

Installation Instructions

Evaporator Defrost Control

Foundation™ Packaged Rooftop Units 15 to 25 Tons

Model Number: BAYLOAM310*
Used With: EAC180-300
GA*180-300

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 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.

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/national electrical codes.

WARNING

Personal Protective Equipment (PPE) Required!
Failure to wear proper PPE for the job being undertaken could result in death or serious injury. Technicians, in order to protect themselves from potential electrical, mechanical, and chemical hazards, MUST follow precautions in this manual and on the tags, stickers, and labels, as well as the instructions below:

- Before installing/servicing this unit, technicians MUST put on all PPE required for the work being undertaken (Examples; cut resistant gloves/sleeves, butyl gloves, safety glasses, hard hat/bump cap, fall protection, electrical PPE and arc flash clothing). ALWAYS refer to appropriate Safety Data Sheets (SDS) and OSHA guidelines for proper PPE.
- When working with or around hazardous chemicals, ALWAYS refer to the appropriate SDS and OSHA/GHS (Global Harmonized System of Classification and Labeling of Chemicals) guidelines for information on allowable personal exposure levels, proper respiratory protection and handling instructions.
- If there is a risk of energized electrical contact, arc, or flash, technicians MUST put on all PPE in accordance with OSHA, NFPA 70E, or other country-specific requirements for arc flash protection, PRIOR to servicing the unit. NEVER PERFORM ANY SWITCHING, DISCONNECTING, OR VOLTAGE TESTING WITHOUT PROPER ELECTRICAL PPE AND ARC FLASH CLOTHING. ENSURE ELECTRICAL METERS AND EQUIPMENT ARE PROPERLY RATED FOR INTENDED VOLTAGE.

3 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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4 General Information

The evaporator defrost control (EDC or Froststat™) is installed in the evaporator (Indoor) coil face area. Its purpose is to cycle the compressor when the evaporator frosts under low outdoor ambient cooling conditions or low airflow applications. The EDC indicates when the evaporator is 10°F (-12.2°C) or below. It resets at 60°F (15.6°C).

Inspection

Unpack all components of the BAYLOAM310* 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

Table 1. Parts list

Quantity	Description
1	Froststat™ Defrost Control
5	Wire Ties

5 Installation

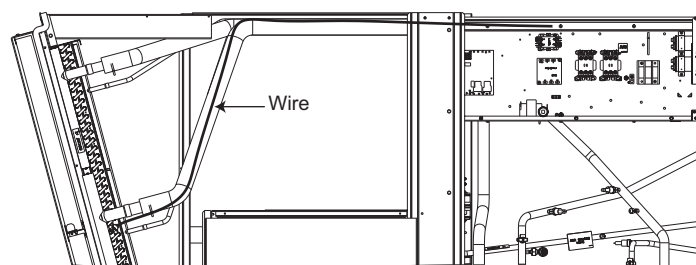
WARNING
Hazardous Voltage w/Capacitors!
Failure to disconnect power and discharge capacitors before servicing could result in death or serious injury. Disconnect all electric power, including remote disconnects and discharge all motor start/run capacitors before servicing. Follow proper lockout/tagout procedures to ensure the power cannot be inadvertently energized. For variable frequency drives or other energy storing components provided by Trane or others, refer to the appropriate manufacturer's literature for allowable waiting periods for discharge of capacitors. Verify with a CAT III or IV voltmeter rated per NFPA 70E that all capacitors have discharged.

1. Remove filter access panel, evaporator blower compartment access panel, heat compartment access panel and left center post.
2. Mount the Froststat Control on the u-bend of the evaporator coil. See Table 2 for u-bend location based on unit tonnage.
3. Route wires along the refrigeration tubing and into the control box. Refer to Figure 1.
4. Connect Froststat wires to wires W8 and 101T located inside the control box.
5. Re-install the left center post, heat compartment access panel, evaporator blower compartment panel, and filter access panel.

Table 2. U-bend location

60 Hz Units			50 Hz Units		
Unit Tonnage	U-Bend Location	Figure	Unit Tonnage	U-Bend Location	Figure
15	4th	2	15	18th	3
17.5	18th	3	17.5	25th	4
20-25	25th	4	20-22	25th	4

6 Figure 1. Route wires to control box



7 Figure 2. Froststat location - 15 tons/50Hz and 17.5 tons/60 Hz

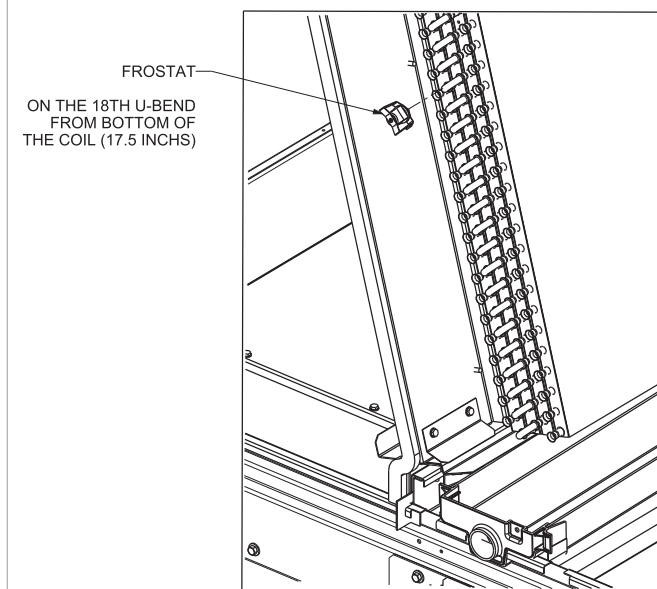


Figure 3. Froststat location - 17.5 to 22 tons/50Hz and 20 to 25 tons/60 Hz

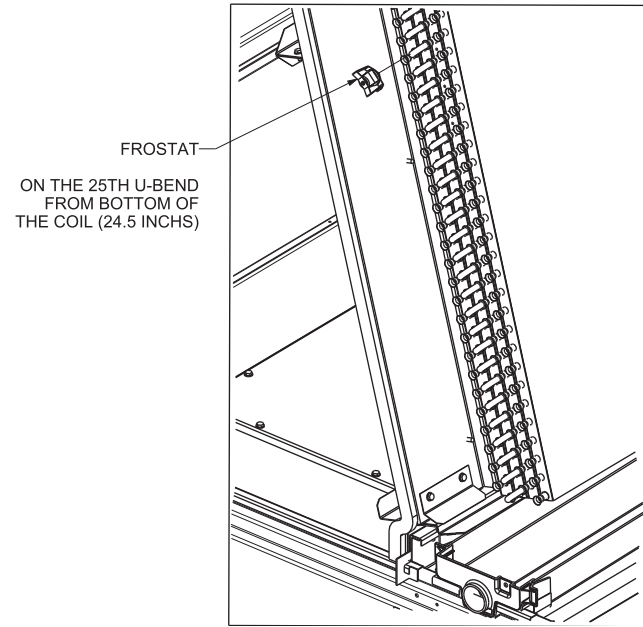


Figure 4. Froststat location - 15 tons - 60Hz units only

