

This publication contains the installation instructions for backdraft and intake backdraft dampers. Cook dampers are designed for use with Cook units. For uses other than the intended design it is responsibility of the engineer of record to determine suitability of the backdraft damper.

Loren Cook *Submittals* provide additional information describing the damper specification data.

For additional safety information, refer to AMCA Publication 410-96, *Safety Practices for Users and Installers of Industrial and Commercial Fans*.

All of the publications listed above can be obtained from:

- [lorencook.com](http://lorencook.com)
- [info@lorencook.com](mailto:info@lorencook.com)
- 417-869-6474 ext. 166

For information and instructions on special equipment, contact Loren Cook company at 417-869-6474.

### Receiving and Inspection

Immediately upon receipt of a BD/BDM/BDI/BDMI unit carefully inspect it for damage and shortage.

Record on the Delivery Receipt any visible sign of damage.

### Handling

Lift by the frame not the blades or linkage.

### Storage

If the unit is stored for any length of time prior to installation, cover the damper to protect it from the elements.



## BD / BDM / BDI / BDMI

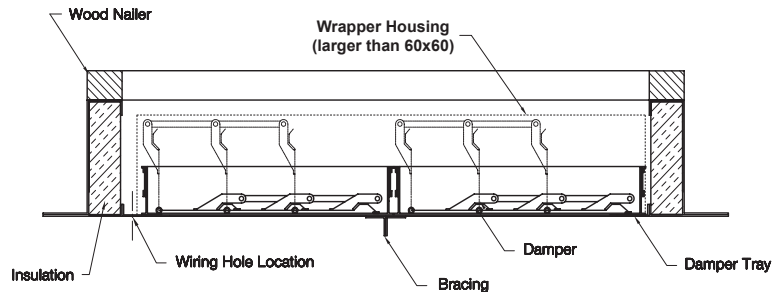
### Installation

**Damper should be level and square before attaching for optimal operation.**



**Make sure mounting fasteners do not interfere with the movement of the blades.**

### BD/BDM



#### Typical mounting instructions:

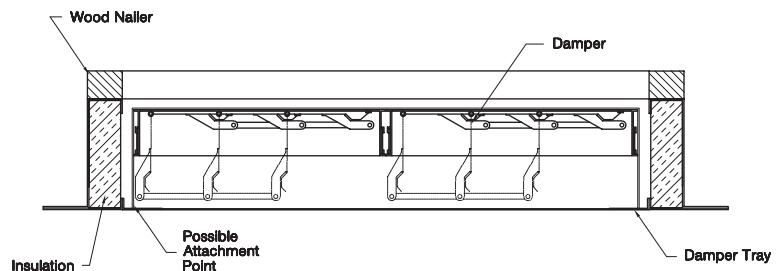
Set damper on damper tray. Install self-tapping screws from underneath the damper tray into the outside frame of the damper.

Damper mounting is the responsibility of the installation contractor.

Some dampers are provided in multiple panel sections which may require bracing to support: the weight of the panels and/ or system pressure. Bracing to be provided by others. For multiple panel assemblies self-tapping screws should be installed through bracing into frame of damper panel sections. Screw heads should be placed as to not interfere with blade movement. For dampers larger than 60x60 join panels together by bolting through intake damper wrappers. Bolts should be spaced to support the weight of the panels and/ or system pressure. Bolt heads should be placed as to not interfere with blade movement.

Dampers are set on an oversized damper tray. Dampers should be mounted on tray as centered as possible. When required the damper can be shifted on the tray to allow for electrical considerations.

### BDI/BDMI



#### Typical mounting instructions:

Set damper on damper tray. Restrain as necessary through intake damper wrapper to the damper tray. Position motorized damper offset from the motor side, to allow for conduit placement.

Damper mounting is the responsibility of the installation contractor.

Some dampers are provided in multiple panel sections, join panels together by bolting through intake damper wrappers. Bolts should be spaced to support the weight of the panels and/ or system pressure. Bolt heads should be placed as to not interfere with blade movement.

### Wiring (Motorized Dampers)

## ⚠ WARNING

**Electrical Shock Hazard:**

Fans should be installed and serviced by qualified personnel only.

Disconnect electric power before working on unit (prior to removal of guards or entry into access doors).

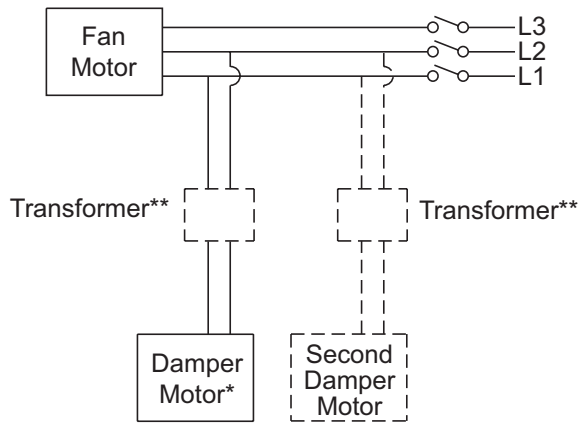
Follow proper lockout/tag out procedures to ensure the unit cannot be energized while being installed or serviced.

A disconnect switch should be placed near the fan in order that the power can be swiftly cut off, in case of an emergency and in order that maintenance personnel are provided complete control of the power source.

Grounding is required. All field-installed wiring must be completed by qualified personnel. All field installed wiring must comply with National Electric Code (NFPA 70) and all applicable local codes.

Failure to follow these instructions could result in death or serious injury.

### Typical Damper Motor Schematic



For 3-Phase, damper motor voltage should be the same between  $L_1$  and  $L_2$ . For single phase application, disregard  $L_3$ .

\*Damper motors may be available in 115, 230 and 460 volt models. The damper motor nameplate voltage should be verified prior to connection.

\*\*A transformer may be provided in some installations to correct the damper motor voltage to the specified voltage.

### Maintenance

Should be inspected and cleaned on a yearly basis.

### Limited Warranty

Loren Cook Company warrants that your Loren Cook fan was manufactured free of defects in materials and workmanship, to the extent stated herein. For a period of one (1) year after date of shipment, we will replace any parts found to be defective without charge, except for shipping costs which will be paid by you. This warranty is granted only to the original purchaser placing the fan in service. This warranty is void if the fan or any part thereof has been altered or modified from its original design or has been abused, misused, damaged or is in worn condition or if the fan has been used other than for the uses described in the company manual. This warranty does not cover defects resulting from normal wear and tear. To make a warranty claim, notify Loren Cook Company, General Offices, 2015 East Dale Street, Springfield, Missouri 65803-4637, explaining in writing, in detail, your complaint and referring to the specific model and serial numbers of your fan. Upon receipt by Loren Cook Company of your written complaint, you will be notified, within thirty (30) days of our receipt of your complaint, in writing, as to the manner in which your claim will be handled. If you are entitled to warranty relief, a warranty adjustment will be completed within sixty (60) business days of the receipt of your written complaint by Loren Cook Company. This warranty gives only the original purchaser placing the fan in service specifically the right. You may have other legal rights which vary from state to state. For fans provided with motors, the motor manufacturer warrants motors for a designated period stated in the manufacturer's warranty. Warranty periods vary from manufacturer to manufacturer. Should motors furnished by Loren Cook Company prove defective during the designated period, they should be returned to the nearest authorized motor service station. Loren Cook Company will not be responsible for any removal or installation costs.



## LOREN COOK COMPANY

Corporate Offices: 2015 E. Dale St. Springfield, MO 65803  
 Phone 417-869-6474 | Fax 417-862-3820 | [lorencook.com](http://lorencook.com)

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