

Installation Instructions

Comparative Enthalpy Kit

Precedent™ Packaged Rooftop Units
6 to 25 Tons

Model Number:
FIAENTH002*

Used With:
6 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.

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-including industry replacements for CFCs and HCFCs such as saturated or unsaturated HFCs and HCFCs.

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.

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General Information

Inspection

1. Unpack all components of the FIAENTH002* kit.
2. Check carefully for shipping damage. If any damage is found, report it immediately, and file a claim against the transportation company.
3. Visually inspect the components for shipping damage as soon as possible after delivery, before it is stored. Concealed damage must be reported within 15 days.
4. If concealed damage is discovered, stop unpacking the shipment.
5. Do not remove damaged material from the receiving location. Take photos of the damage, if possible. The owner must provide reasonable evidence that the damage did not occur after delivery.
6. Notify the carrier's terminal of damage immediately by phone and by mail. Request an immediate joint inspection of the damage by the carrier and the consignee.
7. If the enhanced economizer logic module is not installed in the unit, it has to be purchased.

Note: *Do not attempt to repair any damaged parts until the parts are inspected by the carrier's representative.*

Parts List

- One (1) Harness; Controls, Economizer, Comparative Enthalpy
- One (1) Coil Temp Sensor Circuit 1 Return Air Sensor
- Two (2) Sensor; Humidity with Label
- Two (2) Bushing; Snap - 0.44 ID
- Four (4) Tie; Wire Nylon 7.78 -in. 50-lb. 0.184-in. wide
- One (1) Grommet; Molded 0.25 ID
- Four (4) Screw; Sharp Crested or Sharp Lead Thread

Installation

⚠️ WARNING

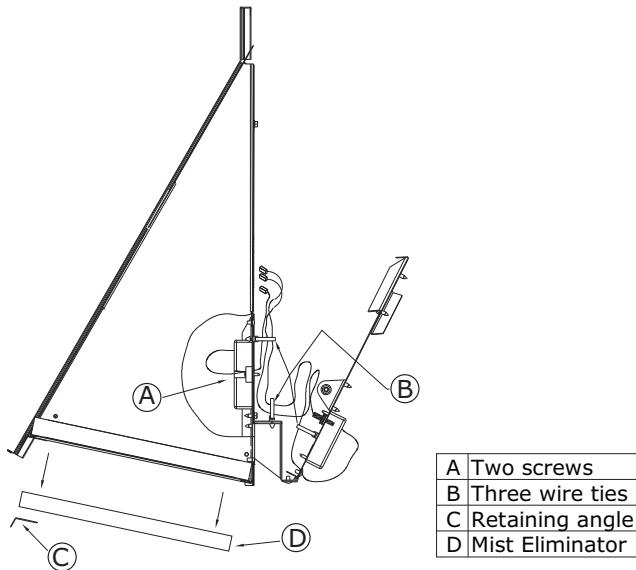
Hazardous Voltage w/Capacitors!

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.

Outdoor Humidity Sensor

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. Connect PPF63 to outdoor humidity sensor.
5. Position sensor and secure with two screws as shown in [Figure 1](#). See figures below for sensor locations.

Figure 1. Route sensor wires



6. Route sensor wires through star bushing shown in [Figure 1](#).
7. Connect J9 from harness to P9 of fresh air options module (located in return enclosure).
8. Secure wires with wire tie as shown in [Figure 1](#). After installation is complete, Symbio™ 700 UC unit configuration will need to be updated to reflect installed option.
9. Replace mist eliminator.

10. 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.
11. Tighten both screws.

Return Air Humidity Sensor and Return Air Temperature Sensor

1. Connect PPF62 to temperature sensor and PPF64 to return humidity sensor.
2. Install return air humidity sensor and secure with two screws.
3. Route return air humidity sensor through grommet.

Note: Allow enough slack in wire harness to permit the return air damper blade to close without pulling or binding the harness.

4. Replace the filter access panel.

Figure 2. Outdoor and return sensor location for 6 to 12.5 ton standard economizer

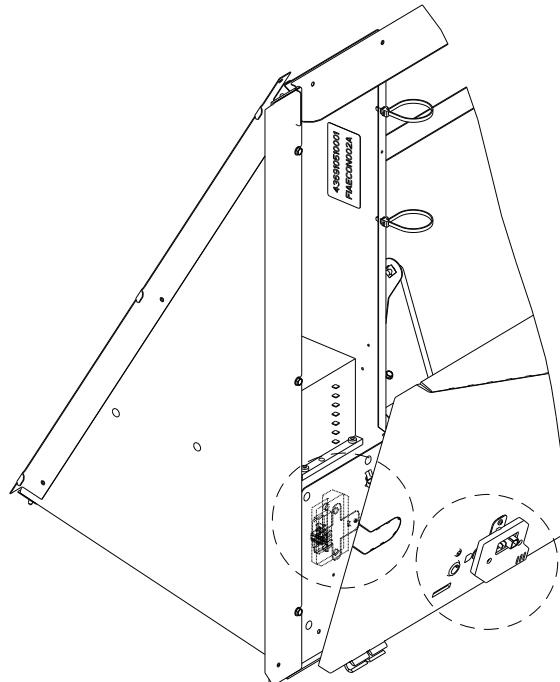
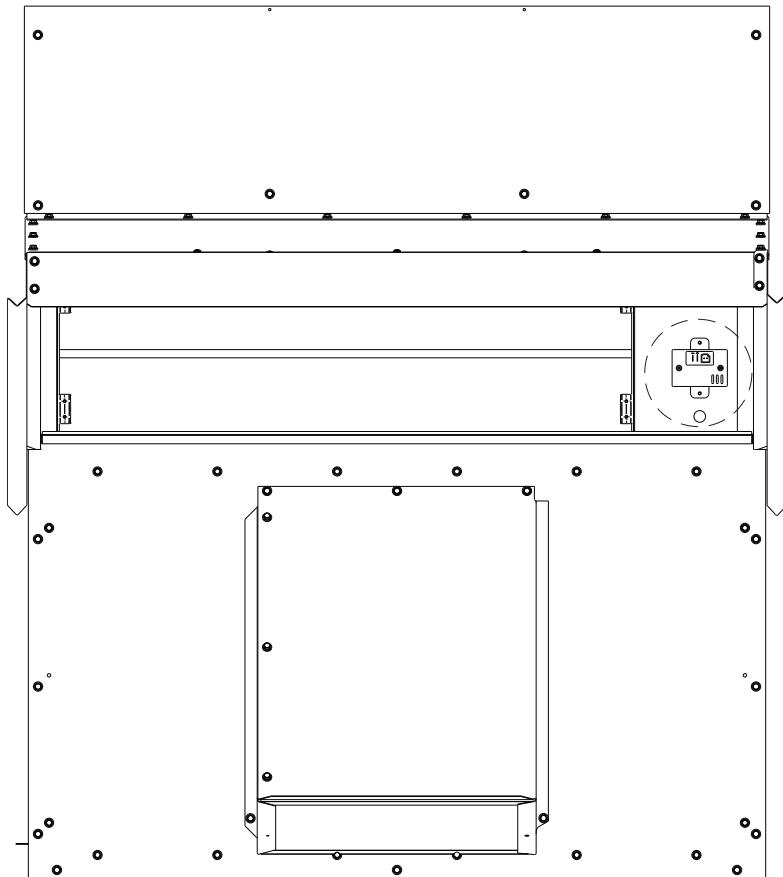


Figure 3. Outdoor sensor location for 6 to 12.5 ton low leak economizer^(a)



(a) Uninstalled components are located in the return enclosure.

Installation

Figure 4. Return sensor location for 6 to 12.5 ton low leak economizer

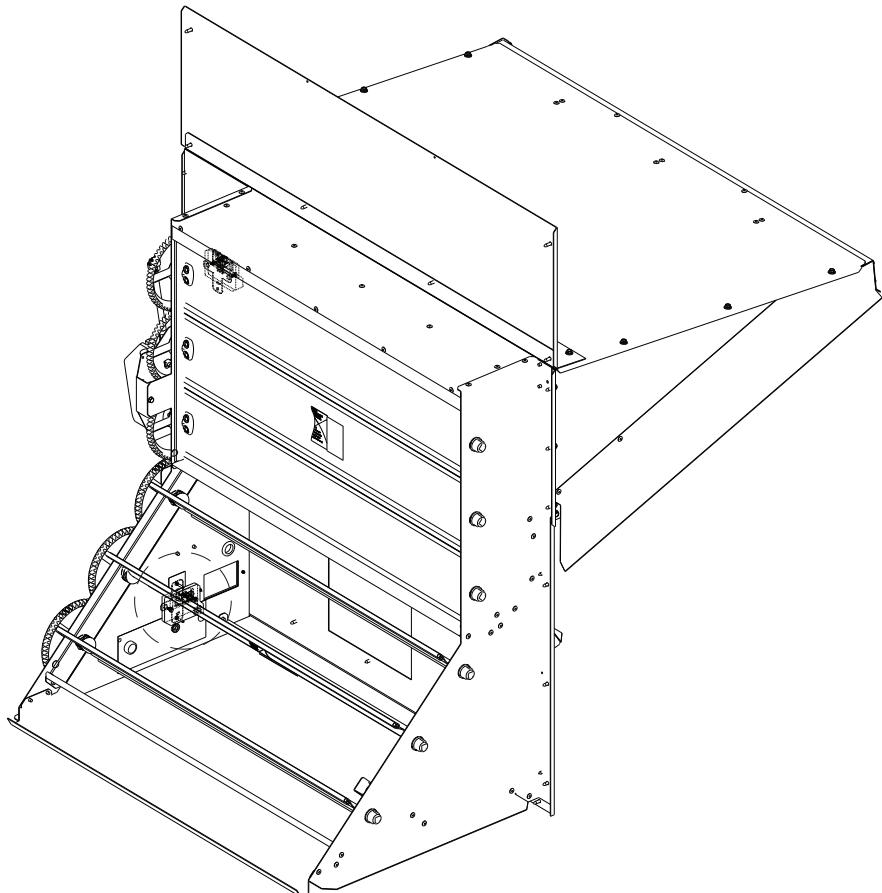
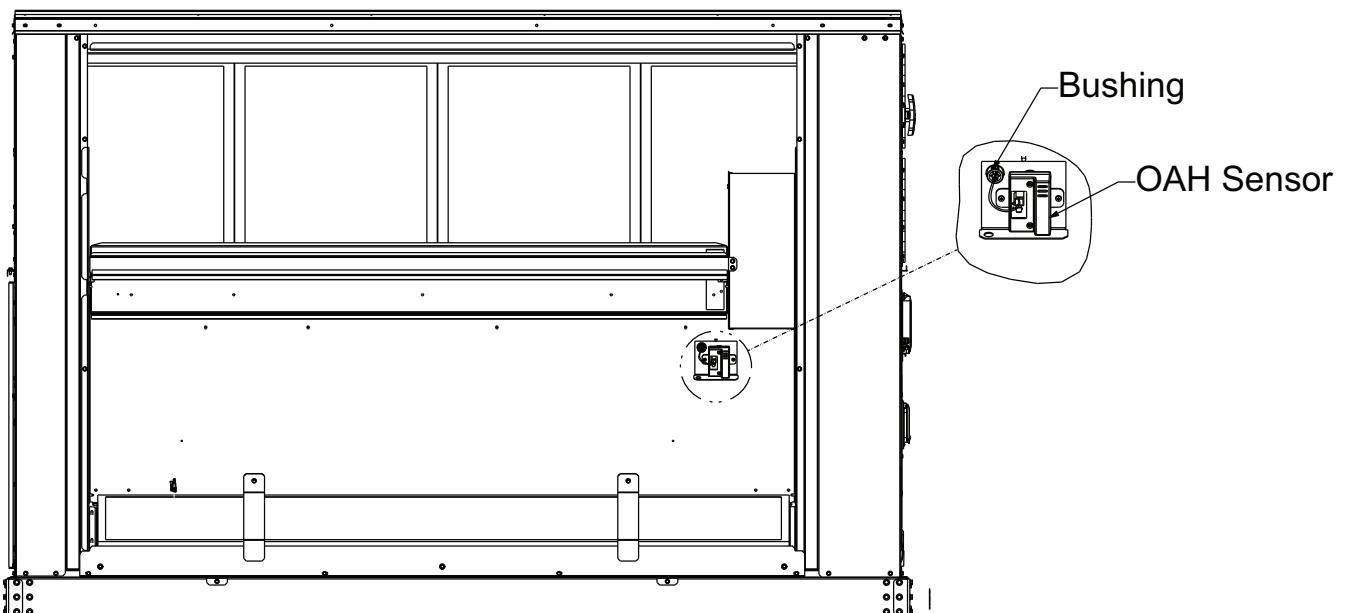


Figure 5. Outdoor sensor location for 15 to 25 ton standard economizer^(a)



(a) Uninstalled components are located in the return enclosure.

Figure 6. Return sensor location for 15 to 25 ton standard economizer

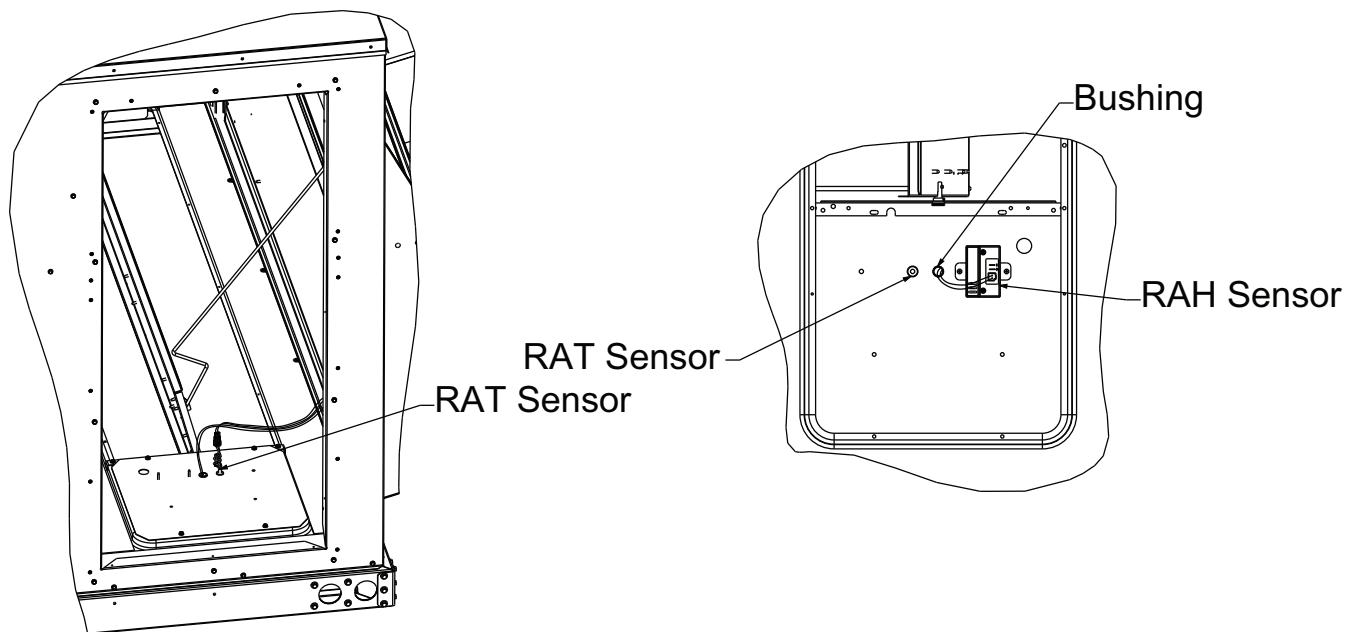
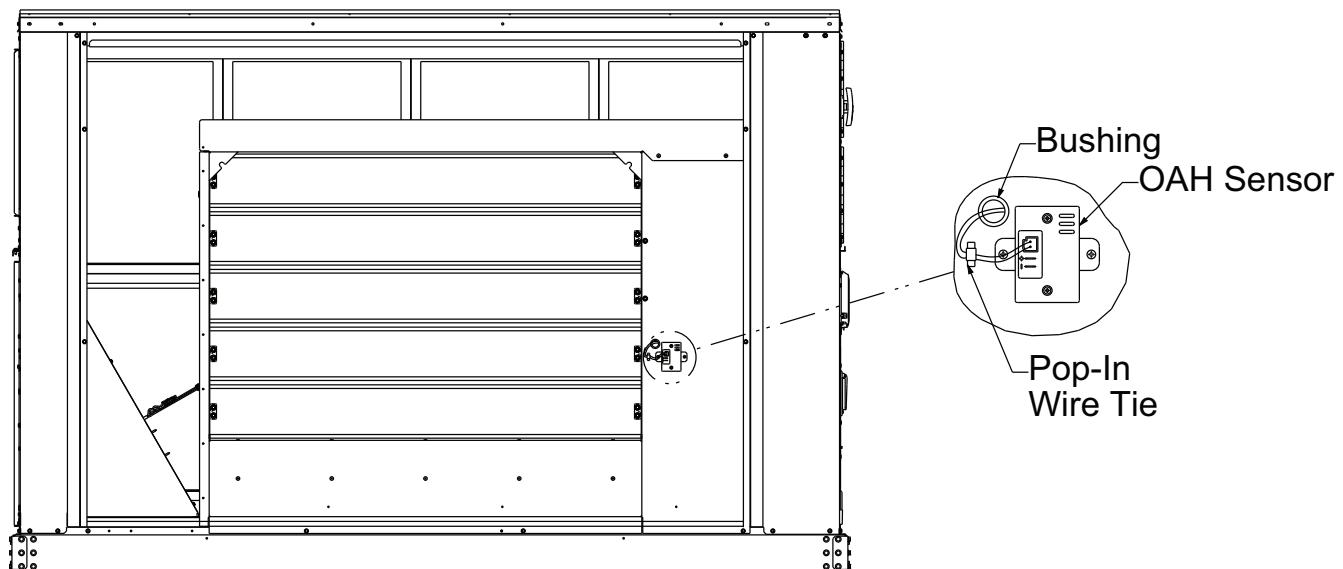


Figure 7. Outdoor sensor location for 15 to 25 ton low leak economizer



Installation

Figure 8. Return sensor location for 15 to 25 ton low leak economizer - downflow

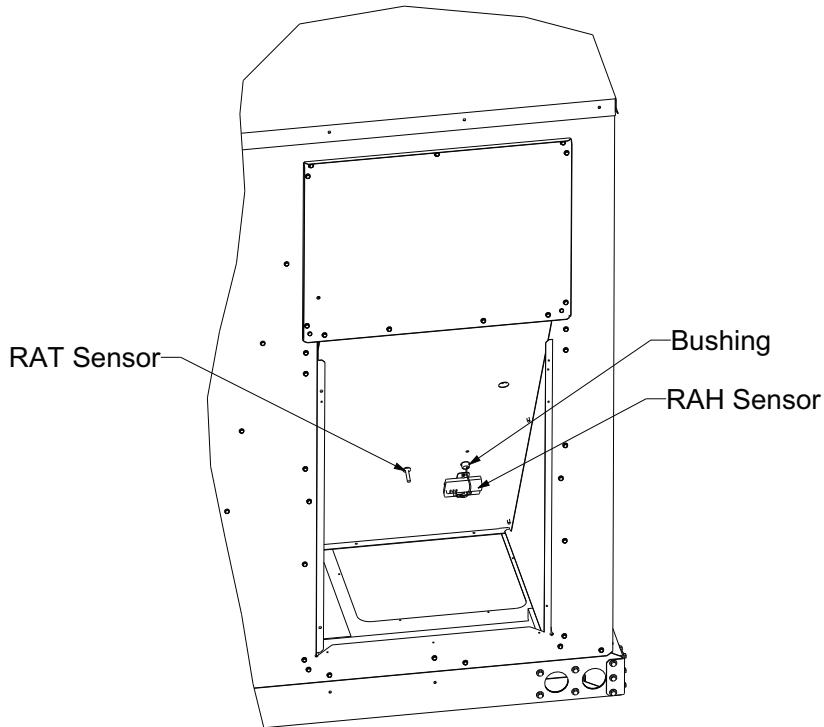
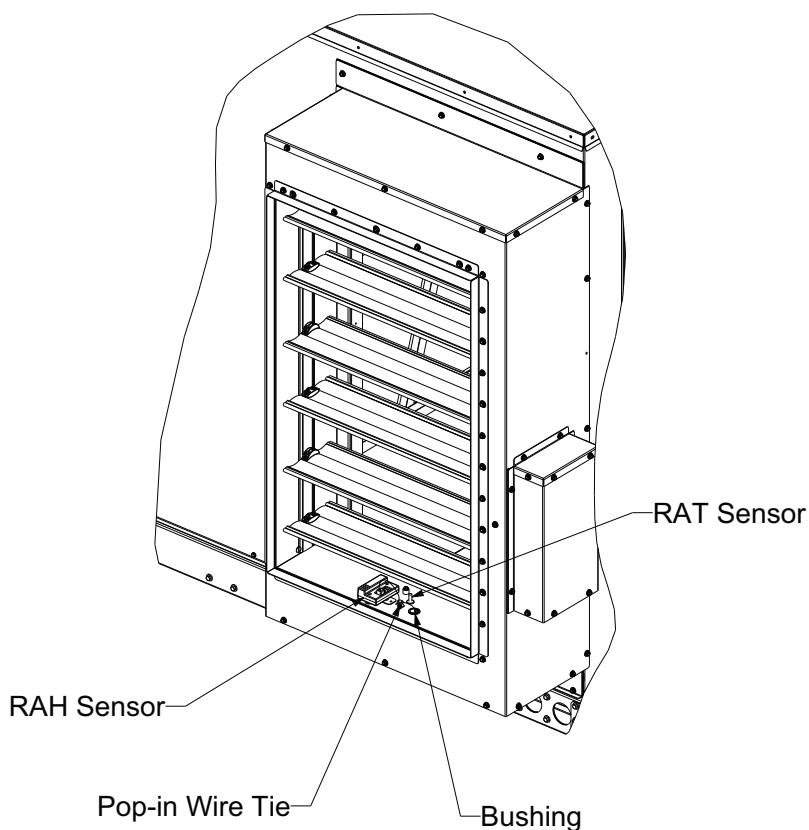


Figure 9. Return sensor location for 15 to 25 ton low leak economizer - horizontal



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