Troubleshooting

Problem and Potential Cause

1. Incorrect direction of rotation. Make sure the fan rotates in the same direction as the arrows.
2. Poor fan inlet or outlet conditions. There should be a straight clear duct at the inlet or outlet.
3. Improper wheel alignment
4. Excessive Vibration and Noise
   - Damaged wheel.
   - Loose fasteners.
   - Speed too high.
   - Incorrect direction of rotation. Make sure the fan rotates in the same direction as the arrows.
   - Wheel set screws loose.
   - Bearings need lubrication or replacement.
   - Debris in impeller.
   - Fan surge.
   - See “Use of Variable Frequency Drives.”
5. Fan surge.
6. Debris in impeller.
7. Wheel set screws loose.
8. Speed too high.
9. Incorrect direction of rotation. Make sure the fan rotates in the same direction as the arrows.
10. Motor improperly wired.
11. Motor improperly wired.

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, 205 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.

Loren Cook Company
205 East Dale Street Springfield, MO 65803
417.869.6474
lorencook.com

INSTALLATION, OPERATION, AND MAINTENANCE MANUAL

This publication contains the installation, operation and maintenance instructions for standard units of the Power-Plume®.

Carefully read this publication prior to any installation or maintenance procedure.

Loren Cook catalog, Power-Plume®, provides additional information describing the equipment, fan performance, available accessories, and 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 Loren Cook Company by phoning (417) 869-6474, extension 166; by FAX at (417) 832-9431; or by e-mail at info@lorencok.com.

For information on special equipment, contact Loren Cook Company Customer Service Department at (417) 869-6474.

Receiving Inspection
Carefully inspect the fan and accessories for any damage and shortage immediately upon receipt of the fan. Turn the wheel by hand to ensure it turns freely and does not bind.

Record on the Delivery Receipt any visible sign of damage.

WARNING

Rotating Parts & Electrical Shock Hazard:
Disconnect electric power before working on unit.
Follow proper lockout / tagout 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.

Handling
Lift the fan by lifting lugs. Never lift by the shaft, motor, or housing.

Storage
If the fan is stored for any length of time prior to installation, completely fill the bearings with grease or moisture-inhibiting oil. Refer to Lubricants on page 3. Also, store the fan in its original crate and protect it from dust, debris and the weather.

- Cover the inlet and outlet opening to prevent the accumulation of dirt and moisture in the housing.
- Periodically rotate the wheel to keep a coating of grease on all internal bearing parts.
- Periodically inspect the unit to prevent damaging conditions.

WARNING

Falling Parts Hazard:
The attachment of roof mounted fans to the roof curb as well as the attachment of roof curbs to the building structure must exceed the structural requirements based on the environmental loading derived from the applicable building code for the site. The local code official may require variations from the recognized code based on local data. The licensed engineer of record will be responsible for prescribing the correct attachment based on code requirements and environmental affects specific to the installation.

Installation
The Power-Plume® can be curb mounted or mounted to a roof mounted laboratory exhaust fan. The Power-Plume® should not be mounted on sheet metal roof curbs, but may be mounted to a Cook LEC, Laboratory Exhaust Curb, attached per recommended attachment methods. The proper attachment method should be defined by the local authority.