Installation Instructions

Reference Enthalpy

Precedent™ Packaged Rooftop Units
3 to 25 Tons

Model Number:	**Used With:**
FIAENTH001*	3 to 25 tons with Symbio™ controls

⚠ 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.

September 2024 **ACC-SVN234C-EN**

Introduction

Read this manual thoroughly before operating or servicing this unit.

Warnings, Cautions, and Notices

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.

⚠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.**

⚠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.**

⚠WARNING

R-454B Flammable A2L Refrigerant!

Failure to use proper equipment or components as described below could result in equipment failure, and possibly fire, which could result in death, serious injury, or equipment damage.
The equipment described in this manual uses R-454B refrigerant which is flammable (A2L). Use ONLY R- 454B rated service equipment and components. For specific handling concerns with R-454B, contact your local representative.

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Trademarks

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Revision History

- Used with model number information updated on the front cover.
- Updated Installation chapter.

General Information

Inspection

1. Unpack all components of the kit.
2. Check carefully for shipping damage. If any damage is found, report it immediately, and file a claim against the transportation company.

Note: *If fresh air options module is not installed in the unit, it has to be purchased.*

Parts List

Table 1. Parts list

Qty	Description
1	Humidity sensor
1	Controls harness
2	Wire ties
1	Bushing
1	Rubber grommet
2	6-32 x 0.75 in. Screws

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. Verify with a CAT III or IV voltmeter rated per NFPA 70E that all capacitors have discharged.

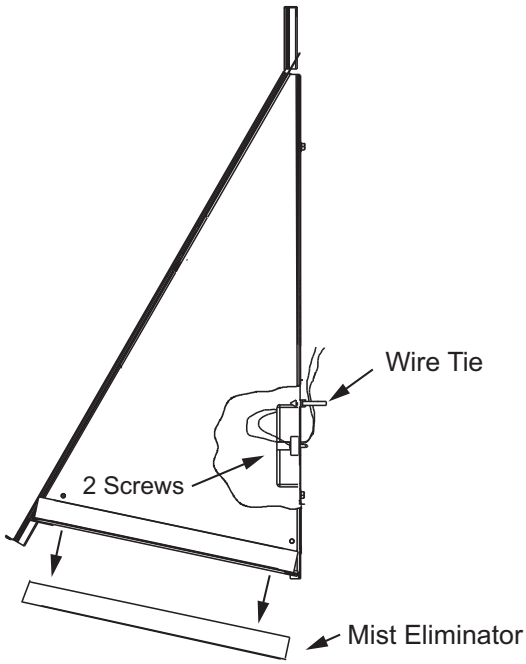
1. Remove filter access panel.
2. Remove one screw from the mist eliminator retaining angle and loosen the other screw.
3. Remove the mist eliminator.
4. Install humidity sensor with supplied screws. See figures below for sensor locations.

Note: *Be sure majority of the temperature sensor protrudes into the hood assembly.*

5. Install bushing into hole and route red and yellow wires to humidity sensor. Connect red wire to the positive (+) terminal and yellow wire to the negative (-) terminal of humidity sensor. Use supplied wire tie to secure harness near sensor.

Figure 1. Route red and yellow wire to humidity sensor

Figure 2. Secure sensor with screws



6. Route J9 (red connector) to the fresh air options module located in the return enclosure. See Figure 5, p. 6 for fresh air options module location, Figure 3 for connection and Figure 4, p. 6 for routing. See main unit schematic sheet 6 for electrical connections. After installation is complete, Symbio™ 700 UC unit configuration will need to be updated to reflected installed option.

Figure 3. Fresh air options module wire connection

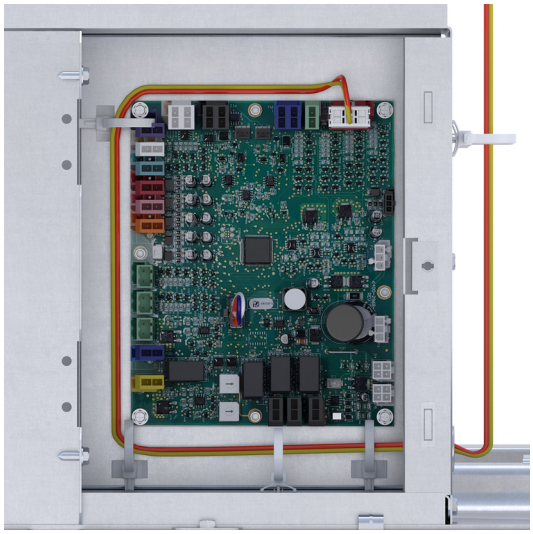
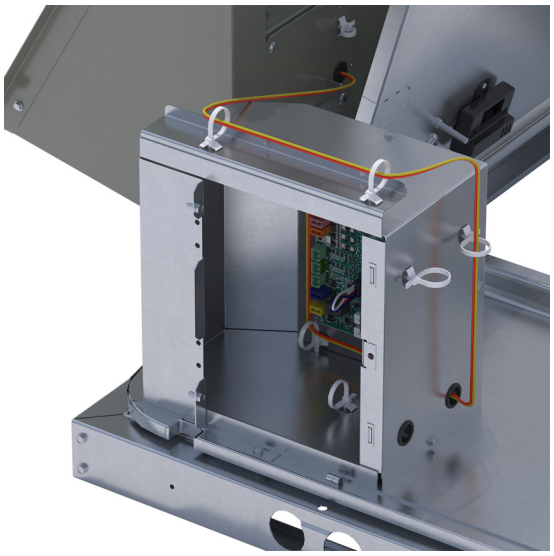


Figure 4. Wire routing to fresh air options module



7. Replace mist eliminator.
8. Replace mist eliminator retaining angle by sliding one slotted end of the retaining angle onto the loosened screw and replace the screw on the other end of the retaining angle.
9. Tighten both screws.
10. Replace filter access panel.

Figure 5. Fresh air options module location

Fresh air options
module access (A, B, and C cabinet)

Fresh air options
module access (D cabinet)

Figure 6. Sensor location for A, B, and C cabinet standard economizer (digit 39 = A, B, C)

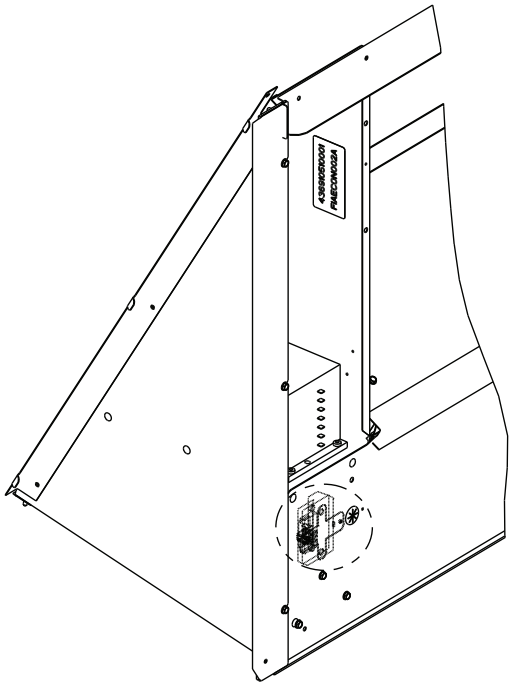


Figure 7. Sensor location for A, B, and C cabinet low leak economizer (digit 39 = A, B, C)

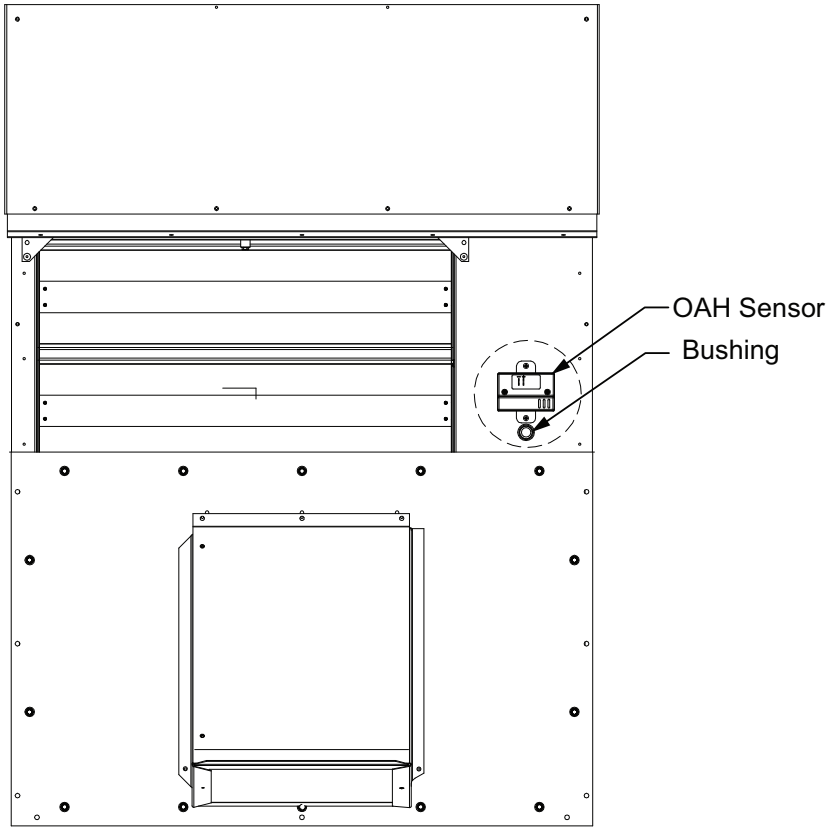


Figure 8. Outdoor Sensor location for A, B, and C cabinet horizontal low leak economizer (digit 39 = A, B, C)

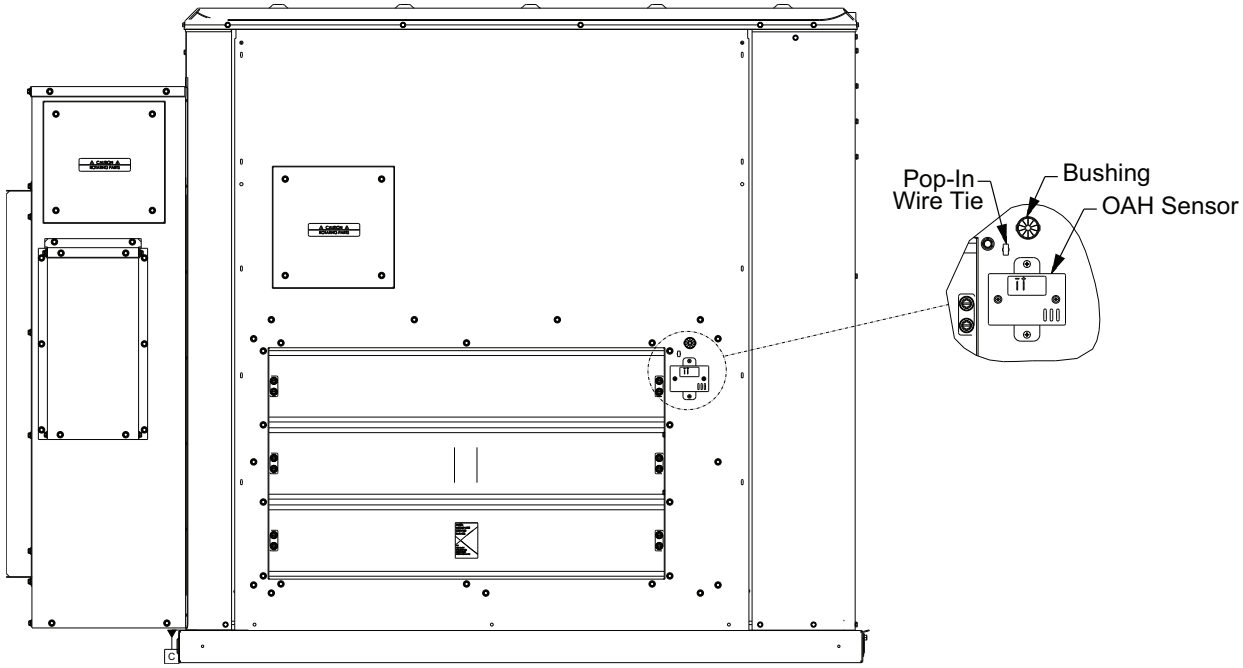


Figure 9. Sensor location for D cabinet standard economizer (digit 39 = D)

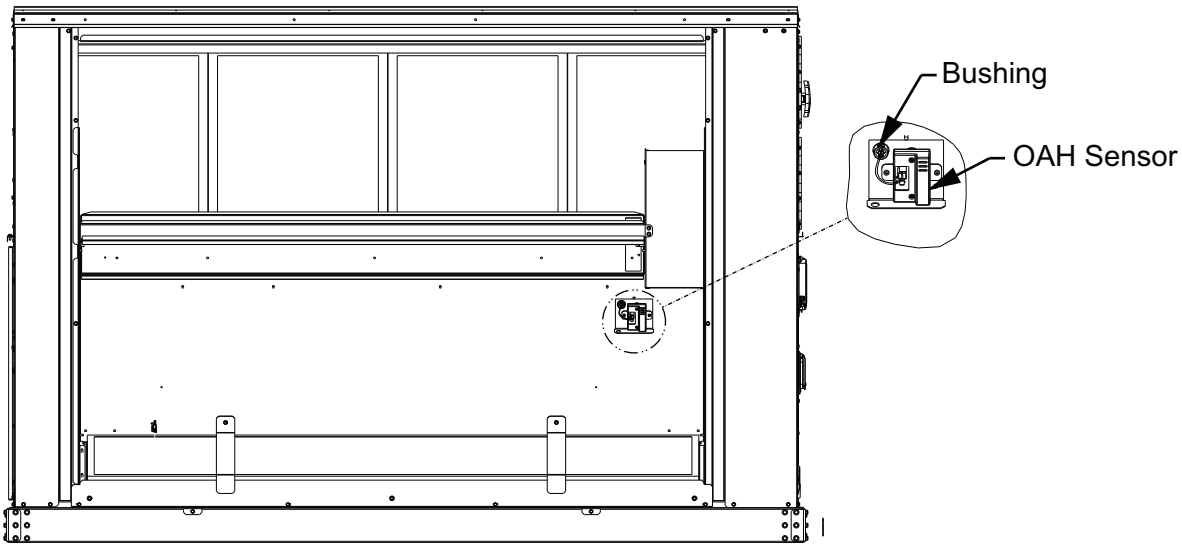
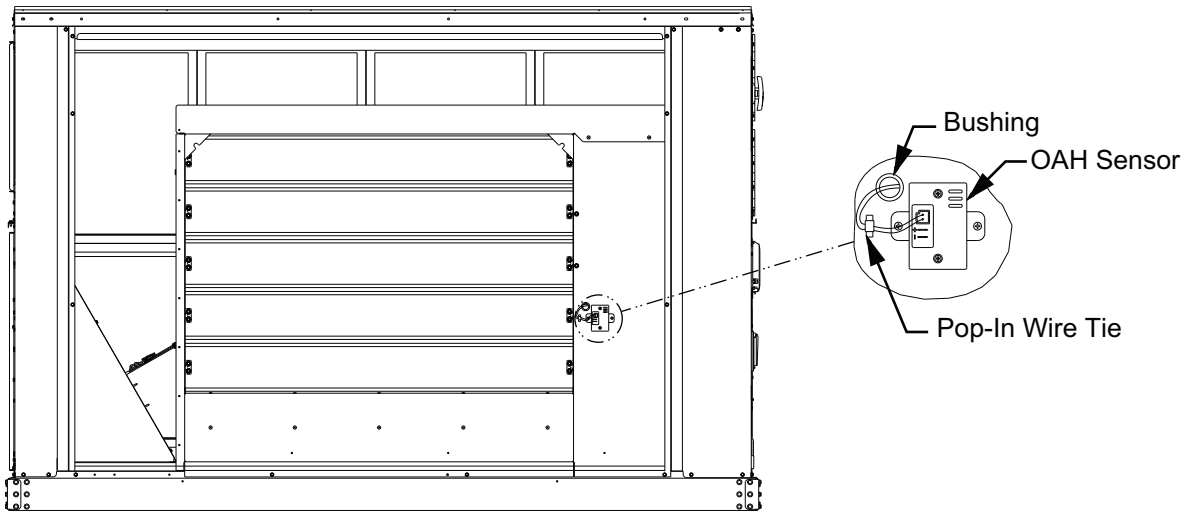


Figure 10. Sensor location for D cabinet low leak economizer[(a)] (digit 39 = D)



(a) Uninstalled components are located in the return enclosure. Refer to Figure 5.

Notes

Trane and American Standard create comfortable, energy efficient indoor environments for commercial and residential applications. For more information, please visit trane.com or americanstandardair.com.

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Supersedes ACC-SVN234B-EN (Aug 2022)