KGBVG0101DFG

DOWNFLOW VENT GUARD KIT FOR DOWNFLOW INSTALLED 33.3” (846 MM) NON−CONDENSING FURNACES

Installation Instructions

NOTE: Read the entire instruction manual before starting the installation. **KEEP THESE INSTRUCTIONS WITH THE FURNACE.**

SAFETY CONSIDERATIONS

Installing and servicing heating equipment can be hazardous due to gas and electrical components. Only trained and qualified personnel should install, repair, or service heating equipment.

Untrained personnel can perform basic maintenance functions such as cleaning and replacing air filters. All other operations must be performed by trained service personnel. When working on heating equipment, observe precautions in the literature, on tags, and on labels attached to or shipped with the unit, and other safety precautions that may apply.

Follow all safety codes. In the United States, follow all safety codes including the National Fuel Gas Code (NFGC) NFPA 54/ANSI Z223.1−2009. In Canada, refer to the National Standard of Canada, Natural Gas and Propane Installation Codes (NSCNGPIC), CAN/CGA−B149.1 and .2.

Wear safety glasses and work gloves. Have a fire extinguisher available during start−up, adjustment procedures, and service calls.

Recognize safety information. This is the safety−alert symbol ⚠ . When you see this symbol on the furnace and in instructions or manuals, be alert to the potential for personal injury.

Understand the signal words DANGER, WARNING, CAUTION, and NOTE. The words DANGER, WARNING, and CAUTION are used with the safety−alert symbol. DANGER identifies the most serious hazards which will result in severe personal injury or death. WARNING signifies hazards which could result in personal injury or death. CAUTION is used to identify unsafe practices which would result in minor personal injury, or product and property damage. NOTE is used to highlight suggestions which will result in enhanced installation, reliability, or operation.

⚠ WARNING

ELECTRICAL SHOCK HAZARD

Failure to follow this warning could result in personal injury or death.

Before beginning any installation, be sure the main electrical disconnect switch is in the OFF position and a lockout tag is installed.

INTRODUCTION

To protect against exposed hot surfaces, the downflow vent guard should always be used when the vent pipe is installed along the outside of the furnace casing in a downflow application. This kit contains spacers to accommodate for both shallow door and deep door designed furnaces. This kit is designed for single− or double−wall 4” pipe. Type B vent connector after the Vent Guard is REQUIRED for all 2−stage applications.

Table 1 – Kit Contents

DESCRIPTION	PART NO.	QUANTITY
Guard Front	327717−401	1
Guard Back	327718−401	1
Spacer − Deep Door	327719−401	1
Spacer − Shallow Door	337083−401	1
Guard Bottom	327720−401	1
Screw	FBN5806B	14
Installation Instructions	AG−KGBVG−01	1

INSTALLATION

⚠ CAUTION

CUT HAZARD

Failure to follow this caution may result in personal injury.

Sheet metal parts may have sharp edges or burrs. Use care and wear appropriate protective clothing, safety glasses and gloves when handling parts and servicing furnaces.

1. Remove appropriate vent opening.
   SHALLOW DOOR - In the downflow position, remove knock-out for vent pipe on the lower left-hand side of the furnace casing.
   DEEP DOOR - In the down-flow position, remove cut-out for vent pipe form the lower left-hand side of the door. (See Fig. 2 and furnace installation instructions.)
2. Install appropriate spacer.
   NOTE: This kit contains spacers for both the shallow door and deep door designed furnaces. Use appropriate spacer according to instructions and type of furnace.
   SHALLOW DOOR - Attach supplied spacer to Guard Front using three screws provided. (See Fig. 1.)
   DEEP DOOR - Align door spacer with front and lower edges of furnace door. (See Fig. 2.) Mark and drill 1/8" holes in the furnace door. Attach spacer to door using two supplied screws.
3. With the furnace in the down-flow orientation, measure and mark location for the Vent Guard bottom mounting hole. (See Fig. 3.)
4. Drill a 1/8" hole thru the casing where indicated by mark.
5. Position the Guard Back on the casing side, aligning the bottom hole in the Guard Back flange with the drilled hole in the furnace casing (See Fig. 4.) Secure the Guard Back to the casing with a screw.
6. While assuring the flange is parallel with the front edge of the furnace, drill 1/8" holes through the furnace casing at the center and top Guard Back flange hole locations. Insert screws and tighten. (See Fig. 4).
7. Reposition furnace vent elbow so outlet is towards left. (See furnace installation instructions.)
8. Attach vent pipe and elbow to furnace vent elbow with at least two field-supplied corrosion resistant sheet metal screws located 180 degrees apart at each connection joint. (See Fig. 5.)
9. Position Guard Front on Guard Back. (See Fig. 6.) Bend centering tabs equally at top of Guard Back and Guard Front to allow Guard Front to mount flush with Guard Back. Centering tabs on lower right-hand opening of Guard Front may also require bending.
10. Secure Guard Front to Guard Back with six screws. (See Fig. 6.) If necessary, rebend centering tabs so that vent pipe is securely centered in vent guard and will not rattle.
11. Position Guard Bottom at bottom of vent guard and secure with two screws. (See Fig. 7.)

NOTE: Guard Bottom will have a gap at the back and side when installed.

12. Install furnace door on casing and check fit.
13. If vent guard needs additional support, field fabricated angle brackets may be installed between the furnace casing and back of vent guard. (See Fig. 8.)

⚠ CAUTION

UNIT DAMAGE HAZARD

Failure to follow this caution may result in personal injury.

Before drilling additional holes in furnace casing or vent guard, be aware of what is on the other side. Screw tips may damage internal furnace components or vent system resulting in electrical shocks or shorting, flue gas leakage, or other hazardous conditions.

Failure to follow this caution could result in personal injury or property damage.

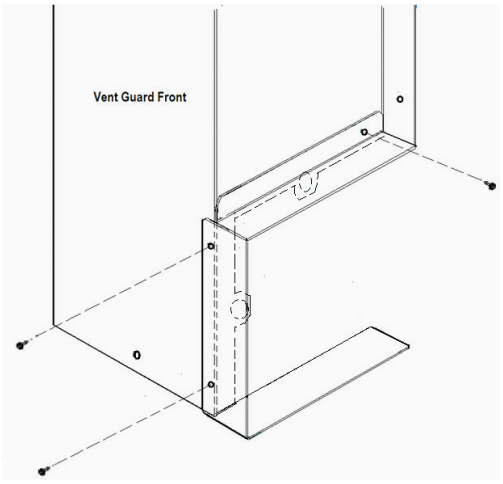

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Fig. 1 - Install Spacer - Shallow Door Design

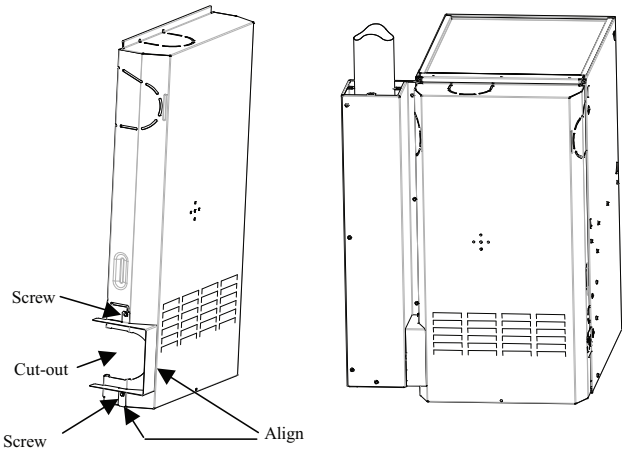

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Fig. 2 - Install Spacer - Deep Door Design

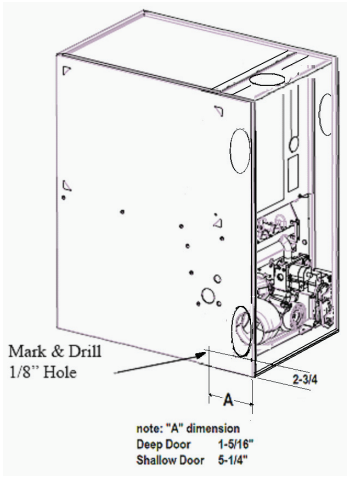

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Fig. 3 - Locate Mounting Hole

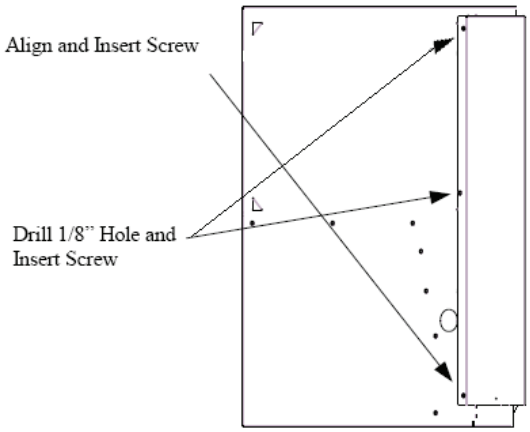

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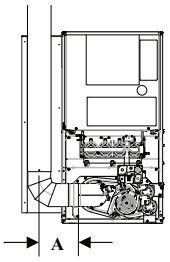
Fig. 4 - Install Guard Back



Furnace Width	'A' - Centerline of Pipe to Elbow (Includes Flange)
14-3/16"	5-9/32"
17-1/2"	7"
21"	8-3/4"
24-1/2"	10-1/2"

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Fig. 5 - Install Vent Pipe

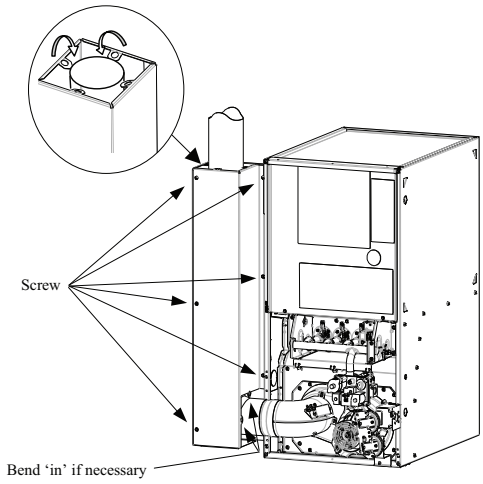

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Fig. 6 - Install Guard Front

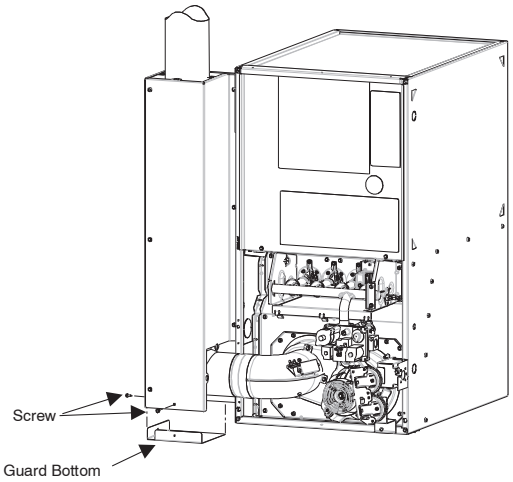

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Fig. 7 - Install Guard Bottom

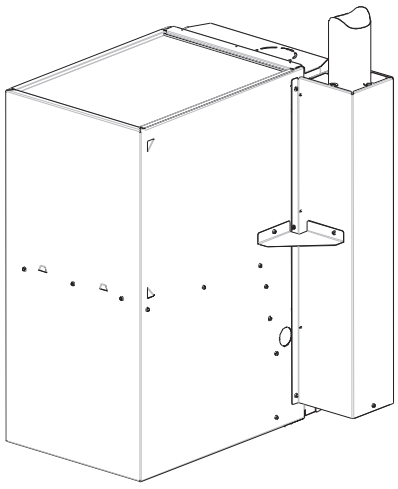

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Fig. 8 - Field-Fabricated Optional Support Bracket

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