# NuTone

# "OpenAire"

**MODEL: PFOB-52** 

### **CAUTIONS**

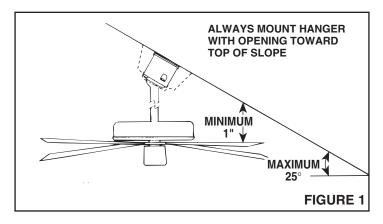
- 1. Before wiring the paddle fan, turn off the electric power supply at the main fuse or circuit breaker box and leave it off until the installation is complete.
- Mount the outlet box so it will support a minimum of 45 pounds. The outlet box must be mounted flush to ceiling. Do not use a plastic outlet box.
- 3. Do not install paddle fan with less than 7 feet clearance between floor and lowest edge of fan blades.
- 4. If you are unfamiliar with electric wiring, acquire the services of a qualified electrician.
- Use proper cable and fittings. Be certain the fan is properly grounded. Wiring must comply with national and local electrical codes.
- 6. **Electrical requirements:** 120vAC, 60 Hz, single phase, 1 amp. without optional lighting accessory.
- 7. Fan blades may be cleaned with a mild soap solution. Do not use an abrasive cleaner or a strong chemical cleaner.
- 8. WARNING: To reduce the risk of fire or electrical shock, do not use this fan with any solid-state speed control device (NOTE: Refer to NuTone's catalog for appropriate speed control switches.)
- 9. WARNING: To reduce the risk of personal injury, do not bend the blade brackets when installing the brackets, balancing the blades or cleaning the fan. Do not insert foreign objects between rotating fan blades.
- CAUTION: To reduce the risk of electric shock, connect only to supply circuit provided with a ground fault circuit interrupter
- 11. CAUTION: To reduce the risk of electric shock, fire or personal injury, a light kit must be marked suitable for use with this fan and must be marked as suitable for outdoor use.
- 12. Do not operate reversing switch while fan blades are in motion. Fan should be turned off and blades stopped before reversing blade direction.

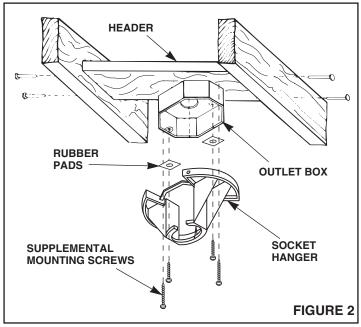
# **LOCATION**

- 1. **Minimum ceiling height:** 8 feet. When fan is installed, this allows a minimum of 7 feet between the floor and fan blades.
- 2. The center of the fan must be located at least 32" from any vertical surface.
- 3. Do not mount fan below, next to or between air ducts, beams or any other obstruction which may interfere with the natural air flow pattern created by the fan.
- 4. Fan can be mounted using down rod or closer to ceiling using ceiling cup as close up adapter.

# MOUNTING ON A SLOPED CEILING

1. **Refer to Figure 1.** A paddle fan equipped with a ball and hanger bracket assembly can be safely mounted to a sloped





ceiling where the maximum angle of the sloped ceiling does not exceed 25°.

For any angled ceiling, use appropriate NuTone Extension Stems to insure proper clearance between the blades and ceiling. See NuTone catalog.

# **MOUNTING OUTLET BOX**

Refer to Figure 2.

CAUTION: To reduce the risk of personal injury, install the supplemental mounting means and use only the hardware provided with the fan or use a listed outlet box marked as acceptable for fan support. If the combined weight of the ceiling fan and any light kit used with it exceeds 35 pounds, the fan should be supported independently of the outlet box. The weight of your fan is 20 lbs.

 Fan mounts to a standard 4" metallic outlet box or a listed fan support box. For damp location mounting, use outlet box listed for "Damp Locations". For outdoor mounting use outlet box listed for wet locations. 2. When using a standard outlet box install a header between joists and securely mount outlet box to header. Using two screws supplied with the outlet box attach socket hanger securely to outlet box. Place rubber pads between hanger and box. Using 3" screws (supplied) install screws through the socket hanger mounting slots, outside of the outlet box, through the ceiling and into the header. Do not overtighten or socket hanger may be damaged. These screws serve as supplemental support independent of the outlet box.

When using a listed outlet box marked acceptable for fan support, follow instructions provided with the box.

# MOUNTING THE FAN WITH DOWN ROD

- Refer to Figure 6. To install the ball and stem assembly to the fan, feed the wires from the fan through the rubber canopy, the ceiling canopy and down rod.
- Insert stem of rod into flange on the top of fan. (It may be necessary to back out the set screw in flange).
   Line up holes in stem and flange and insert smooth pin through flange and stem. Secure pin with hitch pin. Tighten set screw in flange.
- Refer to Figure 6. Run wires from fan through rubber cover. Lift fan and place ball hanger into socket of socket hanger. Rotate fan until groove in ball locks with tab in socket.

# MOUNTING FAN WITH CLOSE UP ADAPTER

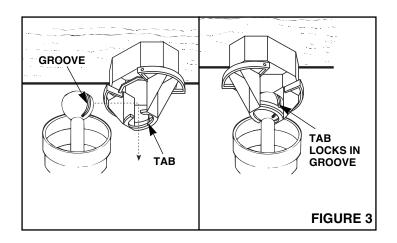
- Remove soft plastic bushing from the center of the ceiling cup. Secure ceiling cup to top of fan using three screws and lockwashers provided in the hardware bag. (The down rod and ball are not required for this installation.)
- 2. Hang the fan from the tab on the back of the hanger bracket using one of the holes in the ceiling cup. This will support the fan while wiring connections are made.

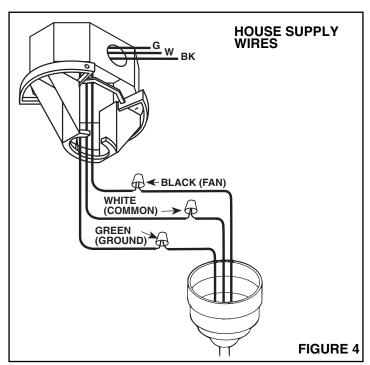
# WIRING CONNECTIONS

#### Refer to Figure 4.

All wiring must comply with national and local codes. Be certain the power is disconnected before proceeding.

- Connect fan wires to house supply wires using listed wire connectors. Make connections as follows: Black to black, white to white and green ground wire to green or bare copper ground from house supply.
  - **IMPORTANT:** For wall switch control use only listed general use switches.
- 2. After splices are made turn them upwards and carefully push into outlet box with white and green wires on one side of outlet box and black wires on the other side.
- 3. Using four screws (supplied) secure ceiling cup to socket hanger.





# **LIGHT KIT**

**USE ONLY PFLK-123WH.** Do not attempt to use any other model.

# ATTACHING FAN BLADES

- 1. **Refer to Figure 5.** Using three screws and washers fasten top and bottom blade bracket to blade as shown.
- 2. **Refer To Figure 6.** Using two motor screws and washers provided, secure blade to fan flywheel Repeat for remaining blades.

#### OPERATION CHECK

- 1. Reconnect electrical supply at breaker or fuse box.
- 2. Check for proper operation of three speed pull chain switch HI MED LOW OFF.
- Let fan come to a complete stop, then check operation of reversing switch.
- For fan balancing see instructions provided with the balancing kit.

# **OPTIONAL EXTENSION STEM**

#### Refer to Figure 7.

To use the optional extension stem (not supplied) follow these steps:

- Loosen anti-turn screw and slide hanger ball from standard stem.
- 2. Remove ground wire and pin.
- 3. Attach ground wire and pin to extension stem.
- 4. Slide hanger ball onto stem and completely tighten anti-turn screw.

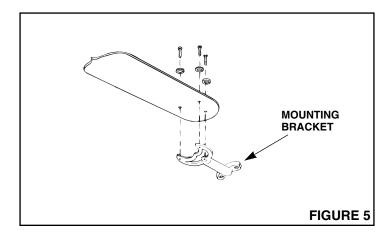
NOTE: To avoid possible electric shock, be sure the green ground wire has been replace and the anti-turn screw has been tightened completely.

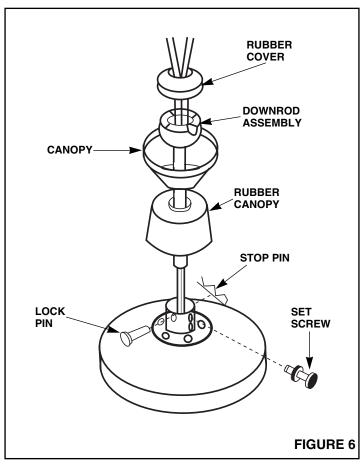
Mount extension stem to fan as described in "Mounting Fan".

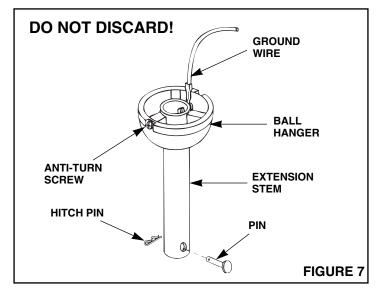
# IMPORTANT SAFEGUARDS

- 1. Be sure fan is switched off before cleaning it.\*
- Keep hands, clothing and other objects away from moving fan blades.
- 3. Exercise close supervision of children if they are present when fan is in operation.
- 4. Shut off electricity to fan at main fuse or circuit breaker box before servicing or working near fan.
- Do not operate fan if it has been damaged in any manner. Contact your nearest NuTone Authorized Service Center.

\*Fan blades may be cleaned with a mild soap solution. Do not use an abrasive cleaner or a strong chemical cleaner.









# Two Year Limited Warranty

WARRANTY OWNER: NuTone warrants to the original consumer purchaser of its products that such products will be free from defects in materials or workmanship for a period of two (2) years from the date of original purchase. THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

During this two year period, NuTone will, at its option, repair or replace, without charge, any product or part which is found to be defective under normal use and service. THIS WARRANTY DOES NOT EXTEND TO FLUORESCENT LAMP STARTERS OR TUBES, FILTERS, DUCT, ROOF CAPS, WALL CAPS AND OTHER ACCESSORIES FOR DUCTING. This warranty does not cover (a) normal maintenance and service or (b) any products or parts which have been subject to misuse, negligence, accident, improper maintenance or repair (other than by NuTone), faulty installation or installation contrary to recommended installation instructions.

The duration of any implied warranty is limited to the one year period as specified for the express warranty. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

NUTONE'S OBLIGATION TO REPAIR OR REPLACE, AT NUTONE'S OPTION, SHALL BE THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY. NUTONE SHALL NOT BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH PRODUCT USE OR PERFORMANCE. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. This warranty supersedes all prior warranties.

WARRANTY SERVICE: To qualify for warranty service, you must (a) notify NuTone at the address stated below or telephone 1/800-543-8687, (b) give the model number and part identification and (c) describe the nature of any defect in the product or part. At the time of requesting warranty service, you must present evidence of the original purchase date.

Date of Installation Builder or Installer

Model No. and Product Description

#### IF YOU NEED ASSISTANCE OR SERVICE:

For the location of your nearest NuTone Independent Authorized Service Center:
Residents of the contiguous United States Dial Free 1-800-543-8687

Please be prepared to provide:

Product model number • Date and Proof of purchase • The nature of the difficulty

Residents of Alaska or Hawaii should write to: NuTone Inc. Attn: Department of National Field Service, 4820 Red Bank Road, Cincinnati Ohio 45227-1599.

Residents of Canada should write to: Broan-NuTone Canada, 1140 Tristar Drive, Mississauga, Ontario, Canada L5T 1H9.

Rev. 03/2001

Product specifications subject to change without notice.



4820 Red Bank Road, Cincinnati, Ohio 45227 Printed in Taiwan, Rev. 3/02, Part No. 83012