

**PLEASE READ AND SAVE THESE INSTRUCTIONS.**

Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain instructions for future reference.

PENN BARRY

Zephyr Heavy Duty Combination Fan/Light Ventilating Fan Models ZL1 & ZL2



Receiving and Handling

PennBarry fans are carefully inspected before leaving the factory. When the unit is received, inspect the carton for any signs of tampering. Inspect the unit for any damage that may have occurred during transit and check for loose, missing or damaged parts. Mishandled units can void the warranty provisions. PennBarry is not responsible for damages incurred during shipment. Avoid severe jarring and/or dropping. Handle units with care to prevent damage to components or special finishes.

Storage

Long-term storage requires special attention. Units should be stored on a level, solid surface, preferably indoors. If outside storage is necessary, protect the units against moisture and dirt by encasing the cartons in plastic or some similar weatherproof material.

Unpacking

Place carton in an upright position and remove staples or use a sharp (knife edge) tool to CAREFULLY cut or scribe the sealing tape on both sides at the top of the carton. Open carton flaps. Remove any cardboard and wooden filler pieces, as well as loose components or accessories shipped with the unit.

Carefully remove the unit from the carton. Inspect the unit for any damage that may have occurred during transit and check for loose, missing or damaged parts.

Installation

WARNING

To reduce the risk of fire, electrical shock, or injury to persons, observe the following:

1. Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer at the address or telephone number listed in the warranty.
2. Before servicing or cleaning unit, switch power off at service panel and lock service panel to prevent power from being switched on accidentally.
3. Installation work and electrical wiring must be done by a qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction codes and standards.

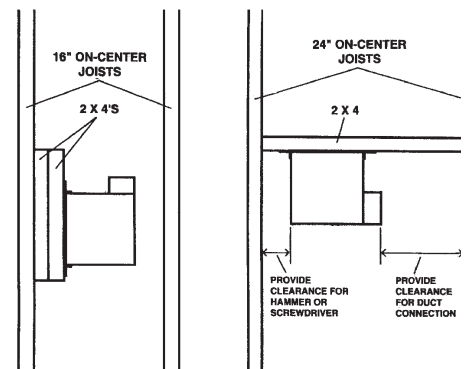
4. Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent back-drafting. Follow the heating equipment manufacturer's guideline and safety standards such as those published by the National Fire Protection Association (NFPA), and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and the local code authorities.
5. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
6. Ducted fans must always be vented to the outdoors.
7. If this unit is to be installed over a tub or shower, it must be marked as appropriate for the application.
8. Never place a switch where it can be reached from a tub or shower.
9. This unit must be grounded.

CAUTION

1. For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.
2. This product is designed for ceiling installation only. **DO NOT MOUNT THIS PRODUCT IN A WALL.**
3. To avoid motor bearing damage and noisy and/or unbalanced impellers, keep drywall spray, construction dust, etc. off power unit.
4. Please read specification label on product for further information and requirements. Installation

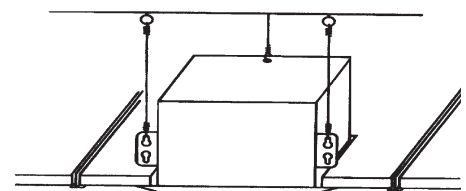
MOUNTING OPTIONS

Figure 1



1. Housing can be installed anywhere between joists using 2" X 4" support(s) as shown.

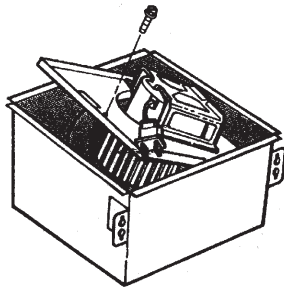
Figure 2



2. Housing can be installed in a suspended ceiling using wire as shown.

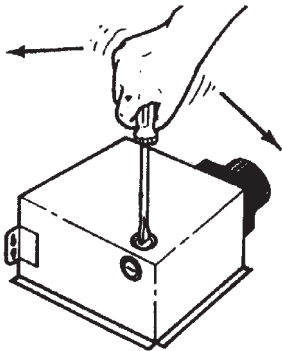
PREPARE THE FAN/LIGHT

Figure 3



1. Unplug motor and remove the sheet metal screw next to the receptacle. Lift the fan assembly out of the housing, being careful not to bend blower wheel.

Figure 4

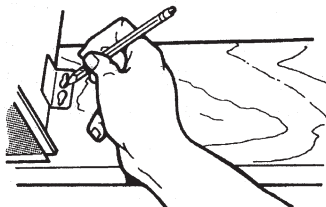


2. Choose either the top or side knockout. Remove knockout by bending it back and forth to break tabs.

INSTALLATION OF THE FAN LIGHT

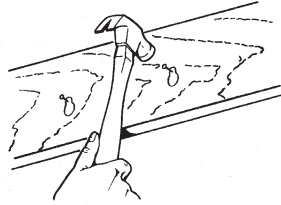
New Construction

Figure 5



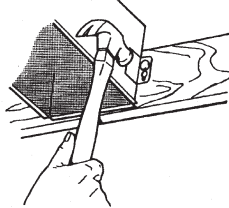
1. Choose the location for your fan/light in the ceiling. For best possible performance, use the shortest possible duct run and a minimum number of elbows.
2. Position mounting brackets against joist so that bottom edge of housing will be flush with finished ceiling. A handy measuring guide is embossed on the housing to make this easy. Mark the top keyhole slot on both mounting brackets.

Figure 6



3. Set housing aside and drive nails partially into joist at the top of both keyhole marks.

Figure 7

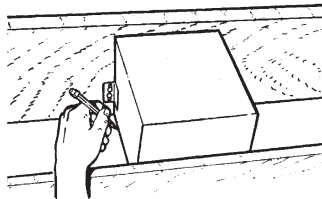


4. Hang housing from nails and pound nails tight. To ensure a noise-free mount, pound another nail through the lower hole of each mounting bracket.

Existing Construction

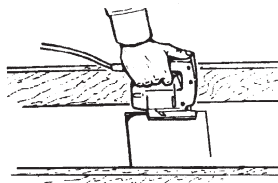
1. Choose the location for your fan/light in the ceiling. For best possible performance, use the shortest possible duct run and a minimum number of elbows.

Figure 8



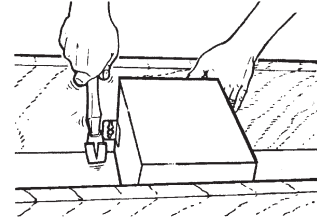
2. In attic, position mounting brackets against joist. Trace outline of housing on ceiling material.

Figure 9



3. Set housing aside and cut ceiling opening slightly larger than marked.

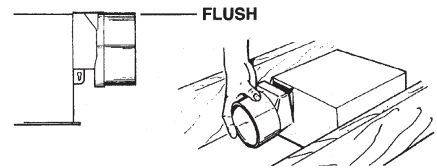
Figure 10



4. Place housing in opening so that its bottom edge is flush with finished ceiling. Nail to joist through top keyhole on both sides. To ensure a noise-free installation, drive another nail through the lower hole of each mounting bracket.

DUCT WORK

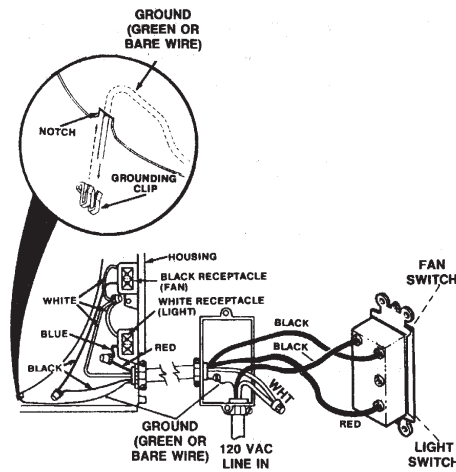
Figure 11



1. Snap the damper/duct connector onto housing. Make sure that tabs on the connector lock into slots in housing. Top of damper/duct connector should be flush with top of housing.
2. Connect 4" round duct to damper/duct connector and extend duct to outside through a roof or wall cap. Check damper to make sure that it opens freely. Tape all duct connections to make them secure and air tight.

WIRING

Figure 12



1. Wire unit following diagram above. Run electrical cable as direct as possible to unit. Do not allow cable to touch sides or top of unit after installation is complete.

CAUTION Do not allow wires to hang over edge of scroll band.

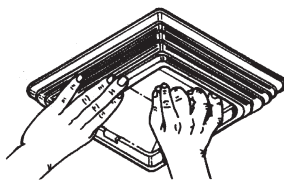
Push all wiring up into corner of unit. Wire left hanging over this edge will become pinched or severed when fan assembly is installed. Electrical shock may result.

2. Replace fan assembly and secure with sheet metal screw. Plug motor into BLACK receptacle.

ATTACHING THE GRILL

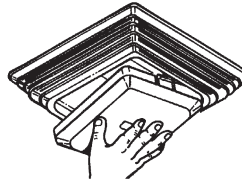
Figure 13

HAND-TIGHTEN ACORN NUT- OVERTIGHTENING MAY DEFORM GRILLE.



1. Slide light reflector into front of grill opening. Plug light into WHITE receptacle. Place grill/reflector combination over protruding screw, and fasten into place using acorn nut provided. HAND-TIGHTEN acorn nut 1/4 turn after it is snug.

Figure 14



2. Install light bulb (100 Watt Max.). Insert one tab on light lens into a slot in the grill/reflector combination. Squeeze other tab slightly and snap into remaining slot.

Use And Care

CAUTION Disconnect electrical power supply and lock out service panel before cleaning or servicing this unit.

BULB REPLACEMENT

Remove lens by gently depressing sides and pull down. Use 100 Watt maximum incandescent bulb.

MOTOR LUBRICATION

The motor is permanently lubricated. Do not oil or disassemble motor.

CLEANING

TO CLEAN LENS AND GRILL

Remove light lens and bulb. Remove nut in center of reflector and lower assembly.

CAUTION and reflector are separate units. Unplug light from white receptacle. Plastic parts can be cleaned with mild, soapy water (use a mild detergent, such as dishwashing liquid) and dried with a soft cloth. Do not use abrasive cloth, steel wool pads, or scouring powders.

TO CLEAN FAN ASSEMBLY

Unplug fan assembly (BLACK receptacle). Remove screw near receptacle and lift fan assembly out. Gently vacuum fan, motor and interior of housing. METAL AND ELECTRICAL PARTS SHOULD NEVER BE IMMERSSED IN WATER.

Parts Replacement

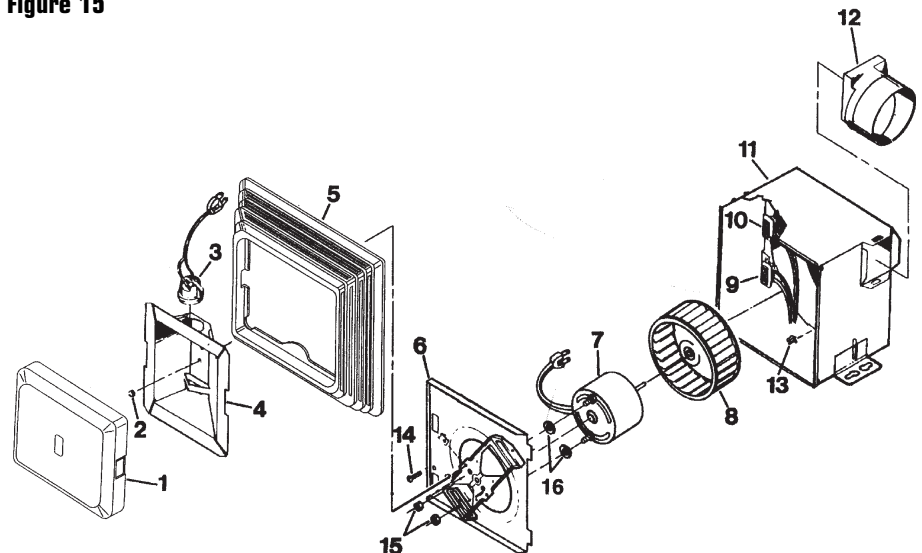
If replacing parts, do so with properly selected components which duplicate the original parts correctly. Incorrectly sized parts can damage the fan.

PARTS LIST

Refer to figure 15.

1. Plastic Lens
2. Acorn Nut
3. Bulb Holder
4. Light Reflector (Includes Keys 3 & 4)
5. Grill
6. Motor Plate
7. Fan Motor
8. Blower Wheel
9. Receptacle (Black)
10. Receptacle (White)
11. Housing
12. Damper/Duct Connector
13. Grounding Clip
14. #8 X 3/8" Screw
15. Motor Nut (2 are required)
16. Rubber Spacer (2 are required)

Figure 15



Limited Warranty

What Products Are Covered

PennBarry Fans and Ventilators (each, a "PennBarry Product")

One Year Limited Warranty For PennBarry Products

PennBarry warrants to the original commercial purchaser that the PennBarry Products will be free from defects in material and workmanship for a period of one (1) year from the date of shipment.

Exclusive Remedy

PennBarry will, at its option, repair or replace (without removal or installation) the affected components of any defective PennBarry Product; repair or replace (without removal or installation) the entire defective PennBarry Product; or refund the invoice price of the PennBarry Product. In all cases, a reasonable time period must be allowed for warranty repairs to be completed.

What You Must Do

In order to make a claim under these warranties:

1. You must be the original commercial purchaser of the PennBarry Product.
2. You must promptly notify us, within the warranty period, of any defect and provide us with any substantiation that we may reasonably request.
3. The PennBarry Product must have been installed and maintained in accordance with good industry practice and any specific PennBarry recommendations.

Exclusions

These warranties do not cover defects caused by:

1. Improper design or operation of the system into which the PennBarry Product is incorporated.
2. Improper installation.
3. Accident, abuse or misuse.
4. Unreasonable use (including any use for non-commercial purposes, failure to provide reasonable and necessary maintenance as specified by PennBarry, misapplication and operation in excess of stated performance characteristics).
5. Components not manufactured by PennBarry.

Limitations

1. In all cases, PennBarry reserves the right to fully satisfy its obligations under the Limited Warranties by refunding the invoice price of the defective PennBarry Product (or, if the PennBarry Product has been discontinued, of the most nearly comparable current product).
2. PennBarry reserves the right to furnish a substitute or replacement component or product in the event a PennBarry Product or any component of the product is discontinued or otherwise unavailable.
3. PennBarry's only obligation with respect to components not manufactured by PennBarry shall be to pass through the warranty made by the manufacturer of the defective component.

General

The foregoing warranties are exclusive and in lieu of all other warranties except that of title, whether written, oral or implied, in fact or in law (including any warranty of merchantability or fitness for a particular purpose).

PennBarry hereby disclaims any liability for special, punitive, indirect, incidental or consequential damages, including without limitation lost profits or revenues, loss of use of equipment, cost of capital, cost of substitute products, facilities or services, downtime, shutdown or slowdown costs.

The remedies of the original commercial purchaser set forth herein are exclusive and the liability of PennBarry with respect to the PennBarry Products, whether in contract, tort, warranty, strict liability or other legal theory shall not exceed the invoice price charged by PennBarry to its customer for the affected PennBarry Product at the time the claim is made.

Inquiries regarding these warranties should be sent to: PennBarry, 1401 North Plano Road, Richardson, TX 75081.