
SUPPLEMENTAL INSTRUCTIONS

CMC-33 Dirty Filter Switch Kit

The CMC-33 kit contains the components required to monitor the amount of restriction in the air filter to signify when filter replacement is required. An indicator light will illuminate as well as a set of normally open contacts will latch closed upon activation of the pressure differential switch. The light will stay illuminated and the contacts closed until the reset button is pushed or unit power is cycled. The pressure differential switch is adjustable to be set at the desired filter restriction level.

The CMC-33 kit is for use with Bard models W42AC, W42HC, W48AC, W48HC, W60AC, W60HC, W72AC, W3SAC, W4SAC and W5SAC.

Field-supplied tools needed:

- Personal protection equipment, including gloves and safety glasses
- 5/16" nut driver
- Phillips head screwdriver
- Multimeter for troubleshooting
- Piece of cardboard to restrict the filters for setting the switch

The CMC-33 kit consists of:

- 7960-854 Installation Instructions
- 910-2071 Filter Switch Assembly
- 910-2073 Filter Switch Light/Relay Assembly
- 8607-021 Low Voltage Terminal Board
- 7961-837 Terminal Board Label
- 8201-159 Pilot Duty Relay (DPDT)
- 8611-047 3/4" Open/Close Snap Bushing (2)
- 1012-065 Phillips Head Screw (5)
- 1012-086 Hex Head Screw (3)
- 1012-153 Smooth Hex Head Screw
- 7950-005 Nylon Cable Clamp
- 7950-012 Push Mount Cable Tie (2)
- 7950-004 Ladder Cable Tie (2)
- 3018-2134 Orange Wire (2)
- 8611-028 1/2" Snap Bushing
- 4084-148 Wiring Diagram
- 7961-312-0511 CMC-33 Unit I.D. Label



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Installation

WARNING

Electrical shock hazard.

Disconnect the remote electric power supply or supplies before servicing.

Failure to do so can result in serious injury or death.

WARNING

Exposed moving parts.

Disconnect all electrical power before servicing.

Failure to do so can result in severe injury or amputation.

CAUTION

Sharp metallic edges.

Take care and wear appropriate protective devices to avoid accidental contact with sharp edges.

Failure to do so can result in personal injury.

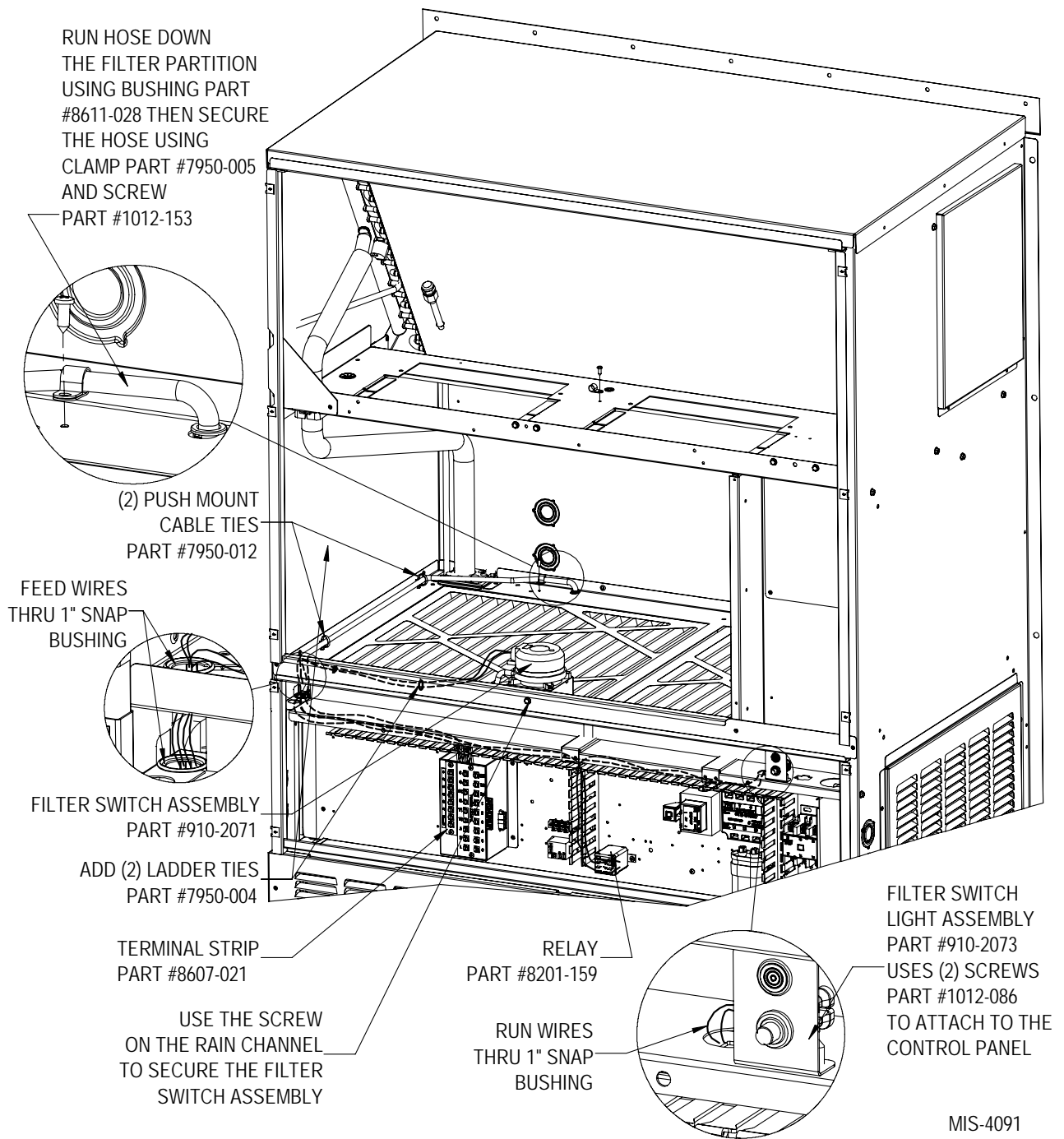
1. Disconnect all power to the unit. Remove control panel inner and outer covers and upper front panel.
2. Mount the filter switch assembly to the back of the rain channel on top of the filter partition as shown in Figure 1. Remove and replace the existing screw in the rain channel to attach the filter switch bracket.
3. Remove the cover on the switch and ensure the knob is set at 0.4" W.C. This is only a recommended starting point prior to making switch adjustments. Switch setting is highly dependent on filter type used, blower speed, unit ducting and other unit installation characteristics. See below for how to make proper switch adjustments. Re-install cover.
4. Install a 8611-028 bushing in the hole at the back of the filter partition (see Figure 1).

5. Route the hose coming off the switch assembly around the edge of the filter partition and down through the bushing installed in Step 3 as shown in Figure 1.
6. Install two (2) push mount cable ties to hold the hose as shown in Figure 1. Snug the cable ties around the hose but do not over tighten as this may cause switch to trip inconsistently.
7. Install the 7950-005 clamp with the 1012-153 screw to hold the hose in place at the back of the filter partition as shown in Figure 1.
8. Mount the filter switch light/relay assembly on top of the control panel as shown in Figure 1. The mounting screws go up through the control panel and into the bracket.
9. Install the 8201-159 relay into the control panel as shown in Figure 1).
10. Install the two (2) snap bushings for routing the wires into the control panel as shown in Figure 1.
11. Route and connect the wires as shown on the wiring diagram in Figure 2 (page 4) as well as the wire routing in Figure 3 (page 5).
12. Secure the wires and hose coming out of the filter switch together using the ladder ties (see Figure 1).
13. Once the wires have been connected on the back, attach the terminal board to the low voltage box using two (2) Phillips head screws. Apply the terminal board label beside the terminal board on the low voltage box.
14. Place the "CMC-33" I.D. label and wiring diagram on the back of the inner control panel cover above the unit wiring diagram.
15. Make low voltage connection to the normally open contacts on the terminal board (if desired).

Switch Adjustment

1. Install all the covers except the outer control panel cover.
2. Apply power to the unit.
3. Turn the unit indoor blower on (make R-G on low voltage terminal board).
4. With new air filters installed and switch initially set at 0.4" W.C. (see Step 3 in **Installation**), begin restricting the air filter of the unit using a piece of cardboard under the filters until the switch trips. If the filter is restricted by 75% (or desired restriction amount), skip to Step 7.
5. If switch setting adjustment is required, disconnect power to the unit. Remove the upper front panel and the cover on the airflow switch so that adjustment can be made. If the switch tripped before 75% restriction was reached, turn the knob slightly

FIGURE 1



6. Replace the upper front panel and repeat Steps 2-4. Continue to make adjustments described in Step 5 until the desired restriction is obtained. Replace the switch cover once adjustment is complete.
7. Remove the restriction and reset the filter switch.
8. Install the outer control panel cover. This completes the installation.

FIGURE 2

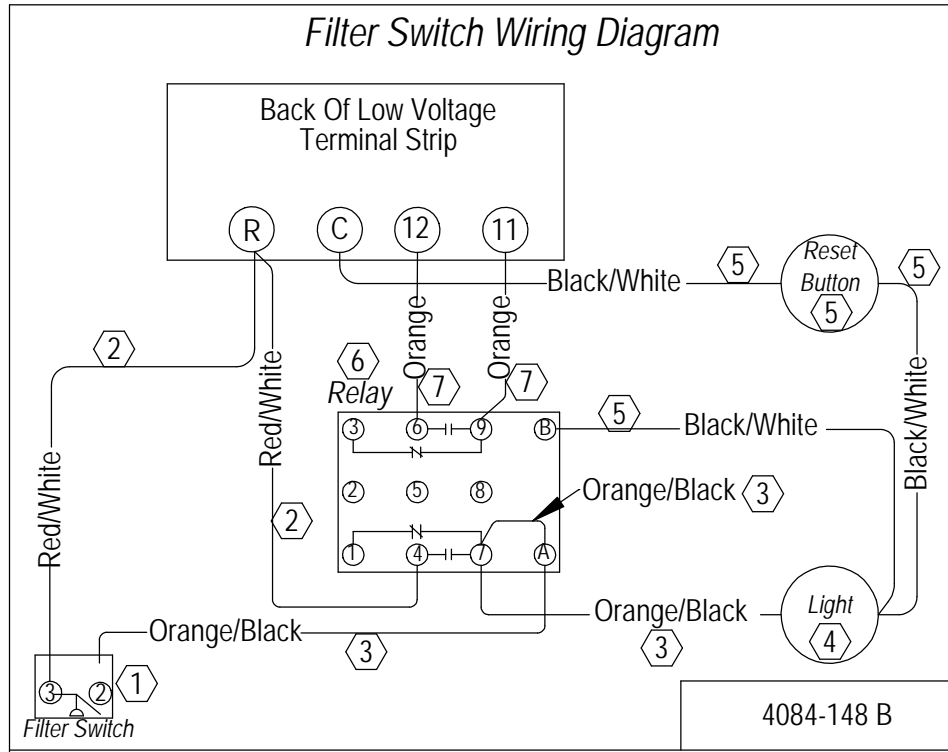


FIGURE 3

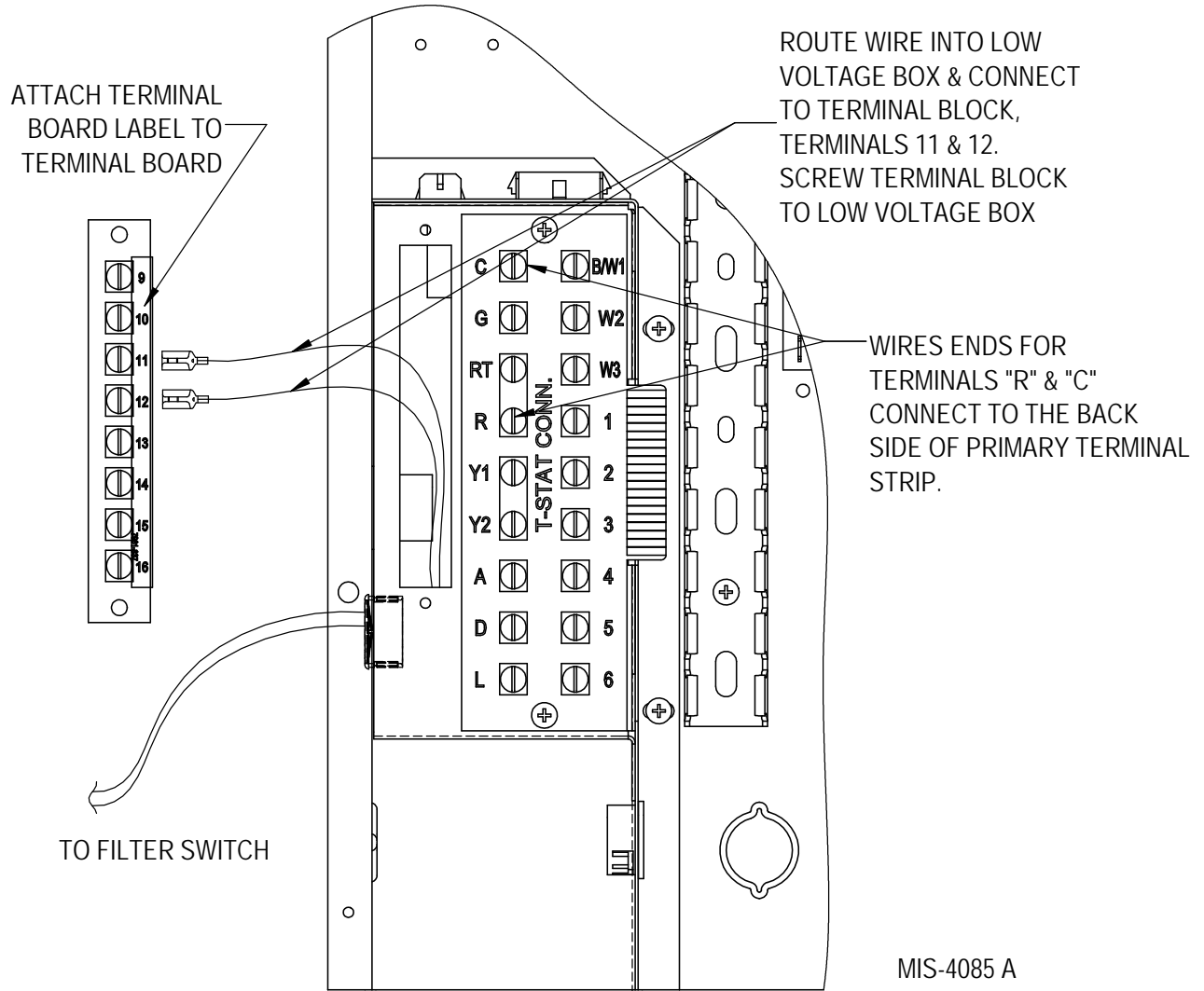


FIGURE 4

