

# INSTALLATION INSTRUCTION

Outside Air Damper (Manual & Motorized)  
Manual Damper 547864 used with R6GP & P6SP 072 & 090  
Manual Damper 547874 used with Q6SP 090 & 120, P6SP & R6GP 120  
Motorized Damper 547865 used with all P6SP, R6GP, Q6SP

FORM# 607A-0611 (607A-0808)

## I - SHIPPING AND PACKING LIST

Package 1 of 1 contains:

### 547864 / 547874

- 1 - OAD Panel with Slide Damper
- 1 - Control and Filter Access Panel
- 1 - Fresh Air Hood with Filter
- 2 - Snap Clips (304260)
- 38 - Screws 10 x ½ x 16 Hex Tex

### 547865

- 1 - Damper Section with Motor

Check contents for shipping damage. Contact the last carrier immediately if any shipping damage is found.

## II - APPLICATION

The Outside Air Dampers (OAD) are designed to fit the Return Access Panel. The manual dampers are adjusted by a slide damper and motorized dampers use a 2-position motor that opens when blower is energized.

## III - INSTALLATION - MANUAL (547864 / 547874)

1. Remove unit return access panel.
2. Install OAD panel where return panel was removed. Add clip to each side near top of panel using existing screw from unit post.
3. Assemble fresh air hood. See Figure 1.
4. Install filter access panel and secure to unit. See Figure 2.
5. Adjust slide damper to desired position.

## IV - INSTALLATION - MOTORIZED (547865)

1. Remove OAD panel from unit or box depending on new or retro fitting existing unit.
2. Remove ½" screws located in clearance holes of hood on OAD panel. See Figure 3.
3. Take 1" screws shipped with damper and start in holes where screws in Step 2 were removed.
4. Place damper section to engage 1" screws in flange of damper. See Figure 3.
5. Place OAD Panel in same place unit panel was located. Connect (P1) plug from OAD to (S1) plug in unit located in economizer control panel above filter system.

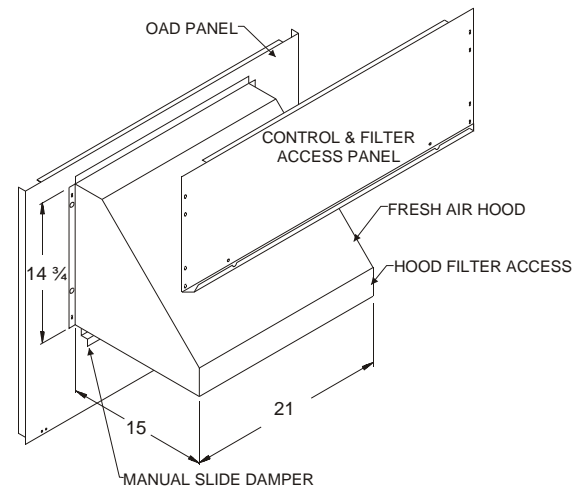


Figure 1

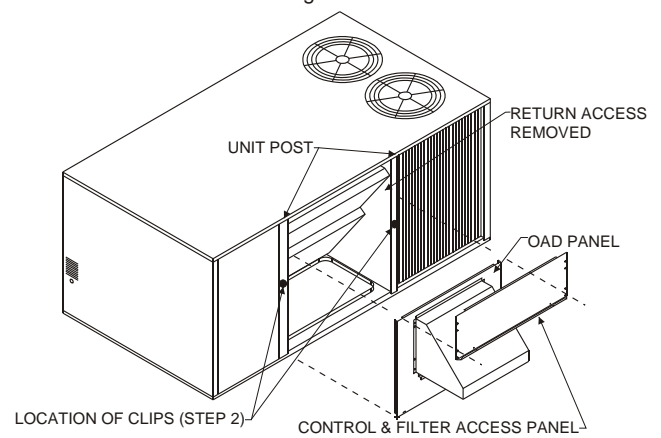


Figure 2

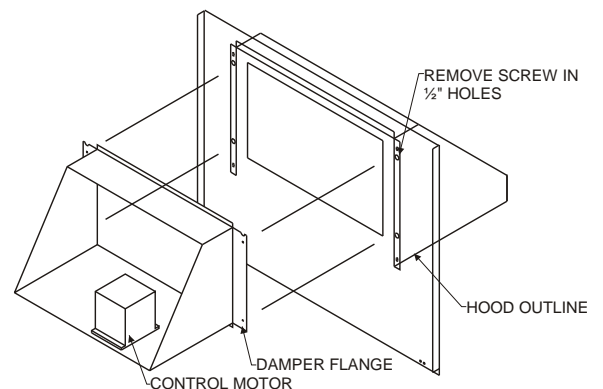
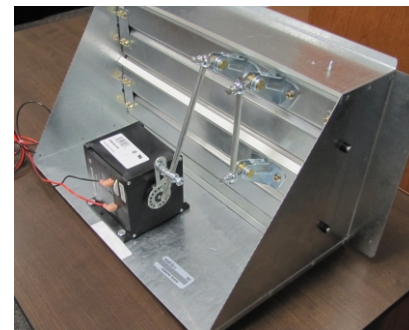


Figure 3

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## V - OPERATION AND CHECKOUT

An spst low voltage controller is used to control the M8405 Actuator as follows:

- A. Mid-position—when the controller circuit closes to provide 24 Vac to terminals T and X, the actuator is energized to run to the adjustable mid-position (minimum position).

Adjustable minimum position can be reached from either the fully closed or fully open position. From fully closed, the actuator drives open to the minimum position; from fully open, the actuator spring-returns to minimum position.

## VI - SETTINGS AND ADJUSTMENTS

The M8405 Damper Actuator has an integral thumbwheel for outside air minimum position adjustment. See Figure 4.

### Outside Air Position Adjustment

1. Connect the 24 Vac to the actuator at terminals T and X (D is not connected).
2. Adjust the thumbwheel on the actuator for desired outside air minimum position.

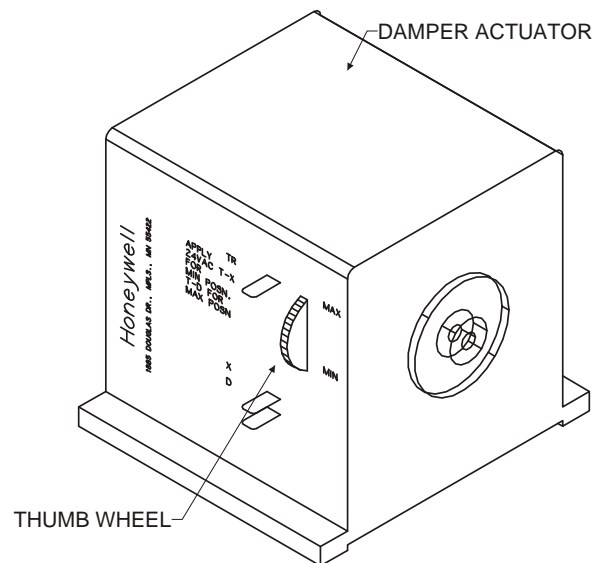
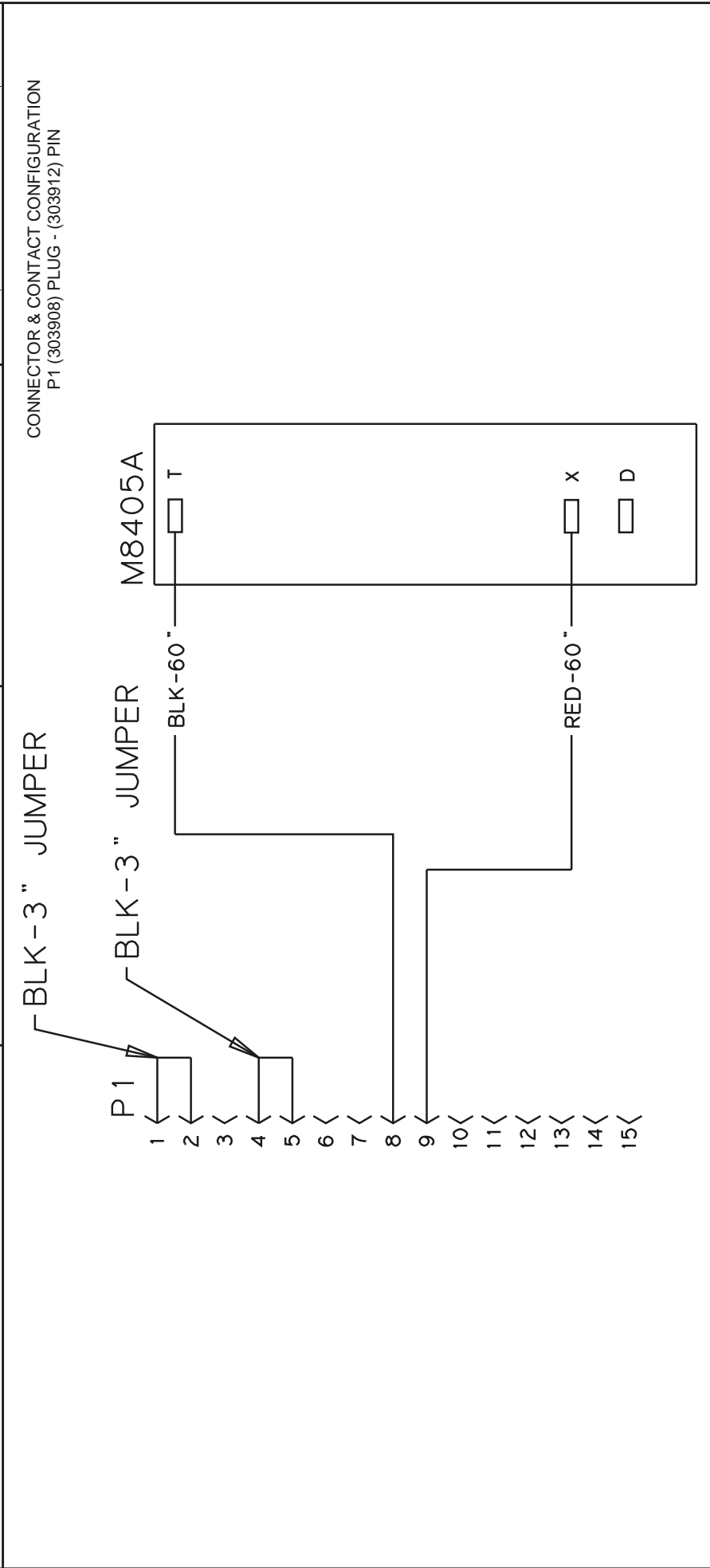


Figure 4

|   |   |   |                      |                                   |                         |
|---|---|---|----------------------|-----------------------------------|-------------------------|
| <b>HARNESSES DETAIL</b><br><b>E# = WIRE END DESIGNATION</b><br>E2 STUD #6 18 Ga. Wire<br>E3 Female ¼ Quick Disc.<br>E4 Male ¼ Quick Disc. Insul<br>E6 Wire Nut Size 73B | <b>COMPONENT CODE</b><br><b>Economizer</b><br>M8405A Damper Actuator 24V<br>P1 Economizer Plug<br>S1 Unit Economizer Plug | <b>WIRE COLOR CODE</b><br>BLK Black<br>BRN Brown<br>ORG Orange<br>VIO Violet<br>WHT White<br>BLU Blue<br>GRN Green<br>RED Red<br>YEL Yellow | <b>Revision</b><br>A | <b>Change</b><br>Removed A/C unit | <b>Date</b><br>06-16-11 |
|   |   |   |                      |                                   |                         |



**0-35% Motorized Outside Air  
P6SP/R6GP 072-120 / Q6SP 090-120**

**Notes:**  
1. Check unit wiring diagram for actual connections to unit wiring.

|                      |
|----------------------|
| Date: June 16, 2011  |
| Supersedes: 07-28-98 |
| Drawn by: MGL        |
| Unit #: 47-287-07    |
| Diagram#: 28707W     |
| Approved by:         |