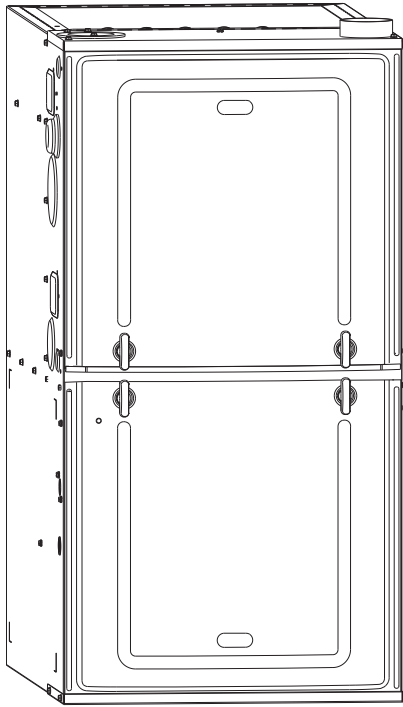


INSTALLATION INSTRUCTIONS

FOR 4 POSITION CONDENSING SINGLE STAGE SINGLE-STAGE GAS FURNACES

(-)92P SERIES

& (-)(-)92MSP SERIES



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

PROPOSITION 65 WARNING: THIS PRODUCT CONTAINS CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

▲ 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.



← Factory Use Only

92-24161-118-11
SUPERSEDES 92-24161-118-10

TABLE OF CONTENTS

1	TABLE OF CONTENTS	2
2	GENERAL INFORMATION	3
	Receiving	4
	California Proposition 65 Note	4
	Checklist	5
3	SAFETY INFORMATION	6
	Warnings	6
	Important Information About Efficiency and Quality ..	7
	Commonwealth of Massachusetts Note	8
4	LOCATION REQUIREMENTS	9
	Freeze Protection	9
	Site Selection	10
	Clearance Accessibility	10
	Clearance Table	11
5	FIELD CONVERSION	12
	General Conversion Instructions and Tips	12
	Lists of Materials for Parts Bag and Conversion Kits	13
	Conversion Table of Contents	14
	Upflow with Vertical Vent	15-16
	Upflow with Left Side Vent	17-18
	Downflow with Right Vent (Non Zero Clearance) ..	19-22
	Downflow Zero-Clearance	23-27
	Horizontal Right with Right Vent	29-30
	Horizontal Right with Vertical Vent	31-33
	Horizontal Left with Right Vent	34-38
	Horizontal Left with Left Vent	39-41
6	DUCTING	42
7	VENTING	45
	General Venting Requirements and Guidelines (All Instructions)	45
	Venting and Combustion Air Piping Requirements	45
	Piping Requirements	46
	Vent Pipe Sizing and Maximum Lengths	48
	Equivalent Vent Length	49
	Polypropylene Vent Products	50
	Termination Requirements	51
	Non-Direct Venting	52
	Non-Direct Venting in an Unconfined Space	52
	Non-Direct Venting in a Confined Space	52
	Non-Direct Venting Termination	55
	Non-Direct Venting Termination Clearances	57
	Direct Venting	58
	<u>Option 1:</u> Standard Vertical Direct Vent Termination	58
	<u>Option 2:</u> Standard Horizontal Direct Vent Termination	60
	<u>Option 3:</u> Variant of Standard Horizontal Direct Vent Termination	60
	<u>Option 4:</u> Alternate Horizontal Direct Vent Termination	61
	<u>Option 5:</u> Variant of Alternate Horizontal Direct Vent Termination	61
	Optional Termination Angles for Alt. Horizontal and Variant of Alt. Horizontal Direct-Vent Terminations (Options 4 and 5) . . .	62
	<u>Option 6 & 7:</u> Vertical and Horizontal Concentric Vent Termination (RXGY-E02A and RXGY-E03A)	63
	<u>Options 8 & 9:</u> Sidewall Vent Kit for Direct Vent Termination (RXGY-G02 & RXGY-G01)	64
	Direct Venting Termination Clearances	65
	Multiventing of Direct Vent Furnaces	66
8	CONDENSATE DRAIN AND DRAIN NEUTRALIZER	67
9	GAS SUPPLY AND PIPING	69
	Gas Supply	69
	Gas Piping	70
	Gas Pressure	73
	Gas Valve	73
10	LP CONVERSION	74
	Setting the Gas Pressure	75
11	ELECTRICAL WIRING	76
	Reversing the Electrical Connection	76
	Thermostat	77
12	ACCESSORIES	78
	Electronic Air Cleaner	78
	Humidifier	78
	Filter	78
13	TWINNING	80
14	HIGH ALTITUDE	83
	Natural Gas at High Altitudes	83
	LP Gas at High Altitudes	85
15	STARTUP PROCEDURE	86
	Sequence of Operations	86
16	DIAGNOSTICS AND FAULT CODES	87
17	LOCKOUT	88
18	FIELD SELECTIONS – DIPSWITCHES	89
19	FAULT CLEAR	90
20	FAULT RECALL	90
21	FLAME STATUS L.E.D.	90
22	TIMING DIAGRAM	90
23	ADJUSTING OR CHECKING FURNACE INPUT .	91
24	SETTING INPUT RATE	92
25	AIRFLOW	93
	Blower Speed Selection	94
26	MAINTENANCE	95
27	SYSTEM OPERATION INFO	96
28	ANNUAL INSPECTION	96
29	REPLACEMENT PARTS	96
30	TROUBLESHOOTING	96
	Troubleshooting Guide	97
31	WIRING DIAGRAM	98

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.

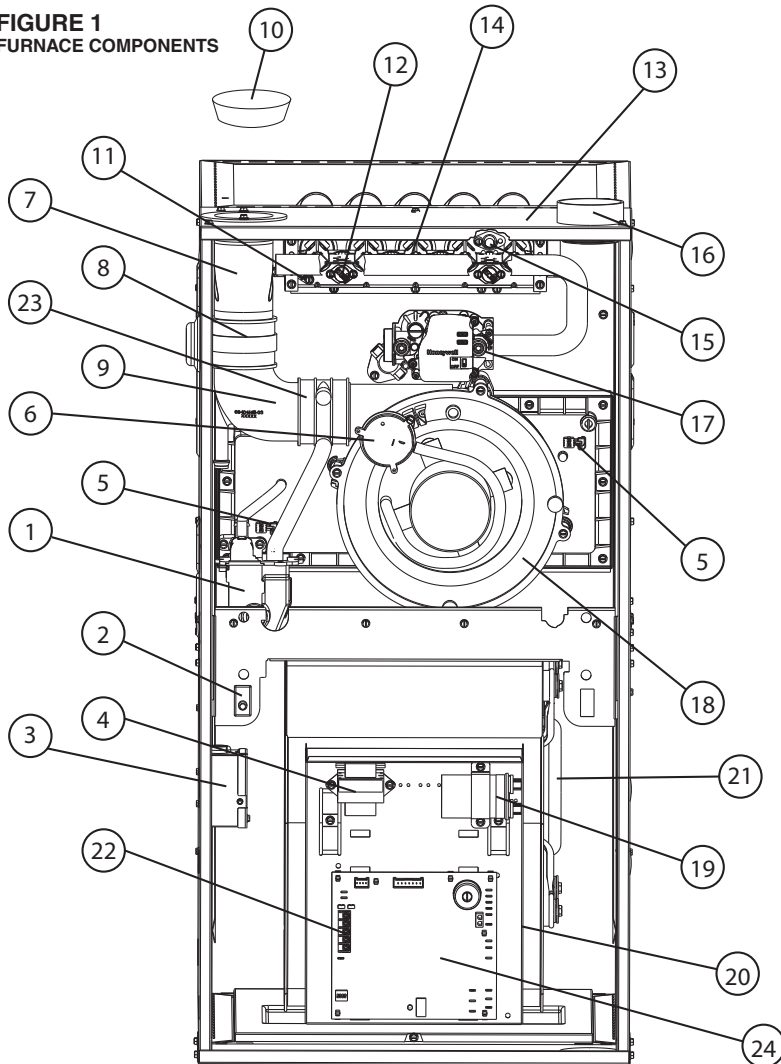
The (-)R92P and (-)(-)92MSP series furnaces are design-certified by CSA for use with natural and propane gases as follows:

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

FIGURE 1
FURNACE COMPONENTS



ITEM NO.	DESCRIPTION
1	CONDENSATE TRAP
2	DOOR SWITCH
3	JUNCTION BOX
4	TRANSFORMER
5	WATER SENSOR (2)
6	MAIN PRESSURE SWITCH
7	EXHAUST TRANSITION
8	COUPLING (ELBOW TO TRANSITION)
9	EXHAUST
10	SHIPPING PLUG
11	FLAME SENSOR
12	OVER TEMPERATURE SWITCH
13	TOP PLATE
14	BURNER
15	IGNITER
16	COMBUSTION AIR INLET
17	GAS VALVE
18	INDUCED DRAFT BLOWER (IDB)
19	CAPACITOR
20	CONTROL MOUNTING PLATE
21	BLOWER
22	LOW VOLTAGE TERMINAL
23	COUPLING (IDB TO ELBOW)
24	FURNACE CONTROL

ST-A1194-02-XO

GENERAL INFORMATION (cont.)

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.

CALIFORNIA RESIDENTS ONLY

IMPORTANT: All manufacturer products meet current Federal OSHA Guidelines for safety. California Proposition 65 warnings are required for certain products, which are not covered by the OSHA standards.

California's Proposition 65 requires warnings for products sold in California that contain, or produce, any of over 600 listed chemicals known to the State of California to cause cancer or birth defects such as fiberglass insulation, lead in brass, and combustion products from natural gas.

All "new equipment" shipped for sale in California will have labels stating that the product contains and/or produces Proposition 65 chemicals. Although we have not changed our processes, having the same label on all our products facilitates manufacturing and shipping. We cannot always know "when, or if" products will be sold in the California market.

You may receive inquiries from customers about chemicals found in, or produced by, some of our heating and air-conditioning equipment, or found in natural gas used with some of our products. Listed below are those chemicals and substances commonly associated with similar equipment in our industry and other manufacturers.

- Glass Wool (Fiberglass) Insulation
- Carbon Monoxide (CO)
- Formaldehyde
- Benzene

More details are available at the Websites for OSHA (Occupational Safety and Health Administration), at www.osha.gov and the State of California's OEHHA (Office of Environmental Health Hazard Assessment), at www.oehha.org. Consumer education is important since the chemicals and substances on the list are found in our daily lives. Most consumers are aware that products present safety and health risks, when improperly used, handled and maintained.

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

REFER TO INSTALLATION INSTRUCTIONS

GAS SUPPLY

- _____ Correct pipe size (record size)
- _____ Correct supply pressure (during furnace operation) (record pressure)
- _____ Manifold pressure (record upstream pressure)
- _____ No gas leaks
- _____ L.P. Kit Number (if applicable) (record kit number)

ELECTRICAL

- _____ 115 V.A.C. supply (Dedicated Circuit) (record voltage)
- _____ Polarity observed
- _____ Furnace properly grounded
- _____ Correct wire size (record type and gauge)

FURNACE INSTALLATION

- _____ Correct clearance to combustibles (record clearance)
- _____ Correct clearance for service (at front) (record clearance)

DUCT STATIC PRESSURE

- _____ in. w.c. on heating speed (record static pressure)
- _____ in. w.c. on cooling speed (record static pressure)
- _____ Air temperature rise in heat (record air temperature rise)
- _____ Air temperature rise in cool (record air temperature rise)

CONDENSATE LINE

- _____ Trap filled with water
- _____ Vented
- _____ Sloped toward drain
- _____ Condensate drain line hoses connected and clamped
- _____ Freeze protection (if necessary)

VENTING – DIRECT VENT

- _____ in. diameter – intake pipe (record diameter)
- _____ in. diameter – exhaust pipe (record diameter)
- _____ ft. of pipe – intake air (record length)
- _____ no. of elbows – intake air (record number of elbows)

- _____ ft. of pipe – exhaust pipe (record length)
- _____ no. of elbows – exhaust pipe (record number of elbows)
- _____ Exhaust Vent Temperature (record temperature)

TERMINATIONS – DIRECT VENT

VERTICAL

- _____ 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
- _____ Correct relationship – exhaust to intake

HORIZONTAL/VERTICAL – CONCENTRIC (RXGY-E03A)

- _____ 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

- _____ Exhaust sloped down toward furnace

- _____ Correct distances (horizontal and vertical) – exhaust to intake

- _____ 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 Propane Installation Code

- _____ Above anticipated snow level (record maximum anticipated snow level)

VENTING – NON-DIRECT VENT

- _____ in. diameter – exhaust pipe (record diameter)
- _____ ft. of pipe – exhaust (record length)
- _____ no. of elbows (record number of elbows)

TERMINATION – NON-DIRECT VENT

VERTICAL

- _____ 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 (record height above anticipated snow level)

HORIZONTAL – STANDARD

- _____ 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 Propane Installation Code

SAFETY INFORMATION

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.

WARNING

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

WARNING

IMPROPER INSTALLATION, OR INSTALLATION NOT MADE IN ACCORDANCE WITH THE CSA INTERNATIONAL (CSA) CERTIFICATION OR THESE INSTRUCTIONS, CAN RESULT IN UNSATISFACTORY OPERATION AND/OR DANGEROUS CONDITIONS AND ARE NOT COVERED 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 INDICATION OF A POTENTIAL SAFETY HAZARD THAT MUST BE ADDRESSED BY A QUALIFIED TECHNICIAN, SERVICE 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.

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 COMMERCIALY AVAILABLE SOAP SOLUTION MADE SPECIFICALLY FOR THE DETECTION OF LEAKS TO CHECK ALL CONNECTIONS, AS SPECIFIED IN GAS SUPPLY AND PIPING SECTION OF THESE INSTRUCTIONS.

WARNING

COMBUSTION AND VENTILATION AIR MUST BE PROVIDED 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 OUTDOORS. 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 FURNACE, THE RETURN AIR SHALL ALSO BE HANDLED BY DUCT(S) SEALED TO THE FURNACE CASING AND TERMINATING OUTSIDE THE SPACE CONTAINING THE FURNACE.

WARNING

WHENEVER THE FACTORY RETURN-AIR CONNECTION IS NOT USED IT MUST BE SEALED. A SOLID METAL BASE PLATE MUST BE INSTALLED AND SEALED. FACTORY 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 CONDITIONED 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 PARTICLES WILL BE HEATED AND CHARRED BY CONTACT WITH THE FURNACE HEAT EXCHANGER. THIS SOOTY RESIDUE WILL SOIL CEILINGS, WALLS, DRAPES, CARPETS AND OTHER HOUSEHOLD ARTICLES. SOOT DAMAGE MAY ALSO RESULT WITH, OR WITHOUT, FILTERS IN PLACE, WHEN CERTAIN TYPES OF CANDLES ARE BURNED, OR CANDLEWICKS ARE LEFT UNTRIMMED.

WARNING

IN COMPLIANCE WITH RECOGNIZED CODES, IT IS RECOMMENDED THAT AN AUXILIARY DRAIN PAN BE INSTALLED 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 DISPOSAL SYSTEM OR THE COIL DRAIN PAN OR A STOPPAGE IN THE PRIMARY CONDENSATE DRAIN PIPING.

⚠ WARNING

ALWAYS INSTALL THE FURNACE TO OPERATE WITHIN THE FURNACE'S INTENDED TEMPERATURE-RISE RANGE WITH A DUCT SYSTEM WHICH HAS AN EXTERNAL STATIC PRESSURE WITHIN THE ALLOWABLE RANGE, AS SPECIFIED IN THE DUCTING SECTION OF THESE INSTRUCTIONS. SEE ALSO FURNACE RATING PLATE.

THE FURNACE MAY BE USED FOR HEATING OF BUILDINGS OR STRUCTURES UNDER CONSTRUCTION.

INSTALLATION MUST COMPLY WITH ALL INSTALLATION INSTRUCTIONS INCLUDING:

- PROPER VENT INSTALLATION;
- FURNACE OPERATING UNDER THERMOSTAT CONTROL;
- RETURN AIR DUCT SEALED TO THE FURNACE;
- AIR FILTERS IN PLACE;
- SET FURNACE INPUT RATE AND TEMPERATURE RISE PER RATING PLATE MARKINGS;
- MEANS FOR PROVIDING OUTDOOR AIR REQUIRED FOR COMBUSTION;
- RETURN AIR TEMPERATURE MAINTAINED BETWEEN 55°F (13°C) AND 80°F (27°C); AND
- CLEAN FURNACE, DUCT WORK AND COMPONENTS UPON SUBSTANTIAL COMPLETION OF THE CONSTRUCTION PROCESS, AND VERIFY THAT THE FURNACE OPERATING CONDITIONS INCLUDING IGNITION, INPUT RATE, TEMPERATURE RISE AND VENTING, ACCORDING TO THE INSTRUCTIONS 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

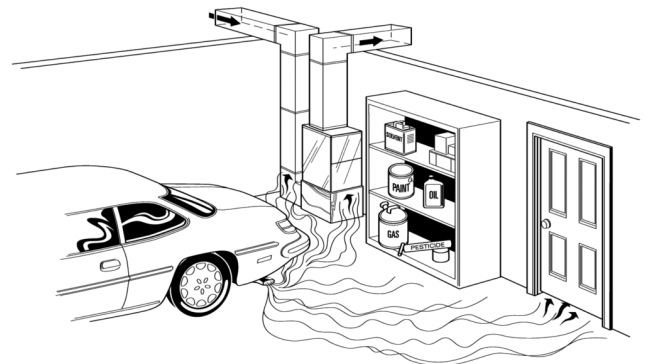
DUCT LEAKS CAN CREATE AN UNBALANCED SYSTEM AND DRAW POLLUTANTS SUCH AS DIRT, DUST, FUMES AND ODORS INTO THE HOME CAUSING PROPERTY DAMAGE. FUMES AND ODORS FROM TOXIC, VOLATILE OR FLAMMABLE CHEMICALS, AS WELL AS AUTOMOBILE EXHAUST AND CARBON MONOXIDE (CO), CAN BE DRAWN INTO THE LIVING SPACE THROUGH LEAKING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

- IF AIR-MOVING EQUIPMENT OR DUCTWORK IS LOCATED 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 LOCATED IN SPACES CONTAINING FUEL BURNING APPLIANCES SUCH AS WATER HEATERS OR BOILERS - 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 BYPRODUCTS INCLUDING CARBON MONOXIDE INTO THE LIVING SPACE.

⚠ WARNING

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

FIGURE 2
MIGRATION OF DANGEROUS SUBSTANCES, FUMES, AND ODORS INTO LIVING SPACES



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

COMMONWEALTH OF MASSACHUSETTS NOTE

IMPORTANT! THE COMMONWEALTH OF MASSACHUSETTS REQUIRES COMPLIANCE WITH REGULATION 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 DETECTORS. 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 EQUIPMENT 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 EQUIPMENT 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

WARNING

WHEN THIS FURNACE IS INSTALLED IN A RESIDENTIAL GARAGE, IT MUST BE INSTALLED SO THE BURNERS AND IGNITION SOURCE ARE LOCATED 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 DAMAGE, 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 crawlspaces. Provisions must be made to prevent freezing of condensate.

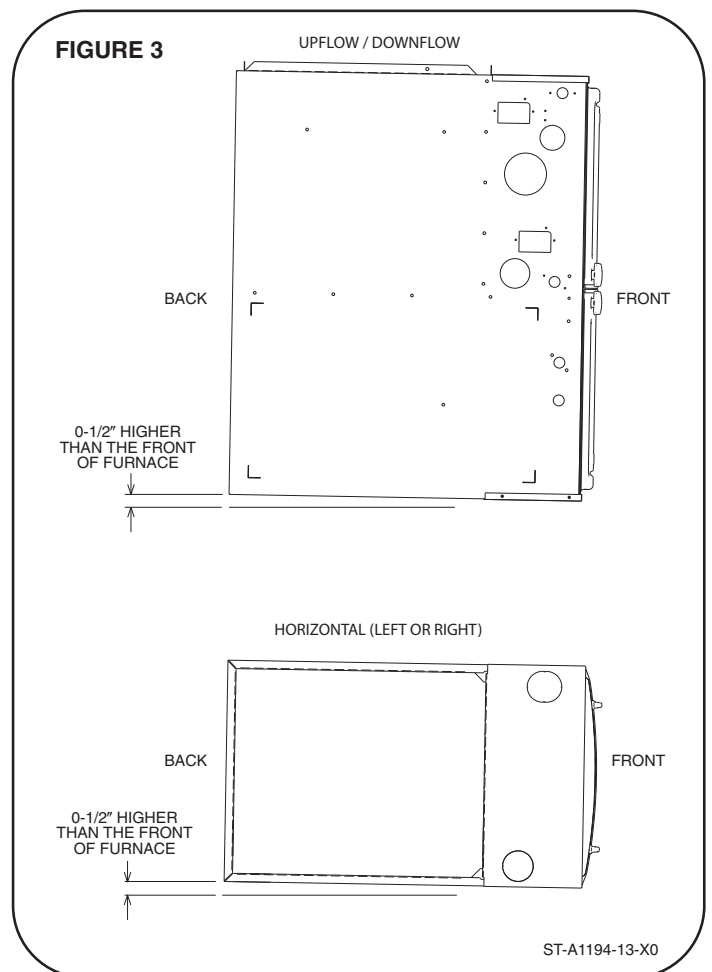
FREEZE PROTECTION

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

LOCATION REQUIREMENTS

GENERAL INFORMATION (cont.)

⚠ WARNING

THIS FURNACE IS NOT APPROVED OR RECOMMENDED 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.
2. 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 EXCHANGER 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 (30 cm) is recommended in front of all furnaces.

NOTE: Use recommended 24" (30 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.

⚠ WARNING

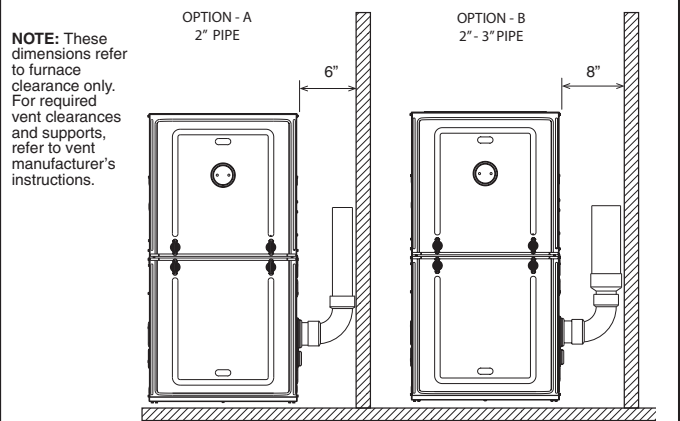
UPFLOW FURNACES ARE DESIGN-CERTIFIED FOR INSTALLATION ON COMBUSTIBLE FLOORS. NOTE, HOWEVER, THAT FURNACES MUST NOT BE INSTALLED DIRECTLY ON CARPETING, TILE OR OTHER COMBUSTIBLE MATERIAL OTHER THAN WOOD FLOORING. INSTALLATION ON A COMBUSTIBLE MATERIAL CAN RESULT IN FIRE, CAUSING PROPERTY DAMAGE, PERSONAL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

FIGURE 4

CLEARANCE FLUE VENT TO WALL

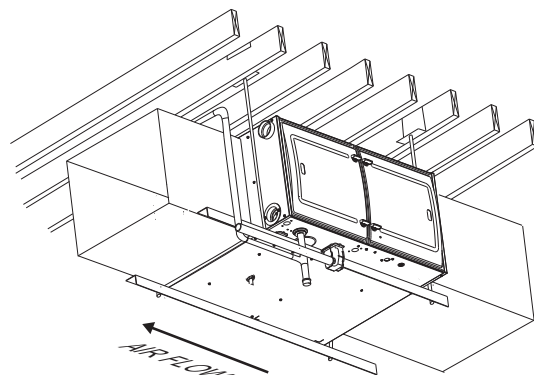


NOTE: THESE ILLUSTRATIONS ARE INTENTIONALLY GENERIC. SOME PARTS OF YOUR FURNACE MAY APPEAR DIFFERENT.

ST-A1194-40-X0

FIGURE 5

NOTE: HORIZONTAL LEFT ORIENTATION DEPICTED IN ILLUSTRATION. HORIZONTAL RIGHT ORIENTATION IS SIMILAR IN INSTALLATION.



ST-A1194-05-X0

FIGURE 6
UNIT DIMENSIONS (CLEARANCE TO COMBUSTIBLES)

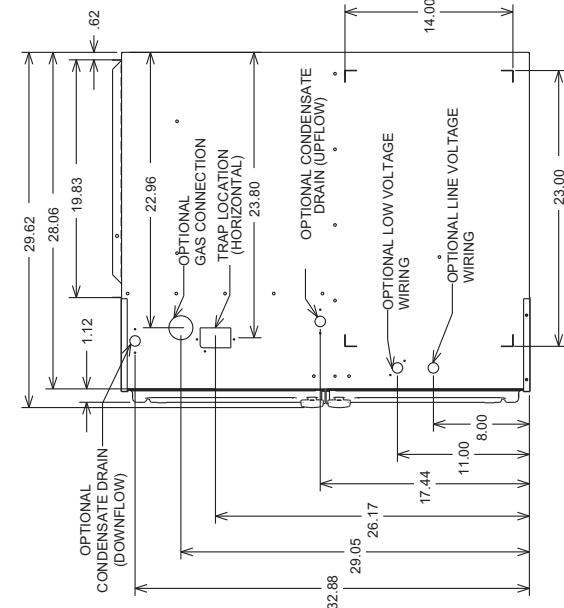
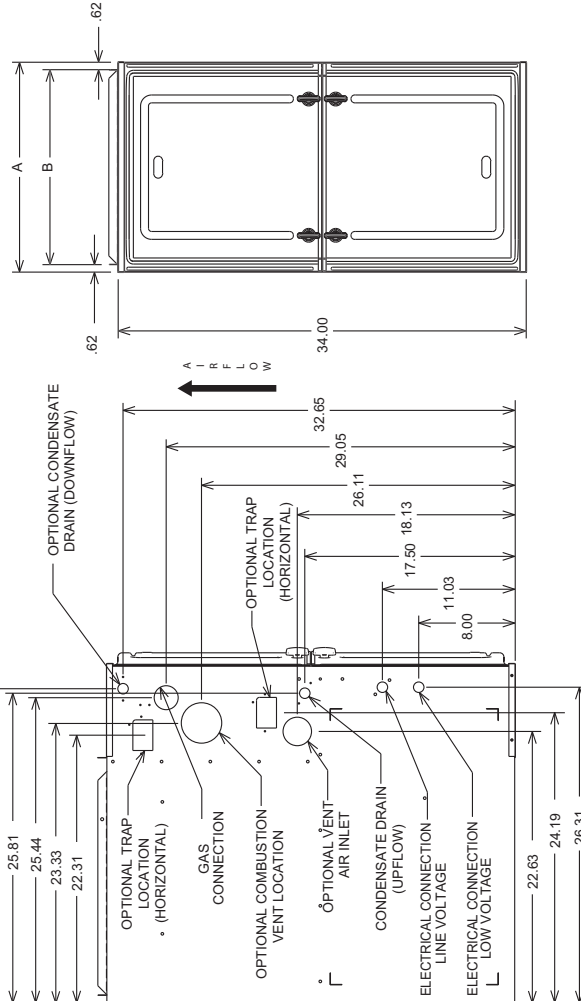
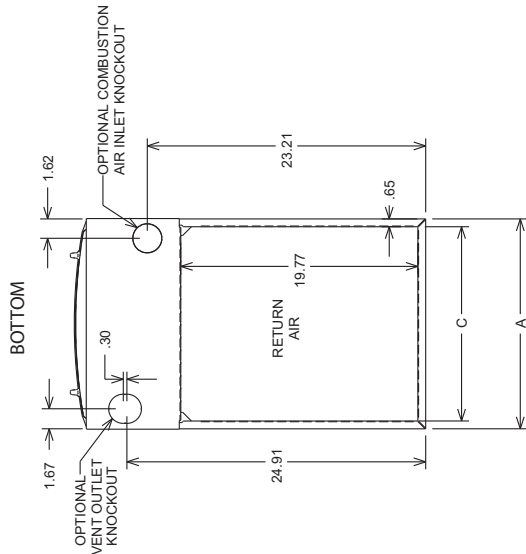
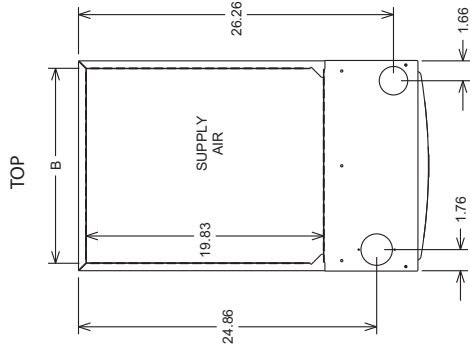
UNIT DIMENSIONS (CLEARANCE TO COMBUSTIBLES)

MODEL	MINIMUM CLEARANCE (IN.)				SHIPPING WEIGHTS			
	LEFT SIDE	RIGHT	BACK	TOP				
(-)R92PA040 & (-)C-192MSP040	0	0	0	1	2	0	0	125
(-)R92PA060 & (-)C-192MSP060	0	0	0	1	2	0	0	
(-)R92PA070 & (-)C-192MSP070	0	0	0	1	2	0	0	
(-)R92PA085 & (-)C-192MSP085	0	0	0	1	2	0	0	
(-)R92PA100 & (-)C-192MSP100	0	0	0	1	2	0	0	
(-)R92PA115 & (-)C-192MSP115	0	0	0	1	2	0	0	

*A SERVICE CLEARANCE OF AT LEAST 24" IS RECOMMENDED IN FRONT OF ALL FURNACES

FLANGE DIMENSIONS		
A	B	C
17 1/2	16 17/64	16 13/64
21	19 49/64	19 45/64
24 1/2	23 17/64	23 13/64

SUPPLY AND RETURN DEPICTED AS UPFLOW CONFIGURATION.
FLANGE CONFIGURATION WILL VARY DEPENDING ON INSTALLATION ORIENTATION.



FRONT

RIGHT SIDE

LEFT SIDE

ST-A1194-01-X0

Location

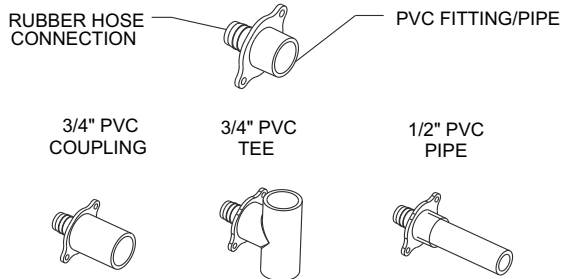
FIELD CONVERSIONS

GENERAL CONVERSION INSTRUCTIONS

CONDENSATE PVC/HOSE OPTIONS

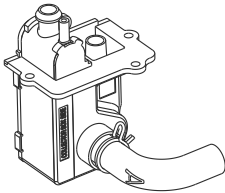
BULKHEAD COUPLING

CONDENSATE DRAINAGE 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.



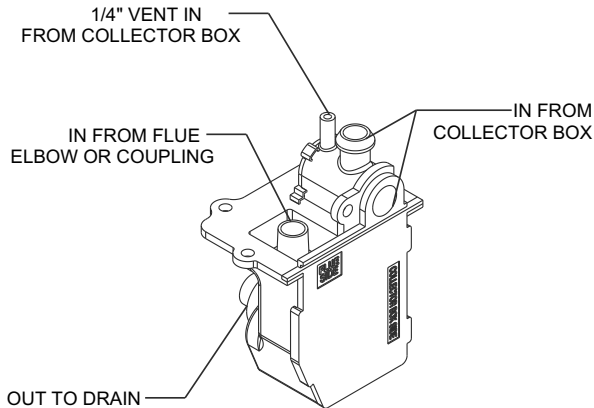
CONDENSATE TRAP

IN ADDITION TO PVC CONNECTIONS, THE CONDENSATE TRAP CAN ACCOMMODATE A 5/8" RUBBER HOSE WITH A HOSE CLAMP WHEN LOCATED INSIDE THE UNIT. PLIERS ARE NECESSARY TO ADD OR REMOVE CLAMP.



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

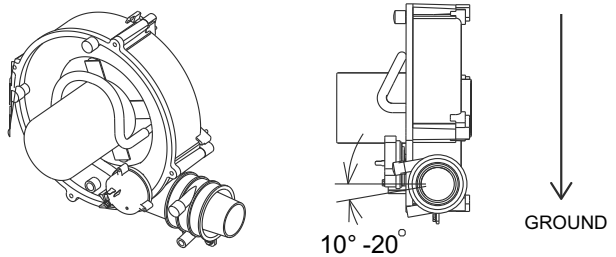
ALL CONVERSIONS REQUIRE THE CONDENSATE PLUMBING TO HAVE DECLINE IN THE DIRECTION OF THE WATER FLOW.

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



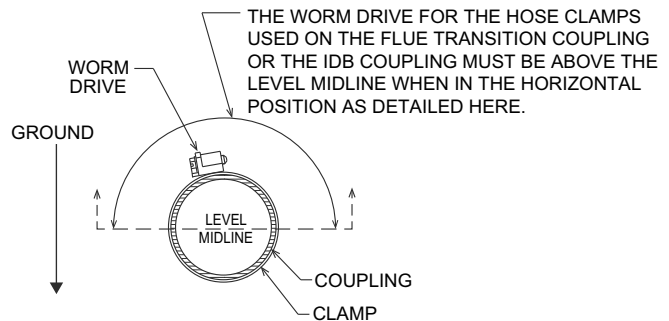
HORIZONTAL INSTALLATIONS REQUIRE CONDENSATE TRAP TO BE MOUNTED EXTERNALLY BELOW THE UNIT:

-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.



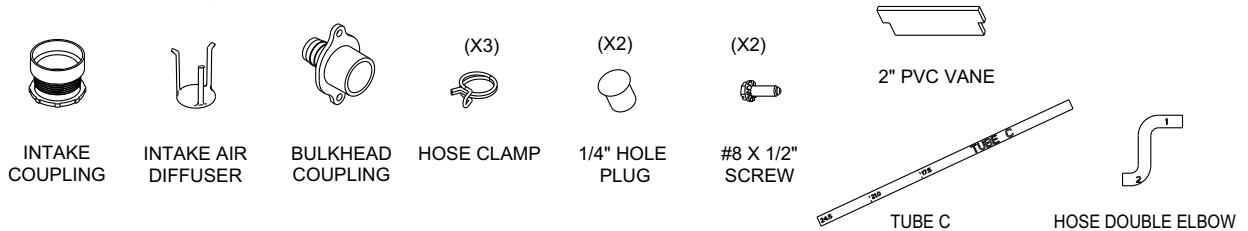
NOTE:

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.

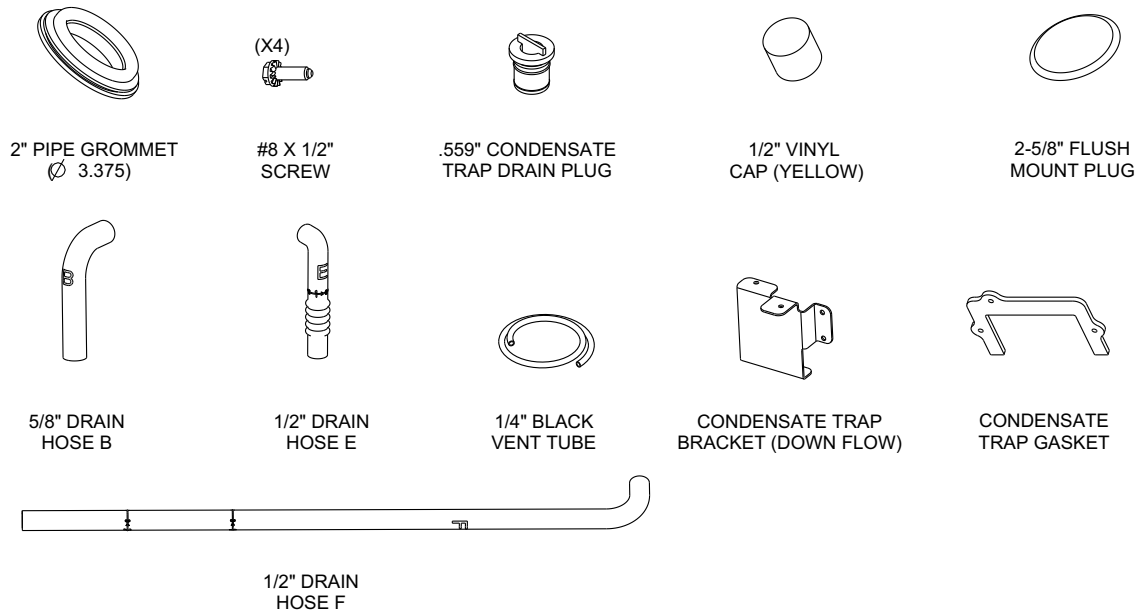
FIELD CONVERSIONS

GENERAL PARTS REQUIRED FOR CONVERSIONS

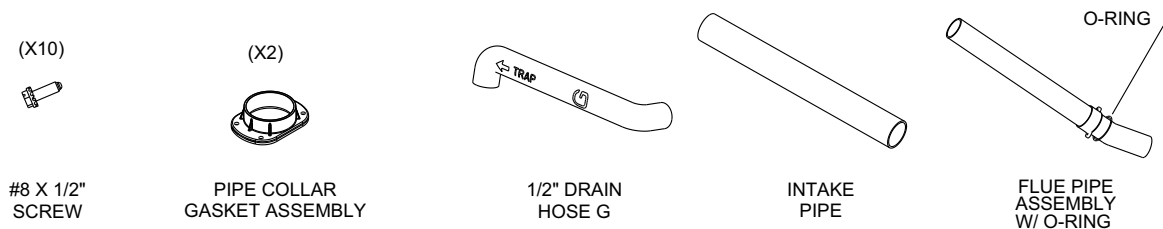
PARTS BAG (PROVIDED WITH UNIT)



CONVERSION KIT RXGY-CK



CONVERSION KIT RXGY-ZK



SEE NEXT PAGE FOR APPLICABLE CONFIGURATIONS

FIELD CONVERSIONS

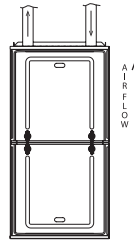
FIELD CONVERSION TO VARIOUS CONFIGURATIONS

Furnaces can be converted in the field from upflow (as-shipped) to downflow, horizontal left or horizontal right as necessary. In addition, there are different venting options, including a zero-clearance option, to give the installer flexibility in locating the venting for this furnace.

LISTS OF MATERIALS FOR PARTS BAGS AND CONVERSION KITS. Pg 12

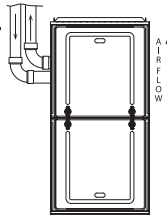
GENERAL CONVERSION INSTRUCTIONS AND TIPS Pg 13

UPFLOW WITH VERTICAL VENT. Pg 15-16



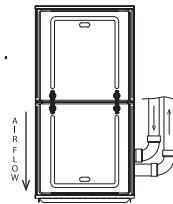
UPFLOW WITH LEFT SIDE VENT. Pg 17-18

(REQUIRES CONVERSION KIT RXGY-CK)



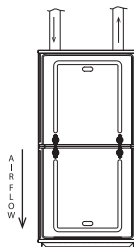
DOWNFLOW WITH RIGHT VENT (NON-ZERO CLEARANCE). Pg 19-22

(REQUIRES CONVERSION KIT RXGY-CK)



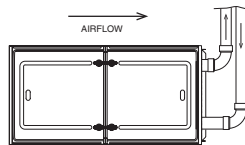
DOWNFLOW ZERO-CLEARANCE Pg 23-27

(REQUIRES CONVERSION KIT RXGY-CK AND ZERO-CLEARANCE KIT RXGY-ZK)



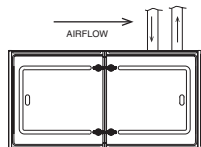
HORIZONTAL RIGHT WITH RIGHT VENT Pg 28-30

(REQUIRES CONVERSION KIT RXGY-CK)



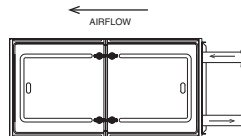
HORIZONTAL RIGHT WITH VERTICAL VENT Pg 31-33

(REQUIRES CONVERSION KIT RXGY-CK)



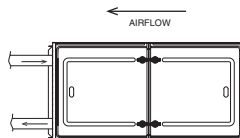
HORIZONTAL LEFT WITH RIGHT VENT. Pg 34-38

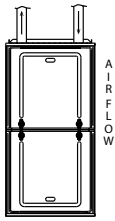
(REQUIRES CONVERSION KIT RXGY-CK AND ZERO-CLEARANCE KIT RXGY-ZK)



HORIZONTAL LEFT WITH LEFT VENT Pg 39-41

(REQUIRES CONVERSION KIT RXGY-CK)



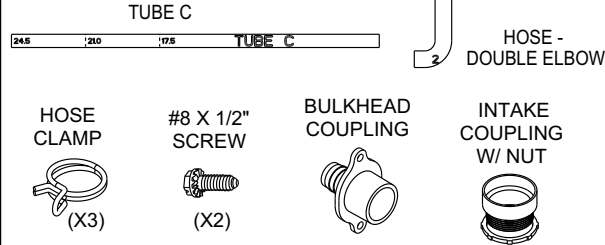


UPFLOW VERTICAL VENT

PARTS NEEDED:

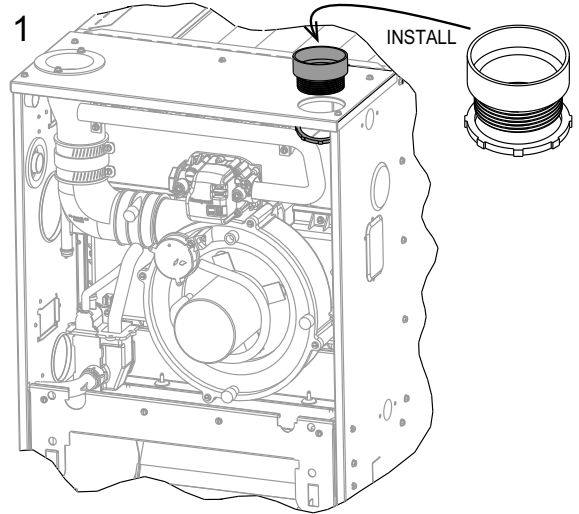
PARTS NEEDED FOR THIS CONVERSION REQUIRE ITEMS FROM THE **PARTS BAG** ONLY. NO OTHER CONVERSION KITS ARE NEEDED.

FROM PARTS BAG (PROVIDED WITH UNIT)



TOOLS/MATERIALS NEEDED:

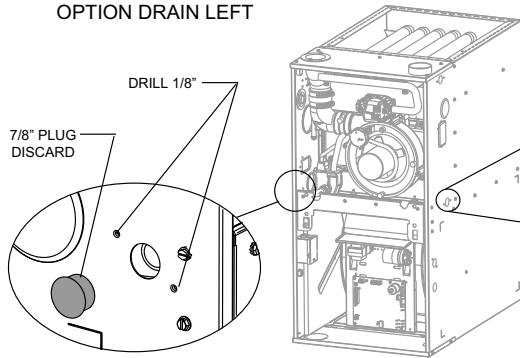
DRILL 1/8" DRILL BIT PLIERS
1/4" HEX HEAD DRIVER TUBING CUTTER



INSTALL INTAKE COUPLING IN TOP PLATE.

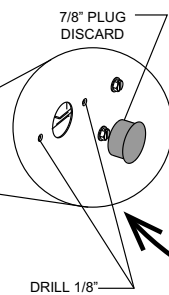
NOTE: THESE CONVERSION INSTRUCTIONS ARE INTENTIONALLY GENERIC, SOME PARTS MAY BE DIFFERENT IN YOUR FURNACE

2 OPTION DRAIN LEFT

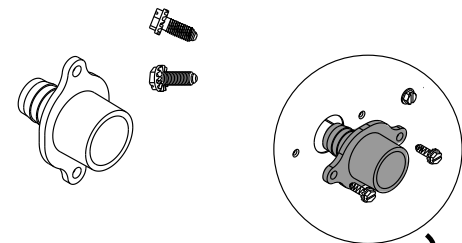


DETERMINE RIGHT OR LEFT DRAIN OPTION.
LOCATE 7/8" HOLE IN JACKET SIDE.
REMOVE PLUG - DISCARD.
DRILL (2) Ø 1/8" HOLES FOR THE BULKHEAD COUPLING.

OPTION DRAIN RIGHT



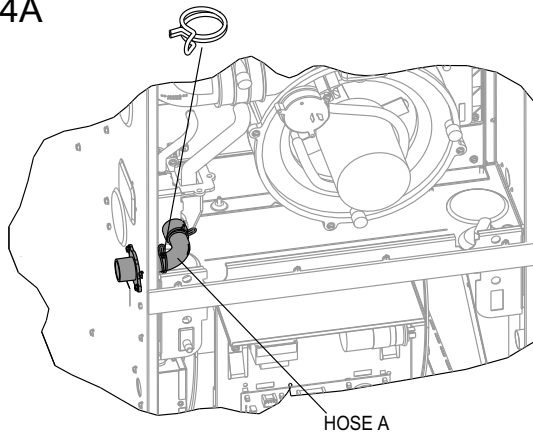
3



INSTALL

INSTALL BULKHEAD COUPLING USING (2) SCREWS.
INSTALL IN JACKET WITH THE BARBED FITTING POINTED INTO THE VESTIBULE.

4A

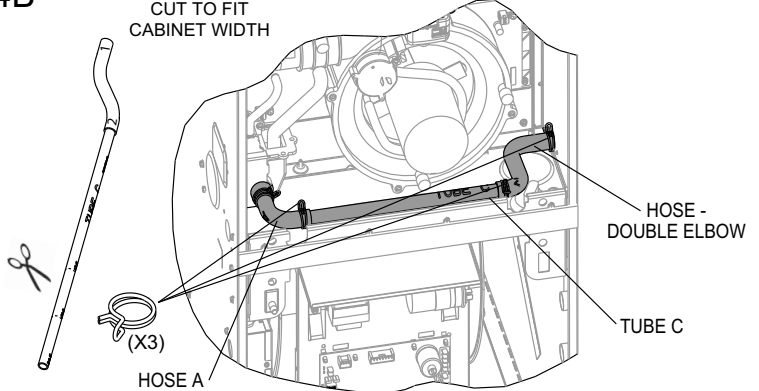


4a - LEFT SIDE DRAIN OPTION

ATTACH HOSE A (PRE-INSTALLED) TO BULKHEAD COUPLING.
INSTALL HOSE CLAMP ON HOSE OVER BULK HEAD COUPLING.

4B

TUBE C
CUT TO FIT
CABINET WIDTH



4b - RIGHT SIDE DRAIN OPTION

4b1 - CUT TUBE "C" TO FIT CORRESPONDING CABINET WIDTH.
4b2 - INSERT TUBE "C" INTO END "2" OF HOSE - DOUBLE ELBOW
4b3 - SLIDE TWO WIRE CLAMPS OVER TUBE "C", SLIDE ONE WIRE CLAMP OVER END "1" OF HOSE - DOUBLE ELBOW.
4b4 - INSTALL TUBE "C" WITH HOSE CLAMP AS SHOWN TO HOSE "A" "PRE ASSEMBLED".
4b5 - ATTACH HOSE - DOUBLE ELBOW TO BULKHEAD COUPLING POSITION WIRE HOSE CLAMP.

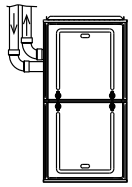
NOTE: PLIERS NECESSARY TO ADD OR REMOVE CLAMPS

ST-A1194-28-03

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)

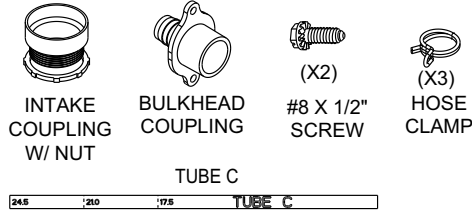
Notes:



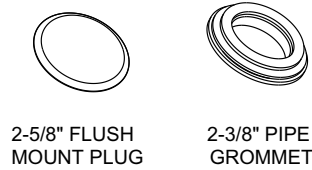
UPFLOW LEFT VENT

PARTS NEEDED:

FROM PARTS BAG (PROVIDED W/UNIT)



FROM CONVERSION KIT RXGY-CK

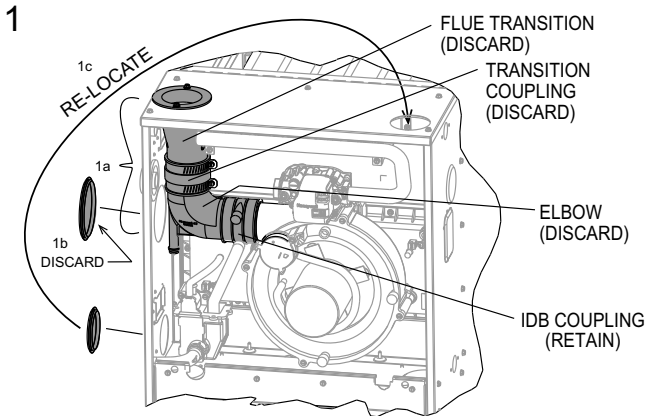


! PARTS NEEDED FOR THIS CONVERSION REQUIRE THE OUTLINED ITEMS FROM THE **PARTS BAG** AND CONVERSION KIT **RXGY-CK**. YOU MUST HAVE THESE PARTS BEFORE PROCEEDING.

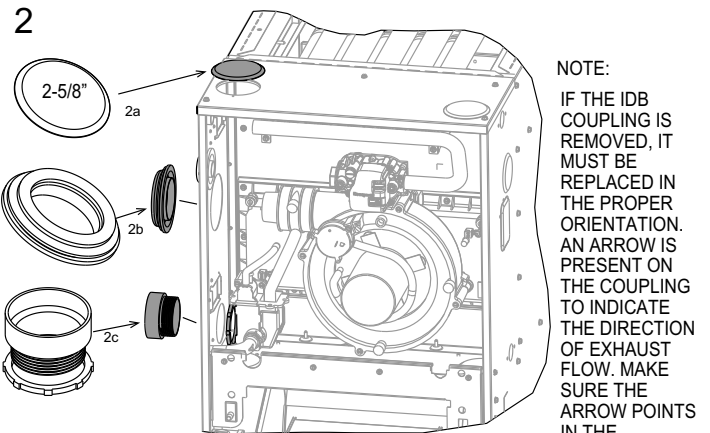
TOOLS/MATERIALS NEEDED:

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

NOTE: THESE CONVERSION INSTRUCTIONS ARE INTENTIONALLY GENERIC, SOME PARTS MAY BE DIFFERENT IN YOUR FURNACE

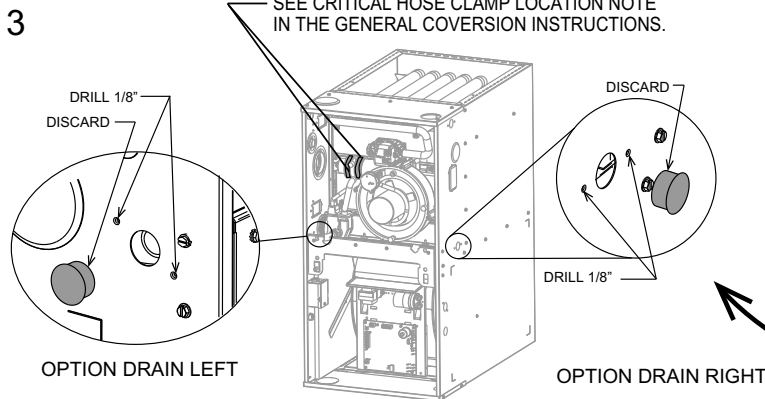


- 1a - REMOVE FLUE TRANSITION, TRANSITION COUPLING, AND ELBOW. (NOTE: REMOVE INDUCER COUPLING W/ELBOW FOR EASIER REMOVAL).
- 1b - REMOVE 3-3/8" FLUSH MOUNT PLUG FROM JACKET - DISCARD.
- 1c - RELOCATE 2-3/8" FLUSH MOUNT PLUG FROM JACKET TO TOP PLATE.

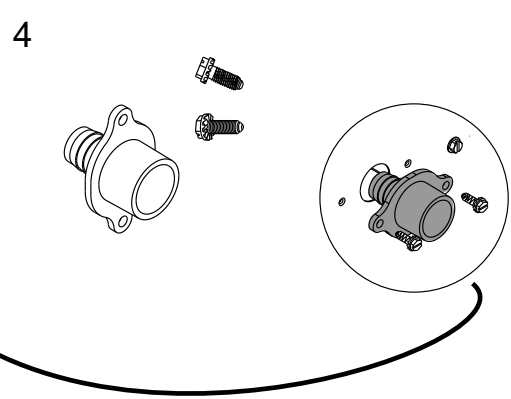


NOTE: IF THE IDB COUPLING IS REMOVED, IT MUST BE REPLACED IN THE PROPER ORIENTATION. AN ARROW IS PRESENT ON THE COUPLING TO INDICATE THE DIRECTION OF EXHAUST FLOW. MAKE SURE THE ARROW POINTS IN THE CORRECT DIRECTION.

- 2a - INSTALL 2-5/8" FLUSH MOUNT PLUG IN TOP PLATE.
- 2b - INSTALL 2" PIPE GROMMET AS SHOWN.
- 2c - INSTALL INTAKE COUPLING AS SHOWN.



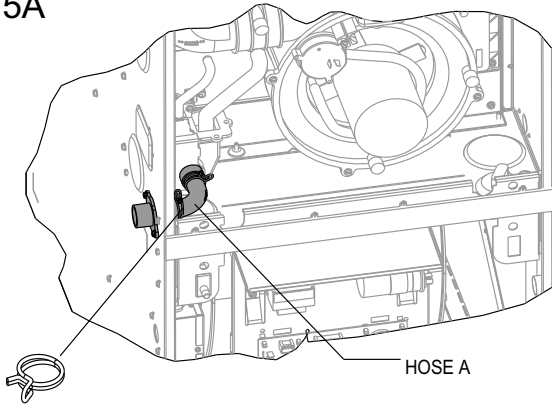
DETERMINE RIGHT OR LEFT DRAIN OPTION. LOCATE 7/8" HOLE IN JACKET SIDE. REMOVE PLUG - DISCARD. DRILL (2) ϕ 1/8" HOLES FOR THE BULKHEAD COUPLING.



INSTALL BULKHEAD COUPLING USING (2) SCREWS. INSTALL IN JACKET WITH THE BARBED FITTING POINTED INTO THE VESTIBULE.

ST-A1194-29-03

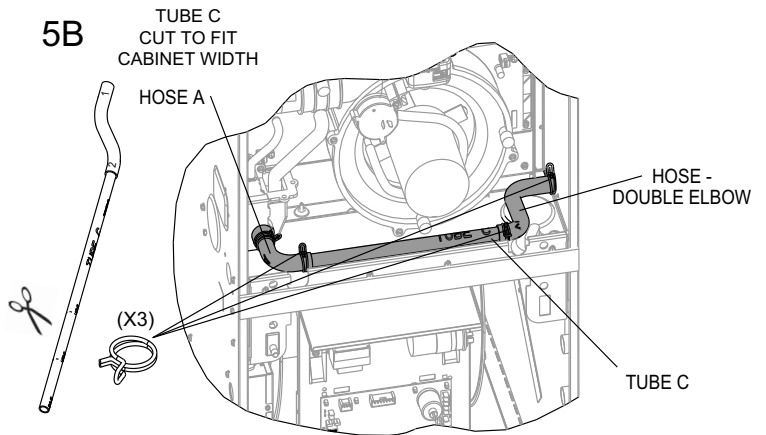
5A



5a - LEFT SIDE DRAIN OPTION

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

5B



5b - RIGHT SIDE DRAIN OPTION

- 5b1 - CUT TUBE "C" TO FIT CORRESPONDING CABINET WIDTH.
- 5b2 - INSERT TUBE "C" INTO END "2" OF HOSE- DOUBLE ELBOW
- 5b3 - SLIDE TWO WIRE CLAMPS OVER TUBE "C", SLIDE ONE WIRE CLAMP OVER END "1" OF HOSE - DOUBLE ELBOW.
- 5b4 - INSTALL TUBE "C" WITH HOSE CLAMP AS SHOWN TO HOSE "A" "PRE ASSEMBLED".
- 5b5 - ATTACH HOSE - DOUBLE ELBOW TO BULKHEAD COUPLING POSITION WIRE HOSE CLAMP.

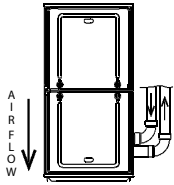
NOTE: PLIERS NECESSARY TO ADD OR REMOVE CLAMPS

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:

DOWNFLOW W/ RIGHT VENT (NON-ZERO CLEARANCE)



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:

FROM PARTS BAG (PROVIDED WITH UNIT)

(X2)

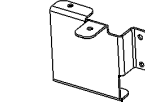
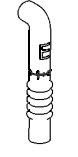
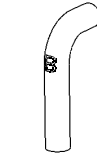
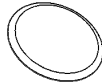


(X3)



FROM CONVERSION KIT RXGY-CK

(X4)



TOOLS/MATERIALS NEEDED:

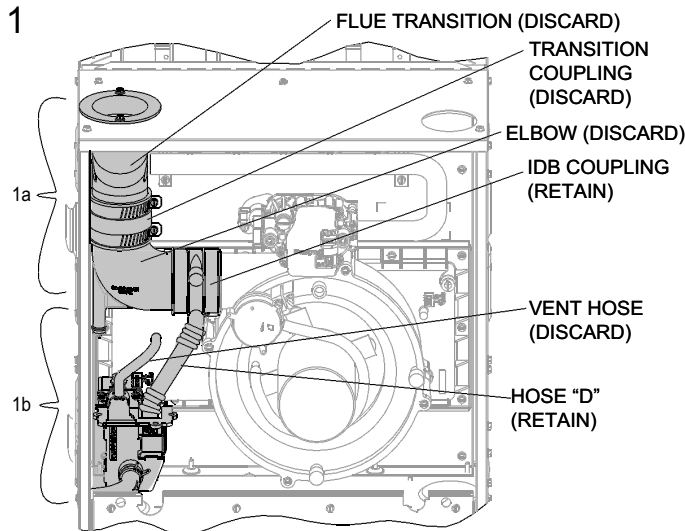
DRILL
(1) 1/8" DRILL BIT

(1) 3/16" DRILL BIT
PLIERS

(1) 1/4" HEX HEAD DRIVER
(1) 5/16" HEX HEAD DRIVER

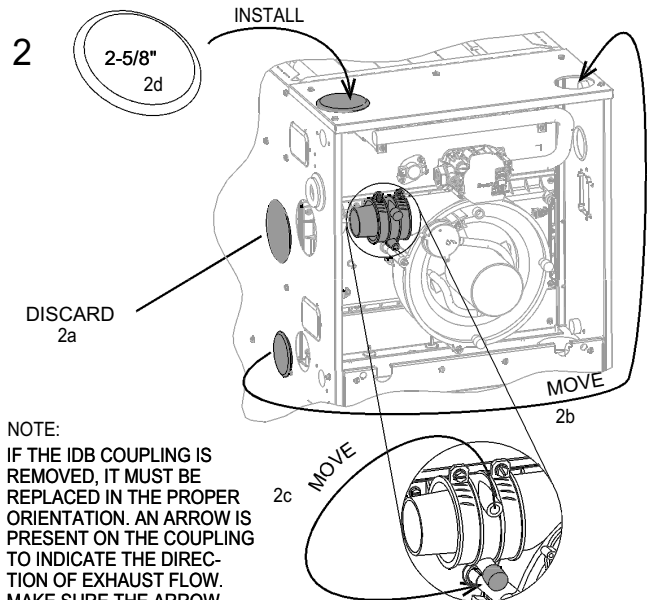
FLAT HEAD SCREWDRIVER
TUBING CUTTER

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"



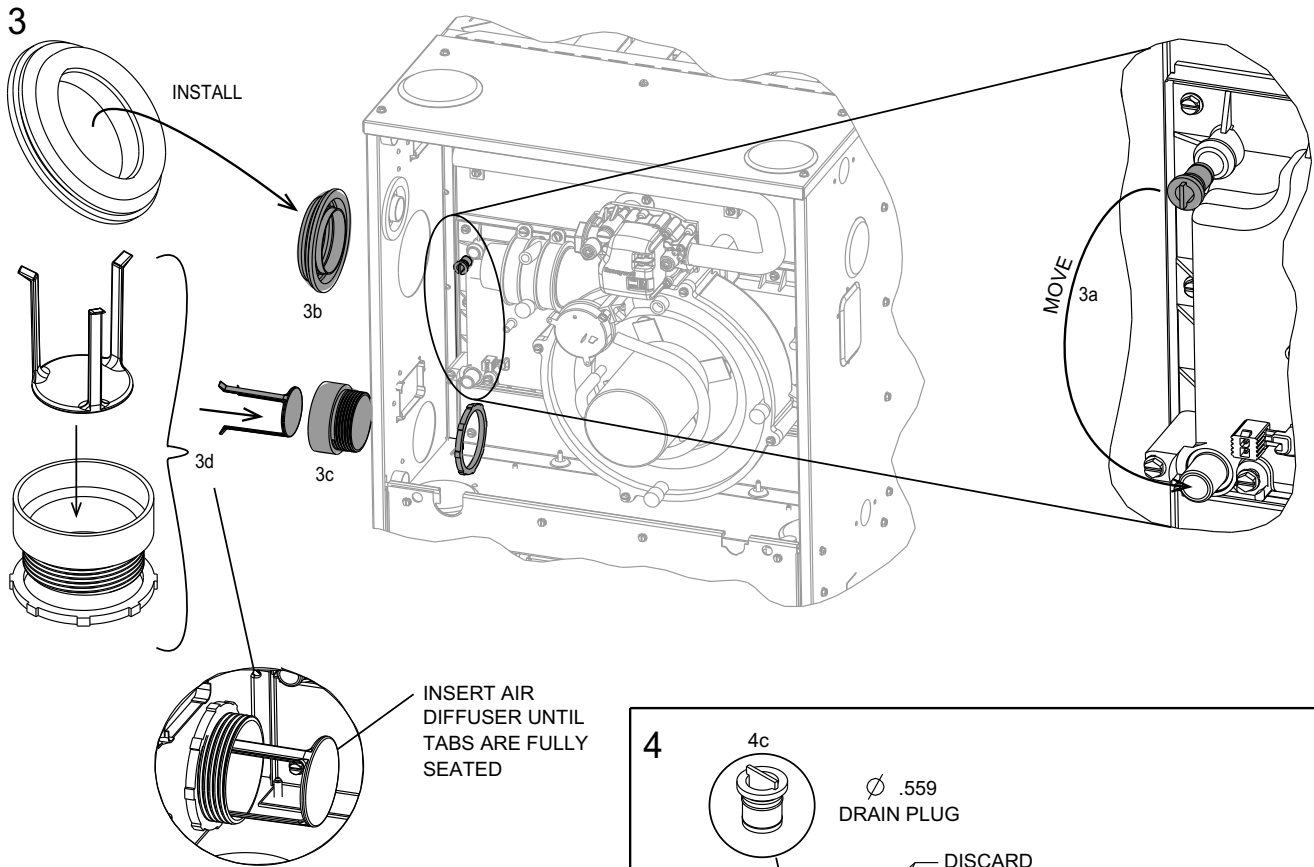
1a - REMOVE FLUE TRANSITION, TRANSITION COUPLING, AND ELBOW.
(NOTE: REMOVE COUPLING ON INDUCER WITH ELBOW FOR EASIER REMOVAL).

1b - REMOVE TRAP AND HOSES. RETAIN HOSE D FOR LATER USE.
(NOTE: TO REMOVE TRAP REMOVE (2) SCREWS AND PULL STRAIGHT OUT).



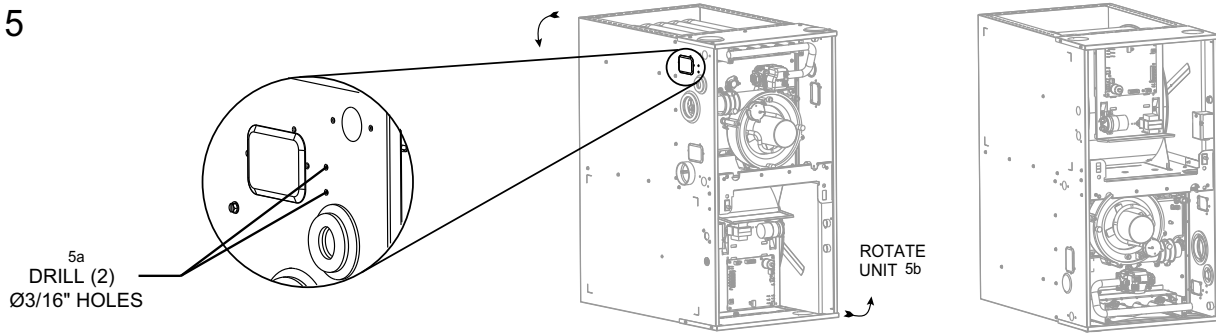
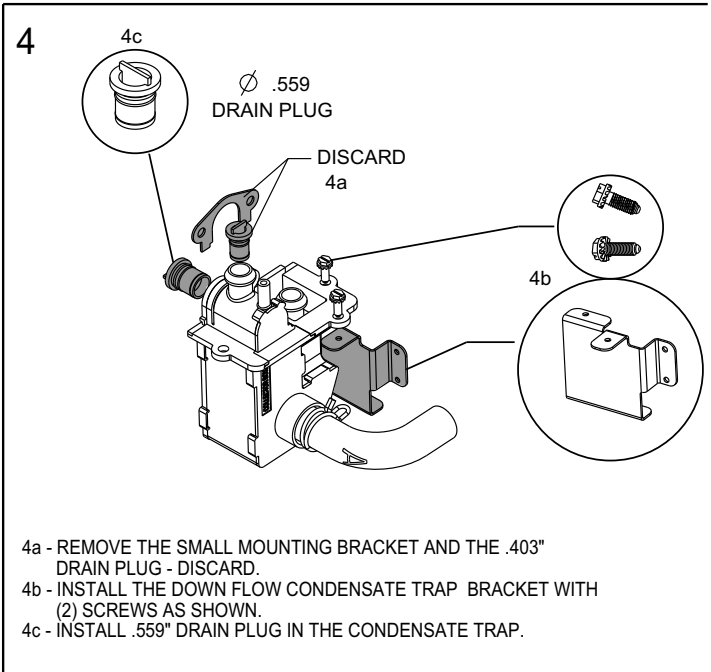
NOTE:
IF THE IDB COUPLING IS REMOVED, IT MUST BE REPLACED IN THE PROPER ORIENTATION. AN ARROW IS PRESENT ON THE COUPLING TO INDICATE THE DIRECTION OF EXHAUST FLOW. MAKE SURE THE ARROW POINTS IN THE CORRECT DIRECTION.

2a-REMOVE 3-3/8" FLUSH MOUNT PLUG FROM JACKET - DISCARD.
2b-RELOCATE 2-3/8" FLUSH MOUNT PLUG FROM JACKET TO TOP PLATE.
2c-RELOCATE 1/2" VINYL CAP (YELLOW) IN INDUCER COUPLING.
2d-INSTALL 2-5/8" FLUSH PLUG IN TOP PLATE.



NOTE:
DIFFUSER MAY HAVE A TENDENCY 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.

- 3a - RELOCATE .403" DRAIN PLUG IN THE COLLECTOR BOX.
- 3b - INSTALL 2" PIPE GROMMET
- 3c - INTAKE COUPLING IN JACKET AS SHOWN.
- 3d - INSERT AIR DIFFUSER INTO COUPLING UNTIL TABS ARE SEATED.



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

NOTE: REMAINING STEPS SHOWN WITH FURNACE IN DOWN FLOW ORIENTATION

6 SEE CRITICAL HOSE CLAMP LOCATION NOTE IN THE GENERAL CONVERSION INSTRUCTIONS.

1/4" TUBE CUT TO FIT (APPROX. 10-1/2")
6c

HOSE E
6e
HOSE D
6d

6a APPROXIMATELY 10-20° TILT ON INDUCER COUPLING

10° -20°
GROUND

ROTATE INDUCER COUPLING TO ENSURE DOWNWARD FLOW OF CONDENSATE FROM FLUE VENTING

6b

6b - INSTALL CONDENSATE TRAP BY MOUNTING BRACKET TO JACKET USING (2) SCREWS
6c - CUT 1/4" VENT TUBE TO FIT (APPROX. 10-1/2"). INSTALL AS SHOWN.
6d - INSTALL HOSE D (REMOVED IN STEP 1) FROM INDUCER COUPLING TO THE FLUE TAP IN THE CONDENSATE TRAP.
6e - INSTALL HOSE E FROM COLLECTOR BOX TO TOP OF CONDENSATE TRAP.

NOTE:
USE SOAPY WATER TO FACILITATE EASY HOSE AND TUBE ASSEMBLY

7 OPTION: LEFT DRAIN

1/8" DRILL

DISCARD 7/8" PLUG

OPTION: RIGHT DRAIN

1/8" DRILL

DISCARD 7/8" PLUG

8

INSTALL

INSTALL BULKHEAD COUPLING USING (2) SCREWS. INSTALL IN JACKET WITH THE BARBED FITTING POINTED INTO THE VESTIBULE.

DETERMINE RIGHT OR LEFT DRAIN OPTION. LOCATE 7/8" HOLE IN JACKET SIDE AND REMOVE PLUG - DISCARD. DRILL (2) Ø 1/8" HOLES FOR BULKHEAD COUPLING.

9a OPTION DRAIN LEFT SIDE

TUBE C CUT TO FIT CABINET WIDTH

24.5 21.0 17.5 TUBE C

ATTACH SIDE "2" TO BULKHEAD COUPLING

HOSE B (X3)

TUBE C

9a - LEFT SIDE DRAIN OPTION.
9a-1 - REMOVE HOSE "A" (FACTORY INSTALLED) ON CONDENSATE TRAP & REPLACE WITH HOSE "B" REUSING SUPPLIED CLAMP.
9a-2 - CUT TUBE "C" ON MARKED LINES CORRESPONDING TO CABINET WIDTH.
9a-3 - SLIDE (2) WIRE CLAMPS OVER TUBE "C" AND (1) WIRE CLAMP OVER SIDE "2" OF HOSE-DOUBLE ELBOW.
9a-4 - CONNECT HOSE - DOUBLE ELBOW END "1" TO TUBE "C", CONNECT END "2" TO BULKHEAD COUPLING. CONFIRM ALL (4) CLAMPS ARE PLACED CORRECTLY.

9b OPTION DRAIN RIGHT SIDE

HOSE A

9b - RIGHT SIDE DRAIN OPTION
ATTACH HOSE A (FACTORY INSTALLED) TO BULKHEAD COUPLING.

NOTE: PLIERS NECESSARY TO ADD OR REMOVE CLAMPS

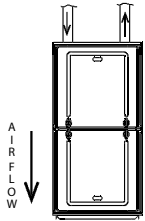
ST-A1194-30-02

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:

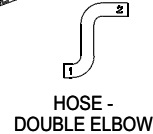
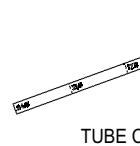
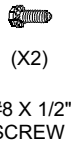
DOWN FLOW ZERO CLEARANCE



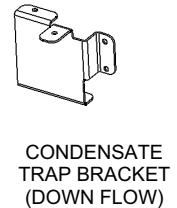
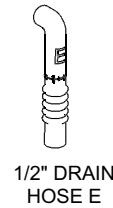
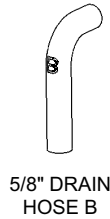
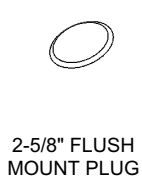
PARTS NEEDED FOR THIS CONVERSION REQUIRE ITEMS FROM THE **PARTS BAG**, CONVERSION KIT **RXGY-CK** AND **RXGY-ZK**. YOU MUST HAVE THE OUTLINED PARTS FROM THESE KITS BEFORE PROCEEDING.

PARTS NEEDED:

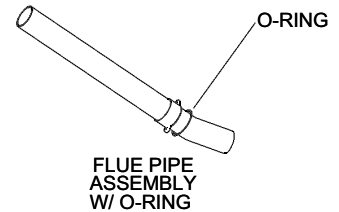
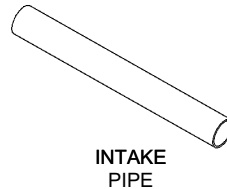
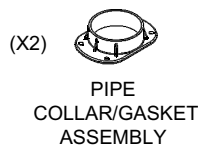
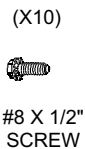
FROM PARTS BAG (PROVIDED W/UNIT)



FROM CONVERSION KIT RXGY-CK



FROM ZERO-CLEARANCE CONVERSION KIT RXGY-ZK



TOOLS/MATERIALS NEEDED:

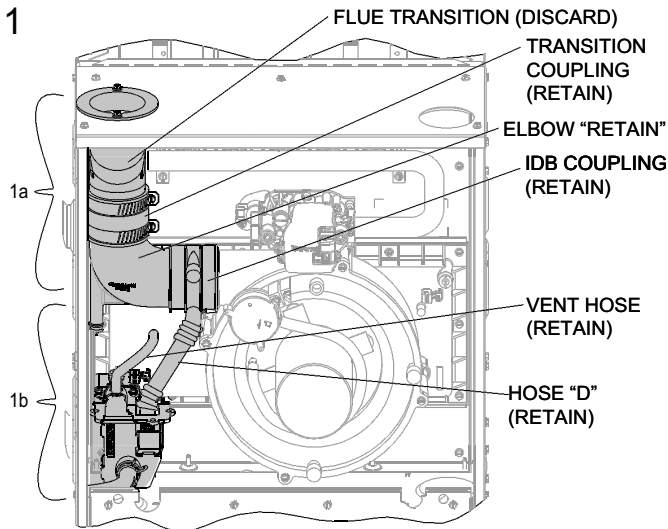
ELECTRIC DRILL
1/8" DRILL BIT

3/16" DRILL BIT
PLIERS

TUBING CUTTER
1/4" HEX HEAD DRIVER
5/16" HEX HEAD DRIVER

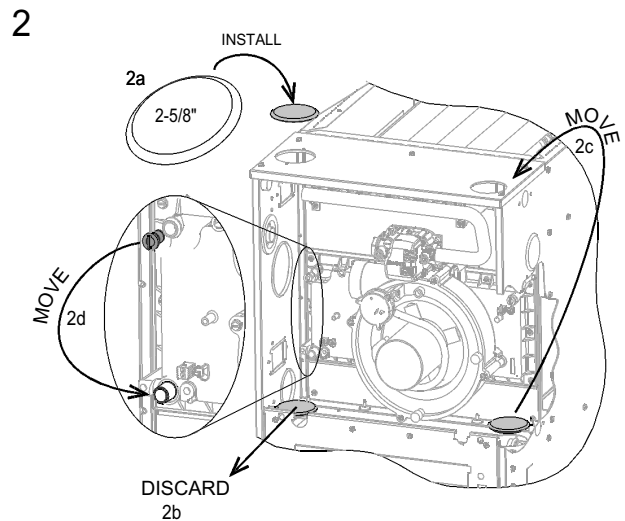
PVC GLUE AND PRIMER
HAMMER
FLAT HEAD SCREWDRIVER

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"



1a - REMOVE ELBOW, (2) COUPLINGS, AND FLUE TRANSITION. (RETAIN ELBOW AND COUPLINGS FOR LATER USE.) (NOTE: REMOVE COUPLING ON INDUCER WITH ELBOW FOR EASIER REMOVAL).

1b - REMOVE TRAP AND HOSES. RETAIN HOSE D FOR LATER USE. (NOTE: TO REMOVE TRAP REMOVE (2) SCREWS AND PULL STRAIGHT OUT).



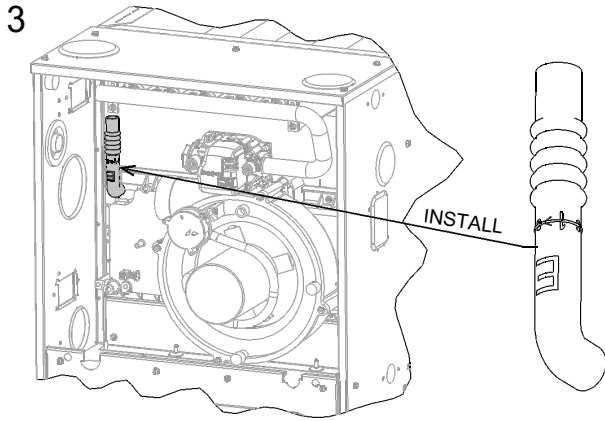
2a - INSTALL 2-5/8" FLUSH MOUNT PLUG.

2b - REMOVE LEFT 2-3/8" FLUSH PLUG IN BLOWER SHELF - DISCARD.

2c - RELOCATE RIGHT 2-3/8" FLUSH MOUNT PLUG FROM BLOWER SHELF TO TOP PLATE.

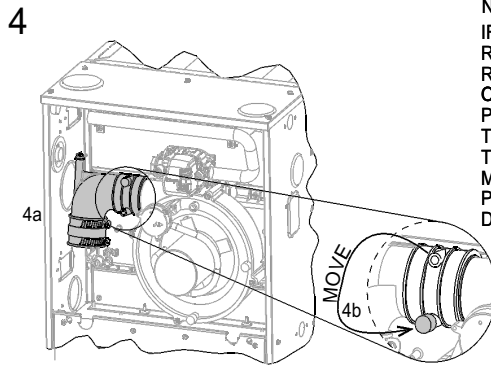
2d - RELOCATE .403" DRAIN PLUG IN THE COLLECTOR BOX.

ST-A1194-31-04



INSTALL HOSE E ON COLLECTOR BOX AS SHOWN. LET THE OPEN END HANG FREE UNTIL STEP 11.

NOTE:
USE SOAPY WATER TO FACILITATE EASY HOSE AND TUBE ASSEMBLY

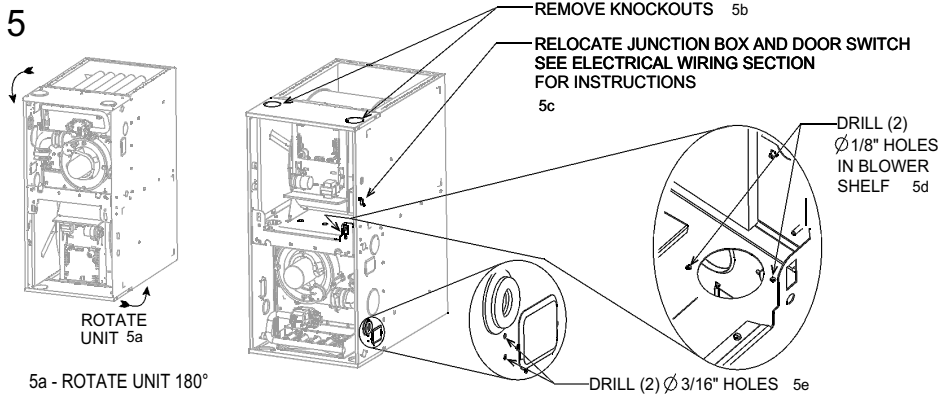


NOTE:
IF THE IDB COUPLING IS REMOVED, IT MUST BE REPLACED IN THE PROPER ORIENTATION. AN ARROW IS PRESENT ON THE COUPLING TO INDICATE THE DIRECTION OF EXHAUST FLOW. MAKE SURE THE ARROW POINTS IN THE CORRECT DIRECTION.

4a - RE-INSTALL ELBOW AND COUPLINGS (REMOVED IN STEP 1) IN THE ORIENTATION AS SHOWN.

4b - RELOCATE 1/2" VINYL CAP (YELLOW) ON INDUCER COUPLING TO OPPOSITE SIDE.

NOTE: LEAVE COUPLING CLAMP CONNECTIONS LOOSE UNTIL STEP 11.



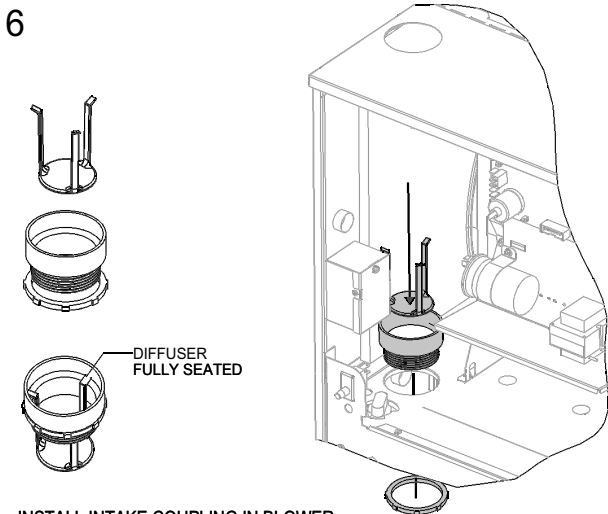
5a - ROTATE UNIT 180°

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

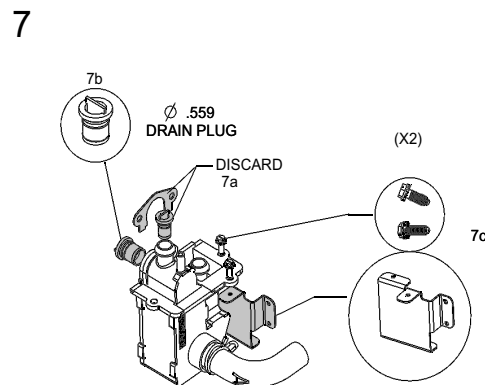
5c - THE JUNCTION BOX WILL HAVE TO BE RELOCATED FOR FLUE PIPE INSTALLATION. SEE ELECTRICAL WIRING SECTION FOR INSTRUCTIONS.

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

5e - PRE-DRILL (2) Ø3/16" HOLES IN JACKET AS SHOWN FOR CONDENSATE TRAP BRACKET.



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

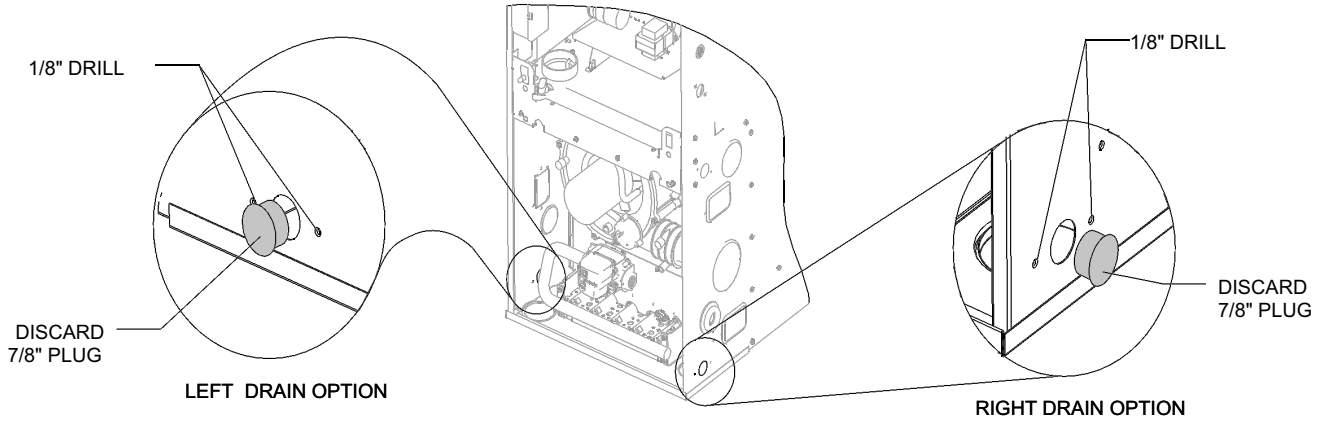


7a - REMOVE THE SMALL MOUNTING BRACKET AND THE .403" DRAIN PLUG - DISCARD.

7b - INSTALL .559" DRAIN PLUG IN CONDENSATE TRAP.

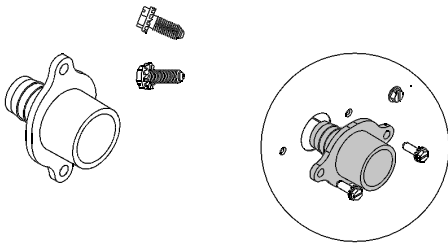
7c - INSTALL DOWN FLOW CONDENSATE TRAP BRACKET WITH (2) SCREWS AS SHOWN.

8



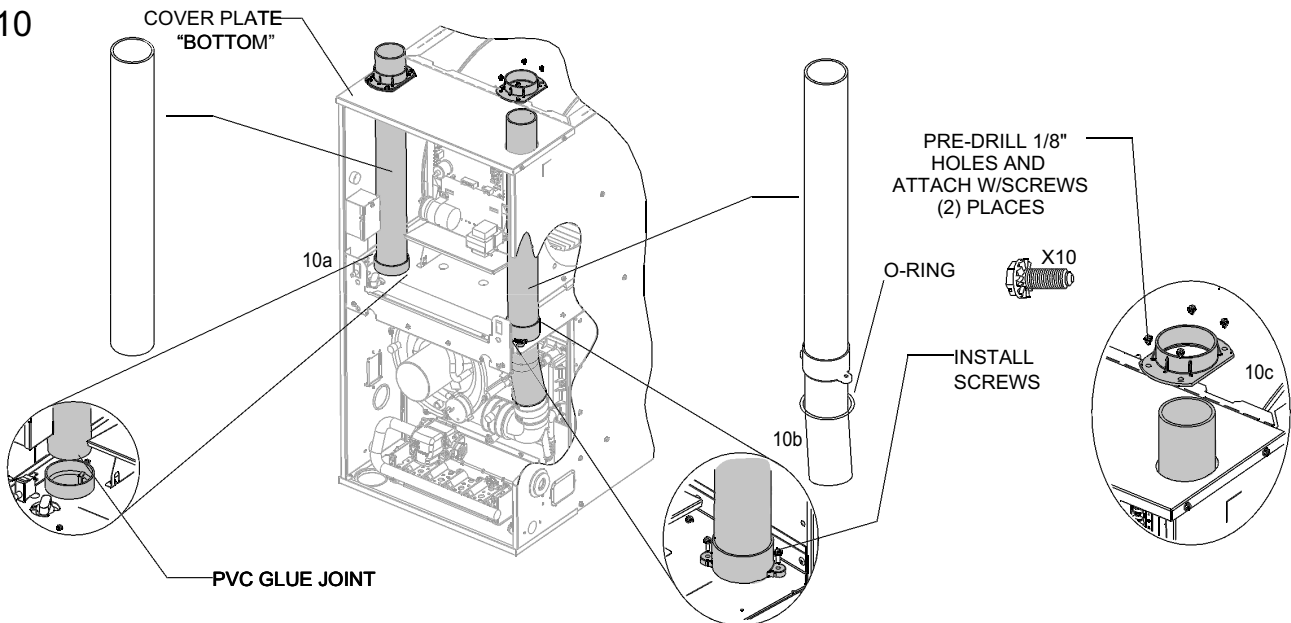
DETERMINE RIGHT OR LEFT DRAIN OPTION.
 LOCATE 7/8" HOLE IN JACKET SIDE REMOVE PLUG - DISCARD.
 DRILL (2) Ø 1/8" HOLES FOR THE BULKHEAD COUPLING.

9



INSTALL BULKHEAD COUPLING USING (2) SCREWS.
 INSTALL IN JACKET WITH THE BARBED FITTING POINTED INTO THE VESTIBULE.

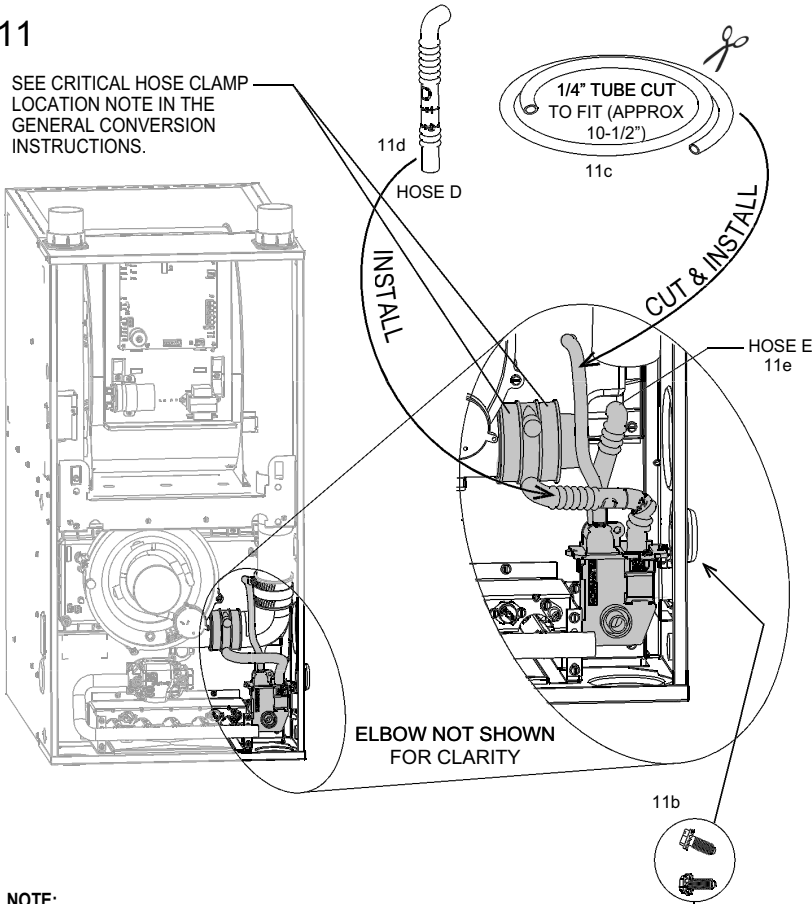
10



- 10a - INSTALL INTAKE PIPE
 SLIDE INTAKE PIPE THROUGH THE LEFT SIDE KNOCKOUT ON COVER PLATE CLEAN AND PVC GLUE TO INTAKE COUPLING AS SHOWN
- 10b - INSTALL FLUE PIPE ASSEMBLY
 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)

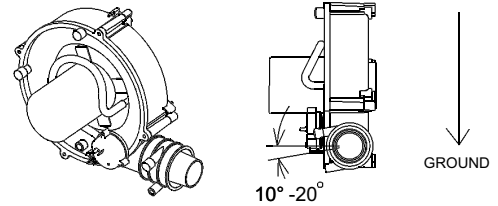
11

SEE CRITICAL HOSE CLAMP LOCATION NOTE IN THE GENERAL CONVERSION INSTRUCTIONS.



11a

APPROXIMATELY 10-20° TILT ON INDUCER COUPLING



ROTATE INDUCER COUPLING TO ENSURE DOWNWARD FLOW OF CONDENSATE FROM FLUE VENTING

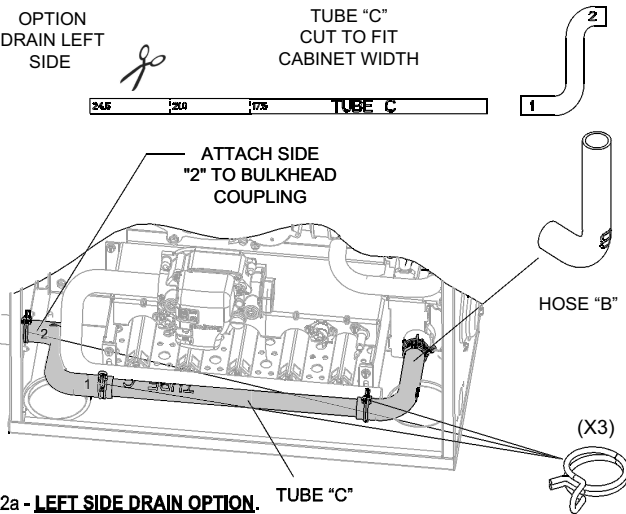
- 11a - ROTATE INDUCER COUPLING 10°
! NOTE: TIGHTEN ELBOW COUPLING CLAMPS TO FLUE PIPE WITH 5/16" NUT DRIVER. (NOT SHOWN)
- 11b - INSTALL CONDENSATE TRAP BY MOUNTING BRACKET TO JACKET USING (2) SCREWS.
- 11c - CUT 1/4" VENT TUBE TO FIT (APPROX. 10-1/2"). INSTALL AS SHOWN.
- 11d - INSTALL HOSE D (REMOVED IN STEP 1) FROM TRANSITION COUPLING TO THE FLUE TAP ON THE CONDENSATE TRAP.
- 11e - ATTACH HOSE E TO THE TOP OF CONDENSATE TRAP.

NOTE:
USE SOAPY WATER TO FACILITATE EASY HOSE AND TUBE ASSEMBLY

12a

OPTION DRAIN LEFT SIDE

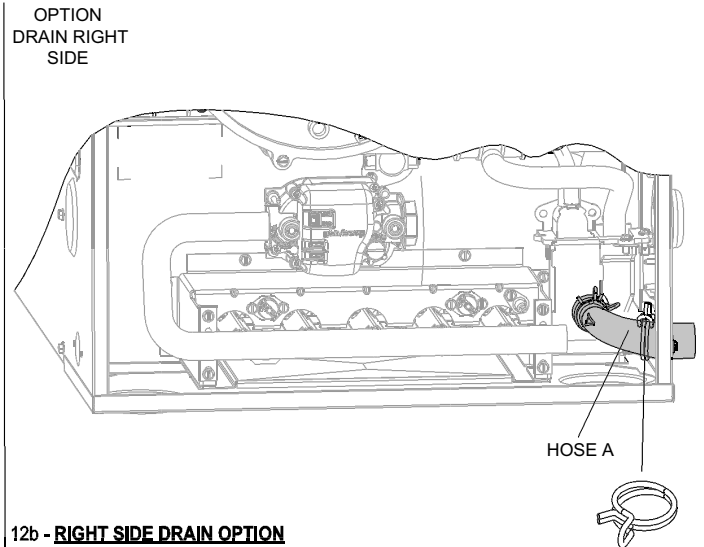
TUBE "C"
CUT TO FIT CABINET WIDTH



- 12a - **LEFT SIDE DRAIN OPTION.** TUBE "C"
- 12a-1 - REMOVE HOSE "A" (FACTORY INSTALLED) ON CONDENSATE TRAP & REPLACE WITH HOSE B REUSING SUPPLIED CLAMP.
- 12a-2 - CUT TUBE "C" ON MARKED LINES CORRESPONDING TO CABINET WIDTH.
- 12a-3 - SLIDE (2) WIRE CLAMPS OVER TUBE "C" AND (1) WIRE CLAMP OVER SIDE "2" OF HOSE-DOUBLE ELBOW.
- 12a-4 - CONNECT HOSE - DOUBLE ELBOW END "1" TO TUBE "C", CONNECT END "2" OF HOSE DOUBLE ELBOW TO BULKHEAD COUPLING. CONFIRM ALL (4) CLAMPS ARE PLACED CORRECTLY.

12b

OPTION DRAIN RIGHT SIDE



- 12b - **RIGHT SIDE DRAIN OPTION**
- 12b-1 - ATTACH HOSE A (FACTORY INSTALLED) TO BULKHEAD COUPLING. PLACE CLAMP OVER HOSE ON BULK HEAD COUPLING.

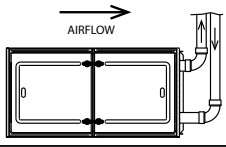
NOTE: PLIERS NECESSARY TO ADD OR REMOVE CLAMPS

ST-A1194-31-04

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:



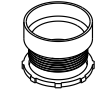
HORIZONTAL RIGHT / RIGHT VENT



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.

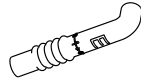
PARTS NEEDED:

FROM PARTS BAG
(PROVIDED WITH UNIT)

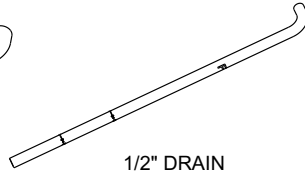


INTAKE
COUPLING
AND NUT

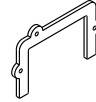
FROM CONVERSION KIT RXGY-CK



1/2" DRAIN
HOSE E



1/2" DRAIN
HOSE F



CONDENSATE
TRAP GASKET

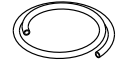


.559 DRAIN PLUG

(X3)



#8 X 1/2"
SCREW



1/4" BLACK
VENT TUBE

TOOLS/MATERIALS NEEDED:

DRILL
1/8" DRILL BIT

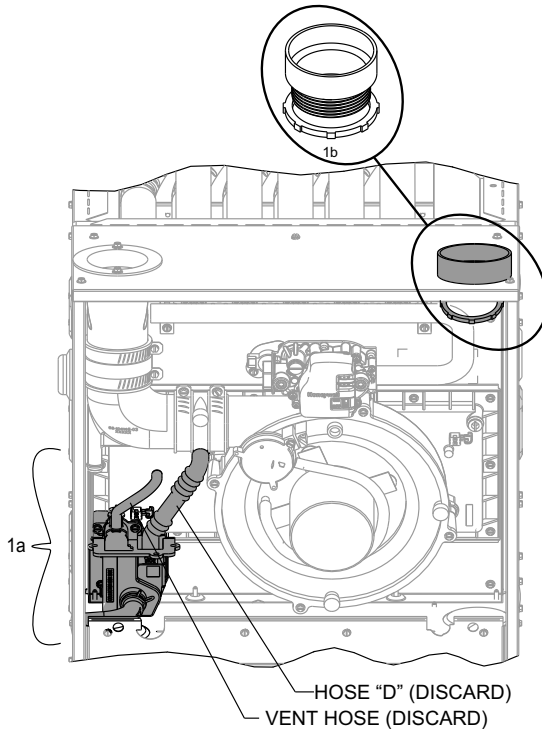
PLIERS
FLAT HEAD SCREWDRIVER

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"

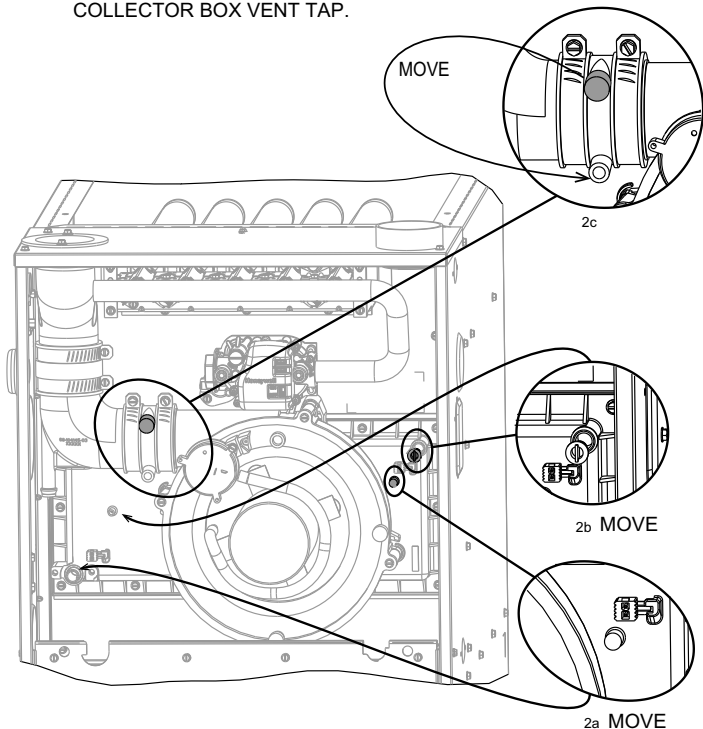
1

- 1a - REMOVE TRAP AND HOSES
(NOTE: TO REMOVE TRAP, REMOVE (2) SCREWS AND PULL STRAIGHT OUT)
- 1b - INSTALL INTAKE COUPLING IN TOP PLATE AS SHOWN.

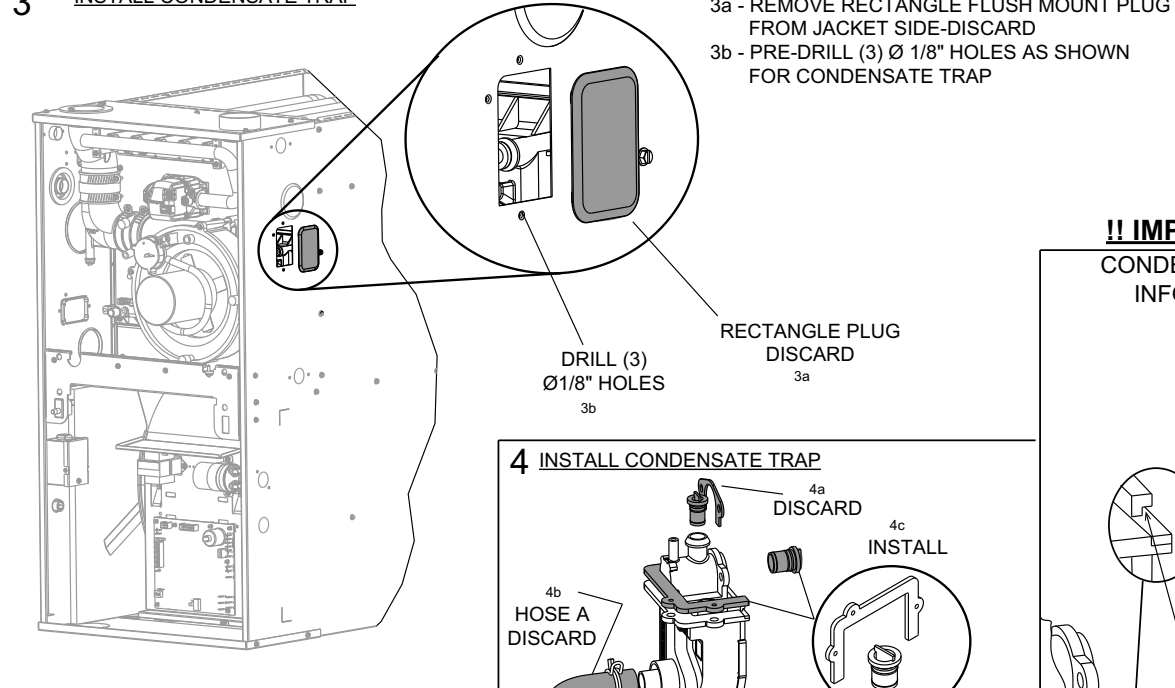


2

- 2a - RELOCATE 1/2" VINYL CAP (YELLOW) ON THE INDUCER COUPLING
- 2b - RELOCATE THE .403" DRAIN PLUG IN THE COLLECTOR BOX.
- 2c - RELOCATE 1/4" VINYL CAP (YELLOW) ON COLLECTOR BOX VENT TAP.

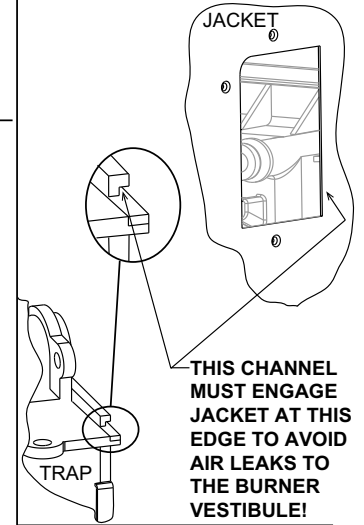


3 INSTALL CONDENSATE TRAP

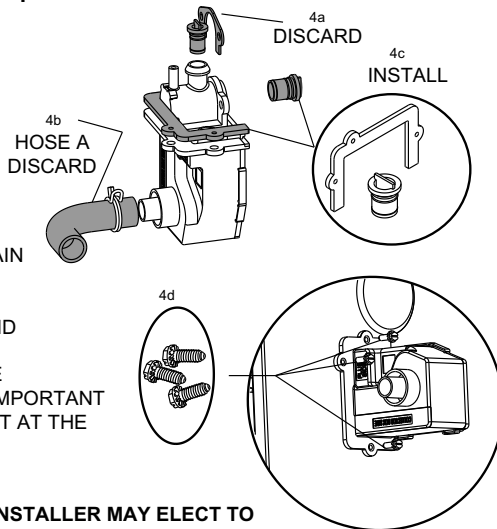


- 3a - REMOVE RECTANGLE FLUSH MOUNT PLUG FROM JACKET SIDE-DISCARD
- 3b - PRE-DRILL (3) \varnothing 1/8" HOLES AS SHOWN FOR CONDENSATE TRAP

!! IMPORTANT !! CONDENSATE TRAP INFORMATION



4 INSTALL CONDENSATE TRAP

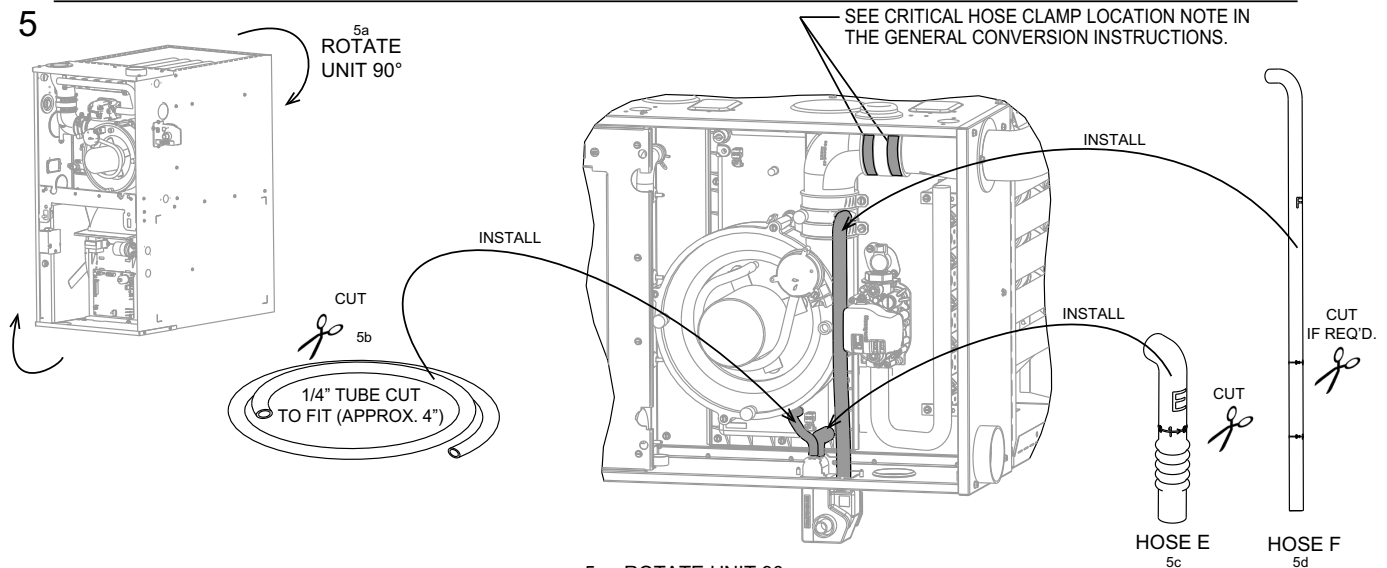


- 4a - REMOVE METAL BRACKET AND THE \varnothing .403 DRAIN PLUG- DISCARD.
- 4b - REMOVE HOSE "A" - DISCARD
- 4c - INSTALL \varnothing .559" CONDENSATE DRAIN PLUG AND CONDENSATE TRAP GASKET AS SHOWN.
- 4d - INSTALL CONDENSATE TRAP. MAKE SURE THE CHANNEL AT THE LOCATION SHOWN IN THE "IMPORTANT SECTION" ENGAGES THE EDGE OF THE JACKET AT THE LOCATION SPECIFIED.
- 4e - SECURE USING (3) SCREWS.

NOTE: TO PREVENT DAMAGE TO THE TRAP, THE INSTALLER MAY ELECT TO INSTALL IT DURING A LATER STEP. (AFTER THE UNIT IS ROTATED)

NOTE: REMAINING STEPS SHOWN WITH FURNACE IN HORIZONTAL RIGHT ORIENTATION

5



- 5a - ROTATE UNIT 90
 - 5b - CUT 1/4" VENT HOSE TO FIT (APPROX. 5-1/2") AND INSTALL AS SHOWN.
 - 5c - CUT HOSE E AT LINE 1- INSTALL
 - 5d - CUT HOSE F ON LINE CORRESPONDING TO UNIT WIDTH AND INSTALL
- NOTE: MAKE SURE CUT IS STRAIGHT AND SQUARE**
NOTE: 17.5": LINE 1, 21": LINE 2, 24.5": DO NOT CUT

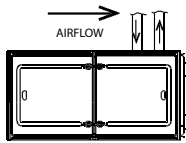
**NOTE:
USE SOAPY WATER TO FACILITATE EASY
HOSE AND TUBE ASSEMBLY**

ST-A1194-32-01

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:



HORIZONTAL RIGHT / VERTICAL VENT

PARTS NEEDED:

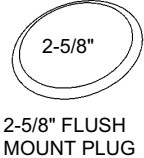
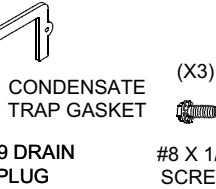
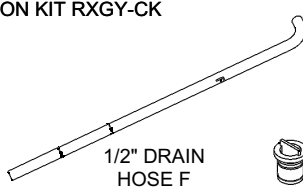


PARTS NEEDED FOR THIS CONVERSION REQUIRE ITEMS FROM THE **PARTS BAG** AND CONVERSION KIT **RXGY-CK** YOU MUST HAVE THE PARTS OUTLINED BELOW BEFORE PROCEEDING.

FROM PARTS BAG
(PROVIDED WITH UNIT)



FROM CONVERSION KIT RXGY-CK



TOOLS/MATERIALS NEEDED:

DRILL
1/8" DRILL BIT

PLIERS
FLAT HEAD SCREWDRIVER

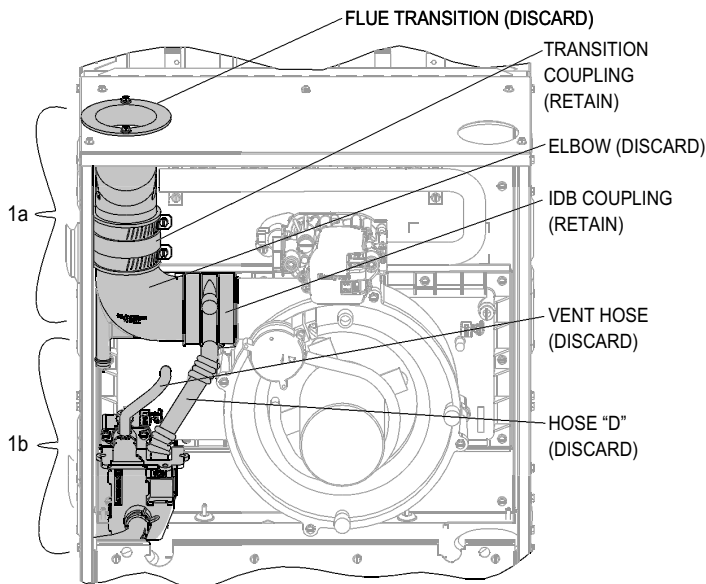
5/16 HEX HEAD DRIVER
1/4" HEX HEAD DRIVER

TUBING CUTTER

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"

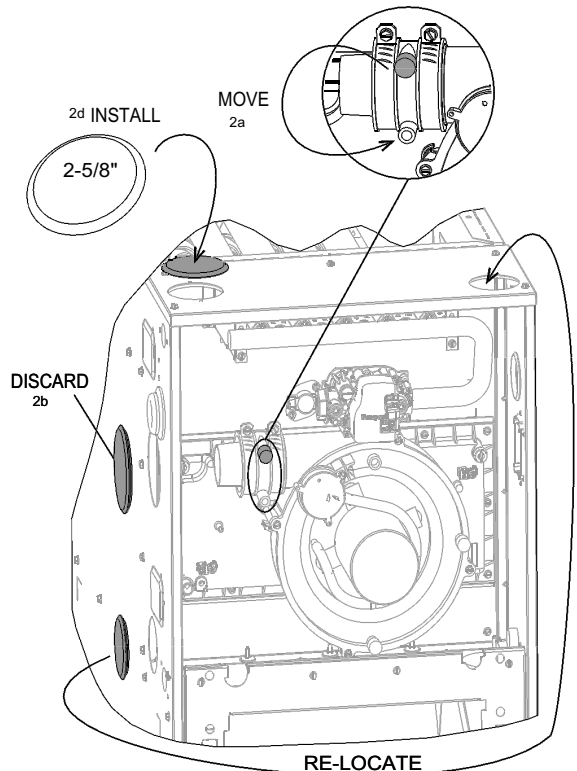
1

- 1a - REMOVE FLUE TRANSITION, TRANSITION COUPLING, AND ELBOW.
(NOTE: REMOVE INDUCER COUPLING W/ ELBOW FOR EASIER REMOVAL).
- 1b - REMOVE CONDENSATE TRAP AND HOSES.
(NOTE: TO REMOVE TRAP REMOVE (2) SCREWS AND PULL STRAIGHT OUT).



2

- 2a - RELOCATE 1/2" VINYL CAP (YELLOW) ON THE INDUCER COUPLING.
- 2b - REMOVE 3-3/8" FLUSH MOUNT PLUG FROM JACKET SIDE-DISCARD.
- 2d - INSTALL 2-5/8" FLUSH MOUNT PLUG IN TOP PLATE.



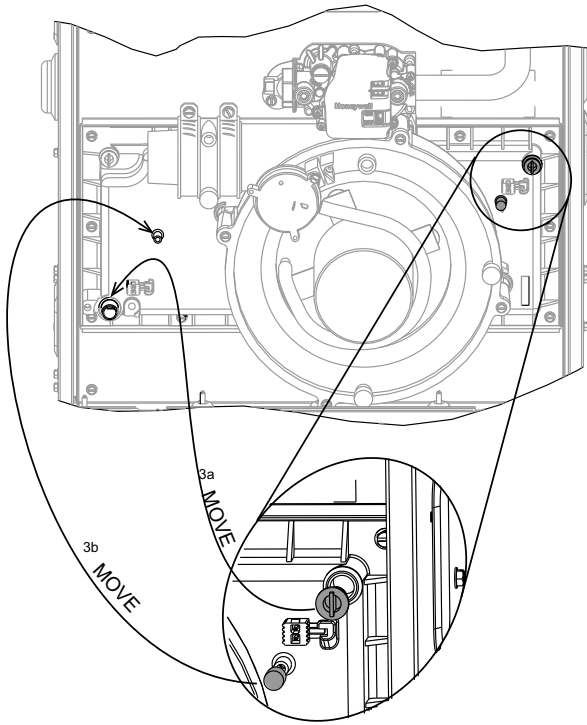
NOTE:

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.

ST-A1194-33-02

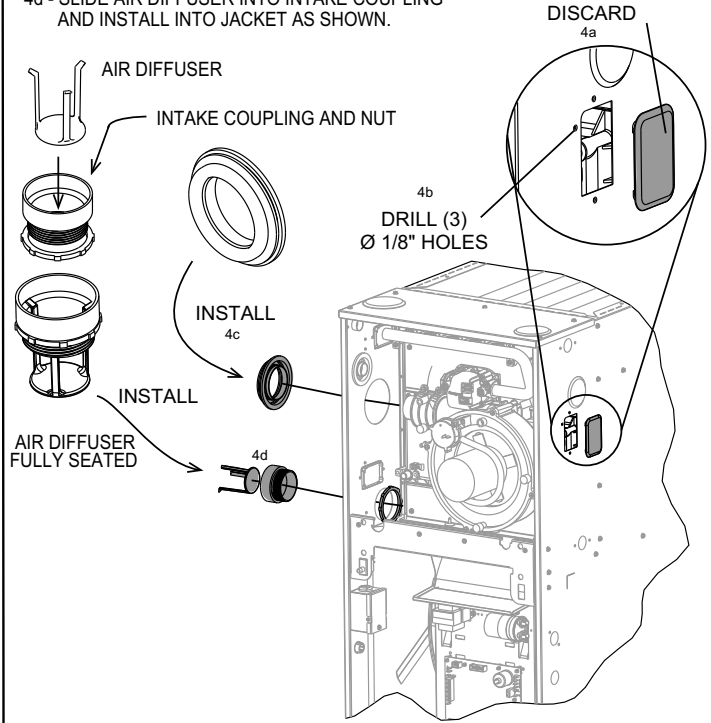
3

- 3a - RELOCATE THE Ø .403" DRAIN PLUG IN THE COLLECTOR BOX.
- 3b - RELOCATE 1/4" VINYL CAP (YELLOW) ON COLLECTOR BOX VENT TAP.

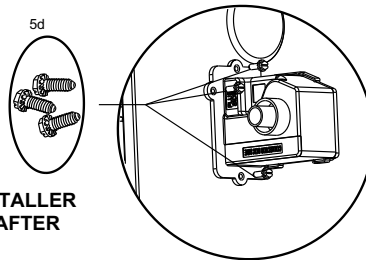
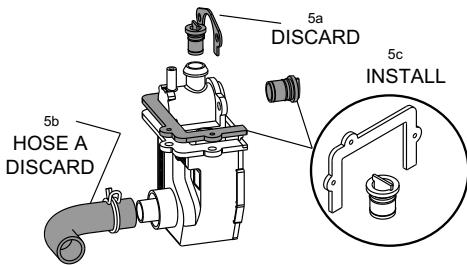


4

- 4a - REMOVE RECTANGLE FLUSH MOUNT PLUG FROM JACKET SIDE - DISCARD
- 4b - PRE-DRILL (3) Ø1/8" HOLES AS SHOWN FOR CONDENSATE TRAP
- 4c - INSTALL 2" PIPE GROMMET IN JACKET
- 4d - SLIDE AIR DIFFUSER INTO INTAKE COUPLING AND INSTALL INTO JACKET AS SHOWN.



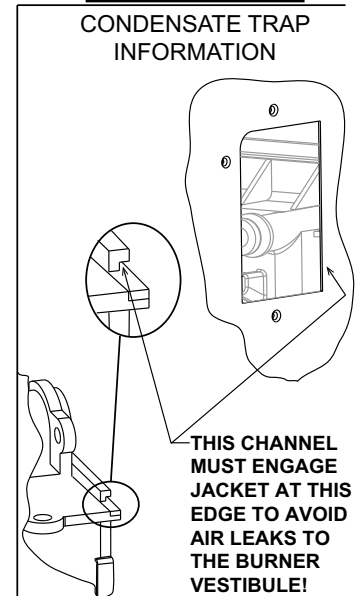
5 INSTALL CONDENSATE TRAP



NOTE: TO PREVENT DAMAGE TO THE TRAP, THE INSTALLER MAY ELECT TO INSTALL IT DURING A LATER STEP. (AFTER THE UNIT IS ROTATED)

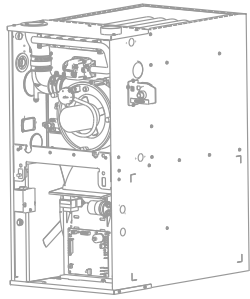
- 5a - REMOVE METAL BRACKET AND THE Ø.403 DRAIN PLUG- DISCARD.
- 5b - REMOVE HOSE "A" - DISCARD
- 5c - INSTALL Ø .559" CONDENSATE DRAIN PLUG AND CONDENSATE TRAP GASKET AS SHOWN.
- 5d - INSTALL CONDENSATE TRAP. MAKE SURE THE CHANNEL AT THE LOCATION SHOWN IN THE "IMPORTANT SECTION" ENGAGES THE EDGE OF THE JACKET AT THE LOCATION SPECIFIED.
- 5e - SECURE USING (3) SCREWS.

!! IMPORTANT !!
CONDENSATE TRAP INFORMATION



NOTE: REMAINING STEPS SHOWN WITH FURNACE IN HORIZONTAL RIGHT ORIENTATION

6



6a
ROTATE
UNIT 90°

6a - ROTATE UNIT 90°

6b - CUT 1/4" VENT HOSE TO FIT (APPROX. 5-1/2") AND INSTALL AS SHOWN

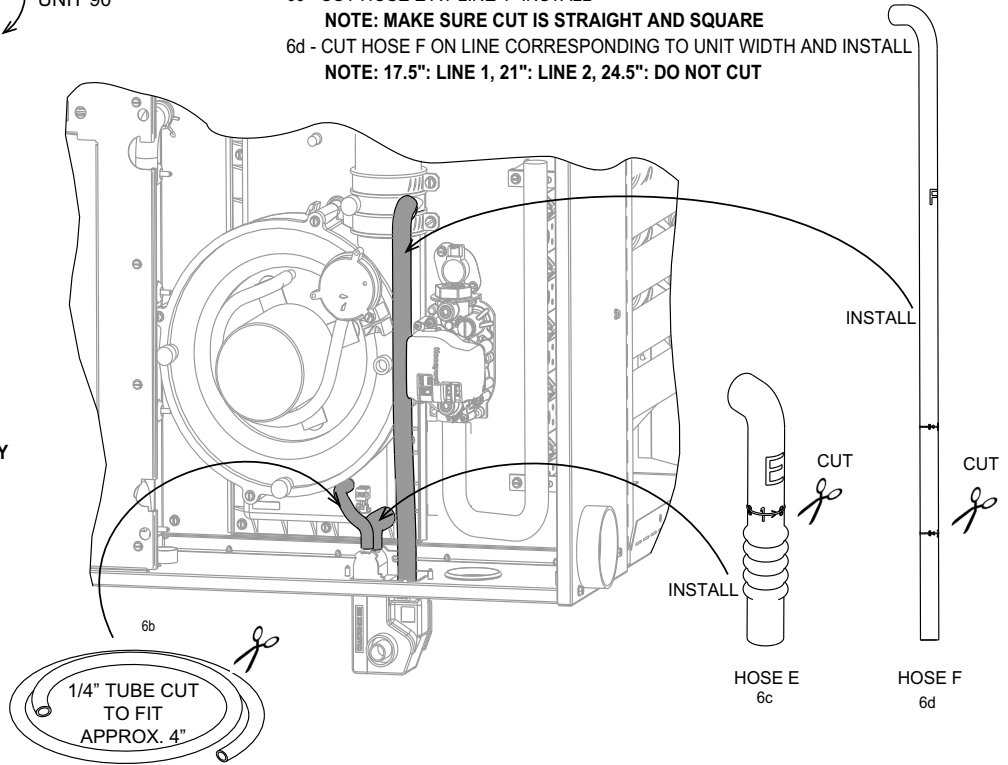
6c - CUT HOSE E AT LINE 1- INSTALL

NOTE: MAKE SURE CUT IS STRAIGHT AND SQUARE

6d - CUT HOSE F ON LINE CORRESPONDING TO UNIT WIDTH AND INSTALL

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

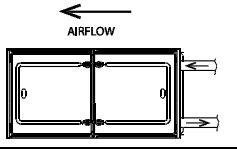
NOTE:
USE SOAPY WATER TO FACILITATE EASY
HOSE AND TUBE ASSEMBLY



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:



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.

PARTS NEEDED:

FROM PARTS BAG (PROVIDED WITH UNIT)

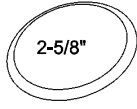


INTAKE COUPLING AND NUT



INTAKE AIR DIFFUSER

FROM CONVERSION KIT RXGY-CK

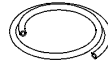


2-5/8" FLUSH MOUNT PLUG

(X4)



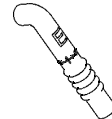
#8 X 1/2" SCREW



1/4" BLACK VENT TUBE



.559" CONDENSATE TRAP DRAIN PLUG



1/2" DRAIN HOSE E



1/2" VINYL CAP (YELLOW)

FROM CONVERSION KIT RXGY-ZK

(X10)

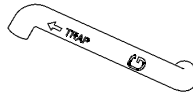


#8 X 1/2" SCREW

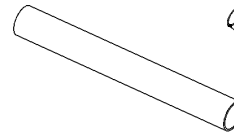
(X2)



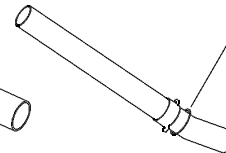
PIPE COLLAR / GASKET ASSEMBLY



1/2" DRAIN HOSE G



INTAKE PIPE



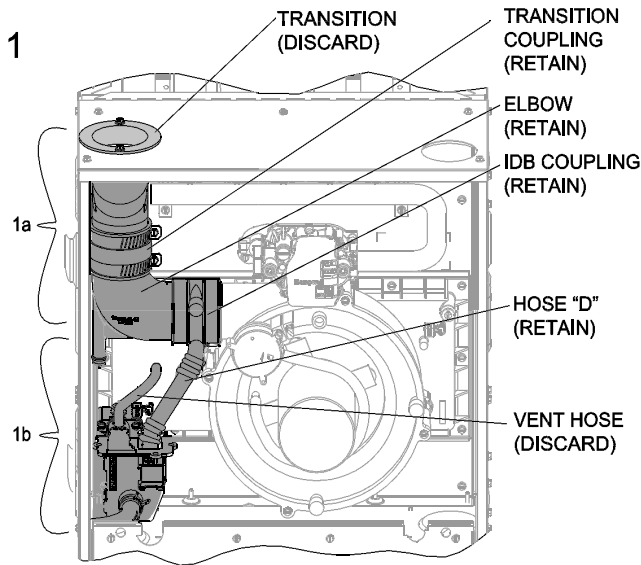
FLUE PIPE ASSEMBLY W/ O-RING

TOOLS/MATERIALS NEEDED:

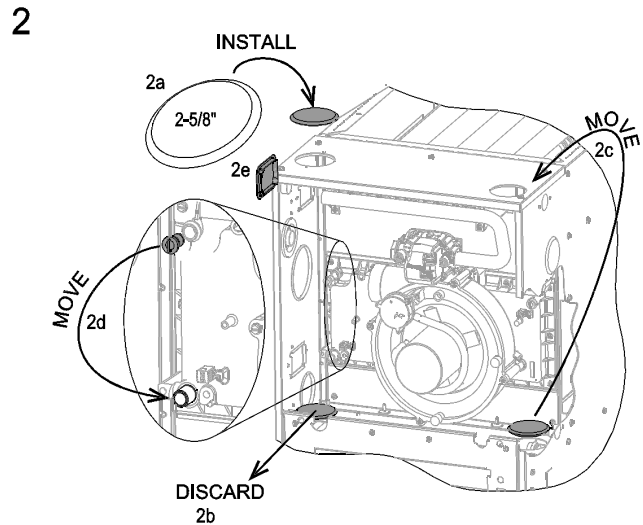
DRILL 1/8" DRILL BIT 3/16" DRILL BIT PLIERS 1/4" HEX HEAD DRIVER 5/16" HEX HEAD DRIVER
PVC GLUE AND PRIMER HAMMER FLAT HEAD SCREWDRIVER TUBING CUTTER

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"

Field Conversions

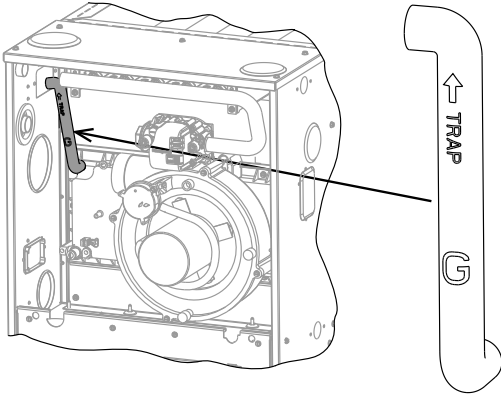


- 1a - REMOVE ELBOW, (2) COUPLINGS, AND FLUE TRANSITION. **NOTE: RETAIN ELBOW AND COUPLINGS FOR LATER USE.**
- 1b - REMOVE TRAP AND HOSES. RETAIN HOSE D FOR LATER USE. **NOTE: TO REMOVE TRAP REMOVE (2) SCREWS AND PULL STRAIGHT OUT**



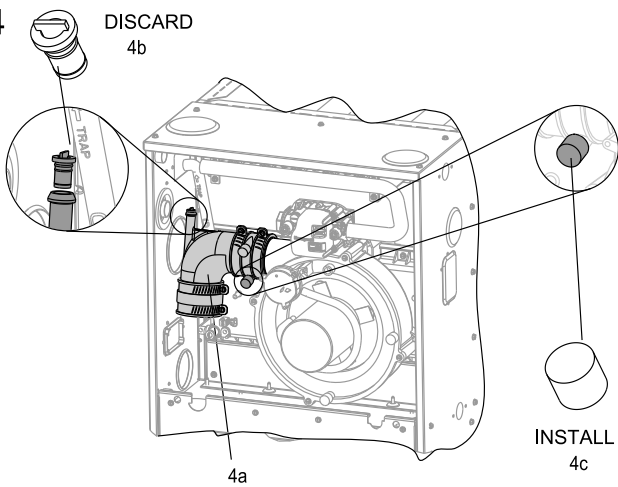
- 2a - INSTALL 2-5/8" FLUSH MOUNT PLUG.
- 2b - REMOVE LEFT 2-3/8" FLUSH PLUG IN BLOWER SHELF - DISCARD.
- 2c - RELOCATE RIGHT 2-3/8" FLUSH MOUNT PLUG FROM BLOWER SHELF TO TOP PLATE.
- 2d - RELOCATE Ø.403" DRAIN PLUG IN THE COLLECTOR BOX.
- 2e - REMOVE RECTANGLE FLUSH MOUNT PLUG-DISCARD

3



INSTALL HOSE G ON COLLECTOR BOX AS SHOWN.
NOTE: LET THE OPEN END HANG FREE UNTIL STEP 10.

4

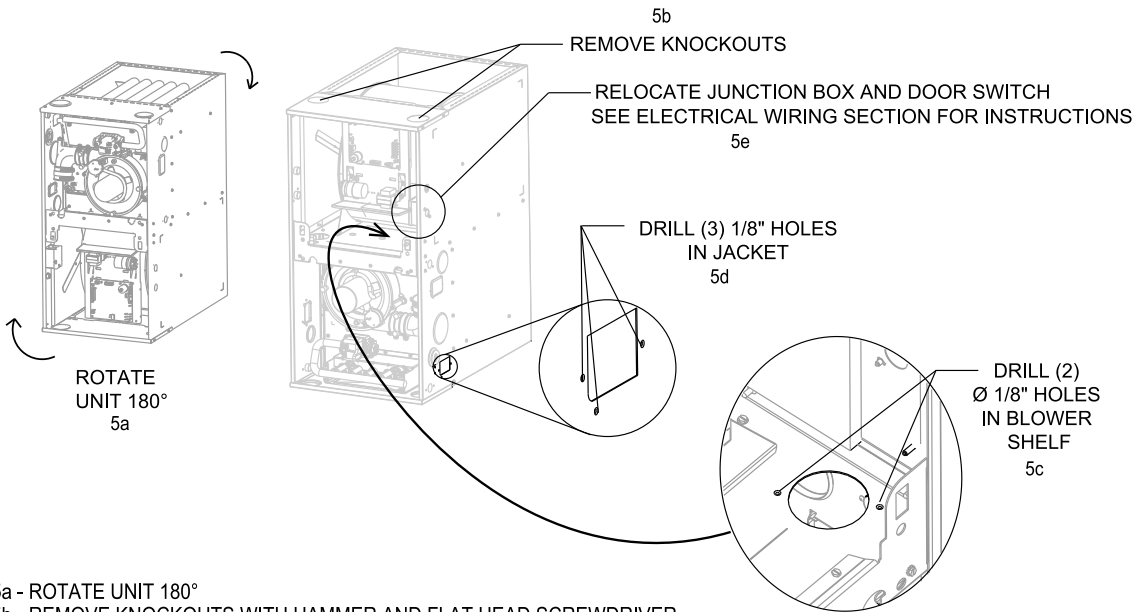


- 4a - RE-INSTALL ELBOW AND COUPLINGS (FROM STEP 1) IN THE ORIENTATION AS SHOWN.
- 4b - REMOVE Ø .403" DRAIN PLUG FROM ELBOW DRAIN PORT - DISCARD.
- 4c - INSTALL 1/2" VINYL CAP (YELLOW) ON INDUCER COUPLING.
NOTE: LEAVE COUPLING CLAMP CONNECTIONS LOOSE UNTIL STEP 10.

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.

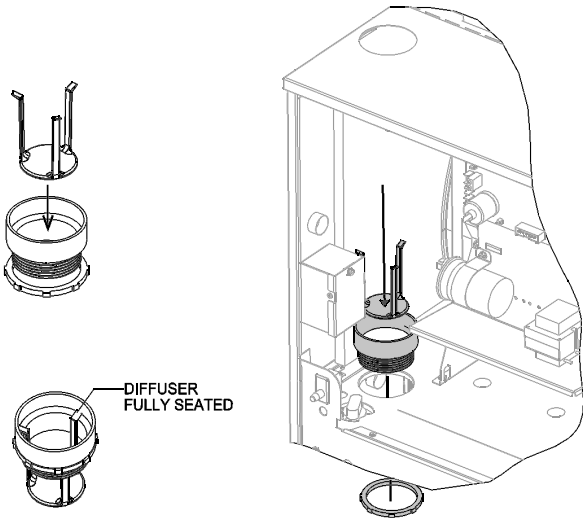
5

NOTE: STEPS 5 - 7 SHOWN WITH FURNACE IN DOWN FLOW ORIENTATION



- 5a - ROTATE UNIT 180°
- 5b - REMOVE KNOCKOUTS WITH HAMMER AND FLAT HEAD SCREWDRIVER.
- 5c - PRE-DRILL (2) Ø 1/8" HOLES IN BLOWER SHELF AS SHOWN FOR FLUE PIPE ASSEMBLY.
- 5d - PRE-DRILL (3) Ø 1/8" HOLES IN JACKET AS SHOWN FOR CONDENSATE TRAP.
- 5e - THE JUNCTION BOX WILL HAVE TO BE RELOCATED FOR FLUE PIPE INSTALLATION
NOTE: SEE ELECTRICAL WIRING SECTION FOR INSTRUCTIONS.

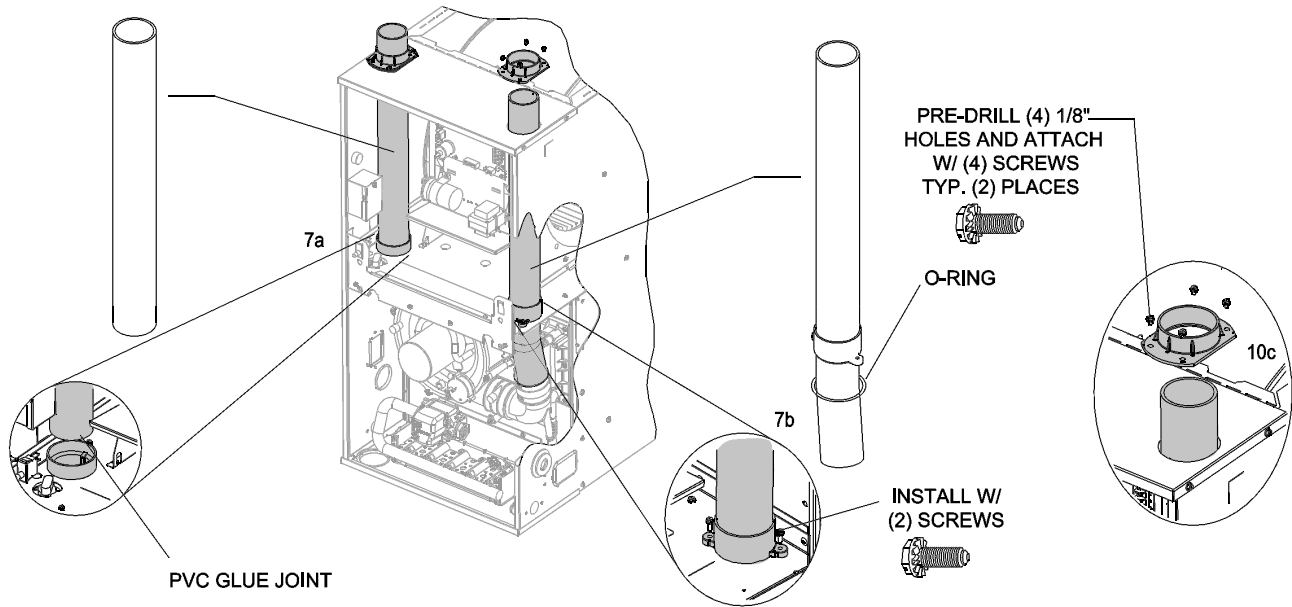
6



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

NOTE:
DIFFUSER MAY HAVE A TENDENCY 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.

7



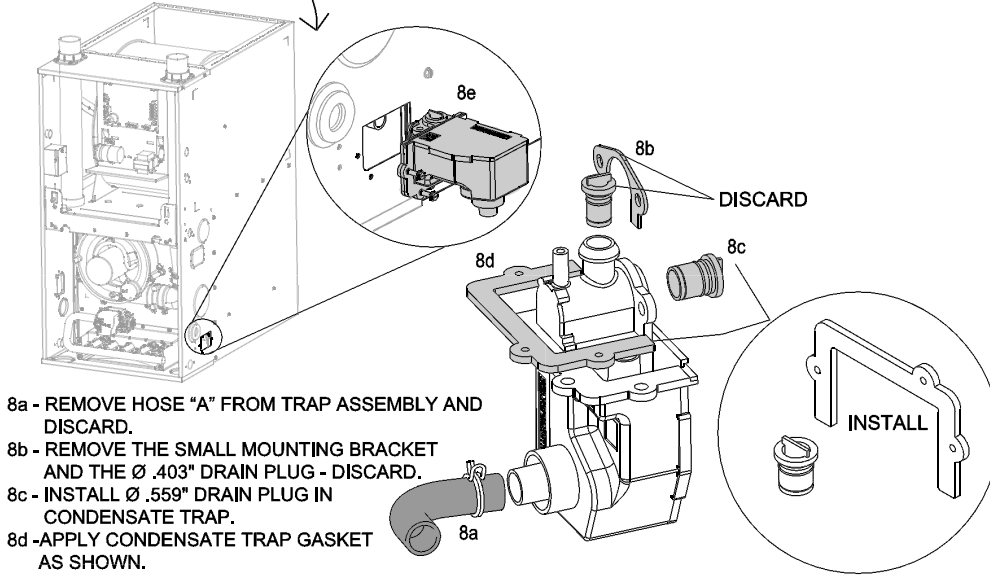
- 7a - **INSTALL INTAKE PIPE:** SLIDE INTAKE PIPE THROUGH THE LEFT SIDE KNOCKOUT, CLEAN AND PVC GLUE TO INTAKE COUPLING AS SHOWN.
- 7b - **INSTALL FLUE PIPE ASSEMBLY:** INSERT FLUE PIPE ASSEMBLY THROUGH RIGHT SIDE KNOCKOUT, (**NOTE: SLIDE FROM UNDER PLATE**), SLIDE ANGLED END THROUGH OPENING IN BLOWER 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: REMAINING STEPS SHOWN WITH FURNACE IN HORIZONTAL LEFT ORIENTATION

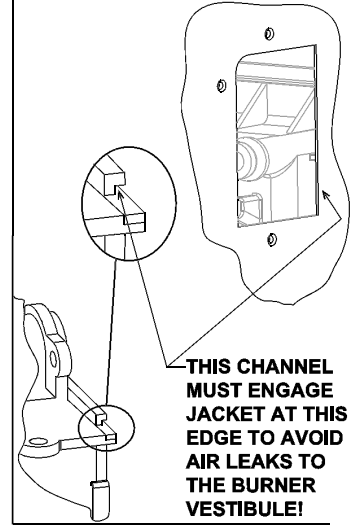
8 ROTATE 90°

NOTE: TO PREVENT DAMAGE TO THE TRAP, THE INSTALLER MAY ELECT TO INSTALL IT DURING A LATER STEP. (AFTER THE UNIT IS ROTATED)

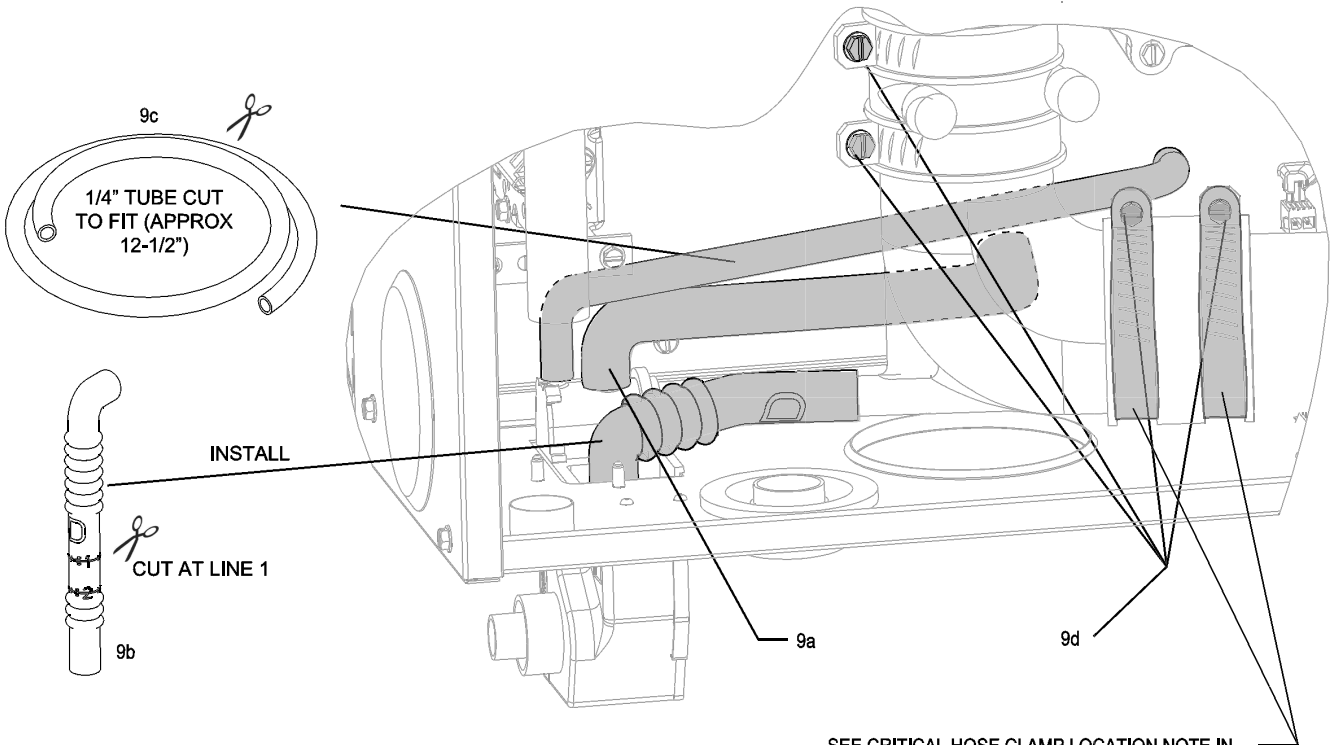
!! IMPORTANT !!
CONDENSATE TRAP INFORMATION



- 8a - REMOVE HOSE "A" FROM TRAP ASSEMBLY AND DISCARD.
- 8b - REMOVE THE SMALL MOUNTING BRACKET AND THE \varnothing .403" DRAIN PLUG - DISCARD.
- 8c - INSTALL \varnothing .559" DRAIN PLUG IN CONDENSATE TRAP.
- 8d - APPLY CONDENSATE TRAP GASKET AS SHOWN.
- 8e - 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.
- 8f - SECURE USING 3 SCREWS.
- 8g - ROTATE UNIT 90°



9



- 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.
- 9c - CUT 1/4" VENT TUBE TO FIT (APPROX. 12-1/2") AND INSTALL AS SHOWN.
NOTE: ROUTE FROM COLLECTOR BOX TO TOP OF CONDENSATE TRAP
- 9d - TIGHTEN ELBOW AND INDUCER CLAMPS TO FLUE PIPE W/ 5/16" NUT DRIVER.

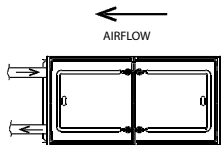
SEE CRITICAL HOSE CLAMP LOCATION NOTE IN THE GENERAL CONVERSION INSTRUCTIONS.

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:



HORIZONTAL LEFT / LEFT VENT

PARTS NEEDED:

FROM PARTS BAG (PROVIDED WITH UNIT)



INTAKE COUPLING
W/NUT



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.

FROM CONVERSION KIT RXGY-CK



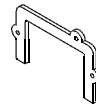
1/2" VINYL
CAP (YELLOW)



.559" CONDENSATE
TRAP DRAIN PLUG



1/4" BLACK
VENT TUBING

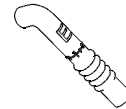


CONDENSATE
TRAP GASKET

(X3)



#8 X 1/2"
SCREW



1/2" DRAIN
HOSE E

TOOLS/MATERIALS NEEDED:

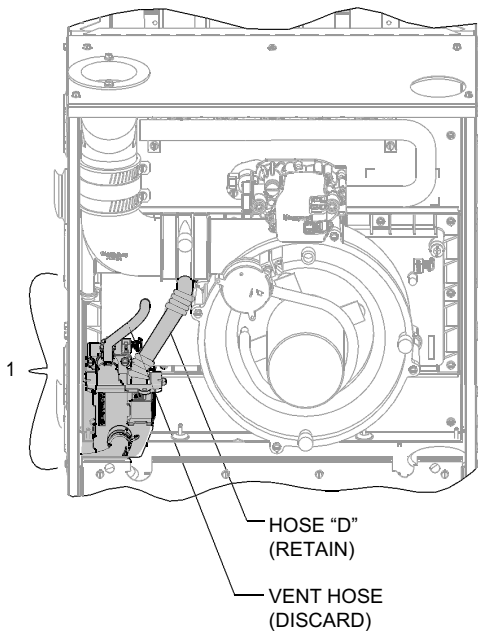
DRILL
1/8" DRILL BIT

PLIERS
1/4" HEX HEAD DRIVER

TUBING CUTTER

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"

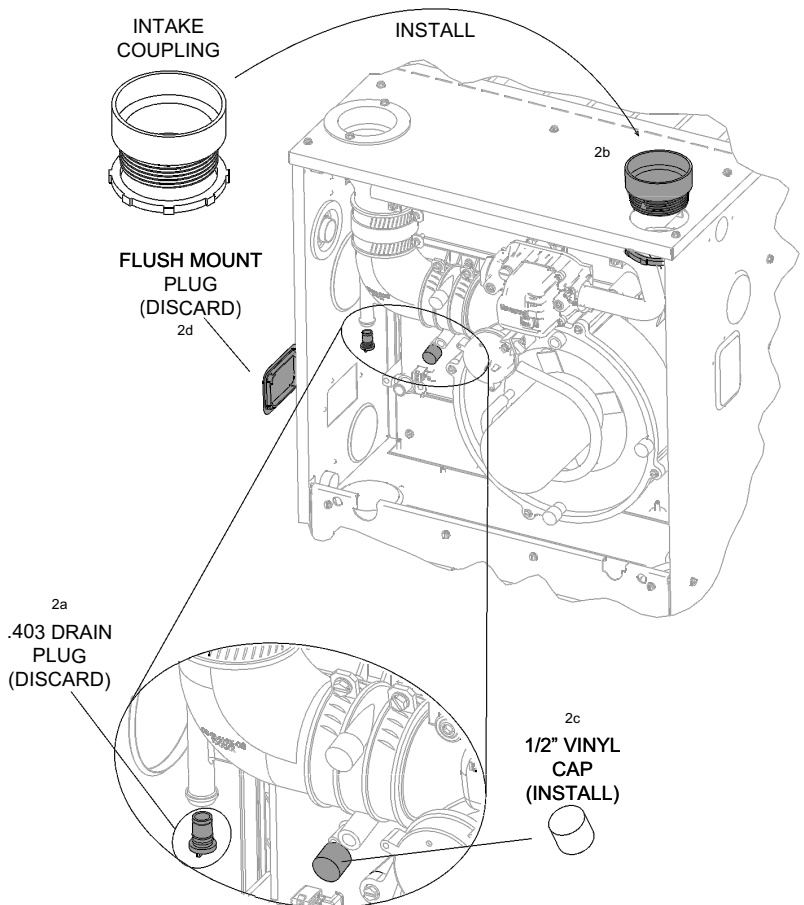
1



1 - REMOVE CONDENSATE TRAP AND HOSES.
(RETAIN HOSE D FOR LATER USE.)

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

2



2a - REMOVE .403" DRAIN PLUG FROM FLUE ELBOW - DISCARD.

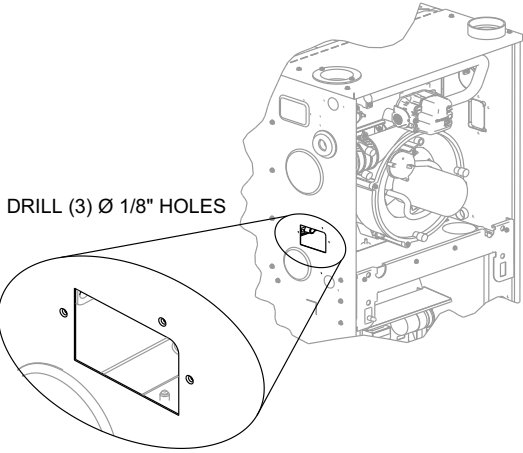
2b - INSTALL INTAKE COUPLING IN TOP PLATE.

2c - INSTALL 1/2" VINYL CAP (YELLOW) IN INDUCER COUPLING AS SHOWN.

2d - REMOVE RECTANGLE FLUSH MOUNT PLUG FROM JACKET SIDE-DISCARD.

ST-A1194-35-01

3



DRILL (3) Ø 1/8" HOLES

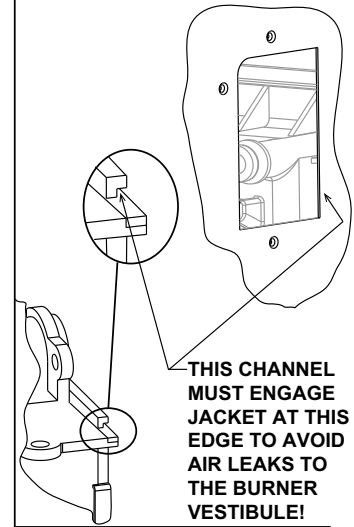
PRE-DRILL (3) Ø 1/8" HOLES AS SHOWN FOR CONDENSATE TRAP.

4 **NOTE: TO PREVENT DAMAGE TO THE TRAP, THE INSTALLER MAY ELECT TO INSTALL IT DURING A LATER STEP. (AFTER THE UNIT IS ROTATED)**

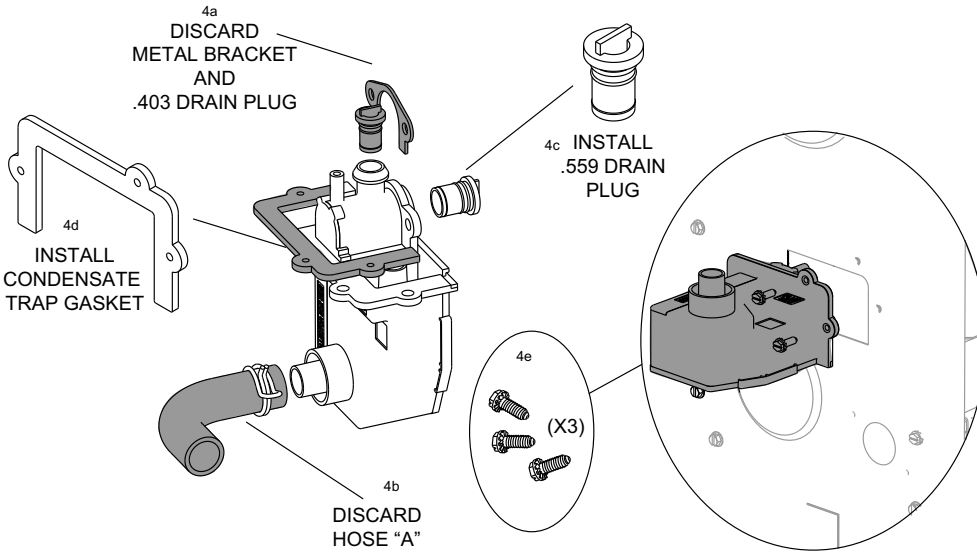
- 4a - REMOVE METAL BRACKET AND .403" DRAIN PLUG - DISCARD.
- 4b - REMOVE HOSE "A" - DISCARD
- 4c - INSTALL Ø.559" CONDENSATE DRAIN PLUG
- 4d - CONDENSATE TRAP GASKET AS SHOWN
- 4e - INSTALL CONDENSATE TRAP. MAKE SURE THE CHANNEL AT THE LOCATION SHOWN IN THE "IMPORTANT SECTION" ENGAGES THE EDGE OF THE JACKET AT THE LOCATION SPECIFIED.
- 4f - SECURE USING 3 SCREWS.

!! IMPORTANT !!

CONDENSATE TRAP INFORMATION

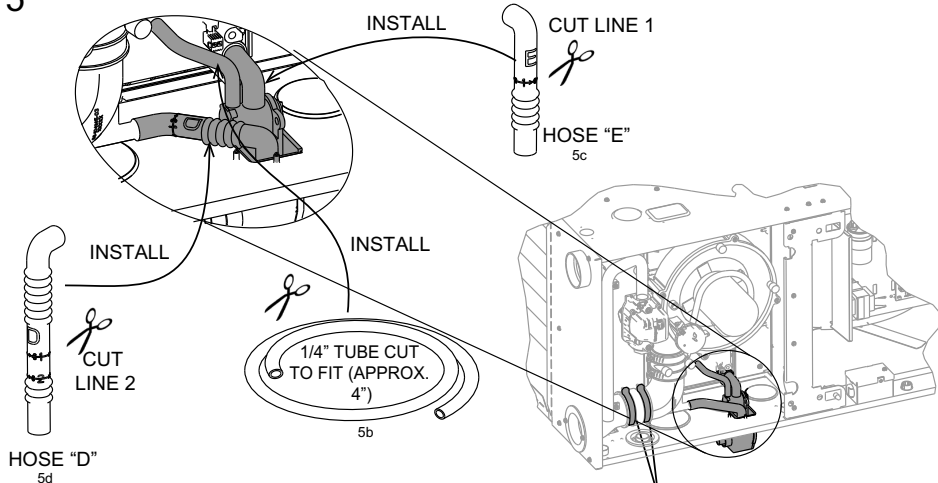


THIS CHANNEL MUST ENGAGE JACKET AT THIS EDGE TO AVOID AIR LEAKS TO THE BURNER VESTIBULE!



NOTE: REMAINING STEPS SHOWN WITH FURNACE IN HORIZONTAL RIGHT ORIENTATION

5



5a ROTATE UNIT 90°

HOSE "D"
5d

SEE CRITICAL HOSE CLAMP LOCATION NOTE IN THE GENERAL CONVERSION INSTRUCTIONS.

- 5a - ROTATE UNIT 90°
- 5b - CUT 1/4" VENT HOSE TO FIT (APPROX. 6-1/2") AND INSTALL AS SHOWN.
- 5c - CUT HOSE E AT LINE 1 - INSTALL
- NOTE: MAKE SURE CUT IS STRAIGHT AND SQUARE**
- 5d - CUT HOSE D (REMOVED IN STEP1) AT LINE 2 -INSTALL

NOTE: USE SOAPY WATER TO FACILITATE EASY HOSE AND TUBE ASSEMBLY

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-CB	External Bottom Filter Rack Kit
RXGF-CC	External Filter Rack Kit - Downflow

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.

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 ACCEPTABLE 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 FILTRATION SYSTEM, ZONING SYSTEM, DUCTWORK, ETC. REFER TO ADDED EQUIPMENT TECHNICAL INFORMATION 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.

WARNING

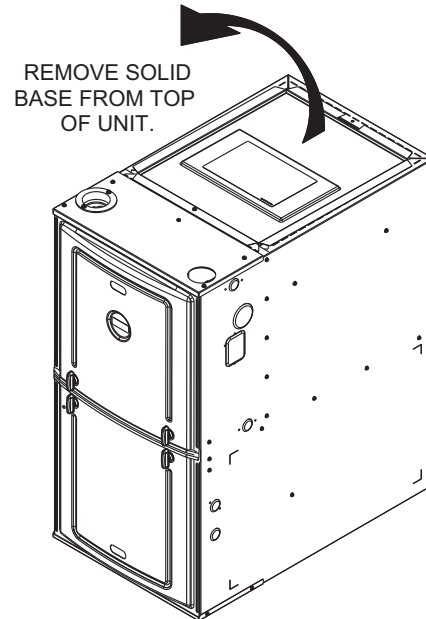
THE SOLID METAL BASE PAN MUST BE REMOVED FROM THE TOP OF THE FURNACE BEFORE INSTALLING THE FURNACE. FAILURE TO REMOVE THIS PAN FROM THE SHIPPING POSITION CAN RESULT TO DAMAGE TO THE FURNACE OR EQUIPMENT.

WARNING

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

FIGURE 7

REMOVE SOLID BASE PANEL FROM THE TOP BEFORE INSTALLING FURNACE



ST-A1194-49

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.
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 or more, BOTH sides or the bottom must be used for the return air.

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

WARNING

UPFLOW FURNACE: THE SOLID METAL BASE (SHIPPED WITH THE FURNACE) PLATE 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.

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 opening 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.

FIGURE 8

① REMOVE BLOWER DOOR AS SHOWN

② INSERT TAB ONTO FLANGE AND PUSH PANEL INTO PLACE

③ INSTALL SCREW IN TAB LOCATED IN THE BLOWER COMPARTMENT TAPE ALL EDGES OF BOTTOM TO COVER GAPS

④ AFTER INSTALLATION OF BOTTOM PLATE, SEAL ALL SEAMS TIGHT WITH METAL TAPE

INTERNAL VIEW OF BLOWER COMPARTMENT

RETAINING TAB DETAIL

INSTALLATION OF SOLID METAL BASE FOR SIDE RETURN APPLICATIONS

ST-A1194-49

DOWNFLOW INSTALLATIONS

WARNING

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

NOTE: In downflow configuration, side return air cut out is not permitted.

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.

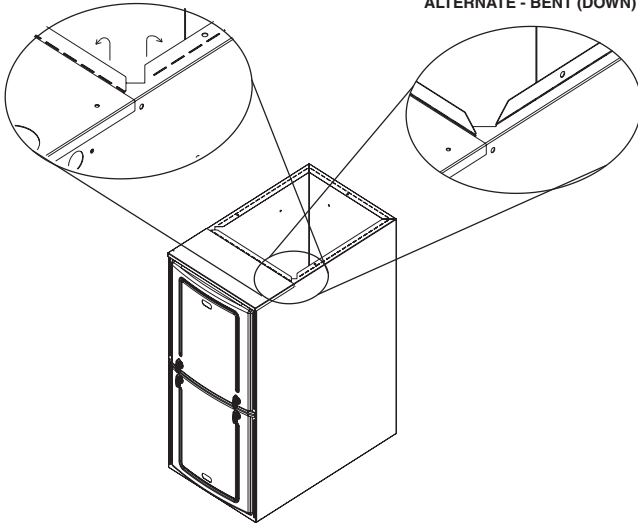
DUCTING

FIGURE 9

FLANGE BENDING INSTRUCTIONS

AS - SHIPPED FLAT

INSTALLER BENT - UP
ALTERNATE - BENT (DOWN)



NOTES:

THIS VIEW IS REPRESENTATIVE OF BOTH SUPPLY AND RETURN OPENINGS.

DUCT FLANGES MUST BE FIELD - BENT ALONG PERFORATIONS EITHER INTO OR OUT OF THE FURNACE AS NECESSARY FOR INSTALLATIONS BUT **NEITHER FLANGE CAN REMAIN FLAT.**

INSTALLER SHOULD USE DUCK BILLED PLIERS (AKA: FOLDING PLIERS) TO BEND THE FLANGE ALONG THE PERFORATIONS.

ST-A1194-39-00

TABLE 1
NON-COMBUSTIBLE FLOOR BASES

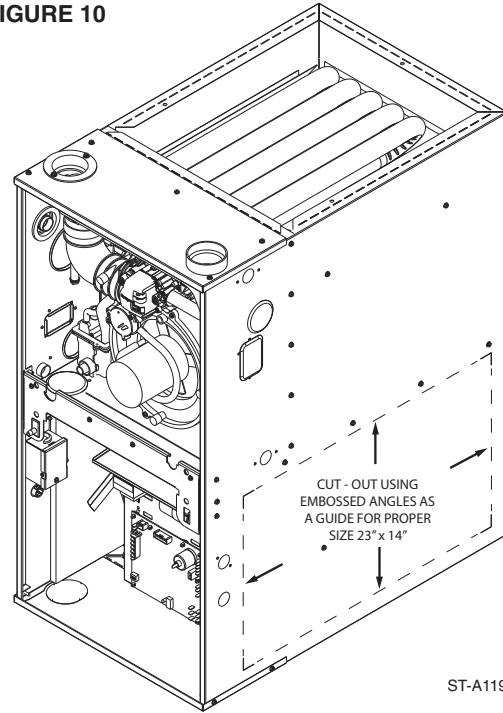
Floor Base No.	Size Cabinet
RXGC-B17	17
RXGC-B21	21
RXGC-B24	24

HORIZONTAL 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. 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.

FIGURE 10



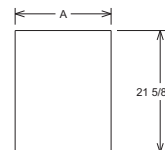
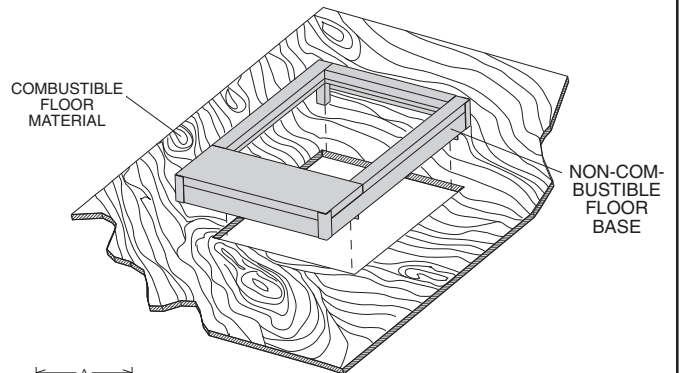
ST-A1194-04-X0

5. 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.

FIGURE 11

NON-COMBUSTIBLE FLOOR BASE INSTALLATION INSTRUCTIONS



FLOOR CUTOUT DIMENSIONS

FLOOR BASE NO.	CABINET WIDTH	FLOOR CUTOUT DIMENSION "A"
RXGC-B17	17.5"	17.0"
RXGC-B21	21.0"	20.0"
RXGC-B24	24.5"	23.5"

ST-A1194-43-00

GENERAL VENTING REQUIREMENTS AND GUIDELINES

VENTING & COMBUSTION AIR REQUIREMENTS

WARNING

READ AND FOLLOW ALL INSTRUCTIONS IN THIS SECTION. FAILURE TO PROPERLY VENT THIS FURNACE CAN CAUSE CARBON MONOXIDE POISONING, OR AN EXPLOSION OR FIRE, RESULTING IN PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

WARNING

THIS FURNACE AND ANY OTHER FUEL-BURNING APPLIANCE MUST BE PROVIDED WITH ENOUGH FRESH AIR FOR PROPER COMBUSTION AND VENTILATION OF THE FLUE GASES. MOST BUILDINGS WILL REQUIRE THAT OUTSIDE AIR BE SUPPLIED INTO THE FURNACE AREA. FAILURE TO DO SO CAN CAUSE PERSONAL INJURY OR DEATH FROM CARBON MONOXIDE POISONING. REFER TO SECTION TITLED “NON-DIRECT VENTING” TO DETERMINE IF THE FURNACE MUST USE OUTSIDE AIR FOR COMBUSTION.

This furnace removes both sensible and latent heat from the combustion gases. Removal of latent heat results in the condensation of flue gas water vapor. This condensed water vapor drains from the secondary heat exchanger and out of the unit into the drain trap.

When installed as a non-direct vent furnace, only exhaust piping is required and inside combustion air may be used. Refer to the section on “NON-DIRECT VENTING.”

Direct vent installations require a dedicated combustion air and venting system. All air for combustion is taken from the outside atmosphere and all combustion products are discharged to the outdoors.

Adequate facilities for providing air for combustion and ventilation must be provided in accordance with Section 5.3, “Air for Combustion and Ventilation” of the National Fuel Gas Code, ANSI Z223.1 (latest edition), in Canada CSA B149.1; Canadian Natural Gas and Propane Installation Code and The National Fire Code of Canada, or applicable provisions for the local building codes, and not obstructed so as to prevent the flow of air to the furnace.

IMPORTANT: Air for combustion and ventilation must not come from a corrosive atmosphere. Any failure due to corrosive elements in the atmosphere is excluded from the warranty coverage.

Combustion air must be free of acid-forming chemicals such as sulfur, fluorine and chlorine. These elements are found in aerosol sprays, detergents, bleaches, cleaning solvents, air fresheners, paint and varnish removers, refrigerants and many other commercial and household products. When burned in a gas flame, vapors from these products form acid compounds. The acid compounds increase the dew point temperature of the flue products and are highly corrosive after they condense.

The following types of installations (but not limited to the following) may require outdoor air for combustion (direct-vent) due to chemical exposures:

- Commercial buildings
- Buildings with indoor pools
- Furnaces installed in laundry rooms
- Furnaces in hobby or craft rooms
- Furnaces installed near chemical storage areas

If combustion air is exposed to the following substances (but not limited to the following), it should not be used and the furnace may require outdoor air for combustion (direct-vent).

- 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
- Printing inks, paint removers, varnishes etc.
- Cleaning solvents (such as perchloroethylene)
- Hydrochloric acid
- Cements and glues
- Antistatic fabric softeners for clothes dryers
- Masonry curing and acid washing materials

WARNING

ALL FURNACE INSTALLATIONS MUST COMPLY WITH THE NATIONAL FUEL GAS CODE, IN CANADA CSA B149.1; CANADIAN NATURAL GAS AND PROPANE INSTALLATION CODE AND THE NATIONAL FIRE CODE OF CANADA, NFPA 54, AND LOCAL CODES TO PROVIDE ADEQUATE COMBUSTION AND VENTILATION AIR FOR THE FURNACE. FAILURE TO DO SO CAN RESULT IN EXPLOSION, FIRE, PROPERTY DAMAGE, CARBON MONOXIDE POISONING, PERSONAL INJURY OR DEATH.

Combustion air requirements are determined by whether the furnace is in an open (unconfined) area or in a confined space such as a closet or small room.

When the furnace is installed in the same space with other gas appliances, such as a water heater, be sure there is an adequate supply of combustion and ventilation air for the furnace and the other appliances. Do not delete or reduce the combustion air supply required by the other gas appliances in this space. See Z223.1, National Fuel Gas Code (NFPA 54). In Canada, CSA B149.1; Canadian Natural Gas and Propane Installation Code and The National Fire Code of Canada for determining the combustion air requirements for gas appliances. An unconfined space must have at least 50 cubic feet (volume) for each 1,000 BTUH of the total input of all appliances in the space. If the open space containing the appliances is in a building with tight construction (contemporary construction), outside air may still be required for the appliances to burn and vent properly. Outside air openings should be sized the same as for a confined space.

GENERAL VENTING REQUIREMENTS AND GUIDELINES

VENTING & COMBUSTION AIR REQUIREMENTS (cont.)

IMPORTANT: ONLY THE CURRENT VENT INSTRUCTIONS APPLY. All 90 Plus Gas Furnaces cannot be common-vented.

OVERTEMPERATURE SAFETY SWITCHES

Furnaces are equipped with safety switches in the burner compartment to protect against over-temperature conditions caused by inadequate combustion air supply. The switches are located in the burner compartment. If a switch is tripped it must be manually reset after clearing the fault condition which caused it to open.

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 INDICATION OF A POTENTIAL SAFETY HAZARD THAT MUST BE ADDRESSED BY A QUALIFIED TECHNICIAN, SERVICE 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

Z223.1, CSA B149.1; Canadian Natural Gas and Propane Installation Code and The National Fire Code (Canada), local codes or ordinances and these instructions.

WARNING

IN CANADA, PRODUCTS CERTIFIED FOR INSTALLATION AND INTENDED TO BE VENTED WITH PLASTIC VENT SYSTEMS (PVC, CPVC & POLYPROPYLENE) MUST USE VENT SYSTEMS THAT ARE CERTIFIED TO THE STANDARD FOR TYPE BH GAS VENTING SYSTEMS, ULC S636.

THE COMPONENTS OF THE CERTIFIED MATERIAL MUST NOT BE INTERCHANGED WITH OTHER VENT SYSTEMS OR UNLISTED PIPE/FITTINGS.

PLASTIC COMPONENTS AND SPECIFIED PRIMERS AND GLUES OF THE CERTIFIED SYSTEM MUST BE FROM A SINGLE SYSTEM MANUFACTURER AND NOT INTERMIXED WITH OTHER SYSTEM MANUFACTURER'S PARTS.

VENT TERMINATIONS ARE NOT REQUIRED TO BE FROM THE SAME MANUFACTURER AS THE REST OF THE VENTING BUT VENT TERMINATIONS MUST BE ULC S636 APPROVED.

NOTE: WITH THE EXCEPTION OF THE TERMINATION INLET AIR PIPING IS NOT CONSIDERED TO BE A PART OF THE "VENTING SYSTEM". THE REQUIREMENT THAT VENT MATERIAL BE CERTIFIED TO ULC S636 DOES NOT APPLY TO INLET AIR PIPING.

REGARDLESS, ALL TERMINATIONS ON BOTH INLET AND OUTLET PIPES MUST BE CONSTRUCTED FROM COMPONENTS BUILT TO ULC-S636 REQUIREMENTS.

MATERIAL REQUIREMENTS PIPING REQUIREMENTS

The combustion air and vent pipe fittings must conform to American National Standards Institute (ANSI) and American Society for Testing Materials (ASTM) standards D1785 (Schedule 40 PVC), D2665 (PVC-DWV), D2241 (SDR-21 & SDR26-26 PVC), D2661 (ABS-DWV) or F628 (Schedule 40 ABS-DWV). For Canada PVC, CPVC and polypropylene venting can be used and must conform with ULCS-636C requirements.

IMPORTANT: The plastic combustion air and venting components are of Schedule 40 PVC. If using ABS piping, ensure that the solvent cement is compatible for joining PVC to ABS components or use a mechanical connection that can withstand the vent temperatures and is corrosion resistant.

NOTE: Schedule 40 ABS-DWV pipe and fittings may be used as an alternate to PVC pipe for the combustion air inlet and vent pipes.

NOTE: Cellular core PVC is also approved for use. It must be Schedule 40PVC-DWV cellular pipe for non-pressure applications and manufactured under ASTM-F-891.

All exhaust piping must be installed in compliance with the chapter titled; "**Venting of Appliances**" in the latest edition of the National Fuel Gas Code, NFPA-54/ANSI

1. All horizontal piping must slope upward from the furnace with a minimum slope of ¼ inch per foot of horizontal vent so that condensate drains back toward the furnace.
2. All horizontal runs must be supported at least every 4 feet. No sags or dips are permitted.
3. **IMPORTANT:** Do not common vent with any other appliance. Do not install in the same chase or chimney with a metal or high temperature plastic pipe from another gas or fuel-burning appliance unless the required minimum clearances to combustibles are maintained between the plastic pipe and other pipes. For Canada PVC, CPVC and polypropylene can be used as long as they conform with ULCS-636C requirements.
4. All vent installed through unconditioned spaces where below-freezing temperatures are expected must be insulated with an approved insulating material. Materials such as Armaflex or Rubatex insulation may also be used as long as there is no heat tape applied to the vent pipe. For horizontal runs where water may collect, wrap the vent pipe with self-regulating 3 watt or 6 watt heat tape. The heat tape must be U.L. listed and installed per the manufacturer's instructions. **NOTE:** Never cover heat tape with insulation.

GENERAL VENTING REQUIREMENTS AND GUIDELINES

VENTING & COMBUSTION AIR REQUIREMENTS (cont.)

5. The minimum vent pipe length is 5 feet [1.5m].
6. **IMPORTANT:** No part of the combustion air and/or vent pipes may be installed underground.
7. Piping at a roof, wall or other penetration must be immobilized to prevent pipes from disconnecting. Disconnected pipes may allow flue products to be released inside the structure.
8. For Direct Vent systems, all pipe penetrations through roof or sidewall must be installed so that the vent and combustion air intake pipes terminate in the same atmospheric pressure zone.
9. Vent terminations must be installed with the minimum clearances specified in the TERMINATION REQUIREMENTS sections of this manual and **Figure 21** (for Non-Direct Vent) and **Figure 32** (for direct Vent installations).
10. Piping external to the structure (excluding approved venting terminations) and vent passing through unheated crawl-spaces, attics, verandas, patios or decks must be insulated with approved insulating material to prevent freezing as required for local climate.

JOINING PIPE AND FITTINGS

WARNING

PVC/CPVC SOLVENT CEMENTS AND PRIMERS ARE HIGHLY FLAMMABLE. PROVIDE ADEQUATE VENTILATION AND DO NOT ASSEMBLE NEAR A HEAT SOURCE OR AN OPEN FLAME. DO NOT SMOKE. AVOID SKIN OR EYE CONTACT. OBSERVE ALL CAUTIONS AND WARNINGS PRINTED ON MATERIAL CONTAINERS. FAILURE TO FOLLOW THESE GUIDELINES MAY RESULT IN FIRE, EXPLOSION OR ASPHYXIATION CAUSING PERSONAL INJURY OR DEATH.

Materials	Sch. 40 Pipe	SDR Pipe	Cell Core Pipe	Fittings	Primer	Solv. Cement
ABS	D1527	-	F628	D2468 & D2661	-	D2235
PVC	D1785	D2241	F891	D2466 & D2665	F656	D2564
CPVC	F441	F442	-	F348	-	F493
ABS to PVC	-	-	-	-	-	D3138

For Canadian installations all exhaust venting materials must be certified to ULCS-636C.

All pipe, fittings, solvent cement, primers and procedures must be installed following the vent manufacturer's installation instructions and must conform to American National Standards Institute and American Society for Testing Materials (ANSI/ASTM) standards as shown in the **Table 2** below:

CEMENTING JOINTS

Properly seal all joints in the PVC vent using the following materials and procedures.

PVC CLEANER-PRIMER AND PVC MEDIUM-BODY SOLVENT CEMENT

IMPORTANT: After cutting pipe, remove all ragged edges and burrs. This is important to prevent reduction in pressure drop throughout the system.

1. Cut pipe end square. Chamfer edge of pipe. Clean fitting socket and pipe joint area of all dirt, grease and moisture.
2. After checking pipe and socket for proper fit, wipe socket and pipe with cleaner-primer. Apply a liberal coat of primer to inside surface of socket and outside of pipe. Read instructions included with the primer for proper application.
3. Apply a thin coat of cement evenly within the socket. Quickly apply a heavy coat of cement to the pipe end and insert pipe into the fitting with a slight twisting movement until it bottoms out.
NOTE: Cement must be fluid. If not, re-coat.
4. Hold the pipe in the fitting for 30 seconds to prevent the tapered socket from pushing the pipe out of the fitting.
5. Wipe all excess cement from the joint with a rag. Allow 15 minutes before handling. Cure time varies according to fit, temperature and humidity.

NOTE: Stir the solvent cement frequently while using. Use a natural bristle brush or the dauber supplied with the can. The proper brush size is one inch.

IMPORTANT: For proper installation:

DO NOT use solvent cement that has become curdled, lumpy or thickened.

DO NOT thin. Observe shelf precautions printed on containers. For applications below 32°F, use only low-temperature type solvent cement.

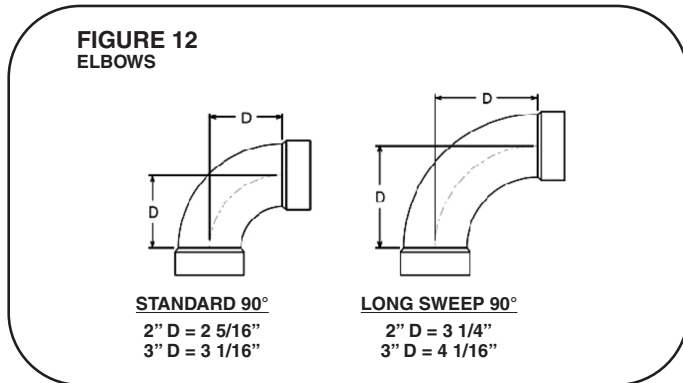
GENERAL VENTING REQUIREMENTS AND GUIDELINES

VENT PIPE SIZING AND MAXIMUM VENT LENGTHS

EQUIVALENT VENT LENGTHS

The concept of equivalent vent lengths is frequently used in piping systems to account for pressure drop of fittings, such as elbows. The equivalent length of a fitting is the length of a straight section of pipe that has an equivalent pressure drop in the application as the fitting used. With the equivalent length vent concept, a vent system can use up to the maximum number of elbows and vent length of straight pipe as long as the maximum equivalent vent length is not exceeded.

There are several different types of elbows that can be used when constructing a vent system. **Figure 12** shows the standard dimensions for standard and long-sweep 90° (1/4 turn) elbows as specified by ASTM 3311, Standard Specification for Drain, Waste and Vent (DWV) Plastic Fittings Patterns.



A long-sweep (AKA Long-Radius) 90° (1/4 turn) elbow has an equivalent vent length of 5 feet of straight pipe for either 2 inch or 3 inch plastic pipe. A standard 90° elbow has an equivalent vent length of 10 feet of straight pipe. This equivalent length can be used in circumstances where it might be necessary to lengthen the vent at the outside of the structure, such as in areas with large accumulations of snow in winter. **Table 3** shows the equivalent lengths of different types of elbows.

Fitting Type	Equivalent Length
90° Standard Elbow	10 Feet of Pipe
45° Long-Sweep Elbow	2-1/2 Feet of Pipe
90° Long-Sweep Elbow	5 Feet of Pipe

Table 4 specifies the equivalent maximum vent lengths specified by the manufacturer for each furnace. Listed table maximums have been qualified by the manufacturer. Dependant on individual installation specifics, installations beyond the table recommendations may cause erratic pressure switch operation.

Examples:

1. A 40KBTU direct-vent installation needs a 31 foot long vent run with qty=5, 90° long-sweep elbows and 2 inch pipe.

31 feet of 2 inch pipe =	31 equivalent feet
Qty = 5, 90° long-sweep elbows =	25 equivalent feet
<hr/>	
Total =	56 equivalent feet

Since the maximum equivalent vent length specified for a 40KBTU furnace is 65 feet, this installation is acceptable.

2. If the installation from Example 1 were installed with standard elbows instead of long-sweep elbows, the calculation would be as follows:

31 feet of 2 inch pipe =	31 equivalent feet
Qty = 5, 90° standard elbows =	50 equivalent feet
<hr/>	
Total =	81 equivalent feet

This installation is NOT acceptable as it exceeds the 65 foot maximum specified for this model.

GENERAL VENTING REQUIREMENTS AND GUIDELINES

VENT PIPE SIZING AND MAXIMUM VENT LENGTHS (cont.)

TABLE 4: MAXIMUM EQUIVALENT VENT LENGTH (TABLE IS FOR BOTH DIRECT & NON-DIRECT VENTING)				
Model	Input (BTU/H)	Pipe Size	Maximum Equivalent Length (Feet)	Recommended Maximum Number of Elbows*
(-)92PA0401317MSA & (-)92MSP040B30A	42,000	2 inchØ	65	6
		3 inchØ	100	6
(-)92PA0601317MSA & (-)92MSP060B30A	56,000	2 inchØ	65	6
		3 inchØ	100	6
(-)92PA0701317MSA & (-)92MSP070B30A	70,000	2 inchØ	65	6
		3 inchØ	100	6
(-)92PA0851521MSA & (-)92MSP085C50A	84,000	2 inchØ	30	2
		3 inchØ	100	6
(-)92PA1001521MSA & (-)92MSP100C50A	98,000	2 inchØ	20	2**
		3 inchØ	100	6
(-)92PA1151524MSA & (-)92MSP115D50A	112,000	2 inchØ	20	2**
		3 inchØ	85	6
<p>NOTE: The elbows needed for the vent termination are not counted in these lengths except at altitudes above 6,000 feet. Above 6,000 feet alternate horizontal vent termination elbows are to be included in the equivalent vent length.</p>				
<p>* This is the recommended maximum number of long sweep elbows for either 2 or 3 inch pipe. Combinations of long sweep 90s, standard 90s, or 45s may be used, but the manufacturer recommends the use of long sweep 90s whenever possible because the use of the maximum number of standard 90 and 45 elbows only may result in nuisance furnace outages due to individual installation specifics.</p>				
<p>Exceeding the recommended maximum number of elbows may cause nuisance operation of the pressure switch.</p>				
<p>** Not applicable for alternate terminations.</p>				

GENERAL VENTING REQUIREMENTS AND GUIDELINES

VENT PIPE SIZING AND MAXIMUM VENT LENGTHS (cont.)

POLYPROPYLENE VENT PRODUCTS

Centrotherm brand *Innoflue* and Duravent *Polypro* Single-wall and flex venting products are approved for use on this furnace product only in single appliance applications. Do not exceed maximum venting lengths, diameters or elbows listed in these instructions (**Vent Pipe Sizing and Maximum Vent Lengths** section [Table 4]). Application of these products is limited to the terminations listed in Tables 5 and

6 below. These manufacturers have provisions for B-vent liners and chimney liners which can be used with this furnace with non-direct venting applications only. Refer to the manufacturer's installation instructions for proper installation. Contact manufacturer for all installation and application information.

NOTE: These venting products are listed for use in Canada under ULC-S636.

TABLE 5: DURAVENT BRAND POLYPRO & POLYPRO FLEX TERMINATION COMPONENTS

2" VENT	3" VENT	Description
2PPS-HTP	3PPS-HTP	Horizontal Direct-Vent Termination
2PPS-HST	3PPS-HST	Horizontal Non-Direct Termination
2PPS-VK, 2PPS-VK-TC	3PPS-VK, 3PPS-VK-TC	Vertical Concentric Kits
2PPS-HK	3PPS-HK	Horizontal Concentric Kits
2PPS-FK	3PPS-FK	Flex Chimney Lining Kit
2PPS-VFT	3PPS-VFT	Vertical Flex Termination Cap
2PPS-BV4, 2PPS-BV5, 2PPS-BV6	3PPS-BV5, 3PPS-BV6	B-VENT Adapter

TABLE 6: CENTROTHERM BRAND ECO SYSTEMS TERMINATION COMPONENTS

2" VENT	3" VENT	Description	Notes
ISCP02	ISCP03	Chimney Cover	For Use on Non-Direct Vent only. DO NOT use with a Direct-Vent Installation.
NA	ISCM03	Stainless Steel Chimney Cover	For Use on Non-Direct Vent only. DO NOT use with a Direct-Vent Installation.
IABC0204 thru IABC0207	IABC0304 thru IABC0307	B-Vent Rain Collar	For Use on on Non-Direct Vent only. DO NOT use with a Direct-Vent Installation.
ISLPT0202	ISLPT0303	Low-Profile Wall Termination	
ISTT0220	ISTT0320	Termination Tee	
ISEP02 & ISEP0239	ISEP03 & ISEP0339	End Pipe	
IFEPO2	NA	2" Flex End Pipe	
NA	ICWT352	Plastic Concentric Wall Termination	Approved for Direct-Vent
ICW2413	ICW3513	Stainless Steel Concentric Wall Termination	Approved for Direct-Vent
ICRT2439	ICRT3539	Concentric Roof (Vertical) Termination	Approved for Direct-Vent