



# INSTALLATION & MAINTENANCE INSTRUCTIONS

## SEF, PEF & GEF DIRECT DRIVE WALL FANS

READ AND SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE



SEF SHUTTER MOUNT FAN



PEF PANEL MOUNT FAN



GEF GUARD MOUNT FAN

**CAUTION! THESE FANS ARE DESIGNED FOR GENERAL VENTILATION USE ONLY. DO NOT USE TO EXHAUST CORROSIVE, HAZARDOUS OR EXPLOSIVE MATERIALS AND VAPORS.**

### BEFORE INSTALLATION

**WARNING! TO REDUCE THE RISK OF FIRE, ELECTRICAL SHOCK, OR INJURY TO PERSONS, PLEASE OBSERVE THE FOLLOWING SAFETY PRECAUTIONS:**

1. **This fan has rotating parts!** Turn impeller by hand to ensure that it rotates freely.
2. Ensure that electrical service to 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 service panel.
3. Do not re-establish power supply until fan and activation device are completely installed.
4. Installation work, including electrical wiring, must be performed by a qualified person in accordance with all applicable codes and standards, including local fire codes.
5. Check voltage at fan to see that it corresponds to fan motor nameplate rating.
6. Fan is intended to be hard wired to a properly rated electrical circuit, and must be properly grounded. Do not use an extension cord.
7. Fan motor is equipped with thermal overload protection, which causes fan to shut off automatically if motor overheats. If this should happen, immediately disconnect and lock power supply to fan. **Do not attempt to work on fan without disconnecting power supply; fan may restart without warning!**
8. Fan should not be turned on and off rapidly.
9. Do not use fan with a solid state speed control device.
10. Do not allow fan to become wet or damp.
11. Do not block air intake or exhaust from fan.
12. Do not allow foreign objects to enter fan and come in contact with fan blades.

### SPEED SELECTOR SWITCH

Fan is equipped with either a 2-speed or 3-speed pull chain switch, allowing user to select desired airflow. Pulling a speed selector switch repeatedly will cause fan speed to cycle as follows:

#### 2-Speed Switch:

OFF – FIRST SPEED – OFF – SECOND SPEED – OFF

#### 3-Speed Switch:

OFF – HIGH – MEDIUM – LOW – OFF

### ASSEMBLY INSTRUCTIONS

#### MODELS SEF-10 THROUGH SEF-24

**Contents:** Pre-assembled guard mount fan, shutter, shutter mounting hardware kit, package of mounting screws.

To mount shutter to fan assembly:

1. Shutter mounting hardware kit includes: 4 rubber vibration isolators, 4 nylon inserts, 4 screws (#12 x 1") and 4 rubberized washers.
2. Insert screws into washers - rubber side down.
3. Place nylon inserts into square holes of corner gussets at rear of shutter.
4. Place shutter face down (gusset side up). Center vibration isolators over nylon inserts.
5. Place fan assembly on shutter so that wire hooks on fan guard are centered over vibration isolators and nylon inserts. Junction box must be positioned at bottom with shutter blades opening upwards.
6. Secure fan assembly to shutter using screws and washers.
7. Ensure that fasteners are snug. Do not over tighten to avoid stripping nylon inserts.

#### MODEL SEF-30

**Contents:** Pre-assembled guard mount fan, shutter, shutter mounting hardware kit, package of mounting screws.

To mount shutter to fan assembly:

1. Shutter mounting hardware kit includes: 4 rubber vibration isolators, 8 rubber inserts, 8 screws (#8-32 x 1 1/2") and 8 rubberized washers.
2. Insert screws into washers - rubber side down.
3. Place rubber inserts into round holes of corner gussets at rear of shutter. It may be necessary to twist and push or tap lightly to seat rubber inserts properly.
4. Place shutter face down (gusset side up). Center vibration isolators over rubber inserts.
5. Place fan assembly on shutter so that wire hooks on fan guard are centered over vibration isolators and nylon inserts. Junction box must be positioned at bottom with shutter blades opening upwards.
6. Secure fan assembly to shutter using screws and washers.
7. Ensure that fasteners are snug. Do not over tighten to avoid pulling out rubber inserts.

#### MODELS PEF-10 THROUGH PEF-30

**Contents:** Pre-assembled panel mount fan.

#### MODELS GEF-10 THROUGH GEF-30

**Contents:** Pre-assembled guard mount fan.

## FAN INSTALLATION

### MODELS SEF-10 THROUGH SEF-30

When shutter is mounted to fan assembly:

1. Cut square wall opening size  $\frac{1}{2}$ " larger than fan blade diameter.
2. From inside of building / room, center fan assembly over wall opening. Fan must be positioned so that junction box is located at bottom and shutter is level and square, with shutter blades opening upwards.
3. Lag fan to wall through mounting holes in shutter gusset, using appropriate fasteners (by others).
4. Rotate fan impeller by hand, ensuring that it is unobstructed and rotates freely.
5. Make electrical connections to fan junction box.

When shutter and fan assembly are mounted separately:

1. Cut wall opening size  $\frac{1}{2}$ " larger than fan blade diameter.
2. From inside of building / room, center fan assembly over wall opening. Fan must be positioned so that junction box is located at bottom.
3. Lag fan to wall through wire hooks on guard, using the appropriate fasteners (by others).
4. Apply caulking compound (by others) to rear of shutter gusset.
5. From outside of building / room, center shutter over wall opening, ensuring that shutter is level and square, with shutter blades opening upwards.
6. Lag shutter to wall through mounting holes in shutter gusset, using appropriate fasteners (by others).
7. Rotate fan impeller by hand, ensuring that it is unobstructed and rotates freely.
8. Make electrical connections to fan junction box.

### MODEL PEF-10 THROUGH PEF-30

1. Cut wall opening size  $\frac{1}{2}$ " larger than fan venturi opening.
2. From inside of building / room, center fan panel assembly over wall opening. Fan must be positioned so that junction box is located at bottom.
3. Lag fan to wall through mounting holes in panel, using appropriate fasteners (by others).
4. Rotate fan impeller by hand, ensuring that it is unobstructed and rotates freely.
5. Make electrical connections to fan junction box.

### MODELS GEF-10 THROUGH GEF-30

1. Cut wall opening size  $\frac{1}{2}$ " larger than fan blade diameter.
2. From inside of building / room, center fan assembly over wall opening. Fan must be positioned so that junction box is located at bottom.
3. Lag fan to wall through wire hooks on fan guard, using the appropriate fasteners (by others).
4. Rotate fan impeller by hand, ensuring that it is unobstructed and rotates freely.
5. Make electrical connections to fan junction box.

## RECOMMENDED MAINTENANCE

1. When undertaking maintenance or service work, ensure that electrical service to 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 service panel.
2. Do not re-establish power supply until maintenance or service work has been completed.
3. Maintenance or service work must be performed by a qualified person in accordance with all applicable codes and standards, including local fire codes.
4. Motor bearings are factory lubricated and do not require additional lubrication.
5. Remove airborne contaminants that have settled on motor using an air hose or vacuum.
6. Clean fan blades, guard or shutter using a mild detergent. Do not allow cleanser to come in contact with fan motor or electrical parts.

## LIMITED WARRANTY

This equipment is warranted to be free from defects in material and workmanship for a period of one (1) year from date of purchase. Any units or parts which prove to be defective during warranty period will be repaired or replaced at Vendor's option. Vendor is not responsible for any removal, installation or transportation costs.

Motors are warranted separately by motor manufacturer for a period of one (1) year, and should be returned to nearest authorized motor service center for repair.

All warranty claims must be processed through point of purchase.

## WIRING PROCEDURE

