

INSTALLER'S GUIDE

18-GJ17D1-2

ALL phases of this installation must comply with
NATIONAL, STATE AND LOCAL CODES

Internal Condensate Switch Kit:

**BAYICKIT01A - For 1-1/2 - 5 ton units
equipped with an Electronic Expansion
Valve (EEV).**

Fits Models:

Hyperion™ and
ForeFront™
Air Handlers

IMPORTANT—This Document is customer property and is to remain with this unit. Please return to service information pack upon completion of work.

Section 1. Safety Information

⚠ WARNING

SAFETY HAZARD! This information is intended for use by individuals possessing adequate backgrounds of electrical and mechanical experience. Any attempt to repair a central air conditioning product may result in personal injury and/or property damage. The manufacturer or seller cannot be responsible for the interpretation of this information, nor can it assume any liability in connection with its use.

IMPORTANT—The Internal Condensate Switch is recommended for Upflow and Downflow applications. It is not recommended for Horizontal applications as the coil must be removed for servicing, seasonal cleaning and maintenance.

Section 2. General Information

Kit Contents

Item	Qty	Description
1	1	Condensate Switch
2	1	Sleeve - Heat Shrink
3	1	Installer's Guide

- The internal Condensate Switch is a normally open set of contacts that mounts directly into the Upflow or Downflow condensate pan.
- A rising level of condensate in the drain pan will cause the switch to close and generate an 11 flash fault code on the EEV Control Board.
- The control board will open the YO circuit after the switch has been closed for 100 seconds. After 100 seconds, if wired correctly using the YO terminal in the field wiring, the OD unit will shut off. The unit will resume operation after the water level drops and the switch opens.
- YI and YO connections must be made as shown for the internally mounted condensate switch to work properly. Please see field wiring diagram in the Air Handler Installer Guide. Once the condensate level

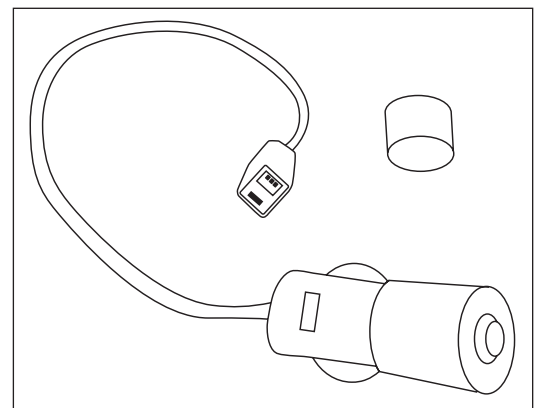
⚠ WARNING

LIVE ELECTRICAL COMPONENTS! During installation, testing, servicing, and troubleshooting of this product, it may be necessary to work with live electrical components. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.

⚠ CAUTION

If air handler is installed above a finished ceiling, a secondary drain pan is recommended.

IMPORTANT—Seasonal cleaning and maintenance is recommended for reliable operation of Switch.

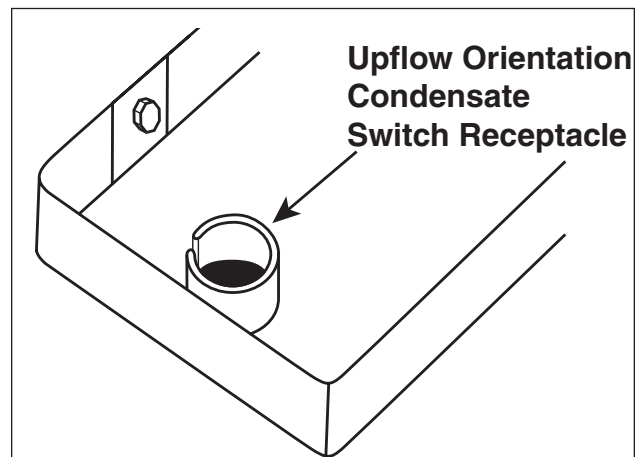
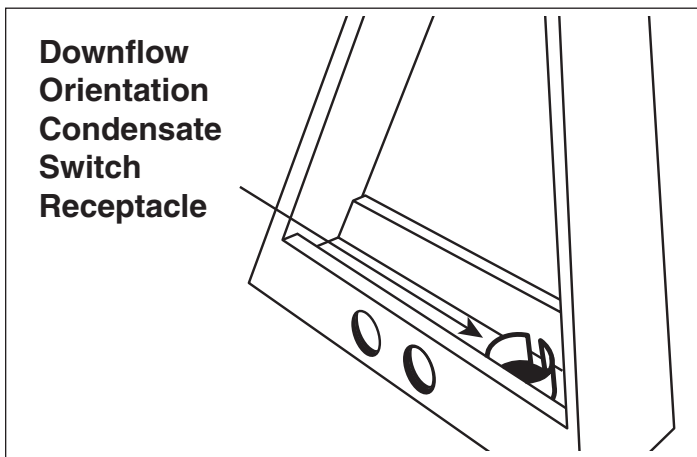
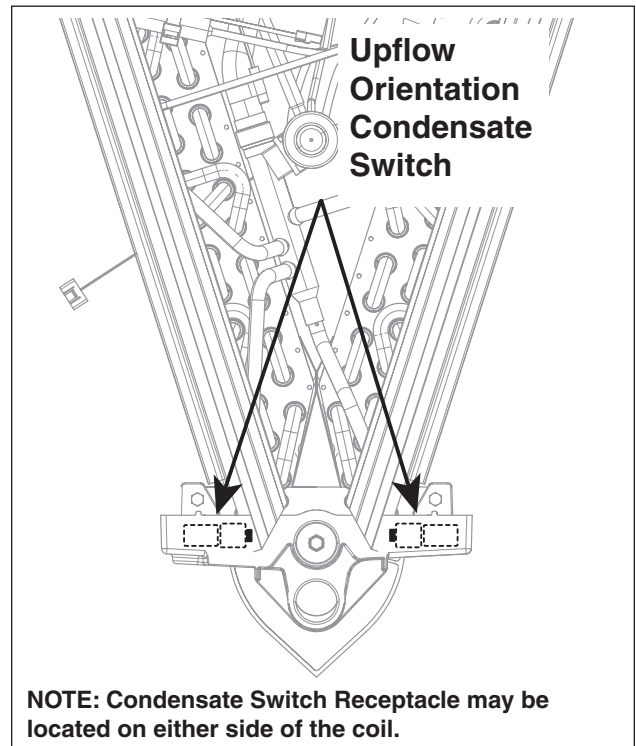
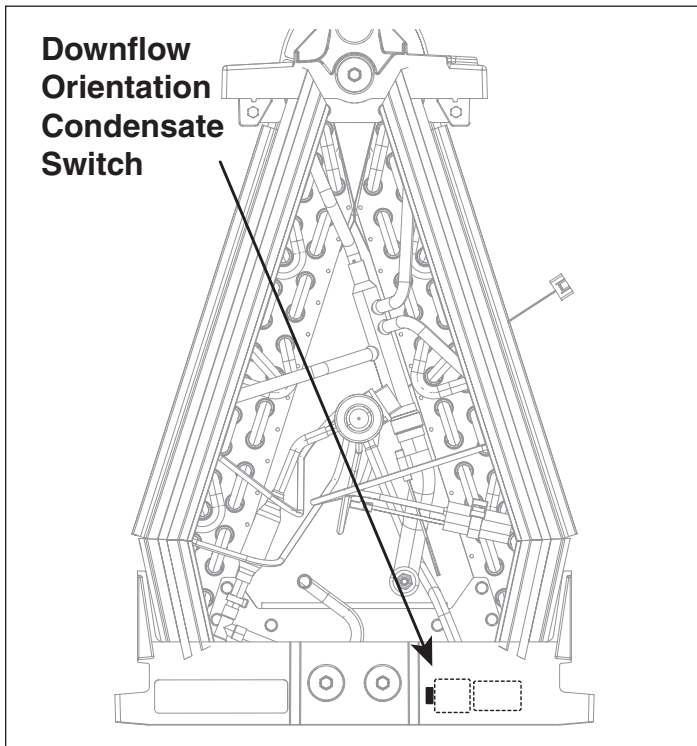


- drops and the switch opens, the control board will allow the OD unit to resume operation.
- Air handler must be level to insure proper operation of the switch.

Section 3. Install Internal Condensate Switch

STEP 1 - Remove the coil panel to access the internal condensate drain connections by turning the Phillips head door fasteners, rotating the door away from the cabinet, and removing.

STEP 2 - Locate the condensate switch receptacle for the application of the air handler (Upflow or Downflow installation).



STEP 3 - Condensate switch installation.

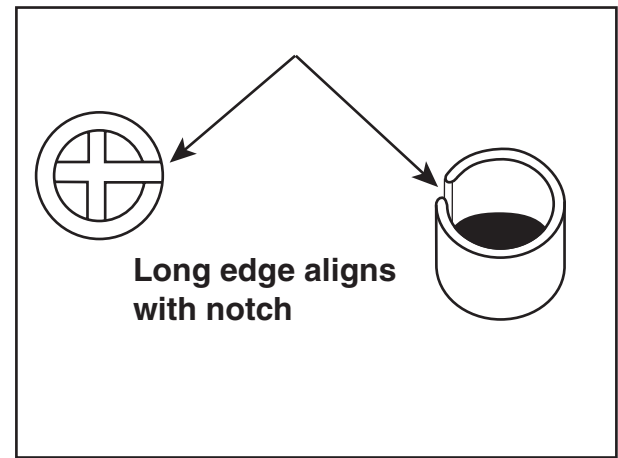
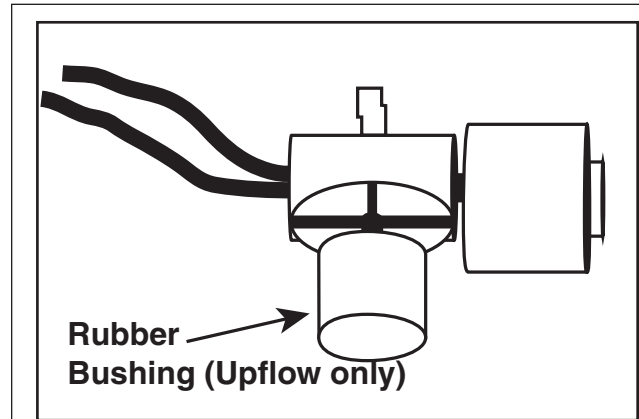
Upflow applications

1. Slide the rubber bushing over the condensate switch as shown.
2. Slide the switch into the condensate switch receptacle with the long edge lining up with the receptacle notch. Ensure a snug fit.

Downflow applications

1. Slide the switch into the condensate switch receptacle with the long edge lining up with the receptacle notch. Ensure a snug fit.

NOTE: The bushing is not required for Downflow applications.



STEP 4 - Wiring connections.

Upflow applications

The air handler is pre-wired to support the Internal Condensate Switch. Simply plug the wiring harness into the 2-wire plug (extending from side of cabinet) on the left side of the cabinet (when in Upflow position). This wiring harness connects to the J6 terminal connection on the EVC.

Downflow applications

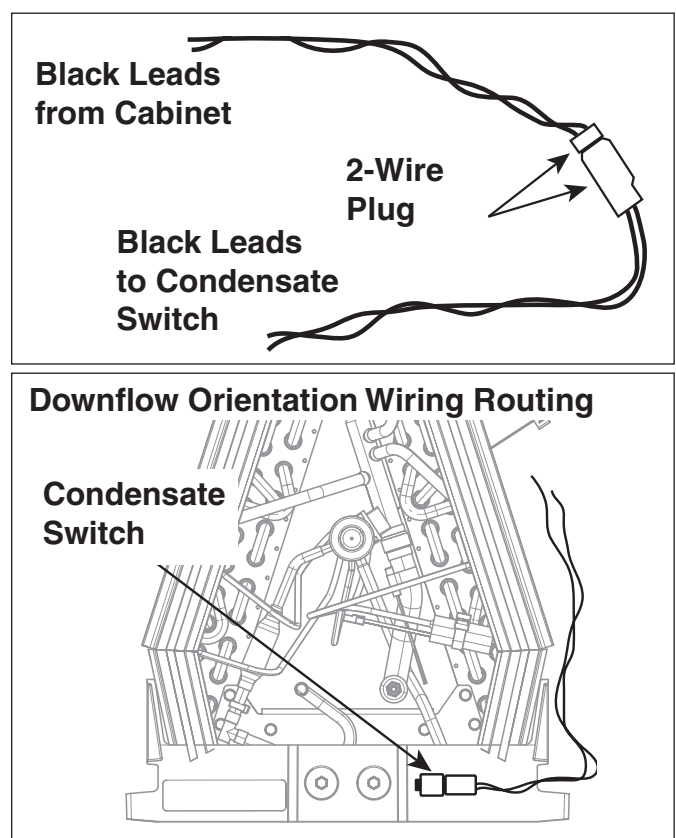
Route the 2 black leads from the Internal Condensate Switch along the bottom inside of the Drain Pan underneath the Coil Flange and up the right side of the Coil Assembly. Plug the wiring harness from the Condensate Switch into the 2-wire plug (extending from side of cabinet). This wiring harness connects to the J6 terminal connection on the EVC.

Black Leads from Cabinet

2-Wire Plug
Black Leads to Condensate Switch

Downflow Orientation Wiring Routing

Condensate Switch

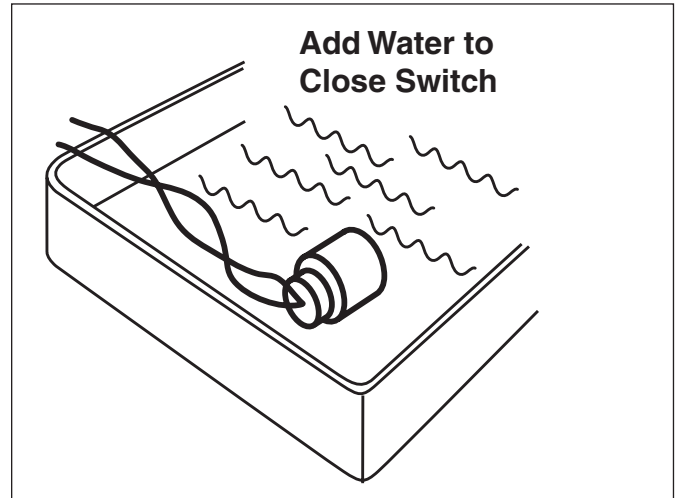


STEP 5 - Confirm operation.

1. Block primary condensate line.
2. Turn on system in cooling mode and add enough water in drain pan to close switch.
3. The red Fault LED on the EVC should blink 11 times once switch closes
4. After 100 seconds the OD unit will shut down.

STEP 6 - Complete installation

1. Unblock primary condensate line and test for proper condensate drainage through the primary line.



EVC Fault LED	Description
OFF	Standby
1	Stepper Motor coil has an open circuit or intermittent short
2	Control has detected an internal failure (Replace EEV control, EVC)
3	Evaporator Temperature Sensor (ET) input out of range (Verify resistance, 5VDC output from control) (1)
4	Gas Temperature Sensor (GT) input out of range (Verify resistance, 5VDC output from control) (1)
5	Stepper Motor Coil is shorted (2)
6	Valve is not responding to a change in position. (Possible stuck valve)
7	High superheat (Low charge or restriction)
10	Low superheat (Check airflow, possible stuck valve) (3)
11	Condensate drain switch activated for 100 seconds (Check condensate switch and drain) (2)
13	Indoor frost protection activated (Check refrigerant charge and airflow) (2)
14	Internal communication fault (All operation is terminated) (Cycle power & check wire terminations)
15	Configuration fault (All operation is terminated) (Cycle power & check if PM error is present)
16	Outdoor status fault (All operation is terminated)
NOTES:	(1) EEV will try to go to a safe position, cooling attempt allowed (2) K1 relay opens on EVC, Yo disabled (3) Cooling attempt allowed, 5 consecutive Y calls with same condition disables Yc

STEP 7 - Replace the coil panel by inserting the door into the bottom channel and rotating into place. Turn the Phillips head door fasteners to secure the door in place.

STEP 8 - Check the box on the unit nameplate signifying that the unit has the internal condensate switch installed.

