
SUPPLEMENTAL INSTRUCTIONS

CMC-31 Dirty Filter Switch Kit

The CMC-31 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-31 kit is for use with Bard models W18AB, W18HB, W24AB, W24HB, W24LB, W30AB, W30HB, W30LB, W36AB, W36HB and W36LB.

The CMC-31 kit consists of:

- 7960-853 Installation Instructions
- 910-2055 Filter Switch Assembly
- 910-2098 Filter Switch Light/Relay Assembly
- 8607-021 Low Voltage Terminal Board
- 7961-837 Terminal Board Label
- 8611-033 7/8" Snap Bushing (2)
- 1012-065 Phillips Head Screw (2)
- 1012-086 Hex Head Screw (4)
- 4084-148 Wiring Diagram
- 7961-312-0510 CMC-31 Unit I.D. Label

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 be used to restrict the filter when setting the switch

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.



Climate Control Solutions

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Installation

1. Disconnect all power to the unit. Remove control panel inner and outer covers, upper front panel and filter access cover.
2. Mount the filter switch assembly using the holes on the side of the control panel and two (2) hex head screws. Route the hose below the filter as shown in Figure 1.
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. Mount the filter switch light/relay assembly to the side of the control panel as shown in Figure 2 on page 4 (right-hand) or Figure 3 on page 5 (left-hand).
5. Position the terminal board label beside the terminals on the side with the screws.
6. Route and connect the wires as shown on the wiring diagram in Figure 4 (page 6) as well as the wire routing in Figure 5 (page 7).
7. Attach the terminal board to the low voltage box once the wires have been connected on the back.
8. Place the "CMC-31" I.D. label and wiring diagram on the back of the inner control panel cover above the unit wiring diagram.
9. Make low voltage connection to the normally open contacts (terminals 11 & 12) on the front of the added terminal strip (if desired).
6. Replace the upper front panel and repeat Steps 10-12. 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 filter access panel. This completes the installation.

Switch Adjustment

1. Install all the covers except the filter access cover.
2. Apply power to the unit.
3. Turn the unit indoor blower on.
4. With a new air filter 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 filter 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 clockwise. If the switch tripped after 75%, turn the knob counter-clockwise. See Figure 6 on page 7.

FIGURE 1

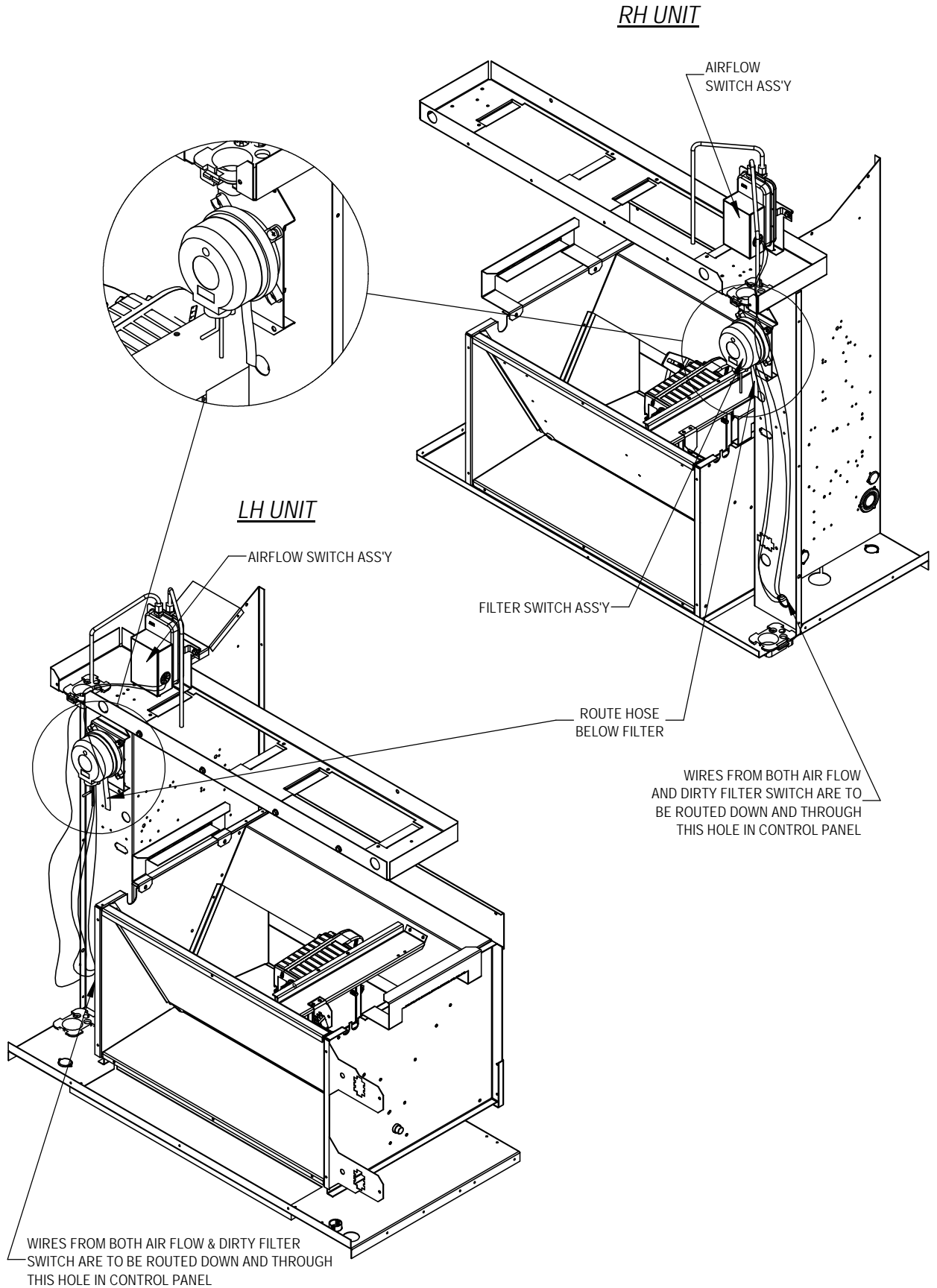


FIGURE 2

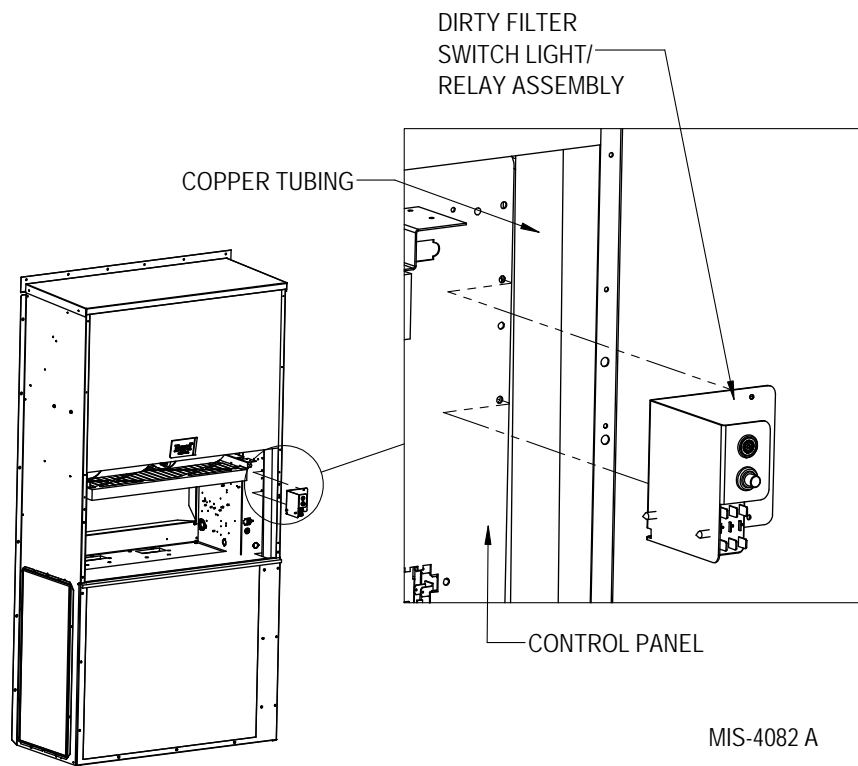
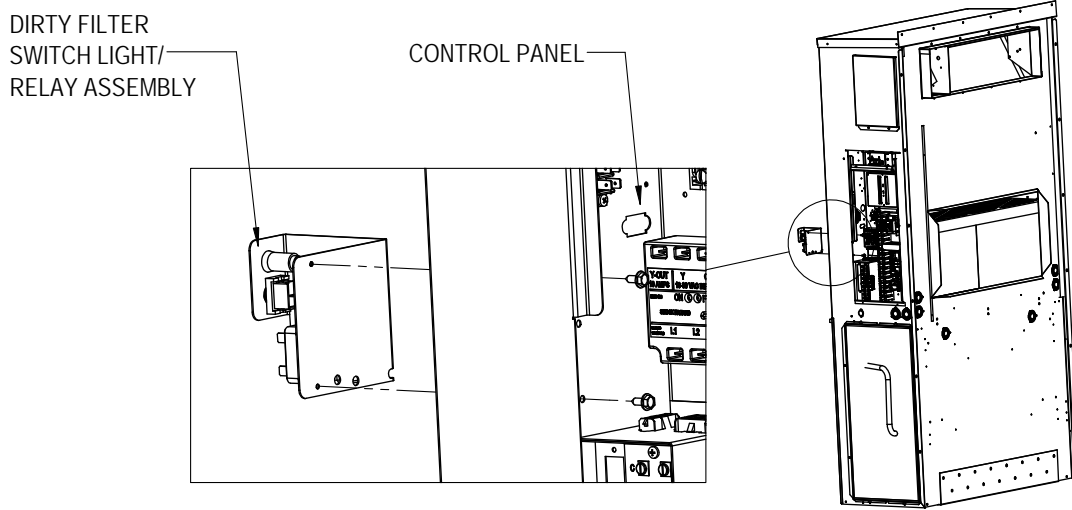


FIGURE 3

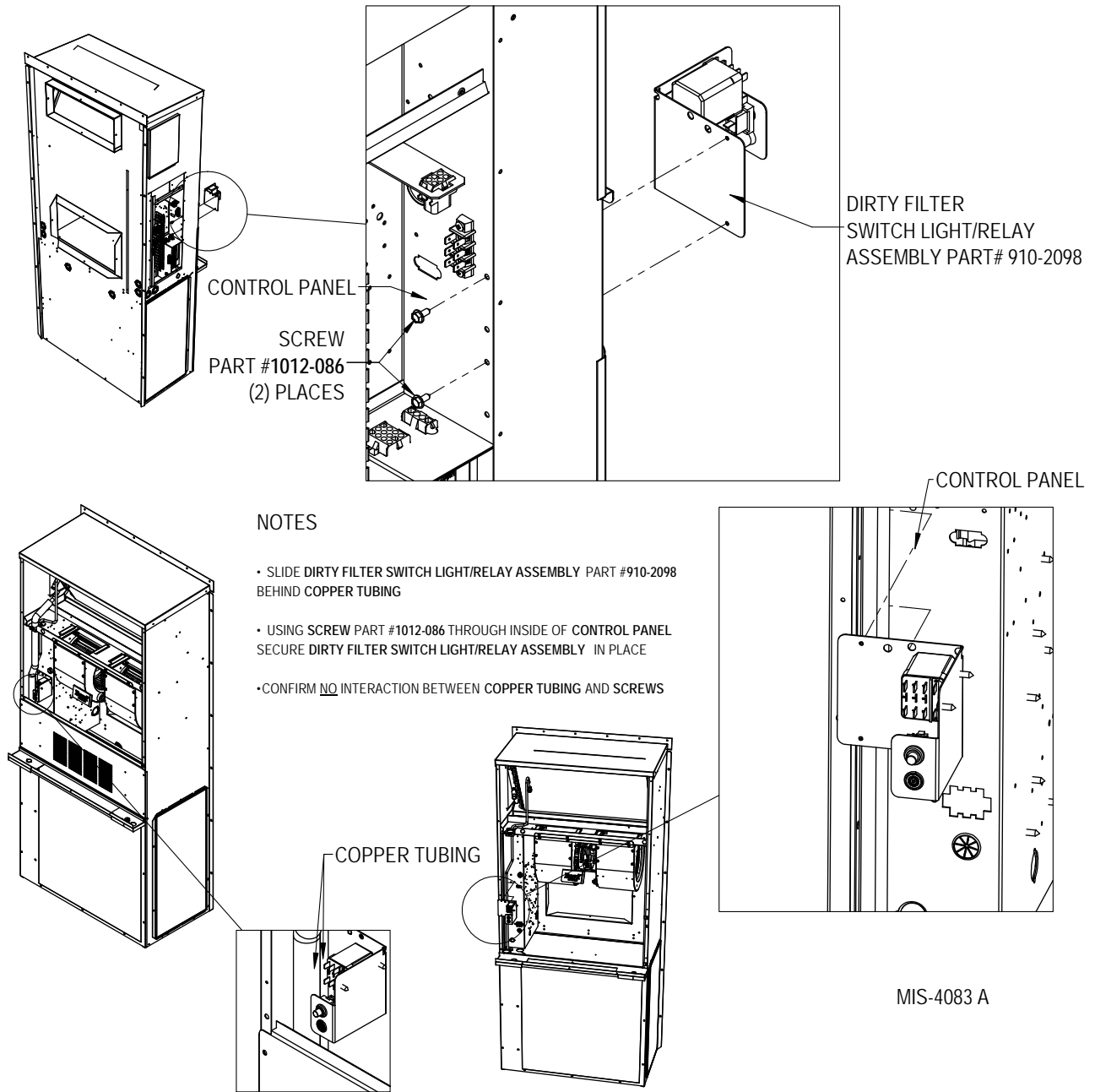


FIGURE 4

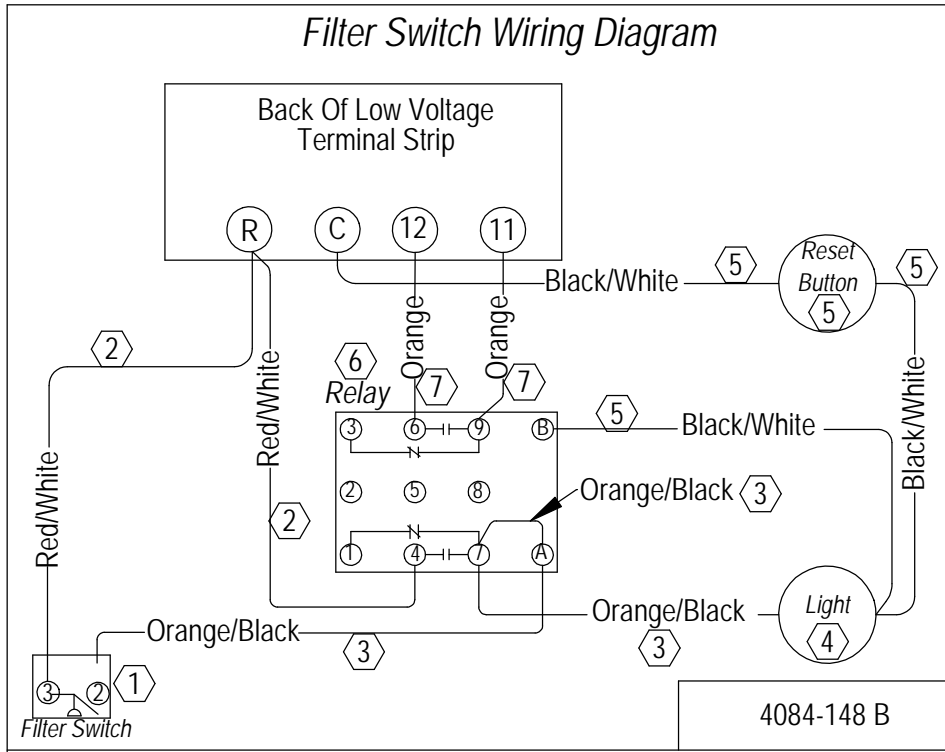


FIGURE 5

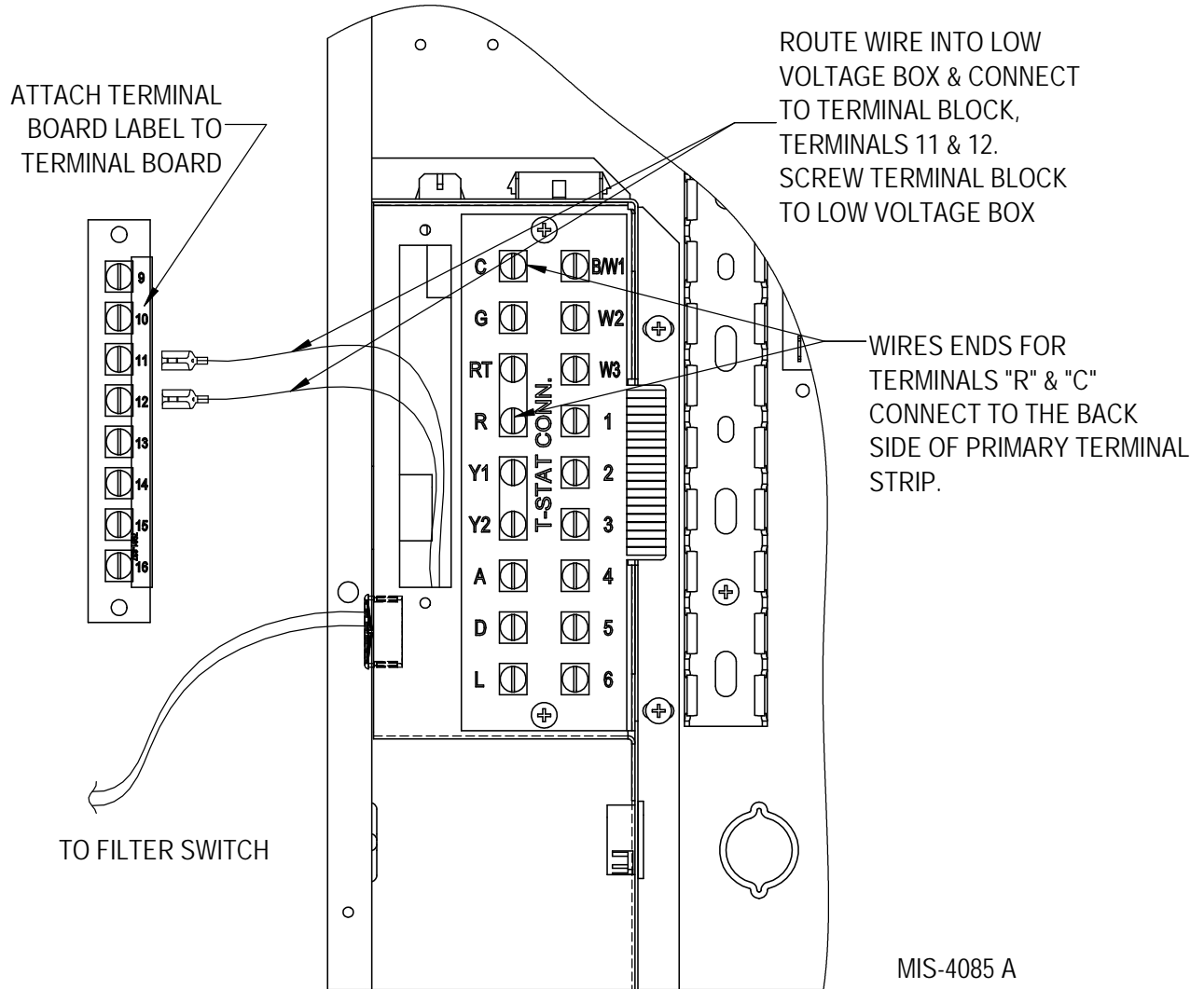


FIGURE 6

