

# Installation Instructions

## 0-100% Downflow Dry Bulb Economizer Standard Economizer Only

**Model Number:** BAYECON089\*  
BAYECON090\*

**Used With:** T/YSD150F  
T/YSD155F, 175F, 180F, 200F, 210F, 240F, 250F, 300F  
T/YHD150-300F  
WSD150E, 155E, 180E, 200E, 240E

### 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.

*Important: These instructions apply to the "Standard Economizer" only. When installing Low Leak Economizers, refer to the Installation Instructions provided with the Economizer.*

January 2014 ACC-SVN78F-EN  
© 2014 Trane All Rights Reserved



### 1 Cautions, Warnings and Notices

#### 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 may 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. 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

#### 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 MSDS sheets and OSHA guidelines for proper PPE. When working with or around hazardous chemicals, ALWAYS refer to the appropriate MSDS 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.

### Inspection & Parts

#### Inspection

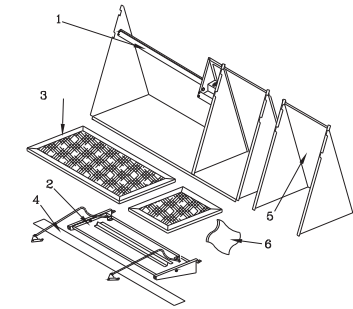
1. Unpack all components of the kit.
2. Check carefully for any shipping damage. If any damage is found it must be reported immediately and a claim made against the transportation company.
3. Visually inspect the components for shipping damage as soon as possible after delivery, before it is stored. 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.

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

### 3 Field Installed Economizer

Each economizer ships partially assembled. The steps for installation are illustrated throughout this guide. Refer to the illustrations as the steps are performed. Figure 1 illustrates the major components of the economizer when shipped for field installation.

Figure 1. Major economizer components



#### Parts List

As the economizer is un-crated, locate the following parts:

1. Outside air damper assembly (with wire harness)
  2. Return air damper assembly
  3. 2 Mist eliminators
  4. 1 Block-off,
  5. Barometric relief hood
  6. Plastic bag of miscellaneous parts:
    - a. Screws
    - b. Supply air temperature sensor
    - c. 1 Tube of sealant
    - d. 1 Edge protector
    - e. Installation and operation manual
    - f. rubber grommet
- Verify that all of the parts are available for installation.

### 4 Installation

#### WARNING

##### Hazardous Service Procedures!

The procedures recommended in this section of the manual could result in exposure to electrical, mechanical or other potential safety hazards. Always refer to the safety warnings provided throughout this manual concerning these procedures. When possible, disconnect all electrical power including remote disconnect and discharge all energy storing devices such as capacitors before servicing. Follow proper lockout/tagout procedures to ensure the power can not be inadvertently energized. When necessary to work with live electrical components, have a qualified licensed electrician or other individual who has been trained in handling live electrical components perform these tasks. Failure to follow all of the recommended safety warnings provided could result in death or serious injury.

#### WARNING

##### Proper Field Wiring and Grounding Required!

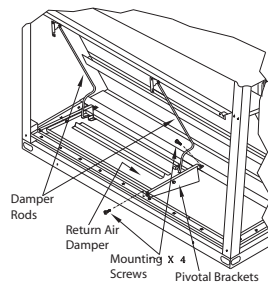
All field wiring MUST be performed by qualified personnel. Improperly installed and grounded field wiring poses FIRE and ELECTROCUTION hazards. To avoid these hazards, you MUST follow requirements for field wiring installation and grounding as described in NEC and your local/state electrical codes. Failure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

1. Remove the filter/fan compartment access panel.
2. Remove the unit end panel (evaporator end).
3. Place the return air damper assembly into the return air opening as illustrated in Figure 2. Insure the damper is positioned with the sheet metal lip in the upward position.
4. Attach the pivotal brackets to the unit using 2 screws per bracket, as illustrated in Figure 2.
5. Raise the damper and rods into the vertical position. Tie the damper rods to the filter rack to prevent them from interfering with the positioning of the economizer as illustrated in Figure 2.

### 5

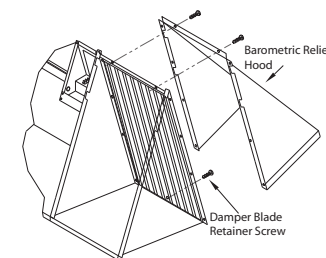
6. Insure damper is positioned with sheet metal lip in the upward position, as illustrated in Figure 2.

Figure 2. Damper, rod assembly and positions



7. Attach the barometric relief hood to the back of the economizer assembly, using 2 screws at the top, as illustrated in Figure 3.

Figure 3. Relief hood/economizer assembly



*Note: If barometric relief is desired, remove the shipping screw that holds the barometric relief damper blade and ensure that the damper swings freely, before attaching the barometric hood.*

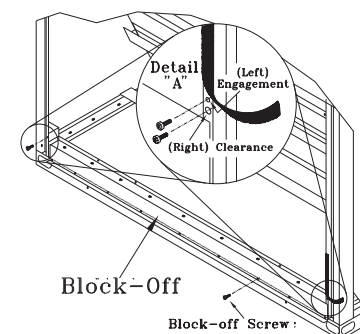
8. Install the block-off as illustrated in Figure 4. The block-off is designed to close the opening created, between the economizer and the base, when the economizer assembly is in its operating position.

### 6

6. Holding the block-off with the holes at the bottom and the bottom angle outward press the bottom of the block-off against the unit and line up the holes. Using the provided screws, secure it into place.
9. Remove approximately 3" of gasket material from the bottom of each corner post to expose the holes used to attach the economizer assembly to the unit, as illustrated in Figure 4, detail "A".

*Note: There are two holes, a (large) clearance hole and a (small) engagement hole. The usage of each hole will be discussed as the process continues.*

Figure 4. Block-off installation

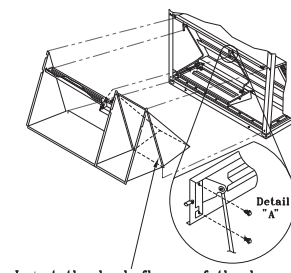


10. With the barometric relief hood attached to the economizer assembly, place the assembly into the opening with the back right flange, on the economizer, behind the corner post flange, as illustrated in Figure 5. Position the left side flange, on the economizer, in front of the corner post flange.

With the screws provided, secure the bottom right hand side of the economizer assembly by inserting the screws, through the clearance holes in the corner post, into the engagement holes in the economizer assembly, as illustrated in Figure 5, detail "A". Secure the bottom left hand side of the economizer assembly by inserting the screws, through the clearance holes in the economizer assembly, into the engagement holes of the corner post. Refer to Figure 5, detail "A".

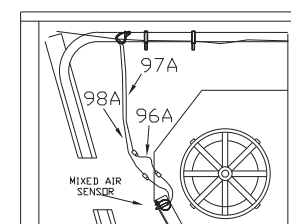
### 7

Figure 5. Assembly placement



11. Before the right hand return air linkage bracket can be installed, two (2) outside air damper screws must be removed as illustrated in Figure 5, detail "A". Align the return air linkage bracket with these holes and reinstall the two (2) screws. Install the left hand return air linkage bracket using the engagement holes in the outside air damper.
12. Manually operate the dampers, slowly; to ensure no binding exists.

Figure 6. Rubber grommet placement



13. Install the rubber grommet, provided with the sensor, into the hole on the fan assembly channel, as illustrated in Figure 6.
14. Insert the supply air temperature sensor through the grommet, approximately one half (1/2) inch, with the end pointing toward the coil, as illustrated in Figure 6.

