



Installation Instructions

Power Exhaust Part No: CRPWREXH033B00, CRPWREXH034B00,
CRPWREXH035B00

Barometric Relief Part No: CRBARRLF003A01

SAFETY CONSIDERATIONS

Installation and servicing of air-conditioning equipment can be hazardous due to system pressure and electrical components. Only trained and qualified service personnel should install, repair, or service air-conditioning equipment. Untrained personnel can perform the basic maintenance functions of cleaning coils and filters and replacing filters. All other operations should be performed by trained service personnel. When working on air-conditioning equipment, observe precautions in the literature, tags and labels attached to the unit, and other safety precautions that may apply.

⚠ WARNING

Turn off main power to the unit and tag disconnect switch before performing service or maintenance operations. Electrical shock could cause personal injury or death.

GENERAL

IMPORTANT: The power exhaust accessory requires the use of the economizer. Power exhaust will not operate without the use of an economizer. Refer to Table 1 for power exhaust package usage.

IMPORTANT: In order to field install Power Exhaust, the 48/50K unit must have "Power and Control Accessory" selected. Otherwise, it will not work.

An economizer is required to install the barometric relief or power exhaust accessories on 48/50K Series units. Refer to Table 2 for a complete list of parts contained in each kit. The power exhaust blowers are shipped assembled and packaged one hood assembly per container.

NOTE: The 48/50K 20 to 50 units require 2 assemblies per unit; 48/50K 60 unit require 3 assemblies per unit.

Each hood assembly has 2 power exhaust blowers. Brackets, wires and extra gasket screws are also included in the package.

In addition to field installing the power exhaust accessory, 48/50K Series unit must have factory-installed option of "Power and Control for Accessory Multi-Stage Power Exhaust with BP Control."

Table 1 — Power Exhaust Package Usage

UNIT	UNIT SIZE	PART NO.	VOLTAGE	NO. REQUIRED
48/50K ^a	20-50	CRPWREXH033B00	208/230-v	2
	60			3
	20-50	CRPWREXH034B00	400-v and 460-v	2
	60			3
	20-50	CRPWREXH035B00	575-v	2
	60			3

NOTE(S):

- a. For 48/50K Series units, to field install Multi-Stage Power Exhaust accessory, the unit must be selected and shipped with factory-installed "Power and Control for Accessory Multi-Stage Power Exhaust with BP Control" option.

Table 2 — Power Exhaust/Barometric Relief Parts List

ACCESSORY	ITEM DESCRIPTION (QTY)
CRBARRLF003A01	Relief Damper Assembly Seal Strip — 1/8" x 3/4" x 84" (1) Seal Strip — 1/8" x 1-5/16" x 51" (1) Screw — 1/4"-14 x 3/4" (16) Side Blockoff — 48EJ500314 (2) Support Panel — 48EJ500276 (1)
CRPWREXH033B00, CRPWREXH034B00, CRPWREXH035B00	Power Exhaust Assembly Support Panel — 48EJ500276 (1) Side Blockoff — 48EJ500314 (2) Seal Strip — 1/8" x 3/4" x 42" (1) Seal Strip — 1/8" x 1-5/16" x 2" (3) Gasketed Screws (12) Extension Harness — 120"- 48VA002173 (1) Extension Harness — 190"- 48VA002174 (1)

⚠ CAUTION

When removing panels from the unit, be careful not to damage roof or other surfaces with the panels.

INSTALLATION

Power Exhaust

VERTICAL DISCHARGE UNITS (48/50K2, K3)

- Unpack accessory packages.
NOTE: For 48/50K 20-50 units, 2 accessory packages are required. For 48/50K 60 units, 3 accessory packages are required. Installation will be repeated for each package.
- Disconnect power to unit.
- If the economizer hoods have been installed, perform the following:
 - Remove the filters from the economizer hoods.
 - Remove the 5 screws from the bottom of the economizer and 3 screws on each side of the economizer. Save screws.
 - Remove the upper panel by pulling out the economizer assembly at the bottom to release the upper panel. Save all screws.
 - Remove the lower panel. Save all screws.
 - There are 2 economizer hoods and 4 panels on size 20-50 units. There are 3 economizer hoods and 6 panels on size 60 units. Repeat this step for each economizer hood and panel.

If the economizer hoods have not been installed, remove the upper and lower panels covering each return air section. See Fig. 1. Save all screws. There are 2 economizer hoods and 4 panels on size 20-50 units. There are 3 economizer hoods and 6 panels on size 60 units. Repeat this step for each economizer hood and panel.

- Install top support panel (provided). Use 3 screws on each side and 5 screws across top previously removed from existing upper panel. If removed in Step 3, install 3 screws on economizer sides and replace economizer filter. See Fig. 2.
- Place hood assembly close to unit. Plug the motor harness into mating plug in the center damper support. See Fig. 3-5.
- Set the hood assembly into the opening, top lip first underneath the support panel installed in Step 4.
- Lift the assembly to allow bottom corner tabs to hook over the base rail. See Fig. 6.

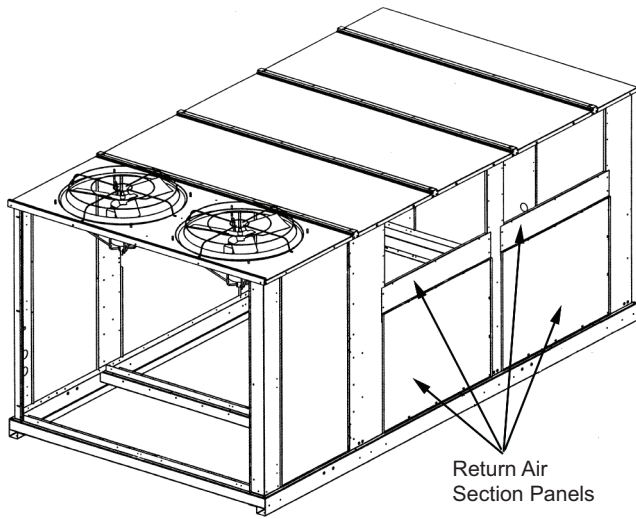
- Install 3 screws (saved in Step 3) along the top of hood and through support panel.
- Install the two side blockoff brackets on each side of the hood assembly with 6 gasketed screws provided (3 each side). See Fig. 6.
- Install 3 gasketed screws (previously removed in Step 3) along the bottom of power exhaust assembly.
- Repeat Steps 3 through 10 for the other hood assemblies.
- Remove tape from damper blades.
- Complete Configuration section on page 3.

HORIZONTAL DISCHARGE UNITS (48/50K4, K5)

- Unpack accessory package. The support panel is not used and may be discarded.
- Disconnect power to unit.
- Return air duct for the number of accessories ordered requires openings 45-1/4 in. wide by 23-3/16 in. high in the side. See Fig. 7. Ensure that the transition required to accommodate these openings begins at least 3.5 feet away from the outdoor-air hood. Any obstruction closer than 3.5 ft will interfere with the airflow and result in rain entering the hood through the filters. See Fig. 8.
- Drill engagement holes for 1/4 in. screws around openings as shown in Fig. 7.
- Place first hood assembly close to openings in ductwork, plug extension harness into one end of the motor harness. Plug the other end of the extension harness into the mating plug in the center damper support. See Fig. 3-5.

NOTE: Two extension harnesses are supplied in the kit (120 in. and 190 in.). The 190 in. harness may be required when 3 packages are installed as the distance from the unit may be greater than 120 inches.

- Set the hood assembly into the opening, top lip first.
- Lift the assembly to allow bottom corner tabs to hook over the opening in ductwork.
- Install 3 gasketed screws (provided) along the top of hood.
- Install two side blockoff brackets on each side of the hood assembly with 6 gasketed screws (3 each side) provided.
- Install 3 gasketed screws (provided) along the bottom of hood.
- Repeat Steps 3 through 10 for the other hood assemblies.
- Remove tape from damper blades.
- Complete Configuration section below.



**Fig. 1 — Typical Panel Locations
(48/50K 20 Unit Shown)**

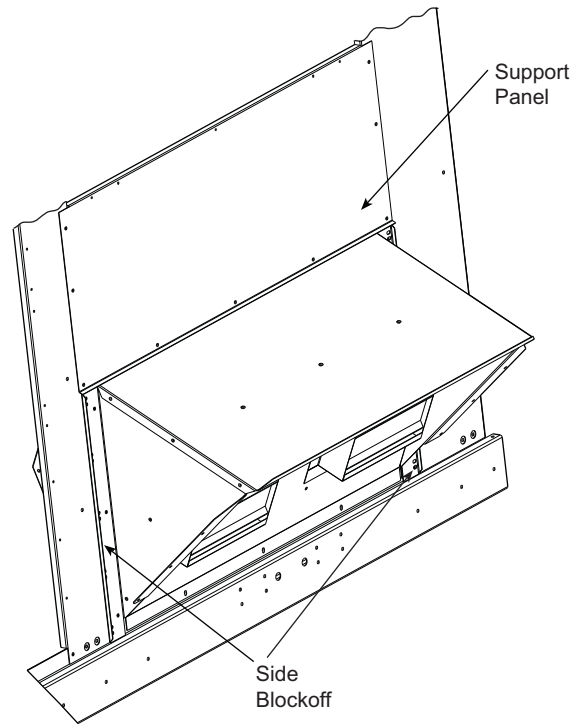


Fig. 2 — Support Panel Installation

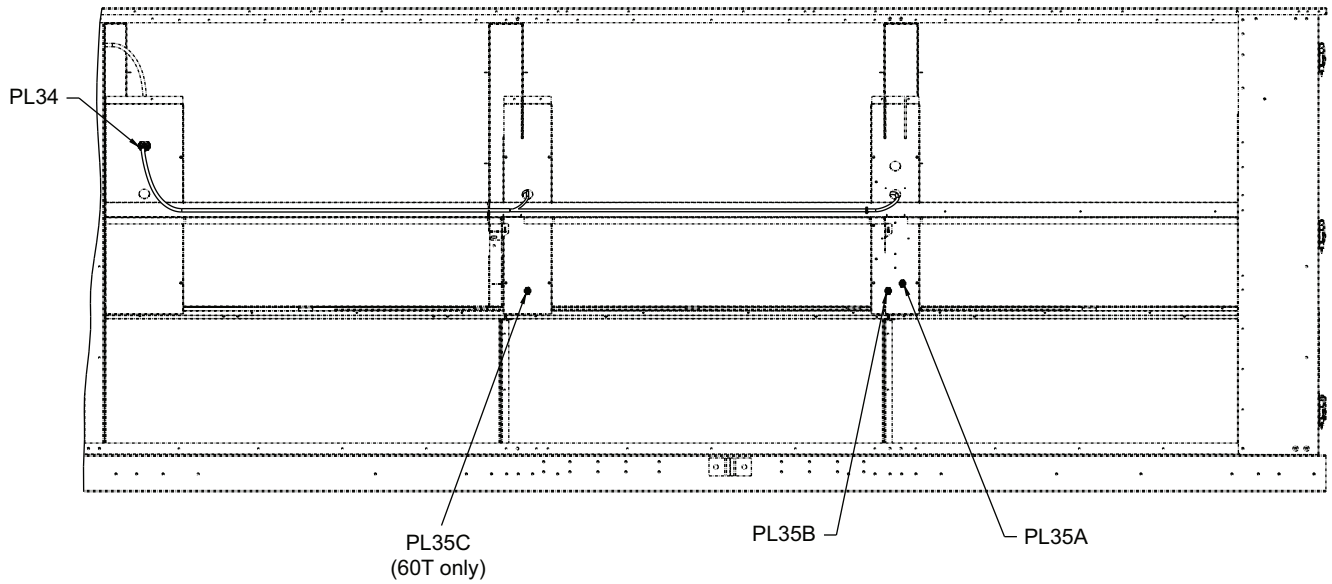
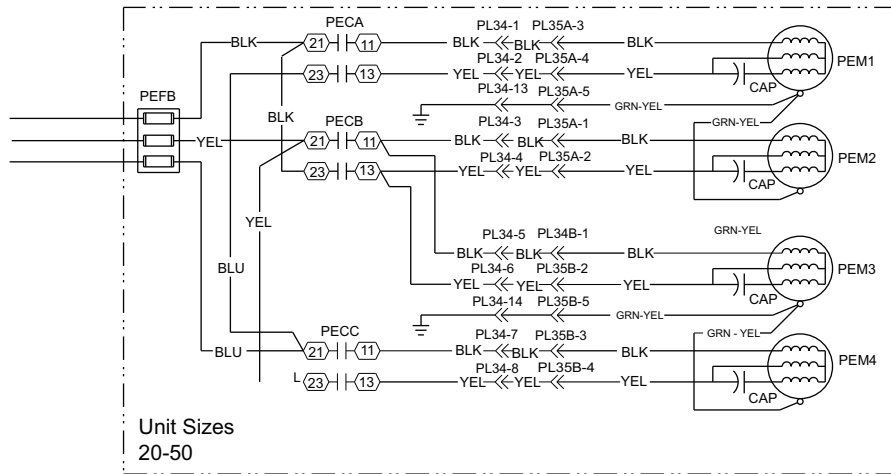


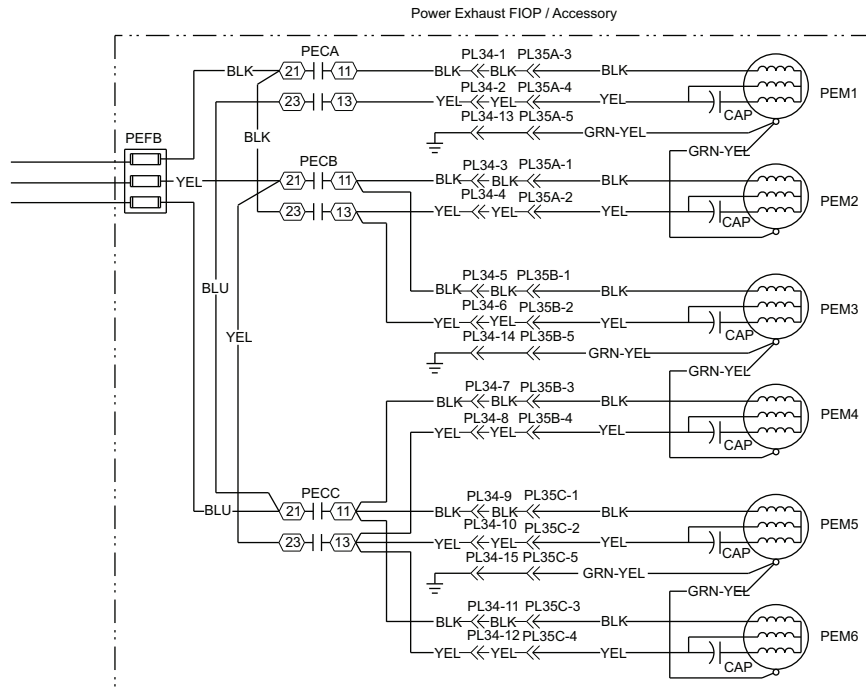
Fig. 3 — Wire Harness Plug Location

Power Exhaust FIOP / Accessory



48/50K 20 - 50 VS ODF
48VA001445 REV -

Fig. 4 — Power Exhaust Wiring (Size 20-50 Units)



48/50K 60 VS ODF
48VA001477 REV A

Fig. 5 — Power Exhaust Wiring (Size 60 Unit)

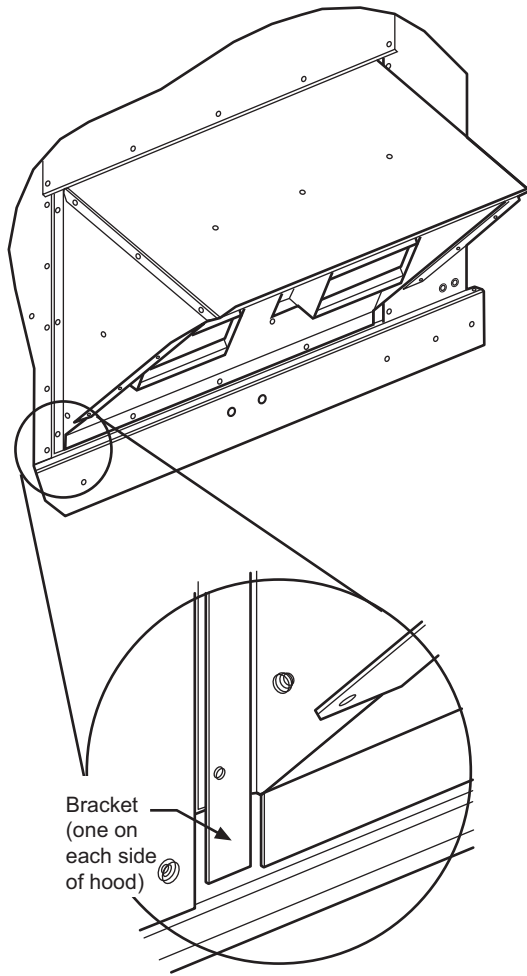
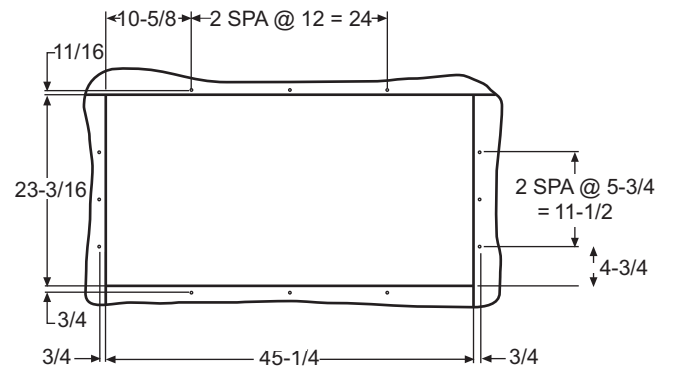


Fig. 6 — Hood Assembly Placed in Unit



NOTE: Dimensions are in inches.

Fig. 7 — Horizontal Discharge Mounting Opening

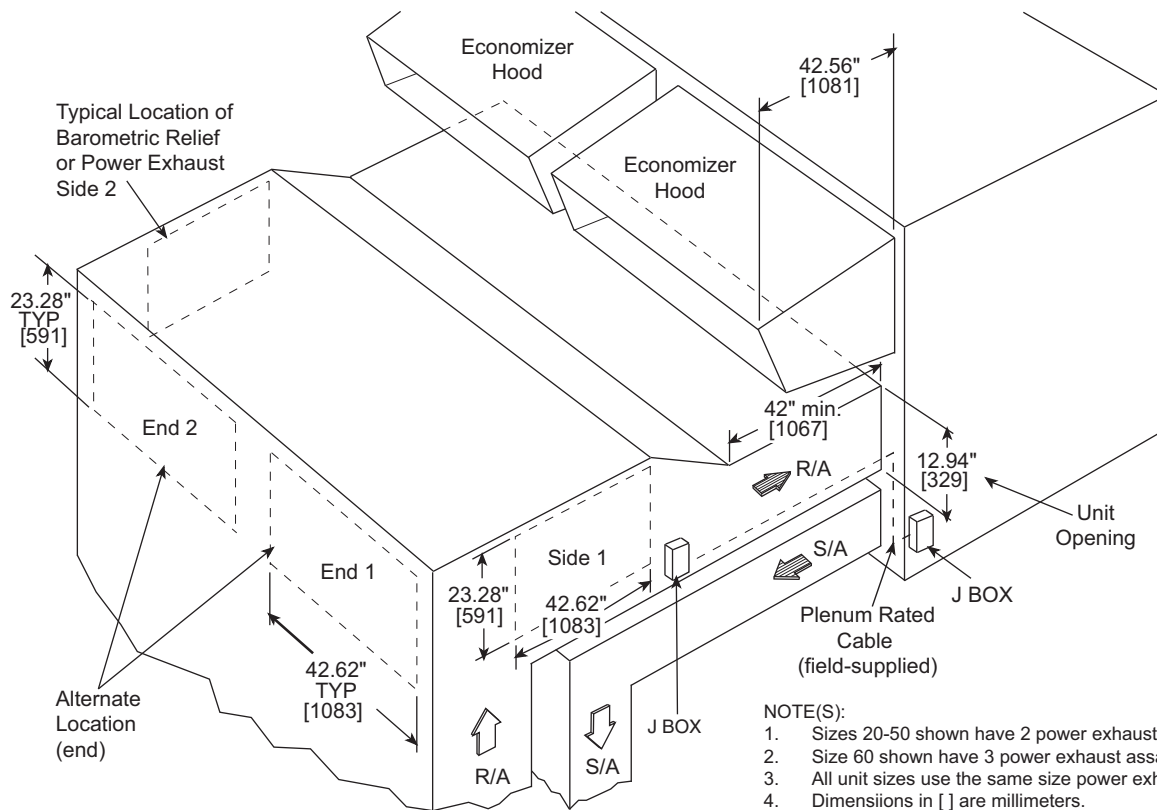


Fig. 8 — Power Exhaust Location on Side Return Duct

CONFIGURATION

1. Unit SmartVu™ controller to come configured for field-installed power exhaust. For additional power exhaust and controller configurations, please refer to the K series controls manual.
2. The control system must be configured to use the power exhaust. A password may be required to edit the configurations, depending on the previous settings configured in the unit. Default password is "1111."
3. To access the configuration, use the arrow keys to scroll the red LED (light-emitting diode) on the display to the "Configuration" position and press . Use the arrow keys to scroll down until the display reads "ECON", and press the key. At the Power Exhaust Type (PWRX) setting, press twice. The display should be flashing 0 (none). Use the arrow keys to change the configuration to "1" (building pressure control based on economizer position) or "2" (modulating building pressure control based on building pressure sensor) and press and then .
4. Use the arrow keys to scroll down to the Power Exhaust Motors setting (PWRM). Press the key. At the Power Exhaust Motors (PWRM) setting, press twice. The

display should be flashing "1" (4 motors). The configuration should be set to 1 (4 motors) for 20-50 size units or 2 (6 motors) for size 60 unit. Use the arrow keys to change the configuration to the correct number of motors and press and then .

5. Use the arrow keys to scroll down to the Power Exhaust Stage 1 Economizer Position setting (PE1.P) and press twice. Use the arrow keys to increase or decrease the economizer position percentage that will start the first power exhaust fan, and press and . Use the arrow keys to scroll down to the Power Exhaust Stage 2 Economizer Position setting (PE2.P) and press twice. Use the arrow keys to increase or decrease the economizer position percentage that will start the second power exhaust fan, and press and .
6. Configuration of the power exhaust is now complete. Pressing the key several times will return the display to the auto scroll setting.
7. Consult the Controls and Troubleshooting Guide for complete instructions on using the SmartVu™ control system.
8. The unit is now ready for normal operation.

Barometric Relief Damper

1. Remove return air section panel. Save screws for reuse. See Fig. 1.
2. Position the barometric relief assembly at return air section of unit. Add seal strip to the edges of the hood assembly. See Fig. 9. The long piece of seal strip is for the top and bottom. The short piece is for the two sides.
3. Place the barometric relief assembly into the unit. The accessory should pivot on the unit end panel. See Fig. 10.
4. Fold barometric relief assembly back into the unit. See Fig. 11.
5. Install the side blockoffs using the screws included (no. 14-10 x 7/8 in.). Be sure to properly position the hood. See Fig. 12.
6. Tilt the assembly out of the unit and into final operating position. See Fig. 13.
7. Secure the assembly using the screws removed from Step 1.
8. Two barometric relief packages are used for 48/50K 20-50 units. Three barometric relief packages are used for 48/50K 60 unit. Repeat Steps 1-7 for additional barometric relief dampers.

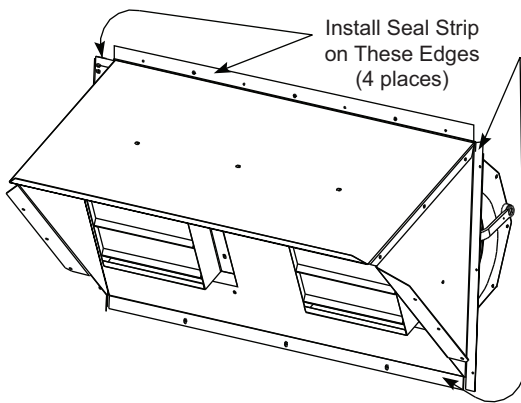


Fig. 9 — Hood Assembly

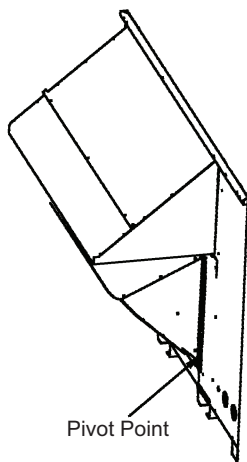


Fig. 10 — Pivot Point on Unit Panel

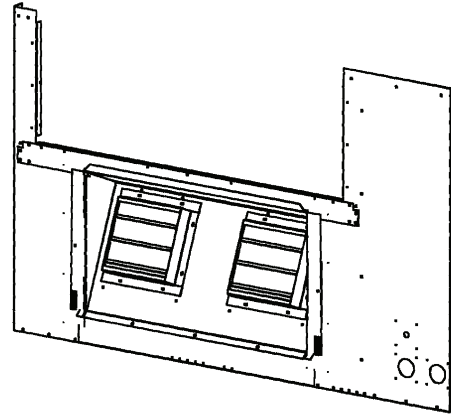


Fig. 11 — Power Exhaust/Relief Damper Assembly

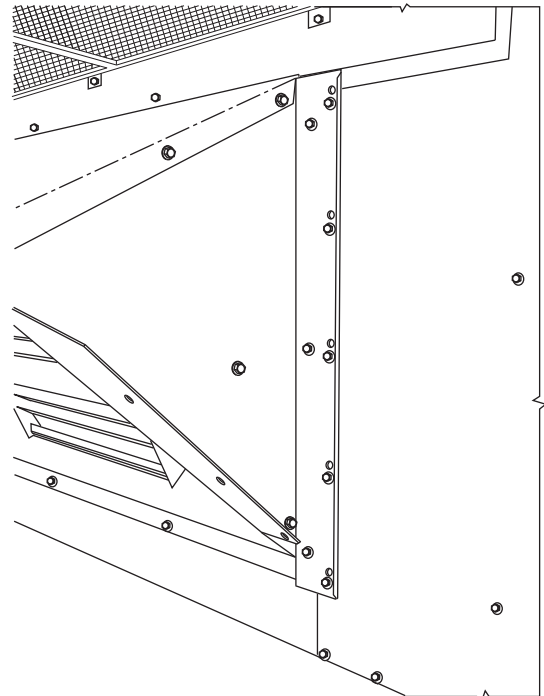


Fig. 12 — Blockoff and Hood Positioning

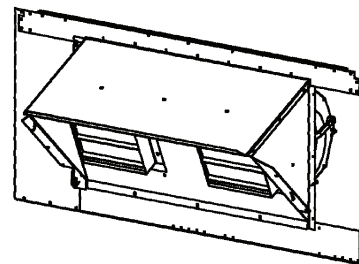


Fig. 13 — Assembly in Operating Position

