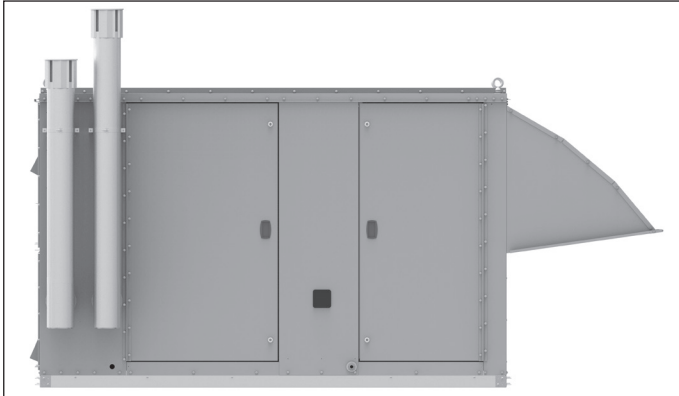


INSTALLATION INSTRUCTIONS Extended Vent Kit for Gas-Fired Furnace Options Packaged Ventilation/Dedicated Outside Air System (DOAS) model DLV

Figure 1.1 – Extended Vent Kit Installed
(C-Cabinet, Non-Condensing Heat Option Shown)



! WARNING

1. Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death, and could cause exposure to substances which have been determined by various state agencies to cause cancer, birth defects or other reproductive harm. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.
2. Disconnect power supply before making wiring connections to prevent electrical shock and equipment damage.

! CAUTION

As with any mechanical equipment, personal injury can result from contact with sharp sheet metal edges. Be careful when you handle this equipment.

IMPORTANT

1. The use of this manual is specifically intended for a qualified installation and service agency. All installation and service of these kits must be performed by a qualified installation and service agency.
2. These instructions must also be used in conjunction with the Installation and Service Manual originally shipped with the appliance, in addition to any other accompanying component supplier literature.
3. Modifications to the kit may result in poor performance or nuisance alarms. Do not change the contents of the kit or deviate from these instructions.

Application

For units with optional gas furnaces (Model Digit 17=2, 3, 5, or 6), the standard power exhaust discharge configuration is a horizontal exhaust cover for non-condensing (81% efficient) furnaces and a downturn elbow for condensing (90%+ efficient) furnaces. In certain installations, such as close proximity to adjacent equipment or parapet walls, it is desirable to redirect the products of combustion vertically through an extended vent kit that terminates above the top of the unit as shown in Figure 1.1. Agency approved extended vent kits are available for field installation as detailed on the following pages.

EXTENDED VENT KIT INSTALLATION - KIT IDENTIFICATION

Before You Begin

Before installing the extended vent kit, verify the kit(s) to be installed is correct for the gas heat option on the unit. To verify, follow these steps, based on the Model DLV model nomenclature shown on the unit serial plate:

1. Identify the Cabinet Size (Digit 6).
2. Confirm the unit has a Gas Heat Option (Digit 17=2, 3, 5, or 6).
3. Identify the Heat Capacity (Digit 18).
4. Review Table 2.1 to determine which kit is required for the unit to which it will be installed. The kits are marked with Item Codes.

Example: Digit 2=C, Digit 17=2, Digit 18=M. From Table 1.1, the kit should be 40336.

Table 2.1 - Extended Vent Kit Pipe Quantity by Length

Cabinet Size (Digit 6)	Heat Capacity and Furnace Type (Digit 18)	Item Code
B	F, G, H, J, K (Non-Condensing)	40335
	R, S, T (Condensing)	40339
C	J, K, L, M (Non-Condensing)	40336
	U, V (Condensing)	40340
D	K, L, M, Q (Non-Condensing)	40337
	1, 2, 3, 4, 5 (Non-Condensing)	40338
	V, P, 6, 7, 8, 9 (Condensing and/or Hybrid)	Contact Factory

5. Inspect the contents of the kit(s) to become familiarized with the parts included. Non-condensing kit components can be seen in Figure 2.1 and condensing kit components can be seen in Figure 2.2. Note that kits include vent pipe that are 36", 48", 60" or 78" in total length. Review Table 2.2 to determine how many lengths of pipe are included of various lengths.

Example: Digit 2=C, Digit 17=2, Digit 18=M. From Table 2.2, the kits include (1) 48" pipe and (1) 60" pipe.

Table 2.2 - Extended Vent Kit Pipe Quantity by Length

Cabinet Size (Digit 6)	Heat Capacity and Furnace Type (Digit 18)	Vent Pipe Qty by Length in Kit			
		36"	48"	60"	78"
B	F, G, H, J, K (Non-Condensing)	-	1	-	-
	R, S, T (Condensing)	2	-	-	-
C	J, K, L, M (Non-Condensing)	-	1	1	-
	U, V (Condensing)	4	-	-	-
D	K, L, M, Q (Non-Condensing)	-	-	-	2
	1, 2, 3, 4, 5 (Non-Condensing)	-	-	2	2
	V, P, 6, 7, 8, 9 (Condensing and/or Hybrid)	Contact Factory			

Figure 2.1 – Non-Condensing Furnace Extended Vent Kit Components ①

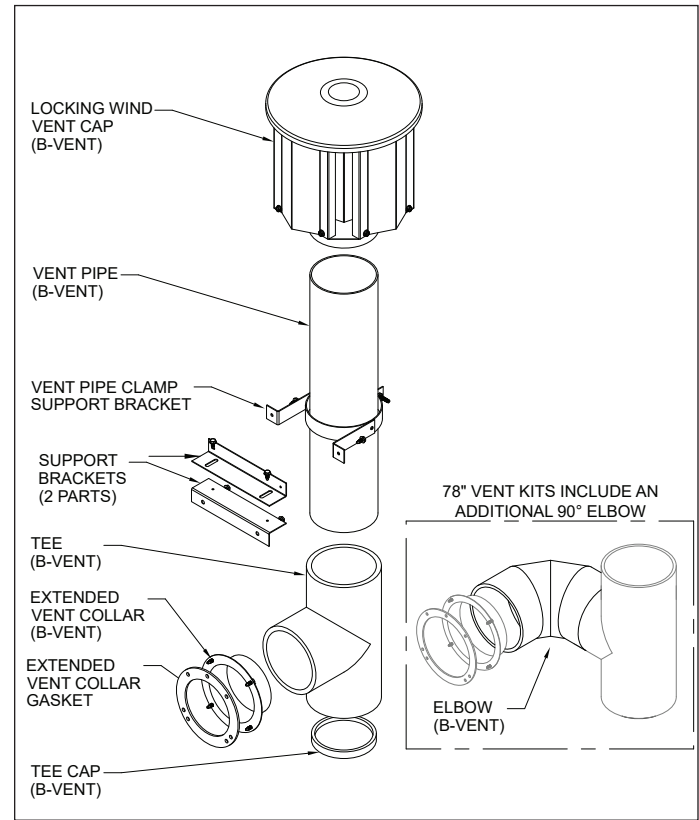
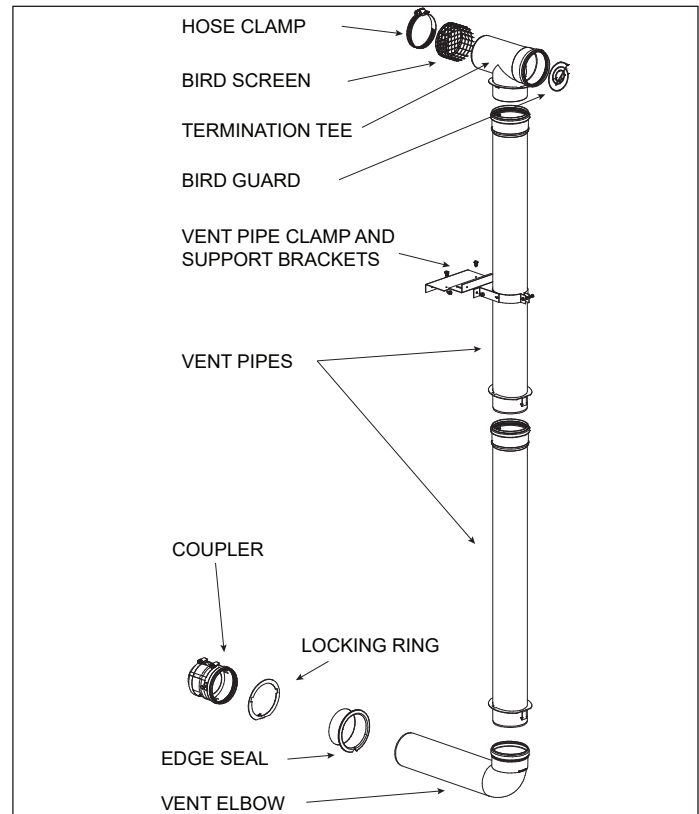


Figure 2.2 – Condensing Furnace Extended Vent Kit Components ①



① For C-Cabinet, there are two vent assemblies and for D-Cabinet, there are two or four vent assemblies. Refer to Table 2.2.

EXTENDED VENT KIT INSTALLATION - **NON-CONDENSING**

Kit Installation Instructions

(For Non-Condensing Models)

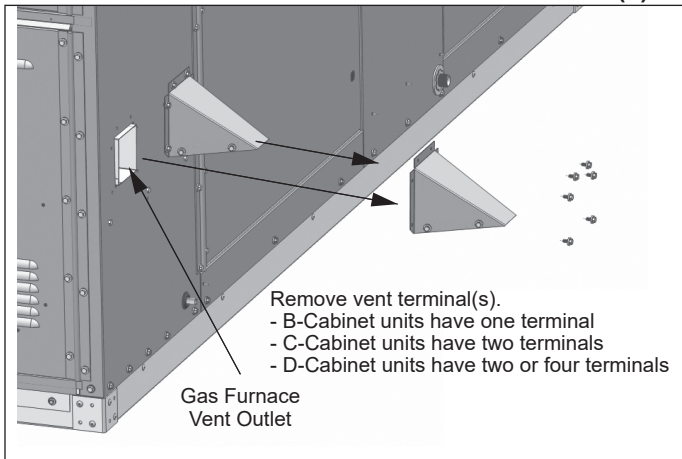
REVIEW BEFORE PROCEEDING

THIS SECTION APPLIES TO ONLY KITS FOR NON-CONDENSING FURNACE OPTIONS.

REVIEW THE INFORMATION ON PAGE 2 TO CONFIRM THE PROPER KIT. IF THE KIT TO BE INSTALLED IS FOR A CONDENSING FURNACE, PROCEED TO PAGE 4.

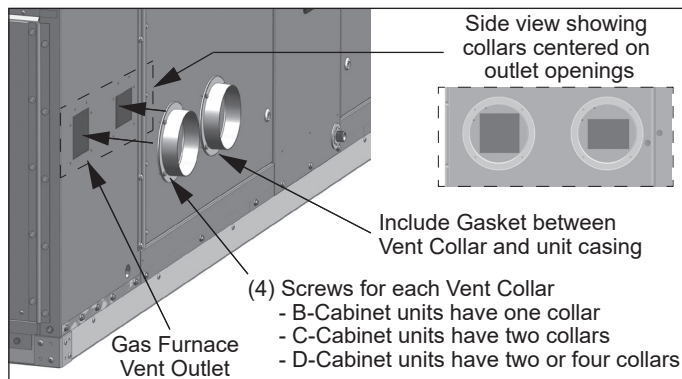
1. Remove the standard power exhaust vent terminal(s) from the unit casing by removing the sheet metal mounting screws. Refer to Figure 3.1.

Figure 3.1
Remove Standard Power Exhaust Vent Terminal(s)



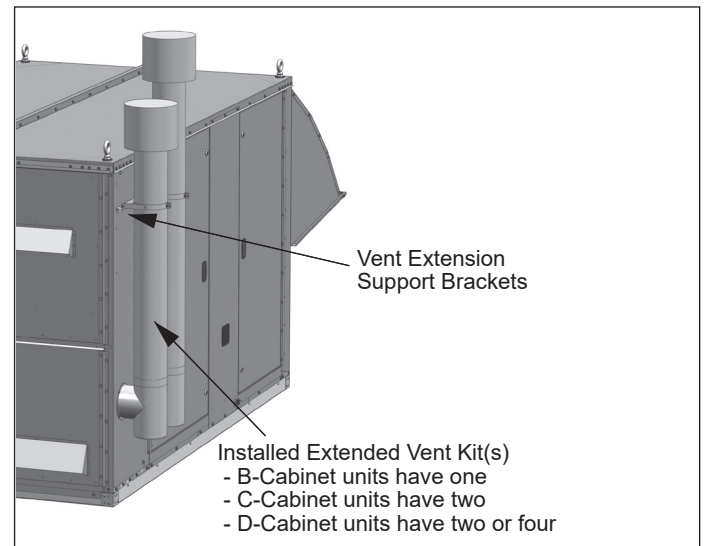
2. Remove any remaining caulk that is on the casing from removing the vent terminal(s).
3. Mount the extended vent collar(s) and collar gasket(s) to the casing using (4) self-tapping sheet metal screws included for each collar. The collar(s) should be centered over the gas furnace vent outlet opening(s) so as to not block any portion of the vent outlet opening(s). Refer to Figure 3.2.

Figure 3.2 – Extended Vent Flue Collar Installation



4. Assemble the extended vent kit assembly (tee, tee cap, vent pipe, vent pipe clamp support bracket, and vent cap) as shown in Figure 3.3. Note the following:
 - Do not tighten the vent extension support bracket(s) yet. That will be tightened in a later step.
 - While most B-vent components lock together when joined, it is recommended that the joints also be secured with the sheet metal screws provided. Drill (3) 1/8" pilot holes around the circumference of each joint and secure with the included screws.

Figure 3.3 – Extended Vent Kit Installed



5. Place a bead of high temperature RTV caulk (by others) around the exhaust collar where it will mate with the vent kit tee. Fit the extended vent kit assembly to the exhaust collar installed on the unit casing, as shown in Figure 3.3. Verify that the vent assembly is vertically plumb. Drill (3) 1/8" diameter bite holes through the tee and into the flue collar, equally spaced around the circumference of the tee. Using (3) sheet metal screws provided, securely fasten the tee to the collar.
6. Position the extended vent support bracket on the unit casing, several inches below the bottom edge of the roof panel. Drill (2) 1/8" diameter bite holes through the casing panel and fasten the bracket using the sheet metal screws provided.
7. Attach the vent pipe clamp support bracket to the extended vent support bracket with (2) self-tapping sheet metal screws.
8. With the brackets secured, tighten the clamp around the vent pipe. Drill (3) 1/8" diameter bite holes through the vent pipe and into the tee. Equally space the holes around the circumference of the vent pipe. Using (3) sheet metal screws, securely fasten the vent pipe to the tee.
9. Caulk the joint around the exhaust collar where it attaches to the unit casing with high temperature RTV caulk (by others).
10. The installation is complete.

EXTENDED VENT KIT INSTALLATION - **CONDENSING**

Kit Installation Instructions

(For Condensing Models)

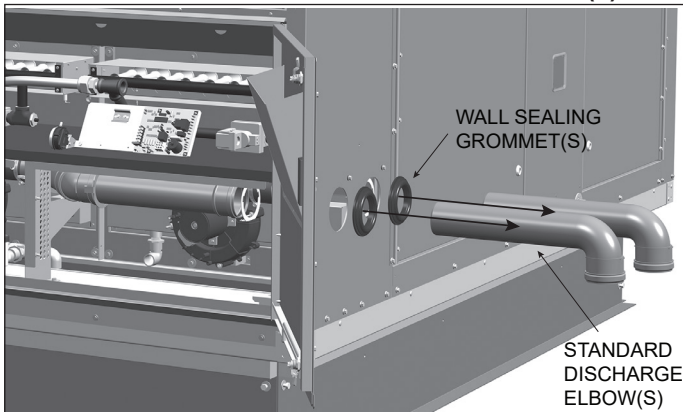
REVIEW BEFORE PROCEEDING

THIS SECTION APPLIES TO ONLY KITS FOR CONDENSING FURNACE OPTIONS.

REVIEW THE INFORMATION ON PAGE 2 TO CONFIRM THE PROPER KIT. IF THE KIT TO BE INSTALLED IS FOR A NON-CONDENSING FURNACE, GO BACK TO PAGE 3.

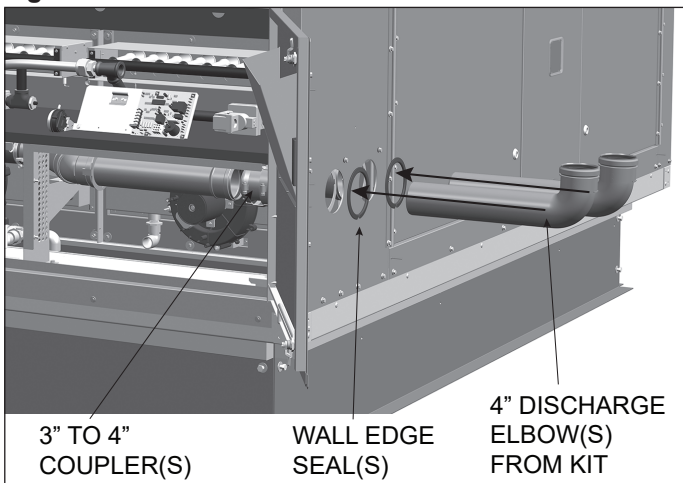
1. Remove the standard 3" power exhaust discharge elbow(s) and wall sealing grommet(s) from the unit casing. Refer to Figure 4.1.

Figure 4.1
Remove Standard Power Exhaust Vent Elbow(s)



2. Install the edge seal(s) around the perimeter of the casing opening(s) to protect the pipe(s) and help provide a partial seal as shown in Figure 4.2.

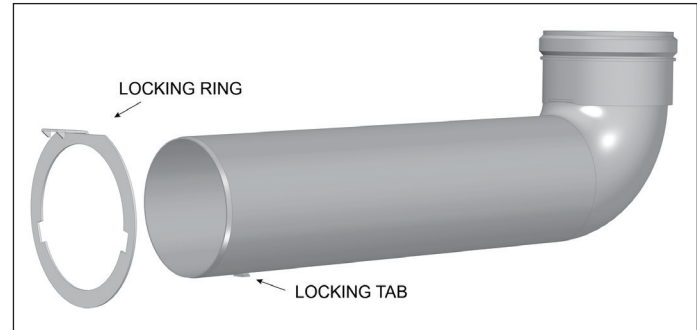
Figure 4.2 - Extended Vent Flue Collar Installation



3. On the 3" vent system that is remaining inside the unit, install the 3" to 4" coupler(s). Tighten the coupler(s) on the 3" vent side.

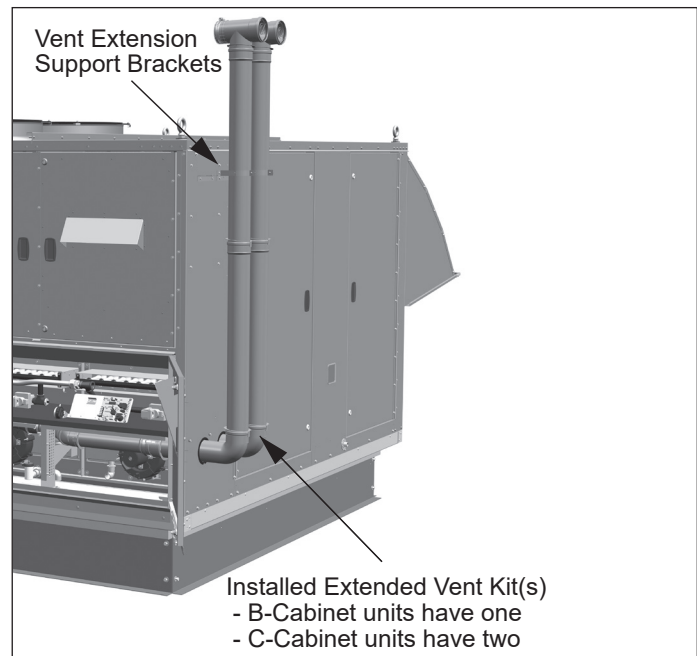
4. Slide the 4" vent elbow(s) through the casing hole(s) as shown in Figure 4.2. It will be necessary to compress the tube slightly when inserting through the side of the unit to get the locking tab to slip through the opening. Refer to Figure 4.3.

Figure 4.3 - Extended Vent Elbow Locking Tab



5. Slide the locking ring over the vent pipe on the discharge elbow(s), then slide the vent discharge elbow(s) into the 4" side of the 3" to 4" coupler(s). The discharge elbow opening(s) should be facing up.
6. Measure the distance from the center of the opening of the discharge elbow(s) to the casing. The measurement should be approximately 6-5/8". If the distance is greater than that, remove the elbow and trim to shorten. Repeat steps 8 thru 10 before proceeding.
7. Assemble the extended vent kit assembly as shown in Figure 4.4. Do not tighten the vent extension support bracket(s) yet. That will be tightened in a later step.

Figure 4.4 - Extended Vent Kit Installed



8. Position the extended vent support bracket on the unit casing, several inches below the bottom edge of the roof panel. Drill (2) 1/8" diameter bite holes through the casing panel and fasten the bracket using the sheet metal screws provided.

EXTENDED VENT KIT INSTALLATION - **CONDENSING**

9. Attach the vent pipe clamp support bracket to the extended vent support bracket with (2) self-tapping sheet metal screws.
10. With the brackets secured, tighten the clamp around the vent pipe.
11. Caulk the joint around the edge seal(s) where the elbow(s) pass through the unit casing with outdoor rated caulk (by others).
12. Tighten the clamp on the 4" side of the 3" to 4" coupler.
13. Drill a 1/8" hole in the bottom of the discharge elbow(s) so that condensate can drain out.
14. The installation is complete.

EXTENDED VENT KIT INSTALLATION

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EXTENDED VENT KIT INSTALLATION

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