Installation Instructions

Clogged Filter Switch

Model Number:	Used With:
BAYDFPS014*	Precedent™ 3 to 10 Tons with ReliaTel™ control and standard, MERV 7, or MERV 8 filters
BAYDFPS003*	Precedent™ 3 to 10 Tons with ReliaTel™ control and MERV 13 filters

⚠ SAFETY WARNING

Only qualified personnel should install and service the equipment. The installation, starting up, and servicing of heating, ventilating, and air-conditioning equipment can be hazardous and requires specific knowledge and training. Improperly installed, adjusted or altered equipment by an unqualified person could result in death or serious injury. When working on the equipment, observe all precautions in the literature and on the tags, stickers, and labels that are attached to the equipment.

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Warnings, Cautions, and Notices

Read this manual thoroughly before operating or servicing this unit. Safety advisories appear throughout this manual as required. Your personal safety and the proper operation of this machine depend upon the strict observance of these precautions.

The three types of advisories are defined as follows:

⚠ WARNING	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
⚠ CAUTION	Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury. It could also be used to alert against unsafe practices.
NOTICE	Indicates a situation that could result in equipment or property-damage only accidents.

Important Environmental Concerns

Scientific research has shown that certain man-made chemicals can affect the earth's naturally occurring stratospheric ozone layer when released to the atmosphere. In particular, several of the identified chemicals that may affect the ozone layer are refrigerants that contain Chlorine, Fluorine and Carbon (CFCs) and those containing Hydrogen, Chlorine, Fluorine and Carbon (HCFCs). Not all refrigerants containing these compounds have the same potential impact to the environment. Trane advocates the responsible handling of all refrigerants-including industry replacements for CFCs such as HCFCs and HFCs.

Important Responsible Refrigerant Practices

Trane believes that responsible refrigerant practices are important to the environment, our customers, and the air conditioning industry. All technicians who handle refrigerants must be certified according to local rules. For the USA, the Federal Clean Air Act (Section 608) sets forth the requirements for handling, reclaiming, recovering and recycling of certain refrigerants and the equipment that is used in these service procedures. In addition, some states or municipalities may have additional requirements that must also be adhered to for responsible management of refrigerants. Know the applicable laws and follow them.
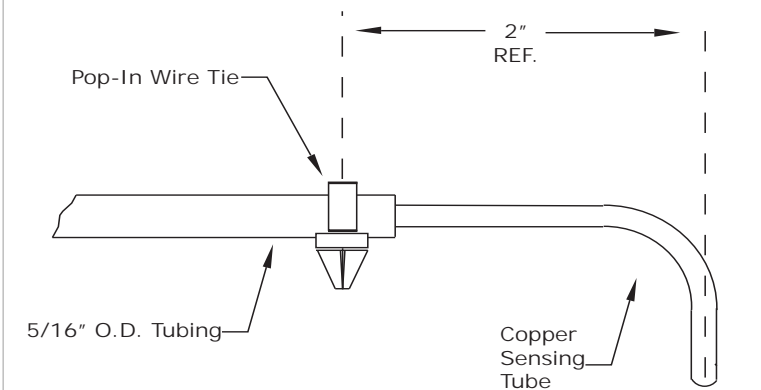
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⚠ WARNING

Proper Field Wiring and Grounding Required!
Failure to follow code could result in death or serious injury. All field wiring MUST be performed by qualified personnel. Improperly installed and grounded field wiring poses FIRE and ELECTROCUTION hazards. To avoid these hazards, you MUST follow requirements for field wiring installation and grounding as described in NEC and your local/state electrical codes.

⚠ WARNING

Personal Protective Equipment Required!
Installing/servicing this unit could result in exposure to electrical, mechanical and chemical hazards. Before installing/servicing this unit, technicians MUST put on all Personal Protective Equipment (PPE) recommended for the work being undertaken. ALWAYS refer to appropriate SDS sheets and OSHA guidelines for proper PPE. When working with or around hazardous chemicals, ALWAYS refer to the appropriate SDS sheets and OSHA guidelines for information on allowable personal exposure levels, proper respiratory protection and handling recommendations. If there is a risk of arc or flash, technicians MUST put on all necessary Personal Protective Equipment (PPE) in accordance with NFPA70E for arc/flash protection PRIOR to servicing the unit. Failure to follow recommendations could result in death or serious injury.

⚠ WARNING

Follow EHS Policies!
Failure to follow instructions below could result in death or serious injury.

- **All Trane personnel must follow the company's Environmental, Health and Safety (EHS) policies when performing work such as hot work, electrical, fall protection, lockout/tagout, refrigerant handling, etc. Where local regulations are more stringent than these policies, those regulations supersede these policies.**
- **Non-Trane personnel should always follow local regulations.**
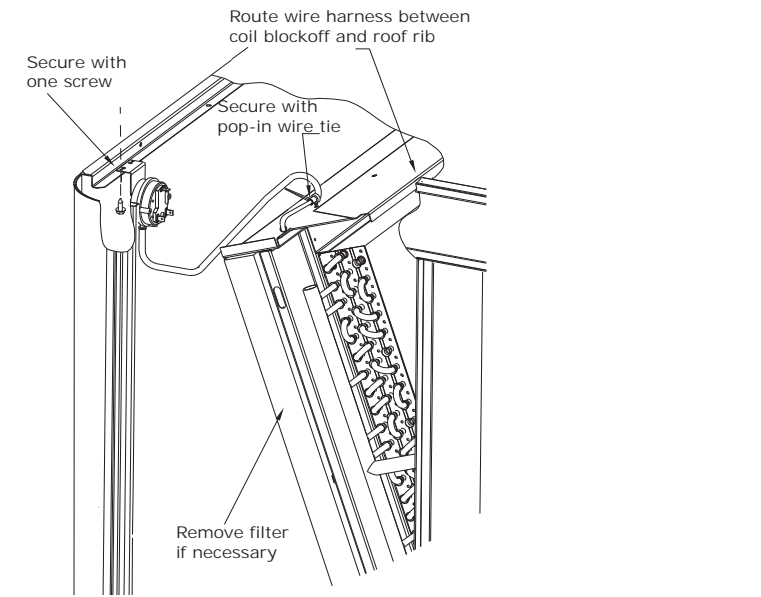
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General

Note: *An options board (BAYABRD001*) must be installed in the unit for the this accessory to operate.*

This accessory kit detects static pressure differentials across the filters to indicate a clogged or dirty filter condition. When it detects such a filter problem, it causes the "Service" light LED on the zone sensor to glow steady, but not shut down unit operation.

Note: *BAYDFPS003* may be used with standard or MERV7 filters. BAYDFPS014* may be used with standard or MERV13 filters.*

Inspection

1. Unpack all components of the BAYDFPS003* or BAYDFPS014* kit.
2. Check carefully for any shipping damage. If any damage is found it must be reported immediately and a claim made against the transportation company.

Parts List

- 1 - Pressure switch
- 1 - 90° Copper sensing tube
- 1 - Length of 5/16" (7.94 mm) OD flexible tubing
- 1 - Sheet metal screw
- 1 - Wire Tie, pop-in
- 5 - Wire Tie
- 1 - Wire Harness

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Installation

Settings

The pressure switch is factory preset at 0.45" WC (1.12 mbar) for BAYDFPS003* and 0.75" WC (1.87 mbar) for BAYDFPS014*.

After a failure situation is detected and corrected, reset the zone sensor service light. This is done by either setting the mode switch to "OFF" for 5 seconds, then back to the desired mode or by cycling the power "OFF" then "ON" at the unit disconnect switch.

⚠ WARNING

Rotating Components!
Failure to disconnect power before servicing could result in rotating components cutting and slashing technician which could result in death or serious injury. Disconnect all electric power, including remote disconnects before servicing. Follow proper lockout/tagout procedures to ensure the power can not be inadvertently energized.

1. Insert one end of the 90° copper sensing tube into one end of the 5/16"(7.94 mm) OD flexible tubing and secure with pop-in wire tie. See Figure 1.

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Figure 1.   Copper sensing tube

2. Remove return air/filter access panel and fan access panels. See Figure 2

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Figure 2.   Remove access panels

3. Mount the pressure switch (with pressure fitting pointed downward) on the angle bracket in the top left portion of the return air compartment using the screw provided. See Figure 2.

Note: *Switch must be located in return air compartment in order to measure air pressure entering the filter.*

4. Install the other end of the 90° copper sensing tube into the pre-drilled hole in the top coil block off to measure air pressure leaving the filter. Remove filters if necessary. See Figure 2.

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5. Connect the other end of the 5/16" (7.94 mm) OD flexible tubing to the pressure switch. Route the tubing such that it does not interfere with filter removal.

Wire Connection - Clogged Filter Switch

1. The wire harness provided in the kit is made up of wires 142A (Violet) and 143A (Red).
2. Connect wire 142A (Violet) to the "NORM. OPEN" terminal on the pressure switch.
3. Connect 143A (Red) to the "COMMON" terminal on the pressure switch.

Note: *Remove wire ties from wire harness as necessary to minimize damage to insulation as Step 4 is performed.*

4. Route the wire harness plug P7 between the roof and coil block off in line with one of the roof ribs. See Figure 2.
5. Replace any filters that were removed in step 4 of installation instructions.
6. Pull the wire harness into the supply fan compartment.
7. Route the wire harness across the top of the supply fan housing and to the condenser partition panel. For plenum fan units, Y/TSC120F(3/4/W),Y/THC074F-120F, T/YZC072-120, D/WHC074-120H & WSC120H(3/4/W) models, route the wire harness through panel seal into the control box above the heat section. Secure the wire harness to the existing harness with wire ties.

Wire Connection - Options Board

1. The options board is generally located in the control box. If it is not in the control box, it will be mounted to a panel in the supply fan section.
2. Route P7 (wires 142A and 143A) and connect to J7-3 and J7-4 on options board wire connection - clogged filter switch. Secure wires to existing harness. See Figure 3 for pin locations.

Figure 3.   Options board
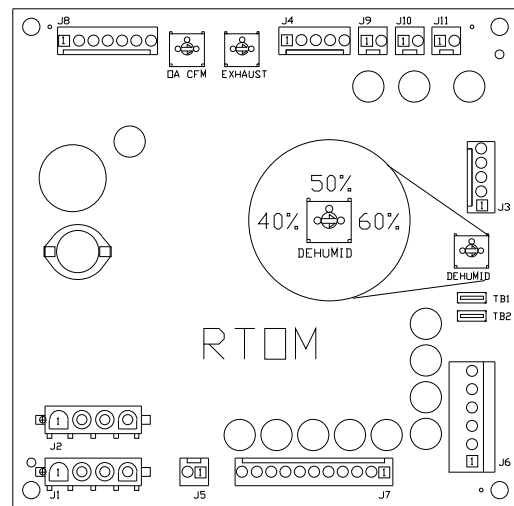
Unit Close up

Replace the two access panels that were removed in Step 2 of the installation instructions.