VENTING INSTALLATION

These instructions are for the installation of optional vent-air intake kit(s) for a Direct Vent Gas Water Heater. A Direct Vent Gas Water Heater uses all air for combustion from the outside atmosphere and all flue gases are discharged to the outside atmosphere.

⚠️ WARNING

The vent-air intake system must be properly installed. Failure to properly install the vent-air intake system could result in property damage, personal injury or death.

DO NOT install any damaged vent-air intake system components. Contact the manufacturer of the water heater for replacement parts.

IMPORTANT

Maintain proper clearances for installation, plumbing, operation and service as detailed in the instruction and operation manual supplied with the water heater.
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**OPTIONAL VENT-AIR INTAKE SYSTEM INSTALLATIONS**

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**PARTS LIST DRAWING**

- Vent-Air Intake Kits                                                 | 24   |
OPTIONAL VENT-AIR INTAKE SYSTEM INSTALLATIONS

Each Direct Vent Water Heater comes with one (1) vent-air intake “Kit C.” Optional vent-air intake kits are available that can extend the horizontal length and/or vertical height of the vent-air intake system.

Note: Additional kit(s) must be purchased for the horizontal length requirements of the vent-air intake system if “Kit C,” which is included with the water heater is used for extending the vertical height of the vent-air intake system.

To find which vent-air intake kit(s) and instructions are correct for your installation, follow the steps below and then order the appropriate kit(s):

1. Measure the vertical height “Y” required in your installation. Reference the height in the applicable Table A under the column heading “Vertical Height “Y” (See Fig. 1).”

2. Measure the horizontal length “X” required in your installation. Reference the length in Table B under the column heading “Horizontal Length “X” (See Fig. 2).”

Table A
Vertical Extensions for Vent-Air Intake System
40 Gallon (151.4 Liter) Models

<table>
<thead>
<tr>
<th>Vertical Height “Y” (See Figure 6)</th>
<th>Vent-Air Intake Kit Part Nos. &amp; Quantity Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min. (in.)</td>
<td>Max. (in.)</td>
</tr>
<tr>
<td>63-1/4</td>
<td>160.7</td>
</tr>
<tr>
<td>68</td>
<td>69-1/2</td>
</tr>
<tr>
<td>69-1/2</td>
<td>73</td>
</tr>
<tr>
<td>73</td>
<td>75-3/4</td>
</tr>
<tr>
<td>74-3/4</td>
<td>79-1/4</td>
</tr>
<tr>
<td>79-1/4</td>
<td>87-1/2</td>
</tr>
<tr>
<td>84-1/4</td>
<td>93-3/4</td>
</tr>
<tr>
<td>86</td>
<td>97-1/4</td>
</tr>
<tr>
<td>91</td>
<td>103-1/2</td>
</tr>
<tr>
<td>95-1/2</td>
<td>111-3/4</td>
</tr>
<tr>
<td>100-1/2</td>
<td>118</td>
</tr>
<tr>
<td>115-1/2</td>
<td>159-1/2</td>
</tr>
</tbody>
</table>

Notes:
The maximum vertical height “Y” for the 40 Gallon (151.4 Liter) model is 159-1/2 in (405.1 cm).

One (1) vent-air intake “Kit C” is included with the water heater. For additional vent-air intake kits, contact the supplier or manufacturer of the water heater.
# Table A

## Vertical Extensions for Vent-Air Intake System

### 50 Gallon (189.3 Liter) Models

<table>
<thead>
<tr>
<th>Kit A</th>
<th>Part No.</th>
<th>239-41260-00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kit B</td>
<td>Part No.</td>
<td>239-41331-00</td>
</tr>
<tr>
<td>Kit C</td>
<td>Part No.</td>
<td>239-41029-00</td>
</tr>
<tr>
<td>Kit D</td>
<td>Part No.</td>
<td>239-41424-00</td>
</tr>
</tbody>
</table>

### Notes:

- The maximum vertical height "Y" for the 50 Gallon (189.3 Liter) model is 159-1/2 in (428 cm).
- One (1) vent-air intake "Kit C" is included with the water heater. For additional vent-air intake kits, contact the supplier or manufacturer of the water heater.

### Vent-Air Intake Kit Part Nos. & Quantity Required

<table>
<thead>
<tr>
<th>Kit</th>
<th>Part No.</th>
<th>239-41029-00</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Max. Height "Y" (See Figure 6)

<table>
<thead>
<tr>
<th>Min. (in.)</th>
<th>Max. (cm.)</th>
<th>Min. (cm.)</th>
<th>Max. (in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>77</td>
<td>195.6</td>
<td>208.3</td>
<td>82</td>
</tr>
<tr>
<td>78 1/2</td>
<td>199.4</td>
<td>208.3</td>
<td>82</td>
</tr>
<tr>
<td>82</td>
<td>208.3</td>
<td>215.3</td>
<td>82</td>
</tr>
<tr>
<td>83 3/4</td>
<td>208.3</td>
<td>224.2</td>
<td>88 1/4</td>
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<td>88 1/4</td>
<td>212.7</td>
<td>241.3</td>
<td>88 1/4</td>
</tr>
<tr>
<td>89 1/4</td>
<td>212.7</td>
<td>241.3</td>
<td>95</td>
</tr>
<tr>
<td>95</td>
<td>241.3</td>
<td>269.9</td>
<td>106 1/4</td>
</tr>
<tr>
<td>106 1/4</td>
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<tr>
<td>109 1/2</td>
<td>306.7</td>
<td>322.6</td>
<td>124 1/2</td>
</tr>
<tr>
<td>124 1/2</td>
<td>322.6</td>
<td>316.2</td>
<td>124 1/2</td>
</tr>
</tbody>
</table>

Notes:
The maximum vertical height "Y" for the 50 Gallon (189.3 Liter) model is 159-1/2 in (428 cm).
One (1) vent-air intake "Kit C" is included with the water heater. For additional vent-air intake kits, contact the supplier or manufacturer of the water heater.
### Notes:
The maximum vertical height "X" is 96 in (243.8 cm). One (1) vent-air intake "Kit C" is included with the water heater. For additional vent-air intake kits, contact the supplier or manufacturer of the water heater.

<table>
<thead>
<tr>
<th>Min. (in.)</th>
<th>Max. (in.)</th>
<th>Min. (cm.)</th>
<th>Max. (cm.)</th>
<th>Elbow set (Supplied with Water Heater)</th>
<th>Kit A Part No.</th>
<th>Kit B Part No.</th>
<th>Kit C Part No.</th>
<th>Kit D Part No.</th>
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<tr>
<td>4-3/4</td>
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<td>(1)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>6 1/2</td>
<td>8 1/4</td>
<td>16.5</td>
<td>21</td>
<td>(1)</td>
<td>(1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 1/2</td>
<td>11</td>
<td>24.1</td>
<td>27.9</td>
<td>(1)</td>
<td>(1)</td>
<td></td>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td>11 1/2</td>
<td>14 3/4</td>
<td>29.2</td>
<td>37.5</td>
<td>(1)</td>
<td>(1)</td>
<td>(1)</td>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td>14 3/4</td>
<td>24</td>
<td>37.5</td>
<td>61</td>
<td>(1)</td>
<td></td>
<td></td>
<td>(1)</td>
<td></td>
</tr>
<tr>
<td>19 1/2</td>
<td>30 1/4</td>
<td>49.5</td>
<td>76.8</td>
<td>(1)</td>
<td>(1)</td>
<td>(1)</td>
<td>(1)</td>
<td></td>
</tr>
<tr>
<td>21 1/4</td>
<td>33 3/4</td>
<td>54</td>
<td>85.7</td>
<td>(1)</td>
<td>(1)</td>
<td>(1)</td>
<td>(1)</td>
<td>(1)</td>
</tr>
<tr>
<td>26 1/4</td>
<td>38 3/4</td>
<td>66.7</td>
<td>98.4</td>
<td>(1)</td>
<td>(1)</td>
<td>(1)</td>
<td>(1)</td>
<td>(1)</td>
</tr>
<tr>
<td>31</td>
<td>48 1/4</td>
<td>78.7</td>
<td>122.6</td>
<td>(1)</td>
<td></td>
<td>(1)</td>
<td></td>
<td>(2)</td>
</tr>
<tr>
<td>36 1/4</td>
<td>53 1/4</td>
<td>92.1</td>
<td>135.3</td>
<td>(1)</td>
<td>(1)</td>
<td>(1)</td>
<td></td>
<td>(2)</td>
</tr>
</tbody>
</table>
Optional Vent-Air Intake System Installations continued-

Figure 1

Figure 2
WARNING
The vent-air intake system must be properly installed. Failure to properly install the vent-air intake system could result in property damage, personal injury or death.

Do not install any damaged vent-air intake system components. Contact the manufacturer of the water heater for replacement parts.

IMPORTANT
The water heater must be located close enough to the outside wall to keep the venting distance within the maximum distance described in this supplemental instruction manual. Note: The direct vent-air intake terminal must be installed on a vertical wall. Read the following instructions before installing the water heater.

IMPORTANT
When the following instructions specify, to seal a vent-air intake joint, use only Permatex Ultra Blue RTV Silicone sealant. A tube of Permatex Ultra Blue RTV Silicone sealant is supplied with every direct vent water heater and each optional vent-air intake kit. Make sure that all joints are completely sealed. When drilling pilot holes for the #8 sheet metal screws through the five (5) inch (12.7 cm) diameter components, be careful not to drill into the inner three (3) inch (7.6 cm) diameter components.

Tools Required For Optional Vent-Air Intake System Installations
The following minimum tools are required to properly install the vent-air intake system. Note: Wall construction will determine tool usage.

- Tape Measure
- Drill
- 3/16 inch Drill Bit(s)
- 1/8 inch Drill Bit(s)
- Masonry Drill Bit(s) *(For Poured Concrete, Concrete Block and Brick Wall Construction)*
- Reciprocating Saw w/appropriate Blade(s) *(Dependent on Wall Construction)*
- Chisel *(For Poured Concrete, Concrete Block and Brick Wall Construction)*
- Hammer *(For Poured Concrete, Concrete Block and Brick Wall Construction)*
- 1/4 & 5/16 inch Nut Drivers *(Preferred)* or Slotted Head Screwdriver
- Phillips Head Screwdriver
Optional Vent-Air Intake System Installations continued-

**IMPORTANT**
If your installation does not require optional vertical extension(s), then continue in this manual to the section titled “Installation of Horizontal Extensions” and follow the instructions.

**Installation of Vertical Extensions**

1. If applicable, cut a 5-1/2 inch (13.6 cm) diameter minimum clearance hole in the ceiling where the telescopic vent-air intake tube(s) will pass through. (See Figure 3).

![Figure 3](image)

2. Use one of the following formulas below to calculate the required length of the three (3) inch (7.6 cm) diameter telescopic tube(s). (See Figure 4).

40 Gallon Models (151.4 Liter Models)

V = Y - (62-¼ inches)  
V = Y - (160.6 cm)

50 Gallon Models (189.3 Liter Models)

V = Y - (71-¾ inches)  
V = Y - (183.5 cm)
Optional Vent-Air Intake System Installations continued-

Where:  
\[ V = \text{The required length of the three (3) inch (7.6 cm) diameter telescopic tube(s).} \]

\[ Y = \text{Height from the ground to the horizontal centerline of the vent-air intake system.} \]

3. **For a Single Telescopic Tube**

Adjust the length of the three (3) inch (7.6 cm) telescopic tube to dimension “V” calculated in the above formula. With a 1/8 inch drill bit (not supplied), drill three (3) holes, 120° apart, through the three (3) inch (7.6 cm) diameter telescopic tube where the small and large sections overlap. Fasten with three (3) #8 sheet metal screws (supplied). (See Figure 5a).

**For Multiple Telescopic Tubes**

Join the three (3) inch (7.6 cm) diameter telescopic tubes by inserting the small end of a tube into the large end of another, one (1) inch (2.5 cm) (or until seated). With a 1/8 inch diameter drill bit (not supplied), drill three (3) holes, 120° apart, through each joint where the three (3) inch (7.6 cm) diameter telescopic tubes are joined. Adjust the length of the joined three (3) inch (7.6 cm) diameter telescopic tubes to dimension “V” calculated in the above formula. Drill three (3) 1/8 inch diameter holes, 120° apart, through the three (3) inch (7.6 cm) diameter telescopic tubes where the small and large sections overlap. Fasten each joint with three (3) #8 sheet metal screws (supplied). (See Figure 5b).
4. Place the large end of the three (3) inch (7.6 cm) diameter telescopic tube(s) through the hole in the ceiling (if applicable). Insert the small end of the three (3) inch (7.6 cm) diameter telescopic tube(s) into the flue reducer until seated. With a 1/8 inch diameter drill bit (not supplied), drill three (3) holes, 120° apart, through the three (3) inch (7.6 cm) diameter telescopic tube at the joint that will be located inside the ceiling. Fasten the joint with three (3) #8 sheet metal screws (supplied). Apply a sufficient amount of the supplied RTV silicone sealant to seal the joint.

**IMPORTANT**

For ease of installation, it is recommended that none of the joint(s) in the vent-air intake system are located inside a ceiling. However, if a joint does end up inside a ceiling, conduct the following steps before installing the three (3) inch (7.6 cm) diameter telescopic tube(s) into the flue reducer. Drill three (3) 1/8 inch diameter holes, 120° apart, through the three (3) inch (7.6 cm) diameter telescopic tube at the joint that will be located inside the ceiling. Fasten the joint with three (3) #8 sheet metal screws (supplied). Apply a sufficient amount of the supplied RTV silicone sealant to seal the joint.

---

**Figure 5a**
Single Telescopic Tube

**Figure 5b**
Multiple Telescopic Tube
5. **For a Single Telescopic Tube**

Compress the five (5) inch (12.7 cm) diameter telescopic tube to minimum length. Place the large end of the five (5) inch (12.7 cm) diameter telescopic tube through the hole in the ceiling (if applicable). Insert the small end of the five (5) inch (12.7 cm) diameter telescopic tube over the three (3) inch (7.6 cm) diameter telescopic tube and plenum collar until seated on top of the plenum box. Drill three (3) 1/8 inch diameter holes, 120° apart, through the five (5) inch (12.7 cm) diameter telescopic tube into the plenum collar. Fasten with three (3) #8 sheet metal screws (supplied). (See Figure 7a).
Optional Vent-Air Intake System Installations continued-

For Multiple Telescopic Tubes

Join the five (5) inch (12.7 cm) diameter telescopic tubes by inserting the small end of a tube into the large end of another, one (1) inch (2.5 cm) (or until seated). Drill three (3) 1/8 inch diameter holes, 120° apart, through each joint where the five (5) inch (12.7 cm) diameter telescopic tubes are joined. At this time, DO NOT drill holes where the small and large sections of the five (5) inch (12.7 cm) diameter telescopic tubes overlap. Fasten each joint with three (3) #8 sheet metal screws (supplied). Compress the joined five (5) inch (12.7 cm) diameter telescopic tubes to minimum length. Place the large end of the joined five (5) inch (12.7 cm) diameter telescopic tubes through the hole in the ceiling (if applicable). Place the small end of the joined five (5) inch (12.7 cm) diameter telescopic tubes over the joined three (3) inch (7.6 cm) diameter telescopic tubes and plenum collar until seated on top of the plenum box. Drill three (3) 1/8 inch diameter holes, 120° apart, through the joined five (5) inch (12.7 cm) diameter telescopic tubes into the plenum collar. Fasten with three (3) #8 sheet metal screws (supplied). (See Figure 7b).

Figure 7a

![Figure 7a](image)

Figure 7b

![Figure 7b](image)
Optional Vent-Air Intake System Installations continued-

6. Extend the five (5) inch (12.7 cm) diameter telescopic tube(s) until it is one (1) inch (2.5 cm) below the top of the three (3) inch (7.6 cm) diameter telescopic tube(s). Drill three (3) 1/8 inch diameter holes, 120° apart, through the five (5) inch (12.7 cm) diameter telescopic tube(s) at the joint(s) where the small and large sections overlap. Fasten with three (3) #8 sheet metal screws (supplied). (See Figure 8a or 8b).

**IMPORTANT**
For ease of installation, it is recommended that none of the joint(s) in the vent-air intake system are located inside a ceiling. However, if a joint does end up inside a ceiling, conduct the following steps before installing the five (5) inch (12.7 cm) diameter tube(s) to the plenum. Drill three (3) 1/8 inch diameter holes, 120° apart, through the five (5) inch (12.7 cm) diameter telescopic tube(s) at the joint that will be located inside the ceiling. Fasten the joint with three (3) #8 sheet metal screws (supplied). Apply a sufficient amount of the supplied RTV silicone sealant to seal the joint.
7. Insert the straight end of the three (3) inch (7.6 cm) diameter elbow one (1) inch (2.5 cm) (or until seated), into the end of the three (3) inch (7.6 cm) diameter telescopic tube(s). Make sure the three (3) inch (7.6 cm) diameter elbow is oriented in the correct direction. Drill three (3) 1/8 inch diameter holes, 120° apart, through the three (3) inch (7.6 cm) diameter telescopic tube(s) into the three (3) inch (7.6 cm) diameter elbow. Fasten with three (3) #8 sheet metal screws (supplied). Using the supplied RTV silicone sealant, apply a sufficient amount to seal the joint. (See Figure 9).
8. Place the straight end of the five (5) inch (12.7 cm) diameter elbow over the three (3) inch (7.6 cm) diameter elbow into the end of the five (5) inch (12.7 cm) diameter telescopic tube(s), one (1) inch (2.5 cm) (or until seated). Make certain that the five (5) inch (12.7 cm) diameter elbow is oriented in the same direction as the three (3) inch (7.6 cm) diameter elbow and both are oriented in the correct direction. Drill three (3) 1/8 inch diameter holes, 120° apart, through the five (5) inch (12.7 cm) diameter telescopic tube(s) into the five (5) inch (12.7 cm) diameter elbow. Fasten with three (3) #8 sheet metal screws (supplied). (See Figure 10).
Installation of Horizontal Extensions

1. Cut a 5-1/2 inch (13.6 cm) diameter minimum clearance hole in the wall at the point where the vent-air intake tubes will pass through the outside wall and connect with the direct vent-air intake terminal. (See Figure 11).

2. From outside the building, position the outer wall mount plate and direct vent-air intake terminal over the center of the opening. Mark the mounting screw hole locations. With a 3/16 inch diameter drill bit (not supplied), drill holes for the wall anchors (supplied). Install the wall anchors but DO NOT affix the outer wall mount plate and direct vent-air intake terminal to the wall at this time. (See Figure 12). Note: Certain construction of walls may require the use of a different type of wall anchoring means than supplied. DO NOT modify the direct vent-air intake terminal or outer wall mount plate.

Figure 11

Figure 12
Optional Vent-Air Intake System Installations continued

3. For water heaters where the three (3) inch (7.6 cm) diameter elbow is not yet installed:

Insert the straight end of the three (3) inch (7.6 cm) diameter elbow into the flue reducer until firmly seated and oriented in the correct direction. With a 1/8 inch diameter drill bit (not supplied), drill three (3) holes, 120° apart, through the flue reducer into the three (3) inch (7.6 cm) diameter elbow. Fasten with three (3) #8 sheet metal screws (supplied). Using the supplied RTV silicone sealant, apply a sufficient amount to seal the joint. (See Figure 13).

![Figure 13](image13.png)

4. For water heaters where the five (5) inch (12.7 cm) diameter elbow is not yet installed:

Place the straight end of the five (5) inch (12.7 cm) diameter elbow over the three (3) inch (7.6 cm) diameter elbow and plenum collar until seated on top of the plenum box. Make certain that the five (5) inch (12.7 cm) diameter elbow is oriented in the same direction as the three (3) inch (7.6 cm) diameter elbow and both are oriented in the correct direction. Drill three (3) 1/8 inch diameter holes, 120° apart, through the five (5) inch (12.7 cm) diameter elbow into the plenum collar. Fasten with three (3) #8 sheet metal screws (supplied). (See Figure 14).

![Figure 14](image14.png)
Optional Vent-Air Intake System Installations continued-

5. **For a Single Telescopic Tube**

   Extend the three (3) inch (7.6 cm) diameter telescopic tube to its maximum length and slide the backing plate over it. Place the large end of the three (3) inch (7.6 cm) diameter telescopic tube through the hole in the outside wall. Insert the smaller end of the three (3) inch diameter (7.6 cm) telescopic tube into the flared end of the three (3) inch (7.6 cm) diameter elbow, one (1) inch (2.5 cm) (or until seated). Drill three (3) 1/8 inch diameter holes, 120° apart, through the three (3) inch (7.6 cm) diameter elbow into the three (3) inch (7.6 cm) diameter telescopic tube. Fasten with three (3) #8 sheet metal screws (supplied). Adjust the overall length of the three (3) inch (7.6 cm) diameter telescopic tube so that 2-1/2 inches (6.4 cm) extends beyond the outside wall. Drill three (3) 1/8 inch diameter holes, 120° apart, through the three (3) inch (7.6 cm) diameter telescopic tubes where the small and large sections overlap. Fasten with three (3) #8 sheet metal screws (supplied). Using the supplied RTV silicone sealant, apply a sufficient amount to seal all joints. (See Figure 15a).

**For Multiple Telescopic Tubes**

Extend the three (3) inch (7.6 cm) diameter telescopic tubes to their maximum lengths. Join the tubes by inserting the small end of a tube into the large end of another, one (1) inch (2.5 cm) (or until seated). With a 1/8 inch diameter drill bit (not supplied), drill three (3) holes, 120° apart, through each joint where the three (3) inch (7.6 cm) diameter telescopic tubes are joined. At this time, DO NOT drill holes where the small and large sections of the three (3) inch (7.6 cm) telescopic tubes overlap. Fasten each joint with three (3) #8 sheet metal screws (supplied). (See Figure 15b). Slide the backing plate over the joined three (3) inch (7.6 cm) diameter telescopic tubes. Place the large end of the joined three (3) inch (7.6 cm) diameter telescopic tubes through the hole in the outside wall. Insert the smaller end of the joined three (3) inch diameter (7.6 cm) telescopic tubes into the flared end of the three (3) inch (7.6 cm) diameter elbow, one (1) inch (2.5 cm) (or until seated). Drill three (3) 1/8 inch diameter holes, 120° apart, through the three (3) inch (7.6 cm) diameter elbow into the joined three (3) inch (7.6 cm) diameter telescopic tube(s). Fasten with three (3) #8 sheet metal screws (supplied). Adjust the overall length of the joined three (3) inch (7.6 cm) diameter telescopic tubes so that 2-1/2 inches (6.4 cm) extends beyond the outside wall. Drill three (3) 1/8 inch diameter holes, 120° apart, through the joined three (3) inch (7.6 cm) diameter telescopic tubes where the small and large sections overlap. Fasten with three (3) #8 sheet metal screws (supplied). Using the supplied RTV silicone sealant, apply a sufficient amount to seal all joints. (See Figure 15c).
IMPORTANT
For ease of installation, it is recommended that none of the joint(s) in the vent-air intake system are located inside a wall. However, if a joint does end up inside a wall, conduct the following steps before installing the three (3) inch (7.6 cm) diameter telescopic tube(s) into the flared end of the three (3) inch (7.6 cm) diameter elbow. Drill three (3) 1/8 inch diameter holes, 120° apart, through the three (3) inch (7.6 cm) diameter telescopic tube(s) at the joint that will be located inside the wall. Fasten the joint with three (3) #8 sheet metal screws (supplied). Apply a sufficient amount of the supplied RTV silicone sealant to seal the joint.
6. For a Single Telescopic Tube

Extend the five (5) inch (12.7 cm) diameter telescopic tube to its maximum length. Place the large end of the five (5) inch (12.7 cm) diameter telescopic tube over the collar on the outer wall mount plate. Drill three (3) 1/8 inch diameter holes, 120° apart, through the five (5) inch (12.7 cm) diameter telescopic tube into the collar on the outer wall mount plate. Fasten with three (3) #8 sheet metal screws (supplied). Using the supplied RTV silicone sealant, apply a sufficient amount to seal the joint. (See Figure 16a).

For Multiple Telescopic Tubes

Join the five (5) inch (12.7 cm) diameter telescopic tubes by inserting the small end of a tube into the large end of another, one (1) inch (2.5 cm) (or until seated). Drill three (3) 1/8 inch diameter holes, 120° apart, through each joint where the five (5) inch (12.7 cm) diameter telescopic tubes are joined. At this time, DO NOT drill holes where the small and large sections of the five (5) inch (12.7 cm) diameter telescopic tubes overlap. Fasten each joint with three (3) #8 sheet metal screws (supplied). Extend the joined five (5) inch (12.7 cm) diameter telescopic tubes to their maximum length. Place the large end of the joined five (5) inch (12.7 cm) diameter telescopic tubes over the collar on the outer wall mount plate. Drill three (3) 1/8 inch diameter holes, 120° apart, through the joined five (5) inch (12.7 cm) diameter telescopic tubes into the collar on the outer wall mount plate. Fasten with three (3) #8 sheet metal screws (supplied). Using the supplied RTV Silicone sealant, apply a sufficient amount to seal the joint. (See Figure 16b).
7. From outside the building, slide the five (5) inch (12.7 cm) diameter telescopic tube(s) through the opening in the wall until the outer wall mount plate is flush with the wall. (See Figure 17).
Optional Vent-Air Intake System Installations continued-

8. Using the supplied RTV silicone sealant, apply a bead one (1) inch (2.5 cm) from the end of the three (3) inch (7.6 cm) diameter tube that is part of the vent-air intake terminal. Slide the direct vent-air intake terminal into the three (3) inch (7.6 cm) diameter telescopic tube that extends through the wall and position it so it is flush with the outer wall mount plate. Make sure that the rain guard and the word “HOT” on the end of the direct vent-air intake terminal are oriented properly. Secure the direct vent-air intake terminal to the outer wall mount plate and wall with four (4) #10 x 1 inch screws (supplied). (See Figure 18). Note: Certain construction of walls may require the use of different type of anchoring means than supplied. DO NOT modify the direct vent-air intake terminal or outer wall mount plate.

9. From inside the building, slide the backing plate over the five (5) inch (12.7 cm) diameter telescopic tube(s) until it is flush with the wall. Adjust the length of the five (5) inch (12.7 cm) diameter telescopic tube(s) and insert the end into the flared end of the five (5) inch (12.7 cm) diameter elbow one (1) inch (2.5 cm) (or until seated). Drill three (3) 1/8 inch diameter holes, 120° apart, through the five (5) inch (12.7 cm) diameter elbow into the five (5) inch (12.7 cm) diameter telescopic tube(s) and through the tubes where the small and large sections overlap. Fasten with three (3) #8 sheet metal screws (supplied). Using the supplied RTV silicone sealant, apply a sufficient amount to seal all joints. (See Figure 19).
10. Mark the mounting screw hole locations for the backing plate. Rotate the backing plate in order to gain access to the markings. With a 3/16 inch diameter drill bit (not supplied), drill holes for the supplied wall anchors. Install the wall anchors and secure the backing plate to the wall with four (4) #10 x 1 inch screws (supplied). (See Figure 20). Note: Certain construction of walls may require the use of a different type of anchoring means than supplied.
IMPORTANT
When the installation is complete, visually inspect the air intake system to insure that all joints are completely sealed.

WARNING
THIS INSTRUCTION MANUAL IS ONLY A SUPPLEMENT TO THE INSTALLATION & OPERATING INSTRUCTION MANUAL SUPPLIED WITH THE WATER HEATER. REFER TO THE INSTALLATION & OPERATING INSTRUCTIONS SUPPLIED WITH THE WATER HEATER FOR COMPLETE INSTALLATION AND OPERATING PROCEDURES.

VENT-AIR INTAKE KITS

DIRECT VENT-AIR INTAKE KIT A
[PART NO. 239-41260-00 (OPTIONAL)]

DIRECT VENT-AIR INTAKE KIT B
[PART NO. 239-41331-00 (OPTIONAL)]

DIRECT VENT-AIR INTAKE KIT C
[PART NO. 239-41029-00 (OPTIONAL)]

DIRECT VENT-AIR INTAKE KIT D
[PART NO. 239-41424-00 (OPTIONAL)]