



# ENVIROFAN CEILING FANS

## ASSEMBLY AND INSTALLATION INSTRUCTIONS

READ BOTH SIDES OF THIS SHEET CAREFULLY BEFORE ASSEMBLING OR INSTALLING YOUR ENVIROFAN.

IT IS IMPORTANT THAT YOU OBSERVE ALL SAFETY INFORMATION TO HELP PREVENT PERSONAL INJURY AND/OR PROPERTY DAMAGE.

FOLLOWING THESE INSTRUCTIONS WILL ALSO HELP MAXIMIZE PRODUCT SUCCESS AND HELP PREVENT POSSIBLE INVALIDATION OF YOUR WARRANTY.

### Parts List

1. 1 - Pre-assembled fan without blades.
2. 3 - Blades with brackets attached.
3. 6 - Bolts attached to motor housing.
4. 1 - J-Hook mounting bolt (or lag screw for 190A).
5. 2 each - lock washers, flat washers, nuts.
6. 1 - J-Hook secondary support bolt (except 190A).
7. 1 - EZ Mount bracket (except 190A).

### Unpacking

1. Carefully remove fan and parts from carton and check for shipping damage.
2. Check parts list against carton contents.
3. Do not install blades before mounting fan.
4. Connect fan to temporary power source to check electrical operation.

### Electrical Hook-Up

#### Model F & FP Fans - Downblowing Only:

Black to Black  
 White to White  
 Green (Ground)  
 Red (capped off)

#### Model C Fans - Reversing:

Black to Black (down blowing)  
 Red to Black (up blowing)  
 White to White  
 Green (Ground)

#### Models 60F-7, 160F-7, 190A-7:

These models are manufactured with a cord and molded 3 prong plug which can be installed directly into a 3-way electrical box.

**Note:** The Models 60C and 160C can be wired as a combination fan (both up and down blowing) by installing a reversing pole switch (108C control) in the line between the fan and the control. Reversible fans operate most effectively with straight blades which come standard on all C Models. **Caution:** Do not flip switch to change fan direction without waiting for motor to stop. Damage to motor could occur.

Other models listed as downblowing, may be rewired to run either upblowing or downblowing. Please contact us for more information.

Not recommended for low noise applications (i.e. churches, theatres, etc.) due to possible hertz hum issues.

**Questions?** For troubleshooting tips or additional installation information, please visit our website at [www.envirofan.com](http://www.envirofan.com)

<b>AGRIFAN</b>	<b>190A-7</b>	24 lbs.
<b>ENVIROFAN</b>	<b>160F, 160C</b>	24 lbs.
	<b>60F, 60C</b>	21 lbs.
	<b>48F, 48C</b>	18 lbs.
	<b>FP56</b>	18 lbs.
	<b>136F</b>	18 lbs.

### Tools and Supplies Needed

1. Screwdriver - Slot and Phillips.
2. Wrench - Adjustable or 1/2", 9/16", and 10 mm.
3. Electrical Wire Connectors - 2 or 3.
4. Metal Outlet Box - Grounded, single receptacle.
5. Solid State Speed Control.

### Safety Precautions

1. This fan should be installed by qualified persons only in accordance with all applicable codes and standards.
2. Use this fan only in the manner intended by the manufacturer. This fan is intended for permanent installation and to be used for air circulation only.
3. The secondary support cable included with the fan must be properly connected.
4. The fan shall be supported 1) directly from the building structure or 2) directly from UL approved fan electrical box using EZ Mount hardware. **Caution:** To reduce risk of injury, use only the enclosed hardware as the primary means of support.
5. Do not bend the blade brackets when installing the blades or cleaning the fan. Do not insert fingers or foreign objects into rotating fan, or block or tamper with it in any manner while it is operating.
6. Ceiling fans without guards are to be installed at least ten feet above floor with adequate clearance between blades and adjacent walls, furnishings, etc.
7. When mounted in a cathedral ceiling, blade tips should be at least one foot from the angled roof line or air turbulence may cause fan to sway.
8. The supporting beam must be capable of holding at least 80 pounds (or the weight of the fan plus any accessories that might be added).
9. Ceiling fans installed with ceiling fan guards must be installed with J bolt hardware provided, and must be attached directly to the building structure.

### Before Installation

1. Disconnect power at main service panel. Lock in open position and tag it to prevent unexpected power application.
2. Check that power source conforms to electrical requirements of fan.
3. Make sure outlet box is metal, UL listed for fans and capable of supporting at least 35 pounds, and is grounded.

### Envirofan Accessories Available

#### Protecto-Guard Ceiling Fan Guard -

Patented guard fits 36" to 60" fans.

For any fan that requires protection or a safety guard. Patented design.



#### Downrod Extension Kit - 30" downrod

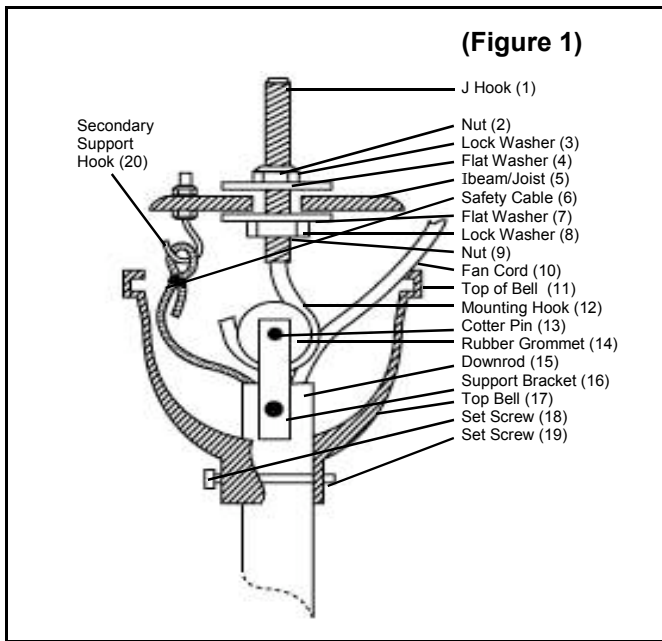
extension kit. Includes safety cable extension.



**Fan Controls** - A complete line of solid state, infinite speed, UL recognized fan controls.



## Step #1 Hanging the Fan



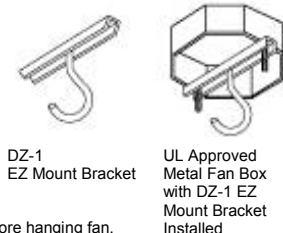
### J-Hook Mount (Figure 1)

1. Wind one nut (9) down to bottom of J-Hook (1) towards the curve. Add a lock washer (8), then a flat washer (7) on top of nut.
2. Put hook through opening in Ibeam/Joist. Add flat washer (4), then lock washer (3), and nut (2). Do not tighten nut completely until fan is put in place on J-Hook (Step 4).
3. Loosen set screws (18) and (19) of top bell (17) on fan downrod (15) and lower the bell to make room to place rubber grommet (14) onto Mounting Hook (12).
4. Tighten top nut (2) on J-Hook to raise fan into the proper installation position.
5. Install secondary support hook (20) next to mounting hook so both will fit within area of top bell (Note: Model 190A-7 does not offer secondary support hook).
6. Double loop (figure-eight) the safety cable loop (6) over the secondary support hook (20), leaving some slack (Note: Model 190A-7 does not offer safety cable).
7. Safety cable loop can be clamped for more security.
8. Wire fan according to directions on page 1. Ensure power to outlet box is off before hooking up wiring.
9. Move top bell back up the downrod to cover both mounting and support hooks. Leave 1/8" gap between top of bell (11) and hanging surface (so downrod does not move off center which could make fan wobble or vibrate). Tighten set screws (18) and (19).

### EZ Mount - Alternate Mounting Bracket for Envirofan Ceiling Fans .

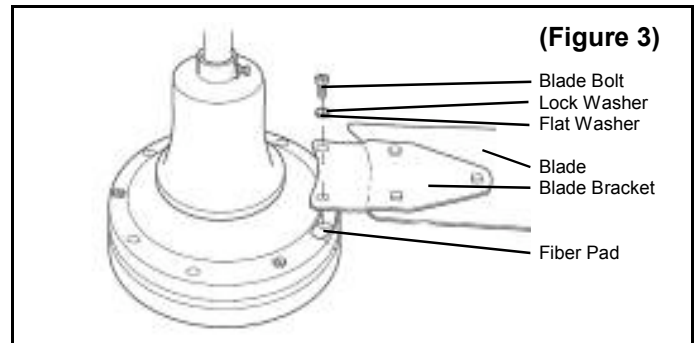
Included with all models except Model 190A.

- Must be mounted to a UL approved metal fan box marked "acceptable for fan support"
- The mounting screws provided with the metal fan box must be used.
- The weight of the fan together with intended combination of accessories installed cannot exceed 35 lbs.
- After metal fan box is installed, using screws provided, attach DZ-1 bracket to metal fanbox as shown in illustration.
- Make sure all screws are securely fastened before hanging fan.
- Install safety cable to extra j-hook provided for added protection.
- Ceiling fan with fan guard cannot be installed to a fan box using the EZ mount bracket.



## Step #2 Attaching Blades

1. Bolts, flat washers, lock washers and fiber pads for attaching blades are located on the motor housing.
2. Brackets come already installed on blades.
3. For each blade remove 2 bolts. Replace in blade bracket with lock washer and flat washer between bolt and bracket (lock washer against bolt).
4. Leaving fiber pad in place on motor housing, set bracket over holes and reinstall the bolts in their original holes. Tighten into motor housing. Do not over tighten.
5. When all three blades are attached turn power back on and test fan function.



## Step #3 Product Safety Inspection (After Installation)

Check the following as a product safety inspection before completing your installation.

### Figure 1

1. Make sure cotter pin (13) is in place and secure.
2. Make sure safety cable (6) is in correct position.
3. Make sure both nuts (2) and (9) are secure on J-Hook.
4. Make sure upper bell set screws (18) and (19) are tight on downrod. Leave 1/8" between bell and hanging surface.

### Figure 2

1. **Important**--make sure set screw (4) is tight to assure wobble-free operation.
2. Make sure cotter pin (5) is in place and secure.
3. Make sure lock-nut (7) is tight and cotter pin (6) is in place and secure.
4. Make sure lower bell set screws (2) and (3) are tight on downrod (1). Leave 1/8" of space between bell and fan.

