propane Installation Code.

MATERIAL INFORMATION

All manufacturer products meet current Federal OSHA Guidelines for safety. Most consumers are aware that products present safety and health risks, when improperly used, handled and maintained. More details are available at the Websites for OSHA (Occupational Safety and Health Administration), at www.osha.gov.

EFFICIENCY TESTING NOTICE

For purposes of verifying or testing efficiency ratings, the test procedure in Title 10 APPENDIX N to Subpart B of Part 430 (Uniform Test Method for Measuring the Energy Consumption of Furnaces and Boilers) and the clarifying provisions provided in the AHRI Operations Manual for Residential Furnaces that were applicable at the date of manufacture should be used for test set up and performance.



General Information

Installation Instructions remain with the furnace as a reference guide to the servicing contractor. We recommend that performance and installation data be recorded for future reference on this sheet to meet service and warranty obligations so that job site information is available when required.

Installation Checklist	ft. of pipe – exhaust pipe (record length)		
REFER TO INSTALLATION INSTRUCTIONS	no. of elbows – exhaust pipe (record number of elbows)		
GAS SUPPLY	Exhaust Vent Temperature (record temperature)		
Correct pipe size (record size)	TERMINATIONS – DIRECT VENT		
Correct supply pressure (during furnace operation) (record pressure)	VERTICAL		
Manifold pressure (record upstream pressure) No gas leaks L.P. Kit Number (if applicable) (record kit number)	Intake – 12" [305mm] min. above roof/snow level (record height above anticipated snow level) or, in Canada, intake and exhaust vents conform with CSA B149.1; Canadian Natural Gas and Propane Installation Code		
ELECTRICAL	Correct relationship – exhaust to intake		
115 V.A.C. supply (Dedicated Circuit) (record voltage)	HORIZONTAL/VERTICAL – CONCENTRIC (RXGY-E03A)		
Polarity observed Furnace properly grounded Correct wire size (record type and gauge)	Intake – 12" [305mm] min. above roof/snow level (record height above anticipated snow level) or, in Canada, intake and exhaust vents conform with CSA B149.1; Canadian Natural Gas and Propane Installation Code		
FURNACE INSTALLATION	Exhaust sloped down toward furnace		
Correct clearance to combustibles (record clearance)	Correct distances (horizontal and vertical) – exhaust to intake		
Correct clearance for service (at front) (record clearance)	12" [305mm] min. above grade/snow level (record height above anticipated snow level) or, in Canada, intake and exhaust vents conform with CSA B149.1; Canadian Natural Gas and		
DUCT STATIC PRESSURE	Propane Installation Code		
in. w.c. on heating speed (record static pressure)	Above anticipated snow level (record maximum		
in. w.c. on cooling speed (record static pressure) Air temperature rise in heat (record air temperature	anticipated snow level) VENTING – NON-DIRECT VENT		
rise)			
Air temperature rise in cool (record air temperature	<pre> in. diameter – exhaust pipe (record diameter) ft. of pipe – exhaust (record length)</pre>		
rise)			
	no. of elbows (record number of elbows) TERMINATION – NON-DIRECT VENT		
Trap filled with water			
Vented	VERTICAL		
Sloped toward drain	12" [305mm] min. above roof/snow level (record height above anticipated snow level) or, in		
Condensate drain line hoses connected and clamped	Canada, intake and exhaust vents conform with CSA B149.1; Canadian Natural Gas and		
Freeze protection (if necessary)	Propane Installation Code		
VENTING – DIRECT VENT	HORIZONTAL – STANDARD		
in. diameter – intake pipe (record diameter)	12" [305mm] min. above grade/snow level (record height above anticipated snow level) or, in		
in. diameter – exhaust pipe (record diameter)	Canada, intake and exhaust vents conform with CSA B149.1; Canadian Natural Gas and		
ft. of pipe – intake air (record length)	Propane Installation Code		
no. of elbows – intake air (record number of elbows)			

SAFETY INFORMATION

A WARNING

DO NOT INSTALL THIS FURNACE IN A MOBILE HOME!! THIS FURNACE IS NOT APPROVED FOR INSTALLATION IN A MOBILE HOME. DOING SO COULD CAUSE FIRE, PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

A WARNING

INSTALL THIS FURNACE ONLY IN A LOCATION AND POSITION AS SPECIFIED IN THE LOCATION REQUIRE-MENTS AND CONSIDERATIONS SECTION OF THESE INSTRUCTIONS.

A WARNING

IMPROPER INSTALLATION, OR INSTALLATION NOT MADE IN ACCORDANCE WITH THE CSA INTERNA-TIONAL (CSA) CERTIFICATION OR THESE INSTRUC-TIONS, CAN RESULT IN UNSATISFACTORY OPERATION AND/OR DANGEROUS CONDITIONS AND ARE NOT COV-ERED BY THE MANUFACTURER'S WARRANTY.

WARNING

DO NOT BYPASS, JUMPER, OR REMOVE ANY SAFETY SWITCH FROM THE FURNACE CONTROL CIRCUIT. IF A SAFETY SWITCH CAUSES THE FURNACE TO SHUT DOWN OR OPERATE INTERMITTENTLY, IT IS AN INDI-CATION OF A POTENTIAL SAFETY HAZARD THAT MUST BE ADDRESSED BY A QUALIFIED TECHNICIAN, SER-VICE AGENCY OR THE GAS SUPPLIER. DO NOT RESET SAFETY CONTROLS WITHOUT CORRECTIVE ACTION AND/OR VERIFICATION OF PROPER SAFE OPERATION BY A QUALIFIED INSTALLER, SERVICE AGENCY OR THE GAS SUPPLIER.

REPLACE ANY SAFETY CONTROL COMPONENT ONLY WITH IDENTICAL OEM REPLACEMENT PARTS. WHEN A NEW SAFETY SWITCH IS INSTALLED, IT MUST BE TESTED FOR A MINIMUM OF 15 MINUTES WITH THE FURNACE OPERATING AT MAXIMUM INPUT RATE AND WITH BOTH BLOWER AND BURNER DOOR INSTALLED. IF THE FURNACE IS INSTALLED IN A CLOSET, THE CLOSET DOOR MUST ALSO BE CLOSED FOR THIS TEST. REPEAT THE TEST AT THE MINIMUM INPUT RATE IF THE FURNACE IS A MULTI-STAGE FURNACE.

A WARNING

USE ONLY WITH THE TYPE OF GAS APPROVED FOR THIS FURNACE. REFER TO THE FURNACE RATING PLATE.

WARNING

NEVER TEST FOR GAS LEAKS WITH AN OPEN FLAME. USE A COMMERCIALLY AVAILABLE SOAP SOLUTION MADE SPECIFICALLY FOR THE DETECTION OF LEAKS TO CHECK ALL CONNECTIONS, AS SPECIFIED IN GAS SUPPLY AND PIPING SECTION OF THESE INSTRUC-TIONS.

A WARNING

COMBUSTION AND VENTILATION AIR MUST BE PRO-VIDED TO THE FURNACE AS REQUIRED BY THE NATIONAL FUEL-GAS CODE (U.S.) AND CSA B149.1 (CANADA) AND THE COMBUSTION AND VENTILATION AIR SECTION OF THESE INSTRUCTIONS.

WARNING

COMBUSTION PRODUCTS MUST BE DISCHARGED OUT-DOORS. CONNECT THIS FURNACE TO AN APPROVED VENT SYSTEM ONLY, AS SPECIFIED IN THE VENT PIPE INSTALLATION SECTION OF THESE INSTRUCTIONS.

WARNING

WHEN A FURNACE IS INSTALLED SO THAT SUPPLY DUCTS CARRY AIR CIRCULATED BY THE FURNACE TO AREAS OUTSIDE THE SPACE CONTAINING THE FUR-NACE, THE RETURN AIR SHALL ALSO BE HANDLED BY DUCT(S) SEALED TO THE FURNACE CASING AND TERMINATING OUTSIDE THE SPACE CONTAINING THE FURNACE.

A WARNING

WHENEVER THE FACTORY RETURN-AIR CONNECTION IS NOT USED IT MUST BE SEALED. A SOLID METAL BASE PLATE MUST BE INSTALLED AND SEALED. FAC-TORY BASE PLATES ARE AVAILABLE AS ACCESSORY ITEMS. (PART NUMBERS ARE LISTED IN THE SPEC SHEET FOR THE FURNACE.) FAILURE TO INSTALL AND SEAL THE BASE PLATE AND RETURN AIR DUCT CONNECTIONS MAY ALLOW CARBON MONOXIDE AND OTHER CONTAMINANTS TO BE DRAWN INTO THE CON-DITIONED AIR SPACE AND DISTRIBUTED THROUGHOUT THE HEATED SPACE.

WARNING

DO NOT OPERATE THE SYSTEM WITHOUT FILTERS. A PORTION OF THE DUST ENTRAINED IN THE AIR MAY TEMPORARILY LODGE IN THE AIR DUCT RUNS AND AT THE SUPPLY REGISTERS. ANY CIRCULATED DUST PAR-TICLES WILL BE HEATED AND CHARRED BY CONTACT WITH THE FURNACE HEAT EXCHANGER. THIS SOOTY RESIDUE WILL SOIL CEILINGS, WALLS, DRAPES, CAR-PETS AND OTHER HOUSEHOLD ARTICLES. SOOT DAM-AGE MAY ALSO RESULT WITH, OR WITHOUT, FILTERS IN PLACE, WHEN CERTAIN TYPES OF CANDLES ARE BURNED, OR CANDLEWICKS ARE LEFT UNTRIMMED.

A WARNING

IN COMPLIANCE WITH RECOGNIZED CODES, IT IS REC-OMMENDED THAT AN AUXILIARY DRAIN PAN BE IN-STALLED UNDER THIS FURNACE AND ANY INSTALLED EVAPORATOR COIL THAT IS LOCATED IN ANY AREA OF A STRUCTURE WHERE DAMAGE TO THE BUILDING OR BUILDING CONTENTS MAY OCCUR AS A RESULT OF AN OVERFLOW OF THE FURNACE CONDENSATE DIS-POSAL SYSTEM OR THE COIL DRAIN PAN OR A STOP-PAGE IN THE PRIMARY CONDENSATE DRAIN PIPING.

SAFETY

🛦 WARNING

Furnaces May Be Used For Heating Buildings Or Structures Under Construction, If The Following Conditions Are Met To Ensure Proper Operation.

DO NOT USE THE UNIT FOR CONSTRUCTION HEAT UN-LESS ALL OF THE FOLLOWING CRITERIA ARE MET:

A) Furnace Must Be In Its Final Location. Per Installation Instructions, And The Vent System Shall Be Permanently Installed.

B) Furnace Must Be Installed As A Two-Pipe System And Outdoor Air Must Be Used One Hundred Percent (100%) For Combustion Air Requirements During Construction

C) A Room Thermostat Must Control The Furnace. The Use Of Fixed Jumpers Is Prohibited

D) The Input Rate And Temperature Rise Must Be Set Per The Furnace Rating Plate

E) Supply And Return Air Ducts Must Be Connected And Sealed To The Furnace. Return Air Must Terminate Outside Of The Space Where The Furnace Is Installed

F) Return Air Temperature Range, Between 13°C (55°F) And 27°C (80°F), Must Be Maintained

G) Merv 11 Or Greater Air Filters Must Be Installed In The Furnace System, And Must Be Regularly Inspected And Maintained During Construction. Regular Static Checks Must Be Performed And Filter Must Be Replaced At The End Of Life

H) Blower And Vestibule Access Panels Must Be In Place On The Furnace At All Times

I) Furnace Heat Exchanger, Components, Duct System And Evaporator Coils Must Be Cleaned Thoroughly Following Final Construction

J) Air Filters Must Be Replaced Upon Construction Completion

K) All Furnace Operating Conditions (Including Ignition, Input Rate, Temperature Rise And Venting) Must Be Verified In Accordance With The Installation Instructions

EQUIPMENT MAY EXPERIENCE PREMATURE COMPONENT FAILURE AS A RESULT OF NEGLIGENCE TO FOLLOW THE ABOVE INSTALLATION INSTRUCTIONS. FAILURE TO FOL-LOW THE ABOVE INSTALLATION INSTRUCTIONS VOIDS THE MANUFACTURER'S EQUIPMENT LIMITED WARRANTY. RHEEM DISCLAIMS ALL LIABILITY IN CONNECTION WITH INSTALLER'S FAILURE TO FOLLOW THE ABOVE INSTALLA-TION INSTRUCTIONS.

NOTWITHSTANDING THE FOREGOING, INSTALLER IS RESPONSIBLE FOR CONFIRMING THAT THE USE OF CON-STRUCTION HEAT IS CONSISTENT WITH THE POLICIES AND CODES OF ALL REGULATING ENTITIES. MUST AD-HERE TO ALL SUCH POLICIES AND CODES.

IMPORTANT INFORMATION ABOUT EFFICIENCY AND INDOOR AIR QUALITY

Central cooling and heating equipment is only as efficient as the duct system that carries the cooled or heated air. To maintain efficiency, comfort and good indoor air quality, it is important to have the proper balance between the air supplied to each room and the air returning to the cooling and heating equipment.

Proper balance and sealing of the duct system improves the efficiency of the heating and air conditioning system and improves the indoor air quality of the home by reducing the amount of airborne pollutants that enter homes from spaces where the ductwork and / or equipment is located. The manufacturer and the U.S. Environmental Protection Agency's Energy Star Program recommend that central duct systems be checked by a qualified contractor for proper balance and sealing.

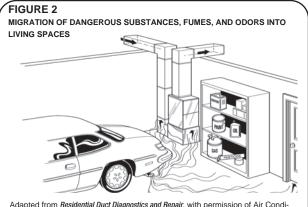
WARNING

DUCT LEAKS CAN CREATE AN UNBALANCED SYSTEM AND DRAW POLLUTANTS SUCH AS DIRT, DUST, FUMES AND ODORS INTO THE HOME CAUSING PROPERTY DAMAGE. FUMES AND ODORS FROM TOXIC, VOLATILE OR FLAMMABLE CHEMICALS, AS WELL AS AUTOMO-BILE EXHAUST AND CARBON MONOXIDE (CO), CAN BE DRAWN INTO THE LIVING SPACE THROUGH LEAKING DUCTS AND UNBALANCED DUCT SYSTEMS CAUSING PERSONAL INJURY OR DEATH (SEE FIGURE 2).

- IF AIR-MOVING EQUIPMENT OR DUCTWORK IS LO-CATED IN GARAGES OR OFF-GARAGE STORAGE AREAS - ALL JOINTS, SEAMS, AND OPENINGS IN THE EQUIPMENT AND DUCT MUST BE SEALED TO LIMIT THE MIGRATION OF TOXIC FUMES AND ODORS INCLUDING CARBON MONOXIDE FROM MIGRATING INTO THE LIVING SPACE.
- IF AIR-MOVING EQUIPMENT OR DUCTWORK IS LO-CATED IN SPACES CONTAINING FUEL BURNING APPLIANCES SUCH AS WATER HEATERS OR BOIL-ERS - ALL JOINTS, SEAMS, AND OPENINGS IN THE EQUIPMENT AND DUCT MUST ALSO BE SEALED TO PREVENT DEPRESSURIZATION OF THE SPACE AND POSSIBLE MIGRATION OF COMBUSTION BYPROD-UCTS INCLUDING CARBON MONOXIDE INTO THE LIV-ING SPACE.

WARNING

BLOWER AND BURNERS MUST NEVER BE OPERATED WITHOUT THE BLOWER DOOR IN PLACE. THIS IS TO PREVENT DRAWING GAS FUMES (WHICH COULD CON-TAIN HAZARDOUS CARBON MONOXIDE) INTO THE HOME THAT COULD RESULT IN PERSONAL INJURY OR DEATH.



Adapted from *Residential Duct Diagnostics and Repair*, with permission of Air Conditioning Contractors of America (ACCA).

COMMONWEALTH OF MASSACHUSETTS NOTE

IMPORTANT! THE COMMONWEALTH OF MASSA-CHUSETTS REQUIRES COMPLIANCE WITH REGULA-TION 248 CMR 4.00 AND 5.00 FOR INSTALLATION OF THROUGH-THE-WALL VENTED GAS APPLIANCES AS FOLLOWS:

(a) For all side wall horizontally vented gas fueled equipment installed in every dwelling, building or structure used in whole or in part for residential purposes, including those owned or operated by the Commonwealth and where the side wall exhaust vent termination is less than seven (7) feet above finished grade in the area of the venting, including but not limited to decks and porches, the following requirements shall be satisfied:

1. INSTALLATION OF CARBON MONOXIDE DETEC-

TORS. At the time of installation of the side wall horizontal vented gas fueled equipment, the installing plumber or gasfitter shall observe that a hard wired carbon monoxide detector with an alarm and battery back-up is installed on the floor level where the gas equipment is to be installed. In addition, the installing plumber or gasfitter shall observe that a battery operated or hard wired carbon monoxide detector with an alarm is installed on each additional level of the dwelling, building or structure served by the side wall horizontal vented gas fueled equipment. It shall be the responsibility of the property owner to secure the services of qualified licensed professionals for the installation of hard wired carbon monoxide detectors.

a. In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or an attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level.

b. In the event that the requirements of this subdivision can not be met at the time of completion of installation, the owner shall have a period of thirty (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector with an alarm shall be installed.

2. APPROVED CARBON MONOXIDE DETECTORS. Each carbon monoxide detector as required in accordance with the above provisions shall comply with NFPA 720 and be ANSI/UL 2034 listed and IAS certified.

3. SIGNAGE. A metal or plastic identification plate shall be permanently mounted to the exterior of the building at a minimum height of eight (8) feet above grade directly in line with the exhaust vent terminal for the horizontally vented gas fueled heating appliance or equipment. The sign shall read, in print size no less than one-half (1/2) inch in size, "GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS".

4. INSPECTION. The state or local gas inspector of the side wall horizontally vented gas fueled equipment shall not approve the installation unless, upon inspection, the inspector observes carbon monoxide detectors and signage installed in accordance with the provisions of 248 CMR 5.08(2)(a) 1 through 4.

(b) EXEMPTIONS: The following equipment is exempt from 248 CMR 5.08(2)(a)1 through 4:

1. The equipment listed in Chapter 10 entitled "Equipment Not Required To Be Vented" in the most current edition of NFPA 54 as adopted by the Board; and

2. Product Approved side wall horizontally vented gas fueled equipment installed in a room or structure separate from the dwelling, building or structure used in whole or in part for residential purposes.

(c) MANUFACTURER REQUIREMENTS – GAS EQUIP-MENT VENTING SYSTEM PROVIDED. When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:

1. Detailed instructions for the installation of the venting system design or the venting system components; and

2. A complete parts list for the venting system design or venting system.

(d) MANUFACTURER REQUIREMENTS – GAS EQUIP-MENT VENTING SYSTEM NOT PROVIDED. When the manufacturer of a Product Approved side wall horizontally vented gas fueled equipment does not provide the parts for venting the flue gases, but identifies "special venting systems", the following requirements shall be satisfied by the manufacturer:

1. The referenced "special venting system" instructions shall be included with the appliance or equipment installation instructions; and

2. The "special venting systems" shall be Product Approved by the Board, and the instructions for that system shall include a parts list and detailed installation instructions.

(e) A copy of all installation instructions for all Product Approved side wall horizontally vented gas fueled equipment, all venting instructions, all parts lists for venting instructions, and/or all venting design instructions shall remain with the appliance or equipment at the completion of the installation.

LOCATION REQUIREMENTS

GENERAL INFORMATION

A WARNING

WHEN THIS FURNACE IS INSTALLED IN A RESI-DENTIAL GARAGE, IT MUST BE INSTALLED SO THE BURNERS AND IGNITION SOURCE ARE LO-CATED NO LESS THAN 18 INCHES [450MM] ABOVE THE FLOOR. THIS IS TO PREVENT THE RISK OF IGNITING FLAMMABLE VAPORS WHICH MAY BE PRESENT IN A GARAGE. ALSO, THE FURNACE MUST BE LOCATED OR PROTECTED TO AVOID PHYSICAL DAMAGE BY VEHICLES. FAILURE TO FOLLOW THESE WARNINGS CAN CAUSE A FIRE OR EXPLOSION, RESULTING IN PROPERTY DAM-AGE, PERSONAL INJURY OR DEATH.

- 1. **IMPORTANT:** If installing the unit over a finished ceiling or living area, be certain to install an auxiliary condensate drain pan under the entire unit. This auxiliary drain pan should extend under any evaporator coil installed with the furnace and the open portion of the condensate drain assembly. See "Condensate Drain/ Neutralizer" section for more details.
- 2. **IMPORTANT:** If using a cooling evaporator coil with this furnace, be sure the air passes over the heat exchanger before passing over the cooling coil. The cooled air passing over the warm ambient air inside the heat exchanger tubes can cause condensation inside the tubes resulting in corrosion and eventual failure.

If these are manual dampers, they must be equipped to prevent heating or cooling operation unless the damper is in the full heat or cool position.

3. **IMPORTANT:** Furnace must be installed level from front-to-back or with a slight tilt such that the back of the furnace is up to 1/2" higher than the front of the furnace as shown in Figure 3.

NOTE: These furnaces are approved for installation in attics, as well as alcoves, utility rooms, closets and crawl-spaces. Provisions must be made to prevent freezing of condensate.

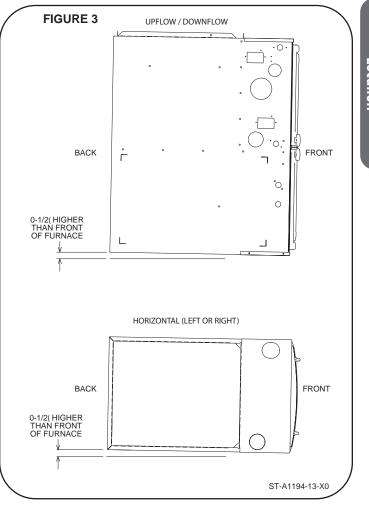
FREEZE PROTECTION

For installations where the furnace may reach temperatures below 32°F (0°C) (such as an alcove or attic installation), the installer must take precautions to ensure that the drain trap and connected drain pipe do not freeze. Local codes and practices should be followed in order to prevent freezing.

If the drain trap is installed within the furnace cabinet, no freeze protection is required. When the trap is mounted outside or partially outside the cabinet, it must be protected from freezing. Regardless of the location of the

drain trap, any exposed drain piping must be protected from freezing as required by local practices or codes. A UL or CSA listed heat tape or UL or CSA approved heating cable with a rating of 3-6 watts per foot is acceptable protection when installed and maintained in accordance with the manufacturer's instructions. Good installation practices necessitate that the installer verify heat tape operation in accordance with the manufacturer's instructions at the time of installation.

IMPORTANT: Support this unit when installed. Since this furnace is suitable for attic or crawl space installation, it may be installed on combustible wood flooring or by using support brackets.



LOCATION REQUIREMENTS

GENERAL INFORMATION (cont.)

A WARNING

THIS FURNACE IS NOT APPROVED OR RECOM-MENDED FOR INSTALLATION ON ITS BACK, WITH ACCESS DOORS FACING UPWARDS.

SITE SELECTION

- 1. Select a site in the building near the center of the proposed, or existing, duct system.
- Give consideration to the vent system piping when selecting the furnace location. Be sure the venting system can get from the furnace to the termination with minimal length and elbows.
- 3. Locate the furnace near the existing gas piping. Or, if running a new gas line, locate the furnace to minimize the length and elbows in the gas piping. See Figure 5.
- 4. Locate the furnace to maintain proper clearance to combustibles as shown in following Figure 6.

WARNING

DO NOT LIFT THE UNIT BY THE HEAT EXCHANGER TUBES. DOING SO CAN DAMAGE THE HEAT EX-CHANGER ASSEMBLY.

CLEARANCE – ACCESSIBILITY

The design of forced air furnaces with input ratings as listed in the tables under Figure 6 are certified by CSA-International for the clearances to combustible materials shown in inches.

See name/rating plate and clearance label for specific model number and clearance information.

Service clearance of at least 24 inches (61 cm) is recommended in front of all furnaces.

NOTE: Use recommended 24" (61 cm) clearance if accessibility clearances are greater than fire protection clearances.

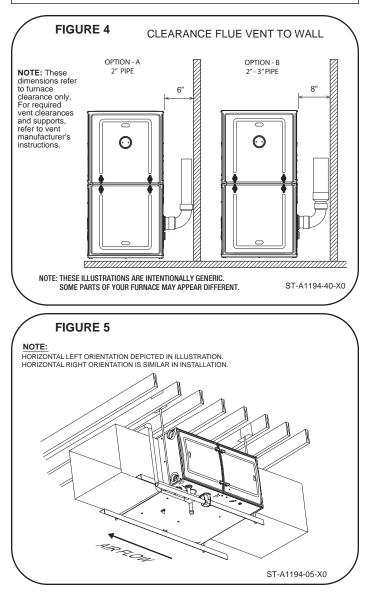
For downflow non-zero clearance furnace installations, the minimum clearance required on the right side of the furnace is shown in Figure 4. If this clearance cannot be maintained, a downflow zero-clearance kit; RXGY-ZK will need to be installed.

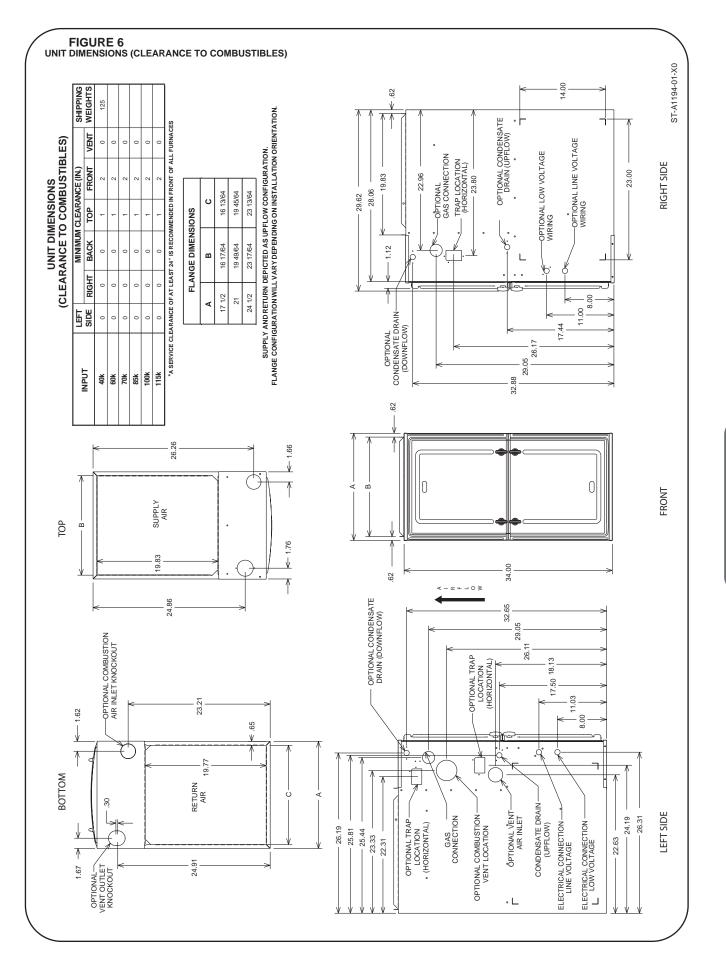
A WARNING

UPFLOW FURNACES ARE DESIGN-CERTIFIED FOR INSTALLATION ON COMBUSTIBLE FLOORS. NOTE, HOWEVER, THAT FURNACES MUST NOT BE INSTALLED DIRECTLY ON CARPETING, TILE OR OTHER COMBUSTIBLE MATERIAL OTHER THAN WOOD FLOORING. INSTALLATION ON A COMBUS-TIBLE MATERIAL CAN RESULT IN FIRE, CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

WARNING

COMBUSTIBLE MATERIAL MUST NOT BE PLACED ON OR AGAINST THE FURNACE JACKET. THE AREA AROUND THE FURNACE MUST BE KEPT CLEAR AND FREE OF ALL COMBUSTIBLE MA-TERIALS INCLUDING GASOLINE AND OTHER FLAMMABLE VAPORS AND LIQUIDS. PLACEMENT OF COMBUSTIBLE MATERIALS ON, AGAINST OR AROUND THE FURNACE JACKET CAN CAUSE AN EXPLOSION OR FIRE RESULTING IN PROPERTY DAMAGE, PERSONAL INJURY OR DEATH. THE HOMEOWNER SHOULD BE CAUTIONED THAT THE FURNACE AREA MUST NOT BE USED AS A BROOM CLOSET OR FOR ANY OTHER STORAGE PURPOSES.





Location

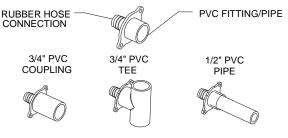
FIELD CONVERSIONS

GENERAL CONVERSION INSTRUCTIONS

CONDENSATE PVC/HOSE OPTIONS

BULKHEAD COUPLING

CONDENSATE DRAINIAGE HAS OPTIONS FOR 3/4" OR 1/2" PVC CONNECTIONS. THE BULKHEAD COUPLING CONNECTS THE RUBBER HOSES FROM INSIDE THE UNIT TO THE PVC PIPE EXTERIOR OF THE UNIT. PVC PIPE CAN BE CEMENTED DIRECTLY TO THE COUPLING AND THE TRAP WITH PROPER PVC CEMENT AND PRIMER.

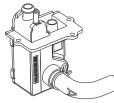


CONDENSATE TRAP

THE CONDENSATE TRAP IS DESIGNED WITH MULTIPLE OUTLET DRAIN CONNECTIONS THAT CAN BE UTILIZED. THE SAME OUTLET CAN BE USED FOR BOTH STANDARD PVC AND A 5/8" RUBBER HOSE.

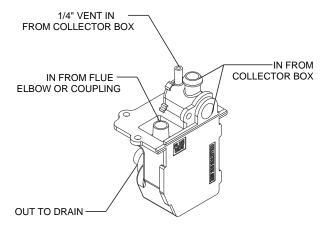
WHEN THE TRAP IS LOCATED INSIDE THE UNIT A 5/8" RUBBER HOSE CAN BE SECURED WITH A HOSE CLAMP TO MAKE HOSE CONNECTIONS TO THE BULKHEAD COUPLING. PLIERS ARE NEEDED TO ADJUST OR REMOVE THE CLAMP.

WHEN THE TRAP IS LOCATED OUTSIDE OF THE UNIT STANDARD PVC FITTINGS CAN BE CEMENTED DIRECTLY TO THE OUTLET WITH PROPER PVC CEMENT AND PRIMER.



THE CONDENSATE TRAP HAS 2 SIDES PLEASE NOTE THEIR LOCATIONS FOR DRAIN CONNECTIONS DURING CONVERSION.

NOTE: IMPROPER HOSE CONNECTIONS WILL PREVENT CONDENSATE FROM DRAINING.



CONVERSION AND INSTALLATION CONSIDERATIONS

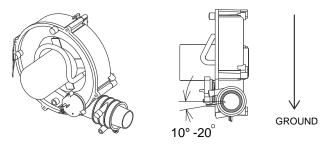
ALL CONVERSIONS REQUIRE THE CONDENSATE PLUMBING TO HAVE DECLINE IN THE DIRECTION OF THE WATER FLOW.

WHEN INSTALLING AND MOVING CONDENSATE PLUMBING THE HOSES SHOULD BE FREE OF KINKS FOR PROPER WATER FLOW.

WHEN DRAIN HOSE OR CONDENSATE TRAP HOSE ROUTING CHANGES ARE NECESSARY BE SURE TO PLUG OR CAP ANY UNUSED HOSE TAPS.

THE INDUCER COUPLING COMES FROM THE FACTORY WITH A 10° TILT FOR UP FLOW INSTALLATIONS. WHEN CONVERTED TO DOWN FLOW THE COUPLING REQUIRES A ROTATION A MINIMUM OF 10° FROM HORIZONTAL AS SHOWN.

10-20° TILT ON INDUCER COUPLING



HORIZONTAL INSTALLATIONS REQUIRE CONDENSATE TRAP TO BE MOUNTED EXTERNALLY BELOW THE UNIT:

-USE CAUTION-MOUNT THE TRAP AFTER THE UNIT IS AT THE POINT OF INSTALLATION TO PREVENT DAMAGE TO THE TRAP DURING TRANSPORT.

-HAND TIGHTEN SCREWS WHEN MOUNTING THE TRAP OR THE BULKHEAD COUPLING TO THE CABINET TO PREVENT DAMAGE TO THE MOUNTING FLANGE.

-USE PROPER FREEZE PROTECTION IF REQUIRED.

-ALLOW MINIMUM OF 6" BELOW THE FURNACE FOR CLEARANCE.

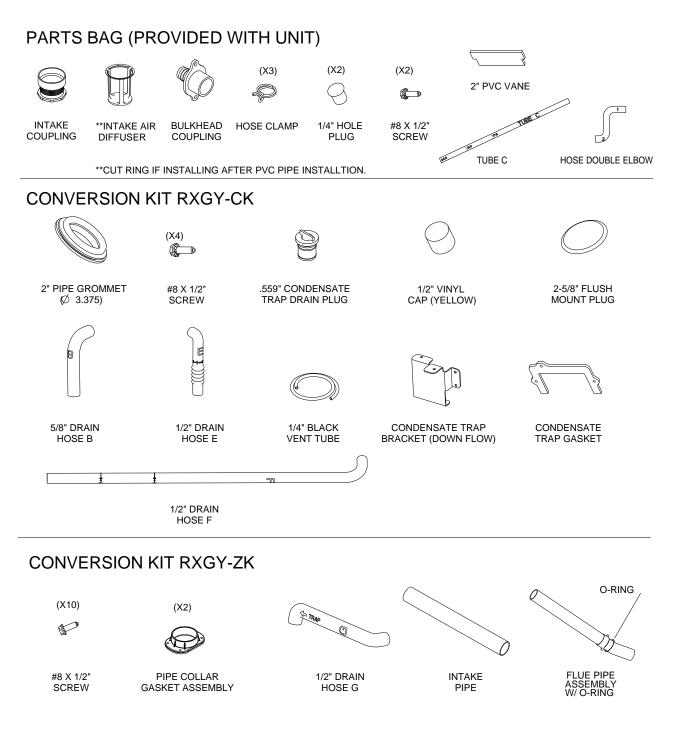
WORM DRIVE GROUND

NOTE:

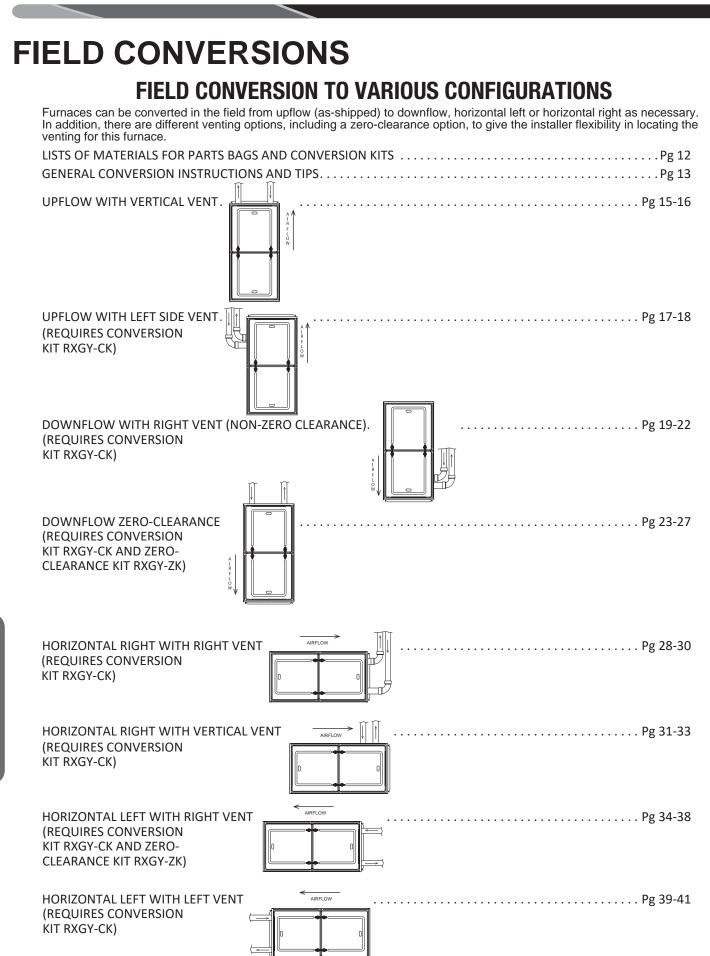
IF THE IDB COUPLING IS REMOVED, IT MUST BE REPLACED IN THE PROPER ORIENTATION. AN ARROW IS PRESENT ON THE COUPLING TO INDICATE THE DIRECTION OF EXHAUST FLOW. MAKE SURE THE ARROW POINTS IN THE CORRECT DIRECTION.

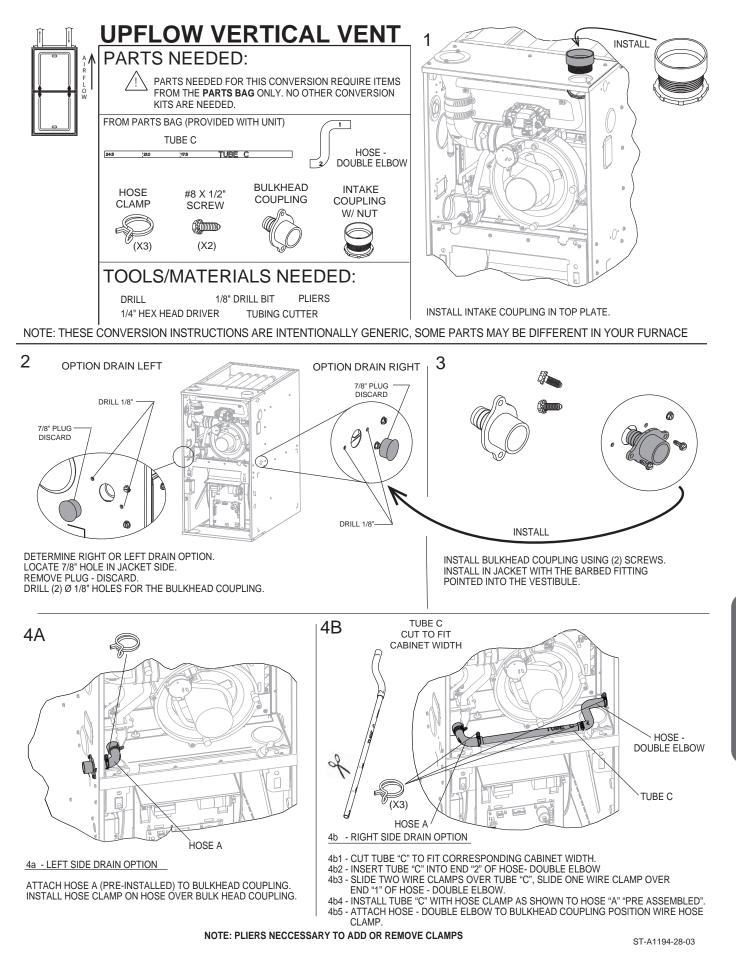
FIELD CONVERSIONS

GENERAL PARTS REQUIRED FOR CONVERSIONS



SEE NEXT PAGE FOR APPLICABLE CONFIGURATIONS

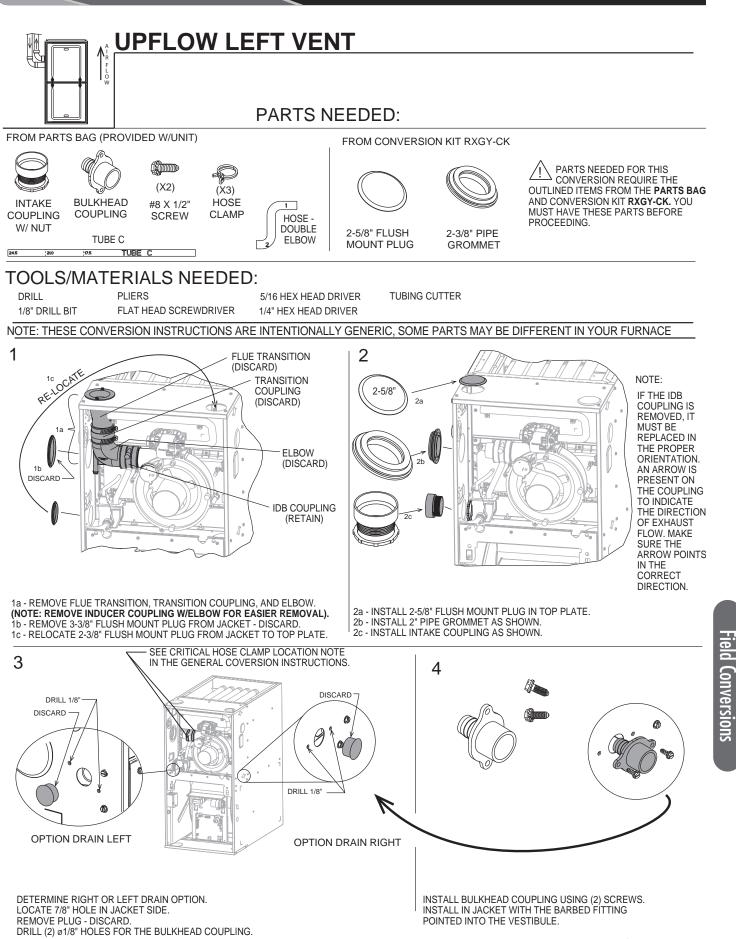




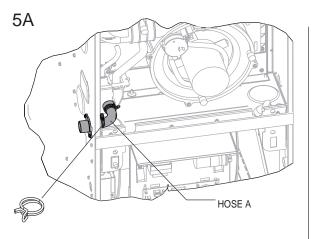
Checklist:

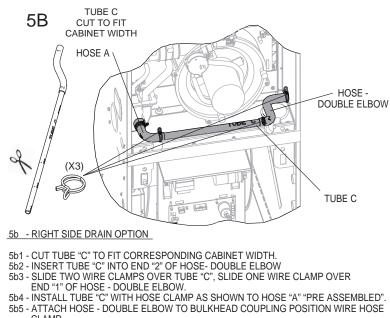
- ____ VERIFY ALL HOSES ARE SECURE AND FULLY SEATED.
- ___ CONFIRM THAT ALL HOSES ARE FREE OF KINKS
- CONFIRM ALL HOSES AND OTHER DRAIN PARTS HAVE A SLOPE IN DIRECTION OF WATER FLOW
- ___ ALL CLAMPS AND COUPLINGS ARE TIGHTENED
- ___ ALL DRAIN PORTS ARE PLUGGED
- ___ UNIT HAS FORWARD PITCH
- ____ HEAT TAPE INSTALLED(IF REQUIRED)

Notes:



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5a - LEFT SIDE DRAIN OPTION

ATTACH HOSE A (PRE-INSTALLED) TO BULKHEAD COUPLING. PLACE CLAMP OVER HOSE ON BULKHEAD COUPLING.

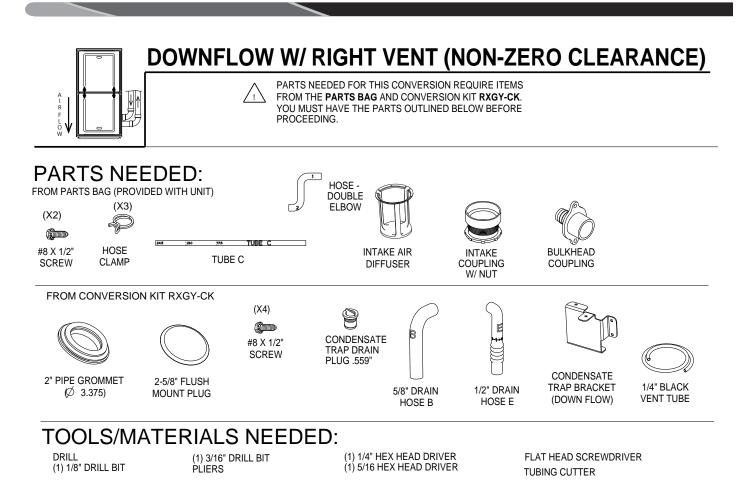
- CLAMP.

NOTE: PLIERS NECCESSARY TO ADD OR REMOVE CLAMPS

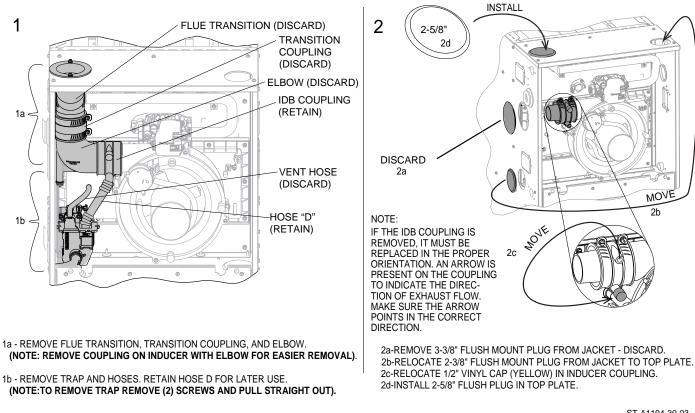
Checklist:

- VERIFY ALL HOSES ARE SECURE AND FULLY SEATED. ____
- CONFIRM THAT ALL HOSES ARE FREE OF KINKS.
- CONFIRM ALL HOSES AND OTHER DRAIN PARTS HAVE A SLOPE IN DIRECTION OF WATER FLOW
- BOTH WORM DRIVES ON THE HOSE CLAMPS OF THE IDB COUPLING MUST BE LOCATED ON THE TOP OF THE COUPLING. SEE LOCATION DETAIL IN THE GENERAL CONVERSION INSTRUCTIONS AT THE BEGINNING OF THIS SECTION.
- ALL CLAMPS AND COUPLINGS ARE TIGHTENED
- ALL DRAIN PORTS ARE PLUGGED
- UNIT HAS FORWARD PITCH
- HEAT TAPE INSTALLED(IF REQUIRED)

Notes:

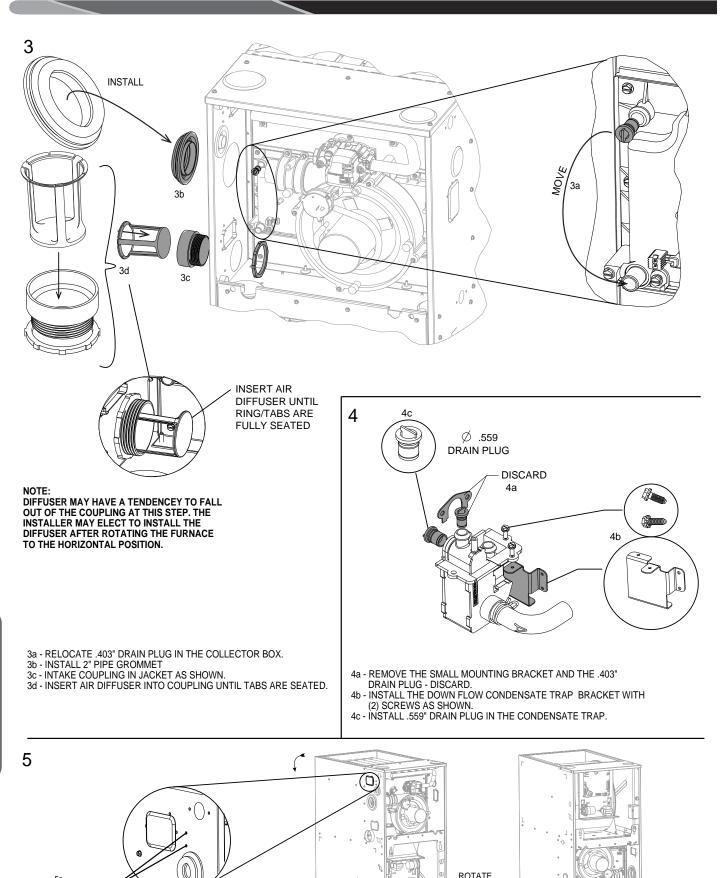


NOTE: THESE CONVERSION INSTRUCTIONS ARE INTENTIONALLY GENERIC, SOME PARTS MAY BE DIFFERENT IN YOUR FURNACE NOTE: STEPS 1-5 SHOWN WITH FURNACE IN "AS SHIPPED CONDITION"



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Field Conversions

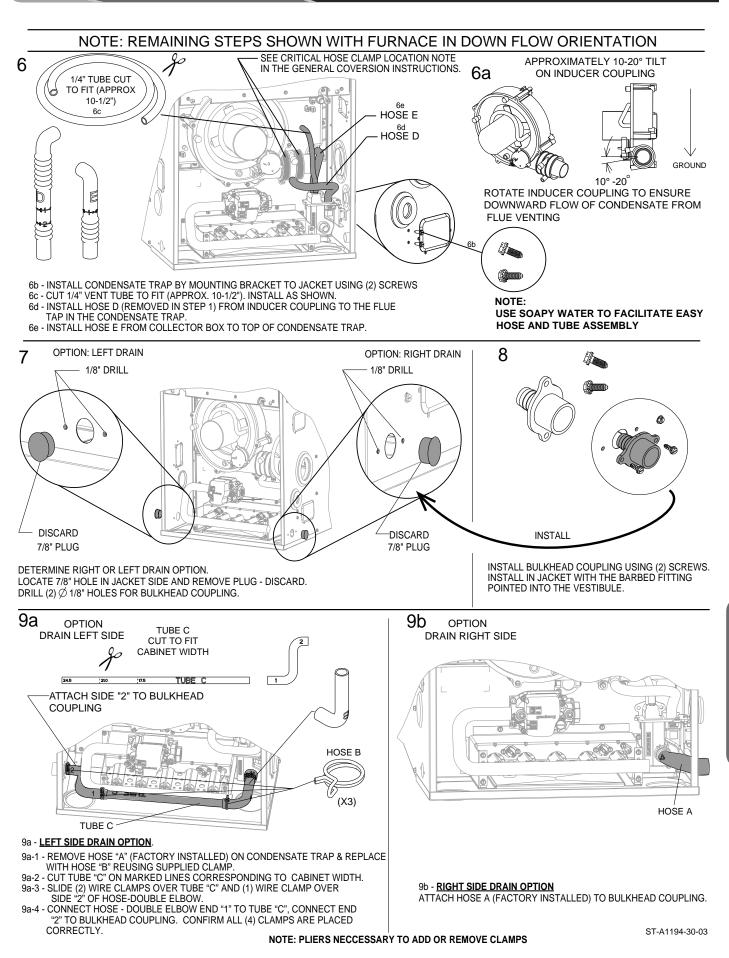


ROTATE

UNIT 5b

5a DRILL (2) Ø3/16" HOLES

5a - PRE-DRILL (2) Ø 3/16" HOLES IN JACKET AS SHOWN FOR CONDENSATE TRAP BRACKET. 5b - ROTATE UNIT 180°



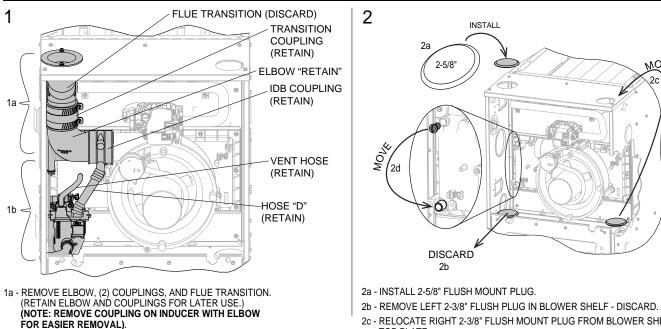
Checklist:

- ___ VERIFY ALL HOSES ARE SECURE AND FULLY SEATED.
- ___ ALL DRAIN PORTS ARE PLUGGED
- ___ UNIT HAS FORWARD PITCH
- ____ HEAT TAPE INSTALLED(IF REQUIRED)
- ___ CONFIRM THAT ALL HOSES ARE FREE OF KINKS
- __ CONFIRM ALL HOSES AND OTHER DRAIN PARTS HAVE A SLOPE IN DIRECTION OF WATER FLOW
- BOTH WORM DRIVES ON THE HOSE CLAMPS OF THE IDB COUPLING MUST BE LOCATED ON THE TOP OF THE COUPLING. SEE LOCATION DETAIL IN THE GENERAL CONVERSION INSTRUCTIONS AT THE BEGINNING OF THIS SECTION
- ___ ALL CLAMPS AND COUPLINGS ARE TIGHTENED
- ___ DOUBLE CHECK DIFFUSER IS INSTALLED IN INTAKE COUPLING

Notes:



NOTE: THESE CONVERSION INSTRUCTIONS ARE INTENTIONALLY GENERIC, SOME PARTS MAY BE DIFFERENT IN YOUR FURNACE NOTE: STEPS 1-4 SHOWN WITH FURNACE IN "AS SHIPPED CONDITION"

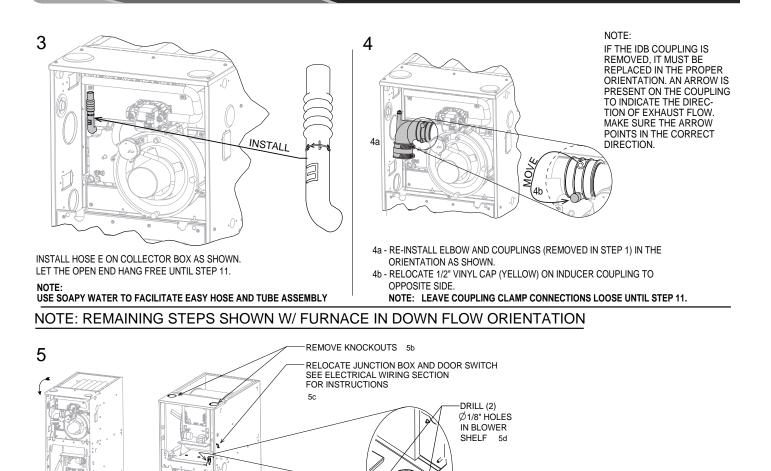


1b - REMOVE TRAP AND HOSES. RETAIN HOSE D FOR LATER USE

(NOTE: TO REMOVE TRAP REMOVE (2) SCREWS AND PULL STRAIGHT OUT).

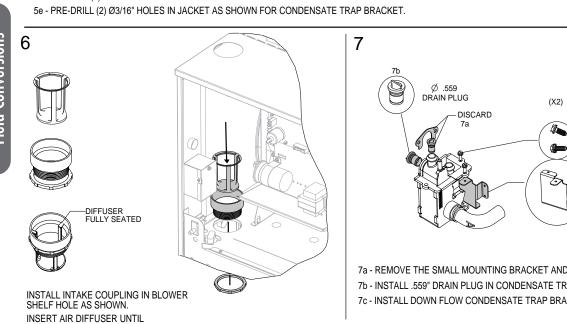
- 2c RELOCATE RIGHT 2-3/8" FLUSH MOUNT PLUG FROM BLOWER SHELF TO TOP PLATE.
 - 2d RELOCATE .403" DRAIN PLUG IN THE COLLECTOR BOX.

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-DRILL (2) Ø 3/16" HOLES 5e

ROTATE UNIT 5a 5a - ROTATE UNIT 180°



Ø

5b - REMOVE KNOCKOUTS WITH HAMMER AND FLAT HEAD SCREWDRIVER.

SEE ELECTRICAL WIRING SECTION FOR INSTRUCTIONS.

5c - THE JUNCTION BOX WILL HAVE TO BE RELOCATED FOR FLUE PIPE INSTALLATION.

5d - RE-DRILL (2) Ø1/8" HOLES IN BLOWER SHELF AS SHOWN FOR FLUE PIPE ASSEMBLY.

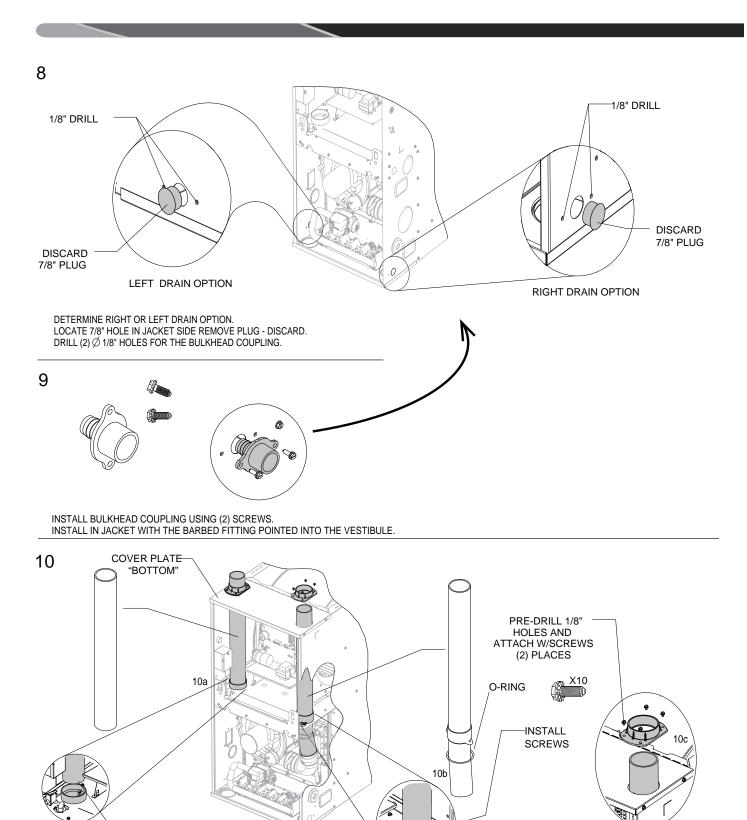
7c

7a - REMOVE THE SMALL MOUNTING BRACKET AND THE .403" DRAIN PLUG - DISCARD. 7b - INSTALL .559" DRAIN PLUG IN CONDENSATE TRAP.

7c - INSTALL DOWN FLOW CONDENSATE TRAP BRACKET WITH (2) SCREWS AS SHOWN.

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RING/TABS ARE FULLY SEATED



SLIDE INTAKE PIPE THROUGH THE LEFT SIDE KNOCKOUT ON COVER PLATE CLEAN AND PVC GLUE TO INTAKE COUPLING AS SHOWN

INSERT FLUE PIPE ASSEMBLY THROUGH RIGHT SIDE KNOCKOUT ON COVER PLATE (NOTE: SLIDE FROM UNDER PLATE).

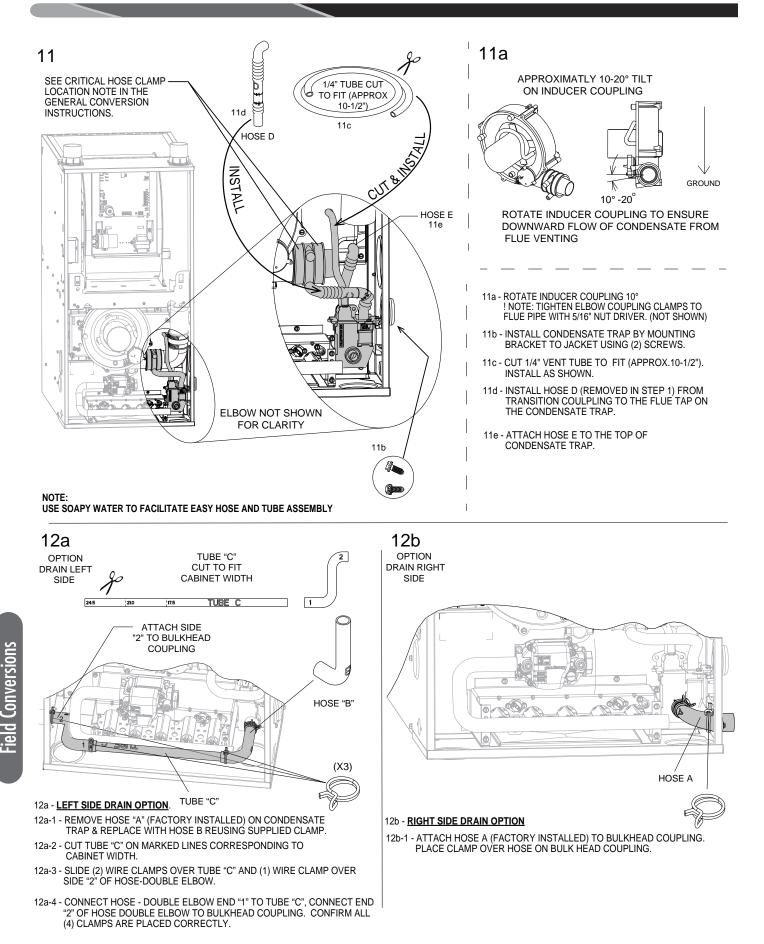
SLIDE ANGLED END THROUGH OPENING IN BLOWER SHELF AND ALIGN WITH ELBOW COUPLING. SECURE PIPE ASSEMBLY TO BLOWER SHELF WITH (2) SCREWS AS SHOWN. ENSURE O-RING IS PROPERLY SEATED. 10c - SLIDE PIPE COLLAR ASSEMBLIES FROM STEP 7 OVER THE (2) PIPES AND DRILL (8) ø1/8" HOLES USING THE COLLARS AS TEMPLATES. SECURE WITH SCREWS.

PVC GLUE JOINT

10a - INSTALL INTAKE PIPE

10b - INSTALL FLUE PIPE ASSEMBLY

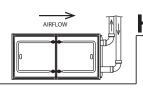
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Checklist:

- ___ VERIFY ALL HOSES ARE SECURE AND FULLY SEATED.
- ___ CONFIRM THAT ALL HOSES ARE FREE OF KINKS.
- CONFIRM ALL HOSES AND OTHER DRAIN PARTS HAVE A SLOPE IN DIRECTION OF WATER FLOW.
- BOTH WORM DRIVES ON THE HOSE CLAMPS OF THE IDB COUPLING MUST BE LOCATED ON THE TOP OF THE COUPLING. SEE LOCATION DETAIL IN THE GENERAL CONVERSION INSTRUCTIONS AT THE BEGINNING OF THIS SECTION.
- ___ ALL DRAIN PORTS ARE PLUGGED.
- ___ UNIT HAS FORWARD PITCH.
- ____ HEAT TAPE INSTALLED(IF REQUIRED).
- ___ ALL CLAMPS AND COUPLINGS ARE TIGHTENED

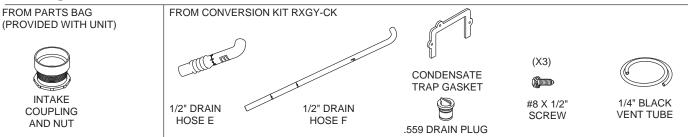
Notes:



HORIZONTAL RIGHT / RIGHT VENT

PARTS NEEDED FOR THIS CONVERSION REQUIRE ITEMS FROM THE **PARTS BAG** AND CONVERSION KIT **RXGY-CK**. YOU MUST HAVE THE PARTS OUTLINED BELOW BEFORE PROCEEDING.

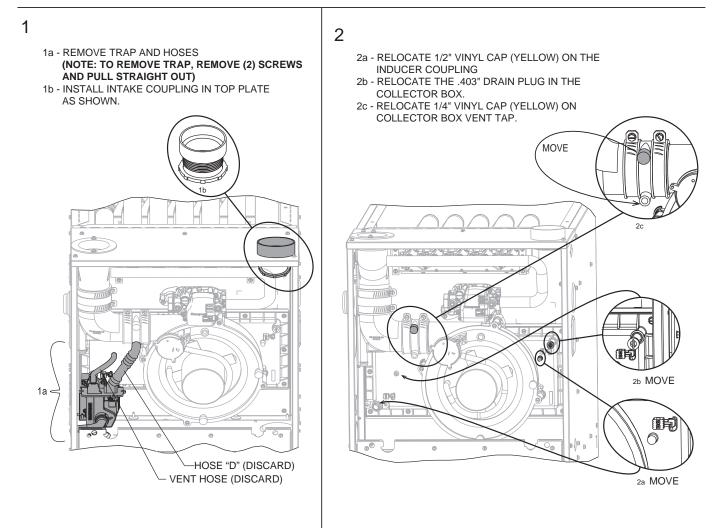
PARTS NEEDED:

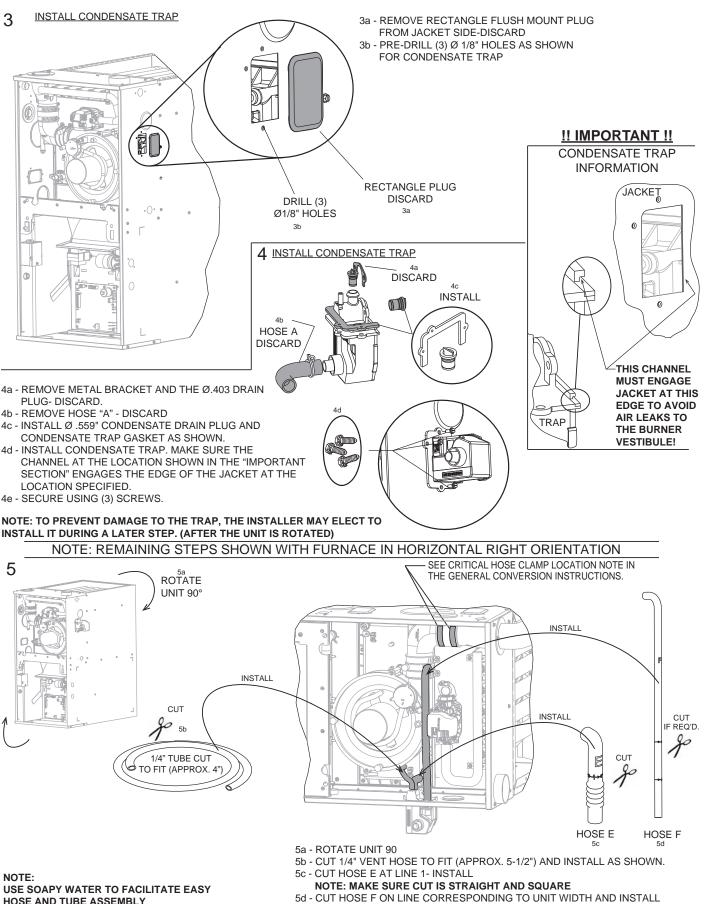


TOOLS/MATERIALS NEEDED:

DRILL 1/8" DRILL BIT PLIERS FLAT HEAD SCREWDRIVER 5/16 HEX HEAD DRIVER 1/4" HEX HEAD DRIVER

NOTE: THESE CONVERSION INSTRUCTIONS ARE INTENTIONALLY GENERIC, SOME PARTS MAY BE DIFFERENT IN YOUR FURNACE NOTE: STEPS 1-5 SHOWN WITH FURNACE IN "AS SHIPPED CONDITION"





HOSE AND TUBE ASSEMBLY

NOTE: 17.5": LINE 1, 21": LINE 2, 24.5": DO NOT CUT

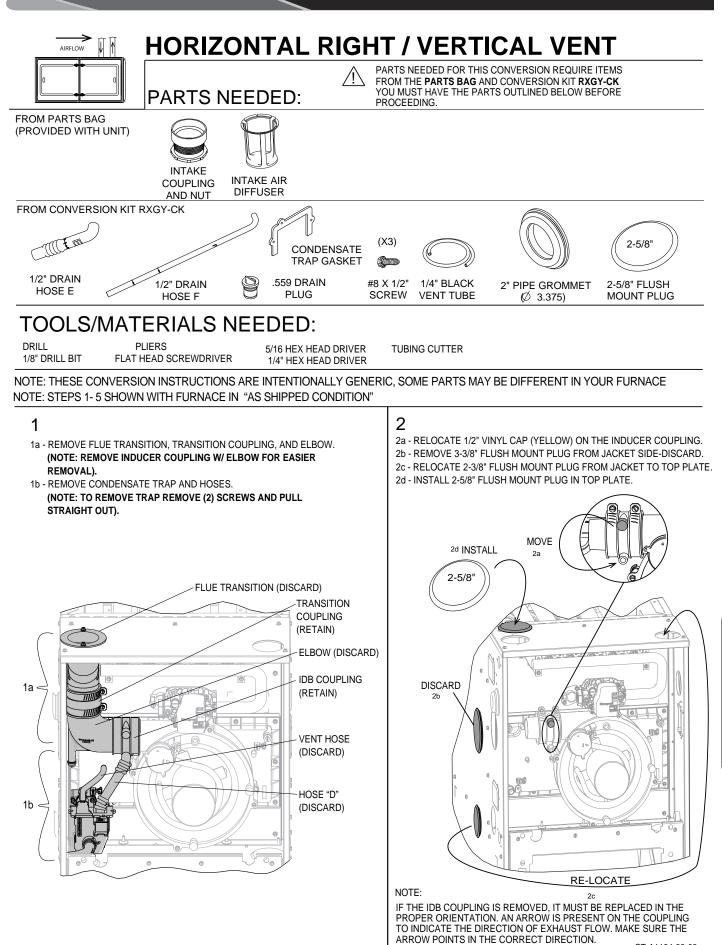
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-ield Conversions

Checklist:

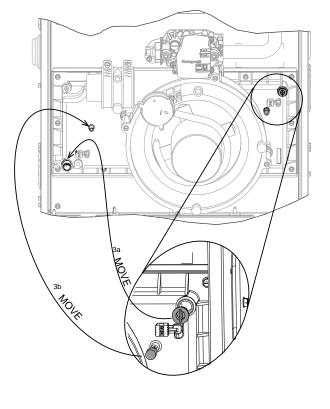
- ____ VERIFY ALL HOSES ARE SECURE AND FULLY SEATED.
- ___ CONFIRM THAT ALL HOSES ARE FREE OF KINKS.
- ___ CONFIRM ALL HOSES AND OTHER DRAIN PARTS HAVE A SLOPE IN DIRECTION OF WATER FLOW.
- ____ BOTH WORM DRIVES ON THE HOSE CLAMPS OF THE FLUE TRANSITION MUST BE LOCATED ON THE TOP OF THE COUPLING. SEE LOCATION DETAIL IN THE GENERAL CONVERSION INSTRUCTIONS AT THE BEGINNING OF THIS SECTION.
- ___ ALL CLAMPS AND COUPLINGS ARE TIGHTENED
- ____ ALL DRAIN PORTS ARE PLUGGED.
- ___ UNIT HAS FORWARD PITCH.
- ___ HEAT TAPE INSTALLED(IF REQUIRED)

Notes:



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- 3
- 3a RELOCATE THE Ø .403" DRAIN PLUG IN THE COLLECTOR BOX. 3b - RELOCATE 1/4" VINYL CAP (YELLOW) ON COLLECTOR BOX VENT TAP.
 - - 4d SLIDE AIR DIFFUSER INTO INTAKE COUPLING DISCARD AND INSTALL INTO JACKET AS SHOWN. 4a AIR DIFFUSER INTAKE COUPLING AND NUT 4b DRILL (3) Ø 1/8" HOLES INSTALL 4cINSTALL Ĥ AIR DIFFUSER FULLY SEATED C INSERT AIR DIFFUSER UNTIL **RING/TABS ARE** FULLY SEATED NOTE: DIFFUSER MAY HAVE A TENDENCEY TO FALL



- OUT OF THE COUPLING AT THIS STEP. THE INSTALLER MAY ELECT TO INSTALL THE DIFFUSER AFTER ROTATING THE FURNACE TO THE HORIZONTAL POSITION.
- **!! IMPORTANT !!** DISCARD CONDENSATE TRAP 5c INFORMATION INSTALL 0 00 5b 0 HOSE A DISCARD 5d Ø NOTE: TO PREVENT DAMAGE TO THE TRAP, THE INSTALLER MAY ELECT TO INSTALL IT DURING A LATER STEP. (AFTER THE UNIT IS ROTATED) THIS CHANNEL MUST ENGAGE JACKET AT THIS 5a - REMOVE METAL BRACKET AND THE Ø.403 DRAIN PLUG- DISCARD. EDGE TO AVOID

4

5b - REMOVE HOSE "A" - DISCARD

INSTALL CONDENSATE TRAP

- 5c INSTALL Ø .559" CONDENSATE DRAIN PLUG AND CONDENSATE TRAP GASKET AS SHOWN.
- 5d INSTALL CONDENSATE TRAP. MAKE SURE THE CHANNEL AT THE LOCATION SHOWN IN THE "IMPORTANT SECTION" ENGAGES THE EDGE OF THE JACKET AT THE LOCATION SPECIFIED.
- 5e SECURE USING (3) SCREWS.



AIR LEAKS TO

THE BURNER

VESTIBULE!

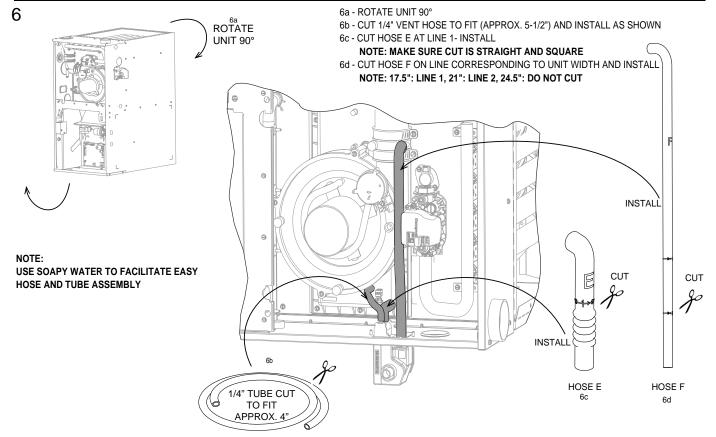
5

4c - INSTALL 2" PIPE GROMMET IN JACKET

4b - PRE-DRILL (3) Ø1/8" HOLES AS SHOWN FOR CONDENSATE TRAP

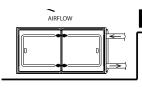
4a - REMOVE RECTANGLE FLUSH MOUNT PLUG FROM JACKET SIDE - DISCARD

NOTE: REMAINING STEPS SHOWN WITH FURNACE IN HORIZONTAL RIGHT ORIENTATION



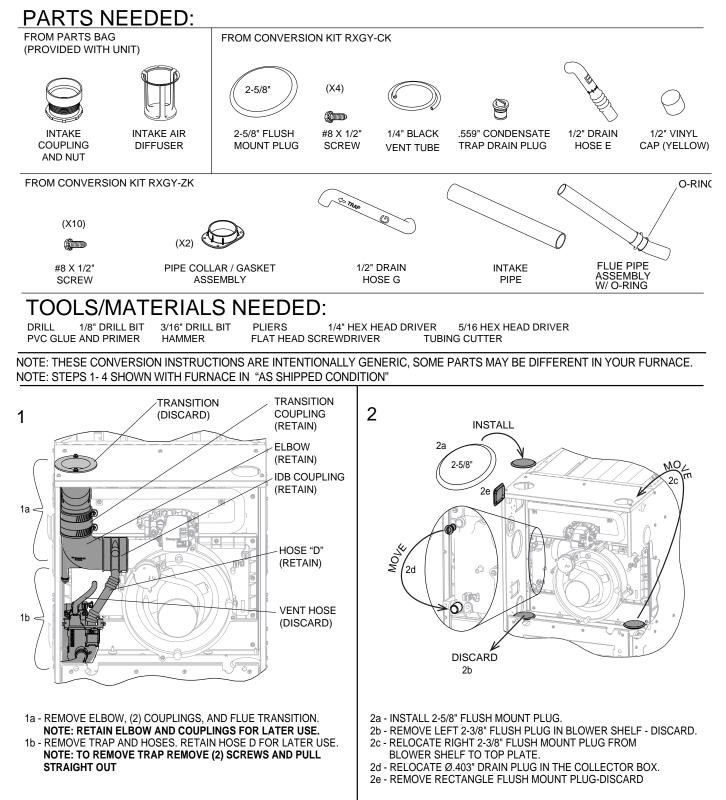
Checklist:

- ___ VERIFY ALL HOSES ARE SECURE AND FULLY SEATED.
- ___ CONFIRM THAT ALL HOSES ARE FREE OF KINKS
- CONFIRM ALL HOSES AND OTHER DRAIN PARTS HAVE A SLOPE IN DIRECTION OF WATER FLOW
- ___ ALL CLAMPS AND COUPLINGS ARE TIGHTENED
- ____ ALL DRAIN PORTS ARE PLUGGED
- ___ UNIT HAS FORWARD PITCH
- ___ HEAT TAPE INSTALLED(IF REQUIRED)

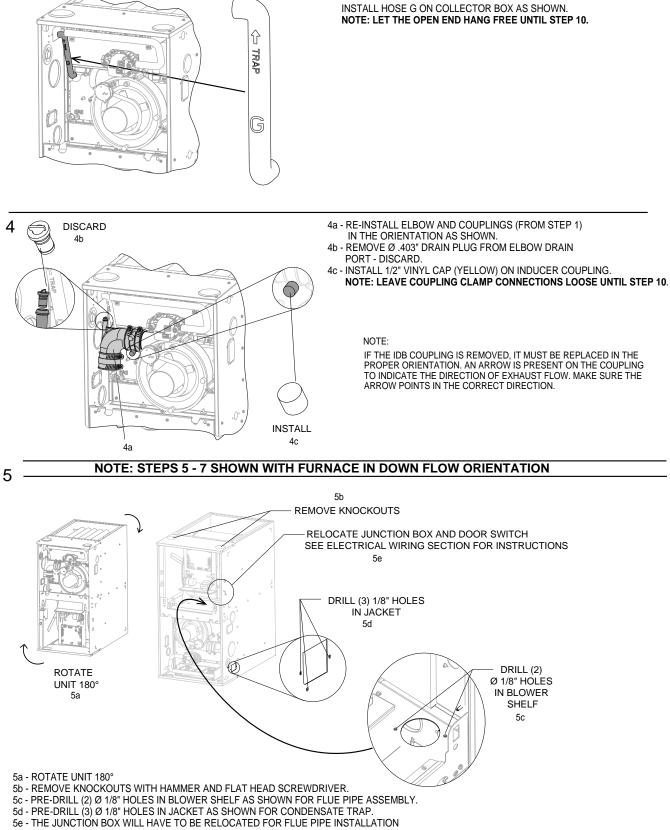


HORIZONTAL LEFT / RIGHT VENT

PARTS NEEDED FOR THIS CONVERSION REQUIRE ITEMS FROM THE **PARTS BAG**, CONVERSION KIT **RXGY-CK** AND **RXGY-ZK**. YOU MUST HAVE THE PARTS OUTLINED BELOW FROM THESE KITS BEFORE PROCEEDING.



Field Conversions



3

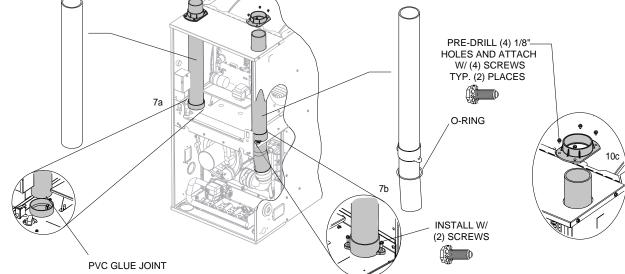
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Field Conversions

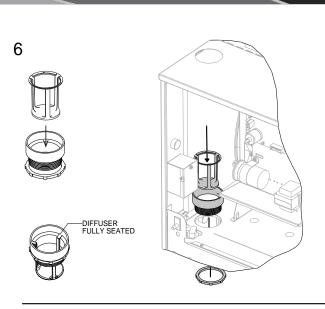
7

- 7a INSTALL INTAKE PIPE: SLIDE INTAKE PIPE THROUGH THE LEFT SIDE KNOCKOUT, CLEAN AND PVC GLUE TO INTAKE COUPLING AS SHOWN.
 7b INSTALL FLUE PIPE ASSEMBLY: INSERT FLUE PIPE ASSEMBLY THROUGH RIGHT SIDE KNOCKOUT, (NOTE: SLIDE FROM UNDER PLATE).
 SLIDE ANGLED END THROUGH OPENING IN BLOWER SHELF AND ALIGN WITH ELBOW COUPLING. SECURE PIPE ASSEMBLY TO BLOWER
- SHELF WITH (2) SCREWS AS SHOWN. ENSURE O-RING IS PROPERLY SEATED. 7c SLIDE PIPE COLLAR ASSEMBLIES OVER THE (2) PIPES AND DRILL (8) Ø 1/8" HOLES USING THE COLLARS AS A TEMPLATE. SECURE WITH (8) SCREWS AS SHOWN.





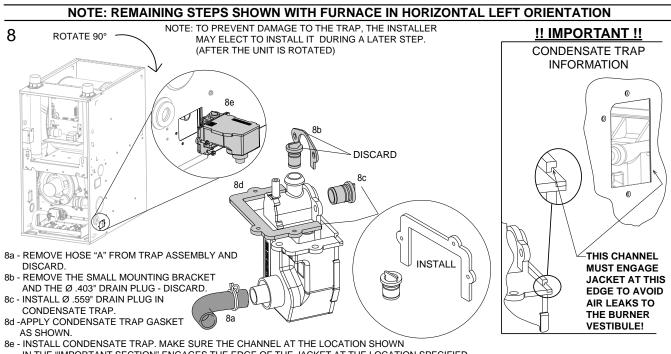
NOTE:



INSTALL INTAKE COUPLING IN BLOWER SHELF HOLE AS SHOWN. INSERT AIR DIFFUSER INTO COUPLING UNTIL RING/TABS ARE SEATED.

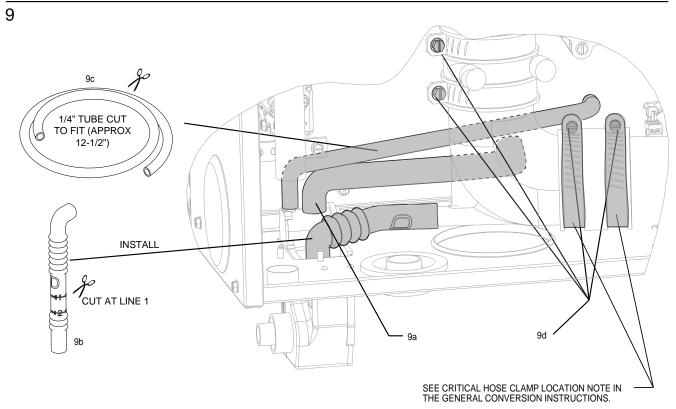
THIS STEP. THE INSTALLER MAY ELECT TO INSTALL THE DIFFUSER AFTER ROTATING THE FURNACE TO THE HORIZONTAL POSITION.

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- IN THE "IMPORTANT SECTION" ENGAGES THE EDGE OF THE JACKET AT THE LOCATION SPECIFIED.
- 8f SECURE USING 3 SCREWS.

8g- ROTATE UNIT 90



- 9a ATTACH HOSE G TO THE TOP OF CONDENSATE TRAP.
- 9b LOCATE HOSE D (REMOVED IN STEP 1) CUT ON LINE 1 INSTALL
- NOTE: ROUTE FROM FLUE ELBOW TO FLUE SIDE TAP IN THE CONDENSATE TRAP. CUT 1/4" VENT TUBE TO FIT (APPROX. 12-1/2") AND INSTALL AS SHOWN. 9c
- NOTE: ROUTE FROM COLLECTOR BOX TO TOP OF CONDENSATE TRAP
- 9d TIGHTEN ELBOW AND INDUCER CLAMPS TO FLUE PIPE W/ 5/16" NUT DRIVER.

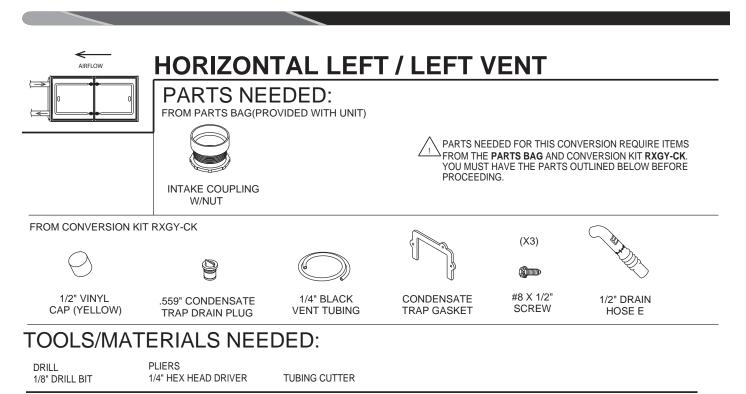
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Field Conversions

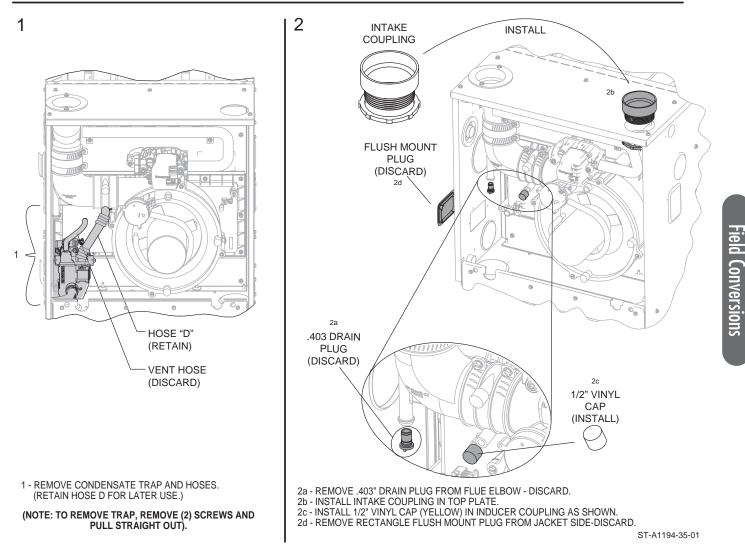
Checklist:

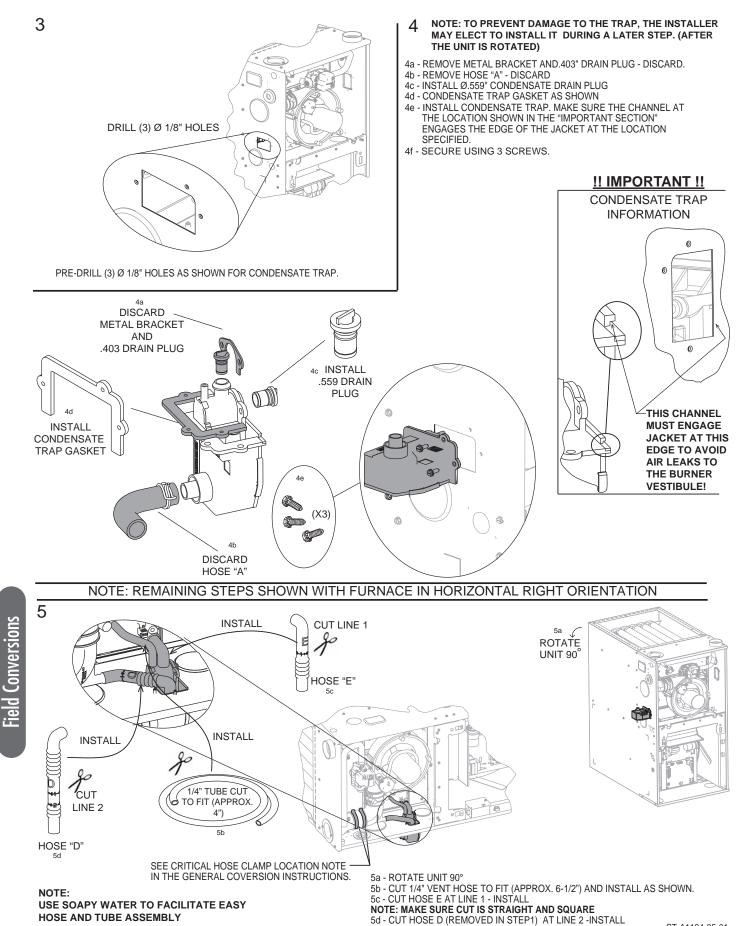
- ___ VERIFY ALL HOSES ARE SECURE AND FULLY SEATED.
- ___ CONFIRM THAT ALL HOSES ARE FREE OF KINKS.
- __ CONFIRM ALL HOSES AND OTHER DRAIN PARTS HAVE A SLOPE IN DIRECTION OF WATER FLOW.
- ____ BOTH WORM DRIVES ON THE HOSE CLAMPS OF THE FLUE TRANSITION MUST BE LOCATED ON THE TOP OF THE COUPLING. SEE LOCATION DETAIL IN THE GENERAL CONVERSION INSTRUCTIONS AT THE BEGINNING OF THIS SECTION.
- ___ ALL CLAMPS AND COUPLINGS ARE TIGHTENED
- ____ ALL DRAIN PORTS ARE PLUGGED.
- ___ UNIT HAS FORWARD PITCH.
- ____ HEAT TAPE INSTALLED(IF REQUIRED)

Notes:



NOTE: THESE CONVERSION INSTRUCTIONS ARE INTENTIONALLY GENERIC, SOME PARTS MAY BE DIFFERENT IN YOUR FURNACE NOTE: STEPS 1- 4 SHOWN WITH FURNACE IN "AS SHIPPED CONDITION"





Checklist:

- ___ VERIFY ALL HOSES ARE SECURE AND FULLY SEATED.
- ___ CONFIRM THAT ALL HOSES ARE FREE OF KINKS.
- CONFIRM ALL HOSES AND OTHER DRAIN PARTS HAVE A SLOPE IN DIRECTION OF WATER FLOW.
- ____ BOTH WORM DRIVES ON THE HOSE CLAMPS OF THE FLUE TRANSITION MUST BE LOCATED ON THE TOP OF THE COUPLING. SEE LOCATION DETAIL IN THE GENERAL CONVERSION INSTRUCTIONS AT THE BEGINNING OF THIS SECTION.
- ___ ALL CLAMPS AND COUPLINGS ARE TIGHTENED
- ____ ALL DRAIN PORTS ARE PLUGGED.
- ___ UNIT HAS FORWARD PITCH.
- ___ HEAT TAPE INSTALLED(IF REQUIRED)

Notes:

DUCTING

External filter racks are available from the distributor. Use the following part numbers when ordering:

RXGF-CA	External Side Filter Rack Kit			
RXGF-CC	External Filter Rack Kit- Downflow			
RXGF-F17	17 1/2"	15"	16"x25"	
RXGF-F21	21"	18 1/2"	20"x25"	
RXGF-F24	24 1/2"	22"	20"x25"	

Proper air flow is required for the correct operation of this furnace. Restricted air flow can cause erratic operation and can damage the heat exchanger. The duct system must carry the correct amount of air for heating and cooling if summer air conditioning is used.

A WARNING

ZONING SYSTEMS ARE NOT DIRECTLY SUPPORTED IN THIS MANUAL. IF A THIRD PARTY SYSTEM IS USED REFER TO THE MANUFACTURER OF THAT PRODUCT FOR INSTALLA-TION AND OPERATION INSTRUCTIONS.

ZONING SYSTEMS USED ON THIS PRODUCT MUST HAVE SENSORS TO PREVENT FURNACES AND/OR HEATING EL-EMENTS FROM CYCLING ON INTERNAL LIMIT CONTROLS. THE ZONING SYSTEM MUST NOT ALLOW THE EVAPORA-TOR COILS AND/OR HYDRONIC COILS TO FREEZE.

A WARNING

SOME HEATING AIRFLOW VALUES MAY BE HIGHER THAN THOSE REQUIRED FOR COOLING. BE SURE TO SIZE DUCT FOR THE MAXIMUM POSSIBLE AIRFLOW VALUE.

SIZE AIRFLOW DISTRIBUTION SYSTEM TO ACCEPT-ABLE INDUSTRY STANDARDS AND METHODS. TOTAL STATIC PRESSURE DROP OF THE AIR DISTRIBUTION SYSTEM SHOULD NOT EXCEED .8 INCHES W.C. THIS WILL INCLUDE ANY AIR CONDITIONER COIL, AIR FIL-TRATION SYSTEM, ZONING SYSTEM, DUCTWORK, ETC. REFER TO ADDED EQUIPMENT TECHNICAL INFOR-MATION TO OBTAIN PRESSURE DROP INFORMATION WHEN EQUIPMENT IS OPERATING AT RECOMMENDED HEATING OR COOLING CFMS.

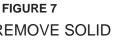
IMPORTANT: When using outside air, design and adjust the system to maintain a return air temperature ABOVE 55° F during the heating season.

NOTE: Return air grilles and warm air registers must not be obstructed or closed.

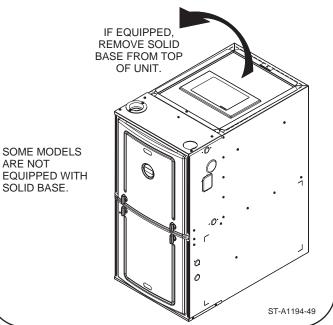
NOTE: Both flanges on the supply and return openings must be bent either up or down but cannot remain flat as shipped from the factory. See Figure 9 for details.

UPFLOW INSTALLATIONS

- 1. Position the unit to minimize long runs of duct or runs of duct with many turns and elbows.
- 2. For side return: Cut an opening in the side. The opening should be cut the full width and height of the knockouts on the unit. See Figure 10.



REMOVE SOLID BASE PANEL FROM THE TOP BEFORE INSTALLING FURNACE



WARNING

IF EQUIPPED. THE SOLID METAL BASE PAN MUST BE REMOVED FROM THE TOP OF THE FURNACE BEFORE INSTALLING THE FURNACE. FAILURE TO REMOVE THIS PAN FROM THE SHIPPING POSITION CAN RESULT TO DAMAGE TO THE FURNACE OR EQUIPMENT.

WARNING

BLOWER AND BURNERS MUST NEVER BE OPERATED WITHOUT THE BLOWER DOOR IN PLACE. THIS IS TO PREVENT DRAWING GAS FUMES (WHICH COULD CON-TAIN HAZARDOUS CARBON MONOXIDE) INTO THE HOME THAT COULD RESULT IN PERSONAL INJURY OR DEATH.

- 3. If summer air conditioning is desired, position the indoor coil on the supply-air side of the unit. Ensure that no air can bypass the coil.
- 4. Connect the furnace to the supply air plenum.
- 5. Connect the return air ducting to the return-air opening at the bottom and/or side of the unit. Make the connections air-tight to prevent the migration of toxic fumes and odors including carbon monoxide from migrating into the living space.
- 6. If a filter is installed near the furnace, be sure to have adequate space for installation and removal of the unit filter.
- 7. **NOTE:** Where the maximum airflow is 1800 CFM and multiple return air plenums are required for installation; the bottom and/or **BOTH** sides may be used for the return air, however the rear of the furnace can **NOT** be used as a return air in any configuration.

DUCTING

WARNING

UPFLOW FURNACE: THE SOLID METAL BASE PLATE (SHIPPED WITH THE FURNACE) MUST BE INSTALLED IN THE FURNACE BOTTOM WHEN USING SIDE AIR RETURN. FAILURE TO INSTALL A BASE PLATE COULD CAUSE THE PRODUCTS OF COMBUSTION TO CIRCULATE INTO THE LIVING SPACE AND CREATE POTENTIALLY HAZARDOUS CONDITIONS, INCLUDING CARBON MONOXIDE POISONING OR DEATH. FOR BOTTOM RETURN, A SOLID METAL BASE PAN MUST NOT BE INSTALLED.

NOTE: DO NOT take return air from furnace rooms, garages or cold areas. Avoid return air from utility rooms, kitchens, laundry rooms and bathrooms.

DOWNFLOW INSTALLATIONS

- 1. Position the unit to minimize long runs of duct or runs of duct with many turns and elbows.
- 2. If summer air conditioning is desired, position the indoor coil on the supply-air side of the unit. Ensure that no air can bypass this coil.
- 3. If installing on a combustible floor **and not using an air conditioning plenum**, install the special non-combustible floor base. See Table 1 and Figure 11.
- 4. Connect the furnace to the supply air plenum.
- 5. Connect the return air ducting to the return air open-

WARNING

A DOWNFLOW INSTALLATION IS CERTIFIED FOR IN-STALLATION ON A NON-COMBUSTIBLE FLOOR. USE THE SPECIAL BASE SPECIFIED ON THE FURNACE CLEARANCE LABEL. FAILURE TO INSTALL THE SPE-CIAL BASE MAY RESULT IN FIRE, PROPERTY DAM-AGE, PERSONAL INJURY OR DEATH. THIS BASE IS AVAILABLE AS AN ACCESSORY.

ing at the top of the unit. Make the connection air tight to prevent the migration of toxic fumes and odors including carbon monoxide from migrating into the living space from an adjacent fuel-burning appliance.

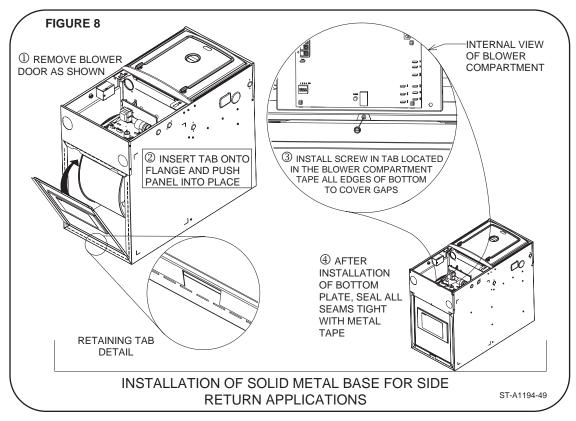
NOTE: In downflow configuration, side return air cut out is not permitted. Do **NOT** take return air from the back of the unit.

6. If a filter is installed near the furnace, be sure to have adequate space for installation and removal of the unit filter.

NOTE: DO NOT take return air from furnace rooms, garages or cold areas. Avoid return air from utility rooms, kitchens, laundry rooms and bathrooms.

HORIZONTAL INSTALLATIONS

1. Position the unit to minimize long runs of duct or runs of duct with many turns and elbows.

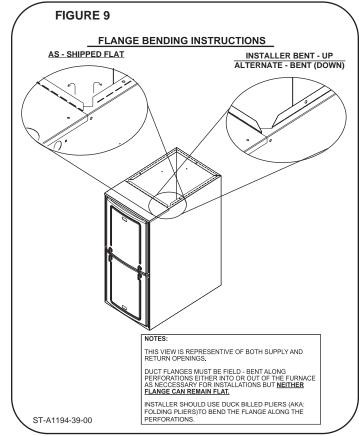


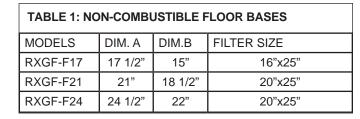
DUCTING

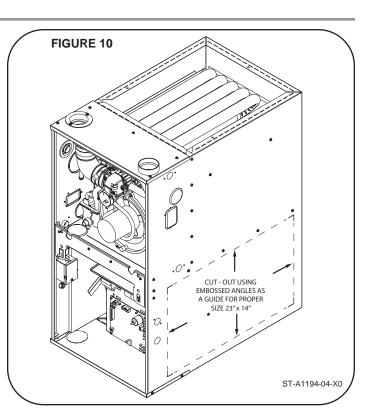
- 2. If summer air conditioning is desired, position the indoor coil on the supply air side of the unit. Ensure that no air can bypass this coil.
- 3. Connect the furnace to the supply air plenum.
- 4. Connect the return air ducting to the return air opening at the return-air end of the unit. Make the connection air tight to prevent the migration of toxic fumes and odors including carbon monoxide from migrating into the living space from an adjacent fuel-burning appliance.

NOTE: In horizontal configuration, side return air cut out is not permitted. Do <u>NOT</u> take return air from the back of the unit.

5. If a filter is installed near the furnace, be sure to have adequate space for installation and removal ofthe unit filter.







NOTE: DO NOT take return air from furnace rooms, garages or cold areas. Avoid return air from utility

