

## Damper Motor Replacement Kits Applies to Models ADF with Horizontal Discharge (Manufactured Prior to 4/98)

### Description/Application

The direct-drive damper motor used on Model ADF units with horizontal discharge has been re-designed by the manufacturer. The function is not changed, and the damper motor will continue to be used on Model ADF units. However, the motor mounting and wiring has changed so that the currently available motor cannot be used as a direct replacement on units with the previously designed motor. The kits listed below are developed to enable a service technician to replace a damper motor (P/N124224) on a Model ADF with horizontal discharge manufactured prior to April 1998 (Serial No. Date Code AXD).

The kits include:

Model ADF		300	500	700/1200
Kit P/N		163197	163196	163195
Qty	Description			
1	Damper Motor Mounting Plate Assembly	124219	124220	124221
1	Damper Motor, Honeywell ML-6184C1001	163101	163101	163101
1	Slotted Head Screw, M4 x 8mm lg (to attach motor to mounting plate assembly)	131402	131402	131402
12	Coated Screws, #10-16 x 5/8" lg (to attach motor mounting plate assy to damper frame)	132199	132199	132199
5	Wire Nut (orange), Ideal Ind. #30-273	16354	16354	16354
1	Wire and Cable Assembly	124231	124231	124232

### Installation Instructions

Service should be done by a qualified agency in accordance with these instructions and in compliance with all codes and requirements of authorities having jurisdiction. The qualified agency performing the work is responsible for the motor installation.

**Required Tools:** Screwdriver

- Turn off the gas and the electric power to the heater.
- Remove the burner/control section access panel and open the main electrical box. Disconnect the damper motor wires from the circuit analyzer board (Terminals T37, T38, T2, T28, T24).
- Remove the blower section access panel. In the blower compartment, remove the junction box cover.
- Remove and Discard the Damper Motor and Mounting Plate Including the Wire and Cable Assembly**

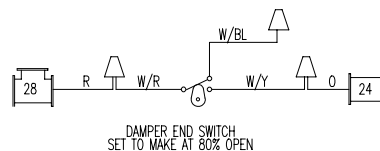
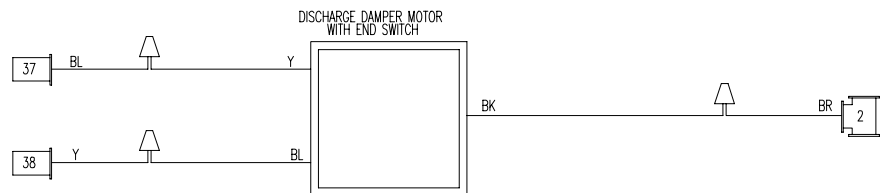
- Following the disconnected wires in the main electrical box, loosen the cable connectors holding the BX cable for the damper motor wires.
- Remove the cover from the damper motor box.
- Loosen the set screws from the damper shaft.
- Remove the screw (slotted head screw) that attaches the damper motor to the damper motor mounting plate. Remove the motor and the attached wires; remove the BX cable.
- Remove the mounting plate from the damper frame.

#### 5. Install the Replacement Mounting Plate and Damper Motor

- Position the new damper motor mounting plate on the damper frame. Center the damper shaft in the large hole. Secure the plate with the 5/8" long screws in the kit.
- Using the slotted head screw in the kit, attach the damper motor to the mounting plate. Tighten the damper shaft set screws. Replace the motor box cover.

#### 6. Connect the Wiring

- Run the new wire and cable assembly from the junction box in the blower compartment into the main electrical box. Tighten the box connectors.



- Following the wiring diagram, connect the wires to the circuit analyzer board.

Blue to T37  
Yellow to T38  
Black to T2

Red to T28  
Orange to T24

Close the electrical box.

- In the blower compartment junction box, attach the motor wires to the new wiring harness. Follow the wiring diagram above using the wire nuts in the kit. **NOTE: Wire colors change; follow diagram closely.** Replace the junction box cover.
- Close the access panels. Turn on the power and the gas. Start the system, checking for proper operation. File this form with the heater installation manual.

**KEEP THIS SHEET FOR FUTURE WIRING REFERENCE.**

**Thomas & Betts**