INSTALLATION INSTRUCTIONS FOR POWER EXHAUST MODELS RXRX-BFF02*

⚠ Recognize this symbol as an indication of Important Safety Information!

⚠ WARNING

THESE INSTRUCTIONS ARE INTENDED AS AN AID TO QUALIFIED SERVICE PERSONNEL FOR PROPER INSTALLATION, ADJUSTMENT AND OPERATION OF THIS KIT. READ THESE INSTRUCTIONS THOROUGHLY BEFORE ATTEMPTING INSTALLATION, ADJUSTMENT, SERVICE OR OPERATION. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN IMPROPER INSTALLATION, ADJUSTMENT, SERVICE OR MAINTENANCE, POSSIBLY RESULTING IN FIRE, ELECTRICAL SHOCK, PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

PARTS LIST		
DESCRIPTION	**PART NUMBER**	**QTY**
Power Exhaust Assembly		2
Wiring Diagram		1
Fuse 8 Amp	44-41084-01	2
Wire Harness Assembly	45-42522-58	1
Screw (Hex-Head) 10-16 x 3/8	63-42109-01	20
Tube Clamps 1/2”	64-18940-02	5

⚠ WARNING

BEFORE BEGINNING ANY MODIFICATION, BE SURE MAIN DISCONNECT SWITCH IS IN THE “OFF” POSITION. FAILURE TO DO SO CAN CAUSE ELECTRICAL SHOCK RESULTING IN PROPERTY DAMAGE, PERSONAL INJURY OR DEATH. TAG DISCONNECT WITH A SUITABLE WARNING LABEL.

TOOLS/SUPPLIES REQUIRED

A. 5/16” nut driver.

B. Box Cutter (to open packaging).

C. Scratch Awl to align panels.

D. 5 foot long section of stiff wire or “fish tape”.

E. Electrical tape.

F. Sheet metal shears for new horizontal economizer installation.

G. Waterproof exterior duct sealant for horizontal economizer installation

INSTALLATION PROCEDURE

A. Immediately upon receipt, all cartons and contents should be inspected for transit damage. Units with damaged cartons should be opened immediately. If damage is found, it should be noted on the delivery papers and a damage claim filed with the last carrier. Compare carton contents to Parts List above to note any missing items.

B. All power exhaust units are factory shipped for high speed. See notes section on wiring diagram to change power exhaust fan to low speed operation if required.

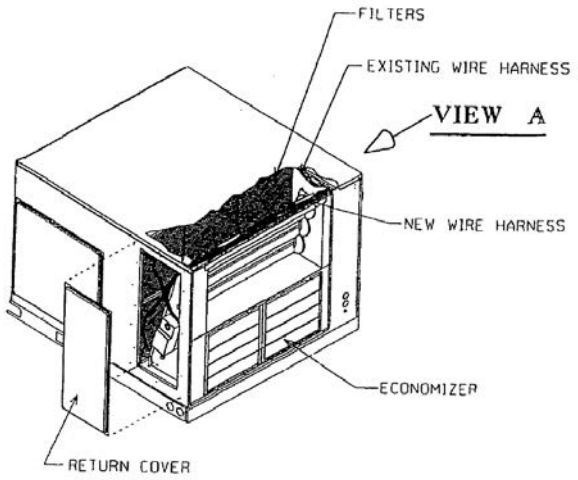
DOWNFLOW INSTALLATION

A. Remove return cover (see Fig. 1).

B. Remove the oval plug from the upper left corner on the inside of the control box. This is where the new line voltage wiring harness is installed (see Fig. 2).

C. Stick a 5 foot long piece of stiff wire or “fish tape” through this hole until it appears through the side return air opening where the return cover was.

FIGURE 1



D. Using electrical tape, secure the new wire harness terminals to the 5 foot long stiff wire or “fish tape”.

E. Pull the wire harness through the oval opening. Grasping the wires, pull the oval grommet on the wire harness until it is secure in the oval opening.

F. Route the portion of the line voltage harness in the return air section above the top of the economizer (see Fig. 1).

G. Install fuses in fuse holders.

H. Choosing any single contactor, connect line voltage wire harness to any two of the three line-side contactor terminals (see Fig. 2).

FIGURE 2

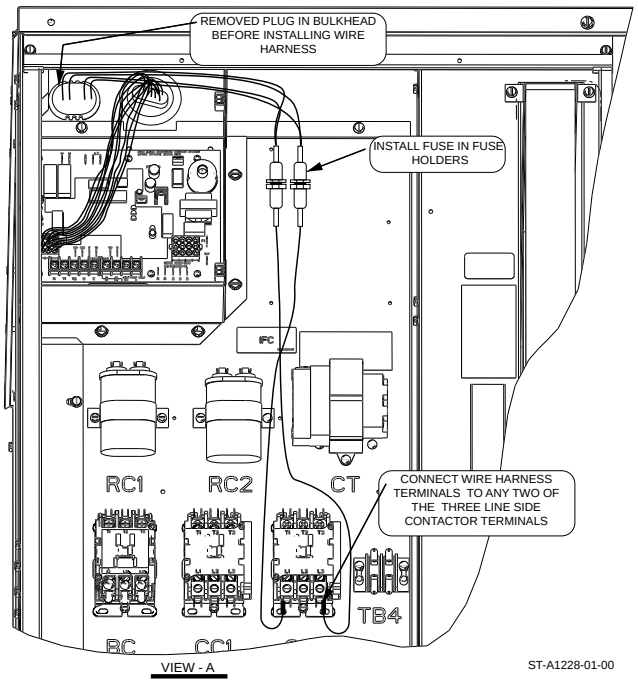
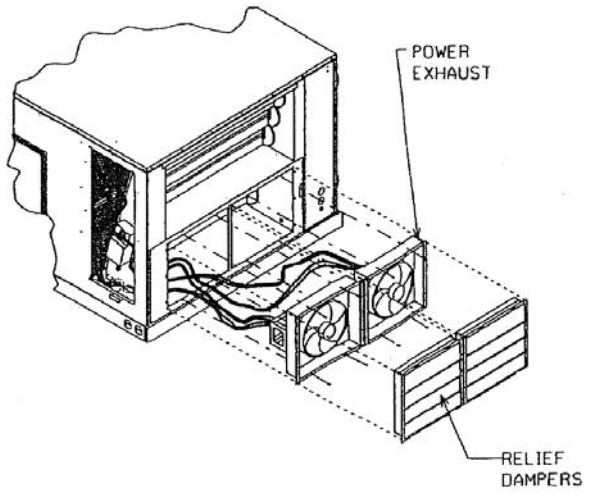


FIGURE 3



I. Remove relief dampers from economizer (see Fig. 3).

J. Connect power exhaust wiring:

1. Connect control voltage harnesses from power exhaust modules to existing connections provided on economizer.
2. Remove small rectangular cover or duct tape beside control connections on economizer and discard (Fig. 4).
3. Use screw that was removed in previous step to attach ground terminals on wire harness, or add screw to ground power exhaust modules to economizer frame.
4. Plug in power connections through the rectangular holes revealed when the cover or duct tape was removed.

K. Route power and control connections under divider panel using tube clamps provided to take up excess slack in wiring harness and avoid contact between fan blades and wiring harness during operation (Fig. 4).

L. Secure each power exhaust with (4) screws (2 in top flange and 2 in bottom flange).

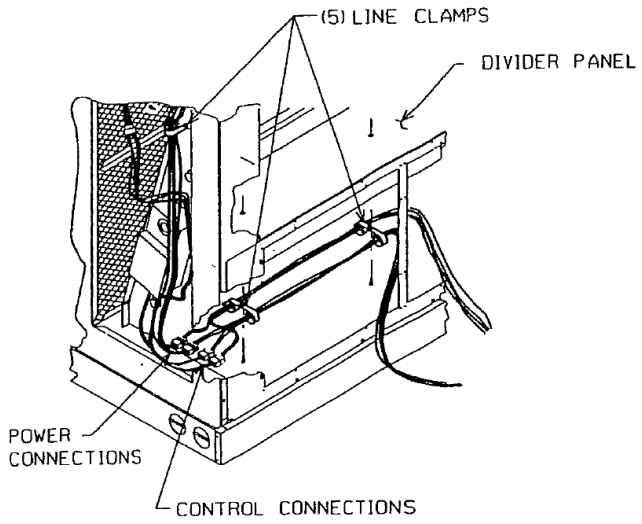
M. Connect ends of new line voltage wire harness to power connections (Fig.4).

N. Reinstall relief dampers.

O. Power up the unit to adjust economizer controller so that power exhaust is energized at the required outdoor air damper position to control building pressurization.

P. Reinstall return cover.

FIGURE 4



HORIZONTAL (SIDEFLOW) INSTALLATION

A. To install power exhaust modules on an existing horizontal economizer, remove the barometric relief damper hoods and the barometric relief dampers from the return air duct (see Fig. 5) and save the fasteners for reuse.

B. Remove the oval plug from the upper left corner on the inside of the control box. This is where the new line voltage wiring harness is installed (see Fig. 2).

C. Stick a 5 foot long piece of stiff wire or “fish tape” through this hole until it appears through the return air opening where the barometric relief dampers were previously installed.

D. Using electrical tape, secure the new wire harness terminals to the 5 foot long stiff wire or “fish tape”.

E. Pull the wire harness through the oval opening. Grasping the wires, pull the oval grommet on the wire harness until it is secure in the oval opening.

F. Remove the lower left end panel of the unit (below the outside air damper) so that the economizer controls are visible.

G. Route the portion of the line voltage harness in the return air section to bottom connections provided in the economizer (see Fig. 6)

H. Install fuses in fuse holders (see Fig. 2).

I. Choosing any single contactor, connect line voltage wire harness to any two of the three line-side contactor terminals (see Fig. 2).

J. Connect power exhaust wiring (Fig. 7):

1. Pass the control voltage harnesses from the power exhaust modules through the barometric relief damper opening in the return air duct and connect to the existing 2-pin control connections provided on economizer.
2. Remove small rectangular cover or duct tape below control connections on economizer and discard (Fig. 7).
3. Pass the line voltage harnesses from the power exhaust modules through the barometric relief damper openings in the return air duct and “snap” into the bottom openings provided on the economizer.
4. Connect the line voltage harness that was previously routed in the steps “B” through “I” in this section to the 2-pin connections that were “snapped in”.
5. Use screw to attach ground wires to economizer chassis.

K. Reinstall barometric relief dampers and hoods that were previously removed using the same fasteners.

L. Add stiffener as required to exterior of return air duct to support additional weight of power exhaust modules.

FIGURE 5

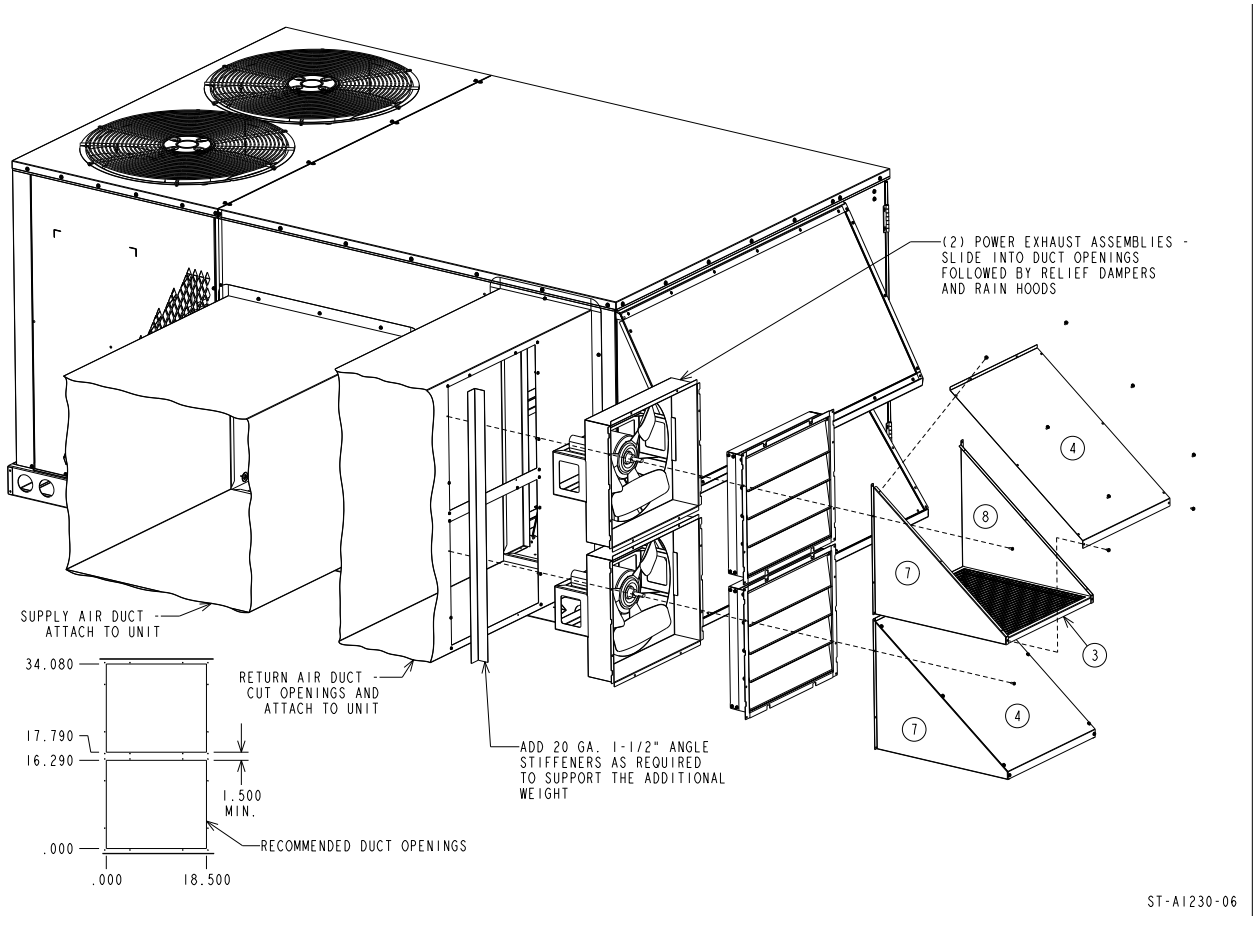
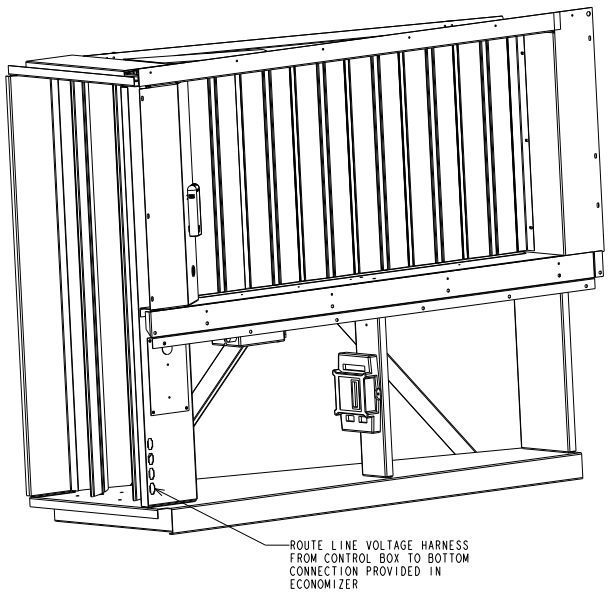
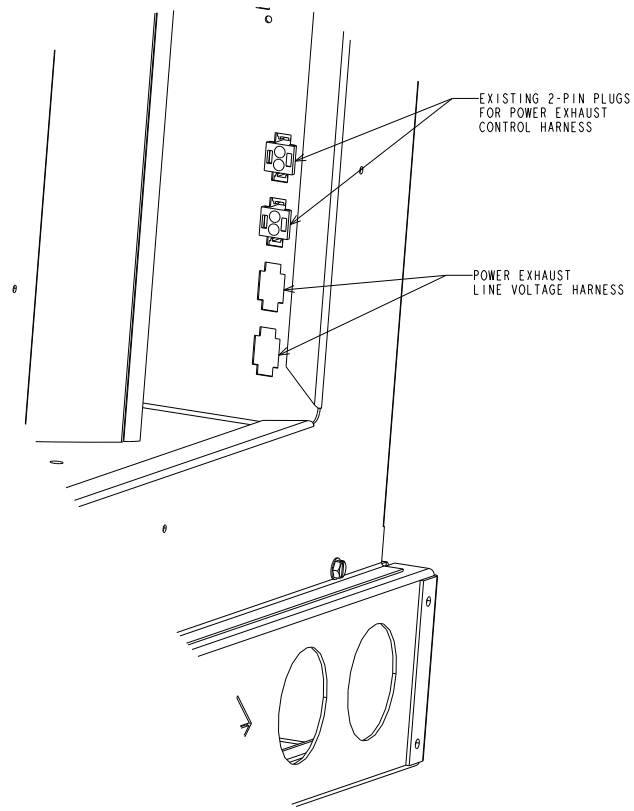


FIGURE 6



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FIGURE 7



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M. Power up the unit and adjust economizer controller so that power exhaust is energized at the required outdoor air damper position to control building pressurization.

N. Reinstall the lower left end panel removed in step “F” (Fig. 6) in this section.

O. For a new horizontal economizer and power exhaust installation, use template and sheet metal shears to cut holes in the return air duct a convenient distance from the unit (Fig. 5).