



INSTALLATION & MAINTENANCE INSTRUCTIONS

WINDMASTER MODEL KD-DC

ASSEMBLY

1. The fan bearings are already mounted in the proper position on the fan shaft and should have rubber rings on the outside of the bearings. If not, install rings on bearings. (Fig. 2)
2. Insert the fan shaft and bearing assembly into the propeller hub and drive roll pin into aligned holes. (Fig. 1)
3. Bolt combined fan shaft and bearing assembly between the bearing housing of the short pipe frame assembly and the bearing cap of the long pipe frame assembly. (Fig. 3)
4. Bolt pipe frame assembly to the orifice. (Fig. 4)
5. Attach motor, belt and drive pulleys (keep drive pulley and fan pulley on the same plane.)

INSTALLATION

1. This unit has rotating parts and safety precautions should be exercised during installation, operation and maintenance.
2. **WARNING!** Do not use fans in hazardous environments where the fan's electrical system could provide ignition to combustible or flammable materials, unless built specifically for that environment.

Installation with Steel Wall Housing

3. For installation with steel wall housing refer to Form 610006.

Installation of Fan with out Housing

4. To install fan, provide a square opening in the wall equal to the outside dimensions of the fan. It is preferable to frame in the opening with 2x4 material, or a metal frame in metal buildings.
5. Slide the fan into the framed opening in the wall. Securely fasten with bolts or screws provided by the installer.
6. When using an automatic shutter, be sure to position the shutter at least 6" from the fan blades.
7. A distance of at least one and one half times the diameter of the fan should be allowed between the fan inlet or discharge opening and any adjacent wall or large obstruction.
8. Guards must be installed when fan is within reach of personnel or within seven (7) feet of working level or when deemed advisable for safety.
9. **CAUTION:** Before proceeding, make sure electrical service to fan is locked in "OFF" position.
10. Before starting, check all fasteners for tightness, particularly in the propeller hub. Turn the propeller by hand to make sure it is in alignment with the orifice and fan blades do not strike.

11. **WARNING!** Check voltage being supplied to the fan to see that it corresponds with the motor nameplate voltage; high or low voltage can seriously damage the motor. On multi-voltage motors check motor terminal connections to make sure motor is internally connected for voltage being supplied. A motor wiring diagram is located on the side of the motor or in the motor wiring compartment. Extra care should be taken.

MAINTENANCE

1. Motor bearings are pre-lubricated. Consult information printed on motor for lubrication instructions.
2. Propeller shaft bearings are pre-lubricated, sealed and require no service.
3. Check belt tension after first 48 hours of operation and thereafter annually. Belt should depress its width when pressed firmly inward at midway point between the pulleys. Too much tension will damage bearings; belt should be tight enough to prevent slippage. When replacing worn belt, replace motor pulley if "shoulder" is worn in groove. **WARNING!** Do not operate at higher speeds than rated. Do not replace motor pulley with a larger diameter pulley. Do not replace the fan pulley with one smaller in diameter. The pulley ratios are set so that the motor will not be overloaded.
4. If motor requires replacement, a comparable one to the original with the same service factor and enclosure must be used.
5. If impeller shaft bearings need replacement, replace with bearings comparable to original equipment. For die formed type support housing install new bearings into neoprene rings, check correct position of propeller with orifice, position bearings in die formed recess and tighten set screws. Replace die formed bearing cap and tighten four bolts.

WARNING

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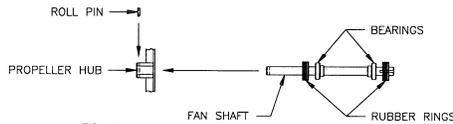


FIG. 1

FIG. 2

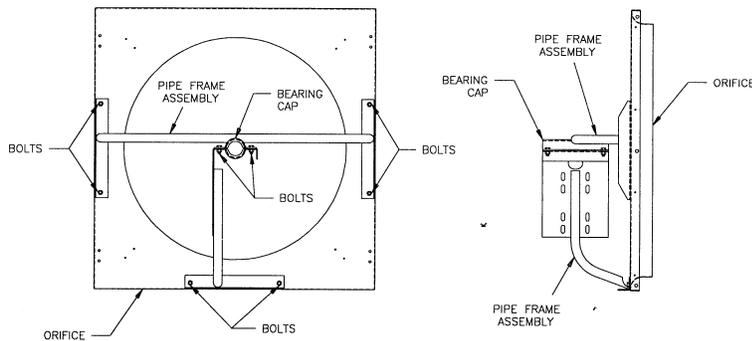


FIG. 4

FIG. 3

NOTICE

These instructions cover the usual installation, operation and maintenance methods for which the product(s) was designed. They do not purport to cover all details or variations in the product(s) nor to provide for every possible contingency that might be met in connection with the installation, operation and maintenance. For any departures from these instructions, or should particular problems arise which are not covered sufficiently for the purchaser's purpose, the matter should be referred to Acme Engineering and Manufacturing Corporation.

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Acme Eng. & Mfg. Corp.
P.O. Box 978
Muskogee, OK 74402
918-682-7791 Fax: 918-682-0134
www.acmefan.com