



# *Installation & Maintenance Instructions*



## *DSF Destratification Fans*

**READ AND SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE**

# BEFORE INSTALLATION

## IMPORTANT NOTICE! READ AND SAVE THESE INSTRUCTIONS

### WARNING!

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, INJURY TO PERSONS, PLEASE READ THESE INSTRUCTIONS CAREFULLY

1. Before servicing or cleaning the unit, ensure that the electrical service to the fan is locked in the "OFF" position to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device such as a tag to the service panel. Do not re-establish power supply until the fan has been completely installed.
2. Use this unit only in the manner intended by the manufacturer. If you have questions, contact the factory.
3. A qualified person(s) must perform installation work and electrical wiring in accordance with all applicable codes and standards, including fire-rated construction codes and standards.
4. Under no circumstances should the fan be operated in an environment with temperatures exceeding the specifications indicated on the motor name plate.
5. When cutting or drilling into walls or ceilings, take care not to damage electrical wires and other hidden utilities.
6. This unit may have sharp edges. Use caution to avoid injury when installing and cleaning.
7. The fan is intended to be hard wired to a properly rated electrical circuit, and must be properly grounded. Do not use an extension cord.
8. The fan should never be operated in area where there are hazardous and/or explosive vapors.

### CAUTION!

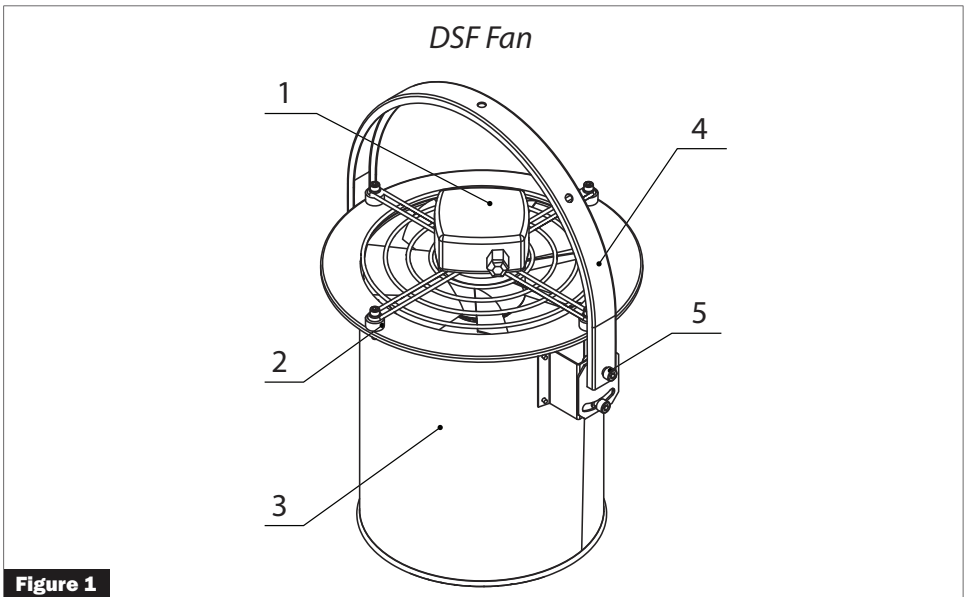
1. Misuse of the fan and/or any unauthorized design alterations or modifications voids the warranty.
2. To avoid motor damage and noisy and/or unbalanced impeller, keep the fan clean from drywall spray, construction dust, etc.
3. Before installing the unit, check for any visible damage to the impeller and housing. The housing internals must be free of debris, which can damage the impeller blades.
4. Please read the specification label on product for further information and requirements.
5. Not for installation by any person that is unable to follow these safety guidelines.
6. To ensure optimal airflow, do not close or block the unit inlet or outlet. Do not sit or put objects on the unit.
7. Store the fan in manufacturer's packaging in a ventilated room at temperatures between 41F and 104F. Relative humidity should not exceed 80%.

## DSF FANS

DSF fans comprise a steel housing and matching arched bracket with a corrosion resistant finish. Delivery set includes:

- Fan – 1
- Gripple Hanging/Safety Cable (2 x 15 ft)

DSF fans are equipped with a single-phase asynchronous external rotor motor with axial impeller. The arched bracket is fixed to the fan casing with two bolts. The fan is equipped with both a hanging and a safety cable for reliable fixation to a building structure.



**Figure 1**

### DSF FAN PARTS (Figure 1)

1. Electrical junction box on protective grille.
2. Vibration-absorbing mount
3. Metal case
4. Arched bracket
5. Fastening bolts for arched bracket

## TYPICAL FAN INSTALLATION

DSF fans come complete with two identical Gripple Hanging/Safety Cables. The cables have a crimped loop fixing at one end and a toggle at the other. Either cable may be used for hanging the fan or as the safety cable.

### WARNING!

Both the hanging and safety cables **MUST** be installed as follows:

### HANGING THE FAN (Figure 2)

**NOTE:** It is easier to secure the hanging cable to the structure first, and then attach the fan by inserting the toggle into the handle of the fan.

1. Insert the cable into one of the openings in the Gripple fasteners;
2. Place the cable over an I-beam, truss, or other structure from which the fan is being hung;
3. Insert the end of the cable into the other opening in the Gripple fasteners;
4. Adjust to desired height;
5. Insert toggle into the top hole on the handle.

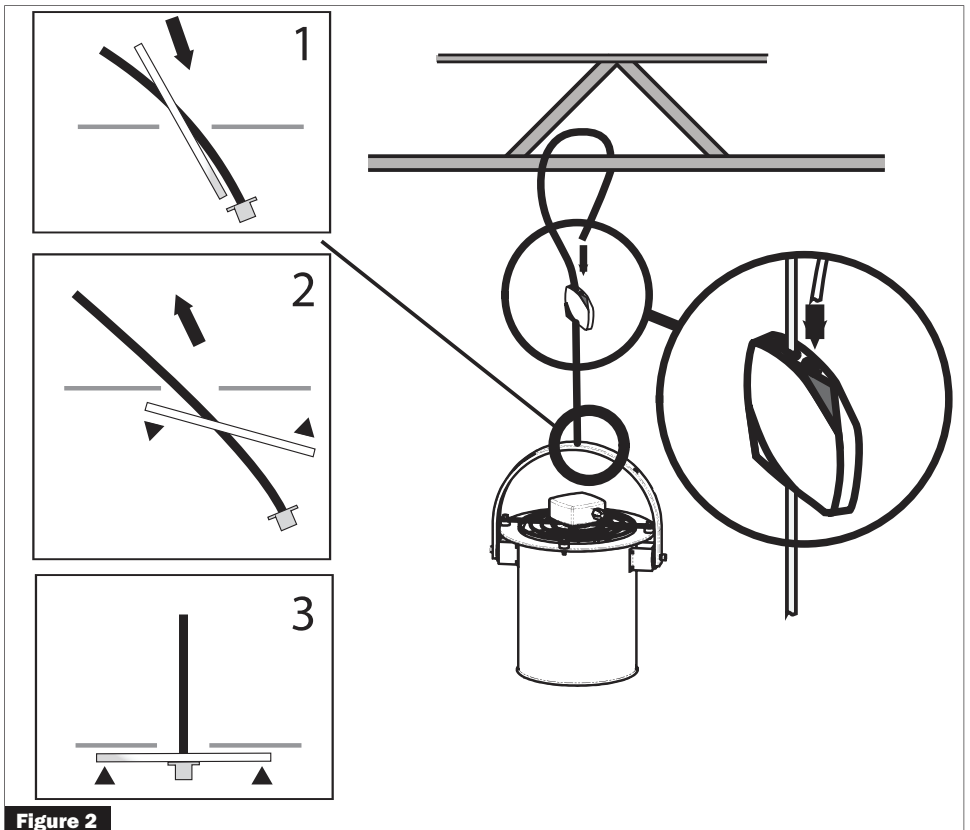


Figure 2

## TYPICAL FAN INSTALLATION

### ATTACHING THE SAFETY CABLE (Figure 3)

1. Insert the cable into one of the openings in the Gripple fasteners;
2. Place the cable over an I-beam, truss, or other structure at a 40 to 50 degree angle to the fan;
3. Insert the end of the cable into the other opening in the Gripple fasteners;
4. Insert toggle into the remaining hole on the handle;
5. Take the slack out of the safety cable by pulling the cable through the Gripple fasteners.

**NOTE:** The cable should not be so tight as to pull the fan to one side. The cable should not be so loose that it could get caught or tangled in the motor.

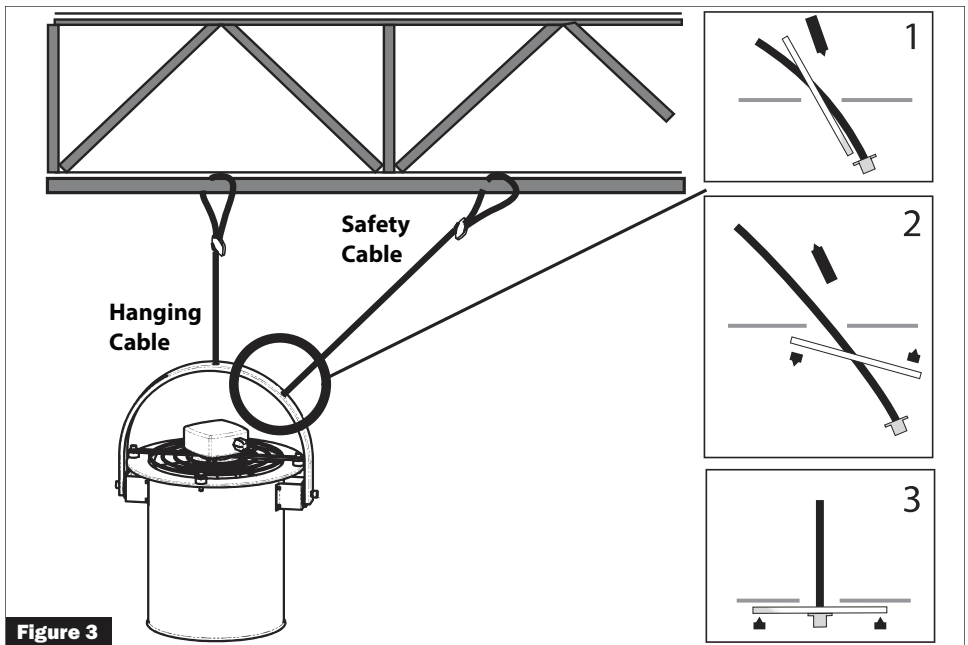


Figure 3

### POSITIONING THE FAN (Figure 4)

1. The DSF Fan may be angled as desired. A 13 mm socket wrench is required.
2. Loosen the bolts on either side of the fan, position at the angle desired, and then re-tighten the bolts.

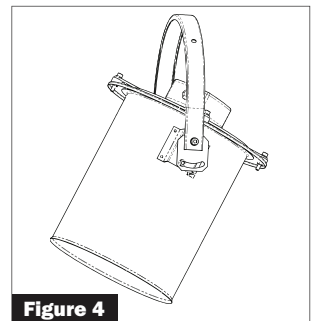


Figure 4

# WIRING PROCEDURES

## WIRING THE FAN (Figure 6)

1. A qualified person(s) must perform installation work and electrical wiring in accordance with all applicable codes and standards, including fire-rated construction codes and standards.
2. Use 18 AWG or greater wire.

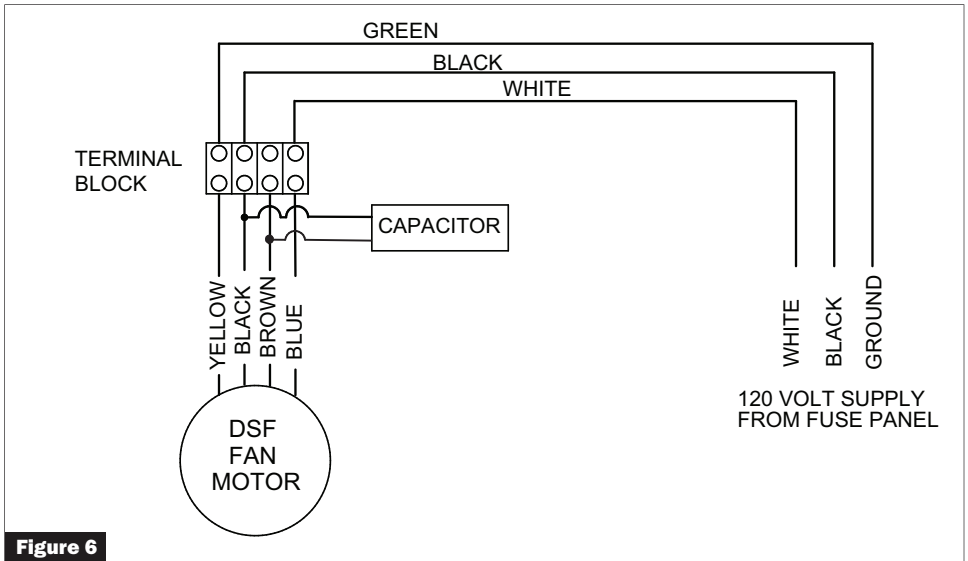


Figure 6

## OPTIONAL VSC SPEED CONTROL (Figure 7)

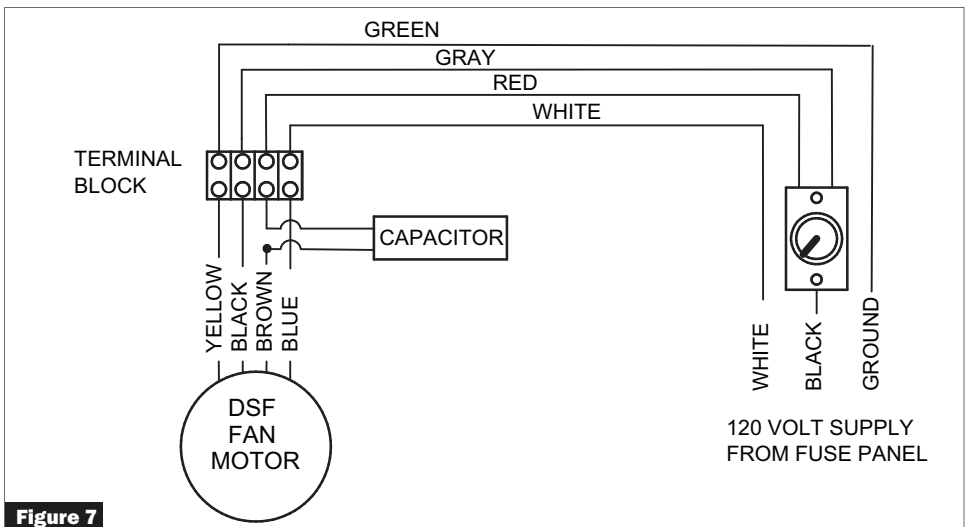


Figure 7

## RECOMMENDED MAINTENANCE

### WARNING!

Make sure to disconnect the fan from the power mains prior to performing any maintenance.

Proper maintenance includes periodic cleaning of the fan surfaces from dirt and dust. The fan impeller blades require thorough cleaning every 6 months. Wipe the fan blades with a soft cloth soaked in a mild detergent. Do not allow liquids to come in contact with the electric motor. Wipe surfaces dry after cleaning.

Annually:

1. Check to ensure that bolts are tight and fan is secure.

### TROUBLESHOOTING

	Possible reason	Remedy
The fan does not start.	No power	Have a qualified electrician check connection and power source.
The fan does not start (possibly with humming noise)	Object stuck in blades	Turn off power. Remove object. Restart fan.
Loud noise, vibration	Loose screw Dirty impeller	Tighten screw Clean the unit according to directions in this manual.

Please contact Customer Service at 800-779-4021 with any other problems encountered.

## ACCEPTANCE CERTIFICATE

**The DSF fan has been duly certified as serviceable.**

DSF250

DSF300

DSF350

Manufactured on (date): \_\_\_\_\_

Date of sale: \_\_\_\_\_

Sold by: \_\_\_\_\_  
(name of trading enterprise, stamp of store)

## CONNECTION CERTIFICATE

Company name: \_\_\_\_\_

Electrician name: \_\_\_\_\_

Date: \_\_\_\_\_ Signature: \_\_\_\_\_

Due to constant product improvements, some models may differ slightly from those portrayed in this manual.

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