

Installation Instructions

0 to 50% Motorized Outside Air Damper Foundation™ Packaged Rooftop Units 15 to 25 Tons

Model Number: BAYDMPR300*
Used With: E/GCC180-300

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.

December 2022

ACC-SVN154E-EN

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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-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/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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Revision History

- Model number updates in Used With information.
- Actuator updates in Installation section.

4 Introduction

This instruction covers installation of the motorized damper on E/GC*180-300 units.

Parts List

Table 1. Parts list

Qty	Description
1	Motorized OA Damper Assembly
10	Screws
1	Blockoff, Bottom

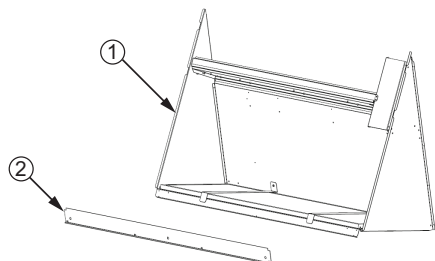
Installation

Field Installed Damper

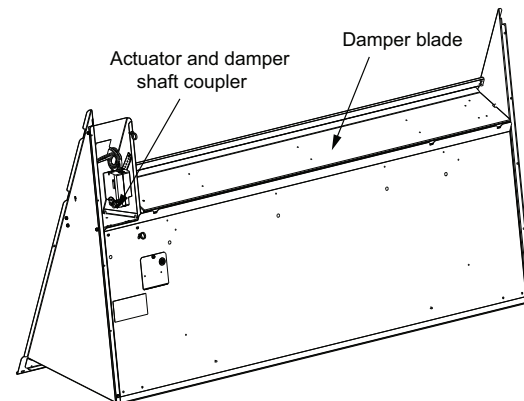
1. Uncrate the damper and locate all parts shown in [Figure 1](#).

Note: Do not adjust damper blade manually which can cause actuator damage. If required, decouple actuator and shaft connection before manual adjustments of damper blade. Confirm the coupler is properly engaged after installation and service. Refer to [Figure 2](#).

Figure 1. Damper contents



5 Figure 2. Economizer damper blade

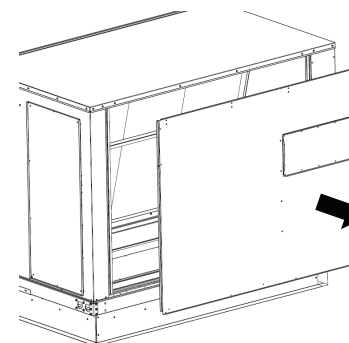


WARNING

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.

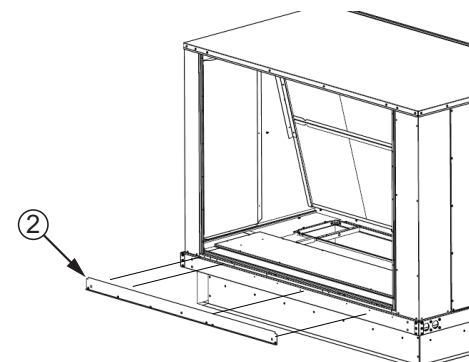
6 2. Remove unit end panel, retain the screws for later use.

Figure 3. Remove end panel



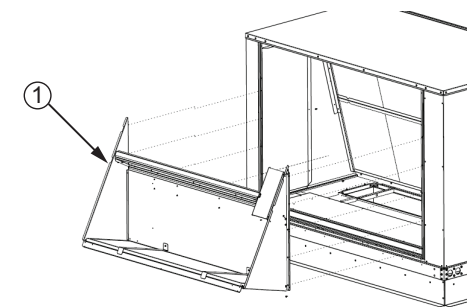
3. Attach block-off 2 to unit by using four screws.

Figure 4. Install block-off



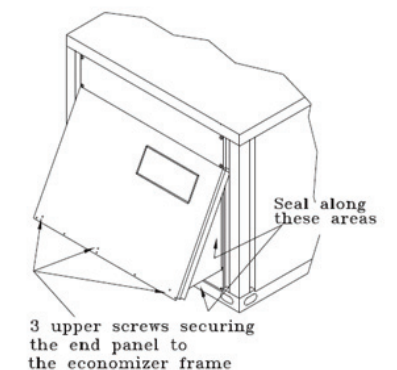
7 4. Secure economizer assembly 1 to unit using ten screws.

Figure 5. Install economizer assembly



5. Attach end panel back to unit using the screws removed in [Step 2](#) and seal indicated areas in [Figure 6, p. 1](#) with field supplied silicone sealant.

Figure 6. Reinstall end panel



Factory Installed Damper (Field Set-Up)

Downflow Configuration

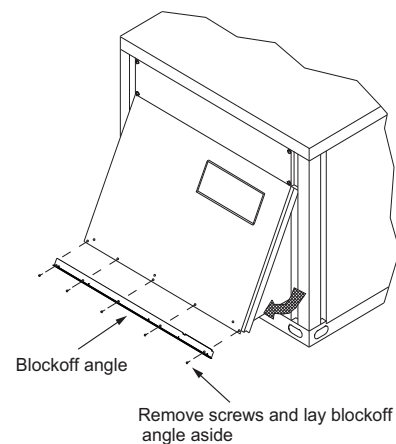
To position damper for downflow operation, complete the following steps:

⚠ WARNING

Hazardous Voltage!
Failure to disconnect power before servicing could result in death or serious injury. Disconnect all electric power, including remote disconnects before servicing. Follow proper lockout/tagout procedures to ensure the power can not be inadvertently energized. Verify that no power is present with a voltmeter.

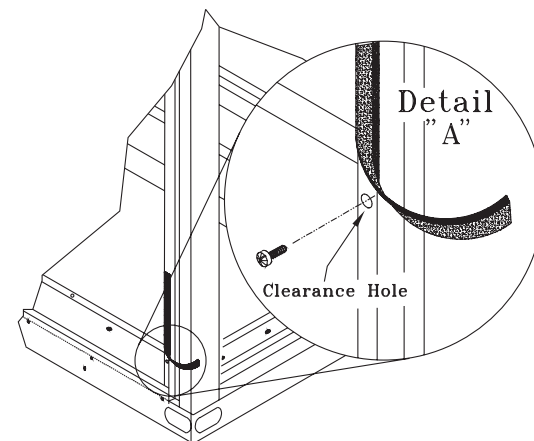
1. Remove filter access panel.
2. Remove the lower screws in the end panel. See [Figure 7](#). Lay block off angle aside for later installation.

Figure 7. Remove lower screws



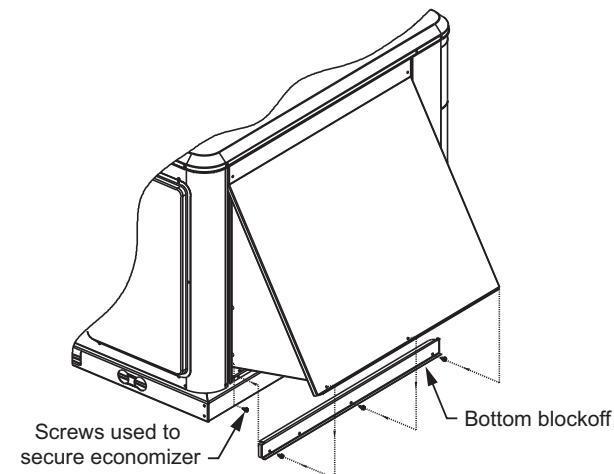
3. Do not remove the screws in the upper row of the end panel.
4. Grasp the bottom of the end panel and pull the economizer assembly outward into the operating position. See [Figure 7](#).
5. Remove approximately 3-inches of gasket material from the bottom of each corner post to expose the holes used to attach the economizer assembly to the unit. See [Figure 7](#).
6. With the screws provided, secure each side of the economizer assembly by inserting a screw through the clearance hole in the bottom of the corner post and into the engagement hole in the economizer assembly. Refer to [Figure 7](#).

Figure 8. Remove gasket material



7. Install the blockoff angle underneath the economizer. The blockoff angle is designed to close the opening created, between the economizer and the base, when the economizer assembly is in its operating position.
 - a. Holding the blockoff angle with the holes at the bottom and the bottom angle outward, tilt the top forward and insert it into the opening between the economizer and the unit base.
 - b. Press the bottom of the blockoff angle against the unit and line up the holes. Using the provided screws, secure it into place.

Figure 9. Blockoff installation



8. Proceed to "[Minimum Position Setting](#)".

Minimum Position Setting

⚠ WARNING

Live Electrical Components!
Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury. When it is necessary to work with live electrical components, have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks.

To adjust the minimum position setting and check out the damper, the power must be connected.

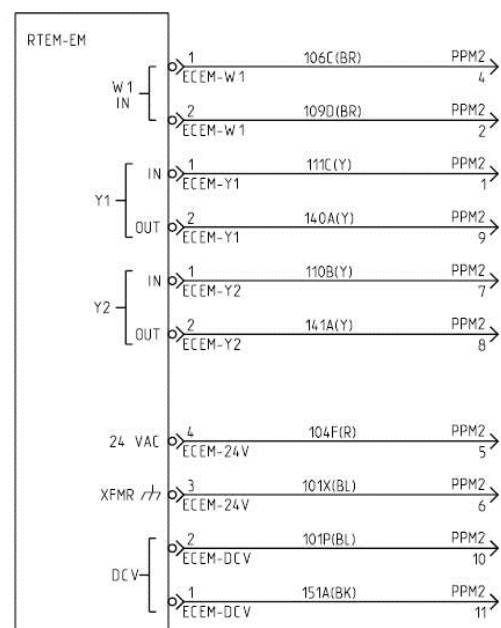
1. Close the unit disconnect and place the zone sensor fan selector in the fan ON position and the heat/cool selector in the OFF position. This will place the damper in the minimum ventilation position.
2. To adjust the minimum position setting for the required ventilation air, turn the potentiometer (on the damper motor) clockwise to open (to increase the amount of ventilation) or counterclockwise to close (to decrease the amount of ventilation). The damper will open to this setting each time the blower circuit is energized.
3. When adjusting minimum position, the damper may move to the new setting in several small steps. Once the damper has remained in position for 10 to 15 seconds without movement, it can be assumed it is at the new position.
4. Replace the filter access panel. The damper will close when the blower circuit is de-energized.

Note: Do not adjust damper blade manually which can cause actuator damage. If required, decouple actuator and shaft connection before manual adjustments of damper blade. Confirm the coupler is properly engaged after installation and service. Refer to [Figure 2](#).

Wiring Connections

Locate unit wiring harness plug PPM2A. The plug is located in the upper left section of the return air section. Remove the cap covering the plug, and connect to the economizer wiring harness.

Figure 10. Electromechanical wiring



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