**CRSTATUS002B01**

**48/50LC 04–06**
**SINGLE PACKAGE ROOFTOP UNIT**
**PLUGGED FILTER INDICATOR ACCESSORY**

# Installation Instructions

## 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.

When working on equipment, observe precautions in the literature, tags and labels attached to the unit, and other safety precautions that may apply.

Follow all safety codes. Wear safety glasses and work gloves.

Recognize safety information. This is the safety-alert symbol ⚠. When you see this symbol on the unit and in instructions or manuals, be alert to the potential for personal injury.

Understand the signal words DANGER, WARNING, and CAUTION. These words are used with the safety-alert symbol. DANGER identifies the most serious hazards which **will** result in severe personal injury or death. WARNING signifies a hazard which **could** result in personal injury or death. CAUTION is used to identify unsafe practices which **may** result in minor personal injury or product and property damage. NOTE is used to highlight suggestions which **will** result in enhanced installation, reliability, or operation.

**Table 1 – Package Contents**

| DESCRIPTION | QTY | PART NUMBER |
|---|---|---|
| Pressure Switch | 1 | HK06WC039 |
| Screw - #8 x 1/2 in. | 2 | AL56AU166 |
| Control Tube - 32 in. long | 1 | 48HG500597 |
| Wire Tie | 3 | HY76TB110 |
| Bracket (optional mount) | 1 | 48HG503699 |
| Screw - #10 x 5/8 | 2 | AL48AM217 |

## INSTALLATION

**NOTE**: The plugged filter indicator can monitor filter status (CLEAN/DIRTY). Follow the procedures below and perform the steps necessary to install the plugged filter indicator.

**⚠ WARNING**

**ELECTRICAL SHOCK HAZARD**

Failure to follow this warning could result in personal injury and/or death.

Prior to installation of this accessory, make sure all power is disconnected to the unit and install lock out tag.

**⚠ CAUTION**

**EQUIPMENT DAMAGE HAZARD**

Failure to follow this caution may result in damage to equipment.

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

1. Turn off power to the unit and install lock out tag per WARNING above.
2. Remove or open the filter access panel. Reserve for replacement later.
3. Attach one end of the control tube to the high pressure port on the pressure switch. The high pressure port is the one farthest from the wire terminals, closest to the mounting flange. See Fig. 1.
4. Secure the pressure switch to the upper most portion of the inner flange of the corner post with the #10 screws provided. See Fig. 2. Refer to alternate mounting for optional mounting with an economizer.
5. Route the control tube through the slot in the coil baffle next to the wiring harness. The end of the control tube should be loose in the indoor fan area. See Fig. 1.
6. Secure tubing using the wire ties so it will not move during operation. Be careful not to tighten too much as to pinch the tubing.
7. Wire the switch per below according to the control system involved.
   a. Electromechanical Units – Route and connect the digital indicator wires coming from the thermostat to the terminals on the pressure switch. Connect to the normally open or normally closed contacts per requirement. The normal status is a clean filter.
   b. ComfortLink Units – Attach loose brown and orange wires to the pressure switch. The loose wires are bundled with the unit wiring harness and have 3/16” female quick connects. Connect these across the common and normally open terminals on the pressure switch.
   c. Other DDC – Route wires through the unit to connect to the DDC controller or into the building to the management system. Refer to the specific literature for the DDC control or BMS for proper connections. The normal status of the switch is a clean filter.
8. Return power to the unit.

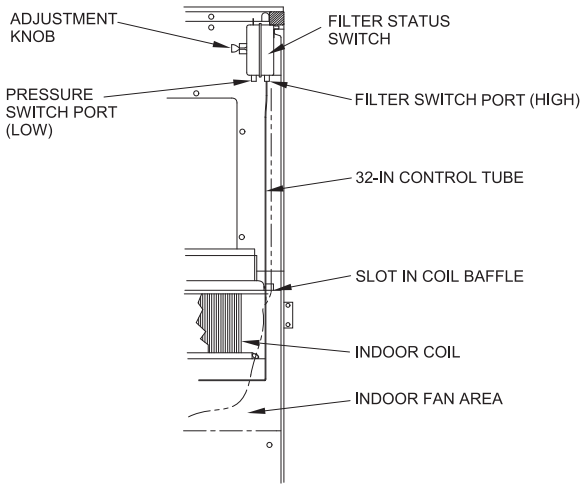


**Fig. 1 – Filter Status Switch Installation (Top View of Typical Rooftop Unit Shown)**

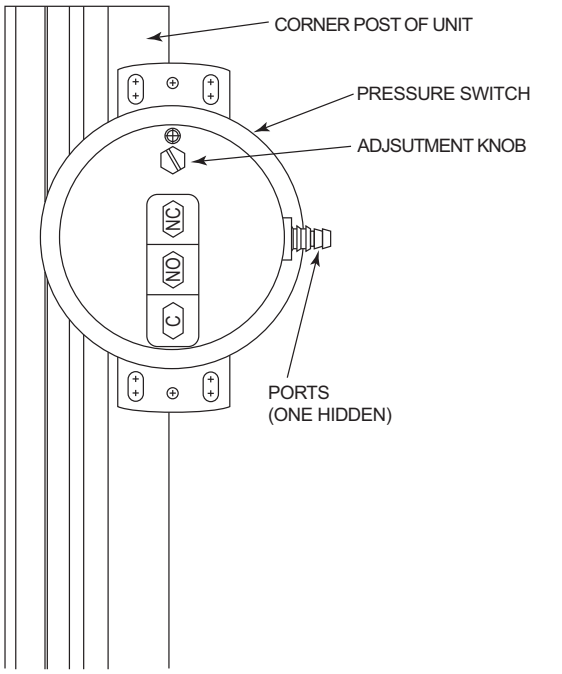


**Fig. 2 – Mounting Filter Status Switch**

## Alternate Mounting

On ComfortLink units with an economizer, the ECB assembly might not allow mounting of switch to the corner post. Instead the included mounting bracket can be used to secure the switch to the ECB assembly. See Fig. 3. Mount the bracket to the ECB assembly with the #10 screws through the inside of the ECB assembly engaging the bracket. Then Mount the switch to the bracket with the # 8 screws.

# CONFIGURATION

Typically the thermostat, DDC, or BMS must be configured when wiring a filter status switch to it. Refer to the specific literature for instructions on this configuration. For ComfortLink units see below and the controls manual for details on configuring the switch.

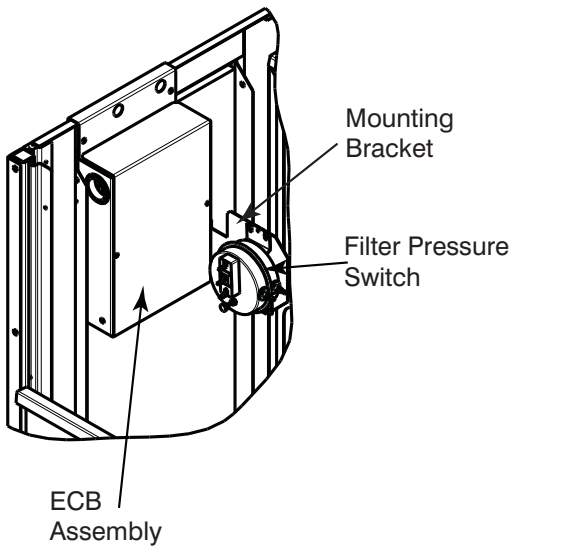


**Fig. 3 – Alternate ComfortLink Mounting**

1. The control system must be configured to use the Plugged Filter Indicator. A password may be required to edit the configurations, depending on the previous settings configured in the unit. Default password is “1111”.
2. To configure the control use the arrow keys on the Scrolling Marquee display 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 shows “UNIT”, and press ENTER. Use the arrow keys to scroll down until the display shows “FL.SW”, and press the ENTER key. At the Filter Switch (FL.SW) setting (default is “0” which means no indicator), press ENTER (“0” should be flashing). Use the arrow keys to change the configuration to “1” for a normally open indicator switch, and press ENTER. Using a configuration of “2” (normally closed indicator switch) is not recommended for this application.
3. Configuration of the plugged filter indicator is now complete. Pressing the ESCAPE key several times will return the display to the auto scroll setting.
4. Consult the Controls and Troubleshooting Guide for complete instructions on using the ComfortLink control system.
5. Close and secure all access doors.

## Setpoint Adjustment

To properly set the setpoint on the plugged filter indicator, run the unit’s indoor fan at the highest application speed. The unit return air filters must be clean or new. Using a flat head screwdriver, rotate the adjustment screw until the pressure switch trips. Rotate the adjustment screw in the same direction another ¼ turn.

# OPERATION

The plugged filter indicator will determine when the filters become dirty depending on the differential pressure across the filters. When the pressure drop exceeds the set point on the switch, an alarm will be generated, indicating a dirty filter. The alarm can be accessed either at the unit display or over the Thermostat or Building Network if installed.

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Edition Date: 06/12

**Catalog No: IIK–CRSTAT02–01**

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Replaces: 48/50H,P–5SI