




Option VK1 - Kit to Convert to Vertical Supply and Return Air Openings



INSTALLATION FORM RGM 480-VK

APPLIES TO: **Model ERSA**

Description

Option VK1 is a kit that provides all the parts required to change the cabinet so that either the return air inlet duct connection only is in the cabinet bottom, the supply air discharge duct connection only is in the cabinet bottom, or both the supply air and return air duct connection openings are in the cabinet bottom. (The standard cabinet has horizontal return air and supply air duct connection openings.) Check the components in the list below and follow the step-by-step illustrated instructions.

Size		3	4	5
Package P/N	Qty	151623	151624	151625
Return Air Access Panel Assembly	1	150900	150896	150904
Downturn Access Panel Assembly	1	151252	151253	151254
Supply Bottom Connector	2	151349	151350	151351
Return Air Bottom Connector	2	151352	151353	151354
Hardware Bag:				
#10 x 1/2" long Sheet Metal Screws	36	11813	11813	11813
Pop Rivet	8	110943	110943	110943
Seal - Bulb 13-13/16" long	2	151016	--	--
Seal - Bulb 12-3/32" long	2	151017	--	--
Seal - Bulb 15-3/8" long	2	--	151014	--
Seal - Bulb 16-19/32" long	2	--	151015	151015
Seal - Bulb 19-5/16" long	2	--	--	151018

- The instructions in Section 1, pages 1-2, are for changing the supply air to vertical.
- The instructions in Section 2, pages 2-3, are for changing the return air to vertical.
- Vertical duct opening dimensions are in Section 3, page 3.

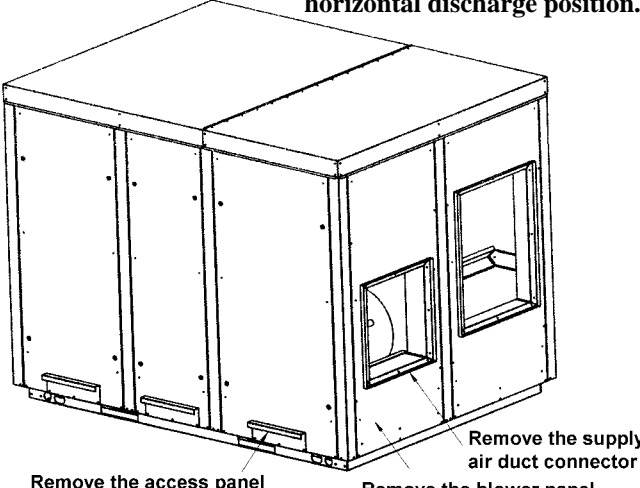
Installation Instructions

Installation should be done by a qualified agency in accordance with the instructions on this sheet and in compliance with all codes and requirements of authorities having jurisdiction. It is recommended that this task can be best accomplished by more than one person. A screwdriver and a pop rivet tool are required.

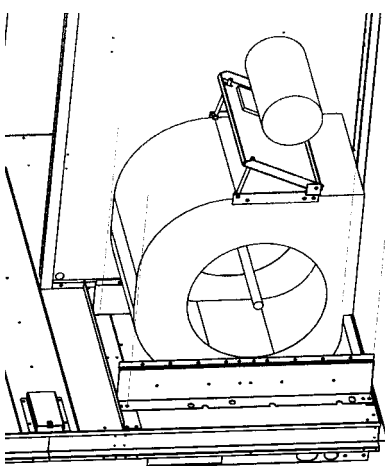
NOTE: For clarity, many of the components including the cabinet top and corner posts are removed from the illustrations. When performing the actual conversion, remove only the parts specified.

SECTION 1 - Instructions to Convert Supply Air Discharge Duct Connection to Vertical Position

STEP 1 - Prepare the unit by removing the horizontal supply air duct connector, the blower panel, and the access panel. The supply air blower is visible in the horizontal discharge position.

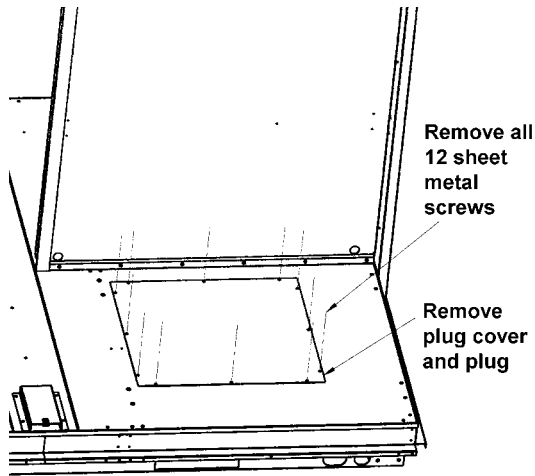


STEP 2 - Remove the four screws that attach the blower supports to the cabinet bottom. Mark and disconnect the motor wires. Carefully lift off the blower assembly. Remove the two supports from the blower. Keep all of the screws to use when the blower and supports are re-attached.

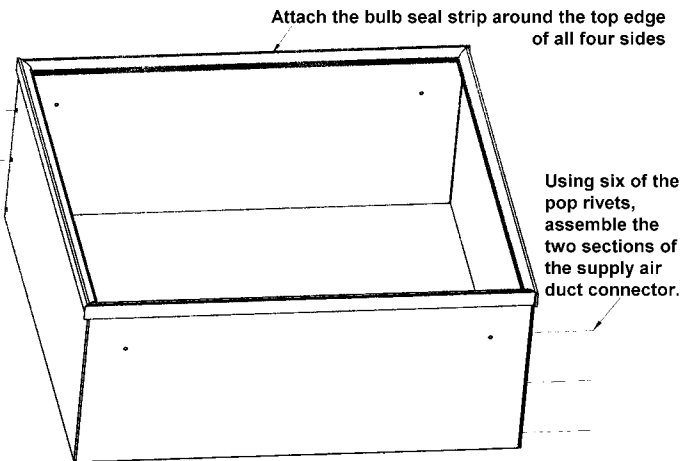


SECTION 1 - Instructions to Convert Supply Air Discharge Opening to Vertical Position (cont'd)

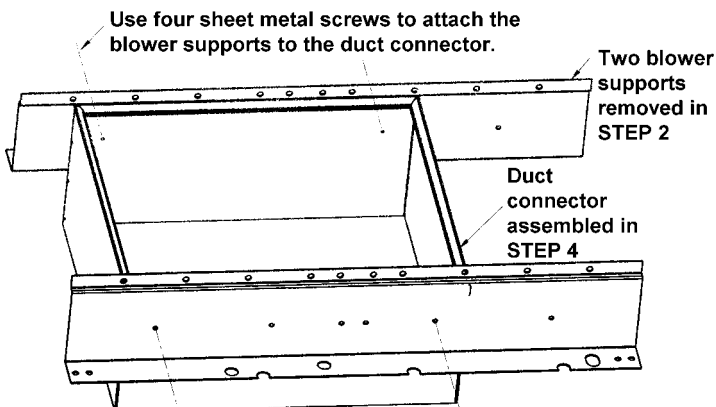
STEP 3 - Remove the cover and plug, revealing the opening in the cabinet bottom panel.



STEP 4 - Use the pop rivets to sub-assemble the two supply air duct connector sections (from the kit). Attach the bulb seal on all four of the top edges of the assembled duct connector.

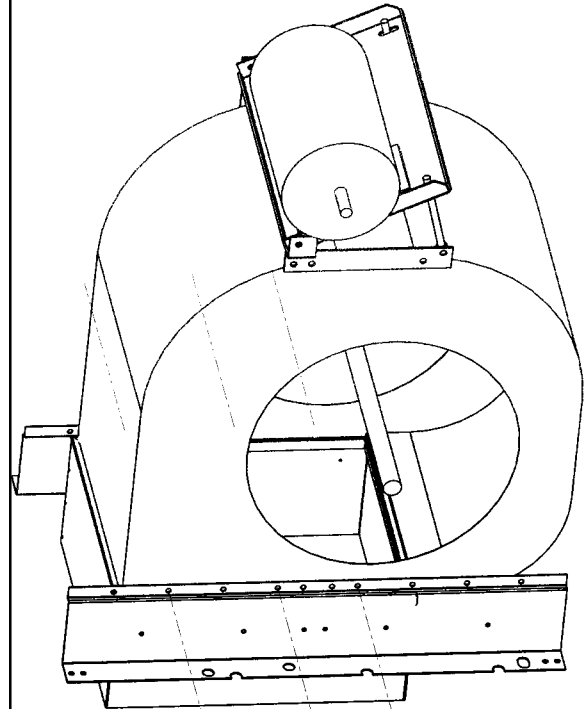


STEP 5 - Using four sheet metal screws, attach one of the blower supports (removed from the blower in STEP 2) to each side of the supply air duct connector assembled in STEP 4.



STEP 6 - Position the blower for vertical discharge and mount it between the supports on top of the duct connector. Attach the blower to the supports using the six self-drilling screws removed in STEP 2.

Remove the motor mounting plate assembly and re-position it on the top of the blower as shown.

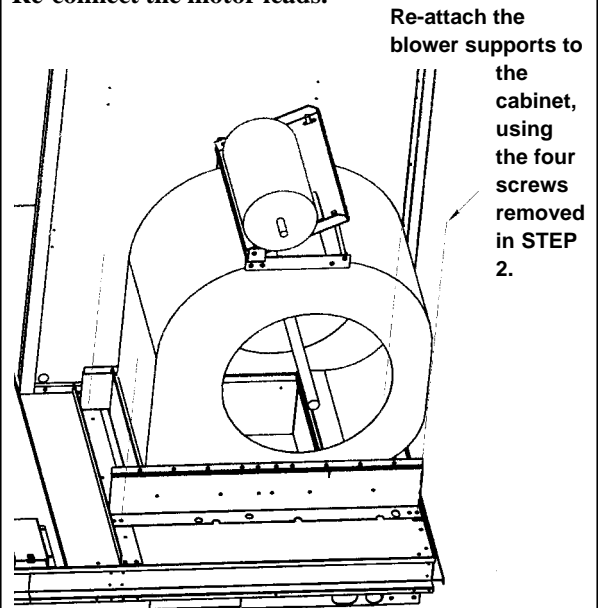


Attach the blower with six #14 self-drilling screws

STEP 7 - Position the sub-assembly (duct connector, two blower supports, and blower) as illustrated with the duct connector in the opening in the cabinet bottom panel.

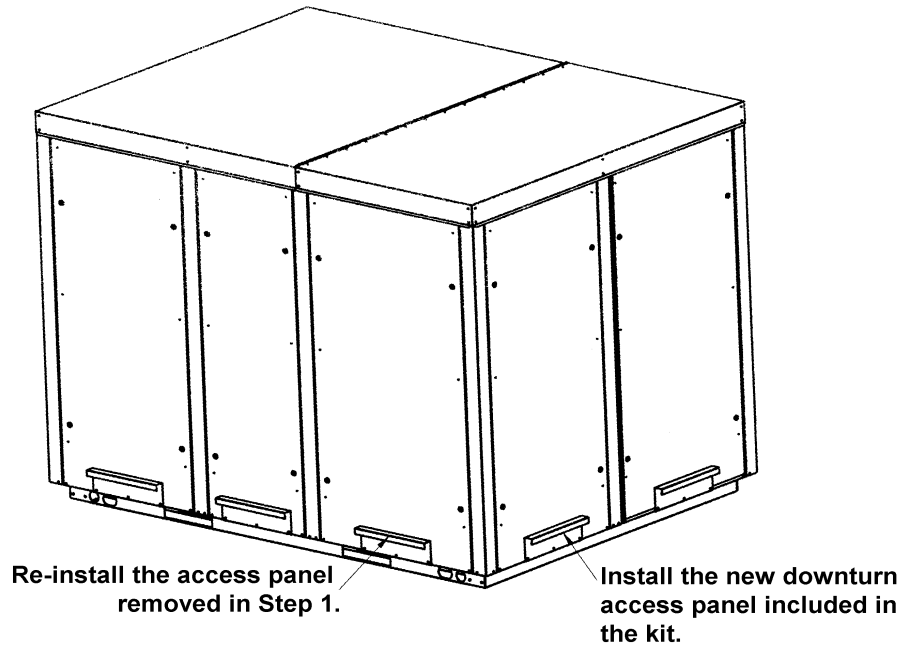
Re-attach the blower supports to the cabinet bottom.

Re-connect the motor leads.



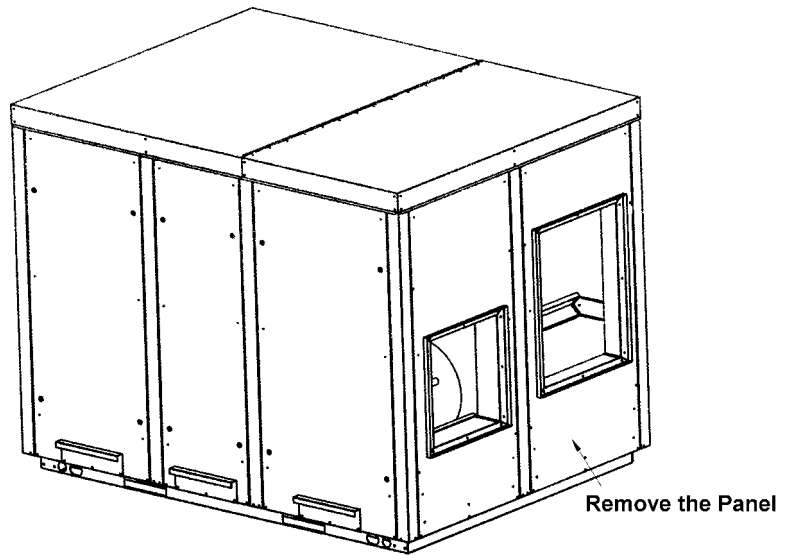
STEP 8 - Install the new access panel included in the kit and re-install the access panel removed in STEP 1.

Conversion to vertical supply discharge is complete.
 If vertical return air inlet is being installed, continue to Section 2.
 Vertical duct connector dimensions are in Section 3.

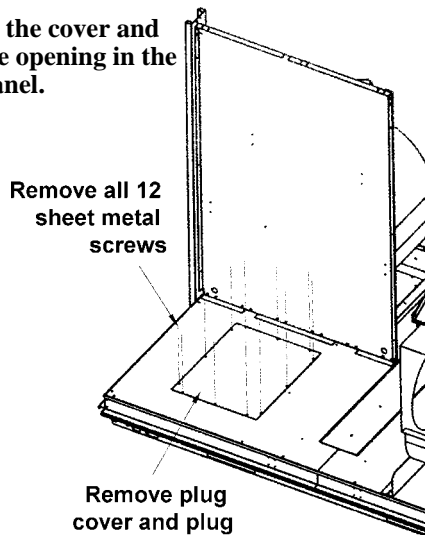


SECTION 2 - Instructions to Convert Return Air Inlet Opening to Vertical Position

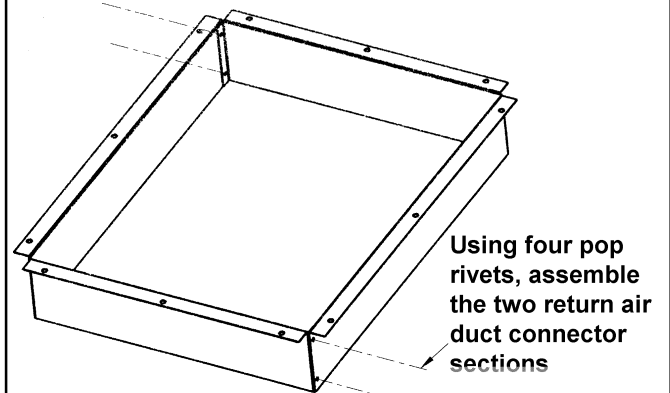
STEP 1 - Prepare the unit by removing the panel with the return air duct connector. The return air filter rack is visible (the filter rack is not shown in the illustration and does not interfere with converting the return air inlet to the vertical position).



STEP 2 - Remove the cover and plug, revealing the opening in the cabinet bottom panel.



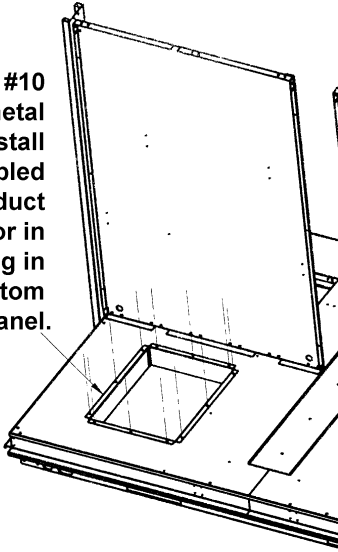
STEP 4 - Use the pop rivets to sub-assemble the two return air duct connector sections (included in the kit).



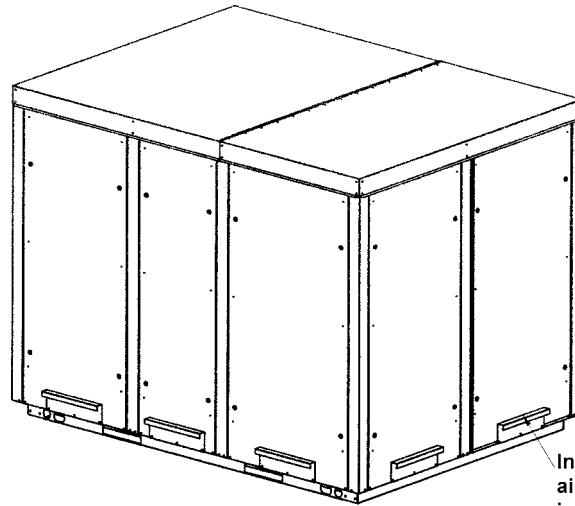
SECTION 2 - Instructions to Convert Return Air Inlet Opening to Vertical Position (cont'd)

STEP 5 - Install the return air duct connector assembled in STEP 4 into the opening in the cabinet bottom panel.

Using 12 #10 sheet metal screws, install the assembled return air duct connector in the opening in the bottom panel.



STEP 6 - Install the new return air access panel included in the kit.



Install the new return air access panel included in the kit.

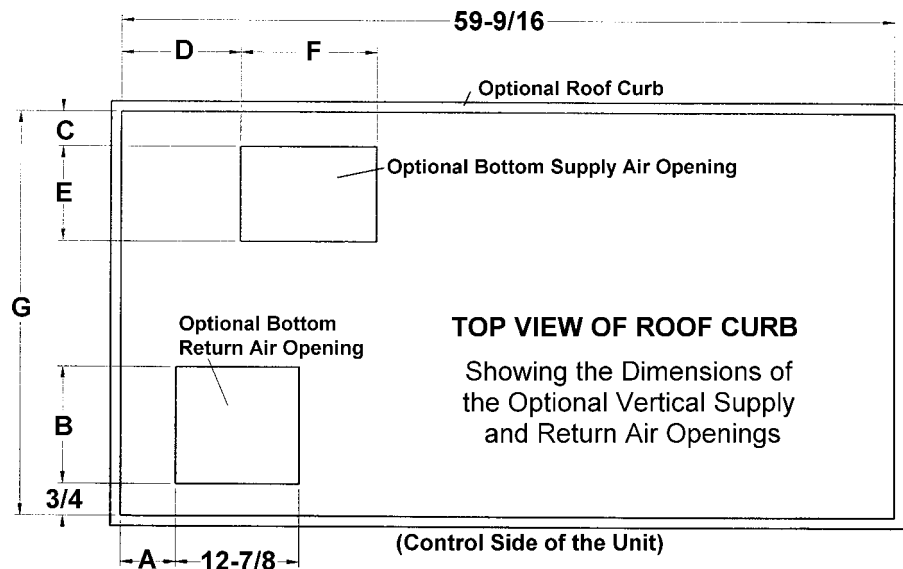
SECTION 3 - Dimensions of the Vertical Supply Air and Return Air Duct Connections

Dimensions (inches)

	Model Size		
	3	4	5
A	1-15/16	2-9/16	2-9/16
B	13-7/8	16-7/8	22-7/8
C	5/8	1-5/8	1-5/8
D	7-1/8	2-9/16	2-9/16
E	13-3/4	15-5/16	19-1/4
F	12-1/16	16-9/16	16-9/16
G	35-3/4	41-3/4	53-3/4

**Optional Vertical Openings with Duct Flange -- Supply Air Outlet - E x F;
Return Air Inlet - B x 12-7/8**

The other dimensions shown apply only to a unit mounted on an optional roof curb (Option CJ1). If a unit with bottom openings is being installed on a roof, it is recommended that the unit be mounted on a full roof curb.



Thomas & Betts