
LEADERFAN

A trusted name in air moving products for over 50 years.

OPERATION AND MAINTENANCE MANUAL

DIRECT DRIVE EXHAUST FANS





INSTALLATION, OPERATION, AND MAINTENANCE MANUAL

DIRECT DRIVE EXHAUST FANS MODEL AX AND P

The purpose of this manual is to aid in the proper installation and operation of the fans. These instructions are intended to supplement good general practices and are not intended to cover detailed instruction procedures. It is the responsibility of the purchaser to assure that the installation and maintenance of this equipment is handled by qualified personnel.

Inspect all shipments carefully for damage. **THE RECEIVER MUST NOTE ANY DAMAGE ON THE CARRIERS BILL OF LADING AND FILE A CLAIM IMMEDIATELY WITH THE FREIGHT COMPANY.**

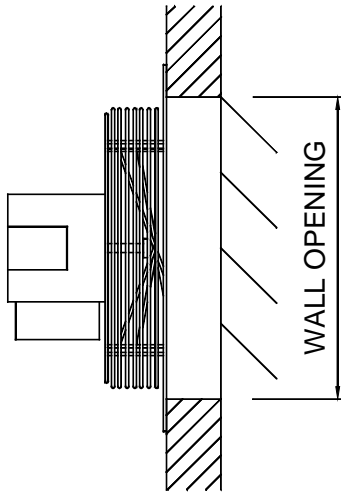
INSTALLATION

PRE-INSTALLATION CHECK

Prior to installation of a fan, please check carefully for any damage. If damage is found, do not install. Check and tighten all nuts, bolts, set screws, etc., which may have loosened during shipping and handling. Before connecting to the power source, check the motor nameplate, and the power supply, to ensure that they are both rated for the same power supply. Make sure the propeller turns freely without striking the fan frame or any other objects.

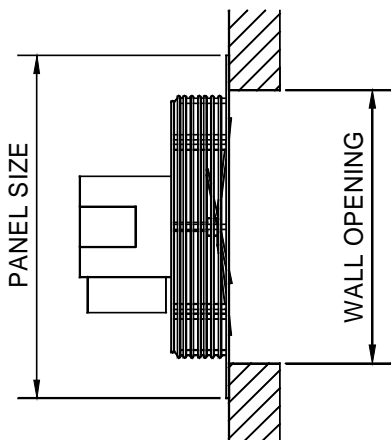
The Leader Fan P model fans can be mounted either horizontally or vertically. AX model fans are to be mounted horizontally only. When mounting the AX model fan, the wall opening should be approximately ½" larger than the shutter size. The P model wall openings should be 2" larger than the fan blade diameter. The AX and P model fans are meant to be through- the- wall fans and are not meant to be connected to duct work (doing so may overload the fan motors).

TYPICAL INSTALLATIONS



AX

AX MODEL	
LFI PART NO.	WALL OPENING
AX8	12-1/4
AX10	12-1/4
AX12	14-1/4
AX14	16-1/4
AX16	18-1/4
AX18	20-1/4
AX20	22-1/4
AX24	26-1/4
AX30	33-1/4
AX36	39-1/4



P

P MODEL		
LFI PART NO.	PANEL SIZE	WALL OPENING
P8	14	10
P10	14	12
P12	17	14
P14	18-3/4	16
P16	20-3/4	18
P18	22-3/4	20
P20	24-3/4	22
P24	28-3/4	26
P30	35-1/4	33
P36	41-1/4	39

NOTE: The opening sizes listed above are for the fans only. For fans with sleeves or cabinets, the opening size should be 1/2" larger than the panel size.

OPERATION

AIR EXHAUST AND SUPPLY

Selected P model fans can be used for supply (-1v models). However, the other P model fans can be used as supply fans only if mounted in the reverse direction and the motor is provided with adequate weather protection. When the P model fans are used for supply, in conjunction with a shutter, the shutter must be motorized. To attach the shutter to the fan, a wall sleeve may be required. The wall opening sizes, on P models, with a wall sleeve should be ½” larger than the outside panel size.

The AX series fan is to be used as an exhaust fan only (*not suitable for supply air*).

VARIABLE SPEED FANS

Leader Fan AX and P models (-1v) are suitable for variable speed or single speed operation. These fans, when used for variable speed operation, must be used with an appropriate speed controller. When using the AX fan with a variable speed controller care should be taken not to reduce the speed too low. If the airflow is reduced significantly the shutters may not open properly. This may cause motor problems.

For variable speed use, the recommended speed control is the MVS-5 or MVS-15 control or equal.

START UP

Turn the fan on and inspect for the following:

- Direction of rotation
- Improper motor amperage
- Excessive vibration
- Unusual noise

. The fan should be inspected after 30 minutes, 8 hours and 24 hours of operation to ensure all fasteners are tight and the fan is operating correctly.

MAINTENANCE

WARNING

Disconnect and secure to the **OFF** position all electrical power to the fan prior to inspection or servicing. Failure to comply with this safety precaution could result in serious injury or death.

- Ventilators should be checked at least once a year. For critical or severe applications a routine check every two to three months is suggested.
- A periodic inspection of all fasteners should be carried out to ensure they have not loosened due to vibration. Particular attention should be paid to fasteners attaching the wheel to the shaft.
- Dust and dirt on the exterior surface of the motor, fan panel and the entire fan wheel should be removed, at intervals determined by the severity of the application, to ensure proper service life and safety.
- For additional safety information refer to AMCA publication 410-96, Safety Practices for Users and Installers of Industrial and Commercial Fans

WARRANTY

All Leader Fan products are guaranteed to be free from defects of workmanship or material and to function satisfactorily when properly installed, operated and maintained in accordance with instructions, for a period of twelve (12) months from date of delivery unless stated otherwise.

The guarantee does not apply if the product has been altered or tampered with in any way after leaving the factory. Leader Fan assumes no liability for resultant damages, labour and services charges of any kind arising from the use of its products. On equipment furnished by Leader Fan but manufactured by others, such as motors, the warranty will be honoured by the manufacturers thereof.

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