48/50HG014-028, 48/50PG03-28 Single-Package Rooftop Units Fan Status Switch Accessory

Installation and Operating Instructions

Part Number — CRSTATUS003B00

IMPORTANT: There are two different design revision 48/50HG units currently being produced. Because of these differences, there are two different versions of this accessory. This accessory literature covers accessories manufactured for units with design revision 1. Design revision 0 units are not covered in this accessory book.

To determine the design revision, refer to the full unit model number. See Fig. 1 for an example of an HG model number. The design revision number in the model number nomenclature is located in position 13.

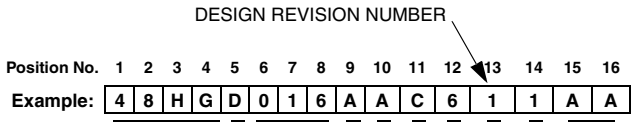

Fig. 1 — Model Number Chart

PACKAGE CONTENTS

DESCRIPTION	QTY	PART NUMBER
Switch	1	HK06WC027
Screw — 10-16 x 1/2 in.	2	AL56AU216
Control Tube	1	50HJ500301
Screw — 6-20 x 1/2 in.	2	AL56AU126
Pick-up Tube	1	EV83XZ150

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.

Untrained personnel can perform the basic maintenance functions of replacing filters. All other operations should be performed by trained service personnel. When working on air-conditioning equipment, observe precautions in the literature, tags and labels attached to the unit, and other safety precautions that may apply.

INSTALLATION

NOTE: The fan status switch can be installed to monitor indoor fan status (ON/OFF). Follow the procedures below and perform the steps necessary to install the fan status switch.

⚠ WARNING

Prior to installation of this accessory, make sure all power is disconnected to the unit and locked out. Failure to disconnect power supply prior to servicing may result in serious injury.

⚠ CAUTION

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

1. Turn off power to the unit.
2. Open the blower access door on the unit.
3. Mount the switch on the fan housing in the fan section as shown in Fig. 1, using the 10-16 screws provided.

   NOTE: To ensure proper operation of the switch, the switch must be installed vertically with the pneumatic ports pointed down.
4. Mount the pick-up tube to the fan housing using the 6-20 screws provided.

   NOTE: The arrow of the pick-up tube should point down as shown in Fig. 1.
5. Connect the control tube to the higher-pressure port (marked “H”) of the pick-up tube installed in Step 4.
6. The wires for the switch are located near the fan status switch. Connect the gray wire (FS-1) to Terminal 1 and the black wire (FS-3) to Terminal 3 (normally open).
7. Restore power to unit.

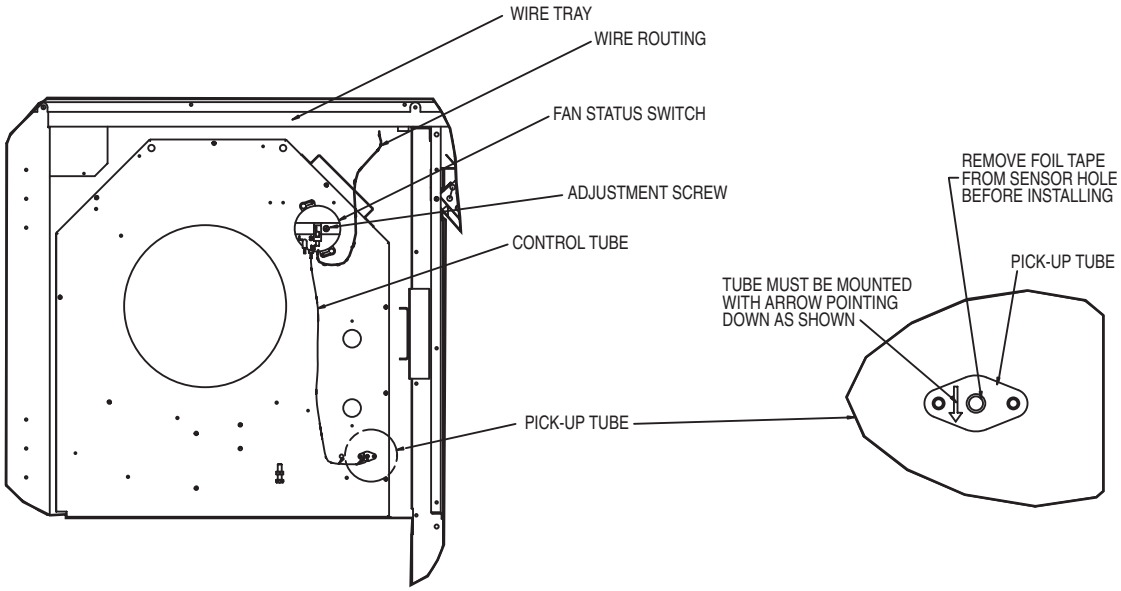

Fig. 1 — Fan Switch Location

CONFIGURATION

Units with *Comfort*Link™ Control

1. The control system must be configured to use the fan switch. A password may be required to edit the configurations, depending on the previous settings configured in the unit. Default password is "1111."
2. There are two configurations used to control the Fan Status feature. The first configuration is "Fatal IDF." Fatal IDF determines if the unit will shut down upon activation of the fan failure switch. The default value is "YES," indicating that the unit WILL shut down should the fan switch activate. To de-activate this feature, configure the unit to "NO."
3. To configure the *Comfort*Link control, use the arrow keys on the Scrolling Marquee display to scroll the red LED on the display to the "UNIT" position and press ENTER. If it is desired to change the setting of "IDF.F" (Fatal IDF), use the arrow keys to scroll down until the display shows "IDF.F," and press ENTER key. At the Fatal IDF (IDF.F) setting (default is YES), press ENTER (YES should be flashing). Use the arrow keys to change the setting and press ENTER again. Now press ESCAPE to save the setting.
4. The second configuration is required to select the switch type. The switch type can be set to either normally open (1) or normally closed (2). The default setting for "FN.SW" is (0), or no switch. For use of this accessory, the setting should be changed to "1."
5. To configure the switch type, use the arrow keys to scroll down to "FN.SW," and press ENTER. At the Fan Switch (FN.SW) setting (default is "0" which means no switch), press ENTER ("0" should be flashing). Use the arrow keys to change the configuration to "1" for a normally open switch, and press ENTER. Using a configuration of "2" (normally closed switch) is not recommended for this application.
6. Configuration of the fan switch is now complete. Pressing the ESCAPE key several times will return the display to the auto scroll setting.
7. Consult the Controls and Troubleshooting Guide for complete instructions on using the *Comfort*Link control system.
8. To configure switch, mechanically place the unit in Fan Only mode. Using a flat head screwdriver, rotate the adjustment screw until the pressure switch closes. Rotate the adjustment screw in the same direction another 2 full turns.
9. Close and secure all access doors.

Units with Mechanical Control — Configure the field-supplied device that the fan status switch accessory will be used with.

OPERATION

Units with *Comfort*Link Control — The indoor fan operation status can be observed at the unit display, or by using a Carrier Comfort Network® device (if installed).

Units with Mechanical Control — The gold flash contacts at the fan status switch are accessible via the terminal strips located in the control box. See unit schematic for wiring. The ratings for the contacts are:

- 278 va pilot duty at 24 vac
- 300 va pilot duty at 120 vac to 277 vac
- 15 amps resistive to 277 vac
- 10 mA at 5 vdc — Gold Flash