

Installation Instructions

Fan Failure Switch

Model Number: BAYDFPS004* **Used With:** Precedent™ 3 to 10 Ton with ReliaTel™ control

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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1 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 equipment or property-damage only accidents.
- 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.

2 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.

3 Model Number Description

All products are identified by a multiple-character model number that precisely identifies a particular type of unit. Its use will enable the owner/operator, installing contractors, and service engineers to define the operation, specific components, and other options for any specific unit. When ordering replacement parts or requesting service, be sure to refer to the specific model number and serial number printed on the unit nameplate.

General

Note: An options board (BAYABRD001*) must be installed in the unit for this accessory to operate. This accessory kit detects the lack of static pressure differential. If the indoor fan should fail, it shuts down unit operation and causes the "service" light LED on the zone sensor to flash. If air flow through the unit is not proven by the differential pressure switch with factory set point 0.07 "w.c.(677 Pa) within 40 seconds nominally, the RTRM will shut off all mechanical operations, lock the system out, send a diagnostic to ICS, and the SERVICE LED will flash. The system will remain locked out until a reset is initiated either manually or through ICS.

Inspection

- Unpack all components of the BAYDFPS004* kit.
- 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 - Wiring harness
 - 3 - Sheet metal screws
 - 1 - Tubing clamp
 - 2 - Wire Ties

4 Installation

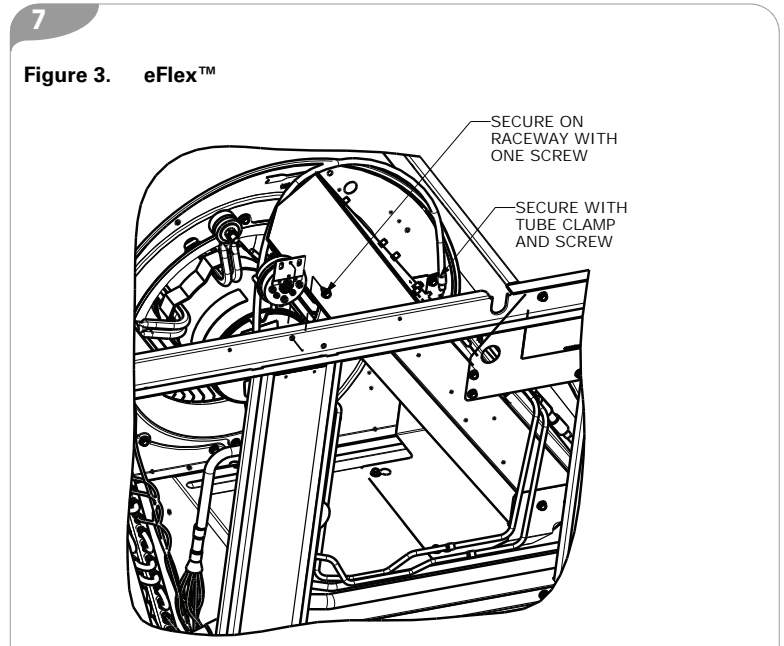
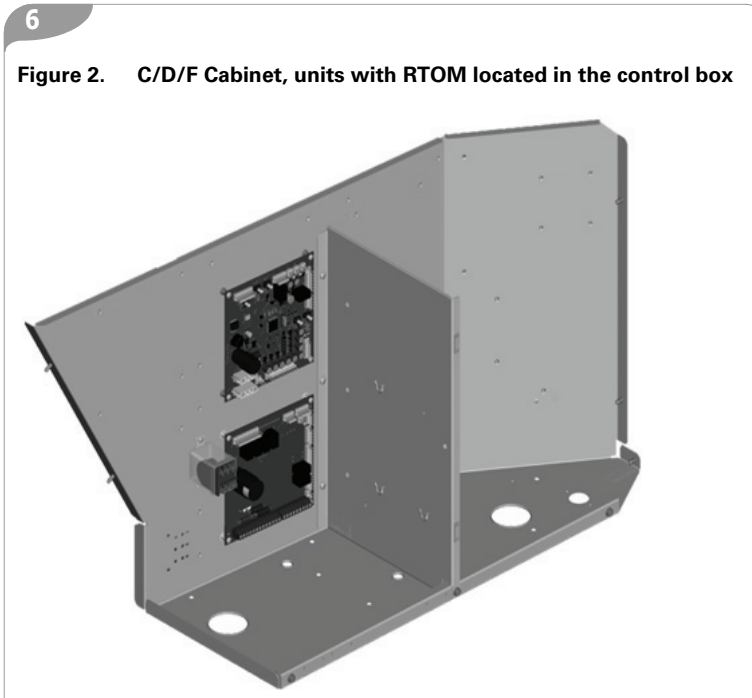
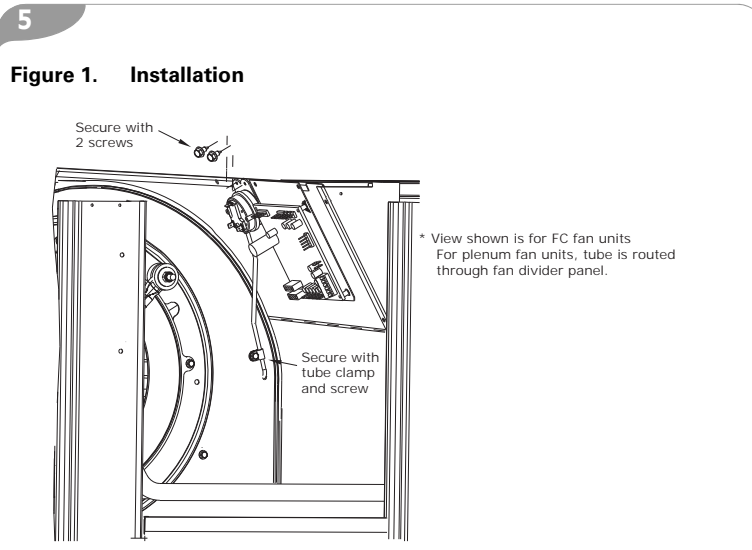
Settings

The pressure switch is factory preset at 0.20" WC.

WARNING

Hazardous Voltage w/Capacitors!
Failure to disconnect power and discharge capacitors before servicing could result in death or serious injury. Disconnect all electric power, including remote disconnects and discharge all motor start/run capacitors before servicing. Follow proper lockout/tagout procedures to ensure the power cannot be inadvertently energized. Verify with an appropriate voltmeter that all capacitors have discharged.
For additional information regarding the safe discharge of capacitors, see PROD-SVB06A-EN

- Units with Forward Curve Fan**
- Remove the supply fan access panel.
 - Mount the pressure switch with two screws at the top of the condenser partition flange. Pressure fitting is to be pointed downward. See Figure 1.

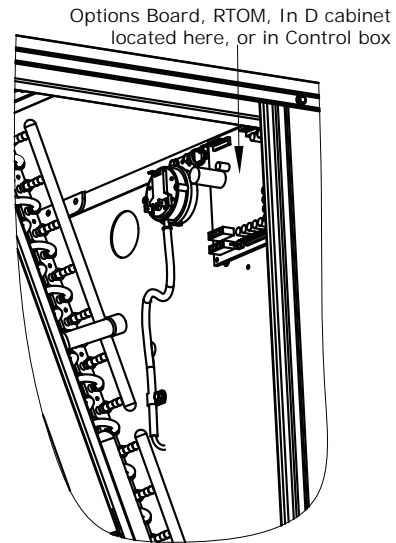


- Insert the long end of the 90° copper sensing tube into one end of the 5/16" (7.94 mm) OD flexible tubing.
 - Insert the other end of the 90° copper sensing tube into the access hole in the fan housing side and secure with a tube clamp and screw. See Figure 1.
- Connect the other end of the 5/16" (7.94mm) OD flexible tubing to the fitting on the pressure switch.

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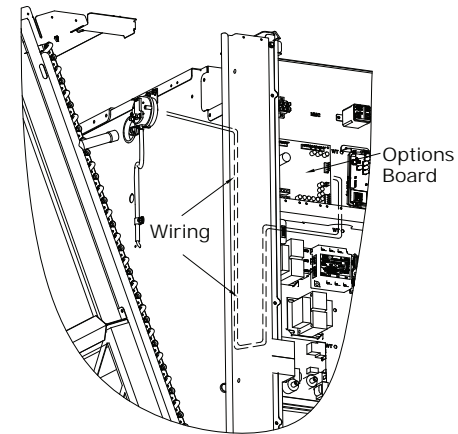
Units with Plenum Fan

Figure 4. D cabinet (digit 30 = D)



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Figure 5. E cabinet (digit 30 = E)



1. Remove the filter access panel.
2. Mount the pressure switch with two screws at the top of the fan divider flange. Pressure fitting is to be pointed downward. See [Figure 1](#).
3. Insert the long end of the 90° copper sensing tube into one end of the 5/16" (7.94 mm) OD flexible tubing.
4. Insert the other end of the 90° copper sensing tube into the access hole in the fan divider panel and secure with a tube clamp and screw. See [Figure 1](#).
5. Connect the other end of the 5/16" (7.94 mm) OD flexible tubing to the fitting on the pressure switch.

Wire Connection - Fan Fail Switch

A wiring harness is provided in the kit.

1. Connect wire 140A (Violet) to the "NORM. CLOSE" terminal on the pressure switch.
Connect 141A (Red) to the "COMMON" terminal on the pressure switch.

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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. Locate plug P7 (wires 140A and 141A) and connect to J7-5 and J7-6 on options board. See [Figure 6](#) for pin locations.

Figure 6. Options board

