

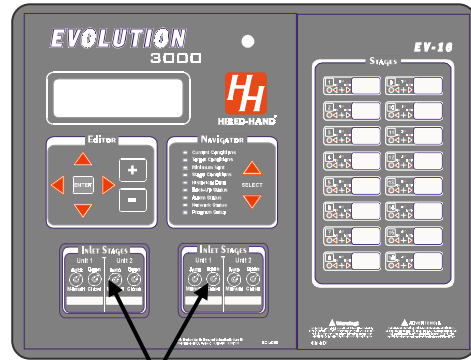


Directions for Installing Evolution 3000 Add-On Ventilation Kits

HIRED-HAND®

Description

These instructions are for installing Ventilation Kits in the Evolution 3000 Controller. Three kits are discussed: The Power Ventilation Kit (Part No. 6450-5101), the Natural Ventilation Kit (Part No. 6450-5102) and the Ventilation Expansion Kit (Part No. 6450-5104). The installer will also need the Evolution Owners Manual (Part No. 4801-5307) for wiring diagrams external to the Ventilation Kits.



Contents of Ventilation Kits

Those items included in each kit are indicated in the right hand columns with an "X".

ITEM - DESCRIPTION	HHI Part Number	Quan.	Power Vent Kit (6450-5101)	Natural Vent Kit (6450-5102)	Vent Expan. Kit (6450-5104)
PCB167 EV Curtain Relay Board	6407-1516	1	X	X	X
Conn TBLK 3 pos Magnum	3006-5082	2	X	X	
Conn TBLK 3 pos EBY	3006-5077	2	X		
Conn TBLK 4 pos EBY	3006-5078	2		X	
Inlet Machine SWX Assy.	6407-6017	1	X	X	X
NUT Machine 6-32 hx z	1001-1461	4	X	X	X
EV I/O Curtain Card Harness	1903-4010	1	X		
EV I/O Curtain Nat. Card Harness	1903-4023	1		X	
Module Static Pressure	3591-2252	1	X		
SCRW 10-32X1/2 PAN SL M/S Z	1004-3056	2	X		
HRNS EV Setra	1903-4011	1	X		
Owners Manual Vent Add-On	4801-5308	1	X	X	X
CTRL tubing 1/8" pvc clr 25'	6407-0156	1	X		
KIT Static Pressure Control	6450-0125	1	X		
Vent Expansion Harness	1903-4029	1			X

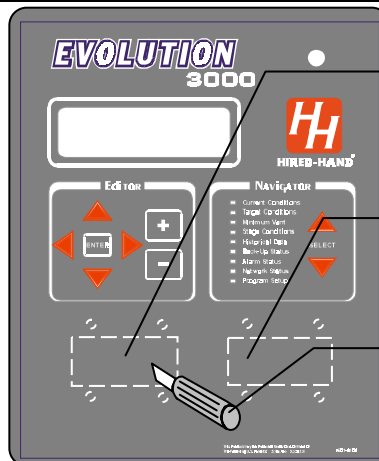
Ventilation Kits

Tools Required

Screw Driver	Small Knife	Wrench Set	Nut Driver Kit
Drill with Bits	Meas. Tape	Socket Set	5/16" and 1/4" Nut Driver

Directions

STEP 1 First, remove all electrical power from the Evolution 3000 cabinet and interconnected equipment containing voltages that may be fed back into the Evolution 3000. (Unless otherwise noted, the following steps are for any of the Ventilation kits.)



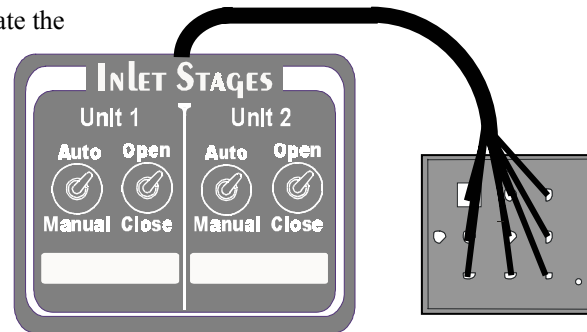
Power Ventilation Cut-Out

Natural Ventilation Cut-Out

Cut out the label around the switch opening and the bolt holes with a small knife.

STEP 2

Open the Evolution front panel and locate the outlined location for the Power or Natural Ventilation switches as illustrated on the previous page. Using a small knife, cut the Evolution label around the opening and around the four bolt holes.



Switch Panels - Natural Ventilation Harness Assembly and the Power Ventilation Harness Assembly (6407-6017)

STEP 3

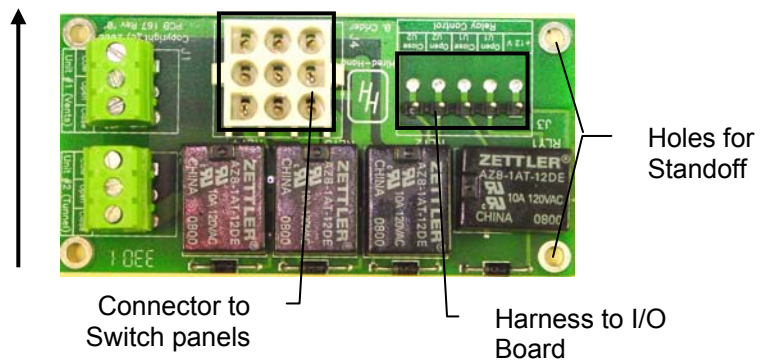
Locate the Inlet stage switch panels and harness assemblies shown at the right and install in the Evolution cut-outs from the step above. Attach with four 6x32 hx z nuts (1001-1461) supplied.

STEP 4

Locate the Printed Circuit Board (PCB 167) in the Add-On Kit. They are the same for either the Natural or Power Ventilation. See Figure 1 on page 4 of this document for the location of these boards in the lower right corner of the Evolution Cabinet. Press the boards over the nylon standoffs until a “click is heard” indicating the boards are fastened into the standoffs. Insure that the board is placed so that the connector to the Ventilator switch panel is at the TOP. Next, connect the cable from the Ventilation Switches to the Ventilation Board.

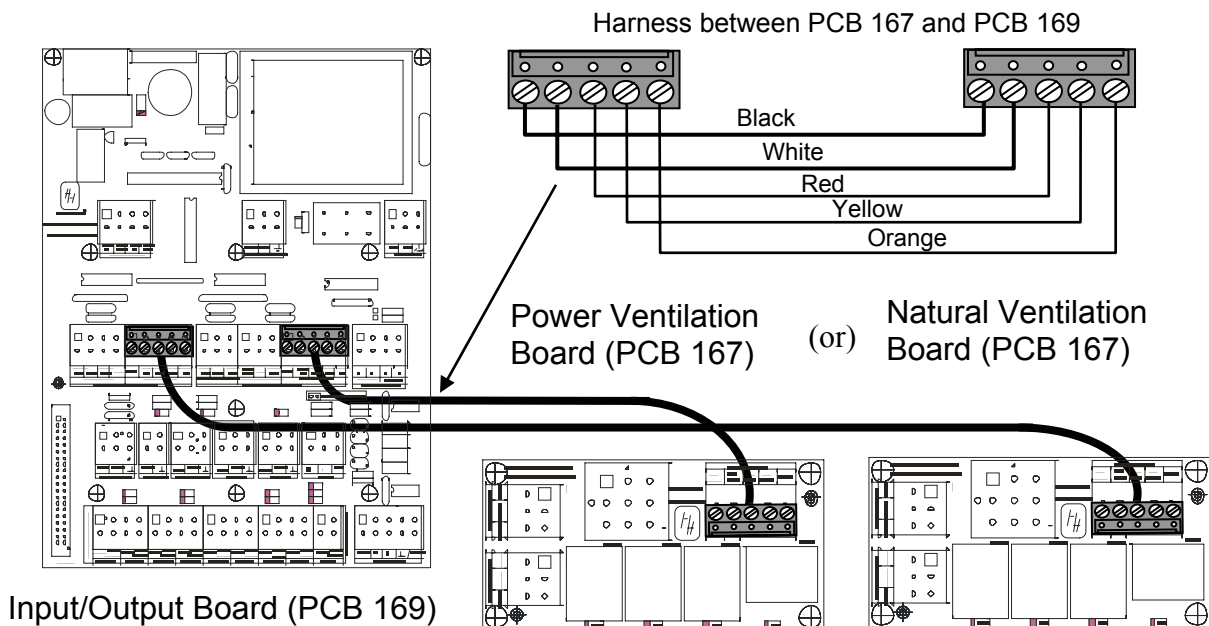
Top of enclosure

Ventilation Board PCB 167



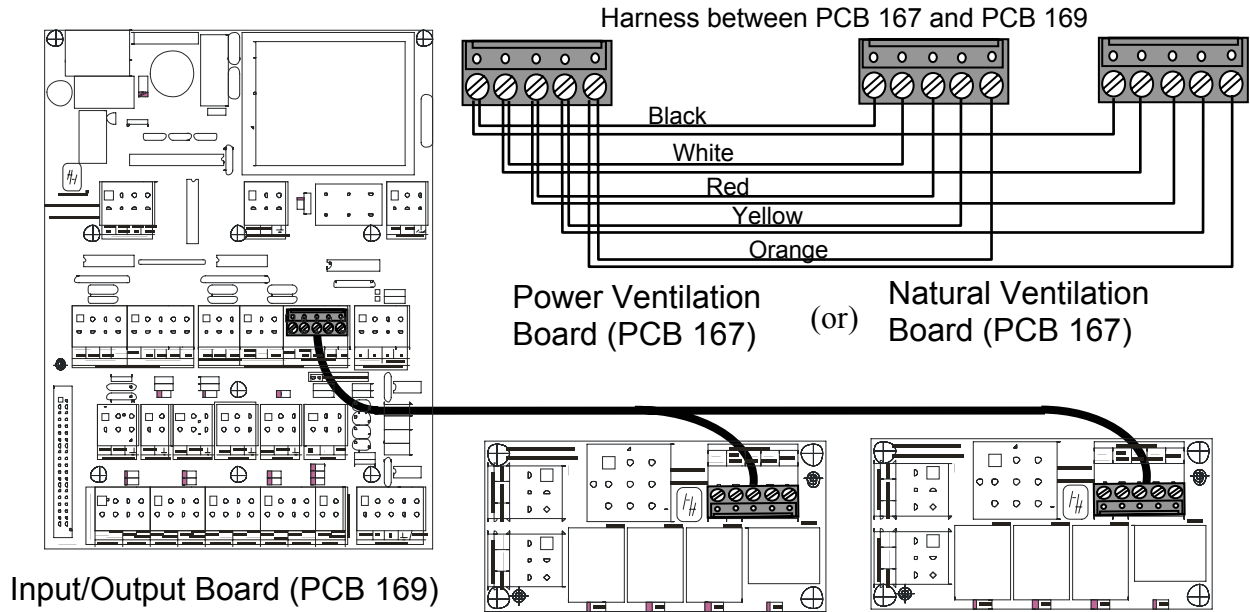
STEP 5

(For the Natural or Power Vent Kits) Locate the harness that connects between the Ventilation Board (PCB 167) and the Input/Output Control Board (PCB 169). See Figure 1 on page 4 of this document for the location of the boards. Connect the harnesses from the Ventilation boards (PCB 167) to the Relay Control on the Input/Output Control Board (PCB 169) as shown below.



STEP 6

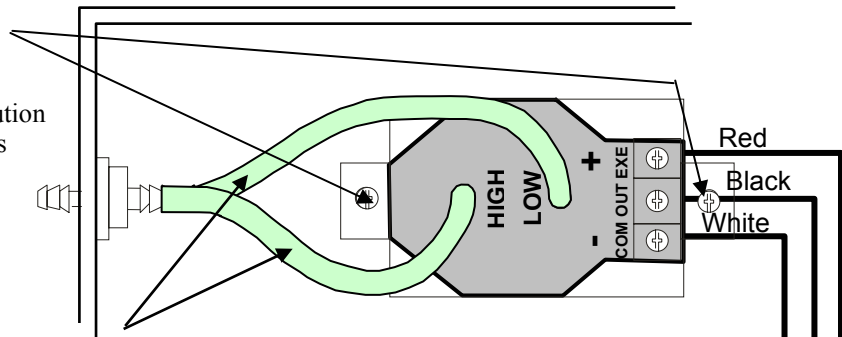
(For the Vent Expansion Kit) Locate the harness that connects between the Ventilation Board (PCB 167) and the Input/Output Control Board (PCB 169). See Figure 1 on page 4 of this document for the location of the boards. Connect the harnesses from the Ventilation boards (PCB 167) to the Relay Control on the Input/Output Control Board (PCB 169) as shown below.



STEP 7

(Power Vent Only)

Mount the Static Pressure Transmitter (3591-2252) at the top left of the Evolution cabinet with two 10x32x1/2 pan screws (1004-3056) provided in kit.

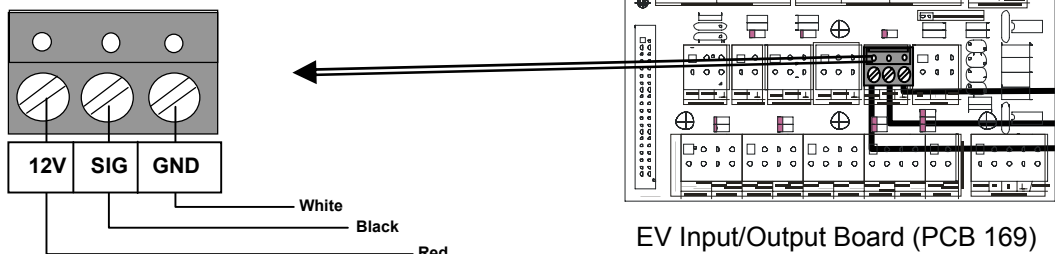


STEP 8

(Power Vent Only) Cut two pieces of clear PVC tubing 5.5" long from the 25 foot roll (6407-0156) provided with the kit. Install the two pieces of tubing from the pressure gauge to the fittings in the cabinet side. NOTE: The HIGH fitting is toward the front.

STEP 9

(Power Vent Only) Install the three-wire harness (1903-4011) from the EV Input/Output board (PCB 169) to the Pressure Transducer as shown.



STEP 10

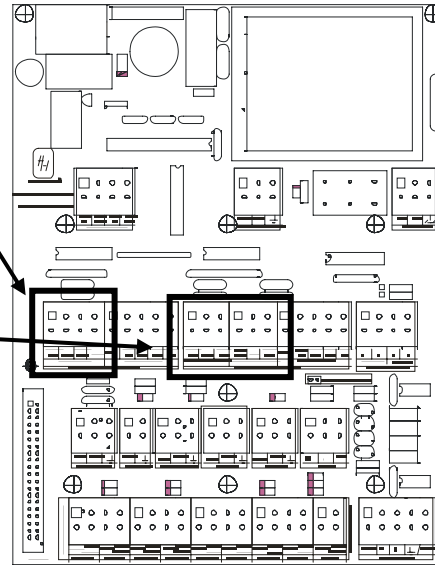
(Natural Vent Only) Install the terminal block for the Natural Ventilation auxiliary switch. See the wiring diagrams in the Evolution Owners Manual part No. 4801-5307 for the external wiring. See Figure 3.

STEP 11

(Power Vent Only) Install the Terminal Blocks for the Tunnel and Vent auxiliary switch. See the wiring diagrams in the Evolution Owners Manual part No. 4801-5307. See Figure 2.

STEP 12

Connect the PowerTraks to the PCB 167 Curtain cards using the supplied terminal blocks (3006-5082). See the Evolution Owners Manual Part No. 4801-5307 for wiring. See Figure 4.



EV Input/Output Board (PCB 169)

Figure 1 Evolution 3000 Cabinet
Circuit Board and Cable Locations

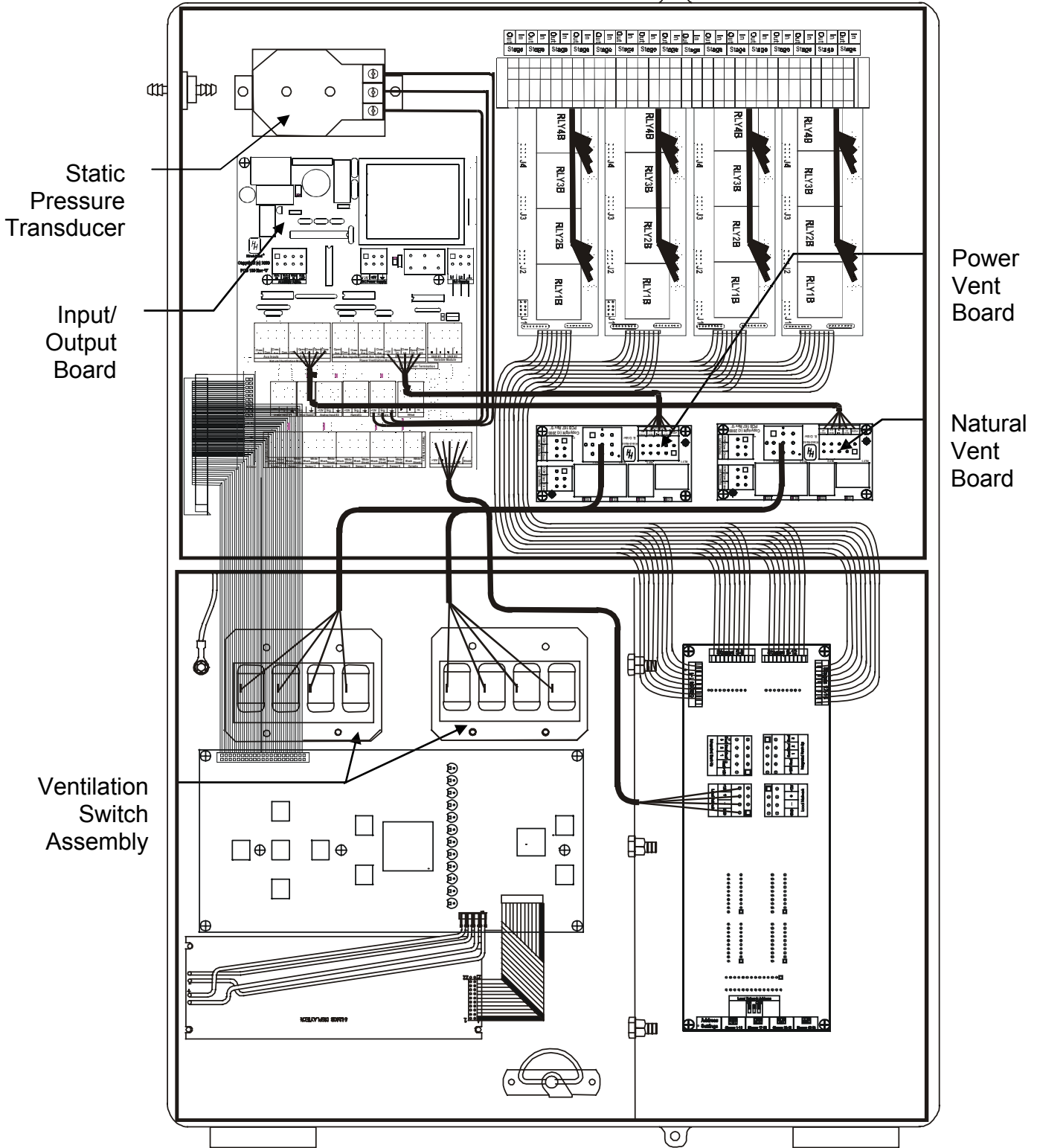
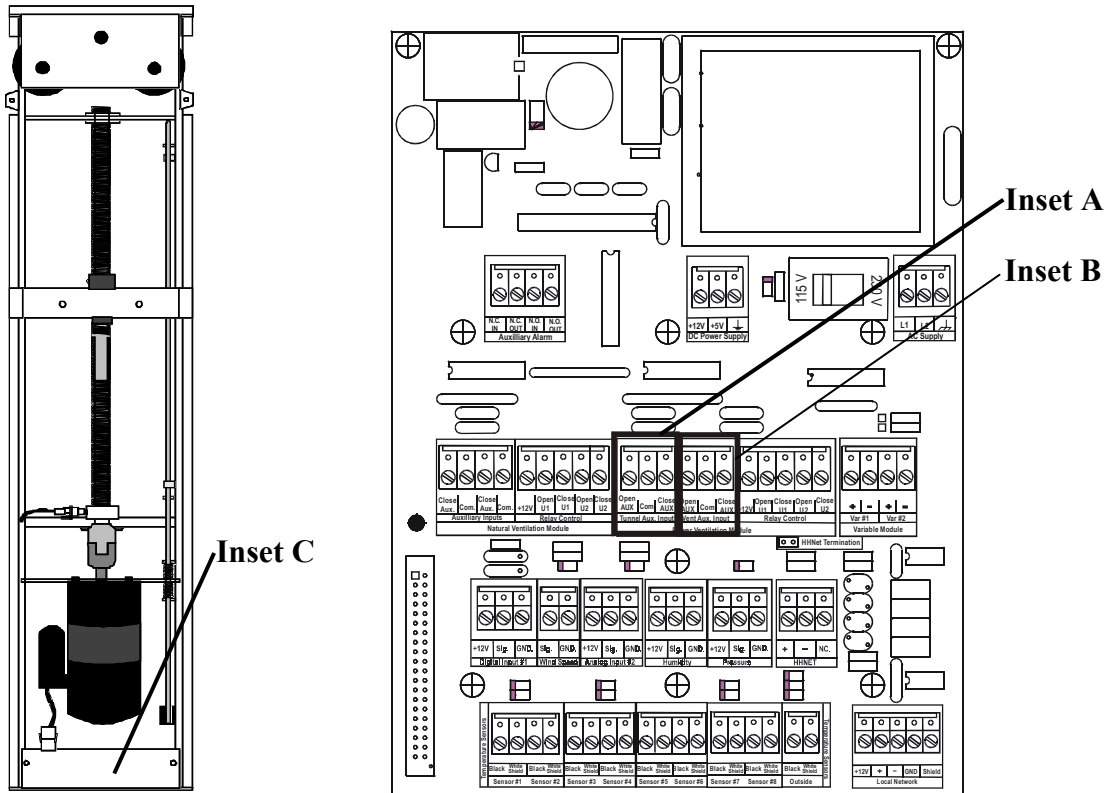


Figure 2 Connecting the PowerTrak Power Auxiliary Switches to Evolution 3000 to Evolution 3000

PCB 169

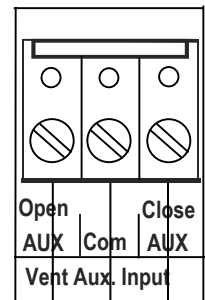
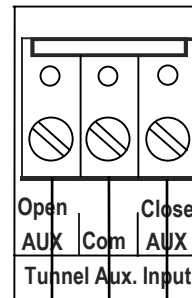
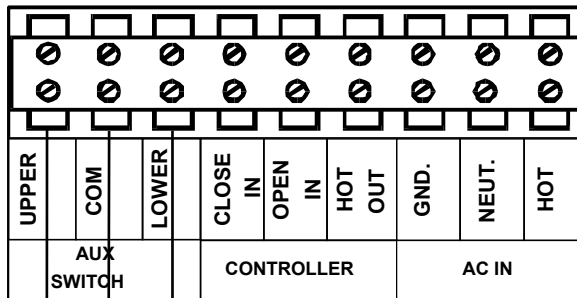


PowerTrak

Inset C
PowerTrak

Inset A
Tunnel Auxiliary
Input

Inset B
Vent Auxiliary
Input

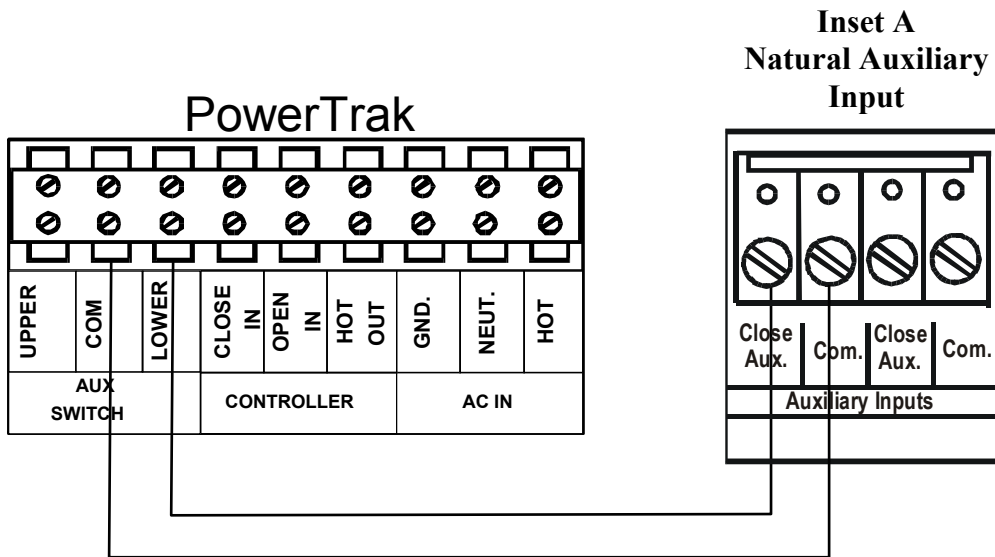
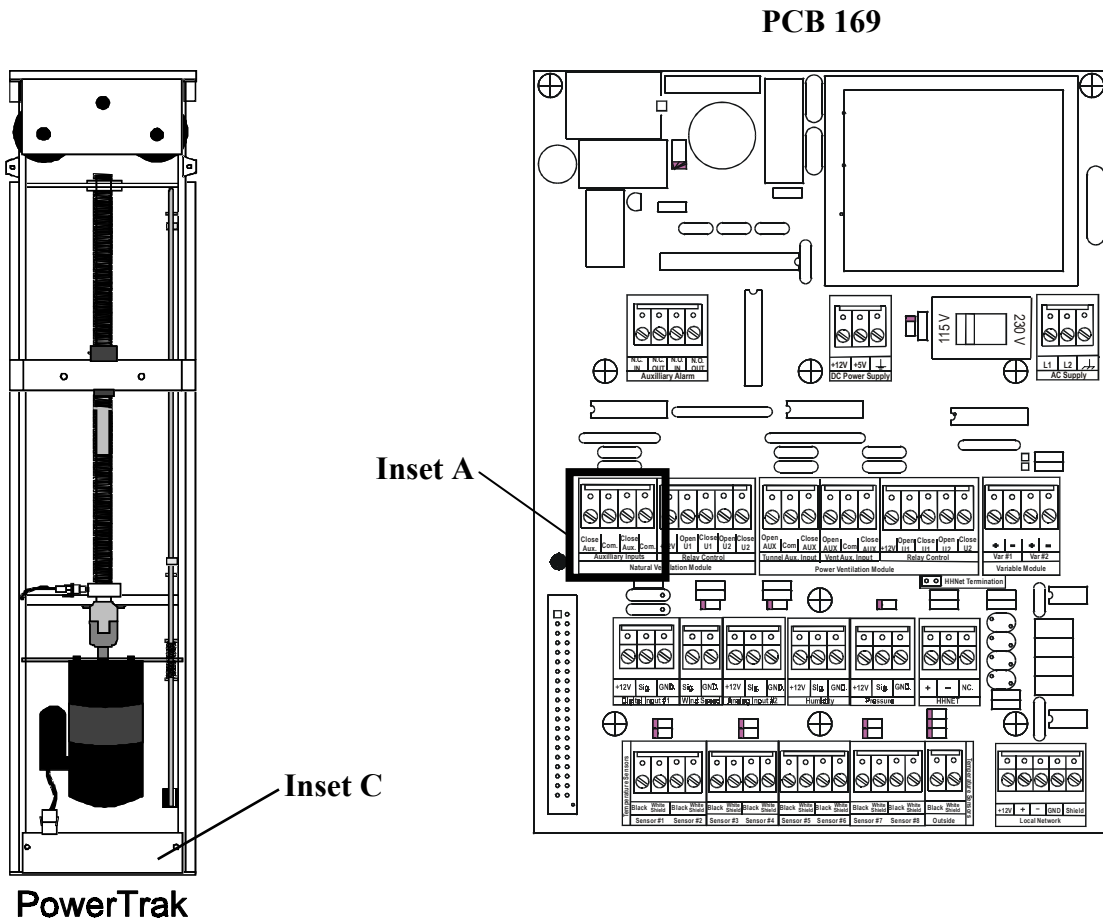


See Note below

NOTE: Vent auxiliary connects the same as tunnel

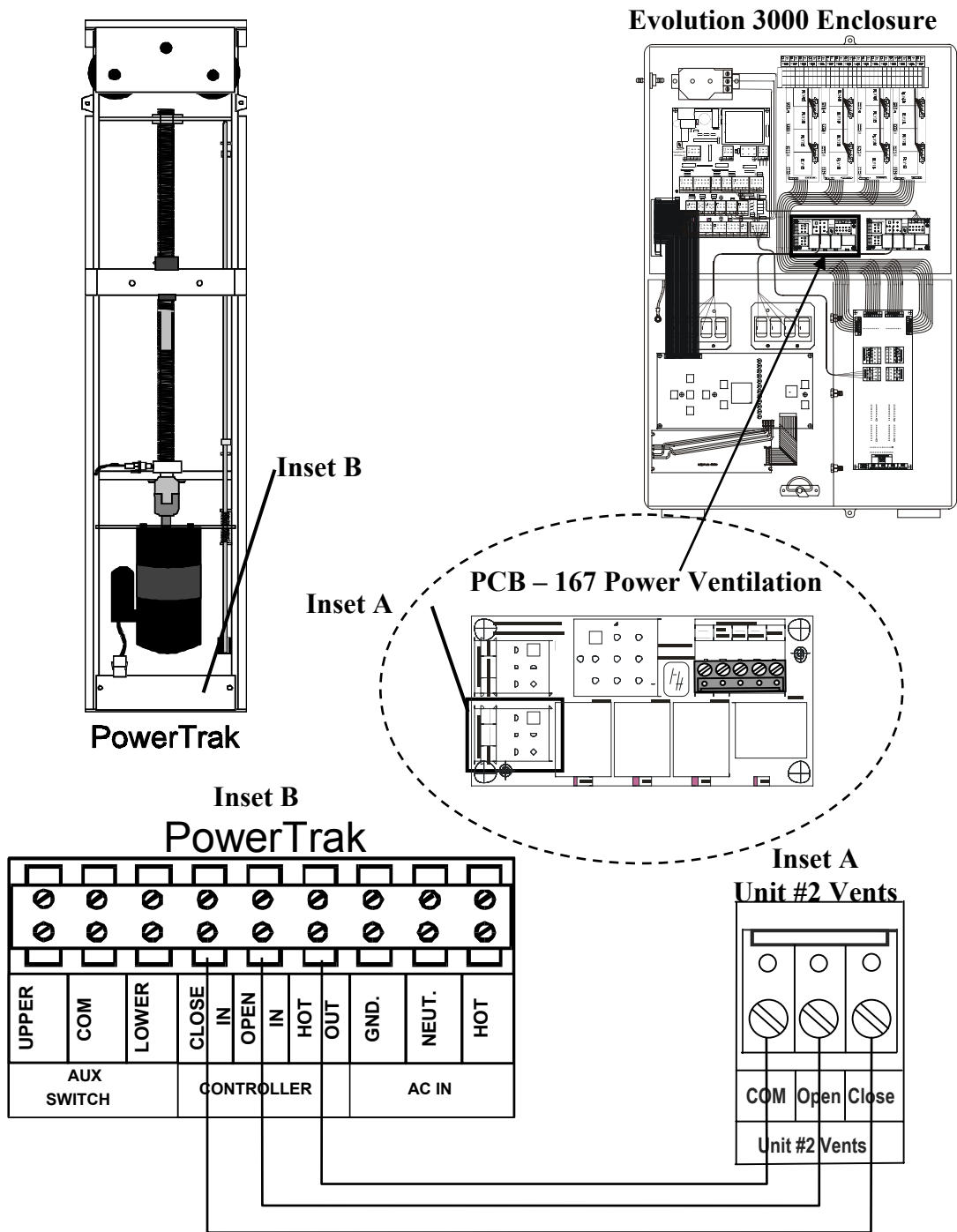
NOTE: If curtain is setup to pull curtain up to open, then reverse wires connected to "Upper" and "Lower" terminals.

Figure 3 Connecting PowerTrak Natural Auxiliary Switches to Evolution 3000



NOTE: If curtain is setup to pull curtain up to open, then reverse wires connected to 'Upper' and 'Lower' terminals.

Figure 4 Connecting the PowerTrak to the Evolution 3000



NOTE: If curtain is setup to pull curtain up to open, then reverse wires connected to 'OPEN' and 'CLOSE' terminals.

NOTE: Only 1 PowerTrak can be connected to each PowerTrak outlet. If Additional PowerTraks are needed, the use of relay boxes are necessary to separate the load.

NOTE: All PowerTrak Units Will Connect The Same.