Concentric Vent Termination Kit Instructions
Part # KGAVT0501CVT, KGAVT0601CVT

STOP! Follow these instructions or warranty will be void!

1. Safety Considerations

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

2. WARNING

This installation shall be done by a qualified service agency in accordance with these instructions, all applicable codes, and requirements of the authority having jurisdiction. Failure to follow these instructions could result in substantial property damage, severe personal injury, or death.

Prior to installation, examine all components for possible shipping damage. When working on heating equipment, observe all precautions in the literature, on tags, and on labels attached to the unit. Follow all safety codes. Wear safety glasses and gloves. Have a fire extinguisher available.

3. DANGER

Before beginning any installation or modification, be sure the main electrical disconnect switch is in the “OFF” position. Electrical shock can cause serious personal injury or death.

This vent kit is to be used only for terminating HTP boilers and water heaters. Do not use this kit to terminate any other appliance. Failure to follow this warning could result in fire, serious personal injury, or death.

Field supplied pipe and fittings are required to complete the installation. The combustion air and vent pipe fittings must conform to American National Standards Institute (ANSI) and American Society for Testing and Materials (ASTM) standards D1785 (schedule-40 PVC), D2665 (PVC-DWV), D2441 (SDR-21 and SDR 26 PVC), D2661 (ABS DWV), or F628 (schedule-40 ABS). Pipe cement and primer must conform to ASTM standards D2564 (PVC) or D2235 (ABS). In Canada, construct all combustion air inlet and exhaust vent pipes for this unit with CSA or ULC certified Schedule-40 PVC, PVC-DWV pipe and pipe cement.

NOTE: Read the entire appliance installation manual and these instructions BEFORE starting installation. These instructions cover installation of the 2” and 3” concentric vent termination kit ONLY.

4. Kit Components and Dimensions

NOTE: IT IS IMPORTANT TO MAKE SURE THE “Y” FITTING IS POSITIONED ANYWHERE BETWEEN 3 O’CLOCK AND 9 O’CLOCK AND NOT LOWER THAN THAT TO PREVENT RAIN WATER FROM FLOWING BACK INTO THE BOILER. (SEE “Y” CONCENTRIC FITTING DIAGRAM)

NOTE: IT IS VERY IMPORTANT THAT YOU GLUE JOINTS PROPERLY IN LOCATIONS SHOWN.

Figure 1 - Kit Components

Figure 2 - Kit Dimensions

<table>
<thead>
<tr>
<th>Kit Part No.</th>
<th>A**</th>
<th>B</th>
<th>C</th>
<th>D***</th>
</tr>
</thead>
<tbody>
<tr>
<td>KGAVT0601 CVT</td>
<td>38-7/8”</td>
<td>3</td>
<td>4-1/2”</td>
<td>21-1/8”</td>
</tr>
<tr>
<td>KGAVT0501 CVT</td>
<td>33-3/8”</td>
<td>2</td>
<td>3-1/2”</td>
<td>16-5/8”</td>
</tr>
</tbody>
</table>

** Dimension A will change accordingly as dimension D is lengthened or shortened.

**** Dimension D may be lengthened to 60” maximum. Dimension D may also be shortened by cutting the pipes provided in the kit to 12” minimum.
Roof Termination

1. Determine the best location for the termination kit.
   **NOTE:** A roof termination is less susceptible to damage. It has reduced chances for intake contaminants and less visible vent vapors.

2. Cut a hole in the roof 4" in diameter for 2" concentric vent, or 5" in diameter for 3" concentric vent kit.

3. Partially assemble concentric vent termination kit.
   a. Cement Y concentric fitting to larger diameter kit pipe (see Fig. 1).
   b. Cement rain cap to smaller diameter kit pipe (see Fig. 1).

4. Install Y concentric fitting and pipe assembly through the hole in the roof and field supplied boot/flashing. **NOTE:** Do not allow insulation or other material to accumulate inside the pipe assembly when installing through the hole.

5. Secure assembly to roof structure as shown in Fig. 4 using field supplied metal strapping or equivalent support material.
   **NOTE:** Ensure termination height is above the roof surface or anticipated snow level (1' in USA or 1 ½' in Canada) as shown in Fig. 3.

6. Install rain cap and small diameter pipe assembly in roof penetration assembly. Ensure small diameter pipe is cemented and bottomed in Y concentric fitting.

7. Cement air inlet and exhaust vent pipes to concentric vent termination assembly. See Fig. 4 for proper pipe attachment.

8. Operate boiler through a heating cycle to ensure air inlet and exhaust vent pipes are properly connected to concentric vent termination connections.
   **NOTE:** Multiple vertical venting is not allowed.

---

**WARNING**

It is very important to properly glue all joints. Failure to do so can result in property damage, serious personal injury, or death.
**Sidewall Termination**

1. Determine the best location for the termination kit.
   a. Position termination kit where vent vapors will not damage plants, shrubs, air conditioning equipment, or the existing structure.
   b. Position termination kit so it will not be affected by wind (which may cause recirculation of combustion products), airborne leaves, light snow, or fertilizer.
   c. Position termination kit where it will not be subjected to damage from foreign objects, such as stones, balls, etc.
   d. Position termination kit where the vent noise will not be objectionable to abutters.

2. Cut a hole in the sidewall 4" in diameter for 2" concentric vent kit, or 5" in diameter for 3" concentric vent kit.

3. Partially assemble concentric vent termination kit.
   a. Cement the Y concentric fitting to larger diameter kit pipe (see Fig. 1).
   b. Cement the rain cap to the smaller diameter kit pipe (see Fig. 1).

4. Install Y concentric fitting and pipe assembly through the hole.

**NOTE:** Do not allow insulation or other materials to accumulate inside pipe assembly when installing through hole.

5. Install rain cap and small diameter pipe assembly in Y concentric fitting and large pipe assembly. Ensure small diameter pipe is bottomed and cemented in Y concentric fitting.

6. Secure assembly to structure using field supplied metal strapping or equivalent support material (see Fig. 6).

**NOTE:** Ensure termination location clearance dimensions are as shown in Fig. 5.

**NOTE:** If assembly needs to be extended to allow sidewall thickness requirement, the two pipes supplied in the kit may be replaced by using the same diameter, field supplied SDR-26 (D2241) pipe. Do not extend Dimension D to more than 60" (see Fig. 2). DO NOT USE COUPLINGS TO EXTEND PIPE.

7. Cement air inlet and exhaust vent pipes to concentric vent termination assembly. See Fig. 6 for proper pipe attachment.

8. Operate boiler/heater through a heating cycle to ensure air inlet and exhaust vent pipes are properly connected to concentric vent termination connections.

9. Allow 8" center-to-center distance between concentric vent terminations on multiple boiler installations (see Fig. 7).

---

**WARNING**

It is very important to properly glue all joints. Failure to do so can result in property damage, serious personal injury, or death.