Installation Instructions

Power Exhaust Part Numbers: CRPWREXH018B00, CRPWREXH019B00, CRPWREXH020B00

Barometric Relief Part Number: CRBARRLF003B00

CONTENTS

IMPORTANT: There are two different design revision 48/50HG units currently being produced. Because of these differences, there are two different versions of this accessory. This accessory literature covers accessories manufactured for units with design revision 1. Design revision 0 units are not covered in this accessory book.

To determine the design revision, refer to the full unit model number. See Fig. 1 for an example of an HG model number. The design revision number in the model number nomenclature is located in position 13.

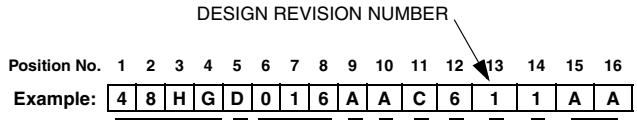


Fig. 1 — Model Number Chart

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.

Consult price pages for the economizer accessory if the unit is not already equipped. Refer to Table 1 for a complete list of parts contained in each kit.

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

POWER EXHAUST PACKAGE USAGE

UNIT	VOLTAGE	PART NUMBER
48/50HG014-028, 48/50PG20-28	208/230 V	CRPWREXH018B00
	460 V	CRPWREXH019B00
	575 V	CRPWREXH020B00

Table 1 — Power Exhaust/Barometric Relief Parts List

ITEM DESCRIPTION	DESCRIPTION (QUANTITY)			
	CRPWREXH018B00	CRPWREXH019B00	CRPWREXH020B00	CRBARRLF003B00
Blower/Damper Assembly	Power Exhaust (208/230 V)	Power Exhaust (460 V)	Power Exhaust (575 V)	Barometric Relief
Contactor	HN52KC010 (2)	HN52KC010 (2)	HN52KC010 (2)	—
Screw 8-18 x 1/2″	AL56AU166 (4)	AL56AU166 (4)	AL56AU166 (4)	—
Power Wiring Harness	50TG402807	50TG402807	50TG402807	—
Control Wiring Harness	50TG403083	50TG403083	50TG403083	—
Snap Bushing	HY93NH091	HY93NH091	HY93NH091	—
Plug Plate	50TG500128	50TG500128	50TG500128	—
Left Hand Bracket	50TG502765	50TG502765	50TG502765	50TG502765
Right Hand Bracket	50TG502865	50TG502865	50TG502865	50TG502865
Screw - 1/4″ x 3/4″	AL31AZ308 (9)	AL31AZ308 (9)	AL31AZ308 (9)	AL31AZ308 (9)
Seal Strip	—	—	—	—

⚠ CAUTION

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

INSTALLATION

1. Remove return end cover and save screws for reuse. See Fig. 2.
2. As shown in Fig. 3, the power exhaust motor is factory wired to terminal 1 (high speed). To change motor speed, move the black wire from terminal 1 to terminal 2 (medium speed) or terminal 3 (low speed). If high speed is desired, no wiring changes are required. The motor closest to the control box is PEM1. The motor furthest away from the control box is PEM2.
3. Position the power exhaust damper assembly at the return end of the unit. Add seal strip to the edges of the hood assembly. See Fig. 4. The long piece of seal strip is for the top and bottom and the short piece is for the two sides.
4. Remove patch plate attached to the bottom of the compressor partition behind compressor B1. Save screws.
5. Feed 6-pin connector of the motor harness through hole created by the removal of the patch plate. Pull as much wire through the hole as possible without causing damage to the harness.
6. Place the power exhaust/damper assembly into the unit. The accessory should pivot on the unit end panel. See Fig. 5.
7. Fold power exhaust/damper assembly back into the unit as shown in Fig. 6.
8. Install the side brackets using the screws included ($^1/_4$ x $^3/_4$-in.). Be sure to properly position the hood. See Fig. 7.
9. Tilt the assembly out of the unit and into final operating position. See Fig. 8.
10. Secure the assembly using the screws removed earlier from Step 1.
11. Snap the 6-pin connector of the control box harness into the plug plate provided with the accessory.
12. Plug the 6-pin connectors together (PL9). Bundle up excess wire in the motor harness and secure with a wire tie. When bundling wires, be sure to gather wires as close as possible to compressor partition so as to reduce the overall length of the wires. Push excess wire through hole in partition. Secure plate with screws originally used to secure patch plate. This will ensure that the extra wire length will not come into contact with moving parts.
13. Remove the control box cover and install the two power exhaust contactors to the side of the control box using the screws included with the kit (8-18 x $^1/_2$-in.). See Fig. 9.
14. Install the plastic snap bushing into the bottom of the control box as shown in Fig. 10.
15. Route the power exhaust harness through the compressor section and into the control box, through the snap bushing. See Fig. 10.
16. Connect the wires of the harness in the control box as shown in the wiring diagram. The harness wires are labeled to match the corresponding component and connection position.

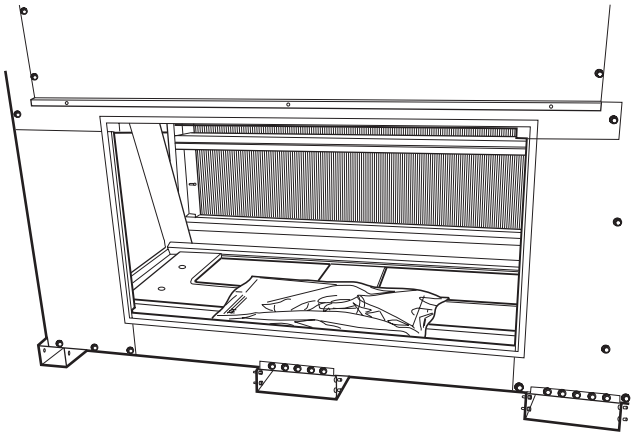
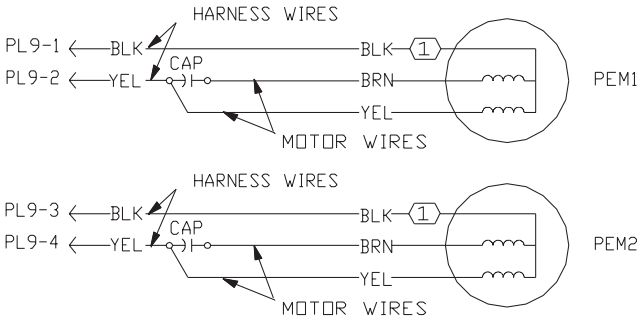


Fig. 2 — Unit Return End (48/50HG Units)



LEGEND

CAP — Capacitor
PEM — Power Exhaust Motor
PL — Plug

Fig. 3 — Power Exhaust Motor Wiring (48/50HG Units)

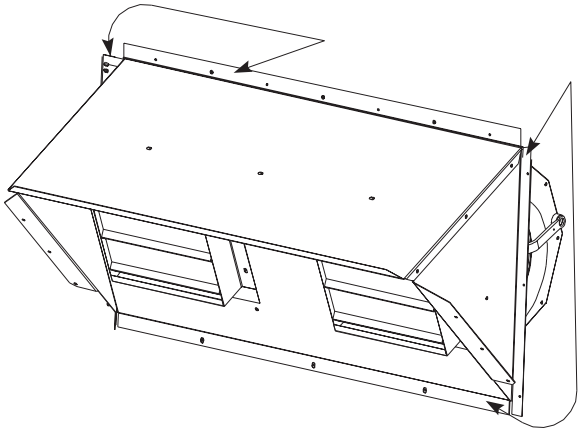


Fig. 4 — Hood Assembly

17. *48/50HG028 208/230-v Units only*:
    Do not install control wiring harness included with the accessory. The control wires for the power exhaust contactors are included with the unit harness as a bundle and can be connected to the appropriate terminals on the contactors. See Fig. 11.

    All other units:
    Install control wiring harness as indicated in Fig. 12.
18. Dress the wiring in the control box so that the wires are adequately supported and secured using the wire ties supplied.
19. Replace the control box cover.
20. Re-apply power to the unit.
21. The *Comfort*Link™ control can now be configured to operate the power exhaust. To do this the unit must be configured for Power Exhaust Enabled (default is DISABLED), Power Exhaust 1 Percentage setting (default is 40%), Power Exhaust 2 Percentage setting (default is 75%). These configurations are accomplished through the Scrolling Marquee Display by using the Configuration menu.
22. 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".
23. To access the configuration, use the arrow keys to scroll the red LED on the display to the "Configuration" position and press ENTER. Use the arrow keys to scroll down until the display reads "ECON", and press the ENTER key. At the Power Exhaust Enabled (PE.EN) setting, press ENTER twice. The display should be flashing DSBL. Use the arrow keys to change the configuration to "ENBL" and press ENTER and then ESCAPE. Use the arrow keys to scroll down to the Power Exhaust 1 Percentage setting (PE1.P) and press ENTER twice. Use the arrow keys to increase or decrease the economizer position percentage that will start the first power exhaust fan, and press ENTER and ESCAPE. Use the arrow keys to scroll down to the Power Exhaust 2 setting (PE2.P) and press ENTER twice. Use the arrow keys to increase or decrease the economizer position percentage that will start the second power exhaust fan, and press ENTER and ESCAPE.
24. Configuration of the power exhaust is now complete. Pressing the ESCAPE key several times will return the display to the auto scroll setting.
25. Consult the Controls and Troubleshooting Guide for complete instructions on using the *Comfort*Link control system.
26. The unit is now ready for normal operation.

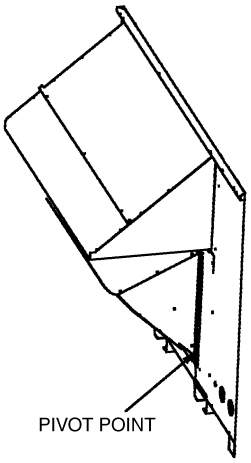


Fig. 5 — Pivot Point on Unit Panel

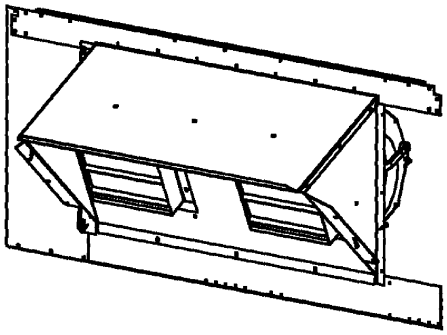


Fig. 8 — Assembly in Operating Position

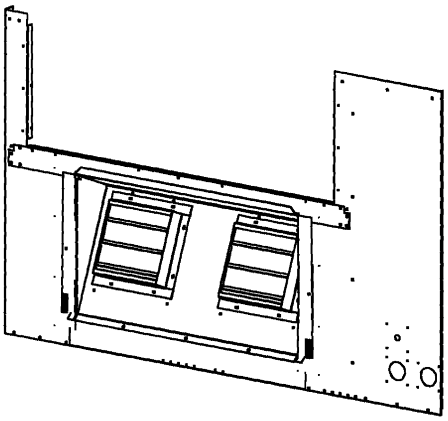


Fig. 6 — Power Exhaust/Relief Damper Assembly

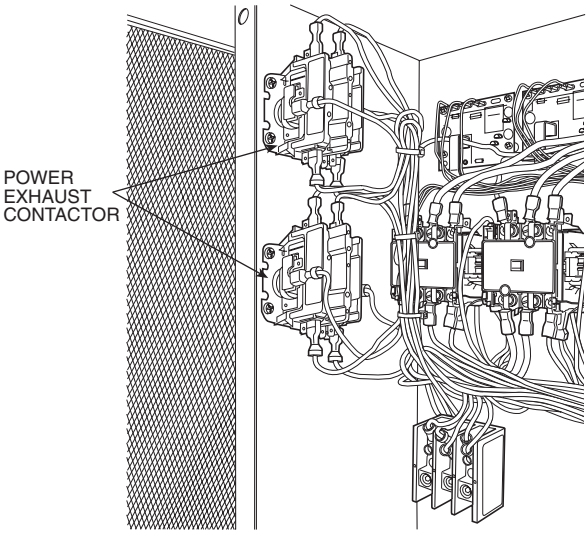


Fig. 9 — Control Box Detail

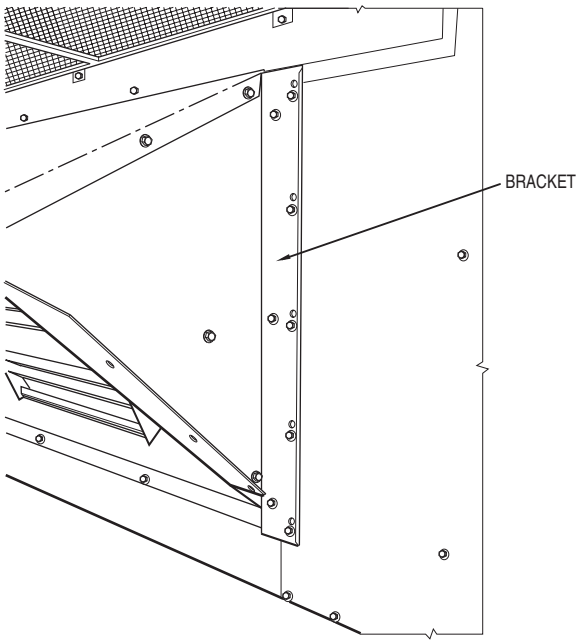


Fig. 7 — Bracket and Hood Positioning

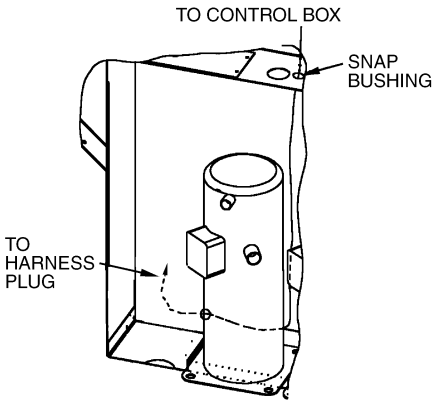


Fig. 10 — Compressor Section

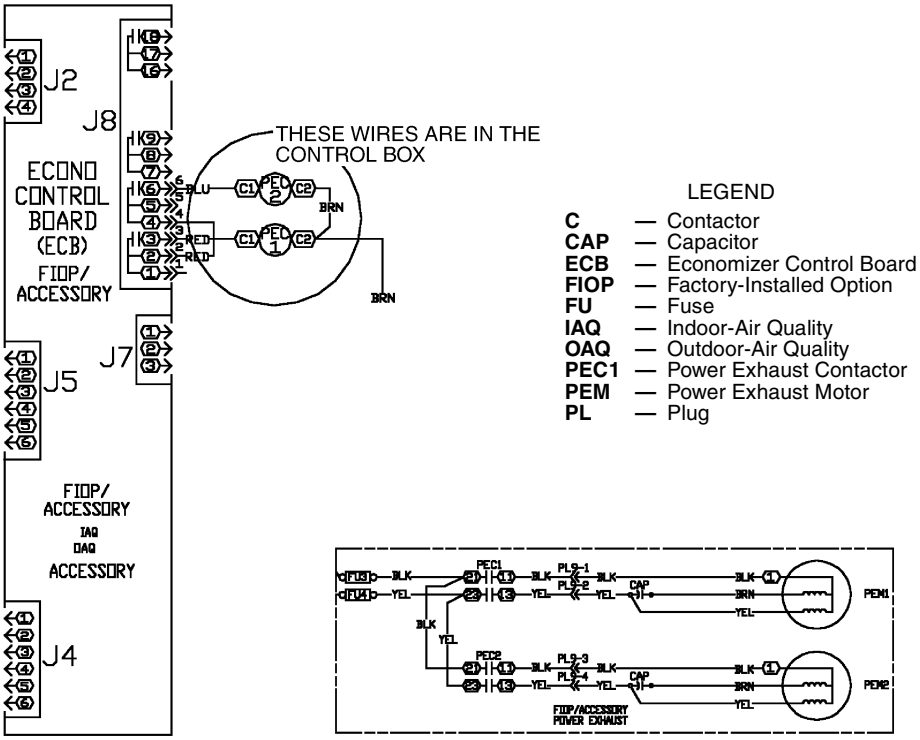


Fig. 11 — Power Exhaust Wiring Diagram — 48/50HG028 208/230-v Units

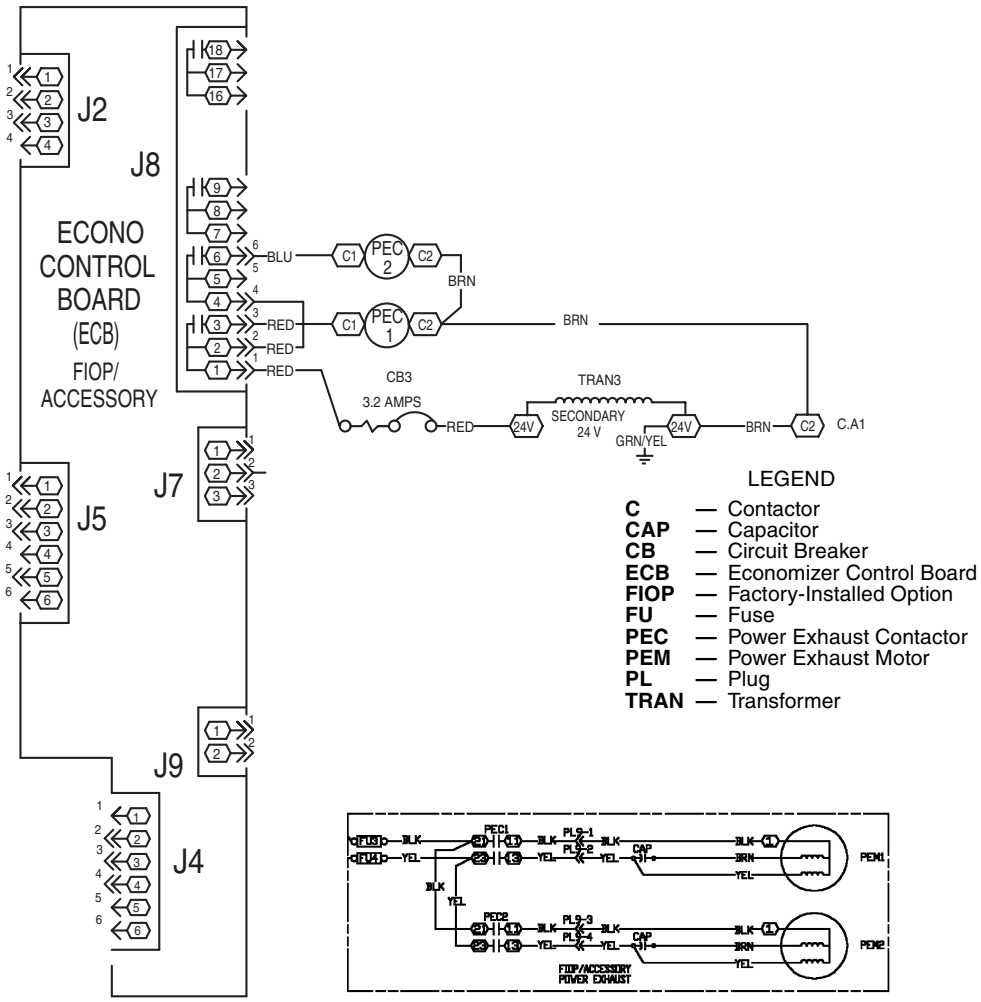


Fig. 12 — Power Exhaust Wiring Diagram — All Units Except 48/50HG028 208/230-v Units

Barometric Relief Damper

1. Remove return end cover. Save screws for reuse. See Fig. 2.
2. Position the barometric relief assembly at return end of unit. Add seal strip to the edges of the hood assembly. See Fig. 4. 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. 5.
4. Fold barometric relief assembly back into the unit. See Fig. 6.
5. Install the side brackets using the $^1/_4$ x $^3/_4$-in. screws. Be sure to properly position the hood. See Fig. 7.
6. Tilt the assembly out of the unit and into final operating position. See Fig. 8.
7. Secure the assembly using the screws removed from Step 1.